

**THE PROCESS OF 'OTHERING' AND
DISCRIMINATION IN HEALTH CARE SERVICES IN
KARNATAKA**

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**SREE CHITRA TIRUNAL INSTITUTE
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CARE SERVICES IN KARNATAKA**

A THESIS PRESENTED BY

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Thiruvananthapuram

IN PARTIAL FULFILMENT OF THE REQUIREMENTS

FOR THE AWARD OF

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2021

CERTIFICATE

I **Bevin Vinay Kumar V N** hereby certify that I had personally carried out the work depicted in the thesis entitled, "**THE PROCESS OF 'OTHERING' AND DISCRIMINATION IN HEALTH CARE SERVICES IN KARNATAKA**". No part of the thesis has been submitted for the award of any other degree or diploma prior to this date.

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Signature

Date

 
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Submitted by

Bevin Vinay Kumar V N


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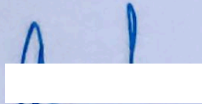
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ABBREVIATIONS

ANM	Auxiliary Nurse Mid-wife
ASHA	Accredited Social Health Activist
BAMS	Bachelor of Ayurveda, Medicine and Surgery
CCDI	Comprehensive Composite Development Index
CFI	Comparative Fit Index
CHC	Community Health Centres
CRT	Critical Race Theory
DAS	Detroit Area Study
DDT	Dichloro-Diphenyl-Trichloroethane
DH	District Hospital
DHI	Diploma in Health Inspector
DHO	District Health Officer
EOD	Experience of Discrimination
FDA	First Division Assistant
GP	Grama Panchayat
GPHDI	Grama Panchayat Human Development Index
HCQS	Health Care and Quality Survey
HDI	Human Development Index
HIV	Human Immunodeficiency Virus
HW	Health worker
IAT	Implicit Association Test
IEC	Institutional Ethics Committee
IV	Intravenous
JHA	Junior Health Assistant
KAUP	Karnataka Ayurvedic and Unani Practitioners Board
KGIS	Karnataka Geographic Information Systems
KPMEA	Karnataka Private Medical Establishment Act
KSHDRP	Karnataka Health System Development and Reform Project
KTDC	Karnataka Thanda Development Corporation
MIRE	Measure of Indigenous Racism
MLA	Member of the Legislative Assembly

MO	Medical Officer
MPI	Multidimensional Poverty Index
MSIL	Mysore Sales International Limited
NFHS-4	National Family and Health Survey-4
OBC	Other Backward Caste
PDO	Panchayat Development Officer
PDS	Public Distribution System
PHC	Primary Health Center
PPS	Probability Proportional to Size
PVTG	Particularly Vulnerable Tribal Groups
RMP	Rural Medical Practitioner
RMSEA	Root Mean Square Error of Approximation
RNTCP	Revised National Tuberculosis Control Programme
RO	Reverse Osmosis
SAGE	Study on Global AGEing and adult health
SC	Scheduled Caste
SCTIMST	Sree Chitra Tirunal Institute for Medical Sciences and Technology
SDH	Sub Divisional Hospitals
SEM	Structural Equation Modelling
SES	Socio-economic status
SHA	Senior Health Assistant
SI	Sampling Interval
ST	Scheduled Tribe
TAC	Technical Advisory Committee
TH	Taluka Hospital
THO	Taluka Health Officer
UDC	Upper Division Clerk

SYNOPSIS

'Othering' is a process of attributing negative characteristics to individuals or groups who are thought of as different from the self. This is central to the formation of identity and one of the ways by which people create their own identities is by comparing themselves with 'other' groups. This concept goes beyond simple creation of attitudes and stereotypes. Instead, it examines the process rooted in history and positions in social hierarchy. There are many examples of 'othering', the common ones being race, caste and gender bias. Men construct the identities of women in relation to them and are treated as inferior. Those who are 'othered' face marginalization, disempowerment and social exclusion through the process of discrimination. 'Othering' is central to discrimination and the consequences of it manifest through the pathways of discrimination. There is no standard definition of discrimination, but it is used to represent injustices meted out to individuals or groups based on their group membership, who are treated badly putting them at a disadvantage. Thus, 'othering' represents what is done by dominant groups to put marginalized groups down and discrimination is one of the ways through which it is achieved. Discrimination can have adverse consequences across different spheres of life but in the domain of health it manifests directly as adverse mental and physical health outcomes and indirectly by restricting access for those seeking health care. This results in poor utilisation and reduced compliance with treatment among those discriminated against. The concept of discrimination highlights the group structure and the relative deprivations built around this structure wrongly by humans to one another. Therefore, discrimination becomes a tool for representing these serious wrongs that are group linked. In this background, measurement of discrimination by the health system becomes important from a Public Health policy perspective. There are different measures that have examined discrimination by the health system and most of them have originated from developed countries where racism is prevalent axis of discrimination. These measures may not apply in the Indian context where casteism is prevalent and it

is more complex than racism as it is across caste groups and within them too. Context specific measures are required to study the discrimination experienced in the health care system, from the view of those who experience it and also those who perpetuate it.

In India, health status and morbidity indicators for Scheduled Castes (SC) and Scheduled Tribes (ST) are relatively worse off than other groups with similar standards of living pointing towards experiences of 'othering' and discrimination across different spheres. The health systems in which these communities live are also likely to engage in the same kind of practices, thus reinforcing or exacerbating the discrimination. This plays out in multiple ways through interactions between the people and personnel in the health system in the community or clinical set-up. The larger context where these interactions take place is influenced by structural factors such as accessibility, acceptability and affordability and discrimination therefore can occur in multiple ways. Studying discrimination in health and healthcare will help in understanding the pathways by which it adversely affects vulnerable populations. This is useful for steering actions and policies targeting vulnerable groups. There are very limited studies in India that have looked at the outcome of discrimination in health care contexts, the ways by which the health system discriminates and the processes by which it operates. Experience of discrimination varies across contexts and regions and has adverse consequences on health and health care access of populations and subgroups already marginalised.

The Banjaras are one such group who are found in different parts of India and currently classified under different social groups across states and in Karnataka classified as Scheduled Caste group. They are most commonly found in northern parts of Karnataka and Gadag is one of the regions where they form a majority among the Scheduled Caste groups. They stay in settlements called tanda, which is located outside the village or at a distance of few kilometers from the village. Administratively tandas are part of the village but are a separate settlement. Banjaras are marginalized historically and have been excluded from the development process and face multiple disadvantages and health and health care access is one of them. There is a need to understand the context of Banjaras and how discrimination is operationalized. As mentioned earlier, 'othering' is significant to discrimination, and it is important to understand the process of 'othering' and

discrimination experienced by Banjaras in the community and health system in Gadag district. The present study aims to understand how the Banjaras are constructed as the 'other' in the community and the health system and the consequences for their health and health care access.

The objectives of the study were:

- To examine discrimination experienced by Banjaras in health care setting
- To study the process of 'othering' by the health care system
- To evaluate the impact of possible discrimination experienced by Banjaras on their health, health care access and utilisation

The study used a sequential mixed methods design conducted in two phases between January 2018 to October 2019 in Gadag district, Karnataka. In the first phase an ethnographic study was conducted to understand the discrimination experienced by the Banjaras in the community and the health care system. This was conducted in the settlement of Vanapura and Chara *tanda* in Gadag district. The ethnography helped in understanding the lives of Banjaras, disadvantages experienced by them for livelihood, types of morbidity, care seeking for health and the structural discrimination experienced by them. Findings from the ethnography were used to develop an interview schedule and a listing schedule for mapping the infrastructure in the *tandas* and villages for the second phase of the study. The second phase was done in two stages. In the first stage thirty *tandas* were selected from a list of *tandas* in Gadag district. To enable comparison, a matched village, of which administratively the *tanda* was a part, or in case it was not; the nearest village were selected. Distance to the Primary Health Centre (PHC) from the *tanda* was used to classify all listed *tandas* into four groups of 0-3 km, 3-6 km, 6-9 km and ≥ 9 km. The *tandas* were selected proportionately to each distance category and within each category; selection was done using Probability Proportionate to Size (PPS). The selection of villages was done as mentioned earlier. Thus, 30 *tandas* and their associated villages were selected. In the second stage, 300 individuals each from *tanda* and village were recruited for the study, resulting in a total sample size of 600. Ten eligible respondents from each selected *tanda* and village selected through systematic

sampling were interviewed using an interview schedule developed from ethnography. The study for both the phases were approved by the Technical Advisory Committee (TAC) and Institute Ethics Committee (IEC) of Sree Chitra Tirunal Institute for Medical Sciences and Technology (SCTIMST). Permissions were also obtained from District Health Officer (DHO) for conducting ethnography in the Primary Health Centres (PHC) and interviewing ASHAs for infrastructure mapping. Phase 1 and 2 was cleared by IEC vide SCT/IEC/1141/DECEMBER-2017 and SCT/IEC/1328/JANUARY-2019.

Gadag district, the larger context where Banjara *tandas* are located is among the backward districts in Karnataka, ranking 25 among 30 districts in Multidimensional Poverty Index (MPI). The district comes under the Northern dry zone which is characterised by high vulnerability to drought. This has severe consequences in a region where around 78 percent of agricultural land depends on rainfall and close to 70 percent of the population depend on agriculture for livelihood. In this context land holding becomes important and the Scheduled Caste groups in Gadag are disadvantaged as the average land holding is poor when compared to other caste groups including Scheduled Tribes. The disadvantage experienced by Scheduled Castes extends to other areas of deprivation in housing conditions, health in the form of increased morbidities and access to health care. It is in this context that the Banjara *tandas* are located. Banjaras form about 29 percent of the Scheduled Caste population and are spread across 79 *tandas* in the district. They are underprivileged in many ways and there is a need to understand the socio-economic realities and the discrimination experienced by them.

Banjaras are commonly found in different parts of India and are known by different names such as *Banjara*, *Vanjari*, *Lambani*, *Lamani*, *Lambada* and *Sugali*. The different names are connected to their trading occupation. In Karnataka they are known by the name *Lamani* or *Lambhani*. History of the Banjaras can be broadly divided into pre-colonial and post-colonial. In pre-colonial times, called as pack-bullock carriers, they provided fearless and reliable transport services through difficult terrains across different parts of the country. Being a nomadic tribe and constantly on the move in groups, these units were called *tanda*. With the ceasing of wars, development of roads, transport and introduction of mechanised transport by the British government, the Banjaras were no

longer in demand and had to settle down in forests and places close to the forest and depend on them for their livelihood. It was during this time the Banjaras were seen as a threat because of their mobile nature and always viewed with suspicion. This led them to be branded as 'Criminal castes and tribes' and also contributed to their sedenterisation. They were brought under the purview of the Criminal Tribes Act in 1896 and this gave powers to the police to adopt strict measures to end their 'criminal activities' which involved notification, registration, restriction and internment in settlements. The Act was repealed in 1952 but stigma attached to the name, viewing of these tribes as being involved in criminal activities continues till date. There is no clear account of how the Banjaras settled in Gadag district. In Karnataka, they come under Scheduled Caste group. Banjara *tandas* or settlements mirror the caste based residential segregation that exists in villages and the difference being the *tandas* located at a distance of a few meters to kilometres from village. This segregation is stark and visible. The selected *tandas* are located among dissected structural hills where the forest is of scrub variety. The ground water potential around the settlements is classified as moderate to poor. These geographical features have implications for their livelihood and health in a district already disadvantaged by its ecological features. Less than 40 percent of the households in both the *tandas* which comprised mainly of marginal landowners and landless, were involved in agriculture. Those without land go for daily wage work or graze animals in the nearby forest land. More than 50 percent of the households had short term migrants.

There are unique characteristics of the Banjaras that makes them distinct from the people in the village. Banjaras are a closely-knit community with members related to each other through some or the other way and there is some degree of homogeneity within the *tandas*. Every *tanda* has a leadership structure consisting of Naika, Kharbari and Davu to oversee the functioning of the *tanda* and to exercise social control but their influence has waned over time. The clothing of women is very colourful, and their garments are adorned with embroidery made of metal pieces and they stand out in a crowd. Structure of houses are different in terms of the door frame carvings and wall hangings crafted by them. In terms of other settlement level features, both the *tandas* are well connected by roads but the frequency of bus services is poor.

Health system catering to the *tandas* comprises of the subcentre, Primary Health Centre (PHC) and private providers are Rural Medical Practitioners, who are generally not qualified in any system of medicine and ayurvedic doctors. The nearest subcentre for Vanapura and Chara *tanda* is located about three kilometres away but the building is non-functional. Even if the *tandas* have the required population for subcentres, the building is always located in the village, indicating the underlying structural discrimination. Both the PHCs are located in the nearby villages at a distance of 8km from Vanapura and 10km from Chara *tanda*. The PHCs have a problem of human resources resulting in multitasking by the staff, often leading to interpersonal conflicts and this affects their functioning. Structural discrimination is also noticed with the location of the PHC catering to Chara *tanda*. This was initially planned to be set up in a nearby *tanda* but was shifted to a village with smaller population due to local politics.

‘Othering’ influenced the practices of providers in different ways. Banjara *tandas* were called as ‘slum areas’, ‘dirty and unclean’ and places of ‘outbreaks’ which resulted in providers using extra probing questions to Banjaras to identify potential sources for ‘outbreaks’ and prescribing antibiotics believing their diseases to be infectious in nature. The private health system is dominated by RMPs, who operate their clinics from nearby villages and also visit *tandas* regularly and in times of emergency. There are also ayurvedic Bishaks and qualified ayurvedic doctors who are located in the village but less likely to visit the *tandas*. These providers are available throughout the day since they reside in the village and often provide services on credit basis. Most of the RMPs train under qualified doctors in the cities and start their practice in the villages. Some are second generation RMPs who have learnt the skills from their fathers. They provide basic services similar to the PHCs that are distant, and are more accessible and accepted by the local community.

Structural discrimination in the form of residential segregation caused the Banjaras to set up their *tandas* in areas close to the forests. The disadvantages imposed by this in terms of the geographical features of the region, access to healthcare and transportation resulted in them being a subaltern society. Leading subaltern lives resulted in limited options for livelihood around their *tandas* and in Gadag district, causing people to migrate

to other districts and states for livelihood. The migration is of short-term duration and common among educated and uneducated and is the outcome of the structural discrimination experienced by Banjaras. This also impacts the families as the children are left behind with the elders who rely on other relatives in the *tanda* for support. Subalternity also reduced them to the 'other' and vice versa and impacted their health and health-care access through different direct and indirect processes. House listing done during ethnography revealed common ailments associated with poor drinking water and musculoskeletal pain which is the outcome of having to toil on difficult, unproductive lands for livelihood. Most of them sought care from RMPs from the neighbouring village or when they visited the *tandas* as these facilities were more accessible. The prevalence of different ailments and care seeking for it cannot be attributed to characteristics of individuals and their health behaviours alone but also the various historical injustices that produce and reproduce socio economic inequities that manifest as illness and the ability to recover from it. The health outcomes and consequences for care seeking as an end result of discrimination are rarely recognised by the Banjaras and so the resistance to it does not develop. The 'Othering' process ensures that the existing structures are maintained and continue to perpetuate the discrimination that is historic in origin.

Mapping of all the *tandas* in Gadag, revealed three types of *tandas*; mixed settlements, standalone *tandas* and *tandas with* corresponding village. Mixed settlements are those which have people from different castes which are outcome of housing schemes by the government. Standalone *tandas* are segregated *tandas* who are not associated with the village but have their own name for the settlement e.g Vanapura. *Tandas* with corresponding village are administratively attached to it and take the name of the village for the *tanda* e.g Chara *tanda*. Similar type of segregation exists among Scheduled Caste groups within villages; unlike the *tanda* these settlements are usually at the periphery of the village. The villages have better physical infrastructure like paved roads, multiple sources of water supply, better drains and amenities like community water filter, ration shop, veterinary centre, milk society, banks and post office when compared to *tandas*. Presence of bus stops and frequency of public buses were better in the villages. Primary schools are found in almost all the *tandas* and villages but beyond middle school

all educational facilities are located in the villages. A similar pattern is observed in health infrastructure with almost all *tandas* and villages having ASHAs but the subcentre, PHC, Ayurvedic dispensary, BAMS and RMP clinic were more likely to be located in the villages. Discriminant analysis was done to identify the infrastructural variables that differentiates between *tandas* and villages. The social infrastructural indicators of health and education (Discriminant function coefficient -0.8689) followed by transportation (Discriminant function coefficient -0.3576) and water supply (Discriminant function coefficient -0.2939) are the greatest discriminating factors between *tanda* and village.

A survey among 600 individuals, 300 from *tanda* and 300 from villages close to the selected *tandas* was done to understand the household characteristics, morbidity pattern and care seeking, which is an end result of discrimination. Using a matched village where other contextual factors were more or less similar enabled comparisons that emerge out of being from the *tanda* to be rendered distinct. Household infrastructure available in the *tandas* and villages indicates that *tandas* are less endowed in terms of water supply and sanitation. On an average, households in the villages own more assets, owned greater quantum of land and possessed agricultural equipments than do households in the *tandas*. Households in the village were more likely to cultivate cash crops on land owned using ground water resources when compared to those from the *tandas* whose crops are rainfed. When it comes to livestock, more households in the *tanda* owned goats, sheep and chicken and those in the village more frequently had cows. Households in the village had less migrants than *tandas* and were more likely to be employed in the organised sector with a steady source of income while those from the *tandas* were in the unorganised sector. The dominant income source for those in the *tandas*, as they were less likely to own land was agricultural and non-agriculture wage labour and for the village households, it was through cultivation. Health care workers did visit households in the *tandas* and villages more or less equally but when they did visit households in the *tandas*, it was more likely to be to spray DDT or check water storage. People living in the *tandas* were more likely to experience more morbidities and common among them being musculoskeletal disorders and infections. The extent of

care seeking for acute ailments across *tandas* and villages was more or less similar but for chronic ailments, those from the *tanda* were less likely to seek care when compared to those from the villages. For acute ailments the care seeking pattern varied across *tandas* and villages with those in the *tanda* dominantly depending on RMPs and those in the villages depending on secondary and tertiary government hospitals. As this was the pattern, the most frequently used mode of transport to reach the health facility was 'none' for those in the *tanda* (as the RMP came home). That the villages had better resources by way of transport is reiterated by the fact that more households there used a car to reach the health facility for chronic ailments. Even with these limited resources, the households from *tandas* spent on an average slightly more than did households from the village for acute ailments. But for chronic ailments which require continuity of care, households from the village spent significantly more than did those from the *tanda*. The sources of funding for care seeking demonstrates that households in the villages could use household income and savings to do so than did those in the *tandas*. For acute ailments, *tanda* households resorted to borrowing more often than did those in the villages. On an average the spending on health care for acute ailments was equal or higher across all types of providers for those in the *tanda* but for chronic ailments, those in the village spent more in general.

What the findings in terms of available assets, infrastructure and health care seeking indicate is that those living in the *tandas* are more disadvantaged on the whole, when compared to those living in the villages. The pathways through which this systematic structural discrimination experienced by those living in the *tandas* affects their experience of morbidity and health care seeking was tested using Structural Equation Modelling (SEM). This model was constructed based on findings from ethnography. The mechanisms by which the structural discrimination operates in the *tandas* and villages is very different. Socio-economic status which is influenced by the structural discrimination components of land and migration has a direct impact on the facility from where care is sought only in the *tandas* (direct effect of SES on facilities used 0.1 in *tanda* vs 0.05 in village). The pathways of individual discrimination (a marker of the morbidity experience) on transportation and facility from where care was sought is similar across

tandas and villages, but the magnitude is stronger in the *tandas* (direct effect of transport on facilities used 0.65 in *tandas* and 0.61 in villages). This means that, absence of public transport to reach an appropriate facility for seeking care for ailments is characteristic of both *tandas* and villages, but this results in more people from *tandas* not using appropriate care. This inadequate use of care by people from *tandas* is in part due to their poor SES that affects their options to use better facilities, but also due to the very nature of the ailments they experience and the means of financing care for them.

Using the notion of ‘othering’ by Gayatri Spivak, I have examined Banjaras being designated as the ‘other’ in Gadag district. Historical archives refer to the Banjaras as being “*athletic, hardy and brave*” but later accounts calls them “cruel robbers on the highway”, “addicted to crime”, “dirty”, “untidy” and “pay little attention to cleanliness”. Ethnographic accounts in 1961 mention the *tandas* as being neat and clean but the image of uncleanliness is what prevails and continue till date in the community and the health system. ‘Othering’ at the local level by the health system is by imprinting patronage and power. Health system views the *tandas* as places that need to be constantly monitored for infectious diseases. On one side health workers don’t visit the *tandas* frequently and even if they do it is for activities related to infectious diseases. This reflects the view that Banjaras have weakened ability to act for their own welfare due to lack of knowledge or understanding. The other type of ‘othering’ is through the collective by diminishing their moral worth and creating negative stereotypes. Historical discourse and injustices have created labels of ‘other’ in the community. The health system goes a step further and attributes diseases to these created labels. These are based on inaccurate stereotypes, and this perpetuates and reinforces the notion of ‘othering’. The third component of othering involves withholding means of livelihood and diminishing their material worth in the development process, thus maintaining their ‘othering’. In spite of the *tandas* belonging to the same region and sharing similar geographical characteristics as the village they are underdeveloped resulting in large scale migration. The Karnataka Thanda Development Corporation (KTDC) is a board formed towards developing the *tandas* but its functions have been restricted to building roads, community halls and organise cultural events within the *tandas*. Even though the objective of the

board is towards skill development, generating employment and promoting embroidery and handicraft, these are lacking in implementation. This has actually contributed to the process of 'othering' through its restricted functioning.

The process of 'othering' results in structural discrimination and has adverse consequence at the *tanda* and individual level. Geographical location of the *tandas* indicate caste-based segregation and the practice of untouchability in the past confirms this. Differential access to land and resources renders the Banjaras vulnerable and the *tandas* are deprived in all aspects of physical, transport and social infrastructure an outcome of the 'othering' process. The villages are also disadvantaged when compared to *tandas* but have better mechanisms to withstand that. At the individual level 'othering' and structural discrimination shapes the differential morbidity experiences and the health care sought. The experience of Banjaras is applicable to different castes and tribes who live in segregated settlements. The disadvantage experienced by them is similar, but the magnitude could differ. These inequities that poses public health challenges need the focus of attention from a development perspective and health systems reforms as maintaining health is not the function of the health system alone.

CHAPTER 1

INTRODUCTION

The aim of this chapter is to introduce the concept of othering and discrimination and explain why studying them in the context of health systems is important for Public Health. I begin by defining 'othering' and discrimination and its consequences for health and health care access. I would be examining why this is an important Public Health issue in the Indian context and identifying gaps from literature. I will then go on to the objectives and conclude with the organisation of the thesis.

1.1 Discrimination and 'Othering'

My mother here (pointing to the elderly lady sitting inside, dressed in the traditional Banjara attire) accompanied my pregnant wife and two-year-old son for an ultrasound scanning appointment in a private hospital. While they were waiting for their turn, the young child passed urine on the floor and my mother took off his shorts and started wiping the floor. Seeing my mother do this, the nurse who was standing there started shouting and behaved rudely with her. My mother shouted back, but the nurse didn't stop and told her that "*you people (referring to caste) are always like this, not clean but dirty*". My mother felt insulted and people around her said nothing. She was crying when she called me up and I told her to take my wife to another scanning centre. I left from home immediately and ensured we got the scanning done from a different centre even if it was expensive and came home. I have decided that even if I die, will never go to that place again

– Mahadevappa, 30 years, Guddadpur *tanda*

The above experience of Mahadevappa was narrated to me back in 2015 when he was asked about difficulties in accessing health care. This incident raises important questions about why the elderly woman was treated badly and the resulting outcome of it. The elderly woman was stigmatised by the nurse because she was aware of her identity, evident from the clothes worn by her. The traditional Banjara attire in this context becomes a mark or a characteristic to devalue the person. By attributing uncleanliness and being dirty to the larger group that the elderly woman is part of, the nurse identifies herself as different from her through the process of 'othering'. The outcome of this is

that the family was discriminated and they sought care from another place which ended up costing them more.

The Encyclopedia of Critical Psychology defines 'Othering' as the process where individuals or groups of people attribute negative characteristics to other individuals or groups of people that set them apart as representing that which is opposite to them (Rohleder, 2014). 'Othering' is more about the way negative attributes and characteristics are constructed rather than the differences in itself. Imbalances in power among relationships is central to 'othering' (Staszak, 2009). The dominant group wielding power defines the group or groups different from them as deviant. It involves defining groups into "us" and "them" or "in-group" and "out-group" (Grove & Zwi, 2006). These labels, stereotypes and definition of the 'other' become the basis for discriminating and excluding them from different spheres of life through dominance and oppression (Krieger, 2014; Marshall, 1996). 'Othering' as a concept is not as simple as the creation of attitudes and stereotypes by individuals or groups but goes beyond that in examining the process rooted in history and positions in the social hierarchy (Akbulut & Razum, 2021). History reveals the process of constructing individuals or groups as 'other', and the social hierarchy throws light on how they continue to be 'othered' in the present context, dimensions of power being central to both. Studies on 'othering' have focussed on the social and psychological domain of creating identities, studies in post-colonial context and in the context of migration (Akbulut & Razum, 2021; Rohleder, 2014; Spivak, 1985). 'Othering' is central to discrimination, and it is important to examine what discrimination is and how it impacts health and healthcare access. Although 'othering' is undesirable, not all 'othering' results in discrimination. People can harbour negative stereotypes in their mind about individuals or groups but not necessarily translating thoughts to discrimination.

The word 'discriminate' originated from the Latin word '*discriminare*', which means "to divide, separate, distinguish" (Merriam-Webster, 2021). Discrimination is defined as "the process by which a member, or members, of a socially defined group is, or are, treated differently (especially unfairly) because of his/her/their membership of that group" (Krieger, 1999). There are many definitions for discrimination, but all of them

ascribe a negative connotation, rather than merely distinguishing between individuals or groups based on group membership. In legal terms, there are no specific definitions for discrimination. The International Covenant on Civil and Political Rights and the Indian constitution does not define discrimination but only mentions that there would be no discrimination based on caste, creed etc. Reflecting on the meaning of the word '*discriminaire*', it would be wrong to conclude that discrimination is unfair. It can be argued that populations can be divided or separated for targeting interventions, or policies can distinguish between population subgroups for planning effective interventions. In such a scenario, these acts of dividing, separating and distinguishing do not amount to unfair treatment. The word '*discriminaire*' in its original use is neutral but has been used to denote unfair treatment. Unlike other apparent morally wrong acts like lying, manipulating or hurting, discrimination against a person or group does not occur unless there are individuals or groups who are treated better (Altman, 2020).

There is no universally accepted definition of discrimination; however, most of the definitions contain the following three characteristics:

- Individual/Group
- Treatment of individuals/groups (prejudicial, worse way, unfair, differently)
- Membership

1.2 Consequences of 'Othering' and Discrimination on health

The consequences of 'othering' on health is manifested through the pathway of discrimination. The health effects of discrimination can be direct or indirect. It does so directly through outcomes and indirectly by restricting access for those seeking health care, poor utilisation and also reducing their compliance with treatment.

1.2.1 Discrimination and Health

Discrimination at different levels can impact health in many ways. Inequities in access to social, economic and material resources have an impact on health status. There are many studies that have examined the experience of discrimination having negative consequences for health (Williams, Lawrence, & Davis, 2019). Health effects of discrimination can have adverse consequences for individuals, manifesting as morbidity or

as a cumulative effect on the group as group inequalities. The direct effect of discrimination is explained by the physiological pathways, which manifest as disease.

Pathways

The effect of perceived discrimination on health is through psychological and physiologic processes (McKenzie, 2003). The pathways are common to psychosocial stressors. Psychosocial stressors cause changes in neuroendocrine, autonomic and immune systems (Brondolo et al., 2009). The neuroendocrine response includes activating the sympathetic nervous system and hypothalamic pituitary adrenocortic axis with the constant secretion of catecholamine and cortisol. These changes affect behaviour and psychology which manifests as health outcomes. The concept of "allostatic load" refers to the cumulative wear and tear that the body experiences on these multiple regulatory systems as a result of repeated cycles of allostasis as well as the inefficient regulation of these cycles. Allostatic load is also influenced by genetic factors, behaviours such as substance use and diet and developmental experiences. High allostatic load is associated with the metabolic syndrome which predicts mortality (Gee et al., 2007), cardiovascular disease incidence, and decline in cognitive and physical function. Stress also plays a role in the onset, progression, and severity of chronic pain syndromes (Ahmed et al., 2007).

Consequence on mental and physical health

Mental health status is the most frequently assessed indicator to measure discrimination. Studies have examined a broad range of mental health outcomes and psychological well-being to establish the link between self-reported experiences of discrimination and mental health. Various studies have shown that discrimination is positively associated with indicators of mental health such as mood, stress, general anxiety disorder, substance use disorders, social anxiety disorder, depression, lifetime anxiety, psychotic experiences, eating disorder and Post Traumatic Stress Disorder (Lewis et al., 2015; Williams, Lawrence, Davis, & Vu, 2019). Other studies have also found a link between the ex-

perience of discrimination and physical health outcomes such as hypertension, breast cancer, asthma, coronary artery calcification and visceral fat (Paradies, 2006; Williams, Lawrence, Davis, & Vu, 2019). There is a strong relationship of discrimination with mental health when compared to physical health, and most of the studies have looked into mental health effects. The physical responses could manifest late since the effect is mediated by stress. Those who face discrimination often engage in risky behaviour like smoking, drug and alcohol abuse and these, in turn, have an adverse effect on their health status.

1.2.2 Discrimination and Health care access

Discrimination impacts health indirectly by restricting access to healthcare, and it also has an impact on utilisation. Perceived discrimination by individuals can lead to lower utilisation of healthcare, delays in seeking care and non-adherence to medical care needs (Casagrande et al., 2007). Discrimination can also manifest as over or under provisioning of health care services for marginalised populations (Abramson et al., 2015; Akbulut & Razum, 2021; Kilbourne et al., 2006; White et al., 2012). Over provisioning of services could be based on constructed vulnerability of a marginalised population to control diseases and preventing its spread to the dominant population. Discrimination could also take the form of differences in treatment regimens for different groups, inadequate spending on health care for the marginalised, compared to the mainstream population and not addressing the cultural barriers for these marginalised groups (Henry et al., 2004). Access to information is an area where certain social groups do not receive information required by them in a form comprehended by them to make choices regarding their health (Thorat & Sadana, 2009).

1.3 Rationale

Most of the literature on discrimination and its linkages with health and healthcare access is in the context of racism in developed countries. Racism is very different from casteism, which is relevant in the Indian context. Both have common outcomes of oppression, discrimination and exclusion but differ in many ways. The fundamental difference among a host of others is based on physical characteristics and ideology. Racism

is based on physical characteristics that are visible, whereas, in casteism, the physical characteristics do not play a significant role. Casteism is based on the values groups hold about each other (Oommen, 2002). In the Indian caste system, there are upper castes who are at the top of the social hierarchy, the lower castes at the bottom and other castes in between them. Casteism is about maintaining the social hierarchy through various means and varies across contexts and groups. The Scheduled Caste (SC) groups are considered to be at the bottom of this hierarchy, having their own ranks within them. Casteism plays out within the different castes categorised as Scheduled castes making the caste system more complex than racism. Discrimination plays out in different ways in this complex system.

In India, health status and morbidity indicators for Scheduled Castes (SC) and Scheduled Tribes (ST) are relatively worse off than other groups. Even for individuals with a similar standard of living and education, the health status of SC and ST populations are lower than the general population. This is indicative of the unequal access to public services related to their caste and experiences of 'othering' and discrimination (Raghavendra, R H, 2020; Thorat & Sadana, 2009). People belonging to marginalised groups experience some form of discrimination or exclusion within the communities in which they live. The health systems in which these communities live are also likely to engage in the same kind of practices, thus reinforcing or exacerbating the discrimination. This plays out in multiple ways through interactions between the people and personnel in the health system in the community or clinical setup. In a clinical interaction, an individual presents with healthcare needs, preferences and expectations, some of which are socio-culturally determined. Providers also possess beliefs that are shaped by their professional training, clinical experiences, social experiences and the larger societal norms and practices. The larger context where these interactions take place is influenced by factors such as accessibility, acceptability and affordability, and discrimination can occur in multiple ways (Institute of Medicine, 2003).

Discrimination in the Indian context by the health system could be broadly operationalised at two levels, i.e. structural and individual level. Structural could be in the form of limiting access by not allocating resources to certain geographical locations or

segments of the population for political-economic reasons. Inequalities in the distribution of health providers or facilities is a characteristic of the Indian health system with variations by states, intra state, inter and intra districts and between rural and urban areas (Baru et al., 2010). The discrimination by the health care system could be in the form of denial of services to marginalised groups or using them to achieve government targets, a form of "discriminatory targeting". This can be seen in the high incidence of women from marginalised communities undergoing hysterectomy in private hospitals in Karnataka, most of it being unnecessary. There was discriminatory targeting by private providers for financial gains, targeted towards a community that is very unlikely to question them (Xavier et al., 2017). Denial of family planning services to Particularly Vulnerable Tribal Groups (PVTG) in Madhya Pradesh/Chhattisgarh by the government in order to increase the birth rate of these groups is a form of discriminatory targeting. Services were denied even to those who wanted it, which resulted in some women from the community getting sterilised under false name or caste (Nandi et al., 2012). Denial of service can also be in the form of health care workers refusing to visit or enter lower caste households (Mishra et al., 2016).

Discrimination at another level in the health system targets specific individuals. Individuals experience discrimination because of their own identity or specific attributes of the group that they belong to by the larger community or the health care system. A study in Gujarat and Rajasthan found that most of the children belonging to the Scheduled Caste group faced discrimination in the health care setting if the provider was of another caste group. The discrimination was in the form of refusal to touch, making them sit separately, long waiting time and spending less time during house visits by health workers (Acharya, 2010). Religion-based discrimination has been reported from Mumbai. The forms of discrimination experienced by Muslim women were rude language, abuse in the labour ward, health care provider speaking in a language they don't understand, derogatory comments targeted towards the community and stereotypical behaviour by the health care providers (Khanday, 2017). Individual experience of discrimination varies across context and regions, as evident from the studies above. Discrimination is wrong and has adverse consequences on the health and healthcare access

of populations and subgroups already marginalised. Studying discrimination in health and healthcare will help in understanding the pathways by which it adversely affects vulnerable populations and useful for steering actions and policies. There are very limited studies in India that have looked at the outcome of discrimination in the health care context, the ways by which the health system discriminates and the processes by which it operates.

Banjaras as a group are found in different parts of India and currently classified under different social groups across states. In the past, Banjaras were nomadic tribes who were involved in trade across the country and lost their traditional calling with the advent of the East India Company in India. They were made to settle down in selected sites. The colonial regime was suspicious of their activities and brought them under the purview of the Criminal Tribes Act. Post the repeal of the Act, they continue to face the stigma of criminal tribes. In Karnataka, they belong to the Scheduled Caste group and are marginalised. Their population is mainly concentrated in the Northern parts of Karnataka, especially in the Hyderabad-Karnataka region. Gadag district located in Northern Karnataka is a drought-prone district and has the third largest proportion of Banjaras calculated as a percentage of the total Scheduled Caste group across districts. This region was chosen for the study because of my prior engagement with this group as a part of my master's dissertation, and I wanted to further explore the discrimination experienced by this community. For the master's dissertation, I used an existing questionnaire that was designed to capture caste-based discrimination. However, it was unable to capture it because people reported class-based discrimination. This was also a reflection of the limited understanding of discrimination and how it operates in the context of Banjaras. Discrimination varies across context and there is a need to understand the context where discrimination is experienced. As mentioned at the beginning of this chapter, 'othering' is significant to discrimination, and it is important to understand the process of 'othering' and discrimination experienced by Banjaras in Gadag district in Karnataka.

1.4 Research questions

The thesis is guided by the broad research question of:

How are the Banjaras constructed as the 'other' in the community and the health system, and what are its consequences for their health and health care access?

Specific research questions

1. How does 'othering' occur in the context of Banjaras in Gadag district? What are the processes that contribute to them being constructed as the 'other'?
2. How does the 'othering' process of Banjaras in Gadag district lead to discrimination in the community and health system?
3. What are the ways by which the discrimination experienced affect the health and health care access of Banjaras in Gadag district?

1.5 Objectives

1. Examine discrimination experienced by Banjaras in health care setting
2. To study the process of 'othering' by the healthcare system
3. To evaluate the impact of possible discrimination experienced by Banjaras on their health, health care access and utilisation

1.6 Organisation of thesis

There are ten chapters in this thesis. In this chapter, I introduced the concept of 'othering' and discrimination and why it is an important Public Health issue. In the second chapter, which is the review of literature, I have described the philosophical underpinning of discrimination, concepts similar to discrimination and the measurement of discrimination by the health care system. Chapter three explains the detailed methodologies employed in the two phases of the work undertaken for the study. Results of the study are split across seven chapters, from chapters four to ten. In chapter four, I situate the context of Gadag in relation to the development discourse of Karnataka using various indicators. Chapters five to seven describe the findings of the ethnography that constitutes phase 1 of the work. Chapter five details the context of the Banjaras *tanda* and the life there, whereas chapter 6 describes the health systems catering to the *tandas*. Chapter seven examines the different structures and everyday discrimination experienced by Banjaras. Chapter 8 compares the infrastructure in the *tandas* and villages and concludes with discriminant analysis which identifies variables that differentiate

between *tandas* and villages. The potential variables included in the analysis were identified through the ethnography. In the ninth chapter, the findings of quantitative survey examining households' attributes, morbidity profile and care seeking for ailments are described. The findings from the ethnography were also used to construct a structural equation model to understand the pathways from structural discrimination to morbidity and care seeking separately for *tandas* and villages. In chapter ten, I discuss the overall findings of the PhD work in the context of othering as described by Gayatri Spivak and its implications for Public Health practice.

CHAPTER 2

LITERATURE REVIEW

The objective of this chapter is to describe the philosophical understanding of discrimination, terminologies and concepts similar to the concept of discrimination and how it has been measured in relation to health and healthcare. This chapter is very different from a traditional literature review which usually provides a justification for the study. I have already discussed the concept of ‘othering’ and discrimination and its consequences on health and health care access in Chapter one (section 1.2). Reviewing historical documents to understand the context of the Banjaras forms an essential part of ethnographic research and has been mentioned separately in Chapter five. Similarly, the review of documents to situate Gadag district in the development discourse is described in Chapter four. These do not form a part of the literature review in order to avoid repetition of information. This chapter, therefore, will dwell on the concept of discrimination, other similar conceptualisations, their distinctions and the manner in which it has been measured by others. This description is presented in three sections. The first section describes the philosophical underpinning of discrimination and the terminology related to it. The second section will deal with the conceptual differences and similarities between stigma, discrimination, ‘othering’ and social exclusion and its consequences for measuring health and healthcare access. The final section describes the different measures for capturing discrimination by the health care system and its applicability across various contexts.

2.1 Philosophical underpinning of discrimination

As individuals and as researchers, we come across situations and circumstances of differential treatment in everyday life. A question arises as to what this differential treatment is, does it harm the individual or the group against whom it is targeted? Who are these individuals or groups meting out differential treatment and are they justified in behaving in such a manner? Let us consider a scenario of a well-meaning medical doctor

on his/her daily rounds in the female general wards where the patients share the same space. It is a regular practice by this doctor to ask questions on alcohol use to women belonging to a particular social group, identified by their family name to aid in diagnosis and treatment. Alcohol drinking is a taboo in the current context in general and women are looked down if they are known to consume alcohol. However, it is an acceptable practice among the women in this group in question. Is the doctor wrong in questioning specific women on alcohol use? If so, then what makes it wrong? Does he/she treat them differently when compared to other women in the ward? What makes the doctor pose this question to specific women? Can this be labelled as 'discrimination'? If yes, then on what basis can it be called discrimination? To answer these questions, it is important to look at the philosophical underpinning of discrimination. The following paragraphs summarises the article by Altman (2020) published in Stanford Encyclopaedia of Philosophy.

To refer to the action/consequence observed by the individual or researcher as discrimination would be on the basis of what is conceived of as 'discrimination', and what makes it wrong. When do people feel discriminated against and when do they not? What does it mean to discriminate against a person or group of persons? When is it tolerated and when is it not and why so? The answers to these questions highlight the moral dimensions of it. Discrimination should be viewed in terms of the actions, practices and policies that cause various social groups to be discriminated (as perceived by the social group that is discriminated against). These groups must be critical to the structure of social interactions across different contexts, i.e. they must have social salience (Lippert-Rasmussen, 2014). This means that any groups based on sex, race, caste, colour, religion, gender are socially salient and likely to experience discrimination. However, groups based on arts or music or food preferences are generally not considered socially salient. The discrimination experienced has to cause harm or disadvantage to the person or group to whom it is directed and relative to an appropriate comparison group. The relevant group here could belong to the same society or under the same political jurisdiction or defined geographical parameters.

Discrimination has at times been talked off as 'differential treatment'. Consider an ex-

ample where the Scheduled Caste (SC) groups have restricted access to resources compared to a dominant group. We say there is ‘differential treatment’ of SC groups compared to dominant groups. It can also be argued that the dominant groups are treated differently from the SC groups, wherein they have access to resources. By using the word differential, the harm of discrimination is missed or left out or not captured. The disadvantage that the SC groups are subjected to is not captured when we call it differential treatment. Discrimination refers to differential treatment that results in a disadvantage for those treated with the specific ‘differential treatment’.

Discrimination by itself is not morally wrong. It may not be morally wrong always, since an individual can be discriminated in favour of as well as against. Sometimes a discriminator may treat people differently, but it will not result in people being worse off than they would have been had they not been discriminated against. For example, having separate restrooms for men and women; here, it discriminates between men and women but not against either of them. On the other hand, even while the need for male and female restroom facilities is treated as distinct, we may be discriminating against transgender groups by not having separate facilities for them. In this context, catering to the needs of transgender groups calls for special provisioning for toilets. Should we not do so, the discrimination would leave transgender groups worse off than if we ignored their specific needs. Whether discrimination is morally wrong or not depends on what makes it wrong. In most political, legal or academic discourse, the word is used in a moralised sense (i.e. to view it as some wrongful act). In this context, it is important to investigate the morality of the concept of discrimination.

2.1.1 Moralised and non-moralised concept of discrimination

Moralised concept of discrimination refers to actions, practices or policies that wrongfully impose a relative disadvantage based on group membership, whereas the non-moralised concept does not identify it as wrongful. The distinction between moralised and non-moralised is in designating the acts, policies or practices as wrongful. The Karnataka Motor Vehicles Rules, Government of Karnataka (1989) specifies that the driver of a transport vehicle “*shall not cause or allow to enter into or to be placed or carried in the vehicle, persons whom he knows or has reason to believe to be suffering from any*

infectious or contagious disease or the corpse of any person whom he knows or has reason to believe to had been suffering from any such disease' (Government of Karnataka, 1989). It can be said that this rule imposes a disadvantage against those suffering from infectious diseases and it would be a way of describing it in the non- moralised sense. We can go a step further and say that if it *wrongfully* imposes a disadvantage, then we are describing it in the moralised sense.

Moralised concept is applied to acts, policies or practices on two conditions:

- wrongfully imposing relative disadvantage on people based on group membership
- wrongfulness is also because part of the disadvantage imposed is because they are members of that particular group

2.1.2 Types of discrimination

Discrimination operates at multiple levels starting from the individual to structural level. There are different categories and types of discrimination. Still, broadly, it can be categorised as direct and indirect which operates at a micro level and structural and institutional at a macro level. These classifications are not independent and are best described using the metaphor of iceberg. The tip of the iceberg is the individual discrimination which is seen and mediated in different ways. The underlying part is the structural discrimination which is complex and challenging to eliminate (Gee & Ford, 2011).

Direct and In-direct form of discrimination

Direct discrimination applies when an agent performs with the aim of imposing a disadvantage on persons for being members of some salient social group. Direct discrimination can be intentional or unintentional or an unconscious prejudice. Example for intentional would-be paying women less than men for the same job. Specifying weight as minimum recruitment criteria (no rational justification) can be discriminatory. It can exclude a disproportionate number of women as they generally weigh less than men and is an example of unintentional discrimination. Unconscious prejudice is when people with progressive values and attitudes harbour negative associations with people based on some characteristic they possess, for example, 'beautiful looking people are not intelligent'. Another example, which is closer to the social contexts we live, is when there

is a theft in the neighbourhood. The police or the community tend to suspect people belonging to certain social groups because they were classified as criminal groups by the British, historically.

Any act that imposes a disproportionate disadvantage on members of a certain group even when the agent has no intention/indifference/bias to discriminate is indirect discrimination.

A policy or act is indirectly discriminatory if:

- it reflects no bias on the part of the discriminator against members on account of their group membership
- it relevantly disadvantages, i.e. on average most members belonging to socially salient groups are disadvantaged compared to another salient group
- the discriminated group is socially salient
- the discrimination in question would not have occurred in the absence of present or past direct discrimination

Structural and Institutional discrimination

Structural and Institutional discrimination have often been used interchangeably, while some authors have treated them as separate concepts (Z. D. Bailey et al., 2017; Williams, Lawrence, & Davis, 2019). Structural discrimination is defined as the totality of ways in which societies foster discrimination through mutually reinforcing systems which in turn reinforce beliefs, values and distribution of resources. This is reflected in history, culture and interconnected institutions. In this context Institutional discrimination refers to policies and discriminatory practices carried out by state and non-state actors based on group membership (Z. D. Bailey et al., 2017). Although Z. D. Bailey et al. (2017) define this in the context of racism in the United States, it has universal applicability. Most common example of structural discrimination is residential segregation which is an outcome of government policies and societies that function to keep certain groups away from the mainstream. Segregation causes reduced access to public and private institutions and affects the overall development of groups that experience this (Williams,

Lawrence, & Davis, 2019). Conceptually structural discrimination is thought of differently from a direct form of discrimination and can be called an indirect form of discrimination. The fact that policies or the reasons for how structural discrimination came to exist and continues to operate in society points towards the argument of it being a direct form of discrimination (Altman, 2020).

2.1.3 The wrongs of discrimination

The question here is what makes discrimination morally worse than non-discrimination. Discrimination in the moralised sense is wrongful and this relates to the group-based character. Therefore, it is essential to examine why it is wrongful. There are multiple views for and against why discrimination is wrong.

Wrongs of direct ‘discrimination’

The commonly held views of why direct discrimination is wrong is mentioned below

- a. Immutable traits- The discriminator treats persons on the basis of traits that are not under the control of the individual. For example, race, caste, sex are immutable traits. This does not apply to all; a blind person denied a driving licence is not morally wrong and aspects like religion are not immutable traits. Discrimination that targets unchosen characteristics is more harmful than those that are target chosen characteristics (e.g., A smoker may stop smoking to not face discrimination, but one cannot opt-out of race/ colour), but this may not apply to a chosen trait such as religion.
- b. Inaccurate stereotypes- Discriminators have stereotypes about people which are inaccurate and generalised.
- c. Arbitrary or irrational- Discrimination imposes a disadvantage on socially salient groups merely because of group identity for which there is no rational justification for the discrimination imposed on them by the discriminators. Not many agree with this view. This is because it merely examines the arbitrariness in behaviours towards the discriminated group and ignores the context in which it happens. The context is one in which discriminators hold attitudes toward these socially salient groups viewing them as morally inferior resulting in discrimination, is not necessarily arbitrary.
- d. Meritocratic - Discrimination violates the meritocratic norm in which the best qualified ought to receive the benefit at issue. This discourse is commonly seen in academic or job settings. This has been seen as more to do with efficiency than fairness.
- e. Denial of equal entitlement- Discrimination increases inequality of opportunity.

- f. Social exclusion- Discrimination is wrong because it involves the exclusion of those discriminated against. The problem with this argument is that discrimination is wrong even when it does not lead to exclusion.
- g. Treating people as morally inferior – discrimination is wrong because it demeans and denigrates those against whom it is directed, thereby treating people as morally inferior.
- h. Prejudice – having an attitude that regards members of a salient group, qua members, as not entitled to as much respect or concern as members of other salient groups.

The most acceptable and consistent view is that direct discrimination is wrong because it violates the equal moral status of persons by treating the victims in ways that would be appropriate only for individuals having a diminished or degraded moral status.

Wrongs of in-direct ‘discrimination’

The two major wrongs of indirect discrimination are the imposition of wrong by the major institutions of society without adequate justification and placing members of different social groups in a position of vulnerability.

The wrongs of indirect discrimination are process-based rather than outcome-based.

The wrongs of direct discrimination are similar to that of indirect discrimination and are so due to the linkage between group membership that explains the disproportionate disadvantage experienced and the persistence of social processes that work to turn differences that are visible and irrelevant morally into systematic disadvantages. Such social processes are morally wrong since they treat some socially salient groups as having a degraded or diminished moral status. This makes the wrongs of direct and indirect discrimination as different versions of the same moral wrong.

2.1.4 The need for the concept of Discrimination

The concept of discrimination identifies a moral wrong where salient group members are treated as individuals having a degraded or diminished moral state on account of their group membership or because they belong to the group and the relative disadvantages that they suffer makes them vulnerable to being dominated and suppressed. Historically large-scale injustices were based on group structure and the dominant group

members imposed various disadvantages on the oppressed group by material deprivation and imposing restrictions on them. The concept of discrimination highlights the group structure and the relative deprivations built around this structure by humans to one another. This is not to point that the group is wronged by injustices but the wrong done to the individuals who make up the group. The concept of discrimination is a tool for representing these serious wrongs.

2.2 Concepts of Stigma, Discrimination, ‘Othering’ and Social exclusion

While reviewing literature on discrimination, interrelated concepts like stigma, ‘othering’ and social exclusion are often used. Each of these different concepts is closely linked to each other and there is a need to identify the commonalities and distinctions. Stigma is often used specific to any disease or ailment. For example, when we talk about stigma of Human Immunodeficiency Virus (HIV) infection, the attention shifts towards the perception and self-image of individuals. These individuals or groups experience unfair treatment which puts them at a disadvantage. The use of the word stigma here renders the unfair treatment invisible (Sayce, 1998). Take, for example, the statement, *“Individuals are excluded from certain aspects of society because they are viewed as having or possessing some mark which causes them to be stigmatised”*. The concepts of stigma, discrimination, social exclusion and ‘othering’ can be used to describe the underlying processes in the above phrase. Treating persons differently because they possess some mark or attribute that puts them at a disadvantage indicates discriminatory practice. The signifying attributes are stigmatising and the underlying social processes which define one group against the other that result in alienation is the process of ‘othering’. This process of ‘othering’ along with stigmas and discrimination will result in groups or individuals to experience social exclusion. In this context, the following section will briefly discuss the meaning of these concepts, the issues addressed by each, and the commonalities across these concepts.

2.2.1 Stigma

Goffman (2009) defines stigma as an attribute that is deeply discrediting and that reduces the bearer from a whole and usual person to a tainted and discounted one. Most

of the dictionary definitions view it as a mark of disgrace that evokes a strong feeling of disapproval. Stigma is, however, a complex process that extends beyond individual experiences. It involves interactions between those marginalised and those who are not and the broader socio-political context where they are situated. These include practices, community relations or policies (Stuber et al., 2008). Goffman's focus is on how individuals are stigmatised, their psychological state and their responses in different social encounters. It is more individual-focused as it views those who are stigmatised as possessing something wrong or defective, although it emphasises that stigma should be seen as the language of relationships and the perspective of others, not as merely possessing an attribute. Psychologists and sociologists have built upon Goffman's work to describe two types of stigma, i.e. felt stigma and enacted stigma. Felt stigma, also known as internalised stigma or self-stigmatisation is a feeling of shame and expectation of unfair treatment that prevents people from talking about their experiences or seeking care. They view themselves as discreditable. Enacted stigma refers to the behaviours and attitude of others towards those perceived to be possessing the stigmatised attribute. An example of this is not shaking hands or avoiding people due to possessing the attribute. Both these types may overlap (Goffman, 2009; Gray, 2002). Researchers from different disciplinary orientations have developed various theories, which in turn affect the way stigma is conceptualised. Some of the criticism of the concept of stigma is that it is too focussed on individuals, perspectives of those stigmatised and the stigmatiser and the influences it has on micro-level interactions. Link and Phelan (2001), who have conceptualised stigma from a sociological perspective, see it as an attribute and stereotype with a component of discrimination. Stigma results when there is a convergence of the interrelated components of differentiating and labelling differences, associating negative attributes to human differences, separating "us" from "them" and status loss and discrimination. Once people are labelled and assigned stereotypes, it becomes a rationale to devalue, reject and exclude them, leading them to experience discrimination (Link & Phelan, 2001). Most definitions or concepts of stigma do not include the component of discrimination but continue to focus on individual attributes or are specific to disease.

2.2.2 'Othering'

Concept of the 'other' has been used by De Beauvoir in describing a woman as the 'other'. Edward Said uses the concept of the 'other' to explain western ways of subordinating people and constructing superior identities (Joffe, 2011). 'Othering' as a concept was first used by Spivak in the essay "The Rani of Sirmur" (Spivak, 1985). She points to the limitations of using archival materials which have been created with a specific perspective that excludes or locate narrators in positions of power vis a vis person whose stories are being told. Such processes may serve to reiterate the voice of the narrator. She defines this as the process of 'othering' (Spivak, 1985). 'Othering' is defined as the process which serves to mark and name those thought to be different from oneself (Weis, 1995). 'Othering' is central to the formation of identity. The 'other' includes groups lacking in power within a particular society, identified out-groups and foreigners. One of the ways people create their identities is not only associating themselves with categories such as ethnicity or gender but also a comparing them with other groups (Joffe, 2011). 'Othering' serves to reinforce notions of own normality and distinguishes the other as one who deviates from this. Those who face 'othering' experience marginalisation, disempowerment and social exclusion (Grove & Zwi, 2006). The concept of 'othering' as identified from the literature has implications for studying groups or communities labelled as 'other', which causes them to be subordinated. It also enables us to recognise how historians and researchers have created or co-created the 'others' in their discourses.

'Othering' in literature has often been described as a negative exclusionary process with consequences and rarely has it been discussed as an inclusive or positive process. It is conceptualised into two categories, i.e. Exclusionary 'othering' and Inclusionary 'othering' (Canales, 2000). Exclusionary 'othering' is when persons are labelled according to perceived differences. Once labelled they are stigmatised, and this stigmatisation constructs their identity as the other. These stereotypes then form the basis for interactions. Inclusionary 'othering' is when differences are not causes for exclusion but are recognised, valued and included. 'Othering' as a process can also lead to inclusion. The difference between Exclusionary 'othering' and Inclusionary 'othering' is related to

how power is used, by whom and consequences thereof. Consequences of inclusionary 'othering' are consciousness raising, sense of community, shared power and inclusion (Canales, 2000). Although inclusionary 'othering' sounds good, in reality, it is hardly practised.

Practices of 'othering' can also occur in the doctor-patient relationships where generalised explanations related to health are made related to communities and their practice (Johnson et al. 2004a). Three forms of 'othering' discourses that existed were essentialising explanations, culturalist explanations and racialising explanations. Essentialising explanations involve making over generalisations about things such as culture, race, location, social background and health care practices. An example of this is a Kerala state minister in 2013 making a statement that infant deaths in a tribal belt were due to alcoholism among mothers, making an over generalisation that mothers in these tribal belts are alcoholics. Culturalist explanations involve attributing behaviours to culture which reflect stereotypical and over- generalised views, e.g. shyness, passivity of women attributed to culture was given as an explanation for women not participating in cervical cancer screening programs.

Racialising explanations are usually subtle in reference to culture, ethnicity and personal characteristics. This is usually noticed in the western context. In India, where caste plays a significant role, it has been reported that health care professionals indulge in practices like untouchability, spending less time and not visiting the households of Dalits. This behaviour, as explained by the Dalits, is because of their social identity that causes them to experience differential treatment (Acharya, 2010).

2.2.3 Social Exclusion

The usage of the term social exclusion has its roots in Europe, first used by Rene Lenoir to refer to those who are physically disabled, mentally disabled and socially maladjusted and the need to strengthen social cohesion for those whom the economy was leaving behind (Evans et al., 2000). This term has been very often used in unemployment or salary relationships but mostly centred on writings on deprivation and poverty. Such discourses are used to provide insights into the nature, causes and consequences of

poverty, deprivation, inequality and discrimination. Some have also criticised the concept of Social Exclusion as it is less stigmatising than the term poverty and acceptable to public opinion (Mathieson et al., 2008).

There are multiple definitions for social exclusion; varying by political, institutional, historical and geographical contexts. The discourse of social exclusion in the European Union is centered on the labour market and welfare provisions. In the South East Asian regions and Sub-Saharan regions it is defined in terms of poverty, capability and resource enhancement and in the South American region on health, social protection and strategies promoting social inclusion (Popay et al., 2008). Most of the definitions emphasise on (Mathieson et al., 2008):

- Groups that are at the risk of being excluded. e.g., mentally and physically handicapped, poor households etc.
- Domains that they are excluded from like livelihood, permanent employment, education, health care, citizenship, equality before the law, etc.
- Problems associated with this exclusion, i.e., unemployment, poor skills, low income, poor housing, poor health and family breakdowns
- Processes that drive these and the levels at which they operate i.e., politics, society, place, person, groups and
- Agents and actors involved.

Social exclusion can be active or passive; active is when deprivations come about by deliberately excluding groups. An example of this could be refugees or migrants who are not given political status in most countries. Passive social exclusion is when there is no deliberative attempt to exclude. An example is, poverty is worsened when the economy is down (Sen, 2001). According to Sen, if poverty is seen as income deprivation, then the notion of social exclusion would help to broaden the scope of poverty analysis. However, if poverty is viewed as capability deprivation, social exclusion serves as a pointer for investigation. The use of relational features in social exclusion can increase understanding of the nature and causes of deprivation, poverty and inequality and develop effective ways of addressing them (Sen, 2001).

2.2.4 Discrimination, Stigma, ‘Othering’ and Social Exclusion: Same concept or different lens?

The four concepts of discrimination, stigma, ‘othering’ and social exclusion are not separate and should not be viewed in isolation. Summarising the concepts in figure 2.1, stigma is seen as more of an attribute or something in a person that is different or deviant from the normal, whereas discrimination is the act of excluding such people. ‘Othering’ involves naming and shaming people who are different from the ‘self’, which is similar to the three components of labelling, negative attributes and separation in (Link & Phelan, 2001) conceptualisation of stigma. The fourth component of discrimination leads to exclusion and has consequences for health. Similarities across all these concepts in the context of health are that they have a bearing on health care access and health outcomes. All have dimensions of power in perpetuating inequities. The difference between them is the level at which they operate and the dimensions of power at different levels. Stigma and ‘othering’ are conceptualised at an individual level, discrimination at both individual and group level and social exclusion at the group level. The concept of ‘othering’ also has methodological implications wherein just using textual materials privileges the voice of the one who speaks, not of those who are silent. A process of research should render these voices heard by moving beyond the archives or literature of what is known by giving voice to those who are silenced in the literature.

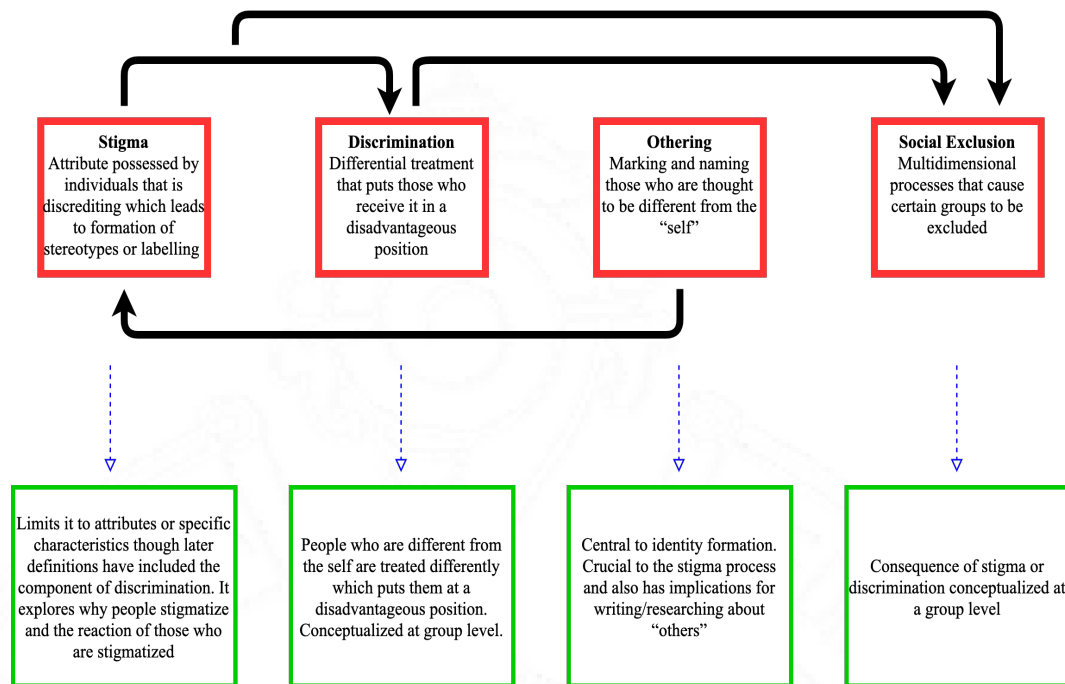


Figure 2.1: Concepts of discrimination, stigma, 'othering' and social exclusion

2.3 Measuring discrimination by the health care system

Discrimination affects health and this is evident from the literature which has been discussed in the previous section. Discrimination and its interrelated components of stigma and 'othering' can occur in multiple spheres of life, the health system being one among them. Discrimination in the health care system can occur in many ways. It could be in the form of distribution of resources or allocation of funds leading to differential access and utilisation. It can also occur in the provider-patient interactions in the form of lack of adequate or inappropriate care, rude behaviour or refusal to provide care. It is important to distinguish the relationship between discrimination and health from discrimination by the health care system. Discrimination experienced in a health care system is by actions of the health systems and its personnel which can lead to reduced adherence to care, under-utilisation of services and seeking inappropriate care which in turn affects health and leads to health disparities. Whereas discrimination experienced in the community or different domains of life, including health care, affects health through physiological and psychological pathways linked to stress manifesting as adverse health outcomes. Krieger (2014) suggested three main epidemiological approaches to study

discrimination which has been applied to discrimination experienced by the health care system. The three main epidemiological approaches are indirect at individual level, direct at individual level and institutional at population level. Indirect approaches involve comparing health outcomes between dominant and subordinate groups without data on exposure to discrimination and if any residual differences persist even after accounting for risk factors it may be assumed that discrimination is the reason for these differences. The direct approach involves measuring the discrimination experienced through scales and associating it with a specific health outcome. The institutional level involves measuring exposures at a population level which mainly includes looking at residential segregation, distribution of facilities and other amenities which is then studied in relation to population rates of morbidity and mortality. It is important to study how discrimination is operationalised in the health care system and the way it is measured. The objective of the review is to examine the different measures for discrimination, stigma and 'othering' by the health system.

2.3.1 Methods for literature search

A computer based search was carried out in PubMed and Web of Knowledge from the earliest record in these databases till March 2021. Plethora of literature in social sciences and scales for measuring discrimination, stigma and 'othering' were found in Scopus and Psychinfo. Searches were not conducted in these databases due to non-access and is the limitation of this review. Searches were performed using keywords that covered different terms related to discrimination, stigma and 'othering' by the health system and its measures. The databases searches, number of articles returned and reviewed are described in figure 2.2. Database search results were exported to Zotero referencing software. The title and if necessary, the abstract was reviewed to include articles in the review. Additionally, references from selected articles and systematic reviews were scanned for documents that did not feature in the database search and were added. Articles included were those that measured discrimination by the health system including the personnel and development of scales or index to measure these. In the case of scales and index the article where it was first mentioned was also included. If the scale or index did not have any psychometric evaluation, separate searches were conducted for any

additional information and these were also included in the review. Different measures were also examined for the use of an explicit theoretical framework in its development, validity, reliability and the context in which it was used.

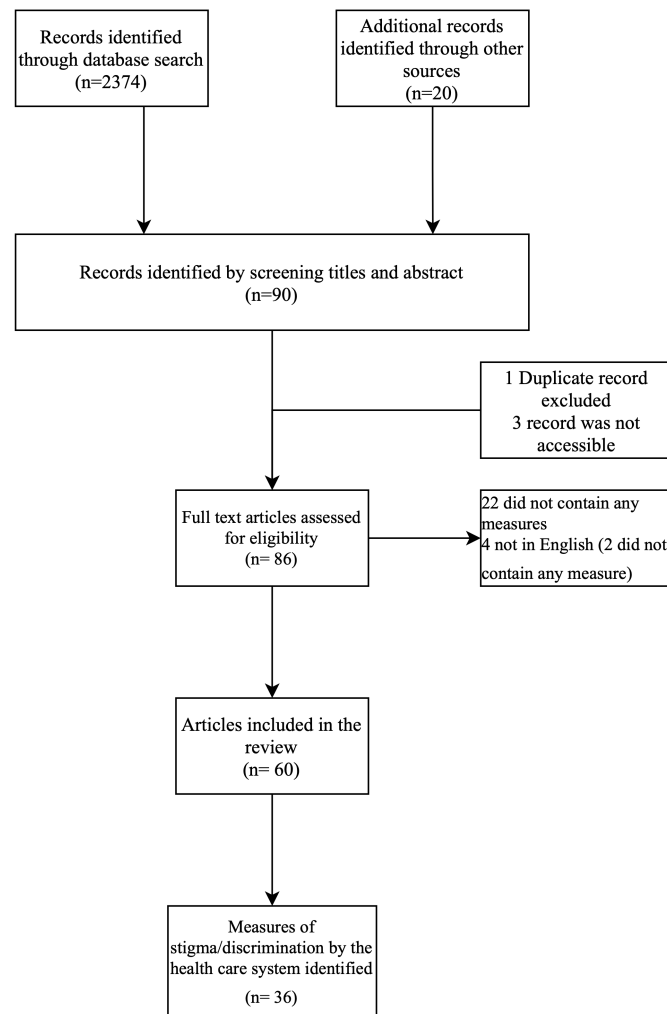


Figure 2.2: Selection of articles for review

2.3.2 Summary of identified measures of stigma, discrimination and ‘othering’

The review identified 36 measures of discrimination, stigma and ‘othering’. Although ‘othering’ is not explicitly stated in any of the measures, the notions of ‘othering’ were identified from few measures. More than 70 percent of the measures were developed in the United States where racism is a major issue. The measures were grouped into five categories i.e. questions in large scale surveys, Implicit Association Test (IAT), scales, indices and ecological analysis. To make a distinction, the five categories were

analysed by studies which used discrimination as process and discrimination as an outcome. Discrimination as a process refers to those studies which have used measures of discrimination to study an outcome related to health and healthcare. Studies that have examined discrimination as an outcome have looked into various factors that influence the discrimination experienced and enacted. A table on countries where the study was done, and the population studied is shown in appendix A1.

a. Questions in large scale surveys

Measures of racial discrimination, Socio-economic status (SES) discrimination and discrimination due to HIV/AIDS were commonly used in large scale surveys. Out of the 10 large scale surveys only one measured discrimination specific to a disease i.e. HIV/AIDS, one related to SES (Schuster et al., 2005) and the remaining eight captured discrimination based on race (Bleser et al., 2016; Hausmann et al., 2010; Johnson et al., 2004; Lauderdale et al., 2006; Ren et al., 1999; Rivenbark & Ichou, 2020; Ryan et al., 2006; Stepanikova & Oates, 2016; Trivedi & Ayanian, 2006; Van Houtven et al., 2005). Most of the surveys were conducted in the United States and one in France. Questions in these surveys ranged from one or two items to six items in the case of Health Care and Quality Survey (HCQS). The questions asked were related to experiences and frequency of discrimination, disrespect, physician and health system bias. Seven papers analysed discrimination as a process where these measures were used as a predictor for various indicators like physical and mental health symptoms, perception of patient-provider relationship, utilisation of preventive health services, quality of care and treatment delays.

Papers which analysed discrimination at the health care system as an outcome were examined with predictors like race, SES, gender, income, education, health care coverage, religion, region and access to care. Internal consistency reliability was tested only for one measure i.e. National Survey of Functional Health and the rest were not checked for reliability and validity. Authors who have used these measures have argued that a single measure of discrimination is as good as a scale for measuring discrimination. However, studies have compared the performance of scales, indexes and single measures and have reported single item measures to be inadequate to capture discrimination (Hausmann

et al., 2010; Krieger et al., 2005).

b. Implicit Association Test (IAT)

Implicit Association Test measures implicit social cognition for describing cognitive processes related to constructs of attitudes, stereotypes and self-concept (Greenwald & Banaji, 1995). Greenwald and Banaji (1995) defined implicit cognition as introspectively unidentified (or inaccurately identified) traces of past experience that mediate favorable or unfavorable feeling, thought or action towards social objects. IAT tries to capture information from the thought process where the information is unknown to the self or known but restrained. IAT assesses the association between target-concept discrimination and attribute dimension and is computer based. IAT starts with introduction of target- concept discrimination (Greenwald et al., 1998). Considering the two target concepts as forward caste and backward caste, the first step in IAT involves distinguishing first names that are identified with these groups. As the task starts the person is asked to sort the words in the appropriate category by pressing certain keys on the computer. The second step is similar to the first but with the introduction of attributes in two categories. The task here is to assign words into categories of good (joy, love, peace, wonderful, pleasure, glorious, laughter, happy) and bad (agony, terrible, horrible, nasty, evil, awful, failure, hurt). In the third step the target-concept and attribute dimension are superimposed, and the participants are asked to assign words. In the fourth step the target-concept is reversed and in the fifth step attribute dimension is superimposed with this reversed target-concept. If the participant found one combined task difficult than the other, then the measure of this difficulty difference is the measure of implicit cognitive difference between target categories. Studies that used IAT have examined bias or attitudes as both, a process and an outcome.

Studies using IAT were conducted among health care providers on the attitudes or bias that they might have towards different groups based on race or sexual orientation. All these studies were done in the United States. In studying outcomes, the researchers were interested in examining the bias or attitudes of providers towards different racial groups and homosexual people (Blair, Havranek, et al., 2013; Sabin et al., 2015). IAT

was used as a process to look into the relationship between physicians' bias and the patient's perception of care in clinical encounters (Blair, Steiner, et al., 2013). IAT is useful in assessing the stereotypes or bias that providers may have towards certain groups. Although this measure is useful to understand the concept of 'othering', it is impractical to use in a context with low literacy and poor penetration of technology.

c. Scales

About 19 scales were identified from the analysis. Eighty five percent of the scales were used in developed countries. About two thirds of the scales were developed and used in the United States alone. Eleven scales measured discrimination or stigma by the health care system or its personnel (Facione & Facione, 2007; Feyissa et al., 2012; Haywood Jr. et al., 2014; Modgill et al., 2014; Peek et al., 2011; Rutledge et al., 2011; Srithanaviboonchai et al., 2017; Thompson et al., 2004; Uys et al., 2009; Vu et al., 2016; Yelland et al., 2012) and in the remaining scales, discrimination in health care was one of the domains or one-two item in the scale (Attanasio & Kozhimannil, 2015; Clark, 2003; Evans-Lacko et al., 2015; Green, 1995; Landrine & Klonoff, 1996; Perez et al., 2009; Uys et al., 2009; Weech-Maldonado et al., 2012). Nine scales measured discrimination or stigma specific to a condition like HIV, mental illness and sickle cell disease. Six out of these measured the stigma towards HIV and mental illness by the providers. All scales in general, measured racist thoughts, actions, frequency of racist events, perceived discrimination, religious discrimination, suspicion of the health care system, stigma towards a particular condition and attitude of providers towards Persons Living with HIV(PLHIV). The items in the scale asked about a combination of generalised and personal experiences or practices and its attributes. All the scales were further checked for the process in the development of the scale. Eight measures had explicitly stated a theoretical or conceptual framework to guide in scale development. The theoretical or conceptual frameworks used were Bethell et al's concept of health care quality, generic stress model, 3D model of culturally congruent care, Link and Phelan's conceptualisation of stigma, Process model of stigma, Harell's model of racism and Earnshaw and Chadoirs HIV stigma framework. Items were developed from review of literature, adaptation of items from different scales, consultation with experts

and formative research with the providers and users of health care. Detroit Area Study (DAS) discrimination scale was not subjected to test of validity and reliability (Perez et al., 2009). Almost all the scales were examined for internal consistency except Detroit Area Study discrimination Scale (DAS) and Measure of Indigenous Racism (MIRE) (Perez et al., 2009; Yelland et al., 2012). The common tests of validity done were construct validity which involved convergent and divergent validity followed by content and concurrent validation. Convergent validity was established by means of correlations between scores on the scale and other variables like trust in health care, rating of providers and other measures of discrimination. Divergent validity was measured by the relationship between the scales and measures of social desirability and gender. Measures of stress and associated symptoms like smoking were used to establish concurrent validity. Construct validity was established by opinion of experts and by cognitive debriefing.

d. Index

Four index measures were identified out of which two were developed and used in India and the others in the United States. Indices measured the experience of discrimination and stigma by health care providers in the context of race, caste and stigma related to PLHIV. The Experience of Discrimination (EOD) measure was validated with other measures of discrimination (Krieger et al., 2005). The Index of Discrimination (Acharya, 2010) was not tested for reliability or validity. A theoretical or conceptual framework was used in all the indices except EOD. Stigma index developed for Indian health care setting utilised a formative research to identify the dimensions of stigma and discrimination in the construction of the index. This index was the only one which measured the stigma at the level of the providers (Mahendra et al., 2007).

e. Ecological analysis

Measures of discrimination are done at a population level. Only one study was identified from the review which probed the association between residential segregation and distribution of primary care physicians. It involved classifying residential zone and linking them to the distribution of health care providers using secondary data sources. The study used the fundamental cause theory to understand the mechanisms of structural

inequality (Gaskin, Dinwiddie, Chan, & McCleary, 2012; Gaskin, Dinwiddie, Chan, & McCleary, 2012) (Gaskin et al. 2012a; Gaskin et al. 2012b).

2.3.3 Discussion

All measures reviewed help in understanding the ways to capture discrimination and stigma and the levels to measure them. Most of these measures are used in developed countries like the United States, Australia and Sweden, all of them focusing on racism or discrimination and stigma related to one medical condition. Analysis of secondary data for discrimination was done in the United States because of the inclusion of items in these surveys that captured discrimination. This may not be possible in many other countries as their Demographic and Health surveys are not designed to capture discrimination. In such situations it becomes necessary to rely on adapting existing scales and indexes or developing them from scratch. Adapting an existing scale in an Indian context where casteism dominates racism is likely to fail. Even within states and districts, the forms of discrimination and stigma vary. Context becomes very crucial in understanding and measuring discrimination. A tool developed to measure caste-based discrimination will not be able to capture class-based discrimination and vice versa. Scale and index development is guided by theory and conceptual frameworks with items being developed by experts and by reviewing existing literature. In this process, very often the voices of those who matter and on whom the measure is applied is not heard. They come into focus when the questionnaire needs to be pre tested or applied. Very few studies develop a scale or index based on the lived experiences of these people. Existing scales and indices have examined discrimination from the view of those who experienced it and less often from the perpetrator. Although few existing scales and indices do address this, it is restricted to a specific disease or illness.

Reviewing existing measures helps in understanding the ways to approach measures of discrimination, stigma, prejudice and stereotypes including its psychometric properties and the context in which it was used. Context specific measures are required to study the discrimination and stigma experienced in the health care system from the view of those who experience it and also those who perpetuate it.

CHAPTER 3

MATERIALS AND METHODS

The study design adopts an Exploratory sequential mixed method approach conducted in two phases between January 2018 to October 2019 in Gadag district, Karnataka. In the first phase, an ethnographic study was done to understand the discrimination experienced by the Banjaras in the community and the health care system. The second phase involved infrastructural mapping of all the *tandas* and the associated villages and measuring the extent of discrimination using an interview schedule. Infrastructure mapping using a checklist helped develop the sampling strategy and enabled listing the features that differentiate the *tandas* from villages.

3.1 Phase 1

The objectives of this phase was to identify the various forms and types of discrimination and consequent othering experienced by the Banjaras in the community and health care setting. The study was conducted between January 2018 - April 2018.

3.1.1 Study design

The component of the study used an ethnographic approach with participant observation and interviews of key informants and stakeholders. Ethnography is a design of inquiry within sociology and anthropology which involves studying a cultural group in natural settings over a prolonged time period. The ethnographic approach allows one to obtain a holistic picture of the subject of study wherein the emphasis is on portraying the everyday experiences of individuals by observing them, interviewing them and others who are relevant (Creswell & Plano Clark, 2018). Data collection is done mainly through participant observations and interviews.

3.1.2 Study setting

The ethnography was conducted in two *tandas*, namely *Vanapura* and *Chara tanda*, in Gadag district. The *tandas* were selected based on the development profile of the

talukas in the district. *Vanapura* is located in Gadag taluka, which is relatively developed among all the talukas and *Chara tanda* in Mundargi taluka, which lags in development. Ethnography was also conducted among the public and private health care providers that cater to these *tandas*. Public providers were the Sub-centre and Primary Health Center (PHC) that cater to the *tandas*. Private providers included the providers trained in AYUSH and those without any formal training in any system of medicine called locally as Rural Medical Practitioner (RMP).

3.1.3 Ethical considerations

The study was conducted after receiving approval (SCT/IEC/1141/DECEMBER-2017) from the Technical Advisory Committee (TAC) and Institutional Ethics Committee (IEC) of Sree Chitra Tirunal Institute for Medical Sciences and Technology (SCTIMST). A copy of the approval is attached as Annexure 2 to this dissertation. The purpose and nature of the study were explained to the Nayaka and the panchayat representatives. Then permission was obtained to visit the *tanda* and observe the daily life there. Formal interviews among people in the *tanda* was done after obtaining informed consent. Approval was obtained from the District Health Officer (DHO) in Gadag district for observations in the public health facilities and to interview the providers. Informed consent was obtained from individual health care providers in public facilities, Bachelor of Ayurveda, Medicine and Surgery (BAMS) and RMP providers to observe their functioning and interview them. All participants were explained the purpose of the study and their participation was entirely voluntary without any compulsion. Consent was also obtained for the audio recording of the interviews and participants were given the option to withdraw at any point in the study. The identity of the informants has been kept confidential, with only the Principal Investigator and the guide having access to the transcripts of interviews and field notes.

3.1.4 Data collection

Data collection began with a house listing exercise involving identifying the number of individuals in each household, experience of any morbidity in the past one month and the consequent care seeking adopted by these households. This served as a traditional

entry point into the community for the ethnography. House listing helped familiarise the researcher with the people in the *tanda* and understand the prevailing types of morbidity among them. Data was collected through observation and interviews. The information sheet, interview guidelines, house listing schedule and observation guidelines are attached as annexures (see Table A4 - Table A19). The observation tool used in the *tanda* informed on the life of Banjaras, their daily life, daily activities in the *tanda* and health care practices. Observations made in the health system provided insights into their functioning and the interaction pattern of the Banjaras with the health care providers. The interviews were conducted through formal and informal lines of inquiry, informal being conversations in the tea shop, gatherings in the *tanda* or during the course of work in different health care settings. This enabled the participants to express themselves freely. Interviews were done in Kannada, the language spoken there. Thirty formal interviews were conducted among village head, panchayat representatives, those who had difficulties accessing healthcare and those who accessed it with ease, health care providers in the government and private sector. Informal conversations and interviews were documented in the field notes. Observations were jotted in a small notebook wherever possible in the field. At the end of the day, a detailed description of the observed reality with depiction of the scenes and dialogues in the course of the observations were typed. This process enabled further probing or developing a hypothesis regarding specific incidents or conversations, which was noted for further clarification. The insights and questions based on each day's observation led to guide and focus on collecting new information. The interviews were translated from Kannada and transcribed using transcribe wreally (Studios, 2019) software. This program enabled the researcher to listen to the interviews and transcribe them through dictation by means of voice-to-text conversion.

3.1.5 Analysis

Unlike other qualitative research methods in ethnography, the analysis begins as soon as the researcher enters the field and reflects on what has been observed and experienced. Writing the field notes enhances this analytical process and for a deeper understanding of what has been observed (Emerson et al., 2011). Ethnographic data was analysed in two ways to answer the objectives. One was analysing the field notes and interviews

to understand 'othering' and discrimination of Banjaras. Secondly, it enabled interview schedule development to gauge the extent of discrimination experienced by the Banjaras in Gadag district. Historical information and documents from multiple sources were examined to document the type and form of discrimination experienced by the Banjaras. The following section describes the two ways in which the ethnographic data was analysed.

Ethnographic Analysis

The analytical process during fieldwork helped in obtaining clarity on varying concepts that prompted further questioning. Once the fieldwork was completed, the detailed notes and the transcribed interviews were sorted and arranged sequentially. This was then read multiple times to get a broad overview of the complete documentation. This helped in recognizing the different patterns and make comparisons within and across the two *tandas*. Multiple reading was followed by open coding of large blocks of data. Coding was done at the margins of the printed notes rather than using a software program, as this helped to go back and forth during coding. In this process, coding was not restricted to events or processes related to health or health care access alone but to various other themes. This was useful later on in the analytical process in telling a coherent story. Insights during the coding process were documented as memos. Open coding generated many themes and themes related to health and health care access were elaborated upon. The data was reread and focussed coding was done keeping with the selected themes categorising into subcategories. The codes generated were transferred to a word program, printed and cut into piles. These were arranged and rearranged with the help of memos and linkages were made to tell a coherent story.

Ethnography for interview schedule construction

Analysis from the ethnography offer insights into the experience of discrimination, othering and its impact in different spheres of life at community, household and individual level. With the changing nature of discrimination across contexts, individuals are less likely to respond to direct questions on discrimination experienced or its form of manifestation, which was the case in the two *tandas*. The discrimination in this context

would be the outcome of it rather than the process and ways of being discriminated. A framework was developed based on the analysis of ethnographic data, which identified the outcome of discrimination at levels of the community, household and the individual (see Figure 3.1).

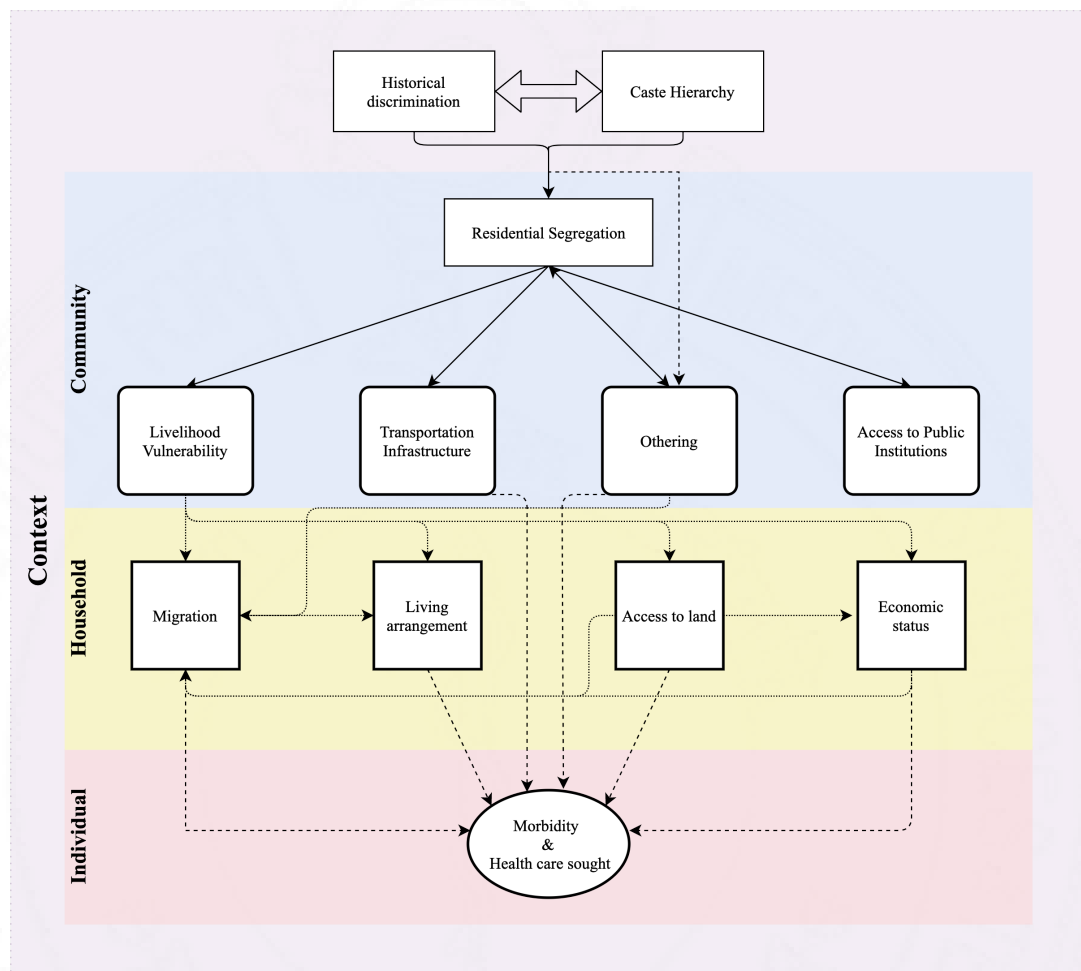


Figure 3.1: Conceptual framework for interview schedule development

Conceptual framework for interview schedule development

Historical accounts revealed the discrimination experienced by the Banjaras through the people in the community and the colonisers. Division of the society on caste lines was prevalent in the pre-colonial era and the Britishers, by classifying nomadic tribes as criminal tribes, deepened the division. Nomadic communities were perceived to be criminals and the British passed the Criminal Tribes Act. This law allowed for unique

settlements to be created where the members could be monitored and reformed (Radhakrishna, 2000). The Banjaras being a nomadic tribe, were brought under this Act. In addition to this, Banjaras belong to a lower caste and were never allowed to settle within the village but at its peripheries. The existing caste system and the labelling as criminal tribes by the Act helped maintain the status quo. This prompted them to look for places of settlement to carry on with their lives and settle down in spaces away from the mainstream village, a form of residential segregation. The outcome of discrimination in this context due to historical injustices and caste hierarchy is conceptualised at the community, household and individual levels.

3.1.6 Development of the Interview schedule

Based on the conceptual framework, variables were identified that would capture the underlying concepts. The variables were operationally defined and the level of measurement was identified. The operationalised variable and the level of measurement are listed in table 3.1. Two different interview schedules were created; one was the schedule for capturing infrastructure at the *tanda* and village level, administered to all the *tandas* and identified villages (see Table A21 in annexures). The other was the household and individual interview schedule administered to selected *tandas* and villages (see Table A25 and A26 in annexures). *Tanda* and village level schedule had a list of questions ranging from transport infrastructure, public amenities and public institutions in the settlements. This form was uploaded to KoboCollect for data collection. For the household and individual interview schedule, variables were identified and the possible list of questions were generated for measurement. These questions were generated by the researcher and from existing survey instruments used in large scale surveys. The wording of the interview schedule was modified to suit the local language and dialect from the ethnography. The questions were then grouped in an appropriate manner with information on the household first, followed by individual attributes, morbidity profile and care seeking. The interview schedule was then pilot tested among participants in the *tanda* to get the correct sequencing. Questions that were difficult to understand were modified and repetitive questions were dropped. The finalised interview schedule was translated into Kannada by a person in Gadag district to ensure cultural appropriateness.

Table 3.1: Development of interview schedule from ethnography and the levels of measurement

Level	Domain	Variable name	Questionnaire	
Community	Livelihood vulnerability	Access to land domain from household aggregated at settlement level		
		Transport infrastructure	Availability of bus shelter Availability of public buses Frequency of public buses	Infrastructure Infrastructure Infrastructure
	Othering	Othering is difficult to measure quantitatively due to the changing nature of discrimination. This limitation is overcome with ethnographic details.	Not applicable	
	Access to Public Institutions		Location of bank	Infrastructure
			Location of Post office	Infrastructure
			Location of Public health facilities	Infrastructure
			Location of panchayat office	Infrastructure
			Location of schools and colleges	Infrastructure
			Location of amenities like ration shop, veterinary centre and milk society	Infrastructure
			Number of ASHAs	Infrastructure
			Number of Anganwadis	Infrastructure
	Household	Migration	Household with migrants	Household and Individual
			Occupation at the place of migration	Household and Individual
		Living arrangement	Remittances by the migrants	Household and Individual
Family members of migrants who stay back			Household and Individual	
Access to land			Purpose for staying back	Household and Individual
			Land ownership	Household and Individual
			Type of land	Household and Individual
			Quantum of land owned	Household and Individual
			Land productivity	Household and Individual
			Source of water for irrigation	Household and Individual
Economic status		Ownership of farm equipment's	Household and Individual	
		Asset ownership	Household and Individual	
Individual	Morbidity	Acute or chronic ailments in the past three months	Household and Individual	
		Health care sought	Household and Individual	
		Facility from where care was sought	Household and Individual	
		Transportation to the facility	Household and Individual	
		Health expenditure	Household and Individual	
	Behaviour of the provider	Household and Individual		

This translated version was uploaded to the KoboCollect platform for data collection.

3.2 Phase 2

The objectives of this phase was to evaluate the impact of discrimination experienced by Banjaras on their health, health care access and utilisation. This phase involved two stages: the location and infrastructure of all the *tandas* and the villages mapped in the initial stage, followed by a Quantitative survey to measure the extent of discrimination experienced by the Banjaras and comparing it with the village. This stage had to be envisaged as a comparison of the *tanda* and the village to which it belongs or one in its immediate neighbourhood. This was because the discrimination experienced is not noticed or even labelled as such by the Banjaras living in *tandas*. Therefore, only by comparing their experiences with others whose contexts are similar can we explicate

the differences across groups. When the contexts remain the same (geographically and physically), variations in lived experiences can be appropriately attributed to individual or household characteristics or to the generic context of the settlement itself. For this reason, this phase was envisaged as a comparative analysis across *tandas* and matched villages.

3.2.1 Stage 1- Infrastructure mapping of *tandas* and villages

The Karnataka Thanda Development Corporation (KTDC) of the Government of Karnataka maintains a list of all the *tandas* in the state. It was necessary to locate all the *tandas* mentioned in the list and the villages they were a part of as there remains a mismatch between the data provided by the district administration and KTDC. The infrastructure mapping helped in figuring out the disadvantage of the *tanda* vis-a-vis the village in terms of infrastructure. This also served towards the development of a sampling strategy for the quantitative survey. The analysis of the ethnography facilitated the identification of the infrastructural variables that needed to be mapped. The other information collected were the numbers of households, population, the type of settlement in case of the *tandas* and geographic coordinates of the *tanda* and village. Due permissions were obtained from the District Health Officer (DHO), Gadag, to approach the Accredited Social Health Activist (ASHA) to get information about the *tanda* and village. Anganwadi teachers were contacted in case the ASHAs were not available (see Annexure A20). The mapping exercise was carried out between February 2019 to March 2019.

3.2.2 Stage 2- Cross-sectional survey

The objective of this survey was to measure the extent of discrimination and its impact on health and health care access between *tandas* and villages in Gadag district. This was done using an interview schedule that was developed based on findings from the ethnography. The individuals from the selected *tandas* were compared with individuals from matched villages where other contextual factors were more or less similar.

3.2.3 Sample Size calculation

The sample size for this survey was estimated using OpenEpi 3.0.1 (Dean et al., 2013). Data from Study on Global AGEing and adult health (SAGE), wave was used for this estimation. According to SAGE, 59 percent of the adults aged 50 and above in Karnataka reported some or the other kind of morbidity. Assuming a prevalence of morbidity of 59 percent with precision of 7 percent and design effect of 1.5, the sample size was estimated to be 285, rounded to 300. Since the aim was to enable comparisons between the *tanda* and village, 300 was selected from each group, making it a total of 600 people.

3.2.4 Inclusion criteria

House listing exercise and the ethnography revealed that older adults had a high prevalence of morbidity and difficulty in seeking care. Therefore, it was decided to survey adults above 50 years of age with experience of acute or chronic morbidity who could understand Kannada or English.

3.2.5 Sample selection

The organisation of the *tanda* in relation to the village has been explained in detail in Chapter 5. Still, it is important to briefly mention this here for understanding the sampling of *tandas* and villages.

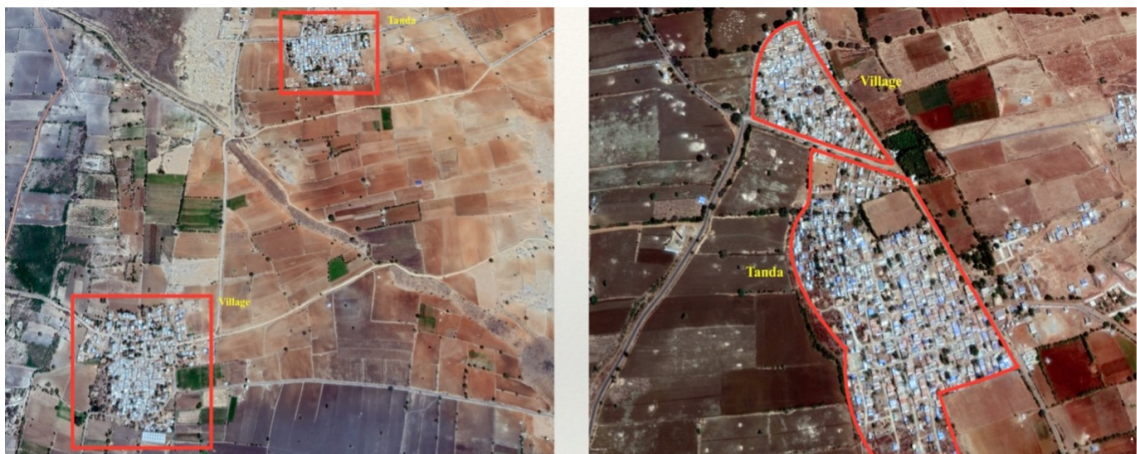


Figure 3.2: Map showing organisation of *tanda* and village in Gadag district (source- Google Earth,2020)

Tandas are a distinct settlement located away from the village but administratively a

part of it and share the same name. For example, the *tanda* located near Chara village is called Chara *tanda*. This distance varies across *tandas*, with settlements situated at a distance of about one to three kilometres from the villages as evident from the first picture. In few places, they are separated by a road, as shown in the second picture (see Figure 3.2). There are a few standalone *tandas* that are not attached to any village and have a distinct name and settlement. In the context of sampling, *tandas* are selected based on a pre-determined set of rules mentioned below. To enable comparison, a matched village, of which administratively the *tanda* is a part, or in case it was not like in standalone *tandas*; the nearest villages were selected.

Distance to the health care facility from the *tanda* is the factor that enables utilisation. Therefore, this variable was considered for stratification of the *tandas* ensuring variation across all other parameters as well. The distance was calculated using google maps and coordinates for the nearest public health facility obtained from Karnataka GIS's online portal (KSRSAC). The shortest distance from the *tanda* to the health facility was taken and this method was uniformly applied across all *tandas*. There may be alternative routes that are likely to be shorter, but only the one shown by google maps was considered uniformly. In some cases, the Primary Health Centre (PHC) that serves a *tanda* was located far off than another PHC or a CHC which is more proximate. In such a scenario, the distance to the closest PHC/CHC was considered. Certain *tandas* are officially classified as big or small *tandas* or with the suffix 1 or 2 with the same name and the distance between them was negligible. For sampling purposes, it was considered as a single unit and if it was selected, then the *tandas* within the unit was randomly selected. Based on the distance from the PHC, *tandas* were classified into four groups of 0-3 km, 3-6 km, 6-9 km and ≥ 9 km. It was decided to select 30 *tandas* in order to qualify the conditions of the central limit theorem. The theorem states that as the sample size gets large enough, the sampling distribution becomes almost normal regardless of the distributional shape of the population. The sampling distribution becomes normal as the sample size approaches 30 and above. The number of *tandas* to be sampled from each group was based on the group representation in the overall collective of *tandas* in the district. *Tandas* with PHC/CHC located at a distance of 0-3 kilometres formed

about 10.2 percent of the total *tandas* and this proportion was multiplied by 30 for the numbers of *tandas* to be selected within that group. A similar exercise was repeated to obtain a count for other groups. (See Table 3.2 and Figure 3.3)

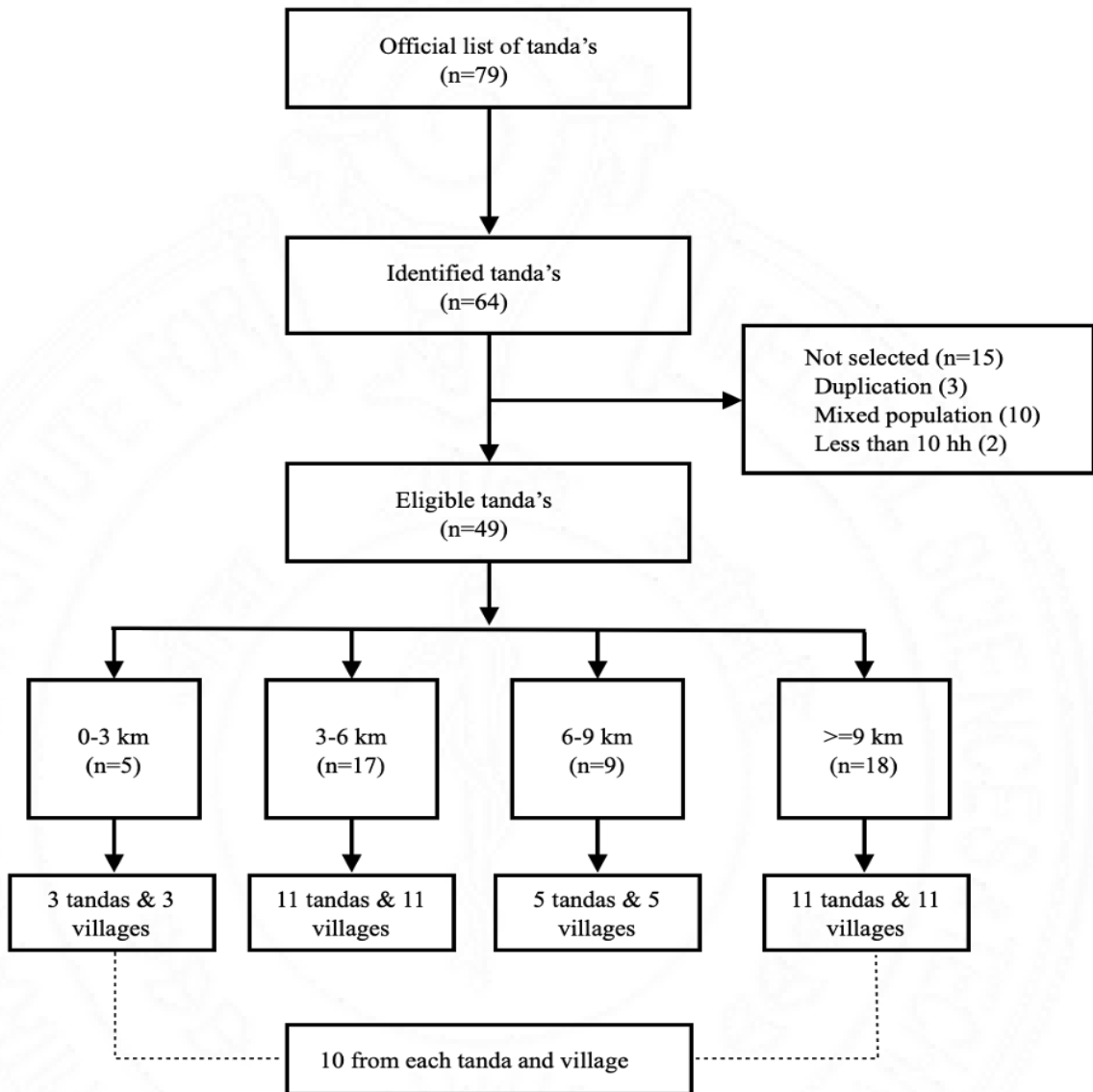


Figure 3.3: Sample Selection procedure at settlement level

Within each group, the *tandas* were organised in ascending order of their population size and selected using Probability Proportional to Size (PPS). The Sampling Interval (SI) was calculated by dividing the total number of *tandas* in the group (N) by the number that needed to be selected (d). *Tanda* in the first SI position was sampled and the following series chose subsequent *tandas*: SI+SI; SI+2SI;.....SI+(d-1)*SI. The

Table 3.2: Selection of *tandas* stratified by distance from the Public health facility

Categories (Kmts)	N (%)	Number of tandas to be selected (d)
0 - 3	5 (10.2)	3
3 - 6	17 (34.7)	11
6 - 9	9 (18.4)	5
>= 9	18 (36.7)	11
Total	49 (100)	30

corresponding village to which the *tanda* belong was also selected for comparison. In the case of a standalone *tanda*, i.e. without a corresponding village, the nearest village to the *tanda* belonging to the same panchayat was selected. This village was to be geographically close to the *tanda* and not selected previously.

3.2.6 Selection of household and respondents

Ten eligible respondents were interviewed from each selected *tanda* and village. The selection of these ten was based on the principle of systematic sampling. In *tandas* and villages with a large population, the area served by the ASHA workers were selected randomly and the survey was conducted. The interval for selecting households was decided based on the numbers of households in the *tanda* and village or segments in large settlements. Since ten is required from each village or *tanda*, the total number of households was divided by ten, which would form the interval (I). The first household was selected by a random number between 1-10 using a mobile android application (Apps, 2016) upon entering the *tanda* or village. Subsequent households were enrolled by adding the interval to the random number. For example, if there are ‘N’ households in a *tanda* or village with ‘n’ to be interviewed, the interval is $N/n=I$ and a random number ‘r’ was generated. Starting with the ‘r’th household, the rest of the household were selected in the following series: r; r+I; r+2I; ;r+(n-1)*I. In the selected household, if there were no eligible participants or the eligible participant refused to participate or was not available, the replacement was done according to pre-determined rules. A sequence was followed wherein the next household was approached. Even if that household is not eligible, the previous one was selected; this continued until an eligible participant was

found. For example, if the 10th household is not eligible/not willing to participate/not available, then the 11th would be approached and even if that is not eligible, then the 9th household would be approached. If there are multiple eligible respondents in the household, then one would be selected using KISH, numbered in ascending order by age.

3.2.7 Ethical considerations

This part of the study was conducted after receiving approval from the IEC, SCTIMST (SCT/IEC/1328/JANUARY-2019) (see Annexure A3). Respondents were informed about the purpose of the study, the nature of the questions and the time for the entire survey. They were given the option of withdrawing at any point and not forced into participating in the survey (see A22 and A23 in annexures). Interviews were conducted after obtaining informed consent. Data collected through a tablet device was stored in a server hosted by SCTIMST. Access to the server was password protected and only the researcher had access to it, ensuring confidentiality of the respondents and the information shared.

3.2.8 Data collection

Data was collected using the KoBoToolbox platform using an android tablet. KoBoToolbox is an online open-source platform designed to collect data through online and offline mode. It has two major components; one is the form builder for creating the interview schedule and KoBoCollect to collect data on android devices. The data collected would be sent to a cloud server from where it can be downloaded in Microsoft Excel format. Access to the platform and server, which was password-protected, was provided by the computer division of SCTIMST. The translated interview schedule was uploaded to form builder and the data was collected through the android tablet. The interview schedule contained questions on household characteristics of water, sanitation, assets, access to land, source of income, migration and visit by health workers. Information on individuals included the type of morbidity experienced, kind of care sought, transportation to the health facility, expenditure incurred, type of treatment received and their experience at a health care facility. Geographic coordinates of the study participants were also

captured.

3.2.9 Analysis

Results were to be presented by *tanda* and village to facilitate comparison between them.

Analysis of *tanda* and village infrastructure

Data was analysed using STATA software, release 15 (StataCorp, 2018). A cross-sectional comparison of various infrastructural variables were done to understand the deprivation in the *tandas*. Discriminant analysis was done to identify the infrastructural variables that classify sampled *tandas* and villages. This form of analysis allows to discriminate/classify between groups based on specified characteristics, the magnitude of classification and the variables that best explain the classification. These differentiating variables are called discriminating variables. The requirement for the discriminant analysis is as follows (Klecka, 1980).

- Data must belong to members of two or more groups- In this case, *tanda* and village
- Sample size should be at least two cases per group- The sample size is 30 in the *tandas* and 28 in the villages
- Discriminating variables should be less than the sample size minus two- Five discriminating variables were used for the analysis
- Discriminating variables must be measured at the ratio or interval scale- Scores were assigned for each component in the measured variable and combined through statistical methods for the final analysis
- Discriminating variables should not be a linear combination of other discriminating variables- Discriminating variables were computed keeping this in mind. However, this requirement had to be ignored for one component that was conceptually relevant as the relationship among infrastructural variables is expected.
- Homogeneity of covariance matrices- This was established using correlation matrix and the findings used for construction of the discriminating variables
- Group is drawn from a population with normal distribution of discriminating variables- Assumption of normality was made as sample size calculation was done keeping in mind the central limit theorem.

Discriminant analysis, description of the discriminating variables and prediction of group membership is included in Chapter 8.

Analysis of quantitative survey

Data was analysed using STATA software (StataCorp, 2018) and R software (Team, 2019) . Descriptive analysis of household-level variables, individual attributes, type of morbidity and care seeking for illness were analysed by *tanda* and village. Asset ownership was computed differently from other variables. The assets were ranked in decreasing order of their possession proportion in the overall sample. An asset that was least likely to be owned was given the last rank. The score for the individual asset was computed by multiplying the assigned rank with the proportion of those who do not own the asset. These scores were assigned to households and the total score for the household was calculated.

The pathways by which structural discrimination leads to health care access as emerging from the ethnography is tested using Structural Equation Modelling (SEM) using path diagrams. Since SEM is an iterative process, its application has been discussed in detail in Chapter 9

CHAPTER 4

PROFILE OF GADAG DISTRICT

The aim of this chapter is to situate Gadag district in the development discourse of Karnataka and the broad context where Banjaras are located. It is divided into seven sections. In the first section, I describe the overall development profile of Gadag district in relation to other districts in Karnataka. In the second section, I examine the natural resources of soil, land use and climate as these have implications for livelihood. This is followed by an examination of land holdings and distribution across different caste groups in the district. In the fourth section, I examine the infrastructure and basic amenities across households in the district using NFHS-4 data. The fifth section outlines the demographic and socio-economic profile of the district. The distribution of health infrastructure and a brief outline of the morbidity profile and health care use is described in the sixth section. I conclude the chapter by discussing the demography of Banjaras in Gadag and their physical distribution across the district.

4.1 Introduction

Gadag, located in Northern Karnataka, was a renowned seat of learning in historical times. There are several sites of historical importance located in the district. During the British regime, this region was under the Bombay-Karnataka Presidency and currently comes under the Belgaum division for administrative purposes. Post census 2001, the district was carved out of Dharwad district through a government notification in 1997. The district shares its borders with Dharwad in the west, Haveri in the south, Bagalkot in the north, Koppal in the east, Bellary in the South-east and Belgaum in the North-west (Registrar General, 2011). Originally there were five talukas, namely Gadag, Mundargi, Shirahatti, Nargund and Ron. Two new talukas, namely Laxmeshwar and Gajendragad, were carved out of Shirahatti and Ron in 2017. There are nine towns and 337 villages in Gadag district and out of these, 15 villages are uninhabited and the district headquarters is located in Gadag taluka. There are 122 Grama Panchayats (GP) for these villages,

one city municipal council, five town municipal councils and three town Panchayats. In terms of geographic spread, Ron taluka is the largest, followed by Gadag, Shirahatti, Mundargi and Nargund (Government of Karnataka, 2019). Gadag District has four assembly constituencies; Nargund taluka comes under Bagalkot and the other talukas are under Haveri Parliament constituencies.

4.2 Situating Gadag district in Karnataka state development profile

Karnataka state was formed on 1st November 1956 by merging districts belonging to erstwhile Bombay Presidency, Hyderabad-Karnataka, Kodagu and old Madras Presidency. Regional imbalance has been a persistent feature in the state since its formation, with varying levels of development and a disproportionate share of natural resources across the geography of the state. Developmental disparity is not limited to regions but across districts and even within districts. The erstwhile Mysore state was relatively well developed with modernisation across sectors by the Dewans and the Maharajas, while the rest of the regions merged during the formation of the state had poor socio-economic conditions (Nanjundappa et al., 2002). The north-south divide in development in the state has been a perennial subject of debate, with different state governments constituting committees to study the reasons for the same. In the year 2000, the government constituted a high-power committee of experts headed by Dr DM Nanjundappa, the former deputy chairman of the State Planning board, to study regional imbalances and suggest remedial measures. The committee decided to study the disparities disaggregated at the taluka level rather than at the district level and computed an index to identify different levels of development. This was done for 175 talukas in 27 districts (Districts of Ramanagar, Chikballapur and Yadgir were formed in 2007). The committee finalised 35 indicators representing five sectors of Agriculture, Industry, Economic infrastructure, Social infrastructure and population characteristics to come up with a Comprehensive Composite Development Index (CCDI). The talukas were then classified as 'Relatively Developed' taluka and 'Backward' taluka. The 'Backward' classification was further classified into "Backward, "More Backward" and "Most Backward" talukas. Overall 22.3 percent (39) were identified as "Most backward", 23.4 percent (41) and 20 percent (35) as "Backward" and "More Backward", respectively. In Gadag

District, Gadag taluka and Nargund taluka are relatively developed, while Ron and Shirahatti are “Backward” and Mundargi is classified as "More Backward". None of the talukas of Gadag was in the "Most Backward" category. Researchers have critically analysed this report in terms of the indicators used and the computation of the index and have recomputed it by addressing the lacunae they identified. The re-computation shows that the regional disparity is more than what was estimated in the original report. The categorisation for other talukas in Gadag remains the same except Shirahatti, which is classified as “More backward” within the “Backward” category as computed by The Nanjundappa committee. CCDI was not computed at the district level and researchers have attempted to comprehend the stage of development using the same indicators at the district level. Dakshina Karnataka ranks at the top among districts, with Gulbarga at the bottom wherein Gadag District occupies the 14th rank among 29 districts in 2001 (Hanagodimath & Aziz, 2012).

An alternative assessment of development disparity is made in the domain of human development which is considered more robust, given its bearing on the quality of life. The aspect of human development using indicators of health, education and standard of living is also examined across districts. With regards to human development too, the manifestation of regional disparities in the state places the Gulbarga region at the bottom of the ranks as against the districts in the Mysore region, topping the ranks. In the midst of this, Gadag District, which belongs to the Belgaum division, has a Human Development Index (HDI) score of 0.571 (Karnataka score is .6111) and is ranked 20 among 30 districts. Further, Gadag District is ranked 27th in the Gender Inequality index with a score of 0.4889, meaning 49 percent loss in achievement across the dimensions of reproductive health, empowerment and labour market. It is also one of the districts with very high gender inequality (Government of Karnataka, 2018). Assessment of human development in the state of Karnataka has been disaggregated to the Grama Panchayat (GP) level with a Grama Panchayat Human Development Index (GPHDI). This index comprises of 11 indicators across three dimensions of health, education and standard of living. In this assessment too, Gadag performs poorly with most of the GPs (92%) with values below the average figures for the state. Taluka wise, only 8 GPs (29.8%)

in Gadag taluka and 1 (3.6%) in Shirahatti taluka are above the state average. None of the GPs in Ron, Mundargi and Nargund are above the state average (Shivashankar & Prasad, 2015).

In addition to reading disparity in development and human development, the most recent Multidimensional Poverty Index (MPI) conveys deprivation in health, education and standard of living based on ten indicators. According to the MPI, 13.01 percent of the population in Gadag are multidimensionally poor and is ranked 25, with Yadgir ranked 30 being the most multidimensionally poor district in Karnataka. Almost 33 percent of the population in Gadag did not have access to 1/3rd of the indicators in MPI (Government of Karnataka, 2020).

On the whole, Gadag district qualifies to be a deprived region of the state as indicated by CCDI, HDI, GPHDI and MPI.

4.3 Natural endowments: The Soil, Land use and Climate

Disparity in development could either be man-made or owing to a genuine lack of natural endowments. It is often the geography that endows natural advantages to induce development. Karnataka is divided into ten Agro-Climatic Zones and is categorised as dry zones, transition zones and hill and coastal zones (KSNDMC, 2017). Ron, Nargund, Gadag and Mundargi come under the Northern Dry zone (Zone 3) and Shirahatti under the Northern transition Zone (Zone 8). Throughout the district, black soil is common and, in some areas, inter-spread with red and lateritic soils. Red soil is predominantly noted in Shirahatti taluka, southern parts of Mundargi and Gadag taluka. Red soil has constraints due to high gravel content, low moisture retention, soil erosion and low nutrient content. These soils are able to support various crops provided the soil, water and nutrient are effectively managed. Common crops grown under these soils are ragi, sorghum, millets, tobacco, cotton and oilseeds. Black soil, on the other hand, is very fertile and used mainly for growing cotton, millet, groundnut, maize, wheat, chillies and sugarcane where irrigation is available. These soils are poor in organic matter, nitrogen and phosphorus (KSNDMC, 2017). The Karnataka State Natural Disaster Monitoring Centre has come up with a multi-dimensional composite drought vulnerability index

that incorporated components of climate, crop cover, soil and livelihood. This index was computed at the taluka level and they categorised the talukas into very slightly vulnerable, slightly vulnerable, moderately vulnerable, highly vulnerable and very highly vulnerable. As per this classification, all the talukas in Gadag are very highly vulnerable to drought. A similar index was computed to assess the resilience to drought and all the talukas in Gadag except Nargund are moderately resilient, whereas Nargund is the least resilient to drought (KSNDMC, 2017).

Gadag District is spread over a geographical area of 4,65,715 hectares with a net sown area of about 80 percent. About 7 percent of the total geographical area is covered by forest, most of these being spread out over Mundargi and Shirahatti talukas. In terms of the geographic spread, Ron taluka is the largest and forms about 27.7 percent of the total land area, followed by Gadag (23.6%), Shirahatti (20.4), Mundargi (19%) and Nargund (9.4%). About 6.8 percent of the total land is fallow land which refers to land available for cultivation but has not been cultivated for about a year or more. There is variation in fallow land across the talukas with a greater proportion in Mundargi (14.1%), Ron (13.8%) and Gadag (9.8%) talukas. Nargund and Shirahatti talukas have around one percent or less of fallow land. The net sown area refers to a particular area sown in the reference year, varying across talukas. The percentage of net sown area to the total geographic area is higher in the districts of Gulbarga and Gadag in Karnataka (Raju et al., 2017). Variations are seen across the talukas, with Mundargi having the lowest net sown area. Cropping intensity is the area that is being cultivated more than once a year and is an indicator of higher yield (Raju et al., 2017). The cropping intensity for Gadag district is 135%, and the lowest intensity is observed in Nargund taluka (120.1%). Agricultural yield is dependent on the availability of different sources for irrigation. Karnataka features among the states with less irrigated area in the country, with only 31 percent of the total area for all crops under irrigation against the national average of 49 percent (Government of India, 2020). The net irrigated area to the net sown area is around 21 percent for the entire district, with variations observed across the talukas; Gadag and Ron having the least area irrigated (Government of Karnataka, 2019). Out of the total irrigated area by source of water, tube well accounts for 47.1 percent and canals

Table 4.1: Agricultural Indicators in Gadag District, 2018-19

Taluka	Gadag	Mundargi	Nargund	Ron	Shirahatti	Total
Geographical area (Hectares)	109751	88398	43562	129091	94913	465715
Fallow land (Hectares)	10801	12458	6030	1682	618	31589
Area sown (Hectares)	93513	53438	34874	118889	73528	374242
Area Sown (More than once)	41844	16404	7029	38774	27548	131599
Net sown area/Total geographical area (%)	85.2	60.5	80.1	92.1	77.5	80.4
Cropping Intensity (%)	144.7	130.7	120.1	132.6	137.5	135.2
Net irrigated area to Net Area Sown (%)	3.0	42.7	95.0	7.0	17.4	21.3
Annual Normal Rainfall (1951-2000)	669	553	578	691	714	641

Table reproduced from Gadag District at a glance 2018-19

about 33.7 percent. Canal irrigation was exclusive to Nargund taluka, while the other talukas are dependent on tube wells for irrigation. Around 78 percent of the net sown area in the district is rainfed for agriculture (Government of Karnataka, 2019). In terms of the annual normal rainfall, Mundargi and Nargund taluka receives the least rainfall in the district. Most of the rain is received during the south-west monsoons between the months of June to September that sustains a major portion of agriculture (Department of Agriculture, 2016). (See Table 4.1)

Malaprabha in the northern part of the district and Tungabhadra in the Southern part are the two main rivers in the district. Malaprabha flows from west to east direction, while Tungabhadra from north-east direction. Besides the physical specificities of the district, the disadvantage with respect to rainfall and agricultural land quality make Gadag deprived due to the natural endowment.

4.4 Land Holding in Gadag district

Given the dependence on agriculture, land holding pattern assumes significance for the means and sustenance of livelihood. Agricultural land holding has been classified into Marginal (below 1 Hectare), Small (1-2 Hectares), Semi-medium (2-4 Hectares), Medium (4-10 Hectares) and Large (more than 10 Hectares). Marginal agricultural landowners form about 26 percent of total agricultural landowners in Gadag, and this is one among the lowest in the state (54.9%). Gadag District has the highest proportion of small, semi medium (23.6), medium (10.8) and large (1.4%) agricultural landholders among the districts in Karnataka (Government of Karnataka, 2019). About 38 percent who are small agricultural landowners in Gadag form the highest such group in the state

Table 4.2: Proportion of different size holdings to the total land, Gadag district, 2018-19

Agricultural land holding	Gadag	Mundargi	Nargund	Ron	Shirahatti	Total
Marginal Land						
Owners (%)	24.7	23.7	27.8	26.4	27.0	25.8
Area (%)	6.4	6.9	7.8	7.6	7.8	7.3
Small agricultural land						
Owners (%)	38.1	40.2	35.1	37.8	39.0	38.2
Area (%)	23.8	26.6	22.8	25.8	27.5	25.5
Semi-medium agricultural land						
Owners (%)	23.5	23.7	23.0	24.0	23.5	23.6
Area (%)	27.8	30.0	28.7	30.6	30.6	29.6
Medium land						
Owners (%)	11.8	11.1	12.8	10.6	9.2	10.9
Area (%)	30.1	29.0	33.3	28.3	25.9	28.9
Large land						
Owners (%)	1.9	1.2	1.3	1.3	1.3	1.4
Area (%)	11.9	7.5	7.4	7.8	8.2	8.8

Source: Gadag district at a glance, 2018-19

(25.3%) (See table 4.2).

Examining the land holding in the talukas, it is seen that Mundargi has the highest proportion of small agricultural landowners. Gadag taluka has a greater proportion of large agricultural landowners. Across the talukas, it is seen that owners of semi-medium, medium and large land holders constitute a large share in terms of the agricultural land area.

Scheduled caste group hold about 8 percent of the total agricultural land in Gadag, which is lower than the state average. Agency matters in terms of a greater proportion of agricultural land ownership where the population of SC is high. The Scheduled Tribes (ST) are better off across districts in terms of agricultural land holding viz a viz their share in the population which does not vary much when compared to the SC. While examining the average size of holdings, it is seen that apart from the district of Raichur, the SC in others districts have a lower average size of land holdings when compared to the ST and other caste groups. In Gadag District, the other caste groups have a higher average land holding of about 2.3 hectares per person when compared to 1.9 among ST and the lowest being 1.5 among SC. While commenting on the agricultural land holding by different caste groups, it is important to also look at their share in the population.

Table 4.3: Landholding among SC, ST and other caste groups, Gadag district 2018-19

Characteristics	Gadag	Mundargi	Nargund	Ron	Shirahatti	Total
Scheduled Caste						
Population (%)	14.2	22.0	9.8	15.4	21.2	16.4
Land ownership (%)	6.8	13.3	4.8	6.0	10.6	8.2
Area owned (%)	4.8	9.5	2.4	3.9	8.0	5.7
Average land holding	1.6	1.5	1.2	1.4	1.6	1.5
Scheduled Tribe						
Population (%)	4.8	8.0	4.6	5.9	6.7	5.8
Land ownership (%)	4.0	6.7	3.9	4.1	8.0	5.3
Area owned (%)	3.7	5.9	2.8	3.1	7.9	4.6
Average land holding	2.1	1.9	1.6	1.7	2.0	1.9
Other Castes						
Population (%)	81.0	70.0	85.6	78.7	72.1	77.8
Land ownership (%)	88.8	79.9	91.3	89.9	81.1	86.4
Area owned (%)	90.8	84.4	94.5	92.9	83.7	89.4
Average land holding	2.4	2.3	2.3	2.2	2.1	2.3

Source: Gadag district at a glance, 2018-19

The pattern is similar to what is seen across the districts in the state, with the SC group being at a disadvantage in terms of their agricultural land holding. Even the average agricultural land holding among the SC is lower than ST and the other caste group (see Table 4.3).

4.5 Infrastructure and basic amenities in households

Reading development disparity with structure and composition of population and resources is often reflected in the household experiences of the population. Hence, the access to basic amenities and infrastructure indicates a feature of adversity as well. In this regard, the most updated information on access to basic infrastructure and amenities among households in the district is contrasted against the state average to infer the relative positioning of the district. This has been examined at the district level using the fourth round of National Family and Health Survey-4 (NFHS-4), for which data is currently available. Based on this survey, the distribution of housing quality in three categories Kutcha, Semi-pucca and Pucca, reflects ten percent of households having kutcha houses as against a majority with pucca and semi-pucca houses in the district. However, this pattern, when verified across caste groups, indicates a clear disadvantage for ST households having a larger share in kutcha households. Further, the district's adversity with regards to housing, contrasts against the state average, which is apparent because

the district has five times more kutchra housing than that of the state.

Besides housing condition, the other two parameters considered for comparison are the fuel used for cooking and the means of transport used by the house. With regards to fuel for cooking, while clean fuel use is more than fifty percent of the households in the state, the district average amounts to a quarter of the households. This is necessarily indicative of some disadvantage, having a clear implication on health. The extent of clean fuel use is further adverse among the SC and ST households compared with households belonging to the other social groups. The means of transport is evaluated based on the ownership by the household. This parameter, too, reflects a disadvantage for the district, with the state average of motorcycle ownership in households being about 45 percent against the same being 30 percent in the district. In this regard, too, the SC/ST households are less likely to own motorcycle as a means of conveyance.

The proportion of households having agricultural land in Gadag is higher than the state average. This is understandable given that more than 60 percent of the population is involved in agriculture, according to census 2011. The scheduled caste population is disadvantaged since approximately one-fourth of them have ownership of agricultural land. The OBC groups have a lower proportion of farm animals when compared to the other groups. Access to improved sanitation and improved water supply is important for the health and well-being of the households. Nearly two-thirds of the households in Gadag do not have access to improved sanitation, this being worse than the state average. The scheduled caste groups are also disadvantaged as four-fifths of the population do not have access to improved sanitation. In terms of having access to improved drinking water, around 85 percent of the households in Gadag have access to improved water source, while the ST households have a better situation, with 96 percent of their households having such access.

Safe water is defined as households having access to an improved source of drinking water and treating the water before drinking (Vijayan & Mishra, 2020). Gadag District performs poorly in this regard when compared to the state as only 31 percent of the households treat the water against 40 percent in the state, and within Gadag, the SC

groups are further disadvantaged. Hand washing facility is defined as having access to soap and piped connection in the house as proxy for hand hygiene, and the Scheduled Caste groups perform poorly as they have the lowest proportion of households with handwashing facility. Gadag district performs better than the state average in areas of agriculture and its allied areas since a greater proportion of the district is dependent on agriculture. However, in the other indicators of basic infrastructure, the district lags behind the state while the Scheduled Caste groups in the district are disadvantaged in every aspect of infrastructure required for basic living (See Table 4.4).

Table 4.4: Access to Basic Infrastructure in households, Gadag district, NFHS-4, 2014-15

Characteristics	Gadag					Karnataka
	SC	ST	OBC	Others	Total	
Type of house						
Kachha	7.1	26.6	3.5	14.9	10.3	2.7
Semi-pucca	42.4	37.8	47.8	43.1	44.5	34.1
Pucca	50.5	35.6	48.7	42	45.3	63.2
Fuel for cooking						
Clean Fuel	15.8	12.5	31.9	25.0	24.8	54.7
Solid fuel	83.6	87.5	67.3	74.2	74.5	43.4
Means of transport						
Bicycle	24.7	32.8	37.4	26.6	31.9	37.0
Motorcycle/Scooter	17.9	19.1	34.5	34.9	30.0	45.3
Car	0.5	1.0	3.2	4.8	3.0	7.1
Agricultural land	26.7	47.5	43.8	50.0	43.3	36.0
Farm animals	35.8	35.0	26.6	39.5	32.8	31.3
Improved Sanitation	20.3	33.4	30.0	35.0	30.2	57.8
Access to improved water	81.6	96.3	86.5	81.0	85.5	89.3
Safe water	24.2	40.2	32.5	28.9	31.1	40.2
Hand washing Facility	22.6	53.3	33.9	33.8	34.7	56.5

4.6 Demographic and socio-economic profile

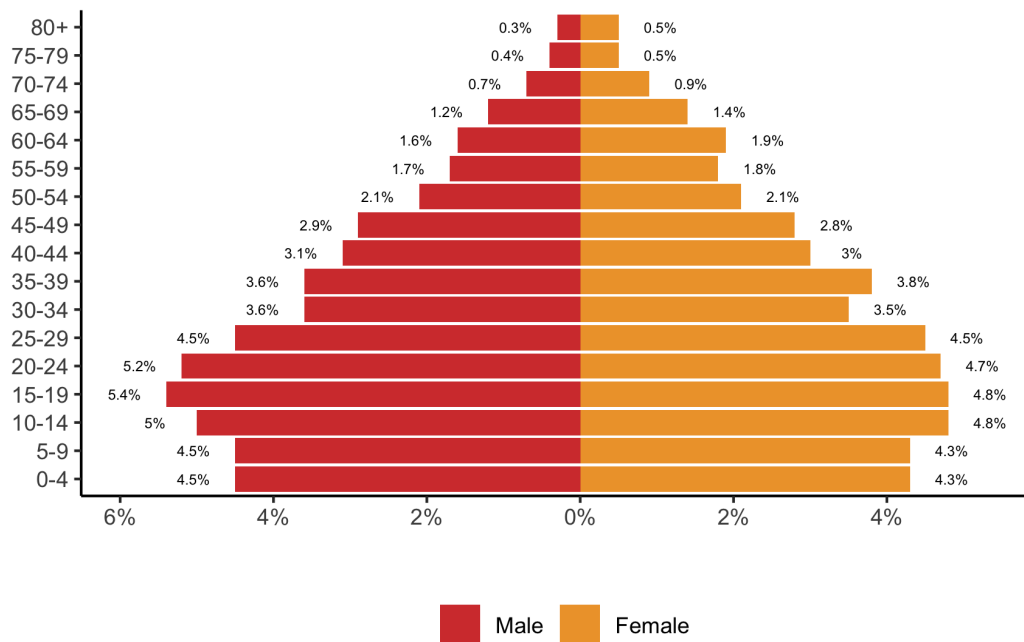
Gadag is the fourth-least populous district in the state, with a population density of around 229 per square kilometre. About 35 percent of the total population live in Gadag taluka, followed by 24.8 percent in Ron taluka. In terms of population density, Gadag taluka has the highest population density at 336 per sq. km. as against the Mundargi

Table 4.5: Taluk wise distribution of the population in Gadag district, Census 2011

Characteristics	Gadag	Mundargi	Nargund	Rona	Shirahatti	Total
Total population (%)	34.5	12.4	9.5	24.8	18.8	100
Population - within SC (%)	29.9	16.6	5.7	23.3	24.4	100
Population - within ST (%)	28.6	17.0	7.4	25.1	21.8	100
Population in Rural areas (%)	47.9	81.1	63.9	72.6	72.9	64.4
SC population to total population	14.2	22.0	9.8	15.4	21.2	16.4
ST population to total population	4.8	8.0	4.6	5.9	6.7	5.8

taluka with the least density of 148 per sq. km. According to census 2011, Gadag district has about 2.2 lakh households and accounts for about 1.7 % of the state's population. The inhabitation of the district is largely in Gadag taluka, which includes both SC and ST groups in absolute numbers. The majority of the population (64.4%) live in rural areas, with the only exception of Gadag taluka, where less than 50 percent reside in rural areas. The share of the SC population in the state is 17 percent and Gadag district too matches this share with about 16.4 percent of SC population. However, this population is largely concentrated in 11.1 percent of the villages in the district with a dominant SC population. Similarly, the state has a 7 percent share of ST population, while Gadag district has a far lower share of tribal population, amounting to 5.8 percent (see Table 4.5). The Scheduled Tribes in Gadag constitute about 1.5 percent of the total ST population in Karnataka. Banjaras or Lamanis form about 12.1 percent of the scheduled caste population in Karnataka. The majority of the Scheduled Tribes in Gadag belong to the Valmiki community (87.6%). Besides the social group composition of the population, the age-sex structure of the population in the district is represented in a pyramid. The age-sex pyramid is the widest in age (15-19), depicting a reasonable share of young population in the district. The broad age structure depicts a share of 27.4 percent below age 14 and 9.5 percent above the age of sixty years. This resembles the state's population structure (see figure 4.1) (Census, 2011).

The overall sex ratio in Gadag District is 982 per 1000 males and is less in rural areas when compared to urban areas (971 vs 1001). The overall sex ratios of Scheduled Caste (SC) and the Scheduled Tribe (ST) is higher than the district average when compared to the other groups. The sex ratio at birth is higher among SC and ST in Gadag when



Census, 2011

Figure 4.1: Population pyramid for Gadag district, Census 2011

compared to any other group.

In terms of economic activity, about 39.8 percent of the population are categorised as main workers and 6.8 percent of them as marginal workers in Gadag district. About 66.1 percent of the entire workforce is involved in agriculture either as cultivators or agricultural labourers. Among the Scheduled Caste groups, 40.4 percent are involved in main work and eight percent in marginal work. Among them, 72.9 percent are involved in agriculture. In the Scheduled Tribe group, 42.7 percent are involved in main work, 7.9 percent as marginal workers and 77.6 percent are involved in agriculture related activities (Census, 2011).

Census estimates literacy by calculating the proportion of the population aged seven and above who can read and write. The total literacy rate in Gadag district is 75.1 percent and is similar to state figures. However, there are differences in the literacy rate for males and females. In Gadag, the percentage of males who are literate is 84.7 percent which is higher than Karnataka (82.5%). The literacy rate for women in Gadag district (65.4%) is less than the state average (68.1%). Variations are also seen across different

caste groups, with 'other caste groups' having a better literacy rate than the district average (Total- 78%, Male-87.2% and Female-68.7%). The literacy rate of Scheduled Caste (Total- 62.9%, Male-73.9% and Female-51.8%) and the Scheduled Tribe groups (Total- 69.4%, Male-80% and Female-58.7%) are lower than the district average, while the Scheduled Caste groups being the most disadvantaged. Females have the lowest literacy rate and the Scheduled Castes are further disadvantaged among them.

4.7 Health and Health care in the District

4.7.1 Health infrastructure

A comparative view of the district of Gadag to the state in terms of its profile does convey its disadvantage in many ways. Despite the fact that the district's overall profile is no different from that of the state, the concentration of backwardness as indicated by the relative indices of development clearly marks the district as one that is adversely placed. Such adversity may well be a derivative of various infrastructural bottlenecks in general, and when it comes to human development, this is particularly with regard to health and education. With regard to health, the state has been emphasising and striving towards achieving universal coverage, but there are disparities across districts in terms of access to care and provisioning of health care services. Gadag, like many other districts, is predominantly served by private health care facilities and a majority of doctors are concentrated in Gadag taluka which is the district headquarters. Private sector provisioning of health care across the district constitutes around 50 percent of the private hospitals/clinics/nursing homes located in Gadag taluka alone, followed by Ron (21%) and Shirahatti (13.5%). Mundargi and Nargund have the least with six percent and seven percent of the total number of private hospitals. Private providers include doctors with training in Allopathy and Indian system of medicine. There are many unqualified providers offering services in many villages, although their count remains unofficial (Kumar, 2015; Vijayan, 2020).

In the Government sector, there are 187 Sub-centres, 43 Primary Health Centres (PHCs), 2 CHCs (Community Health Centres), 4 Sub Divisional Hospitals (SDH) and one medical college catering to the entire district (Government of Karnataka, 2020). There are

four Sub-centres for one PHC in Gadag, and this is similar to the state average. Nargund (8) and Shirahatti (6) have a greater number of Sub-centres per PHC, and each sub-centre, on an average, caters to less than 3000 population in Nargund. The average population served by one SC across talukas is less than the state average. One PHC in Gadag district, on average, serves around 17000 population that is slightly better than the state average. This varies across talukas, with PHCs in Nargund and Shirahatti catering to a larger population size. Gadag district has one doctor for about 1600 population, which is better than the state average. Across talukas, Gadag taluka has the lowest doctor population ratio, and it is the highest in Mundargi. Government hospital beds ratio is better in Gadag taluka as it has many PHCs, one sub-divisional hospital and the Medical college (see Table 4.6).

Table 4.6: Distribution of health infrastructure in Gadag district,2018-19

Characteristics	Gadag	Mundargi	Nargund	Ron	Shirahatti	Total	Karnataka
No of Sub-centres	45	28	23	52	39	187	9758
No of PHCs	15	7	3	11	7	43	2127
Average Population served by one Sub-centre ¹	4149	4055	2970	3914	3983	3890	4527
Average Population served by one PHC ¹	12447	16221	22768	18504	22190	16917	18639
Average population served by 1 doctor ¹	1026	3052	2026	2182	2674	1644	1860
Hospital Beds per 1000 population ¹	1.9	1.1	1.2	0.8	0.9	1.3	1

Source :Gadag district at glance 2018-19, Karnataka state at glance 2018-19

¹ Calculated using projected population for 2018 (Directorate of Economics and Statistics)

4.7.2 Morbidity Profile

Moving from infrastructure to outcomes, some evidence concerning morbidity prevalence in the district is discussed in this section. The two information sources, NFHS-4 as well as DLHS-4, offer some clues regarding the health outcomes and health care seeking patterns at the district level. We describe the morbidity profile of the population along with the patterns in care-seeking in the district as well as across caste groups. DLHS-4 was conducted between December 2012-April 2013 and interviewed 1574 households in Gadag District. DLHS-4 asked questions relating to acute ailments in the past 15 days and chronic ailments in the past one year. Acute ailments included fever, diarrhoea, acute respiratory infection, fever, rashes and reproductive tract infection. Chronic diseases were asked in relation to diseases affecting various systems like the respiratory, cardiovascular, central nervous system, gastrointestinal system, skin diseases and any other ailments. Prevalence of acute illness with a 15 days reference period

Table 4.7: Prevalence of acute and chronic illnesses and care seeking for illnesses in Gadag district, DLHS-4, 2012-13

Characteristics	Gadag					Karnataka
	SC	ST	OBC	Others	Total	
Acute illness	4.8	8.0	7.0	6.9	6.7	5.3
Acute care seeking						
Gov	16.4	15.2	11.9	8.2	12.4	31.6
Private	77.8	76.5	77.6	80.9	78.0	60.6
Home/Did not go	5.8	8.3	10.5	10.9	9.6	7.8
Chronic illness	1.8	2.6	2.4	5.2	2.7	6.0
Chronic care seeking						
Government	20.6	48.3	19.7	21.4	23	27.5
Private	79.4	51.7	76.6	78.6	75.3	69.8
Home/Did not go	0.0	0.0	3.7	0.0	1.7	2.7

was highest among the population above 50 years of age (9.2 %) and lowest in the 15-29 age group (4.3%). The overall prevalence was 6.7 percent and this was higher than the state average. Prevalence of acute illness was lowest among the Scheduled caste groups. In terms of care-seeking, private providers were the preferred choice for treatment and the percentages seeking such care was much higher when compared to the state. Across caste groups, SC and ST were more likely to visit government providers when compared to other groups. The prevalence of reported chronic disease is low when compared to Karnataka and lowest among SC groups in Gadag. Private providers continued to be the preferred choice for chronic ailments also while a greater proportion of ST groups sought care from government hospital (see Table 4.7).

4.8 Banjaras in Gadag

In Gadag, there are 46 different caste groups under the Scheduled Caste category. The majority of the population belonging to the Scheduled Caste groups are those belonging to the Madar group (30.1) and Banjaras (29.1). Banjaras are also known as Lambanis, Lambada, Lamani, Sugali or Sukali; however, in Gadag, they are commonly referred to as Lamanis. Historically the Banjaras were a nomadic tribe and later started settling down in small settlements at a distance from the village. These settlements are called

Tandas. The Census 2011 reports the sex ratio among Banjaras to be 959 per 1000 males; this being lesser than the district average and sex ratio among the Scheduled Caste group. The majority of the *tandas* in Karnataka are located in the Hyderabad-Karnataka region, called now as Kalyana Karnataka comprising of Bidar, Kalaburgi, Yadgir, Raichur, Koppal and Bellary districts. There are 79 *tandas* in Gadag district and most of them are concentrated in Shirahatti and Ron talukas. The official records of the government of Karnataka list the residential areas where Banjaras reside as a *tanda*. This could include a few families living in a village to an isolated settlement where all are Banjaras. It is important to observe the distribution of the Banjara population across talukas wherein the Shirahatti and Mundargi talukas have the highest proportion of Banjaras, followed by Ron and Gadag taluka. These are the talukas that have a greater forest area in the district which, is relevant considering the history of the settlement of the Banjaras. In historical times the Banjaras were a nomadic tribe and always on the move; transporting goods across the country. With the advent of East India Company, the ceasing of wars, mechanisation of transport and better transportation infrastructure, they lost their traditional calling and had to settle down for means of livelihood. Most of the Banjaras throughout the country set up their dwelling in the forest or in close proximity and earned their livelihood with forest dependence (Burman, 2010; Obeng, 2009). There is no official record on agricultural land holdings by the Banjaras, but since they belong to the Scheduled Caste category and, as observed earlier, the situation is unlikely to be better among them. Being forest dwellers or being in proximity to the forest with no water body for irrigation makes their agricultural land dependent on rain. With Gadag being a drought-prone area and with limited access to agricultural land among Schedule Caste groups, the Banjaras are likely to migrate to other districts within the state or to other states to earn their livelihood. Migrations is a common feature among Banjaras, with estimates of about 75%-80% of the residents in the *tandas* migrating seasonally in Northern Karnataka (Halli et al., 2007) . Large scale seasonal migration has been reported among Banjaras in Maharashtra and more among landless and marginal farmers (Burman, 2010). Banjaras of North Karnataka seasonally migrate to Goa, Maharashtra and also within Karnataka. The Banjaras and Madars belonging to the Scheduled Caste group form the major share of the migrants from Karnataka in Goa

(A. Bailey, 2008). The reasons for migration are lack of opportunities in the place of residence, drought-prone regions and poor agricultural yield. The Banjaras leave behind the elders and the children in the *tanda* and migrate seasonally (Madar & Mohan, 2016).

There are very few studies that have documented the health of the Banjaras. They are classified under the Scheduled Caste group in Karnataka and face the same disadvantage in terms of access to basic standards of living similar to other Scheduled Caste groups. Being migration prone, it also brings its own vulnerabilities in terms of housing, nutritional status, hygiene, sanitation and prevalence of infectious diseases in the places where they migrate (Chatterjee, 2006). This is likely to manifest as health problems in the place of their origin and at the destination as well. Studies have established differences in the prevalence of dental problems and childhood ailments between the Banjaras and the village and have attributed it to the quality and hardness of water (Jyothi & Reddy, 2011; Kumar, 2015). The Banjaras as a group have experienced discrimination in terms of residential segregation, access to resources for livelihood to aid in their overall development, including health.

4.9 Discussion

This district profile undoubtedly places the district of Gadag in an adverse position. This has its own implication for the health profile of the district. The information presented in describing the district profile bears ample testimony to this effect. In fact, the specificities of the district in terms of its physical and socio-economic features involve two crucial dimensions that are of interest for exploration with regard to understanding discrimination. These two dimensions are the presence of a special community called Banjaras (typical resident of *tandas*) and their health adversity arising out of differential access to health services owing to their identity on the one hand and predominance of private and unqualified providers on the other. While discrimination cannot simply be understood by assessment of disadvantage and its associated attributes, its recognition in relation to an identity that is underprivileged in many ways is worth exploring in an otherwise deprived setting that is evidenced in terms of profiling the district by its positioning in development, caste characteristics and scenario of health infrastructure. Studying the morbidity and access to health care cannot ignore the socio-economic re-

alities and the discrimination experienced by them.



CHAPTER 5

Ethnography of Banjaras in *tandas*

5.1 Introduction

'*Who are the Bunjarees?*' wrote Lieutenant-colonel William Henry Sykes reporting on the affairs of the East India company in 1832 (House of Commons, 1832). I did not delve into this question until I started working on my Masters' thesis in 2015. The first time I encountered Banjaras was in 2009 while working as a physiotherapist in a mission hospital in the small town of Gadag, in Karnataka state. Working there was altogether a different experience for me as I had spent most of my life in cities. The town was a place in transition with its old-world charm, moving towards urbanisation. It gives an impression of being in a rural area for a city-bred person like me. The people, their clothing, food, culture and language was very different. Even though I knew Kannada, the accent spoken in Gadag is different and sounds harsh to a first-time listener from South and Central Karnataka. Their language is interspersed with words that people take offence to in the southern parts of the state. In Bangalore, the word *sule* (bastard) is frowned upon and usually ends in fights, whereas in North Karnataka, it is a part of the normal conversation across age groups and gender. The language might sound harsh, but the people are very warm and kind-hearted, which made my stay memorable in the five years I worked there. The town square and markets are filled with people from all regions across the district identified by their dressing. The young and middle-aged men preferred pants and shirt when compared to the elderly, who preferred white dothi, long kurta with the Gandhi cap. A similar pattern was noticed among women, with the young preferring churidars and saree and the older women wearing *Ilkal* sarees, which is famous in that region. Apart from these, it was a common sight to notice a few women with colourful dresses, usually blue and red. They always stand out from the crowd because of their dressing, the ornaments that adorn them and the head cloth covered with elaborate embroidery. Not having gone out of the town in the years that

I worked in Gadag, there was very little I knew about them. My limited knowledge of them was that they stayed in settlements called *tanda* and were well off because they always went to Goa and that they were locally called '*Lambanigalu*'. My interest in studying this community came from a single experience of treating an elderly Banjara person in 2009. Hanumanthappa was diagnosed with nerve injury, which needed daily rehabilitation sessions. He was always late and irregular and the only instance when he came on time was when his son dropped him by bike after being shouted at for coming late. Frustrated by this, I decided to speak to him and find out what the problem was. He stayed in a hamlet called *tanda* at a distance of 10 kilometres from Gadag and had limited public transport to reach the city. To add to this, the therapy time given to him did not match with the bus timings. We finally worked around this and changed the therapy timings so that it was convenient for him to travel and we were able to complete the rehabilitation schedule. This incident left me with more questions than answers. By the end of 2013, I left Gadag to pursue a Masters' in Public Health course in Trivandrum. As a part of the course, I was required to submit a thesis on issues of Public Health relevance in the community. While deciding on the topic to explore for my Masters' dissertation, I chose to answer the questions in my mind regarding Hanumanthappa and decided to study the access to healthcare for Banjaras. I visited 16 *tandas* and the villages close to them as a part of that research exercise. I got an idea about the life of the Banjaras and their relationship with the neighbouring villages. The knowledge gained was very limited and adequate to complete Masters' thesis. Building on this, I decided to study the Banjara community further for my PhD work. This required me to go beyond my limited knowledge and started looking for documentation on the origin and history of Banjaras. The search was complicated by the different name for Banjaras across states and documents. The colonial texts referred to them as *Bunjarees* or *Bunjaras*, *Lambadi* and *Sukali* in Andhra Pradesh, *Lamani* in Karnataka and *Banjaras* in Maharashtra and Madhya Pradesh. There are very few documented works on the history and origin of Banjaras by scholars from the same community. Those that exist cite historical documents from the 16th century and accounts during the time of British India. Thanks to digital archives, I retrieved many of the documents that mentioned the history of Banjaras. While going through these historical documents, I was reminded

that this information could be an object of knowledge constructed in the process of creating British India in the 19th century (Spivak, 1985). Archival information was read while keeping this in mind. This section deals with the historical background of the Banjaras culled from this archival literature, description of the two *tandas* that I chose to explore, the people and the life there.

5.2 'Who am I'- Position and perspective- emerging from identity and experience in the field

In the community, I was an outsider observing the everyday happenings and talking to people. It was not possible to be an insider as, first and foremost, I was not a Banjara and my physical characteristics, mannerisms and language was very different. My view of discrimination and expectations at the beginning of the fieldwork was that the discrimination would be interpersonal and that I was only trying to find out the forms it exists in. This led me to try and find out if people from the *tanda* had faced any kind of injustice or behaviour that could be termed unfair while seeking health care. This view was too narrow and did not allow me to see discrimination in the larger context of their lives. It took some time to understand the structural forms of discrimination that exist. There are many incidents that questioned my position in the process of the ethnographic study in the *tandas*. In one such incident in *Vanapura*, I observed a Rural Medical Practitioner (RMP) treating an older man who was bedridden for scalp injuries. He applied stitches to the scalp without any local anaesthesia or taking recourse to aseptic needs. Usage of the word "aseptic" comes from my biomedical perspective. My initial reaction was a pity for the older man and his family as he had to go through so much pain and deserved much better treatment. I documented the entire event the way I saw it happen. The discomfort that this evoked prompted me to talk to the relatives to find out why they preferred such treatment when they could have taken him to the PHC or the District hospital. This thinking led to the questioning because my immediate reaction to this event was that it was wrong. Even with this kind of questioning, at the back of my mind, I was trying to suggest that they take him to the nearest PHC or district hospital indirectly, but I was careful enough not to interfere with their decision.

Writing the field notes of this entire incident prompted me to think from the point of

view of the people of the *tanda*. In the absence of a formal health care system, the *tanda* depends on RMPs who provide service at their doorstep. The government system also provides services at the doorstep, but these are mainly preventive like vaccinations, antenatal care, and prevention of outbreaks and targets for health programs. No form of curative health care is locally available apart from a few medicines given to the ASHA worker for the community. The RMP is more accessible to the community as they are available 24/7 and all the community has to do is make a call. The procedure adopted by the RMP may be questioned from a clinical point of view, but the RMP is physically available when the formal system is not so easily available. My evolving perspective on this is influenced by the public health training that I underwent, which made me think about the population, i.e. the *tanda* as a whole and the absence/presence of the public health system.

My position within the community was one of a researcher/observer with a strong biomedical orientation arising out of five years of clinical experience in Gadag. However, over the course of the research, the dominant focus of mine was largely public health – informed by a strong rights framework. I gradually began to recognise the relative nature of locational and transport advantages/disadvantages, the environment of the *tanda* (in terms of its terrain and slope). This brings in both a political-economic and also an ecological focus.

The ethnography started with a premise of understanding discrimination by the health system that might affect health care access and utilisation by people of the *tandas*. In so far as that is a valid research question, the perspective is also partly determined by that. The worldview that discrimination is bad does not emerge from an ideological vacuum. Starting from a strong biomedical orientation, subsequent training ingrained a public health identity over almost another four years, wherein the population became the focus of attention instead of the individual. That is not to say that the biomedical focus is totally eschewed in my thoughts or actions in the field. It is this mixed identity that confronted the community in the *tandas* of Gadag. Given this, I would say that my perspective towards research was not informed apriori, but it gradually emerged as part of my fieldwork experience. It is informed by a rights-based framework for the people

of the *tanda*. The understandings that come from ethnography enabled recognition of the various disadvantages, going from physical location to individual situation. This meant that the perspective from which I analyse my data would be a critical applied medical anthropological one.

5.3 ‘May I come in’ - Gaining access to the *tandas*

I chose *Vanapura* and Chara *tanda* for ethnographic work based on their geographic location, settlement pattern and development perspective. *Vanapura*, a standalone *tanda* and Chara *tanda* being a part of the village, helped me to examine the structures within them. Based on my communication with laypersons in Gadag, I learned that *Vanapura* is relatively better off compared to other *tandas*. This also gave me an opportunity to examine a relatively well-developed *tanda* with an underdeveloped one. The structure of the *tanda* and its functioning described here are similar to other *tandas* that I observed during the subsequent phase of PhD work.

Before starting the fieldwork, I approached the leader of the *tanda* called Naika and the elected representatives. They had no problem allowing me to be there and were happy that I was taking an interest in their community. The daughter of the elected representative in *Vanapura* was doing post-graduate studies in Dharwad and hence was able to understand the nature of research work. Leaders in *Chara tanda* are familiar with researchers travelling and staying in their *tanda* to study the medicinal plants located in proximity. They had no inhibitions about allowing me into the *tanda* and study their lives. After getting access to the *tanda*, the next question was how to go about observing and talking to people. To help me familiarise myself with the people, I used an age-old tradition of entry for ethnographers. I started listing households enquiring about health issues in the last three months and the health care options used for the health problem. This was not an elaborate survey but a simple half-page interview schedule with the dual purpose of familiarising myself with the community, gaining entry and also enabling me to develop insights into the prevailing health problems. Details of the health problems are described in chapter 7. The people were warm and hospitable and allowed me access to their homes and lives. Most of the conversations happened in the house, accompanied by snacks with tea or in the tea shop, which helped me to have conversations with many

people at a time. Gopal¹ in *Vanapura* and Rani¹ in *Chara tanda* were my key informants and helped me connect with other key persons in the *tanda*.

5.4 From Wanderers to forest dwellers - Historical background of the Banjaras

Banjaras are commonly found in different parts of India and known by various names. It is difficult to estimate their present population in India because they are classified under different social groups across states. Information on their population in states classified as Scheduled Tribe or Scheduled Caste is available from the census. Banjaras believe that they belong to common Rajput ancestry and are spread across India's central and southern parts (Burman, 2010; Halbar, 1986). According to the census of 1891, greater concentration of Banjaras were found in the Haidarabad region (300,248), Berar (110,008) and Bombay presidency (137,295) and retained their customs, manners and dialect in these regions compared to other regions (Grierson, 1907). This indicates that they are likely to be more concentrated in the erstwhile Andhra Pradesh, Karnataka and Maharashtra regions unless large scale migrations have taken place, which would have altered the demographics, which seems unlikely. They are known by different names such as *Banjara*, *Vanjari*, *Lambani*, *Lamani*, *Lambada* and *Sugali* (Enthoven, 1922). There is ambiguity in the origin of the word Banjaras which has been attributed to different Sanskrit words. The word "*Vanijya*" means to trade or the word "*VanaChara*", which means wanders in the jungle. The word *Lambani* is derived from the word *lavana*, meaning salt and these tribes were believed to be traders of salt (Halbar, 1986; Nanjundayya, 1912). Similarly, the name *Sugali* is believed to be originated from the word "*supari*", meaning betel nut, as they traded in that in historical times (Reddy et al., 1961). *Lamani* or *Lambani*, *Sugali* and *Charans* are believed to be a subgroup of Banjaras and scholars and people from the community agree that the word *Banjara* or *Lamani* or *Lambani* or *Sugali* are the same. The different names are connected to their trading occupation (Nanjundayya, 1912; Reddy et al., 1961). In Karnataka, they are known by the name *Lamani* or *Lambhani*. There are different accounts of the origins of the Banjaras and for most of it, the origin is not clear. Some believe they are of

¹Names changed

Rajput ancestry. Many documents mention their origin from the Marwar region of India, although it has also been noted that many nomadic communities attempt to link themselves through myths and folklore, a process of Kshatriyaization (Halbar, 1986; Nanjundayya, 1912). There is no clarity of how the Banjaras came and settled in the Deccan region but it is possible that they accompanied the Mughal invaders in the 14th century (Nanjundayya, 1912). The earliest reference to Banjaras in Deccan is found in the works of Mohammad Kasim Ferishta, written in the year 1612. The mention relates to the seizure of Banjara bullocks during the attempt on the throne of Gulbarga, the Deccan capital, in the year 1417. Ferishta refers to them as grain merchants who travel from Deccan to other parts (Briggs, 1819). Called pack-bullock carriers, they provided fearless and reliable transport services to the Mughals, supplying food grains. They transported goods through difficult terrains earning the goodwill of the emperors and because of this, they were accorded many privileges. Scholars believe that they existed even prior to this and practised the vocation of carrying grains in the 6th century, although they are not mentioned by their group names (Grierson, 1907; Halbar, 1986; Russell, 1916). Some of the Banjaras stayed back in different parts of the Deccan by the end of the 17th century as the Moghuls conquered South India. Later in the 18th century they served the Maratha rulers, Peshwas of Poona, Nizams of Hyderabad and British in the Mysore wars (Halbar, 1986). The Banjaras were neutral in times of war and were not concerned with who purchased their goods (Thurston, 1909). They were not only involved in being commissariats to the armies but also transported cotton, salt, betelnut and major commodities and sold them across village fairs and markets. Banjaras were also involved in the cattle trade and were the communication link between the plains and the forests (Satya, 1997). Being a nomadic tribe and constantly moving in groups, these units were called *tanda* (Deogaonkar & Deogaonkar, 1992). Each *tanda* had a headman called a Naika and communicated with the local societies wherever they moved. Most of the *tandas* were named after the headman (Thurston, 1909). In the pre-colonial times they were on the move and encamped outside the village during the monsoon season. Their entire social life was organised around the context of their migratory nature (Satya, 1997). With the ceasing of wars, development of roads, transport and introduction of mechanised transport by the British government, the Banjaras were greatly affected.

They were no longer in demand and had to settle down in forests and places close to the forest and depend on them for their livelihood (Burman, 2010; Halbar, 1986; Varady, 1979). It is reported that with the loss of livelihood from their traditional occupation, they settled down to farming on a small scale, working as labourers, the poor collecting firewood, grass and forest produce and some to dacoity (Bombay (Presidency) Police Department, 1908; Satya, 1997). During the colonial regime, the Banjaras were seen as a threat because of their mobile nature and always viewed with suspicion. This led them to be branded as ‘Criminal castes and tribes’ and contributed to their sedenterisation (Satya, 1997). The Banjaras were brought under the purview of the Criminal Tribes Act in 1896, which gave powers to the police to adopt strict measures to end their ‘criminal activities’. These measures involved searching the *tanda* first when crimes were reported elsewhere or the enquiry for a crime starting from the *tanda* if it was located nearby and detaining Banjaras without any prior intimation (Bombay (Presidency) Police Department, 1908). When Banjaras travelled, they had to take passes from the police and those labelled as suspicious persons were required to register and report to the station every day (Satya, 1997). The act described four main stages: notification, registration, restriction, and internment in settlements (Ayyangar, 1951). In Dharwad district, two Criminal tribes settlements was established, one in Hubli and the other at Gadag (Government of Bombay, 1959). The Criminal Tribes Act in the Bombay state, which included the Banjaras/Lamanis of Bijapur, Belgaum and Dharwad, was repealed in 1949 and throughout the entire country in 1952. The Government replaced it with the Habitual Offenders Act, which further stigmatised the tribes that were previously labelled as Criminal Tribes. Post repealing of the act, different communities have been classified as SC, ST or OBC across states. In Andhra Pradesh and Telangana, Banjaras are categorised as ST, OBC in Maharashtra and SC in Karnataka. Even after repealing the act, the stigma attached to the name, viewing these tribes as being involved in criminal activities, continues to date. The criminal tribes’ settlement camp in Gadag is still being referred to as the “Settlement area” by the local people and viewed with suspicion even if the area has an alternative official name like any other place.

There is no clear account of how the Banjaras settled in Gadag district, which was

part of Dharwad district earlier. However, it is believed that the Banjaras had settled down in the forests of Malnad region and once they lost their traditional occupation, they moved towards the plains in Dharwad district (Halbar, 1986). The government of Karnataka set up the Karnataka Thanda Development Corporation (KTDC) in 2009 under the Companies Act of 1956. The functioning of this board is under the social welfare department headed by Member of the Legislative Assembly (MLA) belonging to the community. The board's main purpose is to develop and improve the socio-economic infrastructure of the *tandas* and converting them to revenue villages.

5.4.1 Settlers in Gadag- History of *Vanapura* and *Chara tanda*

People in the two *tandas* of *Vanapura* and *Chara tanda* are not aware of their past wandering history and how they came to settle in that locality as it has not been documented anywhere. *Vanapura* is located in Gadag taluka and is closer to the district headquarters while *Chara tanda* is located in Mundargi taluka. The history of the past hundred years is known to the people in *Vanapura*. Few families belonging to Guddadpur *tanda*² in Gadag taluka set their dwellings near the agricultural land owned by them, which was located at a distance of about 2-3 kilometres. They named their settlement *Vanapura*. A group of families that formed this *tanda* had a major conflict in the family about a hundred years ago and this led to the split of the *tanda*. Seven families went away from the main *tanda* of which it was a part of. Since their agricultural fields were far off and it was difficult to travel from the new place, they relocated to another area close to the hills at a distance of 4 kilometres from the current settlement and called it *Vanapura*. Over a period of time, families started moving away from the initial *Vanapura* and few moved into the new *tanda*. Currently, there are 94 households in the *tanda* and the person who narrated the history of the settlement was a young child when the families relocated to the new place.

Little is known about the history of *Chara tanda* and the people there only remember that the current location was the third settlement on the move, and they decided to finally settle. They had first settled outside the village nearby in temporary sheds. With limited livelihood opportunities, they left that place and camped further towards the forest. In

²Name changed

this new location, many in the *tanda* started falling sick and dying due to cholera. During this time, the elders sought the advice of a sage who was passing by and he advised them to shift their location and suggested another place. They move to the new location at a distance of about one kilometre and started building concrete houses over a period of time. It has been approximately 60-70 years since they settled in the current place. Usually, *tandas* are named after the naiks or the closest village to the settlement. The naming of *Vanapura* does not follow this pattern and has a separate name without a *tanda* suffix. *Chara tanda* takes the name of the village that the community had settled in the first time.

5.5 Segregation of *tandas* – Mirror of village organisation

While looking into the organisation of the *tanda*, it is important to examine the residential pattern of villages and situate the *tanda* in relation to it. The works of Spate and Learmonth (1954) on the spatial organisation of Amminabhavi village in Dharwad showed the influence of caste and community on the layout of the dwelling. The dwelling of the lower caste groups was at the periphery of the village, whereas the dominant castes occupied the central portions. This reflects caste-based segregation of the households in the village sphere. This is also true of Gadag district, which was a part of Dharwad district previously. Caste-based segregation is reflected in the naming of streets, areas of houses in the village and labelling of people dwelling within these locally defined spaces and the use of these terminologies in regular conversations. Labelling of dwellings within villages also serve to uphold and reinforce caste-based segregation.

Within a village, there are several '*onis*', '*plot area*' and '*kere*' area. *Oni* refers to a small cluster of households belonging to the same caste with or without a defined boundary. The term *oni* is suffixed with the caste name to indicate the dwellers in that area e.g. Kurubaruoni, Kumbaroni, Lingayatoni or the name of the diety or God specific to the caste. The *Kere* area is the Scheduled caste or the lower caste groups and is at the village's periphery. When it comes to *kere* area, there is a visible boundary in the form of a road or street separating the dwelling from the rest of the villages. There are interconnecting lanes across different '*onis*' within the village but not in '*kere*' settlement. Access

to the village is through the main road or street. The plot area in the village is a demarcated area by the government for providing housing. Here the houses are organised in a row in a linear manner and this has a mixture of people belonging to other castes but rarely the dominant caste of the village. This area is usually outside the village or at a distance because of the availability of land. In some villages where the *tanda* is found along with a village, demarcation is similar to the '*kere*' area, separated by a road or a boundary wall. Most of the *tandas* are located at distance from the main village, some name their *tanda* after the nearest village and some as standalone with separate names. Historical accounts of Banjaras mention that they preferred to stay as a group and away from the main village. However, these accounts fail to discuss the role of the village in keeping them away from their place of dwelling. In the case of *Vanapura* and *Chara tanda*, there is no documented history about their dwelling, but the nature of their settling in the current area points towards the residential segregation that kept their dwelling separate. Guddapur *tanda*, from which *Vanapura* settlement originated, is located at a distance of about 200 meters along with the main village with residential segregation similar to other villages in Gadag. The '*kere*' area of the scheduled caste groups is located at the periphery of the main village. *The plot* area is located in between the *tanda* and village and is more recent. A similar pattern is seen with *Chara tanda*, which first developed outside *Chara* village in a manner very similar to the scheduled caste groups there. They came there searching for livelihood and subsequently moved away from there and camped further into the forest. Discriminatory practices in the past similar to those the scheduled caste groups are routinely subject to have been experienced by the older people in *Chara tanda*. In the past, they worked in the fields and households of the agricultural landowner caste in *Chara* village and were not allowed to enter the houses. Even for drinking water, they had to bend down and the landlord would pour water from a height and they had to drink using the palm of their hands. These discriminatory practices and the labelling of Banjaras as criminal tribes indicate that the residential segregation of the Banjaras is discriminatory in nature. In this context of residential segregation, I discuss the organisation of the *tanda*, public services infrastructure, social life, geography and impacts on livelihood and well-being.

5.6 In the wilderness-Geography features of the *tanda*

Moderately dissected hills are found on the eastern part of *Vanapura*, whereas *Chara tanda* is surrounded on all the sides by these hills. The forest area in both the *tandas* belong to the scrub variety (southern thorn forest). Large areas around *Vanapura* are denotified forest areas except for the hills on the eastern side. Areas north and south of *Chara tanda* are restricted forest area. The average elevation of *Vanapura* is 750 m, with the southern part (754m) of the *tanda* at a higher elevation compared to the northern end (745m). *Chara tanda* is located at an elevation of 680 m, with the northern part (687 m) at a higher elevation than the southern part (674 m). This is higher than the average elevation of Gadag district, which is 656 meters.

Groundwater is crucial in the absence of other means of irrigation. According to data from Karnataka Geographic Information Systems (KGIS), the groundwater potential for *Vanapura* is classified as moderate in the settlement area and area south of it, good in the north, moderate to poor in the west and poor on the eastern side. In *Chara tanda*, the groundwater potential is moderate to poor at the settlement areas, good on the eastern part and moderate in other regions surrounding it.

Total cultivable area for *Vanapura* is 116.1 acres and 508.7 acres for *Chara tanda*. The cropping pattern is better in *Chara tanda* as 40 percent of the land is sown twice compared to 8.7 percent in *Vanapura*. In terms of irrigation, only 15-20 percent of the land is irrigated (Ministry of Rural Development, Government of India, 2020). The Source of irrigation in both these places is through groundwater.

Gadag district is already disadvantaged in terms of its ecological features and the *tandas* within it are further disadvantaged as they have to make use of these difficult to cultivate lands for livelihood.

5.7 ‘Jeevana’- Land and Economy

Quality of land is reflected in the means of livelihood and is important to the economy of *Vanapura* and *Chara tanda*. About 37 percent of households in *Vanapura* and 41 percent in *Chara tanda* are primarily involved in farming activities (Ministry of Rural Development, Government of India, 2020). Banjaras being an immigrant to the region,

have access to limited and poor quality of land. Landless and marginal farmers make up the majority in the *tanda* and the landholding pattern is similar to that seen in villages. The type of ownership commonly seen are landowners who are cultivators, landowners who have leased out their land, cultivation in partnership and cultivation in forest land. Cultivating in forest land is characteristic of Banjaras due to location of the *tanda* in forest area and depending on forest for livelihood in the past. The transfer of forest land for those who have been cultivating in the past has been a controversial issue in Karnataka and is ongoing. In both the *tandas*, few households have got the forest land transferred to them by the government. Due to poor yield and returns from the land, many in the *tanda* migrate to other places for work. Migration is also observed among landholders with no means of irrigation. Rainfall plays an important role in the absence of irrigation. In both the *tandas*, many are agricultural wage labourers who go for work in the field of people in the *tanda* and the village. Although most of the landless are involved in this activity, few landholders also go for daily wages due to little or no returns from their land. Agricultural activity occurs between June-July and lasts till the end of February. Those with irrigation facilities cultivate throughout the year. Loan facility for agricultural activities is availed through banks as well as private money lenders. Those who own forest land cannot borrow money from banks as there is no documentation of ownership and end up borrowing from money lenders. The rate of interest ranges from 3-5 percent. Jamalappa, aged 62 years, resides in *Chara tanda* and owns 3 acres of agricultural land. He has no access to any form of irrigation and is dependent on rain, due to which the land has been lying barren for the past three years. He goes for daily wages work in the land owned by village people and earns rupees 150 per day. During the rainy season or harvest, the wages go upto 200-250 rupees and he also gets old-age pension from the government, which is 1000 rupees. His children stay in Goa and send him money during off-season when there is no agricultural work in the *tanda*. Gender differences exist in wage differences as women get paid Rs. 100 Rs and men Rs.150 for a day's work. Many households own land but this land is not cultivable due to lack of irrigation. Those without land take up rearing of livestock and dairy farming which is an important contribution to the economy in *Vanapura* due to the presence of a milk collection centre. This is not of much importance in *Chara tanda*

as ownership of cows and buffaloes is primarily for household and local consumption. Few of them also raise livestock such as goats and sheep as the land around is helpful for grazing. The other minor activities of economic returns are the petty shops run by people in the *tanda*.

Common agricultural crops grown are maize, millet, red gram, green gram, groundnut and black-eyed beans. Those with irrigation facilities grow onion, sugarcane, tomato and other vegetables.

5.8 Spatial organisation of *tandas*

5.8.1 Organisation of *Vanapura*

Vanapura is located in Gadag taluka and is in close proximity to Mundargi and Shirahatti taluka. Parts of Gadag taluka, significant parts of Mundargi and Shirahatti talukas have hilly terrain and *Vanapura* is located close to the hills. It is located at a distance of about 18 kilometres from Gadag city and unlike other *tandas*, it is a standalone *tanda*. There are five other *tandas* within a radius of five kilometres with different patterns of settlement. *Vanapura* is accessible by road and the nearest asphalted road is about 600 meters which connects to the state highway. The *tanda* being at a higher elevation is visible from the tarred road with pucca houses with tiled roofs. At the outset, it looks like a well off *tanda* with concrete houses but the poverty and inequality within these dwellings is invisible. As I drove along the tarred road from Gadag towards *Vanapura* a concrete board in yellow with the logo of a large corporate welcomed me. I took a right turn and entered the road that leads to the *tanda*. The path from the road to *tanda* is paved with concrete which looks relatively new and ends in front of the primary school.

There are six streets paved with concrete which are almost perpendicular to the main street on one side. All the streets with dwellings are paved with concrete except the western boundary of the *tanda* with unpaved roads (see Figure 5.1). These streets paved with concrete have open pucca drains which are not covered and the waste from these drain into the western end of the *tanda* by the side of the unpaved roads. There are no other caste people residing in the *tanda* and hence no stratification of the dwellings common in other villages. Most of the dwellings are concentrated in the central and

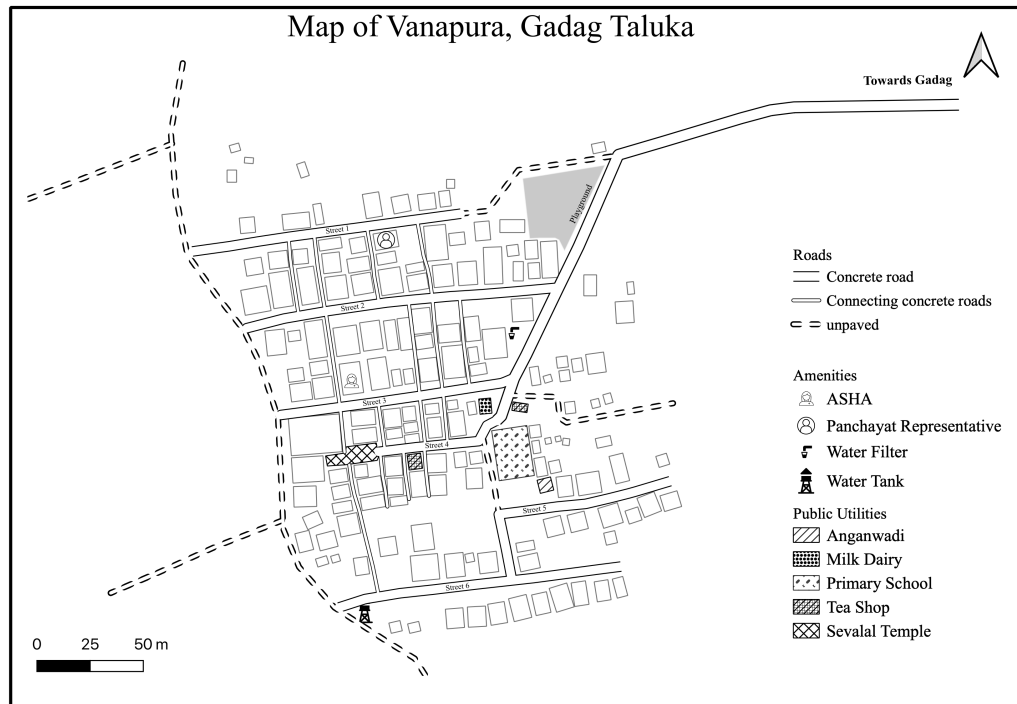


Figure 5.1: Map of the layout of Vanapura

northern part of the *tanda*. The dwellings are less dense in the southern part and are relatively newly constructed houses, most of them which are locked or with elderly residing in them. I drove from Gadag every day and would reach the *tanda* by 10 am and it would wear a deserted look, barring children from the school and Anganwadi. Later I realised that many people go for agricultural work by 10 am and few travel to Gadag town by bus at 9.30 am. So, I started visiting the *tanda* early in the morning by 7 am and noticed that it is buzzing with activities when contrasted with the forenoon. The scene resembles a festive atmosphere, but the only difference is the women washing clothes and children helping in filling water in barrels, taking a bath and getting ready for school. This is the scene every day when water is supplied between 8 am to 9 am. By 9.30 am people gather near the school, the majority of who are college and high school students and older adults visiting the town for purchasing or seeking health care. The bus enters the *tanda* from the main road and takes a reverse near the school, stopping there for 5 minutes and return through the same way it came in.

There are 94 houses in the *tanda* and out of which 29 (31%) are locked. These are

houses with migrants, some short term and some left in the care of their parents which is common in many *tandas*. *Vanapura* has a primary school up to the fifth standard and an anganwadi located behind the primary school. Except for the cook employed at both these places, the rest of the staff are from outside the *tanda*. The school playground is located at the entrance of the *tanda* and is hardly used by the children and used as temporary shelter for cattle. Diagonally opposite to the school is a milk collection centre which also hosts the equipments for solar lighting of the *tanda*. The solar panels are installed above this building. All the streets in *Vanapura* have a solar-powered streetlight installed using MP funds. I was told that the condition for installing solar lights was that all the households in the *tanda* should construct toilets. Public gatherings, meetings and cultural activities takes place at the Sevalal temple, which is located in the fourth street near the school. There are two tea shops located on either side of the school which serves tea along with snacks and breakfast items. These shops also sell tobacco, cigarette, beedis, packaged snacks for children, small stationery items and cool drinks. The tea shops appear to be places for refreshments for people taking a break from activities, but continuing engagement with the community reveals the divisions within the *tanda* on political lines.

Gopal, the owner of one of the tea shops, resented the elected representative in the *tanda*. For many years, individuals from a particular family had represented the *tanda* in the panchayat. A small group was opposed to this and stood against them in the elections and lost. Gopal headed this group and this rivalry continued to other spheres of community life. The other tea shop was run by the family of the elected representative. Gopal's tea shop is located opposite to the milk dairy and usually, young people gather here while older people frequently visit the other one. The current representative is a female who is a wife of the previous member. I got to know about this only after a week as I was corresponding with her husband, thinking him to be the member-other members of the *tanda* called him '*member*'. It was Gopal who told me that the wife of the '*member*' is the elected representative. The '*member*' who was the past representative is currently a proxy for his wife.

There are two sources of water in the *tanda*, one of which is from the main tank located

at a higher altitude on the south-eastern part of the *tanda*. The other is a Reverse Osmosis (RO) water unit located on the main street between second and third streets. The RO water unit is also called ‘*Shuddha Neeru*’ (meaning pure water), which is an initiative of the K H Patil foundation for providing drinking water in Gadag district. These units are installed in villages and *tandas* and implemented and maintained at the local level. Both are maintained by a trained operator residing in the *tanda*. Water from the main tank is supplied through pipes that are placed parallel to the concrete roads near the open drains. Taps are installed perpendicular to these pipes and each covers 2-3 households. Washing of clothes and vessels takes place around the tap and when water is supplied. Most of them collect water from here and store them in cement drums, barrels and pots. Few households have drawn water connection directly to their dwelling. The RO water, operated twice a day, is used for drinking and is charged per pot of water drawn. The first point of contact of the *tanda* with the health system is through the ASHA who has been working since 2016. Before her appointment, the ASHA from the neighbouring *tanda* used to visit for maternal and child health requirements.

5.8.2 Organisation of *Chara tanda*

Chara tanda is located in Mundargi taluka, bordering Shirahatti and Gadag talukas. *Chara tanda*, unlike *Vanapura*, takes its name from the nearby village. The government changed the name after converting the *tanda* to a revenue village, but it is still referred by its old name. This *tanda* is located at a distance of about 5 kilometres from the village from which it draws its name. Until 2016 it was under the panchayat of *Chara* village, and later it was shifted to another panchayat located at a village at a distance of about 10 kilometres from the *tanda*. *Chara tanda* can be reached through three access roads from Gadag town. It is connected to *Vanapura* by a road that is poorly maintained and ridden with potholes. The road connecting to *Chara* village is well maintained and it further connects to the highway from the villages. Buses ply in these two routes. There is a road in the northern part that passes through the structural hills with a beautiful view of dry and barren land in summer and lush green during rains. Structural hills, a type of landform, is characterised by poor groundwater prospects as the water runs off the surface. There is no public transportation on this route, and it is used only by private

vehicles. This road leads to a bigger *tanda* called *Rayan tanda* and further connects to the highway. I preferred taking this route as it was the shortest distance from Gadag and I enjoyed the warm breeze, free of pollution. The roads from *Chara* village and the northern part of *tanda* connect to the highway between Gadag and Mundargi taluka. The road in the south leads to a restricted forest area known for having many plants with medicinal value (see Figure 5.2). The dwellings, like *Vanapura*, are located at an altitude from the main road leading to the *tanda* and within it, residential segments located at various planes are different. The overall dwelling pattern in this *tanda* can be divided into three segments. The segment on the right to the North Road is where the settlement first came up and slowly expanded. The houses in this area are not well organised and haphazard in certain parts. The segment on the left is located at a higher plane and has two parallel roads with houses on either side. The third segment located on the North-Eastern part of the *tanda* is locally called the 'Plot area' with houses arranged in the form of a layout and relatively new dwelling area. Unlike *Vanapura*, there are few families of other caste people who reside in the *tanda* and live among the Banjaras. These other caste people residing here belong to the Other Backward Caste (OBC), Scheduled Caste (SC), Scheduled Tribe (ST) and General category. The OBC family in the past owned land near the *tanda* and settled there for their livelihood. Families belonging to the SC category are involved in tailoring, tyre repair and barber services to the *tanda*. The household belonging to OBC and involved in tailoring and tyre repair shops stay in the second segment of the *tanda*. The households belonging to the ST and General category stayed in the forest close to the *tanda* and were allotted plots to construct houses by the government. These households, along with the household of the barber are in the 'plot area'. There are other houses belonging to the Banjaras in the 'plot area' but these were locked.

During the house listing, I met the anganwadi teacher for the *tanda*, who is from *Chara tanda* but married into another *tanda* nearby. I got to know from her that there are around 400 families with ration cards. I was surprised as, according to my listing, there were only 271 families. I understood this later as I met Raghu, an educated youth who told me his life story. The reason for this is that post-marriage of a young male in

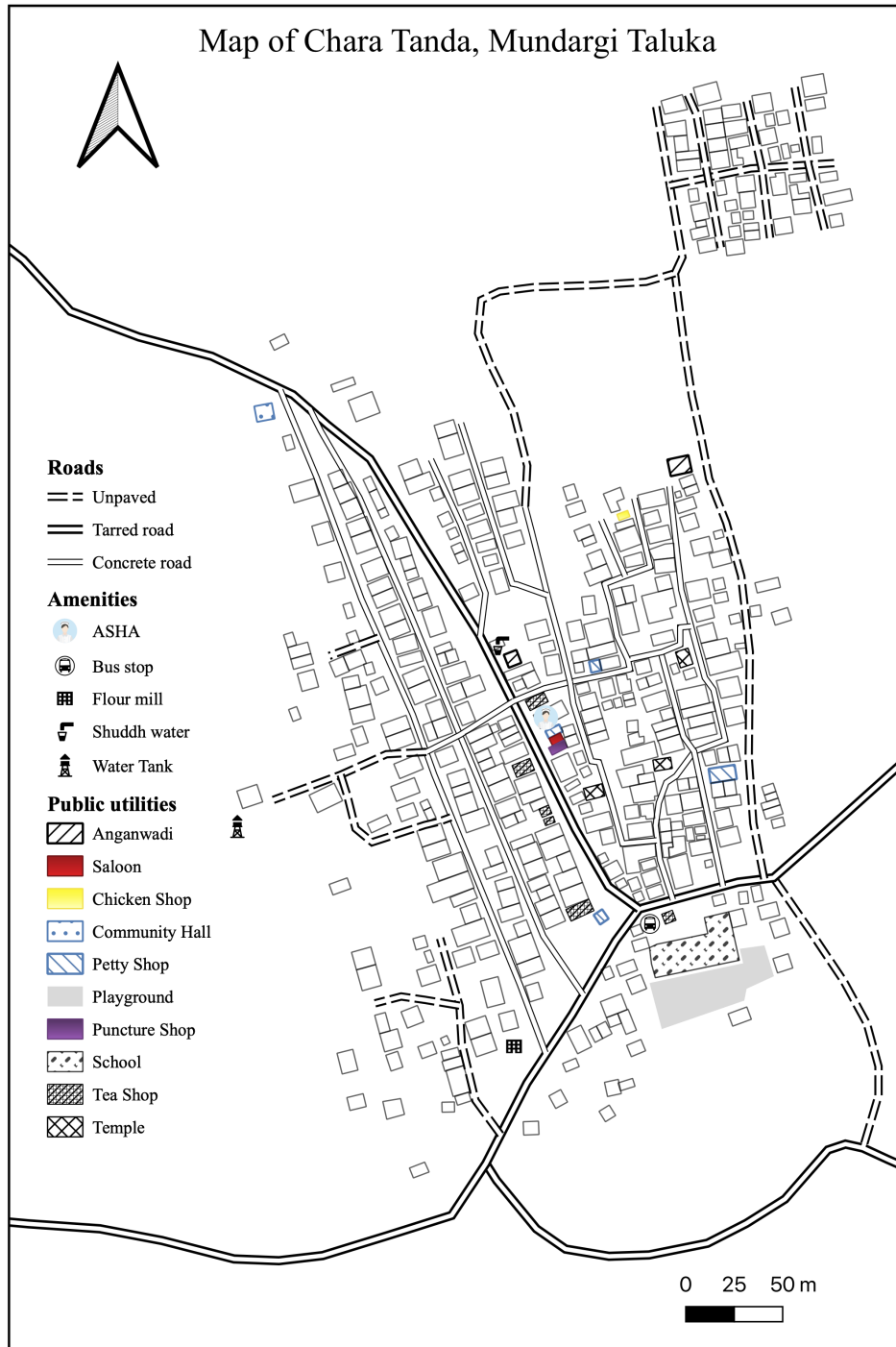


Figure 5.2: Map of the layout of *Chara tanda*

the household, he along with his wife and children apply for separate ration card and this is common among Banjaras to gain benefits. Raghu, currently aged 32 years, was supported by his brothers till marriage and post marriage; they divided the family land and gave him his share in order to be able to provide for his family. As a result, the brothers are no longer liable to support him financially except in times of emergency.

The primary school with upper primary is located at the southernmost part of the *tanda* and has an attached playground. There are two anganwadis, one near the main road next to 'Shuddha Neeru' filter and the other on the way to the 'plot area'. There are four members representing *Chara tanda* at the panchayat and one of them is the vice president of the panchayat. Unlike *Vanapura*, politics here is restricted to elections and post elections, the divisions are papered over and they worked together. There are multiple petty shops, some of which also serve tea and snacks and are located on the main road that separates the old and new dwellings of the *tanda*. Different petty shops cater to various needs of the *tanda*. The tea shop near the school and five on the main road serve snacks and tea and one can find people reading newspaper and discussing politics. These were areas like in *Vanapura* for me to strike conversations and know more about the life of the people there. They also sell tobacco and beedis, which is commonly used by the people. Petty shop in the street perpendicular to the main road serves egg rice and also stacks alcohol and snacks. Apart from these, there is a barbershop and a shop for repairing tyres located adjacent to each other on the main road. Petty shop at the beginning of the main road also sells common drugs for ailments. I noticed a young girl asking the shopkeeper for medicine for her mother, who was having a severe headache; she mentioned the symptoms and bought medicines for it. There are three temples in the *tanda*; Sevalal temple, family temple and temple for the Lingayat saint Basavanna. Sevalal temple is the largest and is located in the middle of the old dwelling and behind it is the family deity of a subgroup of Banjaras. The Lingayat temple was established by the mutt located in Gadag town and was involved in activities with the aim of reforming the lives of Banjaras in *Chara tanda* and is located at the end of the side street. The Karnataka Thanda Development Corporation (KTDC) has also constructed a community hall at the northernmost part of the *tanda* and this is

hardly used. Water supply to the *tanda* is through a central tank installed at the north western part of the settlement. Water from this is supplied through pipes that are laid on the sides of the roads. In addition to this, there is also a pond near the school from where water used to be drawn for drinking and other purposes. Currently, it is being used only for cattle. The *Shuddha neeru* water filter unit supplies drinking water at subsidised cost to the entire *tanda*. This is maintained by a young person in the *tanda* and paid by the NGO who installed it. Only the main road and the road perpendicular to it are asphalted, streets in the new part of the settlement are paved with concrete and streets in the older part are a mix of concrete and unpaved roads. Streets and the road leading to the 'plot area' are unpaved. Collection, storage of water and washing activities are similar to that noticed in *Vanapura*. There is a significant difference in the concrete roads when compared to *Vanapura*. The roads have a depression in the middle along its length for water to drain. There are no drains on the sides of the road like *Vanapura* because of the elevation and the limited space between the houses. Therefore, the roads here dip towards the centre to enable the water from the various taps to drain down the slope easily.

5.9 Goarmati-Social Organisation of *tanda*

5.9.1 Leadership

Every *tanda* has a leadership structure consisting of Naika, Kharbari and Davu to oversee the functioning of the *tanda* and to exercise social control. This system has its roots since the nomadic days when each camp was on the move and led by a leader called the Naika. This leadership, along with panchayat representatives and elders, preside over the various activities related to the well-being of the *tanda*. The job of Naika is to preside over important functions in the *tanda* and head the council in settling disputes among members of the *tanda*. Kharbari assists the Naika in all matters and his responsibility is akin to the secretary and maintains financial accounts relating to events or temple matters. The Davu's responsibility is to announce the meeting of the *tanda* council by beating the drum in the *tanda*. This leadership structure is unique to Banjaras and their main role is settling matters related to crimes, land dispute and any other matter that needs their intervention. The case is heard and a fine is levied, which goes into

the temple fund. If any party is unhappy with the resolution, then the case can be put forth to a higher council of 16 Naikas of different *tandas* to deliberate upon the issue. If it does not get resolved even at the higher council, they are free to approach the police. Naikas in both the *tandas* mentioned that if there are any dispute in the *tanda* and the members directly approached the police without informing the Naika they would be sent back to the council. Currently, the fines range from 100-200 rupees. Over time this system is weakened and now people directly approach the police without approaching the council and the policemen make it a point to enquire with the Naika on the dispute. These three posts are hereditary in nature and their sons take up the role post their death. The influence of the leadership has waned over time post the establishment of the panchayat system with elected representatives from the *tanda*. These representatives wield more power in terms of getting government paperwork done or getting the benefit of schemes to the residents.

5.9.2 Kinship

Banjaras are a closely-knit community with members related to each other in some way or the other. It is difficult to find a household in the *tanda* that does not have even a single relative in the *tanda*. *Vanapura* started with 2-3 families and currently, there are 94 households, all of them related to each other. Those families who have migrated from the *tanda* to other districts or states make it a point to return for important festivals and celebrations. There is a sense of security in the *tanda* with members being aware of those entering and exiting. Most of those who have migrated for jobs leave their elderly behind with the assurance that they would be taken care off by the neighbours and relatives in the *tanda*. Most of them who have migrated still retain their house, their social security numbers and their voting rights in the *tanda*. Festivals of Holi, Dusshera and Ganesh Chaturthi reveal the vibrant nature of *tanda* with households celebrating and feasting together. There are different subgroups among the Banjaras, which they call as Pangada. Common among them are Chavan, Rathod, Lamani, Vadtya and Bhanot. Hierarchy among these groups have been described in earlier literature, but in both these *tandas*, the importance was ascribed to forming relationships. These groups do not marry within their *Panagada* but between *Pangadas*.

5.9.3 Clothing

Banjara women are distinct from others in term of their clothing which is very colourful. Many older women continue to wear their traditional dress while the young have abandoned it to wear sarees or churidars. The traditional dressing consists of three main pieces of clothing; the blouse, skirt and veil for covering the head. The colours are usually red and blue and the veil is adorned with coins at the borders. The garments have lots of embroidery work and metal pieces on them and the women love to adorn themselves with ornaments which is another distinct feature of Banjara women. The embroidery, along with the metal piece, takes a long time and to stitch one set of dress takes around 5-6 months. The women also plait their hair and adorn it with silver ornaments. The plaiting of hair and ornaments needs the assistance of another woman and is time-consuming and is one of the reasons for the younger women to abandon the traditional dressing. Thukaram and his wife migrated to Goa in the 80s and his wife found it difficult to continue wearing the traditional dress as there was no one at home to help her. So he encouraged her to give up the traditional dressing and change to saree and she continues to wear saree till date even after returning to Gadag and settling in the *tanda*. All have not abandoned the traditional dress of the Banjaras but wear them only during holi festival and Sevalal Jayanthi or any other festive occasion. The older women continue to wear the traditional dress on a daily basis. Tattoos on the chin, forearm and leg are common among them. The traditional dressing and ornaments make the Banjaras woman stand out in a crowd. The clothing of men is similar to those in the village. They wear dhoti, pyjama and shirt with a white Gandhi cap, while the younger generation prefers pants and shirts. Therefore, while the women in their traditional Banjara clothing are distinct in a crowd, the men are not.

5.9.4 Housing

Most of the houses are built next to each other with the walls sticking together. Four types of houses are commonly seen in the *tandas*. Most observed houses are the traditional ones with a front porch called *katti* with a raised platform, space for cattle inside the house and a raised platform at level or higher than *katti* with separate rooms for cooking and sleeping around this platform. The *katti* is the space for storing agricultural

produce, drying grains, and holding conversations among known people in the *tanda*. It is also used as a place of rest for the elderly with restricted mobility in the *tanda*. This was also a place for me to sit and talk to people in their houses and they usually put a mat or a bedsheet for me to sit on. Noticing that I am from the city, I was offered plastic chairs to sit on because they perceived that I would not be able to sit with my legs crossed. Behind the *katti* is a large space at the level of the floor, which is usually covered with stones is used for cattle which includes cows, bulls, buffaloes, goats and sheep, with space for fodder. Drums and pots of water are also kept in this area. The raised platform inside the house is a place for rest, recreation with a separate room for cooking. The entire structure is supported by wooden pillars and the roof is covered with tiles. Similar structures are seen among the traditional households and in some cases, the absence of a *katti* outside could be due to constraints of space. Affluent households have retained the overall structure, including the *katti* but have flattened the raised platform inside the house to use it only for dwelling and have shifted the cattle to separate sheds behind or adjoining the house. Walls are plastered, wooden pillars replaced with concrete and the floor is laid with marble or granite.

The other common type of house is the pucca house with 1-2 rooms with or without a *katti*. The roof is usually a sheet made of asbestos or aluminium or fibre and the floor is plastered with cement, although some houses have granite or marble floorings. These types of houses are constructed with grants from the government and also taking personal loans. The elderly residing in these dwelling mentioned that their children were migrating for short term work to pay off the loans taken for construction. There are pucca houses which are relatively new with more than 3-4 rooms and these similar to the concrete houses in cities. These houses have a compound wall with space for parking of vehicles. Few houses are a combination of kutchra and pucca type with the walls made of peeling concrete where ageing is evident, mud floor coated with cow dung with a thatched roof. People living in these households are those who do not have the means or the ability to procure loans to build houses. Few people live in temporary thatched houses during the construction of their new homes.

5.9.5 Sanitation

All the houses here have a toilet and even I have one built with the help of the government, but we (family) don't use it, we all go outside in the open

– Elderly person in *Vanapura*

This is a common response from most of them in both the *tandas*. The toilet location is similar to those in the villages and rarely is a toilet constructed inside the house. Households with toilets in *Vanapura* are almost universal and they are located outside the house. The reasons for the universal presence of toilets is because that was a pre-condition to install solar-powered street lights in the *tanda*. The usual location of the toilet is either behind the house or in front and some cases portion of the *katti* have been converted to a bathroom. Construction of most of the toilets have been done with government aid and these are two separate structures with asbestos roof, located side by side and separate doors. One is the toilet and the other the bathroom and, in some places, the toilet was used as extra storage space. Toilet coverage in *Chara tanda* is not universal and many still defecate in the open fields nearby. Rani, the mother of two teenaged girls and boys in *Chara tanda*, understands the importance of sanitation and its importance for women and the family as a whole. Pointing towards the toilet she had constructed inside her house, she rued her decision due to lack of regular water supply. She had to construct the toilet inside due to lack of space. Irregular supply of water and lack of piped water in the house makes it difficult to maintain the toilet and flush after use. Although Rani continues to use the toilet in spite of the difficulties, not many show a similar keenness to use it. They prefer to defecate in the open as the water requirement is one '*cherige*'³ for washing and cleaning hands. There are few households that are not able to construct toilets because of the rocky nature of the land where the house is built on. Ramappa showed me at the space in front of his house, partially dug and abandoned as it was rocky ground. Funds were sanctioned, but he was unable to find an alternate place due to space constraints.

Barrels, drums, pots and buckets for water storage is kept in the front of the house as the water pipelines and taps are located on the roads. Huge blue barrels are a common sight in the *tanda*, used for purposes of storing water. Water for drinking purposes is

³Copper or brass or steel pot for carrying water. Plastic variants also exist and in south Karnataka called as Lotha

stored in steel drums or plastic dispensers inside the kitchen. Washing of clothes and bathing of young children takes place in front of the house when water is supplied. Affluent households in the *tanda* have overhead tanks and a piped connection into their household.

5.9.6 Migration

One of the common characteristics of the Banjara community is the large-scale migration from the *tandas*. Unequal land distribution, uncertain returns from agriculture, unpredictable rains, dry and difficult terrain and absence of other means of livelihood cause many families to migrate in search of livelihood. Migration from *Vanapura* to Goa in search of livelihood started around 50 to 60 years ago. Tukaram, currently aged 68, recalls the time when he was in the third standard and was unable to continue studies due to poverty during those times. His mother sent him to his uncle to work as a '*jitha*'⁴ for ten years and after that, he worked in the agricultural fields. Since the return and yield was not much, he went to Goa through his relative there, who was his uncle's son, working as a contractor for buildings. He worked under him on construction sites as a labourer and later started his own business of selling Banjara dresses to foreigners. He travelled to *tandas* in Karnataka, Maharashtra, Tamilnadu and Andhra Pradesh and purchased the dresses from Banajras and sold them in Goa. He stayed in Goa for almost 45 years and returned to *Vanapura* after the death of his mother and now he takes care of the agricultural fields and the house. His children continue to run the business of selling clothes in Goa. Most of the migrants from *Vanapura* to Goa run business and very few who work as construction and daily wage labourers. Migration in *Chara tanda* started much later when compared to *Vanapura* and people have started to go to other places for livelihood. There is only one family that runs business in Goa and the rest are daily wage labourers at the place of migration. Unlike *Vanapura*, people in *Chara tanda* go to Goa, Kasaragod, Mangalore, Dharwad and Davangere.

Different patterns of migration are seen i.e. seasonal, short and long-term/duration. Common among these are seasonal migration followed by short term migration. There are very few long-term migrants among the first generation of migrants as the Banjaras

⁴Bonded labourer

retain their connection and identity with the *tanda*. Many second-generation migrants in *Vanapura* have settled in Goa, carrying on the business started by their parents who have returned to *Vanapura*. Two families from *Chara tanda* have settled in Switzerland but still retain their house in the *tanda*. Seasonal migration is both intrastate as well as interstate. Reasons for intrastate migration is for sugarcane harvesting in Mangaluru and Dindal plant, which are usually found in Davangere and Harihar. Interstate migration is common to Goa and work there in hotels, beaches during the tourist season and return at the onset of monsoon. Those who migrated in the short term go to Goa, where they are involved in construction work, selling fish, drivers and other daily wage work. Those who go to Kasaragod are primarily involved in construction work. They usually stay for 6-9 months and then return to the *tanda* for three months during the raining season. In this period, if the rains are good, then farming is taken up in the land owned by them and they return post-harvest. There are many reasons for migrating and primary among them is crop failure and the need to pay off the loans taken for agriculture, construction of house and conducting weddings. Once the loans are paid back, the migrants return to the *tanda* and continue to cultivate or work as daily wage agricultural labourers and again migrate short term when they are caught in the web of loans. Migration is also common among those who have a college degree and are unable to secure employment in the government or private enterprises in Gadag district. Raghu, whom I mentioned earlier, is the only degree holder in his family, having studied Bachelor of Arts in Gadag. He wanted to get into the army but was rejected because he had a flat foot. He is well versed in computers and tried securing employment in and around Gadag in both government as well as the private sector but was unsuccessful. He owns land with no means of irrigation, and he tried to secure funds for starting a data entry centre from the government, which was stuck in red tape. He was firm on not going to Goa for work leaving behind his mother, wife and children. Two months later, he applied for jobs outside Gadag but within Karnataka and was unsuccessful. Finally, he went to Goa to search for a job as his relative was working there so that he could pay off his loans taken for agriculture. There are young people like Raghu who are educated and want to stay back within Gadag so that they could be close to home. Some are able to get employment in the police force, clerical jobs or as teachers and others migrate to Goa

for short term employment. There are also families in *Chara tanda* who have sent their children to Dharwad or Hubli to prepare for competitive exam for government services. *Vanapura* emphasizes the education of children in the *tanda* and has sent many of them to study outside Gadag for higher education.

5.10 Foundation and the *mutt*- Infrastructure and services

5.10.1 Transport infrastructure

Both the *tandas* are connected to Gadag city by road. The main mode of transport is buses, share autos and private vehicles. *Vanapura* is closer to Gadag city than *Chara tanda* but has a smaller number of buses. In a day there are three buses to Gadag city at 9.30 am, 2.30 pm and 6.30 pm. The evening bus is an interstate express service that travels to *tandas* in Gadag taluka for people to travel to Goa. Share autos do not enter the habitation area of *Vanapura* but ply on the main road. Public transport is not a problem in *Chara tanda* as it lies in the route between two talukas. There are 7-8 bus services in a day and no share autos here due to better public transport.

5.10.2 Health Infrastructure in the *tandas*

People in both the *tandas* have to go to the nearby *tanda* or village to access public and private health care. The first point of contact for *Vanapura* with the public health system is the Sub-centre located at a distance of 4 km in the nearby *tanda*. There is no functioning Sub-centre as the building for it is ready but yet to be inaugurated. The Auxiliary Nurse Mid-wife (ANM) visits the *tanda* for health-related activities and coordinates with the ASHA worker. Similar is the case with *Chara tanda* with the Sub-centre building located in *Chara* village where there is a physical building, but that is non-functional. Primary Health Centres (PHCs) catering to both the areas are located in the villages along the state highways. The location of PHC is closer to *Vanapura* (8km) than *Chara tanda* (12km), but in terms of access *Chara tanda* is better as it has good connectivity through public transport to PHC. The major providers of health care services in both these areas are the private providers who comprise of providers trained in the alternate system of medicine, ayurvedic bishaks and unqualified providers called RMPs. The clinics run by them are located in the villages nearby. There are two RMPs

and two providers with BAMS in the village near *Vanapura* and three RMPs and an ayurvedic bishak near *Chara tanda*. RMPs in both these villages visit the *tanda* for providing treatment for ailments on a regular basis and in times of emergency when called.

5.10.3 NGO's in the *tanda*

Two organisations with different objectives were involved with the *tanda*. In *Vanapura*, a corporate organisation was involved in the overall development of the *tanda*. Their presence in the *tanda* is visible by means of a stone containing an engraving of the organisation and the year of the project installed at the entrance of the *tanda*. This organisation was actively involved in providing seeds, fertilisers, agricultural equipment, imparting knowledge on best agriculture practices, clearing land, recharging borewells and educating farmers for those who owned agricultural land. They provided cows, buffaloes, goats and sheep for the landless. The organisation also arranged for weekly health camps for the *tanda* through an ayurvedic doctor from Gadag city. Their work was mainly related to the overall development of the *tanda*. This was different in *Chara tanda*, where a Lingayat mutt had adopted the *tanda* and had built a small shrine there. They were mainly involved in conducting social gathers and imparting knowledge through talks. The talks centred on common beliefs, the importance of education, superstitious beliefs and issues related to moral nature. Both tandas were given the tag of 'adopted' village but for different purposes. The involvement of these organisations led to discontentment among the people in the *tanda* and a permanent schism in the case of *Vanapura*. The marginal farmers and landless in *Vanapura* felt that the work of the organisation benefitted the medium and large landholders. Conflicts arose when the foundation started building a new water tank in the *tanda* and one among the marginal farmer took some bricks and sand meant for building the tank to complete the construction of his house. This led to a huge physical fight and that led to serious injuries and hospitalisations. This conflict created a division in the *tanda* and permeated to other spheres of social and community life. The two tea shops in *Vanapura* are a reflection of the conflict. The organisation wound up their activities post the conflict, but the consequence was a permanent divide among the people. People had a good opinion about the reformation

works of the mutt and unlike the corporate organisation, and the mutt was not involved in development works. People were proud of the fact that the mutt head had called them his adopted village. However, a few felt that the mutt was not true to the adopted tag conferred on their *tanda*. Rani's understanding of the adopted village tag is that there has to be some tangible benefits for the inhabitants. Her teenage daughter was studying in one of the educational institutions run by the mutt and she was unable to pay the full fees upfront. She wanted to know if she would get a special concession for the fees by virtue of being a resident of an adopted village. The management refused to offer any concession and she had to pay the full fees. She believed the mutt head should have sponsored the education of a few children or provided jobs to some and that would have been beneficial rather than teaching moral principles. Both these incidents indicate that the organisations working among people need to be upfront on their objectives and take into consideration the needs of the people.

CHAPTER 6

Health systems for *Tandas*

The objective of this chapter is to describe the health care systems available to the Banjaras in both the *tandas*. The health care system here refers to the public and the private systems providing curative services in the villages and *tandas*. Public providers included the ASHA, the Sub-centre and the PHC. Private providers are those with a degree in alternate medicine and unqualified providers called Rural Medical Practitioners (RMP), who are conventionally not considered as part of the system. I will describe the physical structures, the location, key players and the day to day functioning of each component of the system. In the private system, I was an outsider observing the happenings and interviewing providers. I could never be an insider because the providers always viewed me with suspicion as a person being part of the government system. In the Public health system, I was both an outsider as well as an insider. Outsider, because I was a student from an institution in Kerala, conducting research with permission from a higher official. Gradually, during the course of the fieldwork, I became an insider and the people in the system started viewing me as one among them. They were able to be a bit free and transparent in their conversations.

6.1 Public Health System functioning in the *tandas*

The key player in the public health care system functioning in the *tandas* is the ASHA worker. The public system comprises the Sub-centre, Primary Health Centre (PHC) and the District Hospital (DH).

6.1.1 Accredited Social Health Activist (ASHA)

Accredited Social Health Activist (ASHA) is the first point of contact of the *tanda* with the health system. In both Vanapura and Chara *tanda*, the ASHA worker is from the same community. The ASHA in Vanapura was appointed in 2016, whereas Chara *tanda* has one since 2010. People in Vanapura had written a letter to the health authorities

in 2013 to appoint an ASHA worker and it was fulfilled in 2015. People in the *tanda* largely view them as those who are concerned with the health of pregnant women and children. This perception is shaped largely because of their involvement in maternal and child health and to the extent of not administering injections or ‘*botli*’¹. I will discuss the injections and ‘*botli*’ later as it is an important determinant of care-seeking. ASHAs in both the *tandas* work on a wide range of public health issues like maternal and child health, infectious disease related to Tuberculosis and Malaria, hygiene and sanitation and more recently, non-communicable diseases. The workload for the ASHAs have been increasing with new programs added regularly. The fieldwork was happening at the time when the state was gearing up for assembly elections and the Panchayat Development Officer (PDO) had asked all the ASHAs to help in increasing awareness on voting. Enraged by this, the ASHAs in Rampur PHC complained to the Taluka Health Officer (THO), who shouted at the PDO for involving ASHAs without any formal letter from the government. In addition to all the formal and informal workload, the ASHAs are paid 3500 rupees per month and they earn 5000 rupees on an average after including incentives. The work done by the ASHAs regarding maternal, child health and other health programs are similar across the *tandas*. Being from the same community, they don’t face problems in their work, but in Vanapura, the local politics interfered with the functioning of the ASHA. Being the wife of the person who opposed the leadership, many in the *tanda* were not receptive of her. In the beginning, she was faced with taunts of the people in the community who questioned the need for her to be doing this kind of work. Gradually the people warmed up to her and respond to her for health programs. When I spoke to people and the leadership in the *tanda*, they always mentioned the ASHA workers as *ayahs*. This is the name given to anganwadi helpers and the skill and functioning of ASHAs are viewed to be similar to them.

6.1.2 Sub Centre

The Sub-centre for Vanapura is located in Guddadpur *tanda*, which is at a distance of about 4 kilometres. I went looking for the sub-centre in the *tanda* and people directed me to the Sevalal temple. Construction for a community hall was going on opposite to

¹*botli* is the word for saline drips

the temple and I looked for the Sub-centre and I couldn't find it. I asked an old lady who stays nearby, who pointed to a small room adjoining the building under construction. The room looked smaller than the houses nearby and was shut because of the construction work that was happening. I called the number of the health worker which I got from the ASHA and she asked me to meet her at the Anganwadi. I went to the anganwadi, which was located at the premises of the high school in the *tanda*. I entered the anganwadi and waited as the health worker who appeared to be in her late 40s was conversing in *Gor-boli*² with the ASHA worker who was in her uniform. She was administering deworming tablets to children with the help of the ASHA and instructing her on the same as it was a National Deworming Day. She even made me administer a tablet to a child and clicked a picture telling me that she has to upload it by WhatsApp as evidence of her activity. I got to know from her that the government has constructed a new Sub-centre at a distance from the *tanda*, behind the school using funds from Karnataka Health System Development and Reform Project (KHSDRP) and the building was ready in 2018 but not functional. I visited this Sub-centre a year later and it was still locked, waiting to be inaugurated. There are two Sub-centres in this area labelled A and B at a distance of 200 meters. Sub-centre A caters to Guddadpur village and Hallapur *tanda* nearby. Sub-centre B caters to the *tandas* in the area, namely Guddadpur *tanda*, Vanapura and Bettadpura. Sub-centre A has its own building, but the female health worker does not reside there. The female health worker at Sub-centre B belongs to the Banjara community. Both the female workers stay in Gadag town and commute to work daily.

Sub-centre for Chara *tanda* is located in the village, next to the panchayat office. When I went there, I found that it was an old building with cracks on the wall. The door and window were shut with grass growing on the window sill and it didn't look like it was in use. I spoke to the panchayat development officer, who told me that nobody stays there, and the health worker travels from the PHC to carry out her work. In both the *tandas*, the Sub-centre exists on paper with staff but is non-functional. Work related to screening for non-communicable diseases takes place in common spaces either in the anganwadi

²Language spoken by the Banjaras

or the temple premises. In Sub-centre A these activities take place in the centre itself. The Sub-centre catering to Vanapura comes under the jurisdiction of Hallapur PHC and Chara *tanda* under Rampur PHC. There are four Sub-centres under Hallapur PHC when compared to two under Rampur PHC. There is no shortage of staff in Sub-centre in Hallapur PHC but Sub-centres under Rampur PHC are understaffed and the number of sub-centres are not adequate for the population size. There are two Sub-centres, out of which one is very near to PHC and is used as quarters by class IV staff and the other Sub-centre, which is non-functional, is in Chara village.

6.1.3 Primary Health Centre (PHC)

Location and organisation of Hallapur PHC

Hallapur PHC is located along the state highway and is at a very short distance (relatively) to the district hospital. The district hospital is located on the outskirts of Gadag; it is a fairly new building and also houses the only allopathic medical college in Gadag. As I crossed the district hospital and drove a few meters along the highway, I reached an intersection from where I took a left turn. I continued to drive for about two kilometres and from a distance, I noticed a building that had the typical features of a government health centre. It is a pale-yellow coloured building that has not been painted for a long time and borders in red, with a boundary wall around the building. Previously this PHC was located in the centre of Hallapur village next to the panchayat building and had shifted to the present location in 2008. The old PHC building currently functions as a Sub-centre.

The PHC is located on the base of the hill, which is elevated from the highway. There is a small *katti* near a huge tree at the entrance to the concrete road leading to the PHC. Buses stop at this point for those visiting the PHC and from here, they walk uphill for about 100 meters to reach the PHC. The path, which is laid with concrete, is narrow enough for autorickshaws and cars to drive through. The PHC is surrounded by high walls in front and on the eastern side with no gate guarding it. The other entrance to the PHC is through an uneven road on the western side which leads to the village nearby. In the morning, when I go around, 8.00 am there is hardly anybody in the PHC, as indicated

by the absence of vehicles outside. The class IV worker is sweeping the area in front and the night shift nurse is waiting for her reliever. A car being parked outside indicates the presence of a Medical Officer (MO). Bikes are parked in the area to the left of the main entrance, where there is a shed commonly used by staff. To enter the PHC building, one has to take a right at the main entrance, which is a continuation of the concrete road which ends at the ramp and stairs. This extension is used by the medical officer to park his car under the shade of the tree. Those visiting the PHC by two-wheelers also park their vehicles in this space but in a haphazard manner (see Figure 6.1).

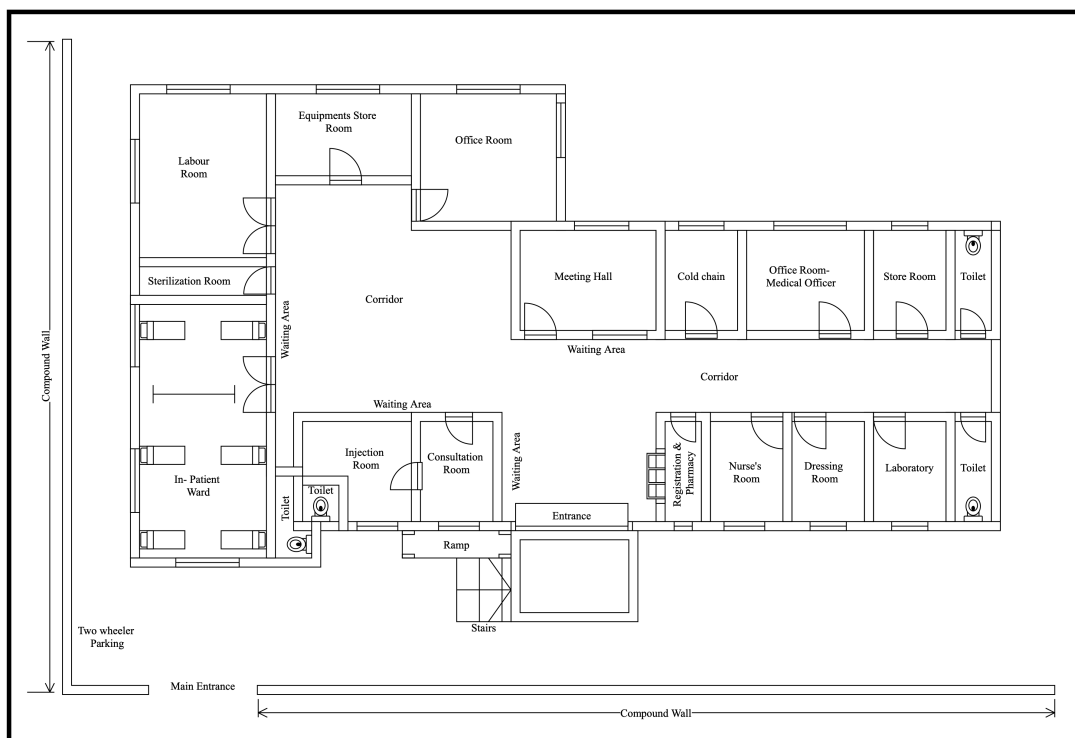


Figure 6.1: Floor map of Hallapur PHC (not to scale), Gadag

PHC is a one-storied building with a ramp and stairs leading to the main door, which opens into a lobby. On the right side of the lobby is a small counter which doubles up as a registration counter and pharmacy. All those visiting the PHC walk to this area and register themselves before proceeding for consultation. When I first went to the PHC, the pharmacist mistook me for an official from the District Health Office and was in the process of adjusting her white coat. The main road and the path leading to the PHC is visible from this counter and she had probably seen my entry from a distance.

During my subsequent visits, she didn't wear one and only wore it when an official was visiting. The left of the lobby is the consultation room, but the entrance is from the corridor in front of it. Directly opposite the main door is a meeting hall which is used for the meeting of the ASHAs and gathering of pregnant women along with ASHA workers for antenatal care. This room is also used for training PHC staff. Upon entering the lobby, I faced a large corridor to my right and left. The corridor on the right had rooms of different sizes on either side with toilets for men and women at the end. The corridor on the left leads to the consultation room, in-patient ward, delivery room and documentation cum office room. Behind the pharmacy and the registration room is the nurse's room with two beds, used by the nurse on night duty. Since this PHC is a 24-hour PHC, there is always a nurse and class IV staff on duty assisting in normal deliveries. The room next to this is used as a dressing room for cleaning up wounds and bandaging. The laboratory is located at the end of the corridor just before the toilet. On the opposite side is the storeroom, office room for the medical officer and the cold chain room with inverter back up. I interviewed the medical officer in his office room. The room is spacious with a table, chair and two large cupboards. In the medical officer's absence, this room is used by the clerical staff for documentation work. Drug supplies, bedsheets and cleaning accessories are kept locked in the storeroom and the keys are with the pharmacist. The corridor on the left side of the lobby is where much of the activity takes place. Opposite the registration counter and pharmacy is the consultation room with an entrance from the corridor. The consultation room is divided into two parts, one being the consultation chamber for the medical officer and the other an injection room with an attached toilet, next to it. These two rooms are separated by a wall and the entry and exit to the injection room is through the consultant's chamber. The walls of the chamber are filled with information about health and statistics of the PHC. A large table is located at the end towards the window overlooking the main road with a comfortable chair. Next to it is a revolving stool for the patients to sit. An examination plinth is kept at the entrance away from the door and rarely used by the medical officer. The adjoining injection room has a small table with BP apparatus and register and chair for the staff nurse to sit. Here too, there is an examination plinth with curtains for privacy but largely used for administering injections. The in-patient ward

and the delivery room are right next to the injection room. In between these two rooms is a small room for sterilising equipment and sheets. The in-patient ward has six beds, with two on the right for males and four beds for females. There is a movable partition with a cloth curtain to indicate the separation between both the wards. Opposite the consultant's room, on the other side of the large corridor adjacent to the labour room are two rooms, one for storing unused equipment, discarded furniture and mattresses. Next to this is the office room which is a large hall with five cupboards containing numerous documents relating to the PHC and a huge table in the middle. This office is used by the Senior Health Assistant (SHA) and by the staff during lunchtime. Hallapur PHC has four Sub-centres and caters to three villages and five *tandas*. The areas covered by the PHC are Jalalpur village, Kallapur *tanda*, Hallapur village, Hallapur *tanda*, Guddadpur village, Guddadpur *tanda*, Vanapura (*tanda*) and Bettadpura (*tanda*).

Transportation to Hallapur PHC

Hallapur PHC is located outside the main village and there is a small unpaved path suitable for walking, connecting it to the village. I have seen few people take this path, although the majority access it through the concrete road in front of the PHC. Private transportation seems to be the preferred mode of travelling to the PHC. I observed families travelling by bike to the PHC at times with four people. This indicated the lack of transportation or a very economical means of travelling, saving on bus or auto charges. I rarely noticed people travelling by car to the PHC except one family from Vanapura. Relatives had bought an old woman with a past stroke who was bedridden in an omni van for Blood Pressure medication. They did not want to take her to the District hospital located in proximity as it would take almost an entire day for consultation. The other common modes of transport are the *tumtums* which are shaped like an auto but bigger and can accommodate more than five people at a time. These are the more common type of shared transportation like buses in Gadag district. They are also available on hire and commonly used by the elderly or those who are weak and unable to walk. They travel by *tumtum*, which waits till they receive treatment and return to their *tanda* or village. The shared *tumtums*, like the buses, stop at the *katti* at the entrance, where people get down and walk to the PHC. On request, they drop people in front of the PHC

for some extra money. I travelled every day by two-wheeler and I didn't understand the difficulty in walking to the PHC until one day I observed an old man walking from the road. Shanthaiah, in his late 60s, a frail looking person was walking towards the PHC with the help of a walking stick that was made from a branch of a tree. From a distance, I noticed that his knees were bow-shaped, a common feature of osteoarthritis in both legs, which made his walking slower. He took almost half an hour to reach the PHC to get an injection for pain in his knees. He stayed in Hallapur village and had to walk from the main road because the unpaved roads were uneven, and he had no one to bring him to the PHC. As he walked back, travelling downhill, I couldn't help but think of the effect the injection would have on his pain as this travel would end up aggravating the pain. Even though the PHC is located at a distance of 8 kilometres from Vanapura, public transport is not convenient.

Every month we have to take high-risk pregnant women to the PHC. While going from here there is bus in the morning at 9, but for return we have to wait till 3 pm (laughs). We take the morning bus and get down at Guddadpur *tanda* crossing, from there we have to walk for 10 minutes, past the village to the bus stop located on the highway. From there we take another bus or tumtum to the PHC

– ASHA worker, Vanapura

Households that don't own vehicles depend on public transportation to the PHC and going to the PHC would lead to loss of wages for the entire day. Many elderly men and women from Vanapura who travel to the PHC for their monthly follow-up for NCD care or joint pain expressed similar difficulties in travelling to the PHC. This was not the case for those households which owned a car or two-wheeler. Men either drove by themselves or dependent on their children. Women were further disadvantaged as they didn't know how to drive and were always dependent. In some cases, they pay their neighbour or close relative money for fuel to take them to the health facility. I have observed many walking back to Vanapura after getting down at the bus stop near the highway. There have been many instances when men and women have stopped me on the road, requesting to drop them on the way. This was not new to me because in 2015, when I travelled to the *tandas* for fieldwork I had entertained many such requests. At that point of time, the fact that these areas had limited means of transportation didn't strike me. I saw it as an opportunity to help people as well as get to know about their

tanda and aspects of their lives.

Location and organisation of Rampur PHC

Rampur PHC, like the previous one, is located on the outskirts of the village and not visible from the highway. Driving along the highway towards Rampur, a green board mentioning “Rampur” and a signboard with hospital bed icon caught my attention. A major portion of the village was located to my right and few households to the left, which indicated the direction of growth of the village. I asked an elderly gentleman who was waiting in the bus stop for directions to the PHC. He paused for a while and pointed towards a building on the highway; as I was about to drive there, he stopped me and asked me if I wanted directions to the new or the old *dawakane* (hospital). Before I could respond, he pointed towards the road leading from the highway to the left portion of the village and told me that it is opposite to the panchayat office. I took the turn and I could see a small building at a distance on the left located near the road. As I approached closer, a larger building on the right which was covered by a series of houses from the road, became visible and had a huge board: “Primary Health Centre-Rampur” written in Kannada. Small letters below this mention the name of the family who donated the land for building the PHC. Unlike the panchayat office on the left side of the road, this building is located away from the road and there is no road leading to the PHC, although the path is at the level of the road. Located on agricultural land, the nearest house is about 200 meters away.

The layout of the PHC is similar to Hallapur PHC, but space is organised differently. No boundary wall surrounds the PHC; entry and exit are through the main door facing the road. The front porch of the building has four pillars with a roof and most of the two-wheelers are parked in this space. Stairs and ramp are present at the entrance to the PHC (see Figure 6.2). The main entrance opens into a large lobby which is primarily used as a waiting area for people visiting. To the left is the meeting hall, which is spacious, well-lit and ventilated and activities similar to Hallapur PHC take place here. Next to it and directly facing the main entrance is the consultation room. In addition to the table, chairs and examination plinth, there is also a TV with a recording device installed on the

wall. This enables the medical officer to monitor the activities of the PHC, including the main entrance, the waiting areas and the corridors. The main lobby leads to a corridor in front and to the right. The corridor on the right has the Pharmacy cum registration counter, storeroom and laboratory on one side and injection and dressing room and cold chain room on the other side.

Toilets are located at both ends. The Corridor in front of the main entrance leads to separate male and female wards, which are situated opposite to each other. There are four beds in the female ward as opposed to two in the male ward and both the wards have attached toilets. Two beds in the female ward and one bed in the male ward have built-in stand for Intravenous (IV) fluid or saline drips. The corridor ends at the surgical wing guarded by two doors fabricated with aluminium and covered with frosted glass that is a characteristic of hospitals. Restroom for the doctor with attached toilet and operation theatre for minor surgeries are on the left side of the surgical wing. Operation theatre has not been used till date and is a storage room for lights, trolleys and beds. Directly opposite to the fabricated door is a small office room with a computer for documentation. This room is used as a lunchroom by the male staff. On the right side is the labour room with all the required equipment but not in use and all the equipment are new and the room has been unused. This is because the PHC does not conduct any deliveries. The restroom in the complex is exclusively used by the medical officer and occasionally by the female health worker. The PHC has two Sub-centres and caters to five villages and four *tandas*. Villages and *tandas* covered by the PHC are Lingpur village, Lingpur *tanda*, Sevalalnagar (*tanda*), Rayan *tanda*, Rayan village, Chara village, Chara *tanda*, Kallapur village and Paraspur village. I found out that the old *dawakane* on the highway was functioning as a PHC till they moved to the new building in 2013. Currently, it is designated as a Sub-centre and the class IV worker resides with her family. Being in proximity to the PHC, all the work of the Sub-centre is carried out there. Even though there are two Sub-centres under the PHC, they are non-functional. The PHC building was supposed to have been built in Rayan *tanda* which is nearby and one of the largest Banjara settlements in the area. The medical officer who is working in the PHC for the past two years mentioned that the reason for shifting the PHC was because people were

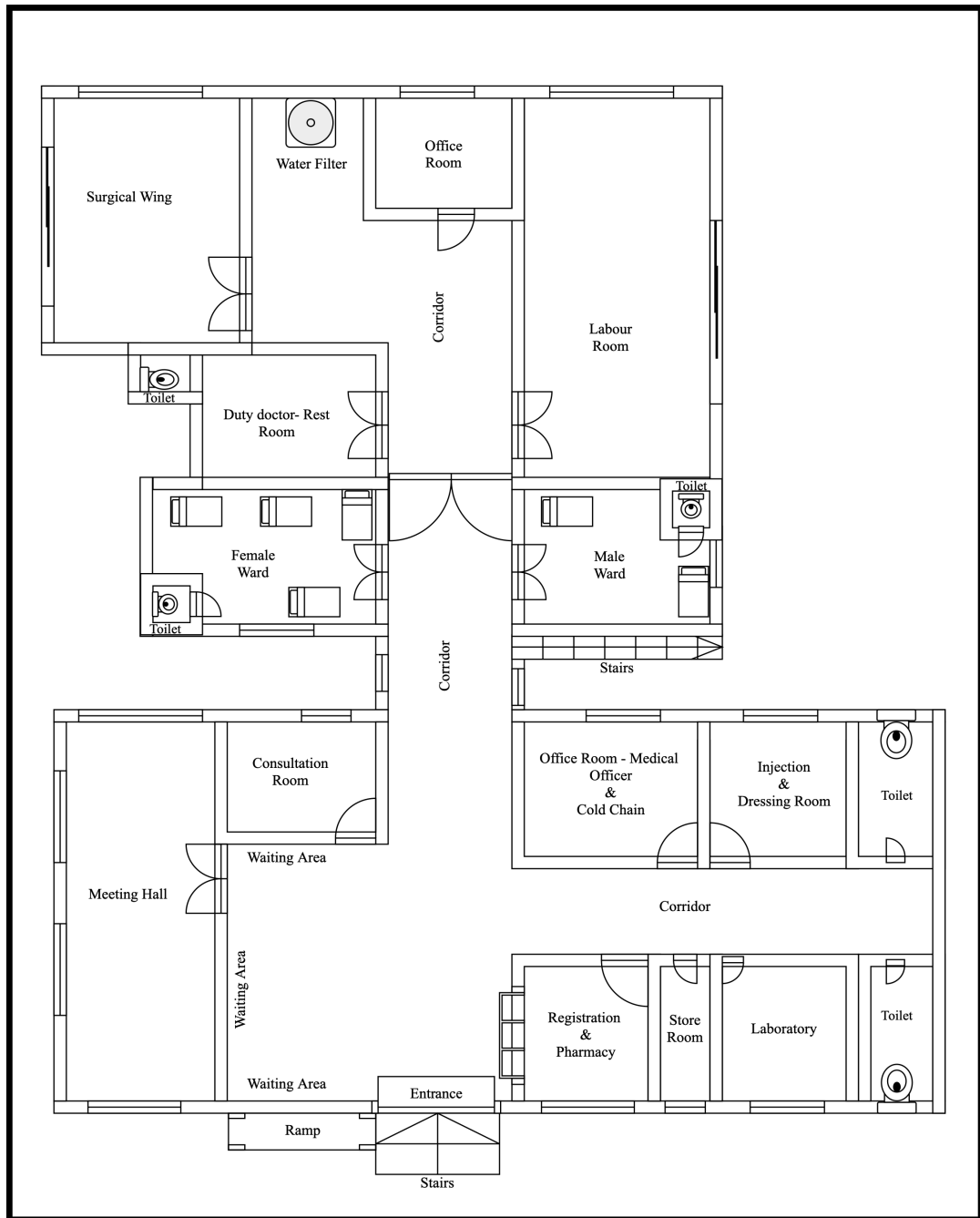


Figure 6.2: Floor map of Rampur PHC (not to scale), Gadag

not willing to donate land in the *tanda*. However, Raju, a resident of Rayan *tanda*, had a different take on it.

Interviewer: How do you travel to the PHC?

Raju: I come by bus or *tumtum*. Do you know that this PHC was supposed to be in our *tanda*?

Interviewer: Yes, I heard about it. I think, because of land disputed it was shifted to Rampur because a family from here came forward to donate the land

Raju: What dispute?..(using his hand he hits his forehead with an exasperated sigh).....That's what they tell. If it would have been located in our *tanda* it would have benefitted us so much. People played politics and prevented it from being built there and our elected members didn't push enough for it. There is so much land around our *tanda*. You have been there. . . have you? (I nodded). . . . and still they tell we didn't give land.

Transportation to Rampur PHC

Rampur PHC, being located on the outskirts of Rampur village, is accessible by bus and *tumtums* as the village is located on the highway. Only one bus stops in front of the PHC as it has to cross the PHC to go to Paraspur village. Otherwise, the nearest bus stop is about five minutes from the PHC and I observed many of them walking from the bus stop towards the PHC. The mode of transportation used by people is similar to Hallapur PHC. Unlike Vanapura, there are many buses from Chara *tanda* which pass through Chara village and stop at Rampur for people to travel to the PHC. Rayan *tanda* is located close to the PHC compared to Chara *tanda*, but the bus services are poor. Most of them rely on *tumtums* or lift on the bike to travel to PHC. It is common to find many two-wheelers and *tumtums* parked outside the PHC when compared to Hallapur and it indicated the increased reliance on private transport to access the PHC.

6.1.4 Human Resources in the PHC

Health care personnel formed the backbone for the effective functioning of the PHC. Medical Officer (MO) oversees the PHC and is responsible for its smooth functioning. Hallapur and Rampur PHC have similar human resources, but the difference is in the number of staff in different cadres (see Table 6.1). This is because Hallapur is a 24-hour PHC providing delivery and newborn care and Rampur PHC is not, even though it has the necessary infrastructure.

The MO in Hallapur is administrative in charge of three other PHCs in addition to Hal-

Table 6.1: Human resources in Hallapur and Rampur PHC, Gadag

Human Resource	Hallapur PHC	Rampur PHC
Medical Officer (MO)	1	1
Pharmacist	1	1
Staff Nurse	3	-
Health worker (F)/ANM	-	-
Health Assistant (M)	1	-
Health Assistant (F)/LHV	1	-
UDC	1	1
LDC	1	1
Laboratory Technician	1	1
Class IV	2	1

lapur, where he also takes care of the outpatient work. As a result of this, he is rarely seen in the OPD and the patients are seen by the staff nurse in his absence. The MO in Rampur works full time and has health problems³ that prevent him from administering injections or saline drips. Hallapur PHC has more staff nurses and additional class IV workers because of it being a 24/7 PHC. During my fieldwork, one of the staff nurse was on maternity leave and two nurses were sharing the workload and there was no replacement for the one on leave. One of them was due to go on maternity leave in a month's time and all three are contractual staff. The staff nurse in Rampur PHC took a transfer to the district hospital one year back and the post has been lying vacant. The MO requested the higher officials to fill up the vacant staff nurse post and received this response in return: "*illiidhave one odithavu, chelokelasamadisiri*" (translated: The existing staff here is chasing mosquitoes and don't have much work to do. Make sure you get them to work properly). Class IV workers in Hallapur take turns for day and night duty.

I met Beeresh, a young boy in his early 20s, cleaning the area around the PHC in Rampur as I started my fieldwork. Over the course of the observation, I saw him doing the job of cleaning the PHC, assisting in dressing the wound and bringing tea and snacks for the MO during break time. He was present in the PHC the whole day but was not wearing a white uniform like those in Hallapur PHC. Most of the time, he was being supervised

³The ailment has been masked to maintain confidentiality

by Maramma, instructing on things to do in the PHC. Maramma is an older woman, short and walks with her a slight limp. Every time she speaks, she winces, indirectly trying to communicate that she is in pain. I assumed they are the class IV workers in the PHC, but I got to know that Beeresh is Maramma's son and he is a stand-in for his mother. Maramma has been having knee joint pain and she requested the Taluka Health Officer (THO) to allow her son to work in place of her. She stays in the Sub-centre nearby and is hardly there in the PHC and comes in the morning to sign in the attendance register and when Beeresh takes a break. Initially, I was surprised at this kind of informal arrangement, but this seems to be happening regularly as Vasanna, the First Division Assistant (FDA), was a proxy for his father when he was working in another PHC and was hospitalised due to ill-health. There is another class IV staff who has been deputed to another PHC. Upper Division Clerk (UDC) is in charge for two PHCs and visits Rampur once or twice a month. I noticed two separate entries in the attendance register mentioning Junior Health Assistant – Female and with the attendance marked by a blank line. I asked Vasanna about this and he told me that two posts were sanctioned in 2017 for two new Sub-centres that were yet to be created. These posts were for one JHA in Chara village and one in Rayan *tanda*. He has been making entries regularly since the creation of the post and additional work in the form of getting approval from the District Health Office and treasury is still pending. He cited being busy and burdened with other work as the reason for not following it up with the higher authorities. I spoke to the MO about this and he didn't have much to say about this practice.

6.1.5 One designation, multiple hats

Shortage of personnel in both the PHCs cause the staff to take up multiple roles in the day-to-day functioning. This seems to be a common practice in both the PHCs and more so in Rampur.

Reached the PHC at 10.35 am and there were very few patients in the waiting area. Walked directly to the injection room inside the OPD of the medical officer. A nurse wearing a lab coat was sitting there and seeing patients. She asked details about the ailments and made a note of the diagnosis on the register on the table and prescribed medicines. For a few patients she asked them to proceed towards the plinth for injections..... The group D staff is present in the injection room and his job there is to clean the room and when patients are present, he loads the medicines into the syringe. He mainly loads cpm and diclofenac. He told me that he also knows how to

prick and connect 'botli'

– **Field notes-Hallapur PHC April 2018**

The nurse in Hallapur PHC has the additional task of making the diagnosis, entering it in the register, administering injections and saline drips to those who require it. In between, she has to attend to women delivering in the PHC and also check on those who have delivered and admitted in the in-patient ward. She has been working in the PHC since 2006 when it was functioning from the old building in the village and the responsibilities have remained the same. It is the job of the MO to make the diagnosis and prescribe medications or injections and with him being absent, the burden falls on the staff nurse on duty. Administering injections and saline drips is not restricted to those who have been trained to do it. Due to shortage of staff other personnel take up these roles. During the course of my observation in Hallapur, I didn't see the class IV staff administer injections or saline drips, but he was assisting in loading the injections and checking on the patients admitted. He claimed that he knew how to administer injections and saline bottle and I noticed him disconnecting the saline to a patient in the ward. Staff also made use of the Diploma in Health Inspection (DHI) students who were posted for observation. They were helping in entering patient details in the register and also administering injections. They are not authorised to administer injections which is never part of their curriculum but trained in the PHC to do the same. The situation is very different in Rampur PHC because of the staff nurse post being vacant. The pharmacist is in charge of managing the pharmacy, maintaining documentation related to drugs and administering injections and saline drips. He even told me that he does additional documentation work related to the treasury that is the job of Vasanna, the FDA, as he is not skilled at doing many things. This is also because when the FDA post was vacant and prior to Vasanna's joining, the pharmacist was doing the role of the FDA. If the pharmacist is on leave, the JHA is called from his fieldwork and asked to administer injections and saline bottle. This additional work compromises on the work in the villages and *tandas*. He informed me that he did not visit Chara *tanda* the previous month because of the increased workload and shortage of staff. Dispensing of drugs is done by the FDA in the absence of the pharmacist. The MO in Rampur is not able to administer injections and saline because of the tremors from his health condition. The

MO did not check on the in-patients in the ward even when the saline was going on and everything was handled by the pharmacist and JHA. I noticed that a few patients who came to the PHC directly walk up to the pharmacy and ask for medication or injection or saline bottle and the pharmacist obliges. At times he administers treatment directly without consulting the MO. The reason for this is that the pharmacist has been working in the PHC for long and does most of the work. The Medical officer in Rampur is not engaged in multitasking work like the other staff, but it is different in the case of the MO in Hallapur. The MO there had additional administrative responsibilities of three other PHCs, which takes away the time available in Hallapur.

6.1.6 Daily activities in the PHC

Broadly the functioning of the PHC can be divided into the pre-lunch and post-lunch sessions. There is no shift system in Rampur PHC as the staff here come in the morning by 10.00 am and leave by 4.00 pm. Shift system exists for the staff nurse in Hallapur who work in three shifts of eight hours each and the class IV staff in two shifts of 12 hours. Without the staff nurse who has gone on maternity leave, the other two divide the work time between them. Day to day activities in both the PHCs are almost similar, but there are differences in the way it is being carried out.

Pre-lunch session

Both the PHCs start around 9.30 in the morning, although Rampur PHC starts a little late because the MO arrives by only 10.30 so the rest of the staff come around the same time. Sweeping and mopping of the entire PHC take place 15-20 minutes before the opening time and there are a few patients already waiting. Those who come early want to finish the consultation and go for work in the agricultural fields and some to avoid crowding in the forenoon. Crowding of patients takes place when there is MO in the PHC. I have always found Rampur PHC to be crowded because the MO is present in the PHC on all the days and sees patients. He once described the crowd outside as '*jathre*' indicating the crowd outside similar to crowding in village fairs or temple festivals. Hallapur is only crowded when the MO is present and sees cases in the OPD otherwise and it is rarely crowded. This is not to say that patients don't visit the PHC but the flow of

cases is smooth and there is no crowding and there is no visible crowding on other days. Patients who visit Hallapur first walk up to the registration counter where their name is entered and a small slip is given to them. The slip has the name and the village to which they belong and then wait for their turn outside the MO's room. There is nobody outside to man the crowd or send the patients inside, but they wait near the door. The door to the consultation room is always open and not closed. If the MO is not likely to come, then the staff nurse on duty starts seeing the patients in the injection room, adjoining the consultation room. During the course of the observation, the MO was present only on two days. If the patients are prescribed injections, they move to the adjoining room where the nurse administers them. Those prescribed medications go back to the pharmacy and collect the medicine and are on their way. The MO spends more time with each patient and hence there is crowd outside the door and this is not the case with the staff nurse. In his absence, the patients go directly to the injection room and describe their problems to the staff nurse who administers injections or prescribes medications. In between, she goes to the in-patient ward or the delivery room to check on the women admitted there. She is assisted in injections by the class IV worker who prepares the injection for her to administer. During the course of the fieldwork, I noticed a few Diploma in Health Inspection course (DHI) students who were posted there for observation. They had been taught how to administer injections and were helping the nurse in administering them. Patients who need the connection of saline drips are directed to the in-patient ward and the nurse goes in between to connect it. Monitoring and disconnection, once it's over, are done by the class IV worker. Things are done differently in Rampur as the patients who visit the PHC directly stand outside the MO's room or sit in the chairs that are outside. When the PHC is crowded, Beeresh stands inside the consultation room and mans the door and allows the patients one by one along with the person accompanying them. The door is closed, ensuring privacy for the patients. The MO writes the prescription on a small chit of paper which is the large prescription slips torn into small bits. I asked the MO about this and he replied that due to lack of funds and supplies, they employ this method. Patients take this slip and go to the pharmacy and registration counter, where the pharmacist enters their name and village where they are from. He also makes a note if they are first-time patients or repeat visit, which he determines by himself and

does not cross verify. Post data entry, the medicines are dispersed and directed towards injection or in-patient ward if they need saline drips. In the absence of the pharmacist, Vasanna does the data entry and disbursing medicines. The pharmacist and the Junior Health worker are the people administering injections and connecting saline drips in the PHC. Laboratory in both places is less crowded and the activity there is related to the monitoring of blood glucose, collection of blood slides and tests related to antenatal care. The crowd reduces around 12.30 pm and the staff break for lunch.

Lunch and post-lunch session

There is no fixed time for lunch and it varies between 1 pm to 2 pm in both the PHCs. This goes on for about half an hour to 45 minutes. The MOs have their lunch separately and the rest of the staff together where they share each other's meals. I had lunch with the other staff, and it was an opportunity for me as a researcher to understand the internal politics and issues related to the functioning of the PHC. The conversations were free-flowing and natural. The pharmacist in Rampur had lunch in his room and did not join the rest because he carried non-vegetarian food for lunch. There are hardly any patients in both the PHCs post-lunch and usually, this is around 5-10 patients. Staff in Rampur PHC start leaving by around 3-3.30 pm, starting with the MO leaving Beeresh behind to close the PHC at the designated closing time. A similar pattern is seen in Hallapur, the difference being the shift duty for nurses. Around five o'clock, the PHC is shut and is open only when there is emergency delivery. The MO in Rampur visits the villages and *tandas* on Saturdays as there are a few cases and I accompanied them on one such visit. We started from the PHC around 12 pm in the vehicle of the MO driven by his driver. The Junior Health Assistant (JHA) also accompanied us, and the entire focus was on the Revised National Tuberculosis Control Program (RNTCP) program. On the way, the JHA called up the ASHA workers to enquire about the patients who are currently on DOTS and asked them to be present. The first stop was in Chara village, where we visited an old man who was currently on DOTS. He was given a small plastic tube called falcons tube for sputum collection and the relatives were instructed to give it for testing in the District hospital. As we got ready to leave, the JHA gave his mobile to the doctor's driver and asked him to click a picture of the PHC staff and the family. He later

told me that he has to upload this to the WhatsApp group to inform about the activities carried out. Before leaving Chara village, the MO instructed the ASHA to be vigilant about larvae survey as there was an outbreak in a village that was 10 kilometres away. This instruction was repeated to all the ASHAs that we met on the way. En route to Chara *tanda*, the MO was told that there was only one case of active Tuberculosis in the *tanda*, so he instructed to skip the *tanda*. We next went to Lingpur village and *tanda* located near to the border of Gadag taluka. Here the village and *tanda* were located together but separated by a road, the residential segregation being visible. Since the ASHA who stays in the village was not available, the MO instructed the driver to turn around to show me the place and then we left. Next, we went to Sevalalnagar, a *tanda* located on the hills and since it was not covered by the JHA who was with us, the MO decided to skip the area and proceeded towards Rayan *tanda*. Here also, he met the ASHA and repeated the same instructions on the larva survey. Before returning to the PHC, we stopped at Rayan village and the MO instructed ASHA to do a larvae survey and take the help of the anganwadi teacher. She complained that the teacher would not come but instead has asked her to assist her in election-related work. The MO listened to her and asked her to do the larvae survey while assisting her with election-related work. We came back to the PHC around 1.45 pm and only Beeresh was present there; the rest had left. We had our lunch and left the PHC by 2.30 pm with clear instructions given to Beeresh to shut the door at 4 pm. In this entire field visit, the village where the PHC is located and the neighbouring village was not visited. This entire trip to me appeared as wanting to show that the MO was visiting the *tandas* and villages that fall under the PHC but not accomplishing much in the process.

6.1.7 Outpatients in the PHC

Rampur PHC on average has about 60-80 patients per day and Hallapur PHC around 70-90. Both these PHCs have increased workload on Mondays, with the count often touching 100. Visitors to the PHC are very familiar with the functioning and navigation within the PHC. Rarely did I encounter any person who enquired about how to seek consultation with the doctor or where to go for other services. Those that did enquire were those visiting their relatives in the villages or *tandas* covered by PHC or labourers

who have come to work in the fields or other infrastructural work nearby. Other common enquiries in both the PHCs were related to the documentation for different government programs related to maternity and Tuberculosis. On any given day, the number of women visiting the PHCs outnumber the men even after discounting for those visiting for antenatal care. Patients start waiting outside the Consultation room, waiting for the Medical Officer or the nurse in the case of Hallapur. There is no token system but an understanding among themselves on the order in which they should enter. The door of the consultation room is shut for every patient in Rampur, ensuring privacy, whereas that is not the case in Hallapur, where people wait at the door. I observed that both men and women had no issues with the lack of privacy which was a common practice.

Patients visiting the PHC can be broadly categorised into those requiring care for minor ailments, follow up care for ailments, wound dressing, immunisation, antenatal care and delivery in the case of Hallapur PHC. Common minor ailments were fever, headache, cold, cough, diarrhoea, body pain, joint and back pain, fatigue, skin diseases and bruises from agricultural work. Most of these ailments are related to drinking water, sanitation and occupation. People in the village and *tanda* are majorly involved in agriculture and experience knee, back and other joint pain due to the heavy-duty nature of the work. Follow up care for ailments include medications for chronic illness like diabetes, hypertension and Tuberculosis, wound dressing and rabies injections. Shantaiah, an elderly person in his late 60s, walked into the injection room where the nurse was seeing patients and asked her to give him two injections on either side of the buttocks for knee pain. He informed her that he has already collected the medicines from the pharmacy for diabetes and BP. This is a common practice observed among those visiting PHC for getting medication for chronic ailments. They get injections for musculoskeletal pain or pain medication to aid in pain management. Prescriptions or books for managing non-communicable diseases given in the district hospital are often showed at Hallapur PHC to get the medicines. This is done to avoid the crowd and long waiting time in the district hospital. For patients on regular follow up, the nurse here insist on past prescriptions for monitoring, but that is not the case in Rampur PHC. As I mentioned earlier, due to a shortage of OPD slips, the prescription is written on small chits of paper

and patients are not required to bring it at every follow-up. They bring the empty tablet strips and show it to the MO for prescription. There is no active monitoring for non-communicable diseases. Wound dressing is done by the class IV staff in both the PHCs and those who require it at regular intervals directly approach them and get it done. Fixed days are designated for regular antenatal care check-up and high-risk category and on those days the PHC is crowded with pregnant women along with the ASHAs of the village and *tandas*. ASHAs have an internal arrangement with the laboratory technician for bringing pregnant women on non-designated days if they are unable to make it as the main monitoring involves blood and urine investigations.

6.1.8 “Doctor please examine this also”- Care seeking as a family

When I started observations in Rampur PHC, I noticed that rarely did anyone come alone to the PHC for consultation except few men. The women were often accompanied by other women who are either their daughter or mother-in-law. If they are accompanied by a male, then it is their husband or children. Initially, I assumed they accompanied them for purposes of transportation or negotiating services in the PHC, but it was also to seek treatment for themselves.

1.13 am- Young man from Rayan *tanda* enters the opd with his child who is 7 years old and stands near the table. The doc instructs the child to sit on the stool. Few seconds later a woman enters the OPD and happens to be the mother of the child. The child complained of throat pain, doc tells it is viral infection and ask the father to give him lots of water to drink. The father is also coughing. The father asks the doctor “injection barithiri sire?” (can you prescribe injections sir). The doctor asks if there is pain and cough to which he replied yes and then prescribed medicines and one injection.

11.15am- The man calls his wife and makes her sit on the stool next to the doctor. She is suffering from fever for the past 5-6 days and also having vomiting sensation. Doctor prescribes one injection and one tablet. Husband asks him for “*botli*” (saline bottle), to which the doctor replied that if it doesn’t reduce with the injection and tablets, then he would write a prescription for IV fluid.

11.16 am- The young man now sits on the stool and complains of cough and Cold. The doctor examines him with a stethoscope in the front and back. He is 30 years old and the doctor advises him to get an x-ray done. He asks him if anybody in the neighbourhood is suffering from TB. The patient informed the doctor that he was in Goa for two months. Just then the lab technician entered the room to sign in the register. The doctor instructed the lab technician to perform a blood smear slide for this man and then prescribed one injection and one tablet

– **Field notes, Rampur PHC, April 2018**

In this case, the young person sought care because the child was sick and since he was taking the child to the PHC, decided to bring the wife and get treatment for all their ailments. He brought his wife along in the hope of getting a prescription for saline drips and requests the doctor for the same. I will discuss this practice in detail in the next section. This was a common practice in both the PHCs of seeking care as a family. Having a bystander helps in negotiating or influencing the prescription practices of the provider. Saline is not administered if there is no bystander and the need for one is always insisted on by the nurse or the MO. The purpose is to monitor them as the saline drip is going on and also in case if something goes wrong. Those who anticipate that the provider will prescribe saline bottle or come with the intention of getting one always bring an accompanying person. There are instances where the condition of an individual does not warrant any medical treatment or intervention but there is a request for medicine because they accompany the patient to the OPD.

112.10 pm- Middle-aged woman accompanied by her husband enters the room. The nurse probably knew them because she smiled at them and enquired about their wellbeing. Woman complained of back pain for one week and also has been suffering from stomach pain. Nurse instructs her to drink lots of water, lemon juice and she would administer injection and asked her to lie on the plinth. As she was about to get up the husband tells her that he feels too much of heat inside the body and asks her if she can give him injection. Nurse questions him if he needs medicines and he nods his head, and she wrote the prescription. She proceeded to the plinth to administer injection to the wife followed by the husband

– Field notes, Hallapur PHC, April 2018

This appeared to me as the husband wanting to get an injection on some pretext because he accompanied his wife to the PHC and even the condition of “body heat” didn’t warrant one.

The practice of seeking care as a family can be viewed in different ways. Like the husband above, there are people trying to get treatment on the pretext of a condition that does not require one. For some, it is a way of getting something out of accompanying their family members. Many older people suffer from chronic pain related to back and knees and accompanying their children and grandchildren helps them to get pain medication or injections that will help them temporary. In the absence of this, they have to rely on unqualified providers called as Rural Medical Practitioners (RMP) or BAMS

doctors in the villages or those visiting in the village or *tandas*. The Medical Officer in Rampur had a different take on this. When I asked him, he replied “*see sir, three people from the same family showed together just because we don’t take fees*”.

6.1.9 Injections and Saline bottle- The magic bullets of treatment

“*Injection barithiri sir-re?*” translated ‘sir, can you prescribe injections?’ This is a common phrase that could be heard in the consultation room with the MO or the nurse. The need for injections or saline bottle is demanded or influenced through different means. Most of them directly ask for ‘*botli*’, which is the local word for saline bottle or ‘*maili*’ commonly used term by Banjaras for injections.

10.57 am - Mother with a 2-3 old child walks into the consultation room. The child has fever, and the doctor examined the child with a stethoscope. The mother is from Chara village. He wrote the prescription on a small chit and told the mother that he has written one tonic and one tablet which has to be taken in four parts. The mother asks the doctor to write “*botli*” for fever, asks whether injection would be done to which the doctor asks about the childing having a cold. He instructs her on how to take the syrup and tablet and also prescribes Injection

– **Field notes, Rampur PHC, April 2018**

Here the mother directly asks for injections and saline and the MO only prescribes injection and in most of the cases he prescribes injections before the patients could make a request. The doctor informs the patient about the treatment after enquiring about their health problems and if there is no mention of injection or saline, it is immediately requested. At times these requests are inserted in the flow of the conversation while listing the symptoms to MO. A middle-aged person from the village accompanied his adolescent son to the PHC as he was suffering from fever. The MO asked him about his symptoms and about his food intake, to which he replied that he has been suffering from fever, body pain, cold and chills. He goes on to add that he hasn’t eaten anything since morning since he thought he would visit the PHC first and get an injection for the fever to subside. He was influencing the prescription practice of the doctor by mentioning injections in the conversation and not demanding it explicitly. The demand for injections and saline is not restricted to adults but for children also by their parents. Requests are often made in a sympathetic tone so that the doctor prescribes them. I noticed a middle-aged lady from Chara *tanda* pleading with the doctor for saline drips. She

visited the PHC to seek care for her child, who had throat pain and for herself, with complaints of body pain and burning sensation in the hand and legs. She asks for saline for her child, which the doctor refused and she requests in a low sympathetic tone asking again, “*Ondhu botli hachidare cheloagthade (it would be really nice if you could connect one saline drip)*”. The doctor refused to prescribe as it was a young child and didn’t need saline drips. For self, she was pleading for saline drips and appealed towards the doctor’s good karma. “*Punya barthade, bhaalathraasagidhe (Good karma would be added to you; I’m having too much discomfort)*. Doctor (RMP) in my *tanda* diagnosed my problem as body heat and told me to go to the PHC and get ‘botli’. My condition will take lot of time to get cured but if you give saline ‘botli’, it will cure faster”. She even tried to influence the doctor by mentioning the diagnosis of RMP in the village. This appeared as a way of trying to use the RMPs name to get Injection because RMPs themselves connect saline in the village or *tanda* and don’t refer to PHC. Sweet talking is another way of getting the prescriptions. An elderly woman who was suffering from headache and knee pain wanted a saline drip which she was unlikely to get because of the nature of her ailment. She tells the doctors that “*Namage parichaya iddhavaru helidharuilli doctor cheloiddhare, saline hatchuthare (People have told us that the doctor here is very good and if we go there, they will connect saline ‘botli’)*”. In another instance a young male praised the Public health system by mentioning that “*Helidharu, sarkariaaspathrialli saline hatchidharekadimeaagthade (I have been told that if they connect saline bottle in the government hospital, I will get alright)*” to get saline drips. The statement made by this young person is something that I constantly heard in Chara *tanda*, where people preferred RMP for minor ailments and government hospital for conditions that require saline drip. Some patients request for injections or saline drip by overemphasising a particular symptom or adding more symptoms to the list.

10.51 am- Young mother from the *tanda* with two boys enter the room. The younger one has fever for the past three days. Doctor places his hand on the forehead and examines the temperature. Mother informed the doctor that he is studying in the 4th standard and has not been eating well. Doc asks if there I anything else apart from fever to which she replies that he also has pain in the throat. He examines the throat and prescribes medicines. The mother asks for ‘botli’, the doc says no ‘botli’ for the kid. She insists to write two ‘botli’ saying the fever hasn’t reduced and he is not eating well.

The doctor didn't say a word further, rolled his eyebrows and prescribes one 'botli' and medicines

– **Field notes, Rampur PHC, April 2018**

The mother in this case emphasises on the fact that the fever hadn't reduced, and the child was not eating adequately. To her, only the saline drip will cure the child of the ailment.

The doctor gives in to the demand of the patients most of the time, but he also turns down requests if it is likely to cause danger or harm. The nurse in Hallapur PHC always gave into the demands and rarely turned them down. The reason for this as discussed earlier is because of the conflicts that arise out of turning down the request of people from the community. The doctor in Rampur also faced trouble because of saline drips. There was a patient who needed saline and it was not available. Agitated, about fifteen of the patient's relatives gathered and broke the gate of the PHC. Ever since this incident, he has started giving into the demands of the patients unless it is likely to cause harm medically.

There was an elderly person in Rampur PHC who had difficulty in walking and complained of chills and fever. Sensing that he would ask for saline, the doctor told him that he would not be able to prescribe it as he has chills, and it would worsen it. He prescribed him medicines and injection for the same. Similarly, a lot of requests for saline drips was turned down because the patients had symptoms like body pain or had high BP. This was not the case with injections as he obliged when patients requested and only turned it down for infants and children.

If the doctor turned down the request for injections or saline, the patients go to the pharmacist and request him to administer the same. I observed many of them without a prescription for injection but request the pharmacist to administer one and he obliges. Previously, the elderly person whose request for saline drip was turned down was lying in the in-patient ward and received two bottles of saline drips. He approached the pharmacist and got it administered. This is not a one-off case and there were many like the old man who went to the pharmacist to get extra saline drips. The Pharmacist wielded clout and power in Rampur PHC to overrule the medical officer. This didn't happen in

Hallapur PHC because the nurse was the one who was diagnosing and administering injections.

6.2 Private providers catering to the *tandas*

In this section, I will describe the private providers who cater to the medical requirements of people in the two *tandas*. The providers were mainly Rural Medical Practitioners (RMP), Ayurvedic Bishaks and those with Bachelor of Ayurveda, Medicine and Surgery (BAMS). It was difficult to observe the private providers because of the difficulty in gaining access to them. As I mentioned earlier in Chapter 5, there are two RMPs and two BAMS providers in Guddadpur village close to Vanapura and three RMPs and one ayurvedic Bishak in Chara village. I was able to interview one BAMS provider and both the RMPs in Guddadpur village. One of the RMPs was very helpful in answering my questions as he understood the purpose of the research. The other RMP and BAMS doctors were not truthful in their responses as their answers were very different from what I observed in their clinics. Both informed me that they only prescribe ayurvedic medicines, but I found vials of antibiotic injections and pharmacy with modern medicine attached to BAMS providers' clinics. I won't blame them for this as their work is under constant scrutiny by the government establishment who calls them quacks or unqualified providers. The situation was better in Chara village because, as luck would have it, the pharmacist who runs the medical store was an old patient of mine for physiotherapy. He recognised me and helped me in setting up an appointment with RMPs to interview them. Even though they were forthcoming for the interview, they were not comfortable with my presence in the clinic for observations on a daily basis. They were afraid of being penalised, considering the nature of their work. I took their consent to write about what I observed in the limited time that I spent there. The amount of time spent in observation may have been less, but the patterns were more or less similar to what people reported in the *tandas*. It was difficult to even get people from the community to speak about care-seeking from RMPs or BAMS providers. Many hesitated to reveal anything out of fear that I might harm them by stopping their practice. Some even questioned me directly if I would complain about them. They relented after I assured them about my identity and purpose of research. This showed the importance and support from the

community for these providers who cater to the *tandas* in spite of knowing that they are not legally qualified to practice.

6.2.1 “Local Docktor”- Private providers and RMPs

Private providers and informal providers or RMPs form the main source of health care in a system where the public sector is largely absent. Although private providers in different capacity are considered a part of the health system, the RMPs are often seen as practising quackery. Revanna Sr, a frail and thin looking old man around 87 years of age is the first RMP in Chara village. He started treating ailments in the villages and surrounding *tandas* using herbs that he procured from hills in Gadag, known for their medicinal value. Over time he started conducting deliveries, administering injections and was practising pluralistic practice, which also included driving away demons and evil spirits. As a proof of his qualification, he showed me two certificates that were hung around his wall. They were old and soiled and the only words that I could read were “Homeopathic college, Sonapat” on one and “Council of Indian Medicine, Hyderabad”. In addition to this, he also holds a document from the government certifying him as RMP. He did not show it to me but informed me that it was given to those who have been involved in the practice of treating patients for more than ten years. Revanna Sr underwent a major surgery ten years ago and he stopped practising and his son has taken over his role. In recent times graduates of Ayurveda and Homeopathy have set up clinics in villages and their practice is similar to that of the RMPs. Private providers with degrees in modern medicine are non-existent in villages and *tandas*. There are many providers like Revanna Sr and his son who practice in rural villages of Gadag and is the first point of curative care for people in the village and *tandas*.

6.2.2 ‘Never in the *tanda*’- Location and organisation of clinics

Clinics of BAMS and RMP providers are located in the villages. None of them are located in the *tandas*, but few RMPs visit there to provide services. BAMS clinic in Guddadpur village is located next to the Sub-centre on the main road, which is the outer border of the village. A board with the print “Dr Rudralli, BAMS” is placed outside the main door. The door opens into a narrow passage with benches for patients to wait and

there are two other rooms in a straight line. One of the rooms is a consultation room and the other is a treatment room with two beds and a stand for saline drips. Attached to the main entrance is the pharmacy, which appears as a separate building, but there is a door behind which opens into the clinic. The pharmacy is also run by Rudralli, who is from Hallapur village. In the same lane, after six houses, is the residence cum clinic of Maheshi, who is a RMP. His is a small house with a table at the entrance and a single bed with a saline stand next to it. There is a small wooden partition separating the clinic space from his house. The table had antibiotic injection vials, few syringes and a torch. Maheshi primarily visits the *tandas* nearby and sees few patients in his residence. Opposite Maheshi's house, there is a narrow lane with houses on either side closely packed and a house located in the middle of the lane is the residence of Narsappa. It is a small house with the entrance leading to a small passage; on the left is a room with two beds with stand for saline. This is used to treat patients for saline or administering injections. On the right is the toilet and bathroom used by the household members and the passage leads to a room as the same size as the initial room with a kitchen attached to it. Narsappa, his parents, brother, sister-in-law and nephew stay in this house. When I first visited him, I noticed a Banjara woman in pain, struggling to walk, accompanied by her son leave the saline room. Before leaving, Narsappa gave them some medicines and instructed her to take them for three days. Without asking the cost, the son placed some money in Narsappa's hands and left. Narsappa is also an agriculturalist and his brother sees patients in his absence. Apart from these clinics, there is a small shop which has been converted into a clinic and is located in the middle of the village. The doctor here visits in the evening and sees patients between 7-9 pm and during the daytime works as a lecturer in an ayurvedic medical college. I couldn't meet him despite multiple attempts, and I was told that he is a BAMS doctor. Both Maheshi and Narsappa doubled up their residences as a clinic for administering medical services and there was no board to indicate the same and they couldn't have one due to regulatory requirements. They didn't need one because their clientele knew where they were located and the nature of services provided by them.

There are three clinics located on the main road in Chara village and one attached to

the house of the provider. The pharmacy is located in the central square of the village where banks and post office are located and run by a person belonging to the village. Basappa, in his early 50s, runs his clinic from an old structure on the main road a few blocks from the pharmacy. The building is very old with the plaster and paint peeling and has not been maintained. Old, dilapidated wooden doors guard the entrance of the clinic. The structure inside the clinic is similar to the house with space for cattle where a single bench was placed and an elevated platform. The elevated platform has a bench for waiting, a table with lots of vials and ampules which are used and unused and syringes with a wastebasket below the table. At the end of the room is a platform made of marble for patients to lie down for saline bottle. A rope was suspended from the roof to attach a saline bottle. A green curtain attached to wires fixed to the walls near the platform acts as a partition. On the wall is a framed certificate from Karnataka Jaanapada Vishwasvidyalaya (Karnataka Folklore University). Basappa administers injections and saline drips and writes a prescription for medication in slips which had the name of a pharmacy in Haveri district. Two hundred meters from Basappa's clinic on the main road is the clinic of Naresh. This clinic is very small, and I found the structure similar to a petty shop. Similar sized shops were there on either side of the clinic; one was a saloon and the other a petty shop. The clinic was small and had just enough space to accommodate two plastic chairs, one table and one examination table. I noticed three certificates framed and nailed to the wall, one next to each other. One was from the Karnataka Ayurvedic and Unani Practitioners Board (KAUP) which is the certificate of Naresh's father; certificate from Karnataka Jaanapada Vishwasvidyalaya which belongs to Naresh and third is the clinic registration certificate from Karnataka Private Medical Establishment Act (KPMEA). Perpendicular to the main road and just opposite to Naresh's clinic is a road which leads to clinic of *Battur Daktar* as he is called locally. The building which houses the clinic is very old with tiled roof and door which was made of wooden planks. All the planks were of similar size and had to be slotted in wooden frames and slided so that they are next to each other. A latch with a chain was attached to the last frame and the threshold for locking the door. The clinic was previously used as a local *kirana* shop. Only two frames were open and as I entered the clinic, an elderly person in his mid-seventies wearing a safari suit was sitting on a table

facing the road and welcomed me with a smile. He introduced himself as Gurulingayya and told me that the reason people call him Battur Doktor is because of the place where he is from.

My in-laws from Battur village, which is 15 kilometres from here. I got married and stayed in that village for some time. From there, we came and settled here. Because we are from Battur, people here call me Battur Doktor.

– **Gurulingayya, Ayurvedic Bishak, Chara village**

At the entrance of the clinic to the left and right is a plastic chair for patients to sit and wait for their turn. On the right side behind the chair is a wooden cupboard with two-door and the doors are made of transparent glass with wooden frames. The lower half of the table is filled with medical waste, i.e. all the needles and syringes which have been wrapped in plastic covers and kept there. And on the top of table, injections and other medication are kept. Behind the table is another cupboard which was filled with stacked up old newspapers and certificates stuck on the door. The Certificates stuck on the door related to his ayurvedic training, KPMEA and biomedical waste. To the left of the entrance, there is a makeshift table floor carpet spread on it and is the place where patients are examined. Next to the cupboard behind, there is a small area where there is a kerosene stove and there is a vessel on top of it used for boiling water for purposes of injection. The area behind the examination table was unused and used as storage space for old furniture, metals, and a cupboard. Previously beds were there in this space and used to connect saline drips. Because of age and inability to sit in the clinic for long, Gurulingayya has restricted himself to seeing few patients. Curtain rods separate the examination area and the table. Close to Gurulingayya's clinic, in the lane behind, is the clinic of Revanna Jr, son of Revanna Sr. I couldn't meet him in person as he was avoiding me, but I did visit his clinic, which is attached to his residence. The cattle area in front of the house was partitioned and used as a space for the clinic. I waited for him in the clinic for some time, but he never showed up. The clinic structure and size is similar to Naresh's and he like the others, had a certificate of Karnataka Jaanapada Vishwasvidyalaya hung on the wall in his clinic. These clinic and providers are the main sources of primary care in the villages and the *tandas* nearby. Clinics function at a designated time during the day, but these providers are a phone call away and attend to any emergencies even in night.

6.2.3 Trained to be a provider

In 2015 I visited Muran *tanda* for data collection as part of my Master's thesis. I entered a small hut asking for eligible children in the house to be interviewed. I stood outside for some time and saw a young adult dressed in formal clothes with a huge black bag by his side, sitting on the floor and conversing with the family. Looking at his attire, I assumed he must be an official from the government. Members of the household invited me inside and introduced the young man as "*Nammdaktaru* (our doctor)". He was very uncomfortable, as it was evident from his body language. As I started to speak to him, he pulled out a bunch of papers and introduced himself as an NGO worker, working among the people in rural areas. Once he became aware that I'm a student and collecting data as part of the research, he sounded relieved and spoke to me about the work he does. He finally told me that he is a RMP who provides basic medical services in the villages and *tandas* that he visits. He even took me around with him in the *tanda* as he visited households and gave them medicines and injections and collecting previous dues along the way. People were very familiar and welcomed him inside their homes and served snacks and tea. Even though I went with him and observed the way he spoke, administering medicines, injections and negotiating payments, my thinking was more of a biomedical view in terms of the appropriateness of care provided. Even though this was not part of the objective of research, it gave me a first-hand experience of seeing RMP at work and the way they operate. The term RMP has its roots in British India as early as 1933 and continued until the late 60s where practitioners of indigenous medicine were registered upon producing a certificate from revenue officers indicating that they were practising for more than ten years. They were also called as Registered Medical Practitioners; however, this term is used presently for only those registered to practice with an MBBS degree (Rohde & Viswanathan, 1995). There is no uniform definition for the term RMP but is referred as: "*This term covers a wide range of practitioners officially registered within the state government on the basis of either formal or informal academic qualifications. Formal qualifications include a degree or licentiate diploma from a course in pure Ayurveda or integrated Allopathy/Ayurveda, while informal education refers to an apprenticeship and sponsorship by a hereditary or a trained*

practitioner. Several different kinds of registration exist in each state, which have little bearing on medical practice.” (Definition by Nichter quoted in Rohde & Viswanathan 1995). RMP also stands for Rural Medical Practitioner, but it is not clear on how this terminology came about. Put simply they are defined as providers of allopathic medicines without any degree recognised by the Government of India (George & Iyer, 2013). For the purpose of the study, I would be referring to the RMPs as Rural Medical Practitioner to distinguish from the Registered Medical practitioner, which from a legal standpoint refers to doctors with MBBS degree. I started the ethnographic field in the two *tandas* and then in health systems catering to them. I always carried a *jhola* bag in the community and many times I have been called by the elderly who ask me ‘*Daktar yen re?*’ meaning am I a doctor, to ask if I have any medicines or injections for pain relief. They mistook me for as a RMP carrying medicines in the bag.

Qualification and training of the provider did not matter to the users of care as it was more to do with familiarity and *kai guna*⁴, but it determines the cost of services availed. Private providers possessing degrees are usually those holding degree or diploma in Ayurveda or Homeopathy. Qualification among RMPs varies with providers having a degree not qualified to practice medicine, no degree or diploma but have the experience of assisting registered practitioners of modern medicine in the city or carrying on the practice of their relatives.

Rudralli has a bachelor’s degree in Ayurveda and practices the allopathic system of medicine. Even though he told me that he practices only Ayurveda, the presence of the pharmacy next to his clinic and the drugs shown by people in the *tanda* who consulted him indicated that he practiced allopathy. Hailing from Hallapur village and since there are many RMPs, BAMS doctors and a PHC there, he set up his practice in Guddadpur village and has been working there for the past fifteen years. Narsappa and Maheshi have a Diploma in Health Inspector course (DHI) and have applied for government jobs and are waiting for the appointment order. Both resent the fact that the government is filling backlog vacancies and not calling for any fresh recruitment and as a reason for

⁴Referring to the skills of the person or the quality of treatment, with those going to the person being cured of the disease

them to practice. Maheshi finished his course in 2005 and worked with a surgeon in Gadag, assisting him in surgeries for ten years. With the experience gained there, he simultaneously started practising in the village and *tandas* nearby and is doing it full time for the past five years. Narsappa expresses reluctance to practice as he understands that he is not supposed to practice with the degree he possesses.

Interviewer: Can you tell me about your work, like when did you start?

Narsappa: I didn't have the intention to work here. I had finished my health inspection course in 2012. My uncle was doing this, he was Medical Social Worker (MSW). . . . It has been around four years now.

Interviewer: for how long did your uncle provide service here?

Narsappa: He was practicing since many years. . . around 20 - 25 years
Narsappa also has done a similar course but he carries on the practice of his uncle. He has worked as a data collector for national surveys in between and assisted his uncle in carrying out the work of treating patients and continues to do so post the death of his uncle.

In Chara village, other than Gurulingayya, the rest of them are RMPs with no degrees or diplomas. Gurulingayya did a course for three years in Ayurveda when BAMS degree did not exist and he has a certificate for the same. The government of Karnataka has registered him as a Ayurvedic Bishak under the KPMEA Act. He and Naresh's father possess the same training and certification, but the latter is bedridden with old age and has stopped practising. Basappa, Naresh and Revanna Jr are RMPs and have certification from Karnataka Folklore University, which is displayed in the clinic. All have done a certificate course in Folk medicine and cite that for legitimising their practice in the village. Naresh repeatedly insisted that he practices only ayurvedic medicine out of fear that I'm from the government to scrutinise their work. I observed doses of 'Xone-500mg' (Ceftriaxone Injection IP) antibiotic injection stacked up in the cupboard. Having the certificate also given them some kind of protection from authorities as they keep mentioning that they practice ayurvedic system. Revanna Jr, as reported by his father, worked under a paediatrician in Gadag for four years and post that started practising in the village. He treats both children and adults in village and *tandas*. Naresh and Revanna Jr carry on the work done by their fathers while Basappa was not forthcoming about his training.

Even though most of them reported practising ayurvedic system of medicine, only Gurulingayyas practice was pluralistic in nature. He contrasted the importance of Ayurveda

in the past and the present:

Interviewer: From where do you buy the medicines that you give to patients?

Gurulingayya: I buy it everywhere. There is nothing like I buy from one place. Because I use ayurvedic, then these (allopathic) and then we have Doddabetta (shows me a tray with flowers, that have been kept out to dry). I get things from there and stock it.

Interviewer: This is from Doddabetta?

Gurulingayya: Yes, from Doddabetta. What I need from there I get it and set it out to dry and make a powder out of it. I use that also. I'm not dependent on one system. Maximum use is those powders only but these (pointing to the syringes and medicines on his table) are just for patient psychology. My main source is that (ayurvedic), these are just like that. (laughs)

He prepares his medicines from plants that grow in a hill nearby known for its medicinal properties and also prescribes injections for minor ailments. Injections are the main stay of treatment across all the providers.

6.2.4 Twenty-four hour services

Basappa has been working in Chara village for the past twenty-five years and mentioned the type of cases that he sees:

Interviewer: What kind of cases do you treat?

Basappa: Those usual cases. . . . minor ones. . . Cold, cough, fever, body pain, joint pain, loose stools and wound dressing which are common cases. . . I used to conduct deliveries in the past but have stopped since 5-6 years because the government asked us to stop.

Interviewer: Do you send patient for any diagnostic tests or investigations?

Basappa: No..No. . . I don't take risk at all, refer them to Gadag and moreover there are no facilities in the village for those things

The services provided by BAMS doctors and RMPs in both the villages were more or less similar. Apart from antenatal care, immunisation and delivery, the services provided by these providers are akin to the PHC. The main distinction is the availability of care that is acceptable to the population and also available at the doorsteps. In addition to the services provided in the clinic, they also visit the elderly and bedridden at their homes and are available 24/7. On average, Basappa sees about 20-30 in the clinic and 2-3 in the homes of patients. Providers like Naresh, Revanna Jr and Maheshi have more house visits than patients visiting them in the OPD. Naresh and Gurulingaya restrict their house visits to just Chara village, whereas Revanna Jr, Narsappa and Maheshi visit the *tandas* in addition to it. Gurulingayya used to travel on cycle to the *tandas* and

nearby villages in the past but has stopped because of old age. Revanna Jr and Maheshi visit *tandas* on a daily basis to provide services whereas the others go only when called.

(A young person walked into the clinic and he asked Basappa if he would be able to come immediately to tend to his ailing father. He told him that he would visit once the saline drip is over. A lady in the clinic was receiving saline drips)

Basappa: We have to visit patients who are old, have joint pain, paralysis and those who are not able to come to the clinic. In villages we have to give visits, can't do without visiting patients in their homes. I go to Chara *tanda* "on call" basis, not daily. When someone calls then I go. Weekly I get 1-2 calls from the *tanda* and I go in the evenings.

During the fieldwork in Vanapura, I noticed Narsappa treating a bedridden elderly person who had a fall in front of his house and was bleeding. The relatives of the old man called Narsappa and he was there in fifteen minutes. After examining him, he went back home to get the suturing kit to sew the cut on the forehead. He sutured the wound and administered injections and medicines and informed the relatives that he would visit in the evening to check on him and left. The relatives had difficulty in terms of arranging transport, accompanying to the hospital and fear of having to file a police case for a fall, so they called Narsappa to treat at home. RMPs like Narsappa and Basappa attend to special cases or emergencies in *tanda* when called, whereas Maheshi and Revanna Jr visit every day. They connect saline bottles in the homes of people in the *tanda* and go around visiting those who require their services. Once they are finished with that, they disconnect the saline, collect their charges and return home. Rudralli the BAMS doctor in Guddadpur village also does house visits but less when compared to others, the reason being his rates are very high and not many can afford him.

Narsappa's uncle, Gurulingayya, Revanna Sr and Basappa had conducted deliveries in the past. Narsappa even boasted that half the people born in his village were delivered by his uncle. They had to stop conducting deliveries after the introduction of 108 ambulance services and the promotion of institutional deliveries by the government. This has led to a loss of revenue for the providers and also restricted their scope.

What we do as service they (government) have broken it. They have left only 4-5 diseases for us to treat

– **Gurulingayya, Ayurvedic Bishak, Chara village**

6.2.5 Injections and Saline *botli*

Injections are the main mode of treatment for most of the patients and there is an expectation for it while visiting the providers. It is largely demand driven and fast acting nature of injections over tablets.

The demand for injections is more from the patients' side. When they have severe problem they ask for injection. Asthma patients who come to me ask for injections and they get alright within half an hour. Tablets act late while injections provide immediate relief in 15-20 minutes, so they prefer injections

– Basappa, RMP, Chara village

Providers are obliged to go by what the patients request them to and being from the same village and familiarity with the people, it becomes difficult for them to turn it down. Gurulingayya treats patients based on their preference and mode of treatment:

Interviewer: I have noticed many people receiving injections. Is demand from the people side or doctors decide? How does that work?

Gurulingayya: Both are there. Few people tell me that they don't want injection but to prescribe costly medicine. I have to go according to what they want. If they tell me that they don't want injection, I can't force them and administer it. Few people tell me that they don't want tablets or syrups but ask for two additional injections. . . .then what do you do for those. We have to adjust according to their requirements. Few people don't want to swallow tablets, few don't want syrup and few don't want injection...as per their wish, we have to do.

Unlike the PHC, I observed providers administering two injections and even people reporting the same during fieldwork. One injection is for the pain they are suffering and the other is "tonic" injection to regain the lost strength or Tetanus injection in the case of injuries. This is different from the PHC, where only one injection is administered.

Interviewer: When I talk to people most of them tell me that they went to Chara, got two injections and came back. Why two injections?

Gurulingayya: One would be for the disease they suffer, and one would be tonic injection.

Interviewer: Tonic injection?

Gurulingayya: For them to get back their strength. If some of them have come with a wound, to reduce the pain one injection and if they have been injured by an iron material then for it one septic injection. So that becomes two injections administered.

Not administering injection can cause the provider to lose his clientele and is also the reason to give into the demand. The practice of injections has been attributed to the attitude of those who ask for it and even demanded by children.

Interviewer: Lot of people in the *tanda* inform that they get “*maili*”, I’m interested to know if the prescription of injection is from the doctor’s side or the patients demand it?

Narsappa: Patients... For them its there in their head that if they get the injection they get alright, it gets alright if they take tablets but they dont know. “Injection maadhreaaramagthdhe” (If I get injections, I get alright). There are 2-3 year old children and for them you should not give any injection. Tell them that you should not give injection but instead give them syrup, they dont listen. “Please give injections, they will become alright” they tell. I don’t give injection to children, prescribe syrups. If they know that I don’t give injection, they stop coming to me and go to another person. It’s there in their head since old times. For most of the condition’s injection is not required.

Injections have a major role to play in the treatment process be it in the PHC or with private providers. In the words of Narsappa:

Patients go to PHC and if they don’t get injection they come here to me and complain: “see I went all the way to PHC and they didnt give injection; sent back with tablets”. For their satisfaction you have to show the needle and put it in the bag (laughs)

Treatment with saline drips is also done by the BAMS providers and RMPs. This is administered either in the clinics or in the homes of people in the village and *tanda* who are unable to travel to the clinic.

6.2.6 “No fixed charges”- Cost of treatment

The cost of services provided by private providers in these areas differs from the fixed charges for a range of services in clinics and hospitals in the towns. It is not possible to have fixed charges in an economy that is largely dependent on agriculture. A contrasting difference that I noticed is that in private clinics and hospitals, the payment for services is done up front and then it is availed. But with the providers in the village, it is done after the consultation and injections. The providers do not insist on a fixed payment, but payment is done in different ways.

There are no fixed charges as such. I don’t have this thinking of charging more if they come in the night. Its according to the disease. Till date lot of poor people come and get treatment and go, I can’t insist on them paying before they leave. Their life situation also may not be suitable for me to force them to pay. If I tell 50 Rs they will say they have only 30 Rs and give that money....To set a fixed rate is not possible in this village, possible in the city. There if you just step in itself they will start counting notes

– **Gurulingayya, Ayurvedic Bishak, Chara village**

I noticed different ways in which transactions took place. There are people who ask the provider on the amount to be paid and pay them the amount quoted. Few pay the

provider without asking and if it is less then informed that they would pay it the next time they visit. I also noticed a person bargaining for the injections received, but the entire conversation happened in a light manner and nobody was offended. Banjaras avail the services on a credit basis. Due to migration in the *tandas* the elderly avail services from RMPs and when the children visit them, they pay the lump sum amount to the provider. This is not common among the people in the village but a few of them avail services on credit and pay the full amount during 'peak' season, i.e. when they get paid for their agricultural produce. RMPs also see patients without charging them. If the consultation does not result in an injection or saline drip and only prescription, then no money is involved. The cost of injections ranges from Rs. 30 for one Injection to Rs 50 for two injections. Cost is reduced by using the same syringe for multiple medications, but the needle used for loading medication is common. If the patients bring the syringe and the medication from the pharmacy, then the charges are only Rs 5. Charges for saline bottle ranges from Rs 150-250 and it depends on the number of 'botli' connected. According to the providers these charges are the same for house visits but more in the case of *tanda* as they have to cover the petrol costs for up and down travel. I was unsuccessful in getting the information on costs from both the providers and the people in the *tanda* for the services provided at home as they were not willing to disclose these details.

6.2.7 Mismanagement by RMPs

Although RMPs provide basic curative care in villages and *tandas*, I came across an incident in Vanapura where a young adolescent girl lost her life because of being treated by an RMP and delay in seeking care at a higher centre. There are RMPs whose go beyond minor illnesses in order to earn money. Narsappa admits that there are money minded RMPs:

Idotsrecently a patient in Vanapura died. There is another person (RMP) here, who lives across the road. That guy used to treat her. . . .He did something. . . . Everybody won't be good, they don't do good like us (meaning him). . . . Don't think like us, their mentality is different. For some the mentality is to make money, in the quest to earn money he ended up sacrificing that girl's life.

I spoke to the relative of the girl in Vanapura and it corroborated with what Narsappa had told me. The adolescent girl was due to appear for her board exams when she

suddenly developed a fever. Maheshi, who regularly visits Vanapura, examined her and told her parents that there was no need of going to higher centres and he would treat her in the *tanda* itself. He connected saline and informed the parents that he has to give powerful medicine and took around 2000 Rs from them. He connected the saline every day for four days and by then, the girl had turned pale and the relatives rushed her to a private hospital in Gadag. She was diagnosed with dengue and it was too late, and she died in the hospital. Narsappa told me that incidents like this happen regularly and attributes it to the lack of knowledge of the people. While working in Gadag I have heard of many incidents of people being treated by RMPs and rushed to government or private hospital due to complications. It hardly creates noise as some form of monetary settlement is reached, or the RMPs are influential. In this case, also around 15-20 people from Vanapura went to Maheshi's house and confronted him. He offered 20,000 rupees to settle the matter, which the family refused, and no complaint was filed. After that, he stopped going to Vanapura but continues to practice in other *tandas*. Similar incidents have occurred with Revanna Jr in Chara village which was reported by the pharmacist. He didn't elaborate the details but mentioned that Revanna Jr faced issues with around three cases that were treated at home and one among them was a baby which died. He also prescribes higher dose antibiotics and holds back patients from going to higher centres and treat them at home. The other providers in Chara village don't take chances with cases that need a referral to higher centres, so they direct them to a government hospital or private hospital. I came across an elderly person in the *tanda* who paid around 3000 Rs to a RMP for two saline '*botli*' and injection for joint and body pain. He had no idea of the treatment being done but were assured that the pain would go away. He didn't know the name of the provider, nor did he have any relief. His son, upon hearing this, came from Goa to find out about details of the treatment and cost involved.

The government, from time to time, tries to crack down on RMPs' practice and they shut their clinics and lay low for some time. They resume their practice after bribing officials. I heard of a RMP in the neighbouring taluka whose clinic was sealed by the police and shut his practice. After a few months he employed a BAMS graduate and

started treating patients using him as a front. I did not hear of any such thing in the field area, but it is possible that it could have happened considering the protective nature of members in the community.

6.3 Summary

This chapter described the health care system that caters to the two *tandas* included in this study. However, the narration would be similar across most *tandas* though the stakeholders would vary. We find that the public health care system is understaffed and those personnel available tend to multitask, sometimes taking on responsibilities beyond their reported skills. This results in internal power struggles across positions and dissatisfaction on the part of those working within the system. The private health care system, such as it is fulfilling the gaps left by the public health care system, but at times mimics it in terms of curative practices. Both systems cater to the demand for saline drips and injections from the communities.

The private health care system consists largely of RMPs and Ayurvedic Bishaks, many of whom practise allopathic medicine and function from villages but mainly cater to the *tandas*. Their charges are not fixed and therefore, are able to adapt their charges to the paying capacity or are willing to provide services on credit. In addition, they also provide services at the doorstep. Therefore, they cater to the needs of those who are unable to access or utilise the public health care facilities either due to mobility problems or financial constraints.

CHAPTER 7

Structures and everyday invisible discrimination

In chapter 5, I presented a brief history of Banjaras, aspects of their lives and means of livelihood and the infrastructure in the two *tandas* selected for the ethnographic study. Geographic location and functioning of public and private health care structures, including their practices, was discussed in chapter 6. In this chapter, I will be discussing how the existing structures and everyday invisible discrimination experienced by the Banjaras is causing them to make sub-optimal choices regarding their lives, particularly with regard to their health care and livelihood. The discussion also includes the consequences of leading such lives on family, health and health care access. I would also discuss the role of ‘othering’ in perpetuation and maintaining the status quo across the mainstream and subaltern groups.

7.1 Introduction

Structural discrimination in the form of residential segregation caused the Banjaras to set up their *tandas* in areas close to the forests. The disadvantages imposed by this in terms of the geographical features of the region, access to healthcare and transportation resulted in them being a subaltern society. Leading subaltern lives resulted in limited options for livelihood, causing people to migrate to other districts and states for livelihood. Subalternity also reduced them to an ‘other’ and impacted their health and healthcare access through different direct and indirect processes.

7.1.1 Tanda- A boon or bane

Dhamlappa Pujar, 96-year-old frail looking man with a monkey cap and shawl around him was a toddler when his family first moved to Vanapura and camped there. Currently he is unable to walk, due to old age and is confined to the makeshift bed placed on the *katti*. He is just able to get up and defecate and urinate on a bedpan placed near the *katti*. His two sons’ and their wives’ have passed away and his daughter lives in Guddadpur *tanda*. He stays with his grandchildren and Muthamma his granddaughter takes care of him and provides for him. She works as a cook in the primary school nearby and manages the entire household. Dhamlappa’s daughter visits him occasionally and Muthamma is her daughter married to

her cousin. Both his male grandchildren are daily wage labourers in Goa and visit Vanapura 4-5 times in a year. The family had owned lot of land but had to sell it off due to lack of returns and all they own now is the house that they live in. The space inside the house which used to be occupied by cattle is now a parking space for cycles and bikes with Goa registration. One day, early in the morning while trying to get up from the Katti to urinate, Dhamlappa slipped and hit his head on the katti. Weak and barely able to speak he sat there in pain for two hours when Muthamma went out and saw him sitting down with blood oozing out of his forehead. She panicked and was not able to take him to the hospital because of lack of public transportation and going by bike was out of the question due to his age and the absence of male members to hold him. There was also the fear that a Medico legal case would be registered at the police station. Muthamma immediately went to her relative, who called Narsappa the RMP in Guddapur. He came in fifteen minutes and saw that he needed stitches, went back to his house and got the suturing kit. He washed the wound, sewed the area without any anaesthetic and applied dressing over it. He administered two injections for pain and gave the relatives medications and left. He checked on him in the evening and for the next two days. Dhamlappa stopped eating and became unresponsive to verbal commands except groaning in pain. Occasionally they tried to make him sip water, but with little success. On the third day, post the fall, he passed away. Relatives from other *tandas* and from Goa attended the last rites.

This entire incident can be viewed from the point of view of an individual, about his health and the pattern of care seeking. It can also be viewed from a health system point of view as to why they didn't go to the hospital or debate on the appropriate or inappropriateness of the care by RMP. I would like to view it from a macro level on how historical discrimination and injustices leading to deprivation causing the Banjaras to lead subaltern¹ lives. This contributes to differential health outcomes and access, here in the case of Dhamlappa.

Banjaras being a nomadic group in precolonial time, moved in groups called *tanda*, usually named after a Naika or leader. They were always on the move and camped outside villages. However, it is not clear if this was by choice or the village didn't allow them to set up their camp within. Post the introduction of transportation by the British, the Banjaras were no longer in demand and had to settle down in the forests or close to the forest for means of livelihood. Banjara *tanda* or settlement are never located inside or integrated with the village and always kept away. The only integration of Banjaras is in the creation of 'plot' areas close to the village where there are multi-caste

¹Social groups excluded from dominant power structures which is a consequence of their limited access to structures of authority. (Ref: Sage encyclopedia of Action Research)

houses, mostly consisting of Scheduled Caste and Scheduled Tribe households. Gudadpur *tanda*, from which Vanapura originated, is located at a distance of about 200 meters from the main village. The form of residential segregation mentioned by Spate and Learmonth (1954) in Dharwad is seen here, similar to other villages in Gadag. The 'kere' area of the Scheduled Caste groups is located at the periphery of the main village. Visible segregation in the form of tarred road separates the village and 'kere' area from the plot and *tanda* area. The plot area has a mixture of houses belonging to Scheduled Castes, including Banjaras, Scheduled Tribes and a few to Muslims. This area is located in between the village and *tanda*. Historical accounts of the people in Chara *tanda* indicates that they first camped outside the village and then moved twice for health reasons and in search of livelihood. History, devoid of the voice of Banjaras, tells us that they moved in groups and camped outside the village thereby establishing a synergistic relationship. This could have been the case in precolonial times when they were a nomadic group, but this pattern of segregation continued during the colonial regime and to this day. The labelling of Banjaras as Criminal Tribes caused the Banjaras to be confined to their *tandas* and gave powers to the police to search their settlements without warning. Even after the repeal of the Act, the stigma attached to it continued and they are being viewed with suspicion and as being involved in criminal activities. People in Chara *tanda* are not aware of how their ancestors settled or camped outside Chara village, but discriminatory practices in the past point towards caste-based discrimination. Some of the elderly there had worked in the field and households of agricultural landowners in Chara village and were not allowed to enter the house. Even for drinking water, they had to bend down, and the landlord would pour water from a height and they had to drink using the palm of their hands. Separate teacups were kept in the tea shops in the village for Banjaras and other Scheduled Caste groups, indicating an overt form of discrimination. Both Vanapura and Chara *tanda* settlements have been on the move in search of livelihood and camped in the current place for more than 60 years. Being immigrants to the region where they settled and not owning any of the fertile agricultural lands, the Banjaras had to start from scratch. These practices of caste-based discrimination, the stigma attached to being labelled a criminal tribe and the movement of Banjaras in search of livelihood point towards *tanda* as a product of structural discrimination mani-

festing visibly as residential segregation. This structural discrimination of Banjaras led them to live subaltern lives with limited options for means of livelihood, poor or absent transport infrastructure, limited access to healthcare, and alternate lifestyle, which is preserving their culture and tradition and also causes them to be an 'other'.

7.1.2 '*There is nothing here*'- Land and livelihood

Dhamlappa Pujar, whom I had mentioned earlier, was among the early families that settled in Vanapura. Over time he owned land and earned his livelihood through agriculture and grazing of cattle. His grandson Ranganna who had come for his funeral, shared with me the reason for him going to Goa for work.

When I was around 4-5 years old my father died. . . (pauses) five years or when I was young, I can't remember how old I was then (Rangamma intervenes and informs that his father died when he was young, and he had to discontinue studies and go to Goa for work). I don't have much understanding. My brother is the one who is studying now. . . In Goa, I started doing whatever job that was available. I was removing water from the boats, transporting stones by boat, sold fish and if anybody calls for coolie work, I go. Currently I'm driving vehicles owned by other people. . . I come home (Vanapura) once in a while and stay for 2-3 months and go back.our family doesn't own any agricultural land now. This house (pointing to the building), we got loan and built. First we had so much and now we have to do all these things (referring to his work in Goa) and build the house

– **Ranganna, 25 year old male, Vanapura**

This narrative of Ranganna is a common lived experience across both the *tandas*. The question that comes to my mind is what makes the Banjaras different from the rest when agrarian distress is commonly seen in a drought-prone region like Gadag.

Being a nomadic tribe and involved in trade, the Banjaras were forced to settle into farming and gathering forest produce for livelihood. Immigrants in the land where they settled had no ownership of land. Consequently, they worked as labourers and gathered firewood from the forest and sold it for a living. Selling firewood is no longer an option to earn their livelihood as the government started promoting smokeless fuel use for households. Gradually, through the various interventions, they managed to own the land and now faced with challenges accompanying the geography of the region, which made things further difficult. As I mentioned in chapter 5, both Vanapura and Chara *tanda* are located among forest belonging to scrub variety. This is characterised by low rainfall and mainly used for grazing of livestock. In addition to this, for the two *tandas*, the land

available is unfertile. Both come under the Northern Dry zone, which are very highly vulnerable to drought. Water is a major problem in *tandas* both for household use as well as for agricultural purposes. Water supply is through borewells in the *tanda* and through private NGOs for RO water. Unlike in Gadag city, there is no pipeline for the supply of water from the Tungabhadra river. At the time of ethnography, work was being done to supply water through this to Chara *tanda* but not in Vanapura. This was a project undertaken by the government to supply drinking water to all the villages in Gadag district. Drinking water in Chara *tanda* is hard and not fit for consumption, whereas in Vanapura, it is sweet and most of the households rely on it. In both places, the supply is irregular and often, people rely on water from the borewells in the fields to compensate for it. As *tandas* located on hilly regions and on higher elevation, there is poor recharging of groundwater as the rainwater flows downstream. This leads to borewell failure in the absence of mechanisms to divert the water to recharge wells or ponds. In recent times many '*Krishi hondas*' have come up near *tandas* due to government schemes. These are projects of the watershed development department to store rainwater and prevent them from draining. The difficult terrain around the *tandas* necessitates such interventions.

Agriculture in Gadag is largely dependent on rains in the absence of river or major irrigation projects and being a drought-prone area adds to the disadvantage of marginalised farmers and Banjaras in particular. Land is crucial to the economy of the Banjaras and the main reason for the temporary settlements to become permanent. Going back to the history of Vanapura and Chara *tanda* their mobility was related to land being accessible. Households in Vanapura, after the split, moved to Guddapur *tanda* and, being far away from their agricultural lands, moved from there and built their huts and later it became a permanent settlement. Similarly, Chara *tanda* settled permanently in the current place after people started owning lands and cultivating there. This is in contrast to the village where the movement of settlement in search of livelihood is uncommon. People there own land in far off places and they build shelters on the land but always stay and travel from the village. The government's lack of interest in developing the *tandas* is evident by the fact that only in 2015 they made the announcement to convert them to revenue villages to aid in their overall development. Survey of the houses in Chara *tanda* was

completed for the purpose of giving title deed to the property on which it is built but the people are yet to receive any further communication. Being located close to the forest most of them started cultivating in forest lands since many years and few have received the title deeds and for the remaining, it is the only means of land. I met few families who are the third generation cultivating on forest land and yet to receive the title deed. Without the deed, they cannot receive any scheme or subsidies related to seeds, fertilisers or borewells. Having land also does not guarantee a constant source of income as even small and marginal landowners work as agricultural wage labourers. Due to residential segregation, the Banjaras have to earn their livelihood on land that is of poor quality, decreased yield, lack of irrigation, along with climatic variations causing them to seek opportunities outside the *tanda*. Many like Ranganna, because of their family circumstances and being victims of structural discrimination, had to look for opportunities elsewhere to survive and take care of their families.

7.1.3 ‘There was nothing that time’- Health and healthcare access

Health status and health infrastructure in Belgaum and Kalaburagi (Gulbarga) region of Karnataka lag behind other regions in the state. Gadag, being part of the Belgaum region performs better in terms of the state average in health infrastructure but lags behind in health status (Siddu et al., 2012). Even though the health infrastructure appears to be doing better when compared to state average, disparities are seen between different talukas in Gadag district. Within talukas there are disparities between municipalities, towns and rural areas i.e. villages and *tandas*. It is a known fact that rural areas are disadvantaged in terms of poor provisioning of care and lack of adequate manpower in the health sector. The *tandas* being distant, located close to the forest, far away from the villages and being at the bottom of the social and settlement hierarchy, are further disadvantaged when it comes to health status and infrastructure. Practices in the past for healthcare give an insight into the discrimination faced and continue to be experienced in the present. In the past, people in the *tandas* depended on knowledge passed on by forefathers, traditional healers, midwives or dais and RMPs in the absence of a Public Health system. Shankranna, the *Kharbari* in Chara *tanda* remembered the time around fifty years ago when he was around twenty-five years old and the kind of treatment one

does while injured or sick.

If any of us injures our hand because of using iron or steel or any equipment, we take the mud from the hills and apply it over the wound. After applying there are herbs that grow in the ground called “hundi soppu” and “hullisoppu”. We apply that over the wound and it heals in one week. . . . At that time there were no doctors or anything. If anybody is suffering from disease, there is no option but to die.

– **Shankranna, 75 year old Chara tanda**

This kind of treatment of applying certain herbs is the practice of forefathers that was being done. He does not remember the time when RMPs started visiting the *tanda* or the government hospitals being set up but remembers it as difficult times when people who fell sick died without any health care. Traditional healers among Banjaras played an important role and they treated sickness and ailments with herbal mixtures along with food. They did not practice pluralistic treatment like the RMPs and they no longer exist, at least in the *tandas* studied. At present, no traditional healers are there in Vanapura and Chara *tanda* but practising in the neighbouring *tandas* of Guddadpur and Sevalalnagar. The treatment prescribed by them is referred to as ‘*gauti oushadhi*’ (herbal medicine) and according to the people they can identify illness by feeling the pulse of the sick person.

Here, in the *tanda* we used to take ‘*gauti oushadhi*’, but it is not a success for many people. Almost two people that I know of died due to snake bite. . . . They gave them ‘*gauti oushadhi*’ initially, to start treatment before going to the hospital, but they died. I think they died because of the time wasted in administering ‘*gauti oushadhi*’. . . . there are 2-3 people in Sevalalnagar who used to give these medicines. It is some herb that is mixed and given with roti and also placed over the area where the bite happened. I don’t think it is a success and have seen it with my own eyes.

– **Rani, Chara tanda**

People no longer practice any form of herbal treatment nor do they go to such healers for any ailments except for pain in the knee. I have seen many elderly Banjara men and women with chronic knee pain having multiple green spots around the knee and one of them around the shoulder joint. Sidappa, aged around 85 years walks with the help of a walker because of a fracture on the hip sustained due to a fall. Both his knees are rounded and indicative of degenerative disease in the knee joint. He spoke to me about his knee and I noticed the green spots around both knees. The colour and appearance of these marks was similar to the tattoos on the body of Banjaras. I remember seeing many

Banjaras with similar marks on the joints while working as a physiotherapist. He said this is called '*Hatchi*' and done by traditional healers. He had got it done by a woman '*gauti daktar*' (Traditional healer) in Kuradi *tanda*, located in the neighbouring district. The word '*Hatchi*' is derived from the Kannada word '*Hacce*', which means tattoo. The healers mark the area around the painful joint with soot from *chulha* stove. Two to three syringe needles are tied together and poked intermittently over the marked spot till it swells and begins to bleed. This is done for all the spots and is believed to cure pain in the joints. This practice has reduced with the dependence on injections for pain relief. Few of the elderly continue to do it themselves after exhausting all treatment options. The other group of individuals in the *tanda* important to health were the midwife or *dais*. They conducted deliveries and shared an emotional bond with the women who they helped deliver. Rani remembers the time about twenty years ago when there were no facilities and she had to deliver at home. She has four children and all of them were delivered by *Dai*.

There is a person nearby; she used to do it very well. From morning till evening, till delivery happens she used to be there. She is one person that I cannot forget. She conducted four deliveries for me. My mother died when I was young and with so much kindness, she conducted delivery and instructed how to take care of the child, how to breastfeed, how to clean, how to keep the clothes clean and like that so many things. Those were difficult times but in that also there was some happiness in these small things.

– **Rani, Chara *tanda***

There is no recognition by the government for the services provided by *Dais* and post the introduction of NRHM, 108 ambulance and institutionalising deliveries, they have lost their relevance.

Twenty years back, based on my knowledge there were around 100-150 households. If any woman developed labour pains, they called her only. There is another person called Ranavva, who is related to me. She has conducted the maximum deliveries in this *tanda*. She stopped conducting deliveries now after the ambulance people told her that if she touches any pregnant women and something were to happen to them, it would be in the records of the government. They scared her and after that she stopped conducting deliveries but still people go to her and tell her “we have faith in you, whatever happens, that is on us, you please check” and get checked by her till date. She can predict and tell when the delivery will happen and if it would be caesarean or normal. - **Rani, Chara *tanda***

– **Rani, Chara *tanda***

The *Dais* have stopped conducting home deliveries and the *tanda* people have embraced the health programmes and policies of the health care system. Currently, all the deliveries are registered and conducted in public or private facilities.

The Banjaras turned to RMPs for curative care when traditional healers were no longer relevant. These providers were practitioners of the Indian system of medicine and started practising allopathy later on. RMPs always belonged to the village and there was none from the *tandas*. They were able to transcend the caste barriers because of economic reasons and provided services in the *tandas*. In both Vanapura and Chara *tanda* the people had to walk long distance to consult a RMP and at times they treated ailments in the *tanda*. Narsappa's uncle, Revanna Sr and Gurulingayya were among the early RMPs in the *tandas*. Gurulingayya mentioned that he used to visit the *tandas* on a bicycle and has stopped now due to old age. Public Health systems existed at that point of time but were inaccessible and located far away. The treatment by RMPs mimicked the modern medicine system and started providing immediate results for multiple ailments. People in the *tandas* hold them in high regard and are protective of them when outsiders enquire about RMPs visiting the *tandas*. In the words of Ranganna

When I come home (Vanapura) I consult Narsappa, have been showing to his uncle as a child who also used to visit out *tanda*. He is a good person, and we call and he comes. Even when my grandfather was not well, he used to come and see him. He is like a family to us; one phone call and he will come.

In all the narratives and conversations that I had with people in the *tandas*, they viewed the RMPs as a family member or one among them, but it was never the case with the Public Health System. An exception to this is if any of them from the community were working as doctors or nurses, they spoke highly of them and referred to them as "*Namm Mandi* (our people)". The Banjaras have given up their practice of traditional healing and delivery by *Dais* and embraced modern medicine by RMPs, private and the Public Health system. The question is, has the Public Health system embraced them and offered special attention to their needs? The private system is out of the purview as they are largely profit-oriented. Looking at the Public Health system from a macro level, the structural discrimination is visible in the location of Sub-centres or Primary Health Centres (PHC). Table 7.1 shows the location of Sub Centres by size of the settlement

they cater to.

Table 7.1: Coverage of Sub-centres by Villages and *Tandas* population size

Sub Center	Village/Tanda	Population
Hallapur PHC		
Sub-centre 1	Kallapur	3520
	Kallapur tanda	1993
Sub-centre 2	Hallapur	3465
Sub-centre 3A	Guddadpur	2355
	Hallapur tanda	2980
Sub-centre 3B	Guddadpur tanda	2350
	Vanapura (tanda)	711
	Bettadpura (tanda)	915
Rampur PHC		
Sub-centre 4	Rampur	1698
	Paraspur	850
	Rayan village	429
	Rayan tanda	4149
	Sevalalnagar (tanda)	1135
	Lingpur & Lingpur tanda ¹	1591
Sub-centre 5	Chara village	6546
	Chara tanda	1489

¹ Population size is counted together in census and PHC records as only a road separates village and *tanda*. More than 50 percent of the households belong to *tanda* settlement.

In the areas covered by Hallapur PHC, when there is a *tanda*, the population catered to by the Sub-centre is larger, as seen in the case of Sub-centre 1 and Sub-centre 3A. Hallapur with a population of 3465 has a Sub-centre as well as a PHC. Sub-centre 1 is located in between Kallapur village and Kallapur *tanda* and can be assumed as a neutral location. Sub-centre 3A is located in Guddadpur village in spite of Hallapur *tanda* having a greater population count. Since Sub-centre 3B caters to Banjaras it is located in Guddadpur *tanda* with the largest population. The situation is much worse, and the structural discrimination is apparent in the case of Rampur PHC. Both the Sub-centres are located in the villages and to an extent the location can be justified in the case of Chara village because of its population count. Rayan *tanda*, being the next largest settlement, does not even have a Sub-centre. In Chapter six, I reported that the PHC that was supposed to have come up in Rayan *tanda* but was built instead in

Rampur. The reasons attributed to it are infighting and land issues among the people in the *tanda*. Looking at the distribution and location of Sub-centres, it points towards reasons beyond these publicly stated explanations. The fact that health care system units are not located within *tandas* points towards the outcome of caste-based discrimination. Units not located within *tandas* can be justified by the argument that their population size does not warrant one, as that is often the case. A few years back the panchayat members and elders in Chara *tanda* approached the government to allot Sub-centre and a Veterinary Centre for the *tanda*. They were categorically told that their population count is low and such centres cannot be allotted because of it. Rayan *tanda* was allotted an additional Junior Health Worker and it remains on paper due to the lackadaisical attitude of the staff and government for not following up on it. Allotment of Sub-centres depend on the population count and is lowered in the case of Tribal groups or difficult to reach population. The Banjaras are tribes but in Karnataka categorised as Scheduled Caste and hence not considered as one. The criteria of “difficult to reach population” may not apply because there is road connectivity to the *tandas* but the means to transport is not considered. The differential criteria for coverage of health units are not considered and it puts them at a further disadvantage and perpetuates existing discrimination. If it is not possible to establish units because of size class, there are no alternative means that exist to reach them. In some places there are mobile vans by the government to reach underserved areas or hilly regions, but none exist for them. During the course of the field work in Vanapura, as I was sitting in Gopal’s tea shop and having tea, I noticed a Tata Indica car with government registration zoom past the shop. Gopal immediately ran in the direction of his house. From a distance, I saw a lady get out of the car and enter his house. I assumed it to somebody from the health department since his wife is the ASHA in the *tanda*. She was there for half an hour and then left. I asked Gopal about it and told me that she is the government veterinary doctor and he had called the helpline in the morning as his cow had an infection and was not producing milk. I was amazed and surprised at the functioning of the Department of Animal Husbandry and Veterinary Services in Karnataka. In another unrelated incident in Chara *tanda*, I was having a conversation with the owner of a small petty shop who was talking about the activities of the shop. He has a small area next to the shop with a kerosene stove for

preparing tea and snacks in the morning and egg rice and chicken in the evening. While I was speaking to him there was a sudden sound of a vehicle horn and he excused himself and went to the main road. He came back with two big cardboard boxes and kept them in the shop. The boxes had labels of 'Kingfisher' and 'Haywards' written on it. I got to know that the government supplied liquor to the *tanda*, to be sold for local consumption. Health care for animals is phone call away and alcohol is available in the *tandas* and both of these generate revenue to the government. Sadly, the monetary impact of having accessible health care services is not realised and continues to perpetuate the existing discriminatory practices.

7.1.4 Ticket! Ticket! Ticket! - Transportation in the *tanda*

The other manifestation of the structural discrimination experienced by the Banjaras is the transport infrastructure. One of the common experiences of travelling to fieldwork in 2015 for my Masters' thesis and during PhD work was that *tanda* people were constantly stopping me and asking to drop them on the way. *Tandas*, being located away from the villages and closer to the forests, have been disadvantaged in terms of public transportation. This affects their ability to access various goods and services. Bus services started in the *tanda* about 25 to 30 years ago. At that time there were only two bus services plying in Chara *tanda*, one at around 8.00 am in the morning and the other at 6.00 pm in the evening. Things have changed now and there are many bus services from Chara *tanda*. This is not because of the concern for people in the *tanda* by the government but because of the location of the settlement. Chara *tanda*, like I had mentioned earlier, lies at the point of intersection of three talukas of Gadag district and the roads here become an important component of connectivity. Increased bus services in Chara *tanda* are an indirect outcome of connectivity and economic reasons. Gadag taluka being the most developed in the district, one expects that the connectivity would be much better off than elsewhere. Sadly, that is not the case in Vanapura and there are four bus services out of which three connect to main town and one to Goa. The timings of the bus services are 9.30 am, 2.30 pm and 6.30 pm and the bus to Goa is between 6.30 pm to 7.00 pm. The bus starts from Gadag and travels through Kallapur, Kallapur *tanda*, Hallapur *tanda*, Guddadpur, Guddadpur *tanda*, Vanapura, Bettadpura, Lingpur

(village and *tanda*) in Mundargi taluka and ends at Sannoor *tanda* in Gadag taluka, returning the same way. This bus service primarily caters to the *tandas* in Gadag taluka. Kallapur and Kallapur *tanda* are located close to town and have very good connectivity either by public transportation or *tum tums*. The other two villages, Guddadpur and Hallapur are located on the highway and well connected by public and private transportation. The difference in public transportation is due to locational disadvantage and the lack of effort by the government to mitigate this disadvantage. Most of them spoke about public transportation and beamed with pride about the direct bus to Goa from the *tandas*. This is an everyday service and plys through the *tandas* in Mundargi and Gadag. Starting long-distance service is again driven by economic reasons on the revenue generated from running the services and remittances through migration. Daily bus services are scheduled according to the timing of schools and colleges in the town and surrounding areas which is a good thing. But this is a disadvantage for those travelling for work, market in nearby towns and seeking healthcare. They have to depend on alternate modes of travel, either through *tum tums* or using own vehicles for transportation. *Tum tums* are available in regular intervals in Chara *tanda* for reasons similar to the public transport system but rare in Vanapura because the settlements are spread out and located far away. Because of the difficulty in transportation in the past and present, one can commonly find two-wheelers in these settlements. These are not a sign of luxury but of necessity due to circumstances thrust upon them. It does help to an extent, but the elderly, especially women, are disadvantaged as most of them don't know how to drive and people in the household who know to drive are working outside the state for livelihood. Relatively affluent households in the *tandas* own bikes, cars and tractors for transportation. The most common reason cited by people in the health care system for their limited visits to the *tandas* is the lack of transportation. The health worker in Vanapura takes the help of her husband who brings her by bike and waits till she finishes her work. Similar difficulty was also reported by the JHA in Rampur PHC. He has to plan in advance to catch the bus to travel to the *tanda* and if he misses it, has to depend on those travelling towards the *tanda* by their vehicles. This is a genuine concern expressed by the health workers, which again reiterates the disadvantages faced by those in the *tandas*. Having said that, this is also one of the reasons given by them for skipping visits

to the *tanda*. Structural discrimination and residential segregation of *tandas* contribute towards disadvantage in terms of availability of transportation. Little or no effort has been undertaken to mitigate this and they continue to remain a subaltern society.

7.1.5 Avaru (other)- Tanda lifestyle

When I say *Tanda* lifestyle, it does not mean it is a consequence of the structural discrimination but a reason for 'Othering' leading to discrimination. There are certain other changes in the pattern of living that is outcome of structural discrimination which I will discuss in detail subsequently.

Reflecting on the time when I had worked as a Physiotherapist in Gadag there were two common views of the Banjaras. On one side was a classic case of "othering" on how they were different from the rest; spoken with a negative connotation. On the other side they were these people who were celebrated for their handicrafts and having a distinct '*kasuthi*' or embroidery. *Tanda* which is considered a 'dirty' place locally, suddenly becomes an 'exotic' hamlet that needs to be visited to experience their handicrafts and living. The notion of 'other' differs according to the situation but the dominant one that prevails is the one that seeks to keep them in their subaltern state. The question then is how Banjaras come to become the 'other' and the changes over time in the nature of being the 'other'. The colonial regime viewed them as a threat and always kept a watch on their activities. They did this by labelling them as Criminal Tribes. This labelling in turn, gave the state the powers to search without warrant and pick-up suspects for criminal activities. The Act that gave them the title was repealed post-independence but the stigma attached to it remains and continues to perpetuate in different ways. When I started work on my masters' thesis, I had little or no knowledge about the Criminal Tribes Act or the British except that Banjaras were labelled as Criminal Tribes. Most of the people who I had met and my friends in Gadag warned me about being careful and staying safe when I visit the *tandas*. I was told about them being rough, rude, non-responsive, crooks, to return before sunset and to make sure I had coverage in mobile to call for help if something goes wrong. I was not given this advice when I told them about the visit to villages for data collection. They in fact tried to call up someone they knew or remember if anybody known to them resided in the villages to help me. The warnings

I received along with the label of Criminal Tribe got me a little scared and I couldn't abandon the field work but had to finish it. I continued with the work and made sure that I returned before sunset and kept constantly checking for mobile network. While obliging to requests for dropping *tanda* people on the way, my senses were heightened, focussing on the area where I had kept my wallet and the backpack. I finished the work in one and half months and reflecting on it the experience was nothing what I was warned about. The notions of Banjaras as the 'other' that had formed in me changed and I became more and more comfortable as I started visiting *tandas* and learning more about them. The warnings by my well-wishers, whom I would call mainstream people, including myself was because of being blind to the life and the way of living of Banjaras in the *tandas*. The creation of a *tanda* because of historical injustices is a visible form of discrimination. The 'othering' that seeks to maintain and perpetuate it is invisible and continues in different forms. In the following paragraphs, I will discuss the different aspects of lifestyle in the *tandas* that contribute to this notion of othering and how these notions are not true in reality.

Banjaras have distinct attire, especially the women with their penchant for embroidery, jewellery and tattoos on the body. The clothing is filled with different colours and give a uniqueness to the people in the *tanda*. Their love for colours is reflected in the painting of the walls of their houses which is multicoloured. '*Kasuthi*', the embroidery unique to the Banjaras, form an integral part of their clothing and wall hangings in the houses. The younger generation and those who migrated to work in other places have given up wearing the traditional dress, but the elderly continue to wear it. At the time of Dussehra festival, all the women both young and old make it a point to wear their traditional attire and gather in a common place and celebrate. The adornments and the attire unique to them becomes an object to distinguish and label them as an 'other'. It is easy to identify a Banjara woman among a crowd because of their attire which is distinct from the bordered silk wrap cotton Ilkal sarees worn by the women in the village and tattoos on body. Reflecting on the narrative from the field work in 2015 which I mentioned in Chapter 1, where an elderly Banjara woman was called out by her caste name ('*eh Lamanakki*') by a nurse in a private facility and asked her to clean the

floor where her grandchild had urinated. Her son was saying that the nurse didn't treat other women who were there in the same way and discriminated against her because she was a Banjara. They are often described as 'dirty' people who don't take bath and have poor hygiene practices by the mainstream. A part of the clothing of Banjara women is the braiding of hair with adornments that cannot be done alone and needs assistance. Because of this, washing of hair occurs at regular intervals and not on a daily basis. Both the men and women take a bath every day when water is supplied and washing of clothes is also done at the same time. *Tandas* are described as dirty places because of hygiene practices related to open defecation and collection of water in drains and mosquitoes breeding on them. The problem of open defecation is common to both the villages and *tandas* and the situation is changing with toilets being built in both these places. This issue is highlighted among Banjaras to label and differentiate them. Similar is the case with collection of water in drains. Villages and *tandas* unlike the cities don't have a central drainage structure. There are drains in almost all the streets, but all these drains collect at a central area and the wastewater flows, not leading to stagnation. At times when the central flow is blocked, it leads to stagnation and mosquito breeding. In Vanapura, the central drains open downhill into a waste land and the wastewater doesn't stagnate. In Chara *tanda* it collects at the end of the settlement and very often leads to stagnation which is cleaned regularly by the panchayat members. In fact, in Chara village, I noticed that there are multiple areas where waterlogging happened and breeding ground for mosquitoes but the "*tandas are the place with poor hygiene*".

The Banjaras belief systems are different from the mainstream. They give importance to tattoos on their bodies and believe it wards off evil eye. They celebrate all the major festivals celebrated by the Hindus and one festival unique to them is the Sevalal *jayanthi*. There is communality in their celebration of festivals where the *tanda* as a whole celebrate together. Non-vegetarian food and liquor form a major part of the celebration, even for some festivals. They use the term '*bete*' meaning hunted to refer to goat that is slaughtered for festivals. Banjaras were known to be hunters in the forest and hunted down deer, wild boars and brought them back to the *tanda* to be cooked and shared in the past. This is no longer possible due to legal restrictions in place for hunting.

On special occasions, money is collected from all the households in the *tanda* depending on their ability to contribute and with that, goat is bought and slaughtered. This is offered to their Gods and then cooked in a commonplace and shared among all the households. Non-vegetarian food is always had with alcohol in the *tandas* irrespective of sex. In a place like Gadag, where non-vegetarianism and alcohol go hand in hand it becomes a reason for labelling. It is difficult to find a non-vegetarian restaurant in isolation in Gadag district, but these are always attached to a bar that serves liquor and shapes that kind of thinking. Banjaras are labelled as drunkards, being addicted to liquor and women folk are looked down because they consume alcohol. While speaking to a young person in Chara *tanda*, I asked him about women drinking alcohol and he shot back saying “*What is wrong in that? Don’t the women in the cities consume alcohol?*”. There is a lot of attention given to Banjaras women drinking alcohol in conversations among the mainstream. This leads to the formation of stereotypes and labelling. Alcohol use among Banjaras is viewed as a form of social evil, but it is a part of their culture. Not many of the participants were willing to discuss their practice of brewing alcohol out of fear and the stigma attached to it. Till date there are news items published about police cracking down on people in different *tandas* for brewing alcohol illegally. Historical documents have mentioned Banjaras being addicted to liquor or ‘intemperate’ in use of alcohol. “Ethnographic survey of Mysore: Banjaras Caste” mention the use of liquor by Banjaras for various occasions relating to birth, death and festivals (Nanjundayya, 1912). It also finds a mention in the legend tales of Banjaras (Halbar, 1986) but it is not clear if they made their own alcohol or purchased it. The British mentioned the brewing of illegal liquor under the list of criminal activities by the Banjaras under the Criminal Tribes Act. Brewing their own liquor can be viewed as a cultural practice or arising out of poverty and sedenterisation. Liquor used to be brewed in the houses and when it was made illegal and criminalised, they shifted brewing to the forests. Liquor in the past was also used for medicinal purposes like cut wounds and vaginal tears during childbirth (Patil & Saroja, 2004). Rani in Chara *tanda* remembers her grandmother saying that she was arrested by the British and put into jail for brewing alcohol. Historical documents, criminalisation by the British and subsequent governments and communities’ past practice of brewing alcohol has led to them being labelled and stigmatised as

alcoholics. This does not mean that there are not given to alcohol, but the labelling is convenient to designate them as the 'other'. Vanapura elders talk proudly about how there is no alcohol in the *tanda*, but that's not the case with Chara *tanda*. In places on the periphery of the *tanda*, I have noticed many sachets of whisky, which is available for thirty rupees in the *tanda*. Some of the women I interviewed mentioned the body pain and tiredness associated with working in the fields, family situation and violence by partners as reasons to consume alcohol. Non-vegetarianism and alcoholism are a part of the villages too, but it is a convenient labelling to designate *tandas* as the 'other'.

The historical discrimination labelling and 'othering' of *tandas* and Banjaras caused some of them adopt measures to subvert this system. I visited Ratnalli as a part of listing all *tandas* in Gadag district and spoke to the Anganwadi teacher who belonged to the Banjara community. I asked her about the area of the village, which is considered a *tanda* and she immediately responded, saying there is no *tanda* and all community people stay together. She was slightly uncomfortable with the mention of the word *tanda*. Similarly, an elderly person in Sevalalnagar corrected me when I mentioned the word "Rayan *tanda*" in the conversation with him. "*Tanda* is all gone now (referring to the name), it is Rajajinagar". Like I mentioned earlier, the government had notified the *tandas* as revenue village and as a part of that was changing the names. Although the names are changed the locals, government officials and even entry in the PHC still refer it to as the *tanda*. Some families in Guddadpur *tanda* have taken up Lingayat surnames to escape the trap of the caste system. Within the *tanda*, people don't hesitate to mention their names with surname, but in public spaces, there are people who try to hide their caste. I had met a young girl while working in Gadag as a physiotherapist who was very inquisitive in learning things related to nursing. I overheard her conversation with a staff nurse who asked her name and she mentioned it without the surname. The nurse smiled and asked her directly if she was a Banjara, she refused and finally admitted when the nurse pointed at the tattoo on her face. It didn't really strike me at that time but later I understood the hesitancy. I met another young man during the observation in Hallapur PHC; he was one among the DHI course trainees. We became quite friendly, and he told me his name and the village. Only when one of the staff nurse who is a Banjara

spoke to him about his experiences with collecting data in *tandas* did I realise that he was one among them but was trying to hide it. It is common in Gadag like in other places of South India for people to ask the surname. I have faced the constant question of “What is your name?” followed by “What is your surname?” if they are unable to make out the caste identity through the name. *Tandas* like Vanapura have adopted measures to move away from the stigma and discrimination by embracing practices of upper caste villages and trying to conform to the mainstream. An elderly person who is also among the leadership in Vanapura laid emphasis on the fact that their *tanda* is unlike other *tandas* in all of our conversations. He emphasised on the fact that I won’t find people whiling away their time in tea shops, not playing cards or gambling their money, children attending school regularly and most of them securing admission in Navodaya schools, nobody drinking alcohol openly, *tanda* being clean and non-rearing of hens. This practice of non-rearing of hens is common among the Lingayat community. He also spoke about the sad state of affairs in Chara *tanda*, comparing the same parameters with Vanapura, an ‘other’ within an ‘other’.

The picture below from Chara *tanda* summarises the subaltern lives of the Banjaras. Historical injustices and structural discrimination caused the *tandas* to be located close to the forest and on unfertile lands. Due to lack of livelihood, the people migrated to other places, in this case, Goa as is evident from the ‘GA’ registration of the vehicle. Everyday living is a struggle as those with vehicles are able to mitigate some of the disadvantages imposed on them. In this photo, the gentleman in the bike was fetching drinking water from neighbouring *tanda* because the resource in *tanda* was non-functional. The same is the case with accessing health care. They have left behind the wandering ways, have settled down and built houses and the structure is similar to the villages nearby and yet they and their settlement are labelled dirty and constructed as the ‘other’. The labelling and ‘othering’ of Banjaras creates further disadvantage and perpetuates into their everyday life, and this has consequences for the different spheres of their lives.



Figure 7.1: Subaltern life in *tandas*

7.2 Impact of leading Subaltern lives

Everyday discrimination experienced by the Banjaras has an adverse impact on the functioning of the settlement as a whole and the individuals that constitute it, across different spheres of life. In the following sections, I will be focussing on the direct and indirect process that has implication for health and health care access.

7.2.1 Land of milk and honey- Migration

The main source of occupation in the *tandas* is agriculture, cattle rearing and grazing of sheep and goats. *Tandas* being located close to the forest, infertile lands and reduced income from agriculture lead the people there to look for alternate means of livelihood. Working as agricultural labourers in the fields of others is inadequate to run the daily life and the wages are around Rs 150 for men and Rs 100 for women for a day's work. This rate increases during the season of harvest but is dependent on the rainfall in that particular year. With almost 80 percent of Gadag district dependent on agriculture,

there are limited opportunities for livelihood outside the *tanda* and in the main town. There are very few families who work by selling sugarcane juice, petty shops or running meat stall in Gadag town but that depends on the proximity to town and availability of transportation. To earn a living and support the family many in the *tanda* go outside the district in search of livelihood but continue to maintain ties in the *tanda*. In the words of Ramavva,

We don't have agricultural field or anything. By earning in Goa, we were able to build this small house. That is our "Karma". Our life is to work, to eat " Our situation is so bad, what do we do in the *tanda*, we have no agricultural land, no means of livelihood...Nothing. Till we die we have to earn outside and eat. By earning in Goa we were able to build this small house, that is our "Karma".... Our life is to work, eat and then die. We have to work, eat and take care of our children till we die and my desire is to make them study. In difficult circumstances also I want to be able to make them study. Even I have to sew somebody's slippers I will do and make my children study. I don't want to become like my drunk husband who has studied and whatever difficulties come I want to make them study. Till they become adults...after that I don't know if I would be alive...It all depends on God. That's my belief and I don't believe in any other things

During the course of fieldwork about 25 percent of the houses in both the *tandas* were locked. Almost 50 percent of the households in both the *tandas* had a migrant (51 percent in Chara *tanda* and 46 percent in Vanapura). Common place for migration is Goa where tourism flourishes and they cater to the requirement of tourists. Most of these migrations are short duration in nature. During the offseason in Goa, they return to the *tanda* and attempt to cultivate the land depending on the rainfall. Post-harvest, they return to Goa and continue the job they had been engaged in. The primary reason for migration is crop failure and diminishing returns from agriculture, other reasons being the need to pay off loans taken for agriculture or healthcare, education of children, building houses and wedding expenditure. Once the loans are paid back the migrants return to the *tanda* and continue to cultivate or work as daily wage agricultural labourers and again migrate short term when they are caught in the web of loans. Most of the migrants, irrespective of gender, are school dropouts due to their life circumstances and migrate to support the family. There are educated Banjaras who have studied in different streams and have secured regular employment and are long term migrants. Those who are educated and unable to secure employment in government or private enterprise in Gadag or outside, migrate in the short term. Raghu whom I mentioned earlier is the only

degree holder in his family, having studied Bachelor of Arts in Gadag. He wanted to get into the army but was rejected because he had flat foot. He is well versed in computers and tried securing employment in and around Gadag in both government as well as the private sector but was unsuccessful. He owns land with no means of irrigation, and he tried to secure funds for starting a data entry centre from the government, which was stuck in red tape. He was firm on not going to Goa for work leaving behind his mother, wife and children. Two months later, he applied for jobs outside Gadag but within Karnataka and was unsuccessful. Finally, he went to Goa to search for a job as his relative was working there so that he could pay off the loans taken for agriculture. There are young people like Raghu who are educated and want to stay back within Gadag so that they could be close to home but unable to do so due to lack of opportunities in the *tanda*.

Migration can be viewed as benefitting the society, families and individuals as a whole but in the case of *tandas* it is a marker of structural discrimination. Few families have benefited from migrating outside, educated their children and have built a big homes in the *tandas*. Subalternity continues in the place where they migrate i.e. in Goa. Usually in cities where there are people of different states and languages where caste is hidden to an extent, the Banjaras face problems because of their caste and nativity. Banjaras from North Karnataka form the major bulk of the migrant population in Goa and most of them stay in areas designated as slums (Children's Rights in Goa, 2016). Even though they have been migrating to Goa for livelihood with many even settling down, they are still seen as the 'other', even there. There are conflicts between the locals and the Banjaras, which is also a political issue there. They face stigmatisation and discrimination in Goa. Ranganna, who works there has experienced discrimination but continues to endure it to support his family.

If we leave Goa and come those guys will suffer. . . . We do all the coolie work, earn and eat and we don't have any problems. They need Lamanis to do all their work. For cleaning toilets, for sweeping they need Lamani people. . . . they can't work on their own. Not all are bad, few are good and few are bad. They do *dadagiri*, we have gone to work there and not gone there to make it our own. So we work, eat, sleep and wake up in the morning and go to work.

People like Ranganna and Ramavva have no agricultural lands and have no option of

returning to the *tanda* and settling down due to limited opportunities. They continue to endure the discrimination and work to provide for their families.

Nobody there (in Goa) cares for people like us (Lamanis). They are very rough, talk rudely and if they beat us also, we have to bear it due to '*hottesmb-handha*' (to fill the stomach i.e food for daily living). It is not our village, '*hoddrehodthathinnabeku, badrubadthathinnabeku*' (If they beat also we have to bear, if they shout also we have to listen). We have to nod our head and keep quiet because if you question then they would fight, or something might happen. We don't want to get into problems.

– **Ramavva, 28 year old, Chara *tanda***

The *tandas* of the present are unlike the past where people have settled and built concrete homes. The only difference now is that the poverty within the *tanda* is masked by these concrete houses.

To look at we appear like people from the city, big people with jobs and businessmen but our situation is very very bad (eyes filled with tears), our future... our life we will carry on till where it leads. Our fate is bad. Whatever God is written we can't do anything to change it.

– **Ramavva, 28 year old, Chara *tanda***

Left behind families- Impact of migration on living arrangements

Large scale migration of people has an impact on the living arrangements for the children and elderly in the *tanda*. Those who migrate are young and middle aged men and women. Most often it is the men who migrate in search of work leaving the wife behind to take care of the elderly and children. The story of Ranganna mentioned in the beginning is common across the *tandas*. In some families the husband and wife migrate for work leaving behind the children with the grandparents. These children are enrolled in the anganwadi or primary school in the *tanda* or college in Gadag. If there are any toddlers, then the parents take them along. Few families with adolescents migrate as a family for sugarcane harvest in Mangalore as they earn more with extra hands. The burden of taking care of the children falls on the grandparents who are dependent on their children for financial support. Elderly persons who are independent in their activities of daily living are left in the *tanda* by their children to take care of the house and land. These elderly are taken care of by relatives in the *tanda* who provide them with food and take them to banks, post offices or health facilities when required. Children support them by sending money through relatives or bank transfers or through e-wallet which is

encashed with the help of relatives in the *tanda*. Looking at it from the perspective of the Banjaras, apart from the practical difficulties, the *tanda* is a safe place where people know each other, and relatives are always around to help in times of emergency. The elderly might find it difficult to adapt to a new place and their children don't earn much in the place of migration. This could probably be the reason for migrants to leave their parents and children in the *tanda*. Leaving the elderly behind has the consequence of leaving their needs unmet.

7.2.2 Aarogya- Health outcomes

House listing exercise done during ethnography provides an idea of the morbidity profile in both *tandas*. People were asked about the experience of the morbidity in the past one month and the care seeking for the same. About 17 percent in Vanapura and 12 percent in Chara *tanda* experienced some kind of acute or chronic morbidity and sought care for it. Table 7.2 shows the common ailments and the care options exercised for them. Almost half of the ailments were due to fever, cold or cough, which are acute in nature. This is more in Chara *tanda* when compared to Vanapura, which is disadvantaged due to lack of adequate source of safe drinking water. At the time of data collection, the community RO in Chara *tanda* was under repair and people depended on alternate water sources for consumption. Musculoskeletal pain in the form of back pain, neck pain and joint pain is the next common ailment and is a consequence of having to work hard and toil in difficult terrain. Agricultural work, in general, is high demanding, strenuous and demanding manual labour. Structural discrimination of *tandas* with its terrain, slopes and hard ground makes agriculture even more challenging and leads to physical stress. This in turn manifests as chronic musculoskeletal problem.

The occurrence of non-communicable diseases like hypertension, stroke, diabetes and heart ailments is higher in Vanapura than Chara *tanda*. People from Vanapura migrated during the early period to Goa and set up their own business, whereas migration from Chara *tanda* occurred much later. The main difference in the migrants as described by an elder in Chara *tanda* is that most of the people from their *tanda* work as manual labourers and are not restricted to Goa alone; while people from Vanapura are primarily businessmen. The elderly from Vanapura who had migrated in their younger days and

Table 7.2: Morbidity and care seeking for illness in Vanapura and Chara *tanda*, Gadag, 2018.

Morbidity Characteristics	Vanapura (n=57)	Chara tanda (n=115)	Total (n=172)
Ailments			
Acute illness (Fever, cough, cold, diarrhoea)	12 (21)	72 (62.6)	84 (48.8)
Musculoskeletal pain	20 (35.1)	20 (17.4)	40 (23.2)
Injury/animal bite	2 (3.5)	2 (1.7)	4 (2.3)
Infections	1 (1.7)	6 (5.2)	7 (4)
NCD	18 (31.6)	10 (8.7)	28 (16.3)
Cataract Surgery	4 (7)	0 (0)	4 (2.3)
Others	0 (0)	5 (4.3)	5 (2.9)
Care Seeking			
PHC	9 (15.79)	10 (8.7)	19 (11.05)
District hospital	21 (36.84)	8 (6.96)	29 (16.86)
BAMS	5 (8.77)	7 (6.09)	12 (6.98)
Private hospital/clinic	11 (19.3)	33 (28.7)	44 (25.58)
RMP	11 (19.3)	47 (40.87)	58 (33.72)
Self-medication/Did not seek care	0 (0)	10 (8.7)	10 (5.81)

returned to *tanda* are the ones who commonly suffer from non-communicable diseases. There are more people in Chara *tanda* involved in farming when compared to Vanapura, where the land has been leased out. The timing of migration, nature of work in the place of migration and in the *tandas* explain the prevalence of non-communicable diseases. The prevalence of different ailments cannot be attributed to characteristics of individuals and their health behaviours alone but also the various historical injustices that produce and reproduce socio-economic inequities that manifest as illness and the ability to recover from it.

7.2.3 ‘Family doctor’- Health care choices available

Primary Health Centres are referred to as the cornerstone of rural health services, the first point of contact of the people in rural areas to a qualified doctor. Although this seems true on paper, the reality is different in the *tandas*. These health centres don’t figure among the top two choices for seeking care for ailments, be it acute or chronic. Overall, the first point of care for curative services in *tanda* is the RMP or BAMS doctor located in the villages nearby. This is different in Vanapura, where most of them prefer

seeking care in the district hospital because of its proximity. Chara *tanda* is even more disadvantaged as almost 9 percent of the people with morbidity did not seek care or self-medicated at home. Health choices of the people in the *tanda* are shaped by the availability of care, availability of resources to seek care, availability of transportation - both public and private, perceived severity of the problem, perception of the quality of services and acceptability.

Gangamma is a 65-year-old widow living alone in Vanapura. Her two sons and their families stay in Goa and visit once or twice a year. She has a daughter who is widowed and stays in the same *tanda*. Previously she worked as an anganwadi helper and is now retired because of ill health. She gets a pension of about 500 rupees and some contribution from her children for daily needs, which is irregular. She suffers from diabetes mellitus, blood pressure, chronic musculoskeletal pain and also suffered a stroke in the past. She is independent and is able to carry out her own activities for daily living but depends on relatives nearby for food. She goes to the district hospital for regular follow up for diabetes and blood pressure and also gets injections for musculoskeletal pain. When the pain is severe and impairs her ability to walk, she seeks care from the RMP or BAMS doctor, depending on their availability in Guddadpur village. Previously she was consulting private providers in Gadag town for her chronic ailments and the cost was expensive. She started going to the government after a doctor from the Banjara community informed her about the benefits of similar medicines in the public sector being available free of cost. The only expenditure incurred is the bus charges and five rupees for registration. It is not convenient for her to go to District hospital every time the musculoskeletal pain flares up because of long waiting time and transportation, so she prefers going to the RMP or BAMS doctors in the village. Even though the district hospital is located in proximity, she has to take a bus from Vanapura, get down in Guddadpur village and walk up to the main road and catch another bus to the District hospital. The return bus is around 2 pm and she has to wait till then. If she has to visit the providers in Guddadpur village, she takes the morning bus, finishes consultation and waits in front of the clinic for someone travelling to the *tanda* so that she can get a ride back. Visiting these health providers is conditioned upon her receiving her pension or

contribution from children. There are times when she endures the pain and avoid seeking care due to lack of money. Recently she had received her pension and consulted the BAMS doctor the next day and administered two injections and prescribed medicines. She described him as a '*chelo*' (meaning good but implied as a skilled person and also good quality) doctor and known to her. She paid 100 rupees for the injections and bought half of the medicines that were prescribed as she wanted to see if it helps before buying more. She has been suffering for long and has lost track of the number of injections that she has got from the Government hospitals, BAMS doctor or the RMP. She kept her hand on the backside to indicate to me the formation of "*gantū*" (Bubble or a knot) as a mark of her suffering and the multiple injections received over time. This form of pluralistic care exists among many in the *tandas* and not unique to Gangamma or elderly like her. Below is a picture of another elderly person in the *tanda* who stay alone and is like Gangamma.



Figure 7.2: Elderly woman in the *tanda* with all the medicines prescribed

She showed me the different kind of medicines that has been prescribed to her over the

years. The medicines were mainly painkillers, paracetamol and steroids for the knee pain. One of the pouches had ayurvedic formulations. She has been visiting providers in the government, private and practitioners of traditional medicine, including massage therapy to be relieved of the pain. The visits to different providers are dependent on her children returning from Goa. She walks with much difficulty and unable to go out alone and depends on the injections of RMPs who visit the *tanda* for pain relief. She assumed that I was a RMP doctor and asked me if I had any good injections or medicines for the pain and this was the case with most of the elderly. She also suffers from Diabetes and Hypertension and takes regular medication without follow up. Her son-in-law who stays behind her house gets it monthly for her. Care seeking by Gangamma and the elderly person above is not a linear process. The choice of care is determined by the availability, acceptability, proximity and affordability and changes depending on the requirements or suggestion of relatives. This is similar in the case of the elderly who are married with children away in Goa. Both the husband and wife seek care together most of the time, but I noticed that this was not always true. Budappa and his wife suffer from diabetes and blood pressure. He regularly consults in the district hospital and has a small notebook for follow up care while his wife consults in the PHC for medication and she has a slip which she carries during every visit. PHC staff advised her to seek care in District hospital as her parameters were not getting controlled, but she refused. They don't own vehicles and travel by bus on separate days as they have the responsibility of taking care of their grandchildren who can't be left alone. Muthamma is another elderly person who visits the PHC monthly to get medications for blood pressure and visits District hospital only when her son comes from Goa. She, like Budappa's wife prefers getting medicines from the PHC because of long waiting time and difficulty in navigating the district hospital. This could also be because of the intimidating atmosphere in the district hospital. Even though they seek care in the PHC or district hospital for NCD care they visit the RMP for ailments like fever, cough, cold and musculoskeletal pain. The story is different for the elderly who have their children in the *tanda* and own vehicles. Barriers due to difficulties in transportation are overcome by the use of own two-wheelers or four-wheelers. One of the elders in Vanapura who stays next to the Sevalal temple showed me his small notebook for monitoring diabetes and blood pres-

sure given to him in the district hospital. He is regular for follow up and is accompanied by his son who drives him during visits, or he goes alone by bike. He doesn't go to the RMP or BAMS doctor and always consults in private hospitals in Gadag town. He prefers the government hospital for NCDs as he perceives the medicines to be good and able to achieve control of parameters. His wife has health problems related to thyroid and they regularly consult in a private hospital in Hubli. Being well off economically enables him to seek care in private hospitals. There are very few families like his who have escaped the disadvantages imposed by structural discrimination, have fertile lands and children well settled in other districts with government jobs. Because of this they are able to seek care in private clinics and hospitals. He had consulted the RMP in the past but stopped visiting after his relative, the young girl who was treated by the RMP died. There are many elderly people like Dhamalappa Pujar whom I mentioned above, with decreased mobility or bedridden who depend on the RMPs who visit. There are occasional visits by personnel from the public health system, but it is usually for preventive health and not curative. The role of the RMP becomes very important as the people are able to get service at their doorstep, thus removing the barriers in seeking care that is forced upon the Banjaras.

Most of the families refer to the RMPs as family doctor and this is very common in Chara *tanda*. One of the well to do families in Chara *tanda* told me that barring children the entire family seeks care from Basappa, the RMP in Chara village. The reason stated was that he has been working as a provider when no hospitals existed and continues to provide the same kind of services. They were being protective of the provider and were hesitating initially to reveal details about him. Seeking care from RMPs is not restricted to the elderly alone but even for children as young as 2-3 years. However, this is commonly seen among the poor in the *tandas* who don't have the means to consult in private clinics. This is also influenced by the belief that injections would cure the child faster than medication and only RMPs would administer it. Perception of the severity of the ailment also influences the care seeking for ailments.

For minor illness like fever, cold, cough and body pain we show it to the local doctor (referring to RMPs). Major illness like typhoid, diarrhoea, malaria we go to the government hospital in the village (PHC).

– Ramanna, 62 year old, Chara *tanda*

The RMPs are seen as those providing basic medical services, which ideally should be the role of the PHC in the community. Perception of the government as centres for typhoid, diarrhoea and malaria is because of the treatment with injections and saline bottle. There is not much trust in the medicines supplied but the injections and saline bottle are perceived to be of high quality. This perception has got to do with an incident involving the entire *tanda*. In 2013 there was an outbreak of dengue and chikungunya in Chara *tanda* and almost all fell sick. During that time the government had set up camps in the community hall, primary school and anganwadi and treated them with saline bottle. Post this incident, lot of changes happened in the *tanda*. A new water tank was installed, and the local MLA built a community RO water purifier as the illness was attributed to the pond from where people drink water. Response of the public health system and having experienced the ‘power’ of saline bottle made people to visit the PHC for similar ailments and for care seeking in general. This incident is a reminder of how the people start trusting the public health system when it is seen as proactive and catering to the needs of the people in the *tanda*. For people in the *tandas*, if anyone suffers from minor ailments and those bedridden and difficult to take to a health facility, the choice of provider is the RMP. In the case of typhoid, malaria, dengue, diarrhoea or any other condition that would improve by connecting ‘*botli*’, antenatal care and NCD medication the preferred choice is the PHC. They go to district hospital or private centres in Gadag town for specialist care, childbirth and care seeking for infants. For super speciality care people travel to Hubli and consult there in the government or private sector. Hospitalisations for super speciality care is expensive and leads families into a debt trap. Javlavva who is in her late 40s was suffering from severe back pain that restricted her ability to stand or work for long. Reeling from crop failure, one of her sons in his early 20s went to Goa to work and support the family. The other son has finished his postgraduate studies and stays in Dharwad preparing for competitive exams for job. She consulted in the district hospital and private hospital and an MRI scan revealed a severe disc prolapse as the cause of pain. She was referred to a neurosurgeon in Government medical college, Hubli as there are none in Gadag. Having had to wait for long time there and lack of response from the staff, her son got her admitted in a private hospital. The neurologist there informed that she requires surgery and would

cost around 80,000 to 1,00,000 rupees. The family emptied whatever savings they had and arranged for the remaining money by taking loans from private lenders who lend for agricultural activities. Simultaneously, her son tried to get a backdated government health insurance and spent 6000 rupees in bribe for it. The surgery was completed, and the insurance card came through on the third day and the hospital refused to reimburse the money as they should have been informed before the surgery occurred. They paid the remaining amount and came back to the *tanda*. When I spoke to her about paying off the loan she replied saying

This is our '*hane bara*' (meaning fate), my younger son is already working in Goa and he will send money and we can pray and ask God that there is good harvest in the coming year so that we can pay off this loan and the previous loan taken for digging borewell.

– Javlavva, aged above 40, Chara *tanda*

I visited her three months later and she was looking much better and no longer in pain but rued the inability to go to the field and work. Historical discrimination continues to pervade and influence the health outcomes and care seeking for Banjaras.

7.2.4 Small disease, RMP; Big disease, Government hospital- Consequences for Care seeking

Discrimination can be viewed in multiple ways as discussed in the earlier chapters. When it comes to accessing care, it could manifest as an outcome i.e the place where care was not sought. To illustrate it with an example, an individual sought care at a government health facility for an ailment. The experience during the visit was so bad that the person was made to feel belittled. For subsequent health problems, they visited the private providers in their vicinity. The discrimination experienced at the government health facility causes them to seek care elsewhere. As a researcher, it was practically difficult to ask people for their experiences of discrimination because for most of them it existed in the past but not in the present. This could also be a way of denying or coping with the discrimination experienced as their narratives of experiences point towards discriminatory behaviour by the system.

Rachnappa's son is studying in 7th standard and stays at a hostel in the neighbouring taluka. While on his holiday, he started developing rashes with boils all over the body.

Since he was away, his wife took him to the RMP in Guddadpur village, who prescribed medicines and advised to wash the area regularly for two weeks. After they returned, he developed fever and the rashes started increasing. The next day his wife, her brother and father took the morning bus and went to the district hospital. Got the appointment of the paediatrician and had to wait for their turn, not allowed to see out of turn considering the nature of the illness. The brother who accompanied them tried telling the paediatrician that the boy is serious, but he shouted back at them saying many of the patients give the same excuse and made them wait. Later he examined them and asked them to get admitted in the ward. He was administered saline bottle and injections through that. The mother went to inform the nurse that the saline bottle is over and the need for it to be stopped or changed. The nurse who was on duty went along with them and showed them how to close it and told them not to disturb them for these small things. The other nurse on night duty shouted at them for informing about the saline bottle and told them to wait patiently. Their experience with the staff nurses was unpleasant and only one person treated them properly and attended to them when called.

“There was only one nurse who was posted there told me to call her when the botli is empty and that she would come and change it. One among ten would say that”

The next day the boy was administered injections and immediately he developed reactions to it and body started to swell. The doctor was called and by the time he came the boy stopped speaking and didn't open his eyes. The doctor examined the boy and told the parents that they have done everything possible and he is not responding to treatment. Since there is no intensive care facility at that hospital he asked them to take him Government medical college in Hubli. Because of the unpleasant experience in the government hospital, they refused to go to the one in Hubli and instead took him to a private hospital in Hubli. The boy was admitted there and he recovered in three days and was discharged. They described the care in the private hospital as “*Chelo*” and the one in government as “*kalagimaadi nodangilla*” (meaning they don't treat with care). Post this incident Rachnappa and his family decided never to visit government hospital and even recently for a minor ailment of his daughter, he took her to the same private hospital in Hubli. He also expressed their helplessness in having to go to the government hospital

in times of emergency as that is the facility located close by.

Experiences of discrimination or being treated unfairly cause people to seek other options for care seeking. This event of Rachnappa could be the experience of any Banjara or non-Banjara and can be flagged as an isolated event but it has implications for their health and care seeking. Discriminatory practices of the past may not be overt and current but manifest in different ways. The 'othering' of Banjaras in the community continues in the health system which is a part of it. The different labels attributes to the *tandas* are that it is a 'slum area', people there are 'dirty', 'chronic alcoholics', 'smokers', 'rough people', 'importers of malaria', 'troublesome people' to name a few. This kind of behaviour influences the practices of the provider as well as the health system. It also adds on and continues to perpetuate the stigma that exists. One of the staff in the PHC had constructed an image of the Banjaras as the 'other'

Banjaras are dirty people; they don't take bath and don't maintain cleanliness. They don't wash their clothes, because of this they fall sick very often.

– PHC staff, April 2018

Such a construction of the Banjaras as the 'other' influences practices that leads to further disadvantage. The medical officers in the PHC ask extra questions to Banjaras to find out if anybody in the *tanda* had returned from Goa or if anybody in the surrounding houses is suffering from fever or joint pain. There is no problem in such line of questioning as it aids in diagnosing accurately. This line of questioning becomes discriminatory when it is asked only to Banjaras because of the image of the 'Other' that is constructed. There was an outbreak of dengue in a village close to the PHC but extra questioning related to it was done only for the Banjaras. The medical officer even admitted to me that while questioning the Banjaras he has an image of the disease or ailment to be of infective in nature. This influences treatment protocols and lead to prescription of higher dose of antibiotics or medications that is not required and thus maintaining a status quo with regards to existing discriminatory processes. The outbreak in Chara *tanda* that happened in 2012 was a point of inflection that helped the people to engage more with the public health system. This also created a distrust related to functioning of the system as the health system is viewed as those who come when there is an outbreak, but their presence is not visible when trying to prevent one. The behaviour of the

health workers also supports this view. Rampur PHC is understaffed including the field workers and the health worker compromises on the visit to the *tanda* due to increased workload. This is not only the problem of the field staff but also that of the official higher to him, the MO. The skipping of Chara *tanda* during the field trip attests to this. This is not the case in Vanapura as the health worker is from the community and there is a certain rapport that exists and there is better engagement with the government health system. When the female health worker for Sub-centre 3B was posted for the *tanda* 12 years back there was no Sub-centre building. She and her family were given accommodation in Sub-centre 3A in the village since the health worker for that Sub-centre was travelling from the town daily. She remembers her experience during that time of people not visiting the Sub-centre:

For one year we stayed in the quarters in the village along with my family. That time people used to go to him (RMP) even though I was there in the village. I was new that time, so many people did not come to me but I have gone to the house and conducted delivery. During that time there were only home deliveries and still many people didn't come to me. So, I went and told our Medical Officer that it is no point for me to stay in the quarters because the people were not coming to me. The *tanda* was far from our quarters and at any given time they go to the RMP doctor only. Even if they have fever they don't come to me for medicines or blood slides. Only when I visit them in their house, I have to give them the medicines or take sample for blood slide. If our quarters was located there then it would have been of some use so we left the quarters and came here (near town). Then they gave a room there and people were happy, they know that our sister would be here the whole day and they started coming there

– **Female Health worker, Subcentre 3B**

The absence of the public health system was the reason for the people there and surrounding *tandas* to seek care from RMPs. Even though the female health worker belonged to the same community, the people continued to visit RMP. The possible reason for this could be the people there felt neglected by the public health system and trusted the RMPs more. This situation changed when a small building in the *tanda* was converted to Sub-centre and people started visiting for different health issues. When the health system actively caters to the needs of the *tandas* they trust the system more and utilise it effectively. The sad part is the new building has been ready for the past two years but yet to be inaugurated.

In the narrative of the people, they describe the word '*chelo*' to refer to doctors or

facilities which are skilled and provide treatment with care. This term is never used to describe the doctors or the health workers in the public health system but the *botli* and injection are *chelo*. The process of 'othering' that is historic and continues with the various structures operating in the *tandas*. This does not allow the Banjaras to recognise or challenge these structures or discrimination that is practised.

7.3 'Hane Bara'- Learning to live with discrimination

The health outcomes and consequences for care seeking as an end result of discrimination are rarely recognised by the Banjaras and so the resistance to it does not develop. Very few people like Rani in Chara *tanda* explain the lack of leadership and unity among the Banjaras to demand for a change at a macro level.

Other caste groups have a strong leadership but we feel there is gap in leadership among us because in our community once we vote for a particular party we continue to vote for them next time... but we will not vote a leader from among us. There is also a problem of unity so even if we protest it is not taken seriously. Assuming we are just 30 percent people, what will we get out of protesting. Protest will remain a protest and we will get nothing out of it.

– **Rani, Chara *tanda***

Rani along with the elected representatives, tried to get a health centre and a veterinary centre in Chara *tanda* but since they didn't have any political backing and the numbers are not on their side, the request was turned down. Banjaras find ways to live with the everyday discrimination by the structures that pervades their lives. A health official in one of the PHCs in a very patronising tone told me that people in the *tanda* make use of all the schemes and facilities provided by the government and demand for what is due to them. This may be true in terms of getting benefits for farming, housing and essentials for daily living through their elected representatives but sadly, this is lacking in matters related to health. There is no collective resistance or a demand for change in matters related to health. It only occurs when the discriminatory practices have adverse consequences on the health of individuals. This is seen in the case of the young girl who died after being treated by the RMP and the entire *tanda* went to his house, protesting and threatening to complain to the police. Thukaram, an elder in Vanapura, has regularly handled cases where people have called him complaining about the unfair treatment in government hospitals. He goes with a group of people and questions the providers

directly and if they don't respond, make calls to people known to them to resolve the issue. Unless the Banjaras are viewed as one among us and not the 'other', the 'othering' process will ensure that the existing structures are maintained and continue to perpetuate the discrimination that was historic.



CHAPTER 8

Infrastructure in *Tandas* and Villages

This chapter will partly address the third objective of the thesis, which is to evaluate the impact of possible discrimination experienced by the Banjaras on their health, health care access and utilisation. I will examine the differences between *tandas* and villages in terms of the available infrastructure. This will enable a determination of consequences of discrimination at the settlement level as the availability of infrastructure at the settlement level can affect an individual's ability to access and utilise appropriate health. This analysis would not be restricted to domains of health alone but also to other allied infrastructure that directly and indirectly impacts health. This chapter is divided into four sections. The first section describes the geographical distribution of *tandas* in Gadag district and their pattern of segregation. The second section will compare the physical, transport, education and health infrastructure of all the identified *tandas* in the district with the villages associated or in proximity to them. In the third section, I will make the same infrastructural comparisons for the *tandas* and villages selected for the sample survey. The fourth section describes the findings of the discriminant analysis undertaken to identify the variables that contribute to distinction across sample villages and *tandas*.

8.1 Geographical distributions of *tandas*

As per the official record of Karnataka Thanda Development Corporation (KTDC) there are 79 *tandas* spread across different talukas in Gadag district. The *tandas* were visited to physically verify the location and map the infrastructure. Efforts were made to ask the residents about location of other nearby *tandas*. Totally 64 out of 79 listed *tandas* were identified, with most of them being located in the southern parts of the district (See Figure 8.1).

Currently, there are seven talukas in Gadag district, two were newly formed out of Shi-

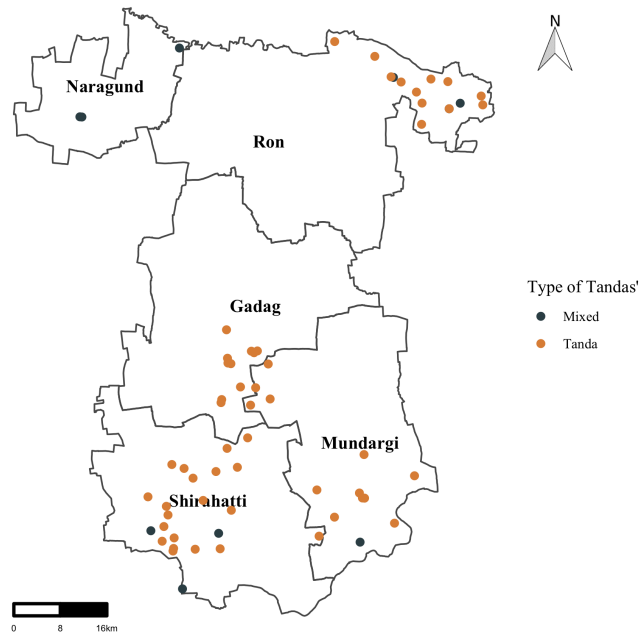


Figure 8.1: Geographical distribution of *Tandas* in Gadag district

rahatti and Ron talukas, namely Lakshmeshwar and Gajendragad. During the duration of the study, the boundaries were yet to be demarcated and hence the result has been presented for only five talukas. Shirahatti taluka has the highest number of *tandas*, followed by Ron, Mundargi, and Gadag. Nargund taluka has the least number of *tandas* (See Table 8.1). Four *tandas* are located within municipality jurisdiction with two each in Nargund and Ron talukas.

8.1.1 Settlement pattern of *tandas*

In chapter 5, I had described the general organisation of *tandas* in relation to the village. However, this is not uniform across all the *tandas* in Gadag district. Broadly the type of *tandas* can be categorised into mixed settlement and demarcated *tanda* (Figure 8.1). In mixed *tandas*, the dwelling of Banjaras is located among the residential areas of other caste households. The segregation in this type of settlements is invisible. These are dwellings commonly located in the 'plot' area of the village or on land allotted by the government for constructing houses. The number of dwelling units of Banjaras in mixed settlements would range from three to twenty households. In demarcated *tandas*, there is a visible segregation that separates the *tanda* from the village. The segregation is in

Table 8.1: Location and settlement pattern of *tandas* in Gadag district

Characteristics	N (%)
Taluka	
Gadag	10 (15.6)
Mundargi	14 (21.9)
Nargund	3 (4.7)
Ron	15 (23.4)
Shirahatti	22 (34.4)
Settlement Pattern	
Corresponding Village	43 (67.2)
Mixed	11 (17.2)
Standalone	10 (15.6)
Total	64 (100)

the form of a street or a compound wall that separates the *tanda* from the village. In most of the settlements, the *tanda* is located at a distance from the village, which ranges from few meters to 2-3 kilometres. Demarcated *tandas* can either be a standalone *tanda* or a *tanda* that takes the name of the closest village. Both are similar in terms of their segregation, but the difference is in their origins and naming of the *tandas*. Standalone *tandas* are usually named after the *Naika* or have a distinct name that is not related to any of the surrounding villages. For example, Muniyan *tanda* in Shirahatti taluka is named after the *Naika* who settled in that place. Different patterns of segregation exist in *tandas* that take the name of the village close to them. About 67 percent of the *tandas* belong to this category (see Table 8.1). They are administratively attached to a village and identify as being part of the village as it is reflected in the name but are distinct in terms of location. Standalone *tandas* form about 15.6 percent of the *tandas* but are considered along with nearby villages for administrative purposes. Mixed *tandas* form about 17 percent of the *tandas*. Fifteen *tandas* from the list given by KTDC could not be identified as they are likely to be mixed settlements with few households of Banjaras. Even if there were around three Banjaras households in a particular area, it was counted as a *tanda* in the official records.

8.2 Characteristics of *tandas* and villages in Gadag district

Infrastructure was mapped for all the *tandas* and mixed settlements identified in Gadag district along with the villages that the *tandas* are a part of. In the case of standalone *tan-*

das, the village that is geographically located close to it was selected for mapping. This was done to enable comparison of the infrastructure across these settlements. Overall, 11 mixed settlements, 53 *tandas* and 45 villages were mapped for comparisons. Some of the *tandas* mapped had a common village in proximity to it and the village was mapped, hence the difference in the numbers between the *tandas* and villages mapped. For example, Guddadpur *tanda* is administratively part of Guddadpur village but these villages are also proximal, geographically to *tandas* of Vanapura and Bettadpura. The mapping was done for these three *tandas* and Guddadpur village.

Characteristics of the settlements have been divided into physical infrastructure, transport infrastructure, education infrastructure and health infrastructure. These characteristics are compared across mixed settlements, *tanda* and village.

8.2.1 Physical infrastructure of *tandas* and villages in Gadag district

Overall, the villages have better physical infrastructure when compared to mixed settlements and *tandas* (see Table 8.2). Roads are an important component for connectivity to access various goods and services. The different types of roads presented in the table are not mutually exclusive as a settlement can have different types of roads. Almost 46 percent of the mixed settlements have paved roads when compared to *tandas* (28.3%) and villages (35.6%).

Close to 13 percent of villages and *tandas* have paved roads which have not been maintained. Villages (75.6 %) have a greater proportion of mud roads when compared to *tandas* (66 %) and mixed (63.6 %) settlements.

More than 90 percent of all three types of settlements have concrete roads. Water and sanitation are important determinants of health of individuals and communities. Coverage of toilets, which is an important component of sanitation, was not captured at the settlement level due to lack of data but is collected at the individual level in the quantitative survey and described there. Different sources of water are available for the purpose of drinking and daily use. The main source of water is through borewell, government supply and community RO plant for the purposes of clean and safe drinking water. More than 70 percent of the settlements have both borewell and government supply through

Table 8.2: Comparison of physical infrastructure across mixed settlements, *tandas* and villages in Gadag district

Characteristics	Mixed (n=11) N (%)	Tanda (n=53) N (%)	Village (45) N (%)	Total (n=109) N (%)
Roads¹				
Paved Roads	5 (45.5)	15 (28.3)	16 (35.6)	36 (33)
Paved (Not maintained)	0 (0)	7 (13.2)	6 (13.3)	13 (11.9)
Mud Road	7 (63.6)	35 (66)	34 (75.6)	70 (69.7)
Concrete	11 (100)	49 (92.5)	43 (95.6)	103 (94.5)
Water Supply				
Borewell + Govt supply	8 (72.7)	37 (69.8)	34 (75.6)	79 (72.5)
Only Borewell	3 (27.3)	10 (18.9)	9 (20)	22 (20.2)
Only Govt Supply	0 (0)	5 (9.4)	2 (4.4)	7 (6.4)
None	0 (0)	1 (1.9)	0 (0)	1 (0.9)
Drains				
Katcha Open	10 (90.9)	46 (86.8)	41 (91.1)	97 (89)
Pucca covered	1 (9.1)	5 (9.4)	6 (13.3)	12 (11)
No drains	0 (0)	8 (15.1)	4 (8.9)	12 (11)
Community RO	10 (90.9)	42 (79.3)	43 (95.6)	95 (87.2)
PDS	5 (45.5)	20 (37.7)	29 (64.4)	54 (49.5)
Veterinary centre	5 (45.5)	6 (11.3)	9 (20)	20 (18.4)
Milk society	4 (36.4)	8 (15.1)	25 (55.6)	37 (33.9)
Bank	4 (36.4)	3 (5.7)	9 (20)	16 (14.7)
Post office	4 (36.4)	6 (11.3)	21 (46.7)	31 (28.4)

¹ The percentages will not add up to 100 because a settlement can have more than one category

pipeline. Not much difference is observed except the *tandas* are more likely to have water supplied by government pipeline when compared to villages. Differences are seen in the presence of community RO units with 80 percent of the *tandas* having a unit as opposed to mixed settlements and villages (91 % and 96 %). Common drains across the three settlement types are the katcha or the open variety and the village is more likely to have pucca drains when compared to *tandas* (13.3 % vs 9.4 %). Fifteen percent of the *tandas* do not have any drainage facility when compared to 9 percent in villages. The mixed settlements are advantaged as they have some form of drainage facility. Public Distribution System (PDS) is important to the rural economy for food security and the *tandas* are disadvantaged as only 38 percent of them have a facility located within when compared to 64 percent in villages and 46 percent in mixed settlements. The remaining

Table 8.3: Comparison of Public transport infrastructure across mixed settlements, *tandas* and villages in Gadag district

Characteristics	Mixed (n=11) N (%)	Tanda (n=53) N (%)	Village (45) N (%)	Total (n=109) N (%)
Bus Stop				
Yes	8 (72.7)	40 (75.5)	43 (95.6)	91 (83.5)
Only hand wave ¹	0 (0)	1 (1.9)	0 (0)	1 (0.9)
Bus Shelter (if bus stop)	5 (45.5)	21 (39.6)	29 (64.4)	55 (50.5)
Bus Frequency (if bus stop)				
1 time in a day	0 (0)	5 (11.9)	5 (11.6)	10 (10.9)
2-6 times per day	2 (25)	18 (43.9)	14 (32.6)	34 (37)
>7	6 (75)	18 (43.9)	24 (55.8)	48 (52.2)

¹ Not a scheduled stop for buses but they stop upon request

tandas depend on PDS centres in nearby settlements. In an economy that is dependent on agriculture and allied agriculture the presence of veterinary centre and milk society makes a lot of difference. Mixed settlements are advantaged in terms of having a veterinary centre located with 46 percent of the settlements having them. More than half the villages have a milk society and the *tandas* are disadvantaged as only less than 15 percent have a milk society and veterinary centre (11 %). Access to banks and post offices are important for *tandas* especially for elderly, for their pension and remittances by migrant family members. Almost one-third of the mixed settlements have a bank located within the settlement when compared to *tanda* (6%) and village (20%). Close to 50 percent of the villages have a post office and compared to only 11 percent of *tandas*.

8.2.2 Public transport infrastructure of *tandas* and villages in Gadag district

Tandas and mixed settlements are disadvantaged in terms of access to public transportation as only three-fourths of them have a bus stop (see Table 8.3). Almost all the villages (96 %) have a bus stop located in the village. Those without bus stop have to walk a distance to the nearby settlement or road to access public transportation. Even among the settlements with bus stop only 40 percent of *tandas* have a bus shelter when compared to 46 percent in mixed settlement and 64 percent in villages. Frequency of buses in *tandas* is poor as less than 50 percent of them have services more than seven times in a day.

Table 8.4: Distribution of Education infrastructure across mixed settlements, *tandas* and villages in Gadag district

Characteristics	Mixed (n=11) N (%)	Tanda (n=53) N (%)	Village (45) N (%)	Total (n=109) N (%)
Anganwadi	11 (100)	52 (98.1)	45 (100)	108 (99.1)
Public Educational Institutions¹				
Primary school	11 (100)	47 (88.7)	45 (100)	100 (91.7)
Middle school	7 (63.6)	22 (41.5)	34 (75.6)	63 (57.8)
Secondary school	5 (45.5)	5 (9.4)	15 (33.3)	25 (22.9)
PU college	4 (36.4)	1 (1.9)	3 (6.7)	8 (7.3)
Degree college	3 (27.3)	1 (1.9)	1 (2.2)	5 (4.6)
None	0 (0)	6 (11.3)	0 (0)	6 (5.5)

¹ The percentages will not add up to 100 as a single settlement can have multiple public educational institutions

8.2.3 Educational infrastructure of *tandas* and villages in Gadag district

Almost all the settlements have an anganwadi except in one *tanda* where there are only five households (see Table 8.4). All the villages and mixed settlements have a primary school, whereas 11 percent of the *tandas* don't have a school. The proportion of settlements with educational facilities beyond a primary school is the lowest in *tandas* when compared to mixed settlements or villages. Even the single *tanda* with a Pre-University college and degree college is because it is located within municipality limits. Otherwise, none of the *tandas* have public educational facilities beyond Secondary school.

8.2.4 Health infrastructure of *tandas* and villages in Gadag district

There was near universal coverage of villages with respect to having a resident ASHA (98%); when compared to *tandas* (85%) and mixed settlements (73%). Although the presence of public health facilities is determined by the population size, these facilities are less likely to be located within the *tandas*. Only 9 percent of the *tandas* have a Sub-centre within the settlement as most of them are located in the villages (see Table 8.5). A similar pattern is observed with PHCs with none of them being located in the *tandas*. The average distance from the settlement to PHC is similar across villages and *tandas* (8 kilometres) but the mixed settlements are located within 4-kilometre distance (see Table 8.6).

Table 8.5: Distribution of Health infrastructure across mixed settlements, *tandas* and villages in Gadag district

Characteristics	Mixed (n=11) N (%)	Tanda (n=53) N (%)	Village (45) N (%)	Total (n=109) N (%)
ASHA	8 (72.7)	45 (84.9)	44 (97.8)	97 (89)
Public Facilities				
Sub-centre	0 (0)	6 (11.3)	14 (31.1)	20 (18.4)
PHC	0 (0)	0 (0)	4 (8.9)	4 (3.7)
Ayurvedic dispensary	2 (18.2)	1 (1.9)	4 (8.9)	7 (6.4)
Private Facilities				
Pharmacy	4 (36.4)	2 (3.8)	9 (20)	15 (13.8)
BAMS clinic	4 (36.4)	4 (7.5)	8 (17.8)	16 (14.7)
RMP clinic	5 (45.5)	8 (15.1)	20 (44.4)	33 (30.3)

Table 8.6: Average distance of PHC from settlements in Gadag district

Characteristics	Mixed	Tanda	Village	Total
Distance to PHC				
n	11	53	41	105
mean (SD)	3.9 (3.5)	8.4 (5.7)	8.3 (5.7)	7.9 (5.6)
Range	0.5 - 10.2	0.8 - 23.2	0.9 - 21.4	0.5 - 23.2

8.3 Characteristics of selected *tandas* and villages in Gadag district

Infrastructural mapping of all *tandas* and the villages closest to them was done and from this, thirty *tandas* and their associated villages was selected for the survey. The selection of *tandas* was based on the distance of the settlement from the nearest PHC. The details of the sampling procedure and selection of settlement are described in Chapter 3. Overall, 30 *tandas* and 28 villages were selected. Two villages were sampled twice as they had an associated *tanda* and also were proximally located to two standalone *tandas* selected for the survey. The distribution of the selected *tandas* by talukas, infrastructure between the selected *tanda* and village have been compared and presented below.

8.3.1 Selection of the *tandas* and villages

A sampling frame was prepared based on the information collected from the infrastructure mapping of settlements. This frame and the details collected were analysed and the details have been presented in the previous section of this chapter. *Tandas* with less than 30 households and mixed settlements were excluded from the sampling frame as

Table 8.7: Location of selected *tandas* by taluka in Gadag district

Characteristics	Overall N (%)	Sampling frame N (%)	Selected n (%)
Taluka			
Gadag	10 (15.6)	9 (18.4)	6 (20)
Mundargi	14 (21.9)	9 (18.4)	6 (20)
Nargund	3 (4.7)	1 (2)	-
Ron	15 (23.4)	10 (20.4)	6 (20)
Shirahatti	22 (34.4)	20 (40.8)	12 (40)
Total	64 (100)	49 (100)	30 (100)

we needed 10 respondents aged 50 and above from each settlement. Forty-nine *tandas* formed the sampling frame from which 30 *tandas* were selected. The selected *tandas* across talukas are proportionate to the distribution of settlements in the sampling frame, ensuring representation (See Table 8.7). The villages close to the *tandas* were included to enable comparison across the settlements. Figure 8.2 shows the geographical distribution of the selected *tandas* and villages. In Ron taluka, the *tandas* are located very close to the villages when compared to Gadag, Shirahatti and Mundargi. Residential segregation is very stark in these talukas. The sampled *tandas* in Ron taluka are located near the village and separated by a road or boundary wall.

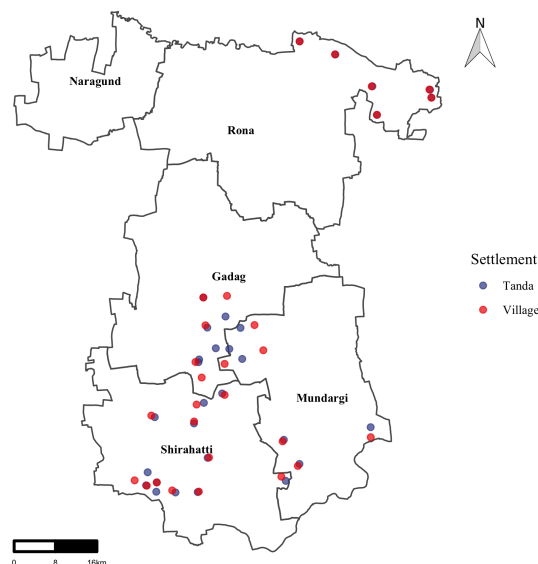


Figure 8.2: Geographical location of selected *tandas* and villages in Gadag district

8.3.2 Physical infrastructure of selected *tandas* and villages in Gadag district

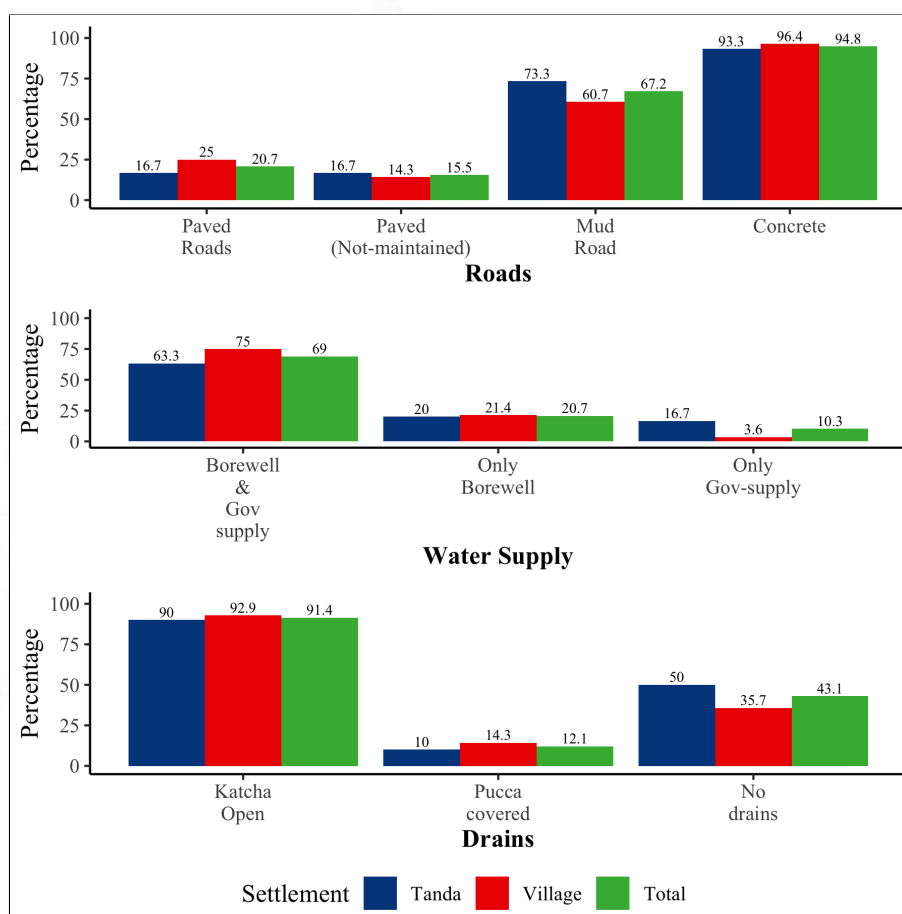


Figure 8.3: Distribution of Roads, water supply and drains across selected *tandas* and villages in Gadag district

Similar to the overall pattern, the sampled villages have better physical infrastructure when compared to *tandas*. *Tandas* are less likely to have paved roads (16.7% vs 25%) and more likely to have mud roads (73.3% vs 60.7%). The presence of concrete roads is similar across villages and *tandas* (see Figure 8.3).

Close to 63 percent of the selected *tandas* have both borewell and government supply of water for drinking and daily needs, which is lower than the selected villages (75%). Equal proportion of *tandas* and villages have borewell as the only source of water supply. Around 17 percent of the *tandas* depend on only government supply of water for their daily needs. This dependence is low in villages (4%). Close to half the *tandas* have areas within the settlement with no drains for wastewater and they are worse off

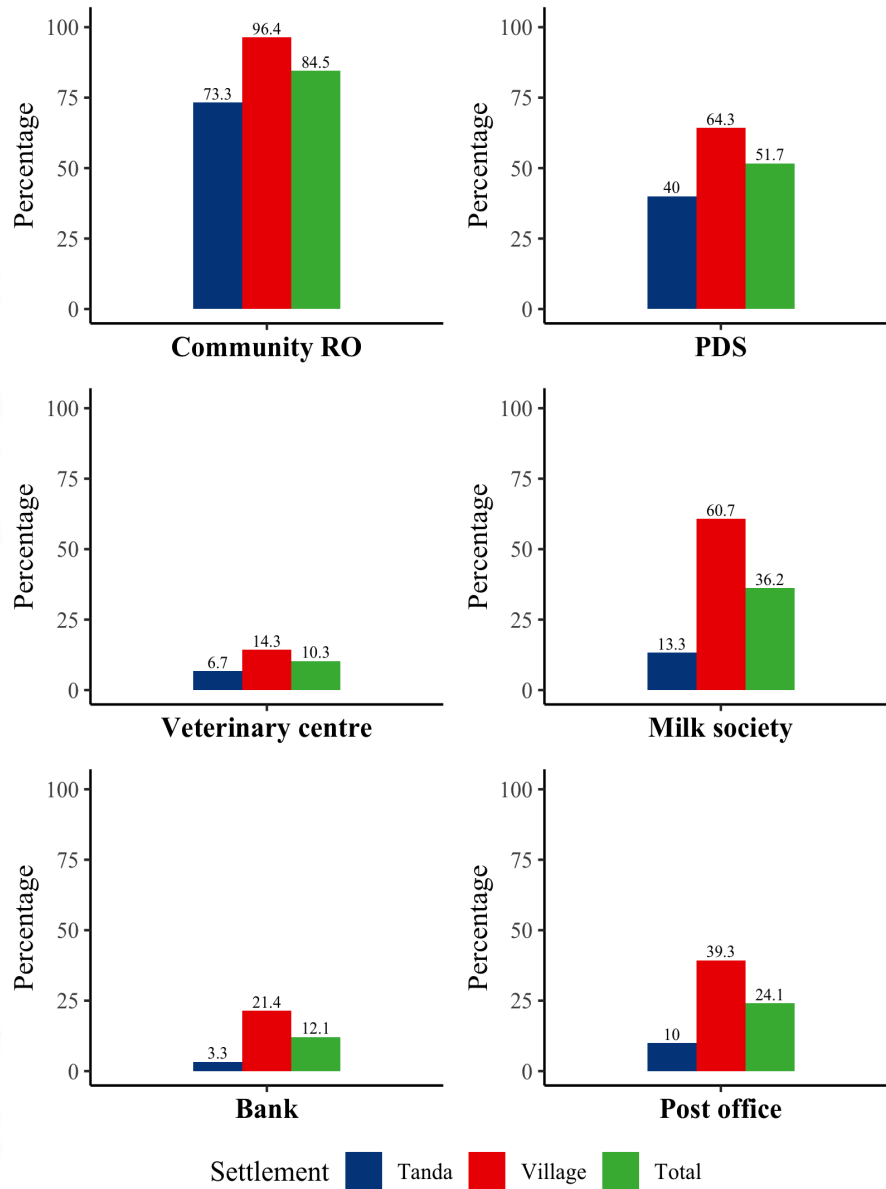


Figure 8.4: Comparison of other physical infrastructure across selected *tandas* and villages in Gadag district

when compared to villages (36%). Proportion of *tandas* and villages with areas having open drains is almost similar (around 90%). Villages are more likely to have pucca or covered drains than *tandas* (14% vs 10%).

Disadvantage observed in type of water supply is reflected in the presence of community RO water unit in the *tandas*. Only 73 percent of the *tandas* had a community RO unit compared to coverage being near universal in the villages (see Figure 8.4). Similarly, the presence of PDS, veterinary centre and milk society is found in less proportion in the *tandas* when compared to the villages. Similar to the overall picture, banks (21% vs 3%) and post offices (39% vs 10%) are more likely to be located in the villages than the *tandas*.

8.3.3 Public transport infrastructure of selected *tandas* and villages in Gadag district

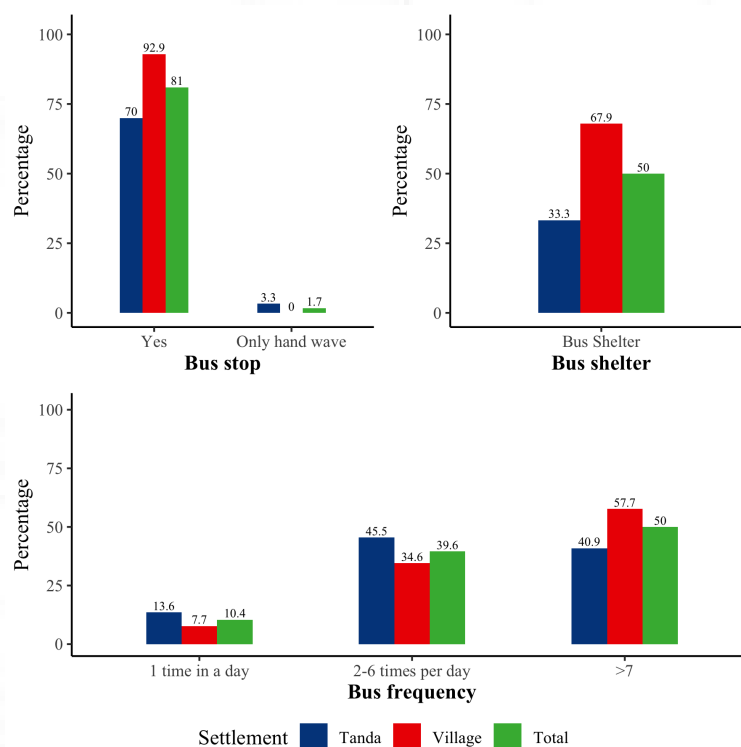


Figure 8.5: Distribution of public transport infrastructure across selected *tandas* and villages in Gadag district

Seventy percent of the selected *tandas* have a bus stop in or near the settlement compared to 93 percent in the villages (Figure 8.5). A similar pattern is also observed in the

presence of a bus shelter and the frequency of bus services. Among the settlements with a bus stop only 33 percent in the *tandas* have a bus shelter as opposed to 68 percent in the villages. In terms of bus services, close to 60 percent of the *tandas* have around two to six bus services per day. Among these, 14 percent of the settlements have just one bus service in a day compared to 8 percent in the villages. The villages are better off, with 68 percent of them having more than seven bus services per day compared to 41 percent in the *tandas*. This has implication for accessing healthcare and will be discussed in detail in the next chapter.

8.3.4 Educational infrastructure of selected *tandas* and villages in Gadag district

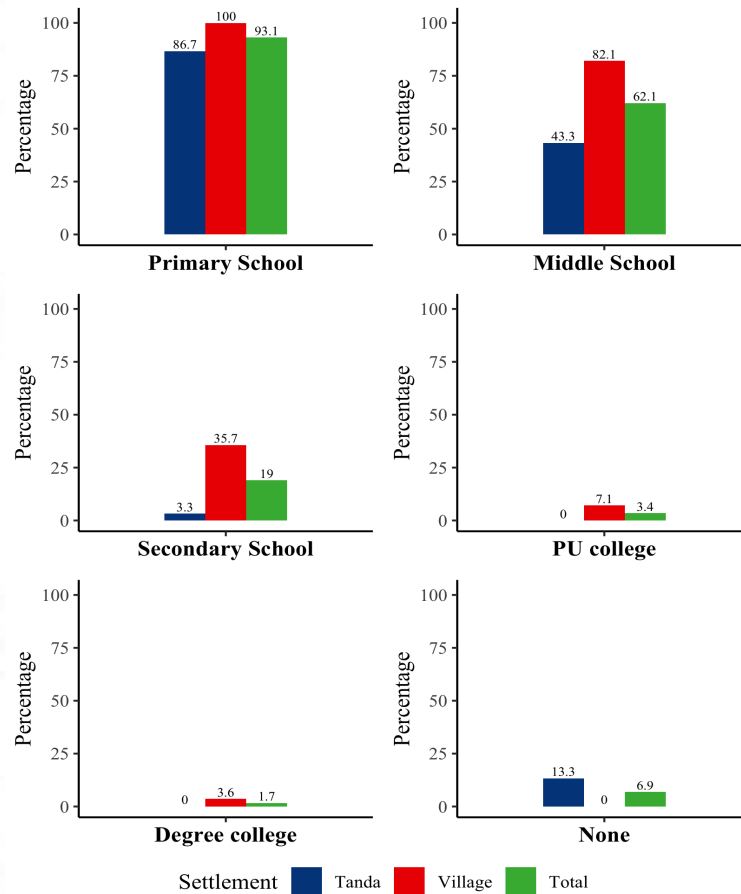


Figure 8.6: Comparison of educational infrastructure across selected *tandas*' and villages in Gadag district

The selected *tandas* are disadvantaged as close to 13 percent of them don't have any public educational facilities (see Figure 8.6). Eighty-seven percent of the *tandas* have

primary schools compared to their universal presence in villages. Middle school (43% vs 82%) and secondary school (3.3% vs 36%) are less likely to be located in the *tandas*. There are no pre-university colleges or degree colleges located in the *tandas*. These patterns are similar to the overall picture of *tandas* in Gadag.

8.3.5 Health infrastructure of *tandas* and villages in Gadag district

ASHAs are functioning in all the sampled villages but in the case of *tandas* only 87 percent have ASHAs. *Tandas* are also disadvantaged as the public health facilities are less likely to be located there. There is no PHC in the sampled *tandas* but around 4 percent of the villages have a primary health centre. Sub-centres are also most likely to be located in the villages when compared to *tandas* (32% vs 10%). Like the PHCs there are no ayurvedic dispensaries in the sampled *tandas* (see Figure 8.7).

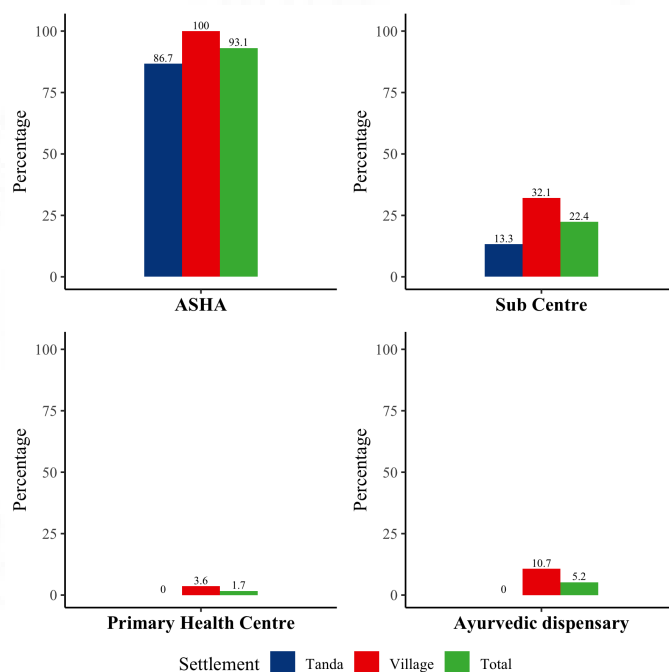


Figure 8.7: Distribution of public health infrastructure across selected *tandas* and villages in Gadag district

The situation in the *tanda* is better for private health providers in the form of BAMS doctors and RMPs when compared to public system but disadvantaged in comparison with the villages. Almost 21 percent of the villages have a BAMS doctor practising with a clinic compared to 7 percent in the selected *tandas*. The RMPs are the main source

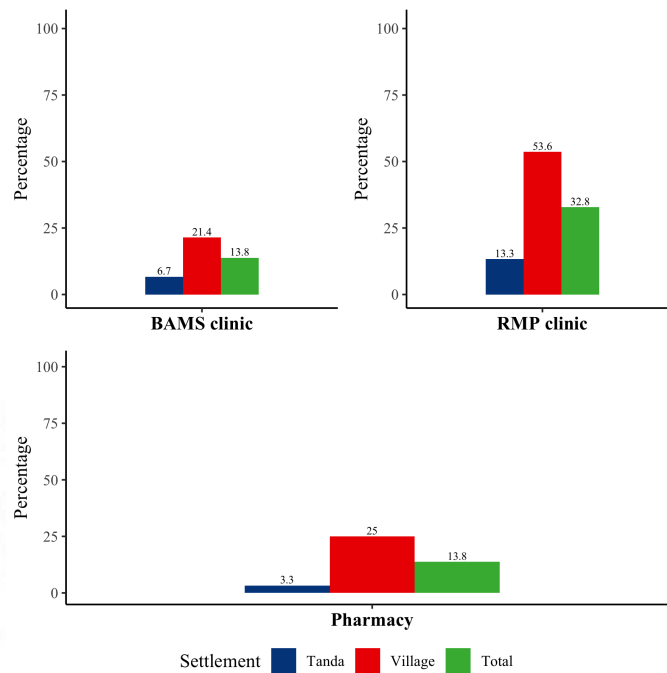


Figure 8.8: Comparison of private health infrastructure across selected *tandas* and villages in Gadag district

of health care in villages and *tandas* and they outnumber the BAMS providers. More than half the villages have a RMP clinic compared to 13 percent of the *tandas*. Like I mentioned earlier, even though the clinic is located in the villages, the RMP providers cater to people in the *tandas*. Pharmacies are also more likely to be located in the villages as that is where most of the private health facilities are located (see Figure 8.8).

8.4 Discriminant Analysis: Factors that differentiate *tandas* and villages

Discriminant analysis was done to determine which of the infrastructural variables predicted the difference between *tandas* and villages. The different variables included in the analysis was assigned scores. The details of definition of variables and scores are given in appendix A27. The variables that were included were roads, drains, water supply, amenities (which included PDS, veterinary centre, community hall, community RO and milk dairy), bus stop and frequency, bank, post office, school, Health facilities (ASHA, Anganwadi, Sub-centre, Ayurvedic dispensary, PHC, Pharmacy, BAMS clinic and RMP clinic). A correlation matrix was computed to examine the relationship across these variables (Table in appendix A28). Variables of road and bus availability, bank

and post office availability, school and health facilities availability were strongly correlated and therefore were merged. There were other spurious associations which could not be explained conceptually and were not merged. Road and bus availability were merged using inverse variance into transport infrastructure, bank and post office availability was merged by adding them and re-labelled as financial infrastructure, school, health facilities and amenities were merged by inverse variance weighting as they are different components them and called Social infrastructure. The remaining variables of water and drains were kept as it was for final analysis (Table 8.8). The average scores for transport infrastructure, drains, water and social infrastructure were high in the villages when compared to *tandas*. The score for Financial infrastructure was higher in the *tandas* but this indicates disadvantage when compared to the village as this variable is a marker of the distance to the services.

Table 8.8: Distribution of variables used in discriminant analysis

Characteristics	N	Mean	SD	Median	min	max
Tanda						
Transport infrastructure	30	5.0	3	5.78	1.06	8.75
Drains	30	1.75	0.41	1.75	1	2.5
Water	30	4.1	1.24	5	2	5
Financial infrastructure	30	7.37	4.13	7	1	15
Social infrastructure	30	2.05	0.68	2	0.65	3.73
Village						
Transport infrastructure	28	6.8	2.38	8.59	1.08	8.75
Drains	28	1.86	.41	2	1	2.5
Water	28	4.54	1.04	5	2	6
Financial infrastructure	28	5.59	4.43	5	0	15
Social infrastructure	28	3.68	2	2.86	1.65	8.49

Discriminant analysis was done on the data and there was only one discriminant dimension as there are only two groups, viz, *tandas* and villages. The discriminant function helps in discriminating between *tanda* and village (Canonical correlation=0.5325, Wilk's Lambda=0.7165, F statistic=4.116, $p < 0.05$). This model accounts for 28.4 percent of the variance between groups.

The standardised discriminant function coefficient is interpreted similar to linear regression. It provides a measure of the contribution of the variable to the overall variation in

Table 8.9: Discriminant function coefficients

Characteristics	Function
Standardized discriminant function coefficients	
Transport infrastructure	-0.3576
Drains	0.0211
Water	-0.2939
Financial infrastructure	-0.1729
Social infrastructure	-0.8689
Discriminant loadings	
Transport infrastructure	-0.5159
Drains	-0.2125
Water	-0.3071
Financial infrastructure	0.3360
Social infrastructure	-0.9066

the discriminant function. Negative coefficient indicates that for settlements with high value of these variables are less likely to be classified as *tanda*. From Table 8.9, it is evident that Social infrastructure is highest in magnitude (-0.8689) followed by Transport infrastructure (-0.3576), Water (-0.2939), Financial infrastructure (-0.1729) and Drains (0.02112). Therefore, Social infrastructure, which includes variables describing health, education and other amenities, has a greater influence in discriminating between *tanda* and village. The discriminant loadings represent the correlation between the variable and the discriminant function score. The loadings indicate the strength of the association between that variable and the discriminant score. We see that even without adjusting for other variables, Social infrastructure has the most influence in discrimination between village and *tanda* and Drains the least. The discriminant analysis correctly predicted 69 percent of the group membership. It was able to predict the group membership of *tanda* better when compared to villages (80% vs 57%) (see Table 8.10).

Table 8.10: Predicted group membership from Discriminant analysis

	Tanda	Village	Total
Tanda	24 (80)	6 (20)	30 (100)
Village	12 (42.9)	16 (57.1)	28 (100)
Total	36 (62.1)	22 (37.9)	58 (100)

8.5 Discussion

The aim of this chapter is to describe the segregation of the *tandas* in relation to the villages and compare the different infrastructure between them. Broadly three types of *tandas* exist in Gadag district, mixed settlements, standalone *tandas* and *tandas* located away from village and identify with it by taking on a similar name. This pattern of residential segregation is similar to what is observed in Indian villages, particularly in Karnataka. Residential segregation in these villages is determined by caste where households belonging to similar castes are clustered together. The *tanda* can also be viewed as one such product of segregation but is different in terms of its locational disadvantages and access to resources. Similar type of segregation exists among Scheduled Caste groups within villages; unlike the *tanda* these settlements are usually at the periphery of the village. In villages where such residential segregation exists (where lower caste groups reside in the periphery), the infrastructure available there are common to all the residents in the village and they will be able to avail the services. People of all caste groups in the villages are able to make use of the different infrastructure that is available. However, this does not mean that there is no discrimination or barriers to use of these structures, as there are different mechanisms at play that determine that. The individual-level factors that affect utilisation of available facilities cannot be examined at a settlement level and to achieve that, one needs to go beyond settlement level analysis. *Tandas* are the most disadvantaged because of residential segregation as most of them are located away from the village and lack many of the infrastructural facilities that exist in villages. In this context, the different infrastructure available in the mixed settlements, *tandas* and villages were examined to understand the differences across them. The villages and the mixed settlements have better physical, transportation, educational and health infrastructure compared to the *tandas*. One possible reason for this could be the size of the settlement and the population count. This is a main determining factor for physical infrastructure being set up like veterinary centre, milk society, banks and post office; educational infrastructures like schools and colleges and health infrastructure in terms of Sub-centre, PHC, ayurvedic dispensary and private providers.

Considering the regulatory requirement of setting up Sub-centres as an example which

states that there should be a Sub-centre for every 5000 population in the plains and 3000 for hilly/tribal/desert areas (DGHS, Government of India, 2012). Banjaras are tribals and because of them being classified as Scheduled Caste (SC) in Karnataka, the population count of 3000 is not considered to establish a Sub-centre putting them at a disadvantage. Among the five *tandas* where a Sub-centre is located only one caters exclusively to the Banjaras. The other four Sub-centres are located in places common to the village and *tandas*. In chapter four it was seen that in Gadag district a single Sub-centre on an average caters to about 3890 population. There are eight *tandas* with a population count greater than 2000 and only two of them have Sub-centres and in the remaining six *tandas* it is located in the village. So even with *tandas* having the required size as per the regulations, the Sub-centres are located in the villages nearby.

The size class explanation for the observed differences does not hold true for infrastructure that are common to all settlements irrespective of the size. The *tandas* are disadvantaged in terms of the type of roads in the settlements and important determinants of health such as water supply, community RO plant and drains. *Tandas* are slightly better than mixed settlements in having access to public transport in the settlement but are worse than villages. People in these settlements have to walk a distance to the main road or nearby village to access public transportation. Even if they have access to public transport, they are faced with the additional barrier in the form of bus services that are less frequent in the *tandas*. The timing of bus services in the *tandas* is convenient for those attending schools and colleges in nearby villages or towns as educational institutions beyond primary schooling are less likely to be located in the *tandas*. *Tandas* are also disadvantaged not having public health facilities being located in the settlement. There are no PHCs located in the *tandas* and Sub-centres are also located in the villages indicating discrimination in the location of these facilities.

In order to compare the morbidity profile and care seeking pattern of those aged 50 and above, 30 *tandas* and villages that it is a part of or close to it was sampled. They were selected by stratifying the *tandas* based on the distance from the nearest PHC. The selected *tandas* are representative of taluk wise distribution of *tandas* in Gadag district, and the findings can be generalised to all the *tandas*. The same cannot be said

of the villages as their selection was based on the *tanda* selected but this facilitates comparison and there is no reason to believe that they are likely to be any different from other villages in Gadag district. The infrastructural characteristics of the selected *tandas* are not much different from all the *tandas* put together but the difference with the villages still persist. The findings from cross-sectional comparisons are validated by the discriminant analysis, which classifies *tanda* and villages based on the infrastructural variables that were included in the model. The social infrastructural variables of health, education and other amenities is the greatest discriminating factor between *tanda* and villages. This is expected given that most of the amenities are located in the villages and the *tandas* are disadvantaged.

The limitation of this chapter is that the household and population size of the settlement was not considered when making a comparison as the accurate numbers were not available. Attempts were made to get the count from the ASHAs in the *tanda* and villages, but they were not accurate. Most of them gave rough numbers and gave the count of ration cardholders and a single household could have multiple ration cardholders. Nevertheless, the infrastructural variables common to all settlements showed that the *tandas* are disadvantaged when compared to the villages.

CHAPTER 9

Care seeking for ailments in the *tandas* and villages

This chapter will address the third objective of the thesis, which is to evaluate the impact of possible discrimination experienced by Banjaras on their health, health care access and utilisation. In this chapter, I will discuss the results of the quantitative survey that compared the socio-demographic characteristics and care seeking for illness of individuals aged fifty and above from sampled *tandas* and villages. The chapter is divided into three sections; the first section describes the socio-demographic characteristics of the household and individuals. In the second section, the nature of acute and chronic ailments and the pattern of care seeking are described. The third section describes the structural equations modelling used to understand the pathways by which structural discrimination impacts health and health care access.

9.1 Selection of respondents from *tandas* and villages

The selection of respondents to be interviewed was done in a systematic manner (Figure 9.1). In the *tandas* about 8.2 percent of the eligible respondents were not willing to participate compared to 10.4 percent in the villages. Non-availability of eligible respondents was more likely in the *tandas* (9.8% vs 5.6%). Replacement was done for those who were not available and not willing to take part in the survey to arrive at the calculated number for village and *tanda*. The rules for replacement were decided a priori and have been mentioned in chapter 3. About 62.5 percent of individuals from the *tandas* and 55.1 percent of individuals listed in the villages had some kind of morbidity in the past three months. In households where two or more adults were eligible, one was selected using KISH.

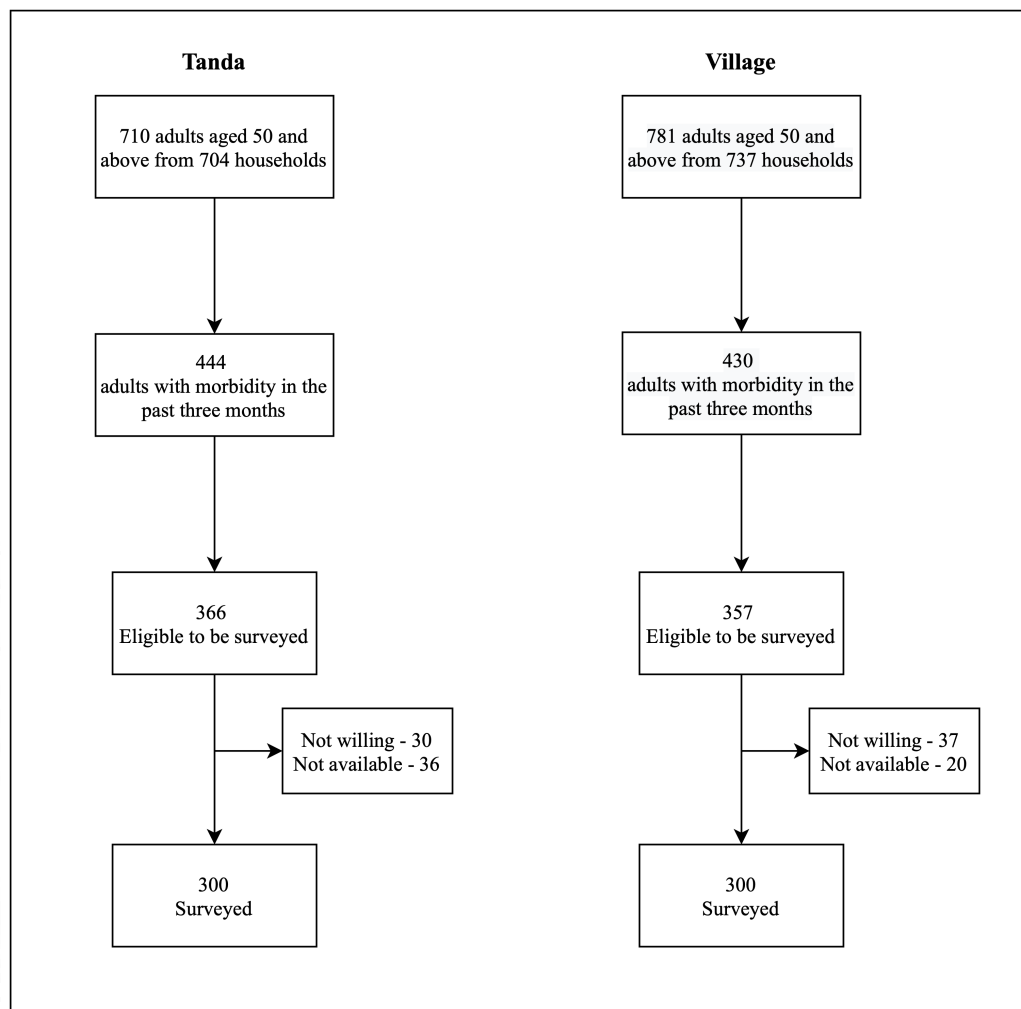


Figure 9.1: Selection of respondents from *tandas* and villages, Gadag, Karnataka

9.2 Socio-demographic profile of the households and individuals

9.2.1 Sex and caste distribution of the respondents

Majority of the individuals in the sample were women (58.2% vs 41.8%). The proportion of women in *tandas* (59%) is slightly greater than in the village (57%). The average age of the respondents is almost similar across *tandas* (Mean= 63 years; SD=8.0) and villages (Mean=63.2 years; SD=8.8). Banjaras belong to the Scheduled Caste (SC) group in Karnataka and hence all the individuals in the *tandas* belong to this group. This is different in the villages where people belonging to different castes reside. Majority of the individuals in the village belong to the Other Backward Castes (73%), followed by Scheduled Tribes (12.3%), Scheduled Castes (8.7%) and General (6%). The overall

caste distribution in the sample does not match the pattern in Gadag district because the sampling was done to ensure comparison between *tanda* and village (see Figure 9.2).

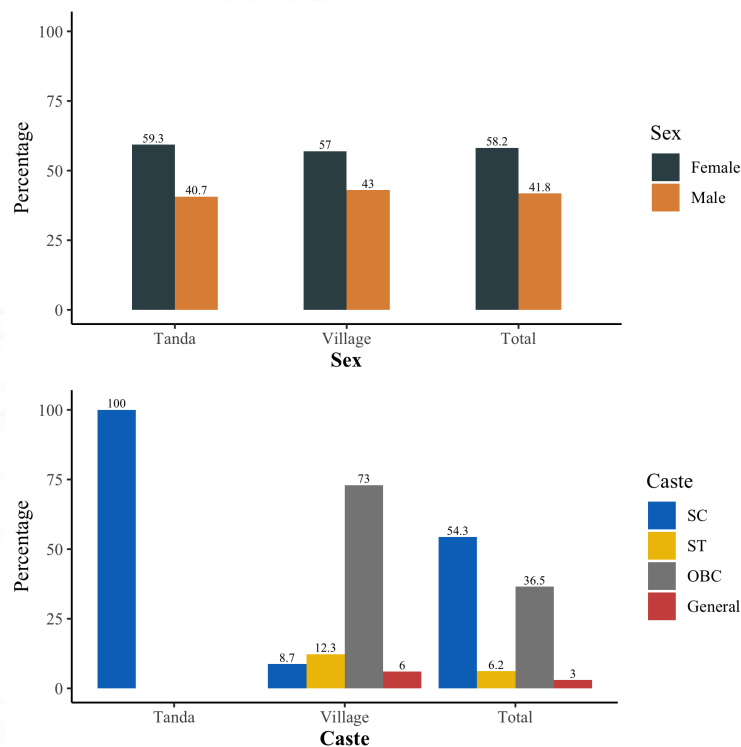


Figure 9.2: Sex and Caste distribution of sampled individuals in Gadag district

9.2.2 Source of water used by the households

Table 9.1 shows the distribution of water source used by the households, its storage and problems associated with it. A greater proportion of households in the village (76.7%) have a piped connections when compared to *tanda* (74.7%), although this difference is minimal. Public tap as a source of water for daily use limits the amount of water available to the households for daily needs as it has to be fetched. Close to 17 percent of the households in the *tanda* depend on public tap when compared to 14 percent in the village. When it comes to water used for drinking purposes, more than 50 percent of the households in the *tanda* and village use water from their own piped connection. Households in the *tandas* are disadvantaged as close to 12 percent use community RO water compared to 17 percent in the villages. Proportion of households using public tap for the purposes of drinking was also greater among households in the *tandas* (16.7% vs 9.7%).

Households in the *tanda* are more likely to report problems with the water supplied in the past three months when compared to the villages (43.7% vs 32.7%). The problems reported were similar across both *tanda* and village although the proportion of households reporting them vary. About 8 percent of the households in the *tanda* reported that the water supplied was inadequate and not supplied regularly. Households in the *tanda* (12.2%) had other issues with water like strong smell of chlorination or attributing cases of illness due to water. Greater proportion of households in the villages (81.3%) are likely to have water supplied throughout the week compared to *tandas* (76%). Disadvantages experienced by the *tandas* are reflected in the means by which water is stored. More than two-thirds of the households use barrels for storing water because of irregular supply of water. This proportion is higher in the *tandas* and is indicative of the water scarcity in the past and present. A steel tank which is slightly expensive, is more commonly found among households in the villages (75.7% vs 70.7%). Households in the villages are more likely to have plastic water tanks (15.7% vs 7%) and cemented tanks (12.7% vs 4%) for storing water.

9.2.3 Sanitation and related practices in the household

In matters concerning access to toilets, households in the *tandas* are disadvantaged as close to 61 percent of them have toilets compared to 68 percent in the villages (see Table 9.2). Close to 90 percent of the households have toilets located outside the house but within the premises. Households in the *tandas* (13.7%) were more likely to have toilets located inside the house when compared to the villages (8.4%). The presence of toilets is an important component of sanitation, but this characteristic needs to be examined in terms of its use instead of its presence. Only about half the households with toilets used them and the rest defecated in the open. Proportion of households where members defecate in the open is greater in the *tandas* (60.7% vs 44%).

9.2.4 Distribution of assets in the households

The disadvantage experienced by households in the *tandas* in terms of sanitation is also reflected in the distribution of assets in the household. There is a difference in possession of assets in the households between the *tanda* and village, with lesser proportion of

Table 9.1: Distribution of water used by households of *tandas* and villages in Gadag district

Characteristics	Tanda (N=300)	Village (N=300)	Total (N=600)
Source of Water for daily use			
Neighbours' connection	19 (6.3)	22 (7.3)	41 (6.8)
Own piped water	224 (74.7)	230 (76.7)	454 (75.7)
Public Tap	52 (17.3)	43 (14.3)	95 (15.8)
Other	5 (1.6)	5 (1.6)	10 (1.7)
Source of Drinking water			
Borewell	3 (1.0)	22 (7.3)	25 (4.2)
Community RO	35 (11.7)	52 (17.3)	87 (14.5)
Neighbours' connection	16 (5.3)	16 (5.3)	32 (5.3)
Own piped connection	175 (58.3)	166 (55.3)	341 (56.8)
Public tap	50 (16.7)	29 (9.7)	79 (13.2)
Multiple sources ¹	21 (7.0)	15 (5.0)	36 (6.0)
Water problem (past 3 months)	131 (43.7)	98 (32.7)	229 (38.2)
Reported Problems			
Insufficient	3 (2.3)	0 (0.0)	3 (1.3)
Irregular supply	8 (6.1)	0 (0.0)	8 (3.5)
Bad taste	17 (13.0)	8 (8.2)	25 (10.9)
Bad odour	23 (17.6)	33 (33.7)	56 (24.5)
Water was coloured	98 (74.8)	84 (85.7)	182 (79.5)
Cloudy	4 (3.1)	4 (4.1)	8 (3.5)
Others	16 (12.2)	2 (2.0)	18 (7.9)
Frequency of water supply (in a week)			
Throughout the week	228 (76.0)	244 (81.3)	472 (78.7)
Water Storage			
Tank	21 (7.0)	47 (15.7)	68 (11.3)
Cemented tank	12 (4.0)	38 (12.7)	50 (8.3)
Barrel	213 (71.0)	191 (63.7)	404 (67.3)
Pots/Buckets	298 (99.3)	297 (99)	595 (99.2)
Steel Tank (Small)	212 (70.7)	227 (75.7)	439 (73.2)
Plastic dispenser	25 (8.3)	33 (11.0)	58 (9.7)
Others (water filter/RO)	0 (0.0)	2 (0.7)	2 (0.3)

¹ Multiple sources includes combination of two or more source of water

households in the *tandas* owning assets when compared to villages. Assets related to private transportation like bicycle (15%) and motorcycle (55%) are equally distributed across households in *tandas* and villages (see Table 9.3). The different assets owned by the households was consolidated as a single measure by assigning scores to each item. The mean asset score in the *tanda* is 22.15 compared to 31.29 in the villages, indicating that the households in *tandas* possess less number of assets. Land ownership which is important to the rural economy, is less among the households in the *tanda* (73.7% vs 83.3%). Due to reduced ownership of land, households in the *tanda* (82.7% vs 69%) are not likely to have farm equipment for agriculture. Non-possession of farm equipment could also be because of the type of the land possessed and the potential yield from it.

Table 9.2: Distribution of toilets in the households of *tandas* and villages in Gadag district

Characteristics	Tanda (N=300)	Village (N=300)	Total (N=600)
Toilet	182 (60.7)	203 (67.7)	385 (64.2)
Location of toilet¹			
Inside the house	25 (13.7)	17 (8.4)	42 (10.9)
Outside, but within premises	156 (85.7)	180 (88.7)	336 (87.3)
Outside in the field	1 (0.5)	6 (2.9)	7 (1.8)
Toilet facilities used by members¹			
Toilet in household	118 (39.3)	167 (55.7)	285 (47.5)
Field/Bush	182 (60.7)	132 (44.0)	314 (52.3)
Toilet in field	0 (0.0)	1 (0.3)	1 (0.2)

¹ Denominator for this is the households with toilets

9.2.5 Agriculture and its allied activities

Five different types of land ownership were identified (see Table 9.4). Majority of the households owned land, with close to 86 percent of the households in the *tandas* owning land compared to 94 percent in the villages. Households in *tandas* (3.6%) were more likely to lease in land for cultivation and less likely to lease out their land (3.6% vs 6.8%) when compared to those in villages. Those who cultivate forest land do not have title deed over the land but use it for cultivation. *Tandas*, being located close to the forests, are likely to have more households (12.7%) cultivating on forest land compared to those in villages (1.6%). Shared cultivation is a type of arrangement where the owner and the cultivator share the agricultural produce based on an agreement between them. Households in the villages are more likely to be involved in shared cultivation. The categories of land possessed is not mutually exclusive and households can lease out portion of their land, lease in extra land or cultivate in a shared manner in addition to the land owned by them. This depends on various factors like the source of irrigation, expected return from cultivated crops, ownership of farm equipment and the availability of workers. The observed differences in the pattern of landholding are reflected in the area of land possessed. The average land possessed by households (in acres) in the village (Mean=7.6;SD=9.3) is twice that of those in the *tandas* (Mean=3.8;SD=4.2). Ability to cultivate the land in the past one year is near-universal in the villages when compared to 90 percent in the *tandas*. The most commonly grown crops are cereals including jowar,

Table 9.3: Distribution of household assets in households of *tandas* and villages in Gadag district

Characteristics	Tanda (N=300)	Village (N=300)	Total (N=600)
Electricity	296 (98.7)	298 (99.3)	594 (99)
Mattress	117 (39.0)	172 (57.3)	289 (48.2)
Pressure cooker	89 (29.7)	128 (42.7)	217 (36.2)
Chair	244 (81.3)	258 (86.0)	502 (83.7)
Cot or bed	141 (47.0)	225 (75.0)	366 (61.0)
Table	91 (30.3)	147 (49.0)	238 (39.7)
Electric fan	245 (81.7)	243 (81.0)	488 (81.3)
Television	208 (69.3)	233 (77.7)	441 (73.5)
Sewing machine	50 (16.7)	68 (22.7)	118 (19.7)
Computer	0 (0.0)	2 (0.7)	2 (0.3)
Refrigerator	32 (10.7)	34 (11.3)	66 (11.0)
Air cooler / conditioner	4 (1.3)	5 (1.7)	9 (1.5)
Washing machine	0 (0.0)	3 (1.0)	3 (0.5)
Watch or clock	232 (77.3)	275 (91.7)	507 (84.5)
Bicycle	46 (15.3)	45 (15.0)	91 (15.2)
Motorcycle scooter	166 (55.3)	165 (55.0)	331 (55.2)
Animal drawn cart	30 (10.0)	60 (20.0)	90 (15.0)
Car	10 (3.3)	13 (4.3)	23 (3.8)
Water pump	35 (11.7)	68 (22.7)	103 (17.2)
Thresher	5 (1.7)	20 (6.7)	25 (4.2)
Tractor	27 (9.0)	44 (14.7)	72 (12.0)
Lpg cylinder	254 (84.7)	234 (78.0)	488 (81.3)
Asset scores			
Mean (SD)	22.15 (18.15)	31.29 (22.81)	26.72 (21.1)
Median	19.54	27.21	22.1
Range	0-105.52	0.01-146.93	0-146.93
Land Possession¹	221 (73.7)	250 (83.3)	471 (78.5)
Farm Equipment¹			
Power tiller/tractor	27 (9.0)	45 (15.0)	72 (12.0)
Thresher	5 (1.7)	20 (6.7)	25 (4.2)
Pump/ other water lifting	37 (12.3)	72 (24.0)	109 (18.2)
None	248 (82.7)	207 (69.0)	455 (75.8)

¹ These assets were not used in the construction of asset scores

Table 9.4: Distribution of Agricultural and allied agricultural activities of households of *tandas* and village in Gadag district

Characteristics	Tanda (N=221)	Village (N=250)	Total (N=471)
Type of land possessed¹			
Owned	191 (86.4)	236 (94.4)	427 (90.7)
Leased in	8 (3.6)	5 (2.0)	13 (2.8)
Leased out	8 (3.6)	17 (6.8)	25 (5.3)
Forest land	28 (12.7)	4 (1.6)	32 (6.8)
Shared	8 (3.6)	18 (7.2)	26 (5.5)
Land under cultivation for the past 1 year¹			
Yes	198 (89.5)	235 (94.0)	433 (91.9)
No	21 (9.5)	11 (4.4)	32 (6.8)
Crops Grown			
Cereals	151 (76.3)	177 (75.3)	328 (75.8)
Pulses	29 (14.6)	55 (23.4)	84 (19.4)
Oilseeds	39 (19.7)	89 (37.9)	128 (29.6)
Vegetables/fruits/chillies	11 (5.6)	36 (15.3)	47 (10.9)
Silk	3 (1.5)	1 (0.4)	4 (0.9)
Cotton	26 (13.1)	39 (16.6)	65 (15)
Flowers	0 (0.0)	4 (1.7)	4 (0.9)
Sugarcane	3 (1.5)	3 (1.3)	6 (1.4)
Source of irrigation			
Canal,Pond/tank	0 (0.0)	2 (0.9)	2 (0.5)
Ground water	38 (19.2)	86 (36.6)	124 (28.6)
Only dependent on rain	156 (78.8)	144 (61.3)	300 (69.3)
Animals²			
Cows/bulls/buffaloes	92 (30.7)	137 (45.7)	229 (38.2)
Horses/Donkeys	1 (0.3)	0 (0.0)	1 (0.2)
Goats	33 (11.0)	25 (8.3)	58 (9.7)
Sheep	43 (14.3)	23 (7.7)	66 (11.0)
Chicken/ducks	36 (12.0)	17 (5.7)	53 (8.8)

¹ six refused to respond to this question

² Denominator includes all the households surveyed

maize and bajra, which is commonly found in drought-prone regions. Households in the villages are more likely to cultivate cash crops in addition to cereals when compared to those in *tandas*. The reason for this is the source of water available for agriculture. Close to 79 percent of the household in *tanda* depend only on rain compared to 61 percent in the villages. The *tandas* are further disadvantaged as Gadag district is a drought-prone region with irregular rains. Households that are involved in agriculture supplement their income through allied agricultural activities like rearing of cows for milk and goat or sheep for sale. Households owning cows/bulls/buffaloes are more common among villages than *tandas* (45.7% vs 30.7%). Households in *tandas* already disadvantaged by diminishing returns from agriculture, depend on grazing of livestock for livelihood as close to 25 percent of households owning goats/sheep compared to 16 percent among those in villages.

9.2.6 Migration for livelihood

Table 9.5: Distribution of Migrants in the household across *tandas* and villages in Gadag district

Characteristics	Tanda (N=165)	Village (N=73)	Total (N=238)
Purpose of migration			
Organised employment	13 (7.9)	40 (54.8)	53 (22.3)
Unorganised employment	152 (92.1)	31 (42.5)	183 (76.9)
Business	2 (1.2)	2 (2.7)	4 (1.7)
Education	7 (4.2)	2 (2.7)	9 (3.8)
Migrants family member currently staying	64 (38.8)	13 (17.8)	77 (32.4)
Family members of migrants who stay back			
Only children	42 (65.6)	5 (38.5)	47 (19.7)
Only spouse	3 (4.7)	4 (30.7)	7 (2.9)
Spouse & children	19 (29.7)	4 (30.8)	23 (9.7)

Individuals from households in the *tandas* with reduced landholdings and unproductive land migrate to other districts and states for a livelihood. Close to 55 percent of the households in the *tandas* have migrants living outside compared to 24.3 percent in the villages, i.e. one in every two households have migrants living outside the *tanda*. Households in the *tandas* (Mean=2.9;SD=1.7) on an average have more number of migrants per household than the villages (Mean=2.1;SD=1.1). Differences are observed in the activities undertaken by the migrants. Those involved in unorganised employment are almost universally from the *tandas* compared to 42 percent from the villages (see Table 9.5). More than half of the migrants in the villages (54.8%) are involved in organised employment with a regular source of income compared to those in the *tandas* (7.9%). More than one third of those in the *tandas* leave their family members, either children, spouses or both, behind in the household compared to 17.8 percent in the villages. Commonly the children are left behind with the grandparents in the *tanda* for the purpose of education (65.6%) and parents migrate for work. In households where the elderly are weak or need to be taken care of, the spouses along with the children stay back.

9.2.7 Source of income across households

Most households depend on agriculture as their principal source of income (see Table 9.6). A single household can have multiple sources of income which could be from cultivation on owned or leased land, working as agricultural labourers, pension in the case

of elderly above 60, widows or disabled children and remittances from family members who are migrants. More than half the households are engaged in cultivation and/or allied agriculture in the villages. Households in the *tandas* (43% compared to 27% involved in cultivation) are more likely to be involved in allied agricultural activities and this is expected considering the nature of the land.

Table 9.6: Distribution of source of income and remittances of households *tandas* and villages in Gadag district

Characteristics	Tanda (N=300)	Village (N=300)	Total (N=600)
Principal source of income			
Cultivation	82 (27.3)	160 (53.3)	242 (40.3)
Allied Agriculture	129 (43.0)	153 (51.0)	282 (47.0)
Agriculture Wage	194 (64.7)	119 (39.7)	313 (52.2)
Non Agricultural wage labour	115 (38.3)	52 (17.3)	167 (27.8)
Petty shop	34 (11.3)	37 (12.3)	71 (11.8)
Organised trade	3 (1.0)	4 (1.3)	7 (1.2)
Salaried employment	13 (4.3)	58 (19.3)	71 (11.8)
Pension	169 (56.3)	166 (55.3)	335 (55.8)
Artisan/Independent	0 (0.0)	1 (0.3)	1 (0.2)
Means of receiving pension			
Post	94 (55.6)	76 (45.8)	170 (50.7)
Bank	70 (41.4)	84 (50.6)	154 (46.0)
Other means	5 (2.9)	6 (3.6)	11 (3.3)
Remittances in the past 1 year	84 (28.0)	27 (9.0)	111 (18.5)
Periodicity of money received			
Fixed intervals	20 (23.8)	12 (44.4)	32 (28.8)
No fixed pattern	64 (76.2)	15 (55.6)	79 (71.2)
Person sending money			
Daughter	1 (1.2)	0 (0.0)	1 (0.9)
Son	80 (95.2)	25 (92.6)	105 (94.6)
Others	3 (3.6)	2 (7.4)	5 (4.5)

More than one-third of the households in *tandas* are involved in non-agricultural wage labour compared to 17 percent in the villages. The nature of non-agricultural work involves activities related to construction of buildings and roads and is common in *tandas* as many migrants are involved in this activity. Close to 19 percent of the households in the village had a person with regular source of income and this was very low in the *tandas*, just around 4 percent. More than 50 percent of the households in the *tandas* and villages received money by means of pension. This is expected as the study population is aged 50 and above. Majority of the individuals received their pension money through

the post in *tandas* and through banks in the villages. This is influenced by the location of bank which is most commonly found in the villages. In addition to all these sources of income, close to 28 percent of the households in *tandas* received money in the form of remittances from their children compared to 9 percent in the villages. These remittances in the *tandas* were not received at fixed intervals and in most cases, were received as per needs of the household. Remittances are commonly done by migrants in the household and sons were the ones sending the money back home.

9.2.8 Visit by Healthcare workers

Table 9.7: Distribution of households by Health care worker visits in the *tandas* and villages in Gadag district

Characteristics	Tanda (N=300)	Village (N=300)	Total (N=600)
Health worker visited HH in the past 6 months	119 (39.7)	110 (36.7)	229 (38.2)
Purpose of visit			
Advice on illness	73 (61.3)	63 (57.3)	136 (59.4)
Check water storage	71 (59.7)	59 (53.6)	130 (56.8)
DDT spray	30 (25.2)	18 (16.4)	48 (21.0)
Check if anyone is sick	34 (28.6)	39 (35.5)	73 (31.9)
Other reasons	6 (5.0)	7 (6.4)	13 (5.7)
Entering the house	67 (56.8)	70 (64.2)	137 (59.8)
ASHA visited in the past 6 months	245 (81.7)	251 (83.7)	496 (82.7)

Households were asked about the visit by health care providers in the past six months to understand the functioning of the health system in the settlements and to see if there is any potential discrimination (see Table 9.7). Health workers like the Junior Health Assistant or the ANM nurse are more likely to visit the *tandas* (40%) than the villages (37%), although this difference is minimal. The activities carried out by these workers were similar across both the *tandas* and villages, but more households in the *tandas* were given advice on illness, checking their water storage and spraying of DDT. Screening activities for specific illness was relatively more among those in villages (36% vs 29%). The health workers were less likely to enter the houses in *tandas* (57%) and carry out their work from outside when compared to those in villages (64%). This was different in the case of ASHAs, as more than 80 percent of the households were visited by them in the past six months.

Table 9.8: Distribution of pattern of alcohol consumption of respondents in *tandas* and villages

Characteristics	Tanda (N=300)	Village (N=300)	Total (N=600)
Alcohol consumption	128 (42.7)	23 (7.7)	151 (25.2)
Frequency of alcohol consumption			
Daily	33 (25.8)	4 (17.4)	37 (24.5)
1-4 per week	34 (26.6)	10 (43.5)	44 (29.1)
1-3 per month	11 (8.6)	3 (13)	14 (9.3)
Less than once a month	50 (39.1)	6 (26.1)	56 (37.1)
Source of alcohol			
Village shop	97 (75.8)	18 (78.3)	115 (76.2)
Locally brewed	2 (1.6)	1 (4.4)	3 (1.9)
Other	29 (22.7)	4 (17.4)	33 (21.9)

9.2.9 Alcohol consumption

Personal behavioural attribute of alcohol consumption among the respondents was recorded (see Table 9.8). The consumption of alcohol was higher among the respondents in the *tanda* (43% vs 8%). There could be a bias in reporting by those in the villages as it is stigmatising but the same cannot be said of those in *tanda* as alcohol is a part of all their celebrations. Among those who reported consuming alcohol, close to 52 percent in *tandas* and 4 percent in villages were women. Majority of those who consumed alcohol in *tandas* did so it less than once a month, indicating that it was for special festivals or celebrations. Only one-fourth of those who consumed alcohol among respondents in *tanda* did it daily. Alcohol was easily available in the shops in the settlements, sourced from Mysore Sales International Limited (MSIL, the Govt supply) and very few consumed locally brewed alcohol. The rest of them depended on nearby towns or others relatives to purchase alcohol.

9.3 Care seeking for acute and chronic ailments

Distribution of the type of ailment and care seeking for the same across *tandas* and villages is important to understand the discrimination that influences the outcome of these processes. Most of the individuals in the *tandas* (89%) were likely to report acute ailments when compared to those in the villages (80%). This pattern was in the opposite direction for chronic ailments (39% in villages and 32% in *tandas*) (see Table 9.9). About 68 percent of the individuals in *tandas* had only acute ailments compared to 61

percent in villages. Proportion of individuals with only chronic ailments was greater in the villages (20% vs 11%). However, 21 percent of individuals in the *tandas* had both acute and chronic ailments compared to 19 percent in villages (not shown in table).

9.3.1 Type of acute and chronic ailments

Table 9.9: Distribution of the type of ailments and care seeking across *tandas* and villages in Gadag district

Characteristics	Acute Ailments		Chronic ailments	
	Tanda (N=300)	Village (N=300)	Tanda (N=300)	Village (N=300)
Illnesses	266 (88.7)	240 (80.0)	97 (32.3)	117 (39.0)
Ailments in the past 3 months¹				
Infection	60 (22.6)	40 (16.7)	-	-
Neurological	1 (0.4)	1 (0.4)	-	-
Genito-Urinary	3 (1.1)	2 (0.8)	-	-
Eye	1 (0.4)	8 (3.3)	-	-
Ear	2 (0.8)	1 (0.4)	-	-
Cardio-Vascular	1 (0.4)	3 (1.3)	75 (77.3)	74 (63.2)
Respiratory	47 (17.7)	58 (24.2)	2 (2.1)	1 (0.9)
Gastro-Intestinal	15 (5.6)	20 (8.3)	-	-
Skin	5 (1.9)	11 (4.6)	0 (0.0)	1 (0.9)
Musculoskeletal	174 (65.4)	117 (48.8)	1 (1.0)	0 (0.0)
Injuries	4 (1.5)	9 (3.8)	-	-
Gynaecological	2 (0.8)	0 (0.0)	-	-
Psychiatric and Neuro	-	-	4 (4.1)	6 (5.1)
Cancers	-	-	0 (0.0)	3 (2.6)
Endocrine, Metabolic,	-	-	26 (26.8)	42 (35.9)
Others	0 (0.0)	1 (0.4)	0 (0.0)	0 (0.0)
Visited facility for illness	247 (92.9)	227 (94.6)	56 (57.7)	81 (69.2)
Numbers of visits to health facility²				
Only one	204 (82.6)	192 (84.6)	55 (98.2)	77 (95.1)
Two visits	41 (16.6)	34 (15)	1 (1.8)	4 (4.9)
Three visits	2 (0.8)	1 (0.4)	0 (0.0)	0 (0.0)

¹ Among those who reported ailments

² Among those who visited health facility

Differences are also seen in the type of acute ailments reported with close to two-thirds of the respondents in the *tandas* suffering from musculoskeletal pain (65%) followed by infections (23%) and respiratory ailments (18%). This pattern is similar in the villages except that after musculoskeletal pain (49%), respiratory ailments (24%) were more common. In terms of chronic ailments, individuals in the *tandas* were more likely to suffer from cardio-vascular ailments (includes hypertension and heart disease) compared to those in villages (77% vs 63%). There are more people suffering from endocrine-related ailments (Diabetes) in villages (36%) than *tandas* (27%). More than 90 percent of individuals visited a health facility for acute ailments, although the gap is narrow between

tandas and villages. Huge differences were observed in care seeking for chronic ailments, with 58 percent of individuals in the *tandas* seeking care compared to 69 percent in the villages. Some of the common reasons for not seeking care were because most of them continue to take the same medicines that was prescribed long back and few because they believe they have been cured of it. In terms of the number of facilities visited for acute illness, individuals from *tandas* were more likely to visit multiple facilities or providers compared to those in the villages (17% vs 15%).

9.3.2 Care seeking for acute and chronic ailments

Table 9.10: Distribution of the facility visited for ailments and transportation to health facility from *tandas* and villages, Gadag district

Characteristics	Acute Ailments		Chronic ailments	
	Tanda (N=247)	Village (N=227)	Tanda (N=56)	Village (N=81)
Facility visited for illness				
SC/Mobile van/PHC	32 (13.0)	32 (14.1)	16 (28.6)	11 (13.6)
CHC/TH/DH	40 (16.2)	55 (24.2)	14 (25.0)	20 (24.7)
Pvt clinic/hospital	30 (12.2)	46 (20.3)	12 (21.4)	32 (39.5)
BAMS	59 (23.9)	51 (22.5)	12 (21.4)	15 (18.5)
RMP	86 (34.8)	43 (18.9)	2 (3.6)	3 (3.7)
Transport to health facility				
Auto	9 (3.6)	8 (3.5)	0 (0.0)	2 (2.5)
Bus	78 (31.6)	91 (40.1)	28 (50.0)	39 (48.1)
Bus & Share auto	1 (0.4)	3 (1.3)	3 (5.4)	1 (1.2)
Car	2 (0.8)	6 (2.6)	1 (1.8)	8 (9.9)
Share auto	34 (13.8)	22 (9.7)	3 (5.4)	7 (8.6)
Two wheeler	41 (16.6)	45 (19.8)	12 (21.4)	17 (21)
Provider visited home	52 (21.1)	24 (10.6)	2 (3.6)	1 (1.2)
Walking	27 (10.9)	26 (11.5)	4 (7.1)	4 (4.9)
Others	3 (1.2)	2 (0.9)	3 (5.4)	2 (2.5)

Among those who sought care for acute ailments, majority in the *tandas* sought care from RMPs (35%) (see Table 9.10). This was different in the villages where the preferred facility for seeking care was in public institutions like Community Health Centre (CHC) or Taluka hospital or District hospital (24%) and BAMS providers (23%). Sub-centre or PHC was the least preferred choice for seeking care in village (14%), whereas in the *tandas*, it was private clinics or hospitals (12%). The preference for RMPs was not demonstrated for chronic ailments as people in the *tandas* preferred seeking care from public sector providers (54%) and the remaining from BAMS providers and pri-

private clinics or hospitals. People in the villages depended on private clinics or hospitals (40%) for care seeking followed by public sector providers (38%).

Transportation used to reach the health facility ranged from the use of public transport to the use of private vehicles and RMP providers visiting households to provide services. Use of public transport (bus/share auto) to access care was more common among those in villages when compared to the *tandas* (51% vs 46%). Even the use of private transport to reach health facility was more among those in villages. Although the RMPs are primarily located in villages, close to 21 percent of those with acute ailments in *tandas* were visited by an RMP at their house compared to 12 percent in the villages. Transportation to health facility for chronic ailments gives a relatively clearer picture as only a lesser percentage people preferred care from RMPs (3.6% in *tandas* and 3.7% in villages). The use of public and private transportation was more or less similar across *tandas* and villages. The average time taken to reach the facility for acute ailments is less among those in *tandas* (Mean=33.2;SD=33.2) compared to villages (Mean=39;SD=42.4). A similar pattern is observed for chronic ailments (Mean=40;SD=33.6 in *tandas* and Mean=49.7;SD=59.4 in villages). The reason for this is the preference for seeking care in private clinics or hospitals located in main towns among those in villages.

9.3.3 Financing for healthcare and behaviour of the provider

Information on expenditure was collected on different heads related to expenses at the facility, medicines and transportation. Due to issues of recall bias and the fact that payment to RMP and BAMS included medicines and consultation expenses, the expenditures were reported as a single amount. Therefore, to enable comparisons across all types of providers, only the total expenditure is used for analysis. Average expenditure for both acute and chronic ailments among those in the *tandas* is less than those in the villages (see Table 9.11). This again could be influenced by the facility from where care was sought. The expenditure was calculated by the type of facility visited and is shown in table 9.12. Average expenditure was highest among those who sought care in private clinics and hospitals across *tandas* and villages for both acute and chronic illness. The average expenditure incurred in other public facilities, RMP and BAMS providers

Table 9.11: Distribution of the mode of financing, mode of treatment and behaviour of the provider in *tandas* and villages, Gadag district

Characteristics	Acute Ailments		Chronic ailments	
	Tanda (N=247)	Village (N=227)	Tanda (N=56)	Village (N=81)
Total Expenditure¹				
N	240	216	56	75
Mean (SD)	362.9 (666.6)	382.1 (614.6)	429.8 (942.2)	646.8 (1511.9)
Median	170	200	102.5	230
Range	0-5365	0-5500	0-5858	0-10900
Source of money for healthcare¹				
Household income/savings	97 (40.4)	126 (58.3)	27 (48.2)	48 (59.3)
Borrowings	41 (17.1)	23 (10.7)	6 (10.7)	14 (17.3)
Contribution from friends/family	28 (11.7)	14 (6.5)	3 (5.4)	12 (14.8)
Daily wage	30 (12.5)	12 (5.6)	5 (8.9)	4 (4.9)
Pension	43 (17.9)	33 (15.3)	11 (19.6)	9 (11.1)
Credit by provider	4 (1.7)	4 (1.9)	1 (1.8)	0 (0.0)
Others	0 (0.0)	0 (0.0)	1 (1.8)	4 (4.9)
Mode of treatment				
Injections				
Injection	198 (80.2)	165 (72.7)	25 (44.6)	27 (33.3)
IV bottle	9 (3.6)	7 (3.1)	1 (1.8)	1 (1.2)
Both	18 (7.3)	7 (3.1)	0 (0.0)	2 (2.5)
None	22 (8.9)	48 (21.2)	30 (53.6)	51 (63)
Injection demanded	79 (32.1)	40 (17.6)	14 (25.0)	7 (8.6)
Behaviour of provider				
Spending adequate time (yes)	227 (91.9)	204 (89.9)	50 (89.3)	77 (95.1)
Avoid touching	6 (2.4)	4 (1.8)	1 (1.8)	2 (2.5)
Not giving adequate information	92 (37.3)	55 (24.2)	11 (19.6)	13 (16.1)
Speak rudely	2 (0.8)	1 (0.4)	1 (1.8)	0 (0.0)

¹ Does not include hospitalisations

is greater among those in the *tandas* compared to villages for both type of ailments. However, for acute ailments, the average expenditure incurred for BAMS providers is similar across *tandas* and villages. Expenditure incurred for seeking care was financed primarily by the income and savings of the household for both acute and chronic ailments. Close to 58 percent of those in the villages used household income compared to 40 percent in the *tandas* for acute ailments. The pattern is similar for chronic ailments. This is on expected lines as people from the *tandas* are less likely to have a regular source of income. Close to one third of the individuals in *tandas* who sought care for acute ailments, borrowed money or received contributions to seek care compared to one fifth in villages. This was in the opposite direction for chronic ailments. Another important aspect with respect to the source of money is the dependence on daily wage and pension among the individuals in the *tandas* for seeking care for both acute and chronic ailments.

Injections were the most preferred mode of treatment in the *tandas* (80% vs 73%) and close to one third demanded it compared to 18 percent in villages. The increased pro-

portion could be because more people sought care from RMPs whose main component of treatment is administering injections.

In addition to the different aspects of care seeking, respondents also reported on the behaviour of the provider when they visited the facility (see Table 9.11). People in the *tandas* are more likely to report that the provider spent adequate time with them compared to villages. More than 37 percent in *tandas* also felt that the provider was not giving them adequate information about their ailments or treatment compared to 24 percent in villages. None of them reported providers shouting at them or talking to them in a derogatory manner.

Table 9.12: Distribution of expenditure incurred at health facility and type of ailments in *tandas* and villages, Gadag district

Facility	Acute illness					Chronic illness				
	N	Mean	SD	Median	Range	N	Mean	SD	Median	Range
Tanda										
BAMS	59	477.75	681.32	320	100 - 5250	12	592	728.84	295	74-2500
CHC/TH/DH	37	295.81	882.23	65	5-5365	14	104.5	168.17	49.5	10-664
Pvt clinic/hospital	26	1026.58	1002.49	576	200-4420	12	1236.67	1656.73	620	244-5858
RMP	86	234.81	322.68	120	20-2000	2	111	86.27	111	50-172
SC/Mobile van/PHC	32	34.25	33.22	22.5	0-144	16	27.63	31.93	19.5	0-110
Village										
BAMS	50	477.76	776.06	300	50-5500	15	446.53	488.58	305	80-2046
CHC/TH/DH	50	178.36	210.52	101.5	5-1050	20	99.25	118.89	38	5-400
Pvt clinic/hospital	41	999.81	778.41	857	170-3860	26	1453.69	2336.65	612.5	170-10900
RMP	43	180.23	161.22	100	0-600	3	120	26.46	110	100-150
SC/Mobile van/PHC	32	31.06	104.63	14	0-600	11	152.18	447.49	14	0-1500

9.4 Correlates of morbidity and care seeking using Structural Equation Models (SEM) analysis

The description of the infrastructure available in the *tandas* and villages indicates that *tandas* are less endowed in terms of water supply and sanitation. On an average, households in the villages own more assets than do households in the *tandas*. Households in the villages tended to own land and agricultural equipment more often than did those in the *tandas*. The village households were more likely to cultivate cash crops on land owned using groundwater resources when compared to those from the *tandas*. When it comes to livestock, more households in the *tanda* owned goats, sheep and chicken and those in the village more frequently had cows. Migrants from the villages were more likely to be employed in the organised sector with a steady source of income, while those from the *tandas* were in the unorganised sector. The dominant income source for those in the *tandas*, as they were less likely to own land, was agricultural labour and for the village households, it was through cultivation.

Health care workers did visit households in the *tandas* and villages more or less equally, but when they did visit households in the *tandas*, it was more likely to be to spray DDT.

People living in the *tandas* were more likely to experience musculoskeletal disorders and infections. The extent of care seeking for acute ailments across *tandas* and villages was more or less similar, but for chronic ailments, those from the *tanda* were less likely to seek care when compared to those from the villages. For acute ailments, the care seeking pattern varied across *tandas* and villages, with those in the *tanda* dominantly depending on RMPs and those in the villages depending on CHC/TH and District hospital. As this was the pattern, the most frequently used mode of transport to reach the health facility was none for those in the *tanda* (as the RMP came home). That the villages had better resources by way of transport is reiterated by the fact that more households there used a car to reach the health facility for chronic ailments.

Even with these limited resources, the households from *tandas* spent on an average slightly more than did households from the village for acute ailments. But for chronic ailments which require continuity of care, households from the village spent signifi-

cantly more than did those from the *tanda*. The sources of funding for care seeking demonstrates that households in the villages could use household income and savings to do so than did those in the *tandas*. For acute ailments, *tanda* households resorted to borrowing more often than did those in the villages. On an average the spending on health care for acute ailments was equal or higher across all types of providers for those in the *tanda* but for chronic ailments, those in the village spent more in general.

What the findings in terms of available assets, infrastructure and health care seeking indicate in summary is that those living in the *tandas* are more disadvantaged on the whole, when compared to those living in the villages. What remains to be established is the pathways through which this systematic structural discrimination experienced by those living in the *tandas* affects their experience of morbidity and health care seeking.

The effect and the pathways by which ‘structural discrimination’; contributes to differential health care access was examined using Structural Equation Models application (SEM). It uses a comprehensive approach to test the hypothesis on relationships between latent variables and observed variables (Hoyle, 1995). SEM helps in better understanding of the direct and indirect pathways through which of the effect of structural discrimination acts on care seeking. An alternative would have been to use regression model to explain the effect but this is inadequate as it would only yield the direct prediction paths of independent variables on one outcome. Statistically speaking, discrimination being a complex phenomenon has an effect on the outcome as well as other different predictor variables. This means, many variables in the pathway would be outcomes and also predictors to alternative outcomes, simultaneously. Conceptually discrimination can be viewed as part of the process or as an outcome itself. Structural Equation Modelling helps in understanding and visualising such complexities better and hence this approach was chosen. Steps in SEM involve specifying the conceptual model, statistical model, distribution of individual variables, model modification, model estimation and interpretation. Each of these steps will be discussed under separate sections that follow.

9.4.1 Conceptual Model

The conceptual model for SEM comes from findings of the ethnographic study described in chapters 5,6 and 7.

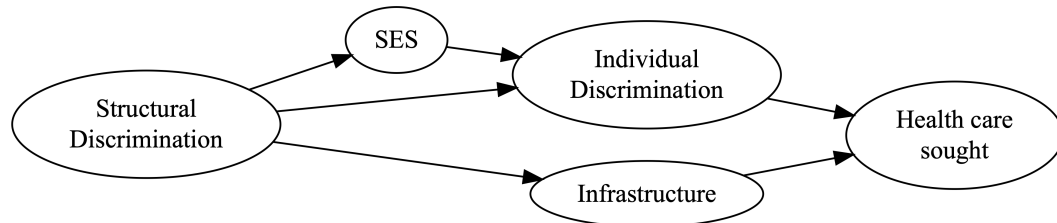


Figure 9.3: Conceptual model of the influence of structural discrimination on care seeking for health

The ‘structural discrimination’ experienced by the Banjaras in the form of residential segregation and access to resources affects their ability to find means of livelihood in the place of their settlement. This impacts the socio-economic status (SES) of the household as individuals in the household seek opportunities outside the settlement and those who stay back have to work on less than optimally productive land. Individual discrimination, which is a manifestation of morbidity experienced by older adults, is influenced by both structural discrimination and SES through different mechanisms. The influence of structural discrimination is through access to land and access to other resources for maintaining health. Having less productive land leads to the extra effort that needs to be made for agricultural yields and this leads to different health problems like musculoskeletal pain. Structural discrimination also affects morbidity as there are inadequate facilities with differential access to seek appropriate care for maintaining health. Socio-economic status operates directly in terms of restricted resources to access preventive and curative services and indirectly through reduced familial support by members in the household leaving behind the elderly to take care of themselves as they seek means of livelihood. Structural discrimination also operates through the households and the transport infrastructure in the settlements. Since the *tandas* are located close to the forests and kept away from the mainstream settlements, the availability of public transportation is poor and people depend on their own vehicles for transport. Individual discrimination along with infrastructure at the household level has an impact on the care seeking for

morbidities. The theoretical model is illustrated in Figure 9.3. This model has been conceptualised for *tandas* and is likely to differ across *tandas* and villages.

9.4.2 Statistical model

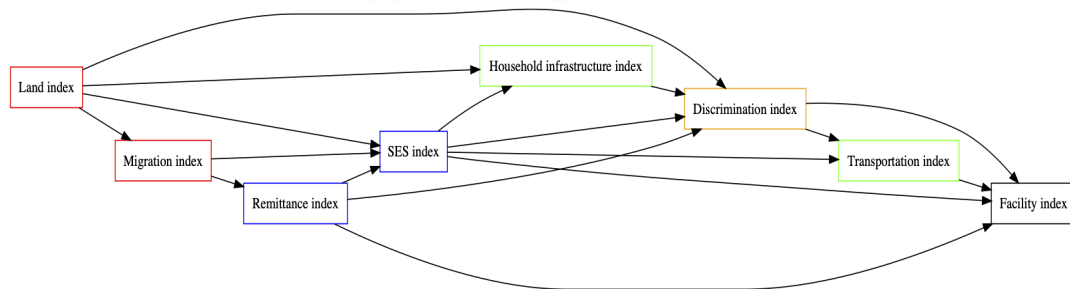


Figure 9.4: Operationalising conceptual model for SEM

The constructs from the conceptual model that emerged from the understandings derived from the ethnography were operationalised and translated into a model which has been used for testing the hypothesised pathways. The path diagram and the measures for the conceptual model are described below (Figure 9.4). The details of computing the scores and indicators for each component are shown in appendix A29. Measures for each component in the conceptualised model included variables, some of which were included independently and others which were merged. The decision to merge was taken after examining the associations using a correlation matrix. For example, SES was measured using Asset score, Allied agricultural score, Principal source of income score for the household and Remittance score. Remittance score was not correlated with any of the other variables and was kept as a separate measure for SES. Asset score, Allied agriculture score, Principal source of income were correlated with each other and they were combined into a single SES score. All the variables were normalised using min-max normalisation and correlated variables within constructs were merged using inverse variance weighting. The min-max normalisation of variables using the formula below was done separately for *tandas* and village.

Structural Discrimination

Structural discrimination was measured using variables of land score and migration score.

Land score

Land score was computed taking into account the area of land possessed, valuation of the nature of ownership and crops cultivated on the land. This score was then indexed using min-max normalisation and labelled Land index.

Migration score

Migration score was computed taking into consideration the number of migrants in the household and the economic activities taken up by them in the place of migration. This was indexed using normalisation and labelled Migration index.

Socio economic status (SES)

This was measured using the variables of SES score and Remittance score.

SES score

This score was computed by combining the asset score, which included 22 items, Allied agricultural score, which measured ownership of agricultural equipment and farm animals and Principal source of income score for the household. Since these three variables were correlated, they were combined after normalising the variables and weighting them using the variances and labelled SES index.

Remittance score

Remittance score was computed taking into account the periodicity of money received and the average amount received per month. Scores were then normalised and labelled Remittance index.

Infrastructure

Remittance score was computed taking into account the periodicity of money received and the average amount received per month. Scores were then normalised and labelled Remittance index.

Household infrastructure score

This was computed by combining Water safety score, Water access score and sanitation

score. Water safety score was computed using the scores for 'Source of water' and the 'Problems experienced' with the source of water. Water access score was graded in terms of perceived ease of access. Sanitation score was computed using the Availability of a toilet in the household and its usage. Since Water safety score was correlated with the other two indices they were normalised and aggregated using variances as weights and labelled as Household infrastructure index.

Transportation score

Transportation score was graded based on the Public availability of transport and its Ease of use.

Individual discrimination

This was operationalised using the variables of Morbidity score, Duration of illness score, Multiple morbidity score and Funding source score.

Discrimination score

This was computed using all the four variables mentioned above. Funding source score was correlated with Morbidity score and conceptually Morbidity score, Duration of illness score and Multiple morbidity score are related. All the four variables were normalised and a single index created by aggregating them using variance as weights and labelled as Discrimination index. This represents the individual's propensity for ailments and the ability to deploy funds to resolve them.

Health care sought

Health care sought was operationalised using the variables of Provider score, Waiting time score, Expenditure score and Provider behaviour score. This represents the quality of health care sought in terms of its various attributes such as its appropriateness, time taken, expenditure involved and provider behaviour.

Facility score

Provider score was correlated with Waiting time score, Expenditure score and Provider behaviour score. All these were normalised and then merged into a single index using

the variance as weights and labelled as Facility index.

9.4.3 Distribution of individual variables

The variables included in SEM were standardised and variables across similar domains were merged using inverse variance weights. The values for these standardised variables ranged from 0 to 1 and the distribution is shown in Table 9.13. Distribution of the individual variables used in SEM is described in the earlier sections of this chapter. Migration is common among those in *tandas* and hence the average Migration index and Remittance index is high when compared to the village. Differences are seen in the mean values for Land index, SES index, Household infrastructure index and Transport index, with villages having better value than those in *tandas*. Average values for Discrimination index and Facility index was lower in the *tandas* as they were likely to have the morbidity for a longer duration and seek inappropriate care for ailments.

Table 9.13: Distribution of variables included in Structural Equation Modelling

Variables	Tanda		Village		Total	
	mean (SD)	Range	mean (SD)	Range	mean (SD)	Range
Structural Discrimination						
Migration index (X_M)	0.107 (0.147)	0 - 1	0.079 (0.186)	0 - 1	0.093 (0.168)	0 - 1
Land index (X_L)	0.036 (0.108)	0 - 1	0.039 (0.106)	0 - 1	0.037 (0.107)	0 - 1
SES						
SES index (X_S)	0.181 (0.129)	0.008 - 0.736	0.192 (0.139)	0 - 0.751	0.186 (0.134)	0 - 0.751
Remittance index (X_R)	0.051 (0.124)	0 - 1	0.016 (0.081)	0 - 1	0.033 (0.106)	0 - 1
Individual discrimination						
Discrimination index (X_D)	0.131 (0.177)	0 - 0.731	0.128 (0.16)	0 - 0.864	0.13 (0.169)	0 - 0.864
Infrastructure						
Household infrastructure index (X_H)	0.563 (0.268)	0.017 - 0.93	0.643 (0.302)	0.056 - 1	0.603 (0.289)	0.017 - 1
Transportation index (X_T)	0.174 (0.168)	0 - 1	0.198 (0.174)	0 - 1	0.186 (0.171)	0 - 1
Health care sought						
Facility index (X_F)	0.328 (0.225)	0 - 0.869	0.471 (0.251)	0 - 0.926	0.399 (0.249)	0 - 0.926

Observed relationships between variables are presented using Pearson's correlation coefficient matrix separately for *tandas* and villages (Table 9.14). Migration index and land index had a significant negative association only in the *tandas* as migration is a consequence of reduced access to land and *tandas* are disadvantaged in that aspect. Migration index also had a significant positive relationship with Remittance index and Household infrastructure index in *tandas* and villages. This holds true as migrants in the household send money in the form of remittances, which also contributes to better household infrastructure. Land index had a positive relationship with SES index in both the settlements and this relationship is expected in a region dominated by agriculture.

Land index is negatively associated with Remittance index in the *tandas* and Transportation score in villages. The SES index had a significant positive association with Household infrastructure index in *tandas* and villages. Similarly, a positive relationship was noticed with Facility index in *tandas* and negative relationship with Transportation index in villages. Household infrastructure index was positively associated with Transportation index in the *tandas* and Facility index in the villages. It was negatively associated with Transportation index in the *tandas*. Transportation index had a significant negative association with Discrimination index and positive association with Facility index. Discrimination index also had a negative relationship with Facility index as duration and number of illnesses determine the facility from where care is sought. The nature of these relationships will be discussed in detail under results of the estimation.

Table 9.14: Correlation matrix of variables in the SEM across tandas and villages

Variables	Migration index	Land index	SES index	Remittance index	Household infrastructure index	Transportation index	Discrimination index	Facility index
Tanda								
Migration index	1.000							
Land index	-0.093*	1.000						
SES index	-0.087	0.465***	1.000					
Remittance index	0.31***	-0.106*	-0.090	1.000				
Household infrastructure index	0.101*	0.075	0.16***	0.055	1.000			
Transportation index	-0.003	0.008	-0.002	-0.001	-0.121**	1.000		
Discrimination index	0.035	0.055	-0.049	-0.077	0.115**	-0.35***	1.000	
Facility index	-0.075	-0.005	0.096*	0.025	-0.055	0.64***	-0.51***	1.000
Village								
Migration index	1.000							
Land index	-0.041	1.000						
SES index	0.071	0.37***	1.000					
Remittance index	0.33***	-0.044	-0.017	1.000				
Household infrastructure index	0.19***	0.070	0.27***	0.088	1.000			
Transportation index	0.040	-0.093*	-0.107*	-0.023	-0.052	1.000		
Discrimination index	0.012	0.085	0.083	0.001	-0.023	-0.39***	1.000	
Facility index	0.091	-0.053	-0.015	0.010	0.103*	0.61***	-0.60***	1.000

*** p<0.01, ** p<0.05, * p<0.1

9.4.4 Model modification

The operationalised conceptual model in Figure 9.4 was reduced from a saturated model to a parsimonious one. This decision was based on Pearson's correlation matrix and also keeping in line with the understanding from the theoretical or conceptual model. Pathways from Land index to Household infrastructure index, Remittance index to Discrimination index and SES index to Discrimination index were dropped as these hypothesised relations did not manifest as significant associations through correlations. Transportation index and discrimination index were strongly correlated with the facility index that indicates the use of a facility by an individual. In addition, the discrimination index was negatively associated with transportation index, indicating that discrimination was mediated through transport availability. Therefore, we dropped the direct path to Facility index and retained the path from transportation index to facility index. The final model used for the structural equations modelling is shown in Figure 9.5. Even after dropping the pathways that were disallowed due to the absence of correlations, the pathways indicated in the original theoretical model (figure 9.4) hold.

The set of 7 equations specified by this parsimonious model are listed below. (SEM equations).

$$X_M = \lambda_{LM}X_L + \epsilon_1$$

$$X_S = \lambda_{LS}X_L + \lambda_{RS}X_R + \epsilon_2$$

$$X_D = \lambda_{LD}X_L + \lambda_{HD}X_H + \epsilon_3$$

$$X_R = \lambda_{MR}X_M + \epsilon_4$$

$$X_H = \lambda_{SH}X_S + \epsilon_5$$

$$X_T = \lambda_{DT}X_D + \lambda_{ST}X_S + \epsilon_6$$

$$X_F = \lambda_{TF}X_T + \lambda_{SF}X_S + \lambda_{RF}X_R + \epsilon_7$$

M=Migration index, L= Land index, S=SES index, R= Remittance index, D= Discrimination index, H= Household infrastructure index, T= Transport index, F= Facility index

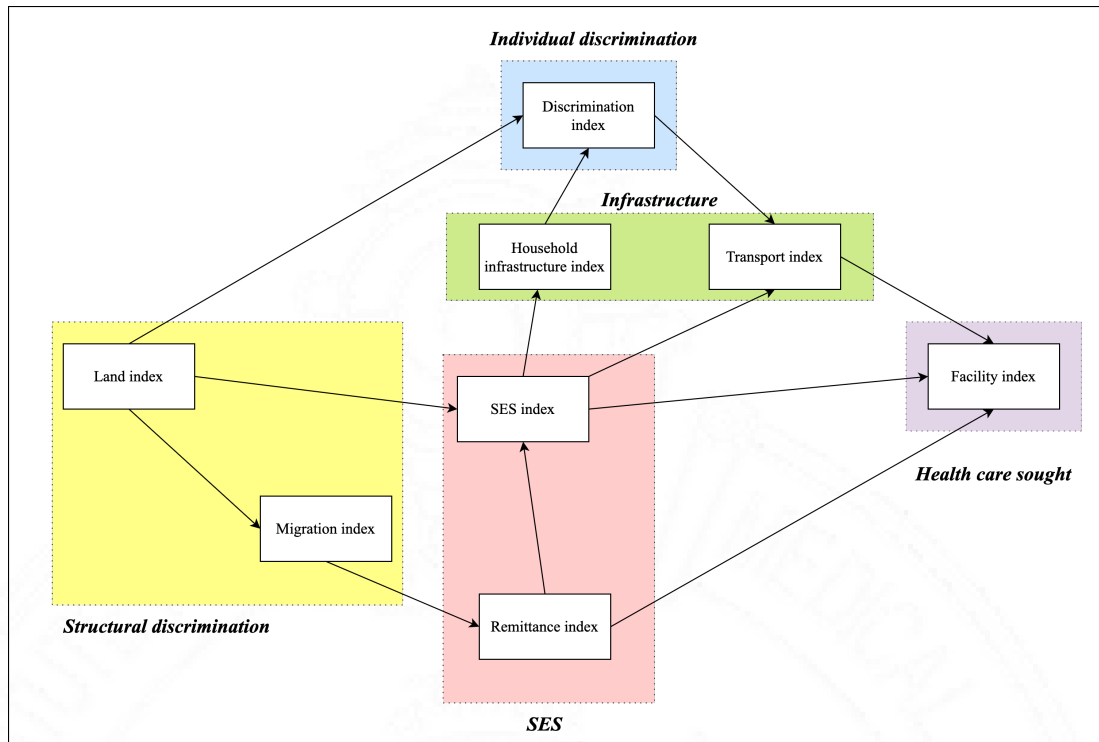


Figure 9.5: Structural equation model of the effect of Structural discrimination, SES, infrastructure, Individual discrimination on Health care sought

9.4.5 Model Estimation and Interpretation

Structural equation modelling was done separately for *tanda* and village to understand the direct and indirect effects of the conceptualised variable on care seeking as the final outcome variable (Facility index). The detailed table showing the direct, indirect and total effects is shown in Appendix A30. The estimated path coefficients between multiple explanatory and response variable for *tanda* and village in shown in path diagrams in Figure 9.6 and 9.7. Land index represents the nature and value of the land possessed. Migration index represents the number of migrants and activities done by them. SES index captures the economic status of the household. Discrimination index represents the collective morbidity experience. Remittance index reflects the ability of migrants to support the family back home. Household infrastructure index represents the water and sanitation of the household. Transportation index reflects the means to travel to health facility and Facility index represents the type, quality of healthcare and expenditure. In *tandas* and villages Land has a significant positive direct effect on SES and the magnitude of the relationship is high in the *tandas*. The indirect effect is mediated

by migration and remittances and contributes only about 0.2 percent of the total effect in *tandas* and 0.003 percent in the villages. Land has a weak positive direct effect on individual discrimination in both *tandas* and villages. Indirect effect mediated through migration, remittance, SES and household infrastructure does not contribute much to the total effect. Migration has a significant positive direct effect on remittances in both *tanda* and village while the magnitude of the relationship is higher in villages. This could be because the migrants from the villages are engaged in the organised sector and the remittances are likely to be fixed and regular. Remittance has a weak negative direct effect on SES in *tandas* and villages.

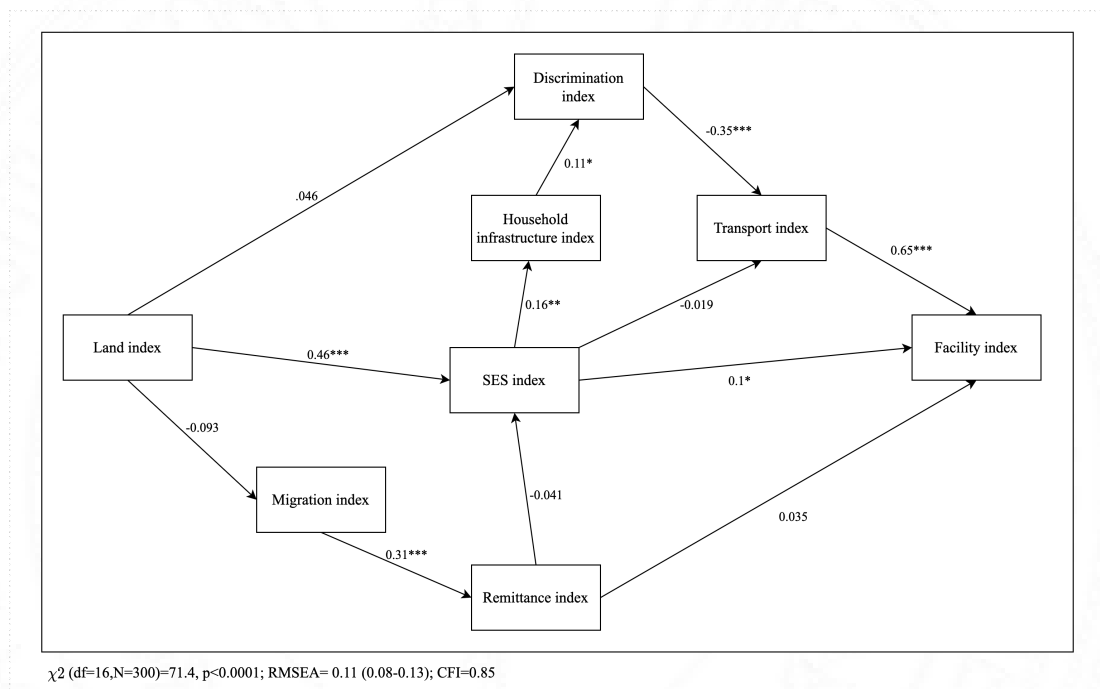


Figure 9.6: Structural equation model for *tandas*

SES has a strong positive direct effect on Household infrastructure in both the settlements although the magnitude is high in the villages. SES also has a mediation effect between land and Household infrastructure and the indirect effect of land on household infrastructure is stronger in the villages. What this means is that land matters to both *tandas* and villages but villages by virtue of having better quality land, demonstrate it though the positive effect on SES and household infrastructure. Household infrastructure has a positive direct effect on individual discrimination in *tandas* and negative in villages. This relationship in *tandas* could mean that in spite of having better household

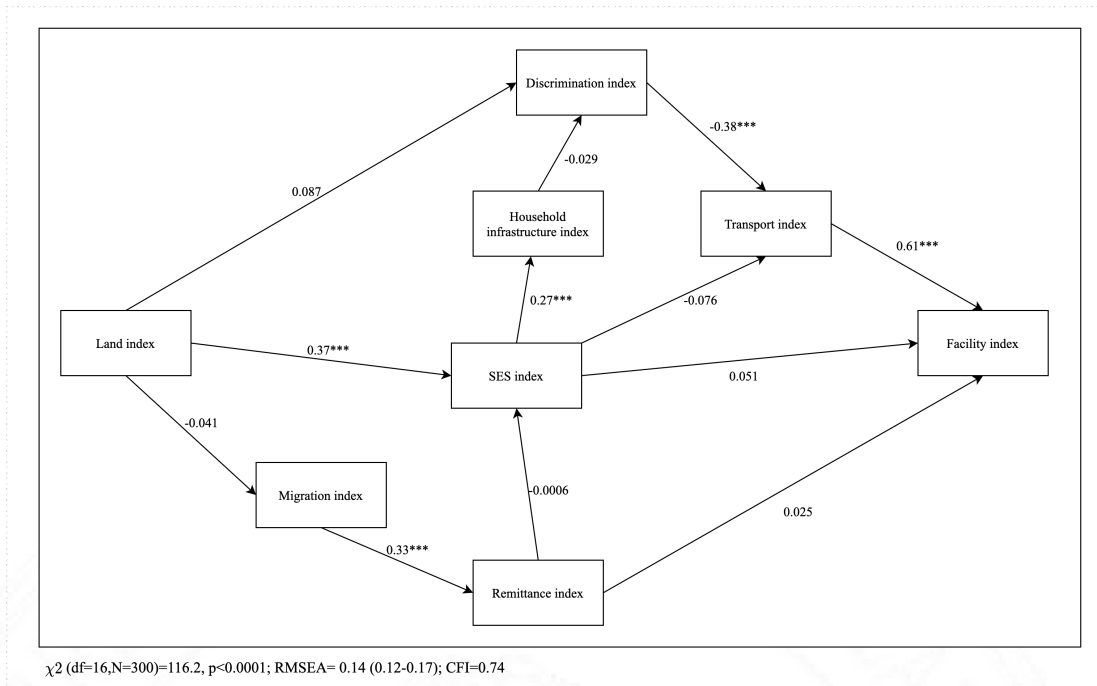


Figure 9.7: Structural equation model for village

infrastructure, people continue to experience morbidities which manifests as individual discrimination. Individual discrimination has a negative direct effect on transportation and the magnitude of this relationship is slightly stronger in the *tandas*. As individuals experience morbidity, which is of longer duration, they tend to seek care from local providers in the case of *tandas* and the difference in the magnitude can be explained by this. Land has a significant negative indirect effect on transportation only in the villages.

SES has a negative direct effect on transportation in both the settlements. Although the effect is not significant, the magnitude is different across *tandas* and villages. Land has a negative indirect effect on transportation and is significant in the villages. This is because better land means better SES and people use private vehicles or autorickshaws for seeking care which have a lower score compared to public vehicles. Transportation has a strong positive direct effect with the health care sought and the magnitude is higher in the *tandas*. Having appropriate transportation to a health facility makes a lot of difference in terms of care seeking. Remittance score has a weak direct effect on health care sought and this magnitude is high in the *tandas* as some of them depend on remittances from their children or relatives for seeking care. SES has a positive direct effect

on health care sought in both the settlements, however, this relationship is stronger in the *tandas*. This highlights the importance of SES in care seeking for *tandas*. Individual discrimination, which reflects the morbidity experience here, has a strong negative direct effect on health care sought, which is mediated through transportation. The magnitude of this relationship is high in the *tandas*. As people suffer from morbidity of longer duration, with restricted transportation and means of financing health care they rely on unqualified providers in the nearby villages or those who visit the *tanda* or village. Visiting of RMPs for providing care is more frequent in the *tanda* as all of them are located in villages and this explains the difference in the magnitude across the *tanda* and the village. Multiple indices of goodness of fit, i.e. Model chi-square, Root Mean Square Error of Approximation (RMSEA) and Comparative Fit Index (CFI) was used to assess the model fit for both *tandas* and villages. The cut off for these indices indicate a poor fit of the model with the sampled data. However, while comparing these indices between *tanda* and village, the model fits better to the sampled data in *tandas* than villages (RMSEA 0.11 vs 0.14, CFI 0.85 vs 0.74). This could be a consequence of the extent of pooled variance within each of the variables in the SEM.

9.5 Discussion

This chapter of the thesis focussed on describing the characteristics of sampled households across *tandas* and villages to compare the living conditions. The morbidity experiences of individuals aged fifty and above in the household and the care seeking for the same was also compared. Finally, an attempt to validate the knowledge gained from ethnography and quantitative survey was done using Structural equation modelling. The differences in characteristics should not be viewed in isolation but in the context of the discriminatory processes that lead to discriminatory health outcomes. The findings of this chapter would be discussed, keeping that in mind.

Access to water and sanitation is important for daily living and has implications for the health of the household and society as a whole. Although there is not much difference in the source of water used for daily use between *tandas* and village, households in the *tanda* are more likely to face problems with the frequency and quality of water supplied. The use of barrels to store water indicates the disadvantage experienced by settlements

in the past. In the absence of regular and constant supply, households use barrels to store water. Even though there is narrowing of the gap in relation to piped water supply, disadvantages of the past are evident in the *tandas* as a higher proportion of households use barrels compared to villages. A similar gap is noticed in the coverage of toilets and their usability across households. Less than half of the households use the toilets inside the houses and rest defecate in the open. One of the reasons for this could be the lack of adequate water supply. *Tandas* have a greater number of houses with toilets located inside the house. Although this can be viewed as the *tandas* being progressive, in reality, it is because of the lack of space as the households are densely packed in the *tandas*. Lack of adequate toilets in the *tandas* can be attributed to the difficulty in obtaining funds from the government in building toilets or the inability to construct on their own due to their socio-economic status. The main markers of socio-economic status in a district where 80 percent depend on agriculture is the land possession and assets owned by the households. *Tandas* are disadvantaged, with households possessing less assets and land when compared to those living in the villages. Banjaras are migrants to the region and even though they have settled for more than hundred years, they had to start from scratch in earning for livelihood to becoming landowners. This explains the differences in the land ownership and the quantum of land held. Their situation is made worse, having been made to live in the forests and cultivating on lands with low productivity where there is increased dependence on rain for cultivation. Because of this they grow crops like cereals which require less water, but the returns are less when compared to other cash crops grown in the villages. This is not to say that the villagers are advantaged in a drought prone zone but comparatively, they have better lands, source of irrigation and are able to cultivate cash crops by being able to withstand the drought situation better. Land and limited means of livelihood in the *tandas* cause people to migrate in the short term, which in some cases is the only source of income for the household. Those who stay back, engage in employment with daily wages be it agriculture or non-agriculture. A greater proportion of households in the *tandas* depend on these daily wages to run their household. In the villages, members in the household are able to get educated and get jobs with salaried employment. This is not the case in the *tandas* as they face disadvantage starting from geographical location of the settlement, location of schools

and colleges and the difficulty in securing jobs with salaried employment and the added lower socio-economic status of the household acts as a barrier.

Active involvement of the governmental departments in *tandas* and villages will help in the people becoming aware of various initiatives by the government, to be more proactive and develop trust in the system. Since the focus of thesis is on health and discrimination, I looked at the functioning of the Public Health system in the settlements. Health worker visits in the past six months was better in the *tandas* than the villages. Although this appears to be a positive marker, findings from ethnography indicate that this could be an outcome of othering where the Banjaras are 'othered' based on their living conditions and hygiene and a need for the system to police them and ensure that there are no outbreaks. Differences were also seen in the proportion of health care workers who visited, not entering the house. This could indicate a potential discriminatory behaviour probably not noticed by those who experience it. These kinds of practices affect the trust in the system.

Residential segregation, household living conditions, jobs undertaken to sustain means of livelihood, personal habits can all have a cumulative effect on health and manifest as morbidities. The household listing done to select the participants revealed that a greater number of individuals aged 50 and above in the *tandas* experienced morbidity when compared to the villages and these are an outcome of cumulative discrimination experienced by them in different spheres of life. The common acute morbidity in both the settlements is musculoskeletal pain, but the prevalence was very high in the *tandas*. This includes pain affecting the neck, back and joints. These are outcomes of having to toil hard on land locate in hilly terrains in a drought-prone area, working as labourers in the field of others in addition to their own fields and working as non-agricultural labourers, away from the land of origin. Banjaras also have a high burden of hypertension and other cardio-vascular ailments and the possible reason for this could be the consumption of alcohol. The study did not examine the reason for consumption of alcohol but findings from ethnography point towards brewing of alcohol as being a part of Banjaras culture which was later criminalised by the British. Alcohol is also used as a means to manage the pain from toiling hard in the fields as people cannot afford to go to a doctor

every day for the pain.

Banjaras are less likely to visit providers for ailments when compared to the villages and this gap widens, especially for chronic diseases. The location of health care facilities in the villages results in people in the *tandas* relying on RMPs visiting them in their dwelling or in neighbouring villages for acute ailments. For chronic ailments, the Banjaras visited government facilities as the medications were available for free. People in the villages preferred seeking care from private providers for both acute and chronic ailments and this could be explained by the socio-economic status of the household, which acts as an enabler. Availability of public transportation is crucial to seeking care for ailments. People in the village made use of public bus compared to *tandas* for acute ailments and this is because of the increased dependence on RMPs for *tandas*, who are available locally. In the case of chronic illness, the use of public bus was more in the *tandas* as they sought care from public facilities. Banjaras are more likely to depend on borrowings or other means of resources like pension for seeking care which also influences the choice of seeking care.

Structural discrimination in the form of residential segregation affects the means of livelihood, causing them to seek multiple options for sustaining themselves. The multiple forms of discrimination experienced by the Banjaras in terms of the segregation, household and living conditions manifest as different morbidities. The discrimination in the geographical location of health facilities, availability of public transportation determines the place from where they seek care. Socio-economic status of the household as a consequence of residential segregation also influences care-seeking.

The understanding from ethnography and insights from the survey was used to construct a structural equation model to understand the different pathways from structural discrimination to care seeking. The mechanisms by which the structural discrimination operates in the *tandas* and villages is different as shown by the model. Socio-economic status, which is influenced by the structural discrimination components of land and migration has a direct impact on the facility from where care is sought only in the *tandas*. The pathways of individual discrimination (a marker of the morbidity experience) on

transportation and facility from where care was sought is similar across *tandas* and villages, but the magnitude is stronger in the *tandas*. Essentially what this means is that absence of public transport to reach an appropriate facility for seeking care for ailments is characteristic of both *tandas* and villages, but results in more people from *tandas* not using appropriate care. This inadequate use of care by people from *tandas* is in part due to their poor SES that affects their options to use better facilities, but also due to the very nature of the ailments they experience and the means of financing them.

CHAPTER 10

Discussion and Conclusions

The objectives of the thesis were to examine discrimination experienced by Banjaras in health care settings, to study the process of othering by the health care system and to evaluate the impact of possible discrimination experienced by Banjaras on their health, health care access and utilisation. The first two objectives were addressed by using ethnography in selected *tandas* and health facilities catering to them and restricted historiography to understand the history of Banjaras and representations of them throughout history. The last objective was addressed in two stages; one was to map all the *tandas* and the villages close to it to understand the differences in the infrastructure across them. In the next stage, an interview schedule was used to examine the consequences of discrimination on individuals in *tandas* and villages to enable the identification of the intergroup differences. The first objective of examining discrimination experienced by Banjaras in health care setting was addressed in chapters four to seven. To study discrimination, it is important to understand the place and the context where the *tandas* are located. In chapter four, the situation of Gadag within the developmental discourse of Karnataka and the position of different social groups across various indicators was described. Chapter five examined the historical context of the Banjaras, the *tandas* and the life there. Chapter six described the health system and its functioning. Chapter five and six are crucial to an understanding of the context of the *tandas* and the health system catering to them where discrimination is experienced and the manner in which it manifests. Chapter seven also addresses the first and the second objectives of the PhD work, which is to study the process of othering by the health system. This chapter examines the existing structures and everyday invisible discrimination experienced by the Banjaras causing them to lead sub-optimal lives. Chapter eight and nine addressed the last objective, which is to evaluate the possible impact of discrimination experienced by Banjaras on their health, health care access and utilisation. Chapter eight compares the

various infrastructure, including health, across all the *tandas* and villages and sampled settlements. Discriminant analysis identified the salient infrastructural variables that contribute to the differences between the *tandas* and villages. Chapter nine presents the findings of the quantitative survey examining households' attributes, morbidity profile and care seeking for ailments. The questions included in the interview schedule for the survey were based on findings from the ethnography in order to capture the outcome of structural discrimination on livelihood, health and health care access. Multiple indices were computed to capture different aspects of discrimination and the relationship was tested across *tandas* and villages using structural equations modelling.

In this chapter, I will discuss the findings from the PhD work described above with respect to the context in which Gayatri Spivak described 'othering' and its implications for 'othering' of specific population groups by health systems and, therefore, public health practice.

10.1 The concept of othering

The concept of the 'other' has been used by different authors, but Gayatri Spivak was the one to use it in a systematic way (Jensen, 2009). She locates 'historical reality' as fabricated by examining the process of creation of British 19th Century in India as an object of knowledge that is constructed. In her essay "The Rani of Sirmur", she looks at the unchallenged acceptance of archives as the means of accurate recreation of history. To demonstrate this, she borrows from three examples of othering from the archives of British India of the 19th century and the narratives of the 'Rani of Sirmur' (Spivak, 1985).

- The first example is from the letter written by Captain Geoffrey Birch to Charles Metcalfe. In this letter, he describes his travel around the place to remind the people whom they are subjected to with an identification of the 'Masters' as against the creation of the natives as domesticated 'others'. This indicates power and treating the natives as 'other' by treating them as subordinates (Jensen, 2009). This is a way of imprinting the position of the Master upon the natives, but there is no mention of how the natives perceive this.
- In the second example Spivak uses letters from Major General Sir Ochterlony-writing to John Adam, the Governor's secretary. His letter indicates the dislike for the hill people and described them as morally inferior.

- The third letter is the deletions made in the letter to Marquess of Hastings by the Board of Control of East India Company. The purpose was to not give access to knowledge of war and technology to the natives who are part of the colonial troops as such persons will not guarantee that the intentions of the British East India Company. In short, the 'other' should not be given access to technology that belong to the Imperial self (Jensen, 2009).

In each of these three passages, what is rendered clear is that the mercantile enterprise is gradually shifting towards state formation, moving from a commercial enterprise to a territorial one. The writing of colonial history situates the formation of British India to India's lack of nationhood. It is in this context that Spivak situates the "Rani of Sirmur". The Rani is described as the designated guardian of her son (minor) in place of her deposed husband, who has been banished. The discourses cover her desire to commit sati but do not record the subsequent choices. The choice of sati should have given her a status in the alternative history telling among the indigenous. The resistance should have also invoked a discourse of rendering such a choice acceptable by the Brahmins. Yet once the ceding of Sirmur is a possibility, the archives contain no information of the Rani. She is not referred to at all in subsequent archival material of the British. Spivak uses the story of the Rani to highlight the role of archives in privileging certain categories of representation and not others. Such representation had translated proper names of women, wives, to translation in English, rendering the individuals invisible. Such is the voiding of identities in the process of 'othering'. The archives portray Rani as a passive marginalised figure, whereas historical evidence points towards her being a strong and independent leader (Mohan, 2019). The othering, as described by Spivak, imbues notions of power, class, race and gender. The concept of othering used here always views the other as inferior, which is done by the powerful and dominant majority. Schwalbe (2000) identifies exploitation as a prerequisite for othering where people or groups are identified and designated as inferior by a group that has the capacity to dominate (Schwalbe, 2000). Even as Spivak's work focuses on the privileging of archives that tell the story of the dominant group, the concept of othering has application across different contexts. The problem of 'othering' is being referred to as the problem of the 21st century. 'Othering' has a role in disputes, violence, conflicts, the spread of disease, hunger and climate change (Powell & Menendian, 2016). It also has a part in defining

and maintaining the status of group of people and designating them to a subordinate position. The groups that are 'othered' commonly experience marginalisation and social exclusion (Grove & Zwi, 2006). This brings to the question of how 'othering' can influence health and healthcare access. As discussed in chapter 2, 'othering' results in identifying and labelling differences based on inaccurate and wrong information, which leads to stigma and discrimination, resulting in social exclusion. Each of these processes impacts health and healthcare access through various pathways.

The focus of the PhD work was on understanding the process of 'othering' by health systems and its impact on health and healthcare access for groups that are 'othered'. Studying 'othering' is difficult as it is a complex exercise as 'othering' is indicative of a process – the process of 'othering', and the end result of the process, a state of being of those affected – the 'othered'. I have explicated the process of how 'othering' is achieved in this context using the historiographic analysis. The consequence of this process is rendered visible in the differences in infrastructure available across the *tandas* and villages and settlements and the health outcomes of the people living there. There are methodological difficulties in explicating the concept of 'othering' or demonstrating how the 'othering' process in the community and the health system affect the health of the population designated as the 'other'. I looked at the different measures from existing literature on how 'othering' has been measured in the context of healthcare. Most of the measurements focus on stigma, discrimination and social exclusion by the health system and not explicitly the 'othering' or its process. The 'othering' process is about labelling, ascribing negative and inaccurate stereotypes which occurs in the psychological domain. The Implicit Association Test (IAT) helps in describing the cognitive processes relating to formation of stereotypes and attitudes. This computer-based test is not suited for context with low literacy and poor penetration of technology. The complex processes in the construction of the 'other' and the experience of discrimination varies across context and existing scales do not capture it. To directly ask the victim if they have been 'othered' or the perpetrator if they have treated someone as the 'other' is less likely to invoke a response. The victims may not know the different stereotypes ascribed to them by the dominant groups or recognise the discrimination experienced by them as such.

Similarly, the perpetrator is less likely to recognise or admit to their own practices of discrimination when asked questions structured into the form of a questionnaire. It was important to understand the process of 'othering' and discrimination that exist before attempting to measure them.

Drawing from the work of Spivak, where she mentions that using textual materials privilege the voice of one who speaks and not that of those who are silent and designated as the 'other'. The focus of the research work was done from the point of view of the Banjaras, giving importance to their voice and view of 'othering' and discrimination from their perspective and then moving on to the view of the dominant groups. This was primarily achieved by conducting ethnography in selected Banjara settlements and the public and private health system that caters to their healthcare needs. This helped in better understanding the world of the community that have been 'othered' and the various manifestations of this 'othering'. Interviews in the health system aided in understanding the language and construction of the 'other' and the ways it impacts practice. The survey design, development of interview schedule was done keeping in mind the context of Banjaras. In the following sections, I will apply the notions of 'othering' as described by Spivak in the context of Banjaras' health and healthcare access to understand the process of 'othering' encountered in Gadag and the state of those being 'othered'.

10.2 Embedded other

Gadag district is among the underdeveloped regions in the state of Karnataka. The North Karnataka region of which Gadag is a part of is backward and deprived region and often being referred to as a neglected region in political discourses. This is partly because of the lack of natural resources with which southern Karnataka is endowed. Gadag is also a drought-prone district because of its geography and differences in developmental indicators across different talukas. In a district where majority are involved in farming, the Scheduled Caste groups are disadvantaged as they are less likely to own agricultural land and if at all they do, the quantum of land possessed is also low when compared to the other groups. The Scheduled Caste groups are also disadvantaged in social and health indicators in Gadag district. The Banjaras form the second-largest groups of Scheduled Castes in Gadag and face multiple disadvantages. In the developmental dis-

course, the regions of North Karnataka and Gadag can be viewed as the 'other' which needs to be developed. Within the districts, the Scheduled Caste groups are othered and face disadvantage. It is in this context the Banjaras *tandas* are located and they face cumulative disadvantage starting from the region to the 'othering' by the dominant communities that they kept them away from the mainstream, affecting their daily lives. The othering of Banjaras needs to be examined starting from the documented history of this group and how it has 'othered' them and contributed towards maintaining the status of the 'other'. They constitute about a third of the SC groups in Gadag district (29.1 percent of SC population in the district) and identifying and describing this process has salience for this group and other groups similarly situated across the country.

10.3 'Othering' in historical discourses on Banjaras

Historical documentation of Banjaras in archival materials is written by British scholars and few Indian scholars in the colonial regime. Scholars working on different disciplinary orientations have referred to these materials without posing challenges to the archival material. Spivak has referred to such archives as contributing to the process of othering as the voice of the 'other,' i.e., Banjaras is not being represented. The earliest references to Banjaras in the colonial archives is a letter dated from 1814, written by Captain John Briggs to William Erskine, mentioning that he intends to show the "*nature of these people*". This letter is among the papers of the Bombay Literary Society (Briggs, 1819). He starts by describing them as "*athletic, hardy and brave*" but goes on to call them as "*cruel robbers on the highway; for they seldom spare the life if any resistance is made*". He bases this on two isolated incidents involving the Banjaras. The descriptions of being 'cruel', 'unruly', 'robbers' and 'addicted to theft' is commonly found in the archives. Although their hardworking nature, strong stature and utility to the armies is recognised and appreciated, it is the description of their criminal ways that dominate the materials. The criminal nature attributed to the Banjaras is highlighted in the 1908 report, "Notes on Criminal Classes in the Bombay Presidency" where there is a detailed mention of the crimes to which they are "addicted" to. Mentioned as hardworking and toiling during the day and robbers at night (Bombay (Presidency) Police Department, 1908). This report was in the context of Banjaras being brought under

the purview of Criminal Tribes Act in 1896. This document identified Banjaras in the Carnatic region (South India) as the most troublesome people. They even go to the extent of describing the location of *tandas* as being situated at a vantage point to enable stealing from multi-caste villages (Halbar, 1986). Cleanliness and dirtiness are other features that have been attributed to the Banjaras in the archives; the words used are “dirty”, “untidy”, “pay little attention to cleanliness”. Most of the archives don’t dwell further than mentioning these attributes other than Edgar Thurston. In his documentation of the Tribes and Castes of Southern India he mentions the lack of “cleanliness” to the plaiting of head among Banjara women, which is not combed regularly or left unwashed for a month. The observations of “*their bodies or clothes are seldom washed*” are made based on their clothing and extensive jewellery, making it difficult to clean their bodies regularly. This conclusion is made based on the clothing and appearance of women and not men and there is no description about the hygiene in the settlements. There are conflicting report of Banjaras even in the archival material. The Census of India (Bombay) in 1911 refers to their thieving ways of the past, who later settled down to being law-abiding citizens (Mead & Macgregor, 1912). It is possible that the Banjaras were involved in petty crimes in the past during the colonial regime, which may not justify their inclusion in the Criminal Tribes Act. Tribes were brought under the purview of the Act based on the colonial ideas of crime and order in relation to their society. Their nomadic ways also threatened the regime and were viewed as groups that needs to be monitored. The Act was viewed as more of political control rather than maintaining peace in the society (Burman, 2010). In 1881 there is a mention made about the low conviction rate among Banjaras in the central provinces when compared to other castes (Russell, 1916) indicating that the Act was intended for political control. Even after the repeal of the Criminal Tribe Act in 1949, the stigma associated with it remains and is used as a marker for the ‘other’. Ethnographic accounts of the Banjaras by the Government of India in 1961 describes the *tanda* settlement as ‘neat and clean’ and no particular diseases attributed to them and same as the general population (Reddy et al., 1961). In spite of this, the image created by the archives of them being ‘dirty’ and ‘untidy’ is what prevails. Halbar (1986) in his ethnographic account of Banjaras in Dharwad district mentions the stereotyping of Banjaras by the non-Banjaras as being

“shabby and dirty”.

Non- Lamani (Banjara) peasants: “*Tanda* people are dirty, of loose morals, drunkards, thieves, spendthrifts and lacking any foresight

– Halbar (1986), pp194

In post-colonial India, Banjaras continue to be ‘othered’ and their personal attributes of cleanliness, alcoholism and labelling of criminal tribes in the past continue to maintain them as the ‘other’. The view of Banjaras as the ‘other’ by non-Banjaras was common discourse in the fieldwork done in Gadag. This ‘othering’ which is rooted in history, maintained by the dominant communities, is also practised by the health system, which is part of *tandas* and villages. In Gadag, through the health system, it takes the form of labelling them as ‘dirty’ and potential epi-centres for disease outbreaks. The frequent questions by treating medical officers to them regarding their travel to and from Goa or their water storage means are manifestations of this process of ‘othering’. The process of ‘othering’ is not common to Banjaras alone, but there are many tribes in different parts of India, including Karnataka, who have been classified as ‘de-notified’ tribes who continue to face the stigma and discrimination even today (Abraham, 1999; Japhet & Diwakar, 2015).

10.4 Imprinting patronage and power - ‘Othering’ at the local level

The functioning of the public health system in the *tandas* is through the ASHA worker, who is from the same community and the Health worker (HW) from the Sub-centre. Their role can be likened to the letter written by Captain Geoffrey Birch where he travels around the place on a horse to make sure the subject knows who the master is. The functioning of ASHA and health worker at the local level can be viewed as health system imprinting its presence to demonstrate its potential for power and patronage in the mind of the locals. Although how this gets imprinted is different from the perspective of the system and the locals. The ASHAs, who are commonly referred to as *ayahs* are seen as only catering to pregnant women and children and doing the role which was done by the anganwadi teacher previously. The word *ayahs* is the term used for anganwadi helpers and even though ASHAs function with the health system, they are viewed as helpers with limited role. The health workers role is to visit the settlement from time to time and carry out a range of preventive and basic curative services. From the ethnography,

it was found that health workers at the Sub-centre skipped visiting the *tandas* due to increased workload or engagements in the PHC and entrusted their work to the ASHAs and following it up over the phone. While carrying out their roles in the *tandas*, they are less likely to enter the house of the Banjaras. This kind of practice of health workers not visiting and not providing services is reported among scheduled caste groups too (Acharya, 2010; Shah, 2006). There are two types of othering that can occur here, first is viewing the *tandas* as places where the workers can skip their visits because people are less likely to protest and raise concerns. This reflects the potential diminished autonomy to exercise their rights by the group being othered. The second is viewing *tandas* as places without hygiene and the need to be constantly monitored to prevent infection outbreaks. This again reflects the view of *tandas* being places with people who have a weakened ability to act for their own welfare due to their lack of knowledge and/or understanding. Therefore, they are likely to cause disease ‘outbreaks’, requiring interventions by the health system. I will discuss the second view in the next section. The absence or irregular visits of health workers creates an image of a non-responsive health system. ASHA was envisaged as a link between the community and the public health system, but in the *tandas*, they are not seen in that way. Although the health system views itself as functioning in the *tanda* through the ASHA and the health worker, in reality, it has failed in imprinting its presence in the minds of people because of ‘othering’ of the *tandas* and their people by those health workers at the lower level. That this is not challenged by the community is inevitable as they have not the means to recognise the systematic discrimination. But that the absence of any other health workers in the *tandas* has failed to invoke a health system response is also a symptom of the strength of this ‘othering’ process within the health system. The health system officials do not seem to have made any efforts on their own or through the Health Workers to redress the absence of any other health functionaries barring the ASHAs, leaving the field to be taken up by the RMPs.

10.5 Creating negative stereotypes -Othering of the collective and diminishing their moral worth

Positioning the collective group of Banjaras as morally inferior by means of multiple labelling is akin to the dislike of hill people by Major General Sir Ochterlony. As mentioned earlier, the Banjaras were designated to the position of the 'other' by labelling them as unclean, dirty, alcoholics and criminal tendencies because of being brought under the Criminal Tribe Act. These inaccurate labels and stereotypes by the community is also held by the health system that cater to Banjara settlements. The health system goes a step further and attributes diseases to these created labels. There is nothing wrong in attributing disease patterns to living conditions like water, sanitation and personal habits as is routinely done in clinical and public health. The problem is ascribing these disease patterns based on the labels of othering. In Chapter seven, I mentioned the different labels in the 'othering' process by providers in the health system. To reiterate it, *tandas* are called 'slum areas', people living in *tandas* are 'dirty', 'chronic alcoholics', 'importers of malaria', 'rough people' and 'troublesome people'. The first four labels are attributed to risk factors for diseases, and it influences the functioning of the public health and clinical decision making of the provider. Stereotyping the *tandas* and the people there result in 'policing' visits by the health worker or ANMs when compared to the village. The public health system views *tandas* as places harbouring diseases and hence the need for additional monitoring. Description of the work carried out like checking water storage and spraying of Dichloro-Diphenyl-Trichloroethane (DDT) is more in the *tandas*. This overreach by the health system is a consequence of viewing the Banjara *tandas* as the 'other' and the policing role by the health system is stronger. The notion of 'other' influences the clinical decision making by prescribing antibiotics more frequently because the sick person is from the *tanda* or giving common advice to Banjara men and women to reduce intake of alcohol. Because they are perceived as possessing a rough nature and trouble causing people, the time spent by the provider during consultation is limited and the provider also gives into the demands for injections. The providers don't take the effort to explain the treatment plan as they want to avoid 'problems' by 'trouble-causing people'. The actions and behaviour of the Public

Health system are influenced by viewing the Banjaras as the ‘other’ and this reinforces the process of ‘othering’. This is not to say that the intention of the health care workers in the *tandas* or the providers in the PHCs is to ‘other’ the Banjaras, but their actions and practices reinforce it. The private system catering to the *tandas* also have similar stereotypes related to cleanliness and hygiene, but it is far more subtle when compared to the public system as Banjaras form a major part of their earnings and they have been catering to them for long. As this private health system takes the form of RMPs who have a historical connect to the *tandas* through their long practice or through that of older RMPs from whom sons or others have taken over, their connections to the *tanda* are far more rooted, enabling them to be viewed as ‘*nam mandī*’ (‘our guy’) by the Banjaras.

10.6 Withholding means of livelihood- ‘Othering’ in the development process and diminishing material worth

Development trajectories in the *tandas* is very different from the villages in spite of them belonging to the same region. It can be argued that the locational disadvantage of *tandas* is incidental and not related to the process of ‘othering’ or discrimination, but the evidence points otherwise. The reasons for this could be compared to avoiding of upskilling the native groups mentioned in the letter of the Board of Control of East India Company in the process of ‘othering’. Overall development in the *tandas* have never been the priority of successive governments in Karnataka. The developmental discourse has been on the north and south divide across Karnataka at the taluka level and not within talukas. This has resulted in developmental efforts being disproportionately distributed within talukas. Underdeveloped *tandas* and large-scale migrations of Banjaras is a topic among politicians but has not translated to any concrete work on the ground. Setting up of the Karnataka Thanda Development Corporation (KTDC) was a step towards developing the *tandas* but setting up of such caste-based boards have been argued as catering to the vote bank. Conversion of *tandas* to revenue villages was first raised in 1994 but came into policy in 2015. This would have helped the *tandas* in getting funds for developmental works in the settlement, but that has not happened at the ground level, as demonstrated by the differences in development infrastructure across *tandas* and villages. This actually is indicative of the possible disinterest of successive

governments in developing the *tandas* or the inability to recognise inequities that arise out of structural and systematic discrimination. As a consequence, they also contribute to the process of maintaining *tandas* as the 'other'. The KTDC, which was envisaged as working towards uplifting the Banjaras, has restricted its role to laying of concrete roads within the settlement, building community halls and organising cultural events for Banjaras. Their role in skill development, generating employment opportunities and promoting embroidery and handicraft is practically non-existent. If there are income generation potential in the *tandas* it would help it to grow economically and develop. There is not much land available for agriculture and when available, it is of poor quality. The transportation infrastructure is poor, that it is not viable for private buses or auto to ply in these settlements. Lack of opportunities within the *tanda* cause the people to migrate in search of livelihood. The board has not done anything to create or improve the health infrastructure in the *tandas*, although it is mentioned as part of its functioning. Public health facilities are mostly located in the villages and rarely in the *tandas*, in spite of the fact that some *tandas* do have the regulatorily defined population size. The memory of the public health system in the minds of the people is largely marked by its absence and presence only during outbreaks. The Public health system is remembered for its presence when there are outbreaks and setting up camps in the *tandas* to contain the disease. The memory of the Public health system is only of these problems and not everyday engagement. The KTDC, which was conceived as a body with well laid out goals, sounding good on paper, for the overall development of *tandas*, is restricted in its functioning and has not helped in upskilling the Banjaras. It has contributed to the process of 'othering' by its restricted functioning. Historical injustices, labelling and stereotyping, functioning and organisation of structures have contributed to the process of 'othering' of Banjaras.

10.7 Outcome of 'othering'

In the above sections, I have discussed the three steps in the process of 'othering' and how the Banjaras came to be the 'other' in the community and health system. In this section, I will discuss discrimination which is a manifestation of this process of 'othering' at the settlement and individual level.

10.7.1 Outcome at the *tanda* level

Historical discourses on location and settlement pattern of Banjaras explain their pattern of settlement as a way of preserving their culture and traditions. This could be true in certain parts of India but cannot be generalised to the whole country. In Gadag district, more than three-fourths of the *tandas* are located away from the village and take the name of the village close to it. The practise of untouchability in the past and the caste segregation in villages point towards a deliberate attempt to keep the *tandas* away from the village. Not all *tandas* are an outcome of such discriminatory practices in the villages because close to 16 percent of the *tandas* are standalone and not attached to any village. This may not be a direct outcome of the stereotypes or ‘othering’ but mobility in search of livelihood. This pattern of residential segregation, both forced and by choice to an extent, result in the *tandas* being located away from the mainstream villages and face disadvantages because of it. The poor-quality land available for agriculture, borewell failure and lack of alternate means of livelihood renders the Banjaras vulnerable and in addition to it, they are located in a drought-prone district. *Tandas* are also disadvantaged as other than presence of ASHA, anganwadis and primary school within their settlement, the rest of the infrastructure is located in the villages. The access to these resources is made difficult by the lack of adequate transportation, which impacts their overall wellbeing, including health. Discriminant analysis identifies social infrastructure of health and education, transport infrastructure as the main discriminators (statistical) between *tandas* and villages. To put it into a broad perspective, *tandas* and villages are located in a drought prone district which is classified as backward in Karnataka. Yet, the *tandas* lack facilities and development that are observed in the villages and this reflects an inequality in the allocation and distributions of resources. This is not to say that the villages in Gadag are better off; they are also disadvantaged but better when compared to *tandas*. Inequality in access to unproductive land, limited irrigation, transport infrastructure, amenities and social infrastructure is an outcome of the process of ‘othering’ that manifests as discrimination. This impacts the *tanda* as a whole and disadvantages the households and individuals residing there.

10.7.2 Outcome at individual level

The outcome of the process of ‘othering’ manifests as discrimination at the individual level in terms of differential morbidity and care seeking for it. Starting from the household infrastructure of water, sanitation and distribution of asset ownership, the *tandas* are disadvantaged compared to the villages. This is also a reflection of their socio-economic status, which is influenced by their earning potentials from land held by them. The land available to the Banjaras are close to the hills and are generally unproductive and ability to cultivate is hampered by lack of groundwater and inadequate rain. This has a bearing on the lives of Banjaras in multiple ways. Many of them migrate to other states for livelihood but continue to maintain the connection with the settlement. Those who have stayed back and continued to toil on difficult terrain live in hardship and have morbidities connected to this. Musculoskeletal problems like joint pain, back pain and muscle pain are effect of wear and tear of toiling in the fields. People in the village also have reported these problems, but their prevalence is greater in the *tandas* and Banjaras suffer from these problems for a longer duration. Structural discrimination in the form of suboptimal land impacts the socio-economic status of the households leading to migration and also impacts the health of Banjaras. These structures perpetuate the existing disadvantage in preventing them from seeking appropriate care for their illnesses. Public and private health facilities are likely to be located away from the *tandas*, far away and in the villages. Even though the *tandas* are connected by roads, the public transportation services are poor, and they often have to rely on other private modes of transport like autorickshaws which are expensive. This results in their seeking care from suboptimal providers like RMPs who are available in the neighbouring villages and who also visit the *tandas*. The pathways by which structural discrimination affects health and healthcare access is different across *tandas* and villages and the magnitude of the path coefficients through which structural discrimination affects health care used were higher in the *tandas* as revealed by the Structural Equation Modelling. The model reinforces the findings from ethnography, systematically establishing the mechanism by which the process of othering – resulting in structural discrimination, shapes the differential morbidity experiences of those in the *tandas* and the villages and the health care

sought for these conditions by them.

The problem of Banjaras identified above is a common problem experienced by denotified and nomadic tribes in Karnataka (Japhet & Diwakar, 2015; Venugopal & Chandrasekar, 2018) . The findings from this study are applicable to different castes and tribes who live in isolated settlements throughout India as the disadvantages faced by them is similar, but the magnitude could differ. It is this inequity within similarity that poses a public health challenge that needs to be the focus of attention.

10.8 Conclusions

The present study started with the philosophical underpinning of discrimination in understanding the wrongs of discrimination. Discrimination operationalises through the 'othering' process leading to individuals and groups being excluded from different spheres of life. The focus was to understand the process of 'othering' and discrimination by the health system and its effect on the health and health care seeking of Banjaras, a historically marginalised group. The process of 'othering' and discrimination varies across context and the ethnographic study helped in understanding the process, which is rooted in history, structural in nature and continuing in the present, leading to the discrimination of Banjaras. This results in their leading subaltern lives, forcing them to make sub-optimal choices regarding their everyday life, particularly with regard to livelihood and health.

Findings from the ethnography helped in developing a tool to understand the impact of the structural discrimination on the health and care seeking of Banjaras and comparing it with the villages. The survey of tandas and villages and their inhabitants confirm the disadvantage experienced by *tandas* in the distribution of physical, transportation, educational and health infrastructure, which affects their overall wellbeing and access to healthcare. The process of 'othering', leading to discrimination manifesting as morbidity and care seeking was tested using a statistical model. This modelling exercise validates the finding from the ethnography confirming the pathways by which structural discrimination leads to increased morbidity and suboptimal care seeking. The methodology employed in studying the process of 'othering' and discrimination started from

the perspectives of the Banjaras through ethnography. The sampling was done based on the distance of primary health centres from the *tandas* and a cross-sectional survey enabled comparison of *tandas* and villages. The process of establishing the results follow, inadvertently as indicated by Critical Race Theory (CRT) (Ford & Airhihenbuwa, 2010a, 2010b). In this case, the race is replaced by caste.

The fact that the methodology followed to establish the process of ‘othering’ of the Banjaras is similar to the methodology recommended in Critical Race Theory, is a marker of the validity of the methodology to study marginalised groups.

Thus, the present work has taken the conceptualising of ‘othering’ by Spivak and interpreted it in the context of the health system’s ‘othering’ of a specific population group—the Banjaras, living in Gadag district, Karnataka. It has identified this process as having three steps – the first, of imprinting the presence of the health system or failing to do so, the second of diminishing the moral worth of the group by using negative stereotypes to describe them and the third and last step of withholding benefits and rights from them, thereby diminishing their material worth.

10.9 Strengths and Limitations

The strength of this work is the methodology employed in studying a complex process like othering and discrimination using ethnography, restrictive historiography and a quantitative survey. The results from the ethnography were used to develop a conceptual framework. Many of the variables in the framework were measured at the macro-tanda level and at the individual level. The variables that were significant in discriminating between *tanda* and village were conceptually the same variables that had salience in SEM. This process of triangulation of the findings across methods and analytical strategies contributes to validating them. The study avoided examining interpersonal forms and types of discrimination using scales and then examining its effect on health outcomes. This is most popular methodology used in studies on discrimination. My study is not a deliberate attempt to avoid scale development, but my approach to measuring discrimination is informed by the ethnography and takes into consideration the social determinants of health. The use of multivariate statistical modelling like discriminant

analysis and structural equation modelling aided in validating the findings of ethnography.

However, this work is not without limitations. The study did not examine the existing caste hierarchies in totality in Gadag district but focussed on Banjaras and the disadvantages experienced by them as that was the objective. Subgroup analysis of different caste groups in the village would have helped towards better understanding of the caste-based inequalities prevalent there. This was not possible as the sample size was inadequate to attempt such an analysis and the sampling was not designed for that. Consequently, the multi caste village was treated as a single unit for comparison. The current study did not examine the role of Karnataka Thanda Development Corporation (KTDC) from a policy perspective but only based on information from the field and future studies can examine its role and functioning in the development of *tandas* in which Banjaras live.

10.10 Policy Implications

Even when the caste-based negative label is removed through constitutional processes, the removal of caste-based disadvantage is near impossible. The visible and invisible structures of this labelling and consequent ‘othering’ continue to pervade the life of Banjaras leading to inequities. There is a need for moving from the process of ‘othering’ to one of belonging, although it sounds good on paper but takes great effort on the ground. It is very difficult to address structural discrimination, but efforts can be directed towards mitigating the disadvantages caused by it.

- The Karnataka Thanda Development Corporation (KTDC) should go beyond its current role of improving streets, installing lighting, building community halls and temples in *tandas*. The roles and objectives of the board is comprehensive and intends to address the overall development of *tandas* in Karnataka but lacking in implementation. It needs to focus on the people in the *tanda* and not contribute to perpetuating the existence of *tandas* as the ‘other’ to contrast the village. The board needs to focus on generating employment opportunities in the *tandas* to prevent large scale migration, improving frequency of buses in *tandas* for local mobility and pushing for Sub-centres and PHCs in *tandas* if they satisfy the prescribed population criteria.
- The public health system should be sensitised to the needs of Banjaras and the practices that end up alienating them. There is a need to modify the criteria for “difficult to reach population” and include availability of public transportation in addition to existing criteria in determining the location of public health facilities.

- Mobile clinics exist for villages and *tandas* in Ron taluka, which are located far away from PHCs. This service can be introduced in all *tandas* and other sites where transportation is a problem.
- Monitoring systems for national health programs at local level involve clicking pictures of beneficiaries in settlements along with health workers and sending to higher officials, even though this is not a documented regulatory requirement. Similar mechanism should be established for scheduled visits of health workers to *tandas* and villages for the purpose of accountability. This will increase the presence of health system in the *tanda* and also avoid delegating the responsibility of health worker to ASHAs alone, enabling the development of a sense of entitlement from the health system for those in the *tandas*.

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degree of harm, whether physical, psychological or social. The balancing of harm against benefit is the risk-benefit ratio, and a favourable risk-benefit ratio is a prime determining factor of whether a research study should be allowed to go ahead. However, this framework is challenged when it comes to HPSR studies, because, while the risks may accrue to one group, the benefit may accrue to another. Clinical equipoise is “traditionally defined as a state of genuine uncertainty on the relative value of two approaches being compared in a trial” (3). In HPSR studies, clinical equipoise is difficult to assess since the intervention is not about evaluating its efficacy, but to “analyse changes in policy, implementation or service delivery” (1: p 6). As “risk” is not clearly spelt out in HPSR studies, it gets

interpreted along the lines of risk in biomedical research; but as the author of the above case study suggests, the concept of risk needs to be rearticulated for HPSR studies.

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Observation of unsafe medical practice during research in a healthcare-deprived area

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Keywords: *Unethical treatment, quacks, RMPs, reporting unethical treatment*

Background and context

The health workforce in India is unevenly distributed within and across regions, with qualified practitioners more concentrated in urban areas (1). In rural and poor areas where there are no doctors, unqualified medical practitioners are the first point of contact for healthcare needs (1). These unqualified medical practitioners, also called Rural Medical Practitioners (RMP), practise western medicine without any formal training. They may hold certificates from organisations that are not recognised by regulatory authorities (2). RMPs work under doctors as helpers, observe their work, and then set up clinics or practise in areas where there are no doctors (3). They are described as quacks by the IMA and the Supreme Court of India. The IMA has been fighting to eliminate these providers from the system (3,4).

An ethnographic¹ study was done among a nomadic tribe in a rural district to understand their access to healthcare. The tribe lives in settlements called *tandas* (5). The nearest public health facility from this particular *tanda* is around 9 km. Road connectivity to this public health facility is good, but there is

no public transport to reach the facility from the *tanda*. People have to rely on private vehicles. A few RMPs and Bachelor of Ayurveda Medicine and Surgery doctors live in a settlement about 3 km from the *tanda*. They provide services in their clinic and also visit the *tanda* whenever called. They are available on call even in the middle of the night.

The case

The researcher, who is undertaking an ethnographic study, visits the *tanda* regularly to observe and interview the people regarding their access to healthcare. Consent has been obtained from the village head and the elected representative to carry out this work. During one such visit, the researcher observes an old man being treated by an RMP for a head injury sustained by a fall. The RMP does not belong to the *tanda* but provides emergency services here and was called by the relatives. The RMP informs the family that the wound needs suturing to control bleeding. The researcher notes that the RMP instructs one of the relatives to bring a bowl of hot water and some old newspapers. The RMP then takes out a pair of gloves, cotton and suturing materials from plastic boxes in a compartment of his bag. The boxes do not seem to have been maintained in aseptic conditions. The RMP uses the cotton to clean the wound, asking the relatives to hold the old man's body and head in position. He sutures the wound without administering local anaesthetic or other pain medication. The researcher observes the old man writhing in pain throughout the procedure. After suturing, the RMP cuts the suture material off with a pair of scissors which he takes out from his bag.

After the procedure, the RMP instructs the relatives to clean the scissors, using the hot water provided, and asks them to dispose of the used cotton and gauze which was placed on

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the old newspaper. He then washes his hands and puts the scissors and suturing materials back in the plastic box.

The RMP takes a syringe from the bag, loads it with what seems to be some medicine, and injects it into the old man's buttocks. He then removes the needle and flushes the syringe by loading it with the water from a container nearby. He then takes another vial from his bag, attaches the needle to it, loads the syringe with the medicine from the vial, and injects it into the other buttock. The syringe is put back into the bag. The RMP informs the family that he will visit them in the evening to inspect the wound. He gives them antibiotics and pain killers and instructs them on their use. He also instructs the family to get a barber and shave around the wound area.

The researcher, who is trained in modern medicine, finds the treatment inappropriate. If he intervenes in this situation, the family's only alternative would be to take the old man to the hospital 9 km away. Reporting the RMP to the concerned authorities would deprive the *tanda* of the only source of healthcare available at their doorstep.

Ethical issues

1. What are the researcher's ethical responsibilities? What are his possible courses of action, and why?
2. The researcher obtained consent from the village representatives to observe the residents of the *tanda*. Should the researcher have obtained consent from the RMP, who is not from the *tanda*, to observe his treatment of the old man?
3. The researcher on his next visit in the *tanda* learns that the

old man had died on the fifth day after his fall. Considering the events that the researcher observed, how would the death of the old man reflect on the dilemmas already faced by the researcher?

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Note

1. Ethnography is a research tool which describes and interprets the shared and learned patterns of behaviour, beliefs and languages of a group. The aim of ethnography is to provide rich insights and descriptions into the views, beliefs and actions of people through detailed observations and interviews. It involves observations of the group and interviews of participants.

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The non-formal healthcare provider dilemma - to hate the player or the game?

RAVI PRASAD VARMA

Keywords: Informal care provider, harm, professional codes, research objectivity, moral dilemma

The case study by Bevin Vijayan (1) draws attention to a well-recognised public health problem – trauma and the lack of formal trauma care services in India (2). This is the reality in

India for trauma and for many other health problems. Despite decades of dutifully repeating the platitudes of “availability” and “accessibility”, the problem is not merely a case of a service being “present” or “absent”. A layered milieu of multiple elements related to peoples, systems and cultures determines the services people actually receive. It is here that we see the non-formal healthcare provider, often called a Rural Medical Practitioner (RMP), make an entrance.

Do the practices of these RMPs amount to biomedicine? Biomedically speaking, one would approach the incident referred to in the case study with several concerns. Why did the person fall in the first place? Is it due to an underlying endocrine or metabolic disorder, or perhaps a stroke? What are the possible issues the person has in addition to the scalp laceration – other

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RESEARCH ARTICLE

Prevalence and clustering of diarrhoea within households in India: some evidence from NFHS-4, 2015–16

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Abstract

Diarrhoeal disease is one of the major causes of morbidity and mortality in children and is usually measured at individual level. Shared household attributes, such as improved water supply and sanitation, expose those living in the same household to these same risk factors for diarrhoea. The occurrence of diarrhoea in two or more children in the same household is termed 'diarrhoea clustering'. The aim of this study was to examine the role of improved water supply and sanitation in the occurrence of diarrhoea, and the clustering of diarrhoea in households, among under-five children in India. Data were taken from the fourth round of the National Family and Health Survey (NFHS-4), a nationally representative survey which interviewed 699,686 women from 601,509 households in the country. If any child was reported to have diarrhoea in a household in the 2 weeks preceding the survey, the household was designated a diarrhoeal household. Household clustering of diarrhoea was defined the occurrence of diarrhoea in more than one child in households with two or more children. The analysis was done at the household level separately for diarrhoeal households and clustering of diarrhoea in households. The presence of clustering was tested using a chi-squared test. The overall prevalences of diarrhoea and clustering of diarrhoea were examined using exogenous variables. Odds ratios, standardized to allow comparison across categories, were computed. The household prevalence of diarrhoea was 12% and that of clustering of diarrhoea was 2.4%. About 6.5% of households contributed 12.6% of the total diarrhoeal cases. Access to safe water and sanitation was shown to have a great impact on reducing diarrhoeal prevalence and clustering across different household groups. Safe water alone had a greater impact on reducing the prevalence in the absence of improved sanitation when compared with the presence of improved sanitation. It may be possible to reduce the prevalence of diarrhoea in households by targeting those households with more than one child in the under-five age group with the provision of safe water and improved sanitation.

Keywords: Diarrhoea; Sanitation; Clustering

Introduction

Globally, 3 out of 1000 children under the age of five died due to diarrhoea in 2016, accounting for 8% of all under-five deaths. The situation in India was similar, with an under-five mortality rate due to diarrhoea of 4 per 1000 live births in 2016, representing 9% of total deaths among under-five children (UNICEF, 2018). The majority of these deaths occurred in the post-neonatal period, indicating a preponderance of exogenous causes of mortality. Most of these deaths were avoidable and were usually related to poor household conditions, including sanitation and water supply, and also poor access to health care facilities (Saha & van Soest, 2011). Improved health care access would mitigate this, but prevention would contribute a significant contribution towards reducing deaths due to diarrhoea.

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Deaths in under-five children show significant heterogeneity in risk across households (Arulampalam & Bhalotra, 2006; Das Gupta, 1990; Ronsmans, 1995; Saha & van Soest, 2011; Shabani *et al.*, 2010). In particular, Das Gupta (1990) and Ronsmans (1995) noticed that a small proportion of households in India and rural Senegal contributed to a significant proportion of under-five children mortality, which is otherwise termed as 'death clustering'. This clustering or heterogeneity in the mortality experience across households could be due to many exogenous factors that are common to communities or households. Such factors could be household socio-economic status and the household's ability to provide for the survival of children through access to sanitation and safe drinking water (Edvinsson & Janssens, 2012) or the maternal capability of autonomous and effective functioning through education (Das Gupta, 1990; Gupta, 1997). Alternatively, the heterogeneity could be due to the effect of the death of a previous child affecting the subsequent child's mortality. This effect has been called 'state dependency' or 'scarring'. This process may be operationalized through death of a previous child resulting in shorter birth intervals for the succeeding infant or through maternal depression due to the previous child's death affecting maternal functioning and therefore care for the subsequent child. Alternatively, death of an infant may also result in a household learning to reduce similar deaths, resulting in a reduction in the scarring effect. A similar clustering effect has been noticed for diarrhoea in pre-school children (Katz *et al.*, 1993).

For acute conditions such as diarrhoea, the determination of the potential sources of heterogeneity in terms of within-household factors that are common to all children in the household (inter-household heterogeneity) and those due to individual characteristics of the child with diarrhoea (intra-household heterogeneity) may not be possible. Also, it may not be possible to chronologically sequester the primary case of diarrhoea within the household to make a determination of its potential transmission to other children, and thus to be able to identify the original case of diarrhoea in a household with multiple cases. Moreover, it has been established that improved water supply and improved sanitary conditions have decisive effects on the prevalence of diarrhoea at the individual level (Cairncross *et al.*, 2010). Therefore, a focus on these exogenous factors with respect to diarrhoeal prevalence is still relevant.

Diarrhoeal diseases and their correlates are often conceptualized and measured at the individual level, whereas improved water supply and improved sanitation are shared household attributes that impact the health and well-being of all residents of a household. Children living in the same home environment are exposed to similar risks. This can be explained using the example of a child in a household suffering from diarrhoea. For this child it is possible that the other children in the household are also exposed to similar risks of getting diarrhoea. This child may or may not be a sibling sharing the same genetic factors. Apart from this, there are also the factors of caste, socio-economic status and place of residence, which are exogenous and have an effect on the occurrence of diarrhoea in the household and its clustering. An understanding of diarrhoea prevalence and its tendency to cluster within households, and the changes likely to be wrought in it through modifiable factors such as safe water and sanitation, will help to provide appropriate, targeted policies. This study aimed to examine the role of improved water supply and sanitation in the occurrence of diarrhoea and the clustering of diarrhoea in households among under-five children in India.

Methods

Data were from the fourth round of the National Family Health Survey (NFHS-4) conducted in India in 2015–2016 (IIPS & ICF, 2017). The NFHS-4 is a nationally representative multistage survey designed to provide estimates of vital indicators at the district, state and national level. A total of 699,686 women were interviewed from 601,509 households. The survey collected data on sanitation and improved source of drinking water using a household questionnaire. Information on diarrhoeal disease in under-five children was obtained using a women's questionnaire.

Households were classified as having ‘improved sanitation’ or an ‘improved source of drinking water’ using definitions taken from the Joint Monitoring Program (JMP) (WHO & UNICEF, 2018). An added refinement was that water was designated as ‘safe’ if some form of treatment was done before consumption. Having an improved source of drinking water alone will not guarantee protection from infection as it depends on the quality of water and the way it is stored. Treating water before drinking takes care of the quality. This improved drinking water variable has been labelled ‘safe water’.

The information about the occurrence of diarrhoea in a child was matched with the household characteristics. If any child belonging to the same household had reported diarrhoea during the reference period then that household was designated a ‘diarrhoeal household’. The number of children in the household that reported diarrhoea in the 14-day reference period prior to the date of the survey was recorded. Computation of the diarrhoea prevalence for clustering was carried out considering only eligible households, i.e. those with at least two children. This led to the exclusion of households with fewer than two children under the age of five years. Household clustering of diarrhoea was defined as the occurrence of diarrhoea in more than one child in households with two or more children.

The presence of clustering of diarrhoea within households was assessed by examining whether the prevalence of diarrhoea was conditioned by the number of children within a household. In the absence of clustering, the distribution of households with diarrhoea would be binomial and the probability of observing k cases of diarrhoea in a household with n children ($0 \leq k \leq n$) (Ronsmans, 1995) is given by:

$$P(X = k) = \frac{n!}{k!(n-k)!} p^k (1-p)^{n-k} \text{ for } 0 \leq k \leq n$$

The average number of children with diarrhoea in households with n children is np , and the variance $np(1-p)$. The value of ‘ p ’, is estimated from the observed proportion of households with diarrhoea in the sample for each category of number of children in households. The excess of the observed number of households with diarrhoea over the expected number of households would indicate clustering. The difference between the observed and expected number of households with clustering was tested using a χ^2 test to establish the statistical significance of the departure from expected number of children with diarrhoea within households. This helps determine the presence of clustering without ascertaining the exact cause for the departure.

The overall prevalence of diarrhoea in the household and prevalence of diarrhoea clustering were examined by the exogenous variables caste, wealth quintile and the place of residence.

The variables ‘improved sanitation’ and ‘safe water’ were combined to create four categories to manage potential interaction effects: Both present, Only sanitation, Only safe water and Both absent. Adjusted odds ratios for each household characteristic category, i.e. caste, wealth quintile, place of residence and presence of sanitation and safe water, were computed by dividing the odds of diarrhoea in each of the categories by the overall odds of diarrhoea. Similarly, adjusted odds ratios for clustering were computed in the same manner. Standardizing the odds in this way enabled a comparison across the different groups within each of the selected variables. This enabled comparisons across characteristics in terms of the increase or decrease in the odds for a characteristic against the same odds without the characteristic. This standardization procedure is similar to the Prevalence Odds Ratio (POR), but does not lend itself to estimates of the statistical significance of the effect through p -values. The POR is estimated by the cross-product of a 2×2 contingency table, which represents the odds of disease in exposed as against the odds of disease in the unexposed. Because the standardization is not through such a cross-tabulation of each characteristic against the prevalence of diarrhoea or diarrhoea clustering but through the computation of an alternative ratio, it is difficult to discern its equivalence to PORs. However, a parallel can be drawn to make comparisons of the specific mean against the overall mean in ordinary least squares regression.

The use of the Prevalence Odds Ratio (POR) or Prevalence Ratio (PR) has been the subject of debate in epidemiology (Lee, 1994; Thompson *et al.*, 1998), mostly related to the appropriateness of the measure, statistical tools and the availability of software programmes (Lee, 1994; Zocchetti *et al.*, 1997). The POR is preferred for chronic diseases with long latent periods whereas the PR is used for acute illness. The ideal measure to use in the case of acute diarrhoea would be the PR, because when the prevalence of the outcome is low the POR and PR are almost the same. The choice of the measure used should be made on epidemiological reasoning (Zocchetti *et al.*, 1997), and as it was anticipated that the prevalence of diarrhoea would not be very high the POR was used in this analysis.

Multinomial logistic regression analysis was used to predict the effect of the combined categories 'safe water' and 'improved sanitation' on the occurrence of diarrhoea and clustering of diarrhoea within households. This analysis was done for households with two or more children where clustering was possible. In the first model (Model 1) the outcome variable was divided into three categories, namely 'no diarrhoea', 'one child with diarrhoea' and 'two or more children with diarrhoea', which was then examined with the predictor variable of availability of water supply and sanitation within the household. In the second model (Model 2), the exogenous variables caste, wealth quintile and place of residence were also included. The results are presented as Relative Risk Ratios (RRR) with 95% confidence intervals. Data were analysed using Stata (Version 15) (StataCorp, 2018) and graphs created using the *ggplot2* package in R software (Wickham, 2009; R Core Team, 2017).

Results

There were a total of 176,531 households with children under five years of age with information on the occurrence of diarrhoea and 59,103 households were eligible for analysis of clustering wherein there was more than one child available in the household. The household prevalence of diarrhoea was about 12%. Furthermore, the prevalence of clustering (meaning more than one child in the household with diarrhoea during the 2-week reference period before the survey) was 2.4%. Of the 22,500 children with diarrhoea, 12.6% came from just 6.5% of the total households with diarrhoea, clearly indicating the contribution of multiple cases within the same households.

The probability of clustering was evaluated by examining the null hypothesis that there was no difference in the probability of diarrhoeal occurrence by the number of children within a household. The probability of diarrhoea occurrence across households with varying number of children below five years ranging between 2 and 7 was computed and contrasted against the expected probability of diarrhoea based on the overall probability of diarrhoeal prevalence among household (i.e. $p=0.1202$). The observed and expected probabilities are shown in Fig. 1. The expected probability of diarrhoea was computed for each number of children in households using the binomial distribution given by the formula given in the Methods section for $2 \leq k \leq 7$. Using these expected probabilities, the expected number of households with diarrhoea clustering was estimated as a product of the specific expected probability of diarrhoea and the number of households with 2–7 children. This was contrasted with the observed number of households with diarrhoea clustering.

The observed and expected numbers of cases of diarrhoea within households with two or more children were tested using the chi-squared test of independence with five degrees of freedom (to allow for households with 2–7 children). The computed value of the χ^2 statistic was 82.13, which was significant at $p < 0.001$. This served to reject the null hypothesis that there was no possible clustering of diarrhoea across households, indicating the existence of a statistically significant level of clustering. However, it does not necessarily provide causal reasoning for the same.

The overall prevalence of diarrhoea and the prevalence of clustering of diarrhoea in households by household characteristics are shown in Table 1. The overall household diarrhoeal prevalence

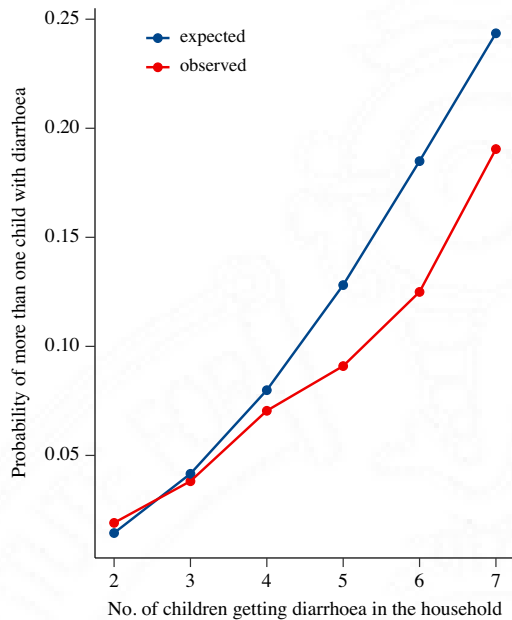


Figure 1. Expected and observed probabilities of diarrhoeal occurrence in children across households with 2 or more children, India, 2015–16.

increased as the number of children in the household increased. A similar trend was observed for clustering, with a higher prevalence occurring when the number of children in the household exceeded five.

The prevalences of overall diarrhoea and diarrhoea clustering in rural households were 12.7% and 2.5%, respectively, which were higher than those in urban areas. The 'Other' group representing the higher caste groups had a prevalence of 10.6%, which was low when compared with those of Schedule Caste, Schedule Tribe or Other Backward Caste groups. However, the prevalence of clustering was lowest for the Scheduled Tribe group. Scheduled Caste groups had the highest burden of overall diarrhoea (12.6%) and clustering (2.6%), which was higher than the overall prevalence of diarrhoea and prevalence of clustering. The prevalences of diarrhoea and clustering were higher in poorer households than in middle and higher quintile households and lowest in the richest quintile group (13.8% and 2.8%, respectively). This association was in the expected direction. Access to improved sanitation and safe water did have an impact on both the prevalence of diarrhoea and its clustering. When both improved sanitation and safe water were available, the prevalence of diarrhoea was 8.8% and the clustering of diarrhoea in households was 1.7% when compared with the absence of both (13.63% and 2.7%, respectively). When it came to clustering, safe water alone had more impact on reducing diarrhoea prevalence than sanitation alone.

The odds ratios (ORs) for overall prevalence of diarrhoea were computed across the different groups of sanitation and safe water, and were adjusted with the overall odds of diarrhoea to derive the Prevalence Odds Ratios (Table 2). A similar exercise was carried out for the household clustering of diarrhoea and the POR was computed against the overall odds of household clustering of diarrhoea (Table 3). The overall OR for diarrhoea in the household was 0.1366 and for household clustering of diarrhoea it was 0.0246. To enable an easy visual comparison, the POR for diarrhoea and diarrhoea clustering within households was represented for the two extreme conditions – when both safe drinking water and sanitation were present and when both were absent (Fig. 2).

The reduced risk in urban and rural areas due to the provisioning of sanitation and safe water was strongest in urban areas. However, the risk of diarrhoea was higher in rural areas when compared with urban areas when both were absent. When both sanitation and safe water were

Table 1. Overall prevalence of diarrhoea and prevalence of household clustering of diarrhoea in children aged 0–5 by household characteristics, India, 2015–16

Characteristic	Prevalence of diarrhoea (any) in households with at least one child <i>n</i> (%) ^b	Prevalence of household clustering of diarrhoea in households with more than one child ^a <i>n</i> (%) ^b	Total number of households
No. children in household			
1	11,250 (9.58)	—	117,428
2	7741 (15.97)	948 (2.0)	49,645
3	1585 (20.26)	299 (3.8)	7828
4	358 (29.14)	90 (7.0)	1276
5	88 (29.49)	25 (10.8)	275
6	19 (26.55)	7 (9.0)	56
7	8 (41.15)	4 (19.2)	21
8	0 (0.0)	0 (0.0)	1
9	0 (0.0)	0 (0.0)	1
Place of residence			
Urban	4868 (10.34)	289 (2.2)	44,354
Rural	16,181 (12.73)	1084 (2.5)	132,177
Caste			
Scheduled Caste	4347 (12.6)	302 (2.6)	33,095
Scheduled Tribe	3406 (10.95)	186 (1.9)	35,686
Other Backward Class	8690 (12.79)	562 (2.4)	67,025
Other	4606 (10.64)	314 (2.4)	40,725
Wealth quintile			
Poorest	5639 (13.81)	424 (2.8)	43,903
Poorer	5022 (12.7)	326 (2.5)	40,664
Middle	4264 (12.27)	257 (2.1)	35,417
Richer	3449 (10.87)	223 (2.3)	30,546
Richest	2675 (9.52)	143 (2.0)	26,001
Improved sanitation			
No	12,990 (13.23)	911 (2.6)	100,683
Yes	8059 (10.38)	462 (2.1)	75,848
Safe drinking water			
No	15,519 (12.94)	1091 (2.6)	119,716
Yes	5528 (9.87)	282 (1.8)	56,788
Safe water and sanitation			
Both present	3164 (8.83)	151 (1.7)	35,463
Only sanitation	4895 (11.6)	311 (2.3)	40,370
Only safe water	2364 (11.58)	131 (1.9)	21,325
Both absent	10,624 (13.63)	780 (2.7)	79,346
Total	21,049 (12.02)	1373 (2.4)	176,531

^aThe total number of households for the calculation of clustering of diarrhoea was 59,103.

^bThe numbers in brackets are weighted percentages.
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Table 2. Prevalence and Prevalence Odds Ratios (PORs) of diarrhoea in households with at least one child by socioeconomic characteristics, India, 2015–16

Characteristic	Sanitation and safe water	Prevalence of diarrhoea (any) in households with at least one child	Odds of diarrhoea	Adjusted/Prevalence Odds ratios
Place of residence				
Urban	Both present	8.4	0.092	0.671
	Only sanitation	10.9	0.123	0.899
	Only safe water	10.8	0.122	0.891
	Both absent	12.3	0.141	1.031
Rural	Both present	9.4	0.104	0.760
	Only sanitation	12.0	0.136	0.998
	Only safe water	11.9	0.135	0.986
	Both absent	13.8	0.161	1.176
Caste				
Scheduled Caste	Both present	10.9	0.122	0.892
	Only sanitation	10.7	0.120	0.879
	Only safe water	12.8	0.147	1.075
	Both absent	13.6	0.158	1.153
Scheduled Tribe	Both present	9.3	0.102	0.749
	Only sanitation	9.8	0.109	0.798
	Only safe water	13.1	0.150	1.102
	Both absent	10.8	0.121	0.885
Other Backward Class	Both present	9.1	0.100	0.732
	Only sanitation	12.6	0.144	1.054
	Only safe water	11.0	0.124	0.909
	Both absent	14.8	0.173	1.268
Other	Both present	7.8	0.084	0.616
	Only sanitation	11.1	0.124	0.909
	Only safe water	10.2	0.114	0.833
	Both absent	12.9	0.148	1.083
Wealth quintile				
Poorest	Both present	8.3	0.091	0.663
	Only sanitation	10.5	0.118	0.861
	Only safe water	12.1	0.138	1.011
	Both absent	14.2	0.166	1.212
Poorer	Both present	9.6	0.106	0.778
	Only sanitation	11.9	0.136	0.993
	Only safe water	11.9	0.134	0.984
	Both absent	13.3	0.154	1.125

(Continued)

Table 2. (Continued)

Characteristic	Sanitation and safe water	Prevalence of diarrhoea (any) in households with at least one child	Odds of diarrhoea	Adjusted/Prevalence Odds ratios
Middle	Both present	11.1	0.125	0.917
	Only sanitation	12.2	0.139	1.019
	Only safe water	11.8	0.133	0.976
	Both absent	12.9	0.148	1.080
Richer	Both present	8.9	0.098	0.716
	Only sanitation	11.4	0.128	0.939
	Only safe water	10.6	0.119	0.871
	Both absent	13.3	0.153	1.120
Richest	Both present	8.1	0.088	0.645
	Only sanitation	11.3	0.127	0.933
	Only safe water	10.0	0.112	0.818
	Both absent	13.6	0.157	1.148

available to the household these tended to protect against the occurrence of diarrhoea. This reduction was observed in all caste groups except the Schedule Caste, where the reduction was only 11%. The reduction ranged from 25.1% in the Scheduled Tribes to 38.4 % in the Other (higher caste) category. However, in households with only sanitation, the risk of diarrhoea reduced by almost 10% in Schedule Caste and Other and 20% among Scheduled Tribes, but such reductions were not evident in Other Backward Class households. Having safe water reduced the risk in only the Other Backward Class and Other (higher caste) category households. Not having both increased the risk in all the groups except Scheduled Tribes.

The risk of household clustering of diarrhoea (Table 3) was reduced when there was provisioning of both improved sanitation and safe water and the reduction was almost 50% in rural areas. When both sanitation and safe water were absent the risk increased by 15% in rural areas compared with 5% in urban areas. In households with only safe water the risk reduction was greater in urban than in rural areas. The protection against clustering of episodes of diarrhoea was stronger in rural areas than urban areas, due to the presence of these two components of public health infrastructure.

The provisioning of safe water and sanitation was not effective among the Scheduled Caste group for the prevention of clustering episodes of diarrhoea. One of the possible reasons for this could be the heterogeneous nature of Scheduled Caste groups. In all other caste groups, the presence of sanitation and safe drinking water had a protective effect. The protective effect ranged from 73% in Scheduled Tribes to 23% in Other Backward Classes. In the Scheduled Tribe group, not having safe water and sanitation did not seem to increase the risk of clustering.

The presence of sanitation and safe water had a protective effect across all income groups with respect to clustering of diarrhoea in the same household. These benefits were to the tune of a decrease in adjusted/prevalence odds from 1.227 to 0.357 and from 1.115 to 0.303 among the poorest and the poorer groups on comparing the absence of sanitation and safe water with their joint presence within the household. A very significant improvement was noticed in the richest households, where the adjusted/prevalence odds declined from 2.077 to 0.674. However, it should be noted that the richest households accounted for 10% of the total households with diarrhoea clustering, and this could be the reason for the relatively larger decline in the odds of clustering depicted.

Table 3. Prevalence and Prevalence Odds Ratios (PORs) of household clustering of diarrhoea in households with at least one child by socioeconomic characteristics, India, 2015–16

Characteristic	Sanitation and safe water	Prevalence of diarrhoea (any) in households with at least one child	Odds of Diarrhoea	Adjusted/Prevalence Odds ratios
Place of residence				
Urban	Both present	2.1	0.021	0.872
	Only sanitation	2.3	0.024	0.957
	Only safe water	1.3	0.013	0.540
	Both absent	2.5	0.026	1.051
Rural	Both present	1.3	0.013	0.523
	Only sanitation	2.3	0.023	0.953
	Only safe water	2.1	0.021	0.868
	Both absent	2.8	0.028	1.154
Caste				
Scheduled Caste	Both present	3.2	0.033	1.348
	Only sanitation	2.1	0.022	0.880
	Only safe water	2.1	0.021	0.855
	Both absent	2.8	0.029	1.162
Scheduled Tribe	Both present	0.7	0.007	0.278
	Only sanitation	1.5	0.015	0.602
	Only safe water	1.7	0.017	0.703
	Both absent	2.2	0.023	0.931
Other Backward Class	Both present	1.6	0.017	0.678
	Only sanitation	2.3	0.024	0.957
	Only safe water	1.9	0.019	0.783
	Both absent	2.8	0.028	1.154
Other	Both present	1.4	0.014	0.586
	Only sanitation	2.5	0.026	1.059
	Only safe water	2.0	0.020	0.821
	Both absent	3.0	0.031	1.240
Wealth quintile				
Poorest	Both present	0.9	0.009	0.357
	Only sanitation	2.2	0.023	0.914
	Only safe water	1.8	0.019	0.762
	Both absent	2.9	0.030	1.227
Poorer	Both present	0.7	0.008	0.303
	Only sanitation	1.8	0.018	0.745
	Only safe water	2.6	0.026	1.072
	Both absent	2.7	0.027	1.115

(Continued)

Table 3. (Continued)

Characteristic	Sanitation and safe water	Prevalence of diarrhoea (any) in households with at least one child	Odds of Diarrhoea	Adjusted/Prevalence Odds ratios
Middle	Both present	2.0	0.020	0.830
	Only sanitation	2.4	0.025	1.004
	Only safe water	1.3	0.013	0.519
	Both absent	2.2	0.022	0.910
Richer	Both present	1.9	0.019	0.766
	Only sanitation	2.6	0.026	1.068
	Only safe water	1.8	0.018	0.745
	Both absent	2.6	0.027	1.098
Richest	Both present	1.6	0.017	0.674
	Only sanitation	2.2	0.022	0.893
	Only safe water	1.7	0.018	0.716
	Both absent	4.9	0.051	2.077

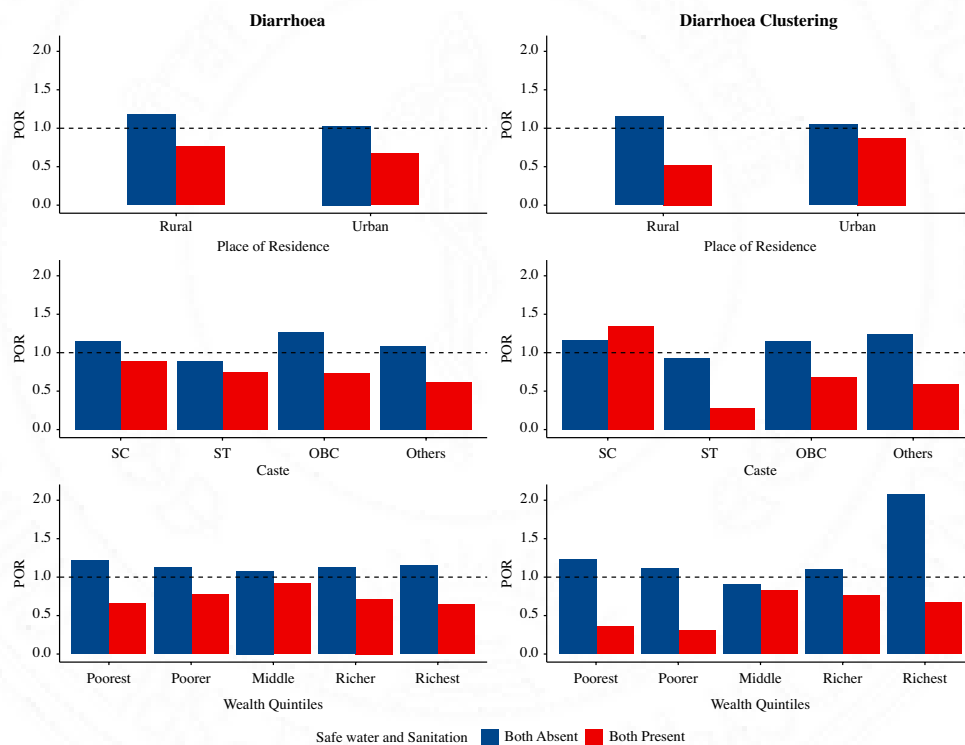


Figure 2. Prevalence odds ratios of diarrhoea and clustering of diarrhoea in households with at least one child by socioeconomic characteristics and presence and absence of sanitation and safe water, India, 2015-16.

Table 4. Multinomial logistic regression of the effect of safe water and sanitation on the clustering of diarrhoea in households with two or more children, India, 2015–16

Safe water and sanitation	Model 1		Model 2	
	One child with diarrhoea RRR (95% CI)	Two or more children with diarrhoea RRR (95% CI)	One child with diarrhoea RRR (95% CI)	Two or more children with diarrhoea RRR (95% CI)
Both present (Ref.)				
Only sanitation	1.331*** (1.229–1.442)	1.509*** (1.24–1.837)	1.269*** (1.169–1.378)	1.438*** (1.176–1.759)
Only safe water	1.097 (0.997–1.206)	1.158 (0.914–1.467)	1.119** (1.009–1.24)	1.259 (0.977–1.622)
Both absent	1.371*** (1.276–1.472)	1.672*** (1.402–1.993)	1.348*** (1.236–1.47)	1.74*** (1.408–2.149)

The reference category for the outcome variable was 'No diarrhoea in the household'. Model 1 examined the effect of water and sanitation on the occurrence of diarrhoea in a household and Model 2 examined the same effect adjusted for caste, place of residence and wealth quintiles. *** $p < 0.01$; ** $p < 0.05$.

The benefits of access to sanitation and safe drinking water are nearly universal across rural and urban areas, across almost all caste groups and across all economic status groups (Fig. 2). This provides a definite advantage against clustering of diarrhoea in households compared with the prevalence of diarrhoea within households in rural areas. The presence of sanitation and safe drinking water also serves to depress the prevalence of diarrhoea clustering in Scheduled Tribes and other groups when compared with the prevalence of diarrhoea. This reduction in diarrhoea clustering was stark when both sanitation and safe drinking water were available among the richest households.

The results of the multinomial logistic regression presented in Table 4 using the unadjusted Model 1 indicate that having access to only improved sanitation increased the risk of a single child having diarrhoea in households having two or more children by 33%, and when both improved sanitation and safe water were absent the risk increased by 37%. This was in comparison to having both improved sanitation and safe water in the household. Having access to only safe water increased the risk by 10% but this was not statistically significant. Similar results were observed when two or more children in the household experienced diarrhoea episodes. However, the risk increased by almost 51% when households had access to only improved sanitation, and when both were absent the risk of clustering increased by almost 67% when compared with households that had both. Model 2, which adjusted for socioeconomic characteristics of the household, indicated an adjustment in the risk of clustering of diarrhoea to 44% from 51% (unadjusted risk ratios) when only sanitation was present, 26% from 16% (unadjusted risk ratios) when only safe water was present and 74% from 67% (unadjusted risk ratios) when both were absent. It should be noted that some of the cells for computing the adjusted risk ratios were the result of a very small number of cases and cannot be as robust. This is a serious limitation for the multivariate analysis undertaken. In so far as these adjusted risk ratios did not contradict the emerging patterns from the unadjusted model, the underlying associations indicated held.

Discussion

This study demonstrates the potential for diarrhoea to cluster in households with more than one child in India. While its prevalence in the present sample extended to just 2.4% of households with two or more children, it represents a significant departure from an assumption of uniform prevalence of diarrhoea across households. There is clearly a potential for diarrhoea to cluster in

households with multiple children. It may be possible to reduce the prevalence of diarrhoea in households by targeting those households with more than one child in the under-five age group, and by providing them with safe water and improved sanitation.

The presence of both sanitation and safe water has a strong effect in reducing both diarrhoea prevalence and its clustering within households, particularly in rural areas, amongst Scheduled Tribe and Other caste groups and among the poorest and richest households. Safe water alone has a greater impact in reducing the prevalence of diarrhoea and household clustering of diarrhoea in the absence of improved sanitation when compared with the presence of improved sanitation. The effect of the presence of safe drinking water in the household alone is nearly as good as having both sanitation and safe drinking water.

The relevance of universalization of access to safe drinking water to diarrhoea prevention among under-five children has been established in previous studies using other data and methods (Nandi *et al.*, 2017; Nilima *et al.*, 2018; Ramanathan & Vijayan, 2019). The provision of piped water to rural households planned under the Jal Jeevan Mission of the Government of India (Ministry of Jal Shakti, 2019) could contribute to the reduction in diarrhoea prevalence and its clustering in rural areas of India. This is not to say that access to improved sanitation is not important. In areas that are yet to receive sanitation improvement schemes there is a need to advocate for the use of safe water for consumption and to continue to emphasize the importance of this, even in areas where there is improved sanitation. When combined with the Swachh Bharat Mission for universalizing sanitation access (Ministry of Drinking Water and Sanitation, 2017), the impact on the household prevalence of diarrhoea among under-five children in India would be very significant because the present analysis indicates a joint potential to reduce diarrhoea clustering within households by about 75%, even after controlling for the socioeconomic conditions of the household.

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Conflicts of Interest. The authors have no conflicts of interest to declare.

Ethical Approval. The data used were from public resources that are anonymized. Such analysis are usually exempt from ethics review.

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Associating State of Water and Sanitation with Childhood diarrhoea: Anomalies and Contradictions *Anomalies in analyzing Water and Sanitation data*

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Abstract

Information on safe water, sanitation and hand washing obtained in large scale surveys are used to validate its responsiveness to childhood ailments. Definition of these variables are uniform to enable comparison within and across countries and devoid of the context and circumstance. Associating these variables with prevalence of diarrhoea overlooking the context seem to distort the relationship and lead to spurious results. An empirical verification of such an association in an Indian context based on the most recently conducted NFHS-4 data set brings to the fore apparent contradictions that cautions on the use of these variables as they are obtained. It calls for a redefinition of these variables prior to verifying their responsiveness to childhood diarrhoea as illustrated here.

Keywords: Anomalies; Hand washing; Health; Sanitation; Water

Introduction

Safe water, sanitation and hygiene are important components of Public Health and adversely impacts health if any of these are compromised (Bartram & Cairncross, 2010; World Health Organization, 2014). This is very relevant in the Indian context where improving access to these components have a positive impact on the health of children under the age of five (Nandi, Megiddo, Ashok, Verma, & Laxminarayan, 2017; Nilima et al., 2018; Ramanathan & Vijayan, 2019). Due to the importance of these indicators, extensive details regarding water, sanitation and hygiene are often obtained in surveys to validate its responsiveness to childhood morbidities (WHO/UNICEF, 2006). Such details consist of attributes that differentiates compromise of safety in water and sanitation. As regard to water, its source and access determines the first rung of safety assessment and the measures if any taken to guaranteeing further safety like treating the water prior to its use serves as the final step in safety judgment (Shaheed, Orgill, Montgomery, Jeuland, & Brown, 2014). Similarly, the aspect of sanitation too is largely conditioned by the availability of water along with facilities of handwashing that qualifies for safe sanitary practice (Cairncross, Bartram, Cumming, & Brocklehurst, 2010). Information obtained on these two counts consist of objective queries, observations as well as its varied options. For instance, safe water is largely conditioned not necessarily by its content and quality but the use pattern depending on its availability and accessibility. More often than not the perception of safe water may vary across regions and hence there cannot be a

uniform connotation on its safety. In the state of Kerala almost 92% of the households treat the water before drinking irrespective of whether the water source is improved or not (International Institute for Population Sciences – IIPS/India and ICF, 2017b). As regard sanitation too more depends on the practice and behavior rather than the means available for the purpose. Given such complexities in defining safety, a whole range of practice aspect in these two domains are considered for their association with the outcome for the simple reason that many of them may be culturally conditioned and circumstantially effected.

Methods

The above stated exploration is made with the content of information obtained by the National Family Health Survey (NFHS-4) 2015–2016 (International Institute for Population Sciences – IIPS/India and ICF, 2017b). NFHS-4 is a nationally representative multi stage survey designed to provide estimates of vital indicators at the district, state and national level. For this analysis the key information collected by the survey such as drinking water and Hand washing in the household questionnaire and information on diarrhoeal disease in the women questionnaire. The questionnaire asks respondent about the “the main source of drinking water for household members”, observation by the data collectors on the “place where members of the household wash their hands” and the women in the households were asked if any “child under five years of age had diarrhoea in the last two weeks” (International Institute for Population Sciences – IIPS/India and ICF, 2017a). NFHS-4 defines Improved source of drinking water and handwashing similar to the WHO/UNICEF Joint Monitoring Program (JMP) indicators (WHO/UNICEF, 2006).

The household questionnaire obtains information on the treatment of water making it safe before consumption and therefore we conceptualize the “Improved source of drinking water” as households having access to improved source of drinking water and treating it before consumption. We call this variable the “safely managed drinking water”. The WHO/UNICEF JMP indicator for handwashing is the proportion of households having a handwashing facility with soap and water (WHO/UNICEF Joint Monitoring Programme (JMP) for Water Supply, Sanitation and Hygiene, 2018). Handwashing facility is defined as having a sink with tap water but can also include any device which regulates the flow of water.

Handwashing in the Indian context varies across context and is determined by the presence of water supply within the dwelling. In contexts where there is scarcity of water, handwashing may not be a priority as the water is used for basic needs. We conceptualise handwashing as the proportion of households having a source of water supply delivered to the dwelling and the presence of handwashing facility with soap and water.

Analysis was carried out considering districts as unit of observation and the aforementioned variables as defined by NFHS-4 and same variable conceptualised to suit the Indian context. It is being done at the district level as we are interested in examining the impact of safe water, sanitation and hygiene on the prevalence of diarrhoea from a policy perspective which is an ongoing work. The anomalies found during data analysing informs this communication. The outcome variable is the prevalence of diarrhoea at a district level. Correlation coefficient is computed to comment on the relationship between the outcome and the predictor variables. The aim of this exercise is not to discuss the strength of the association but to comment on the direction and the potential reasons behind it. Data was analyzed using STATA (Version 15) (StataCorp, 2018) and graphs using ggplot2 package of R statistical software (Wickham, 2009).

Results

We examined the relationship between prevalence of diarrhoea with improved water and hand wash as defined by the survey. [Figure 1](#) shows that there is a positive correlation between prevalence of diarrhoea among children and two other predictor variables in both urban and rural areas across districts. What it conveys is that the prevalence of diarrhoea at district level increases with the increase in the coverage of improved water source and presence of hand washing facilities. This relationship is in contradiction of the common wisdom leading one to suspect the adequacy of attributes that defines presence of safe water and hand washing. Water, Sanitation and hygiene have been amply demonstrated to have a negative bearing on the prevalence of diarrhoea (World Health Organization, 2014) and this makes us verify the

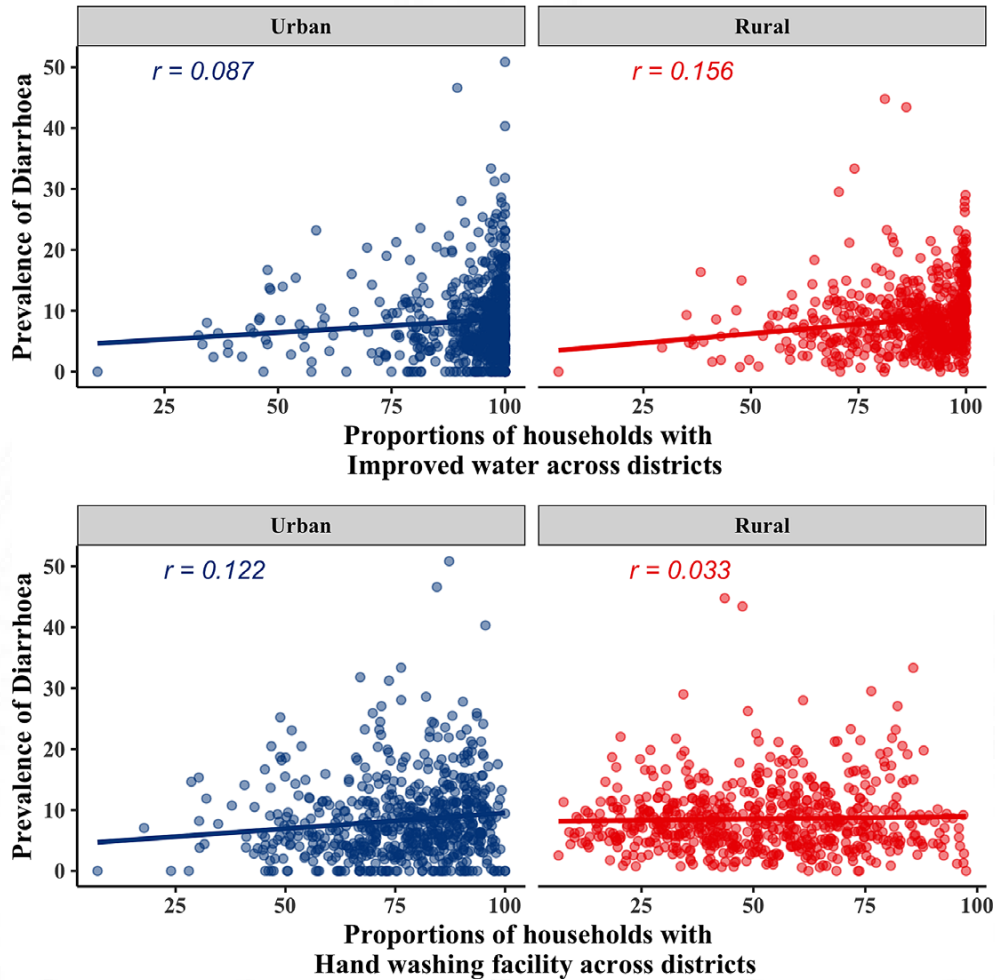


Figure 1. Relationship between prevalence of diarrhoea and improved water and hand washing facility at district level, NFHS-4, 2015–2016.

quality of information collected. In a rural context where the site for washing of clothes outside the house very well can have, the presence of water and soap that can also qualify as a place for handwashing. Similarly, households may have access to improved sources of water but this water could be stored for long and in unhygienic conditions and cannot be used as a marker for safe water. Hence qualifying safety in hand washing and water use is not that simple as it is made out to be unless stricter attributes are taken along with it for such a qualification.

The same relationship was examined (Figure 2) with the differently conceptualised variables and a negative relationship was observed between prevalence of diarrhoea and the two variables, except with hand washing in urban areas where there is a positive relationship. This is because of the heterogeneity in the prevalence of diarrhoea at low levels of coverage of handwashing facilities. This could also be due to extreme clustering of diarrhoeal prevalence at lower levels.

In an attempt to verify the same, it is observed that with exclusion of the bottom 25 per cent and 30 percent of the observation the inverse relationship gets strengthened. Given the heterogeneity in the safe drinking water variable across districts we subjected its association with the prevalence of diarrhoea using

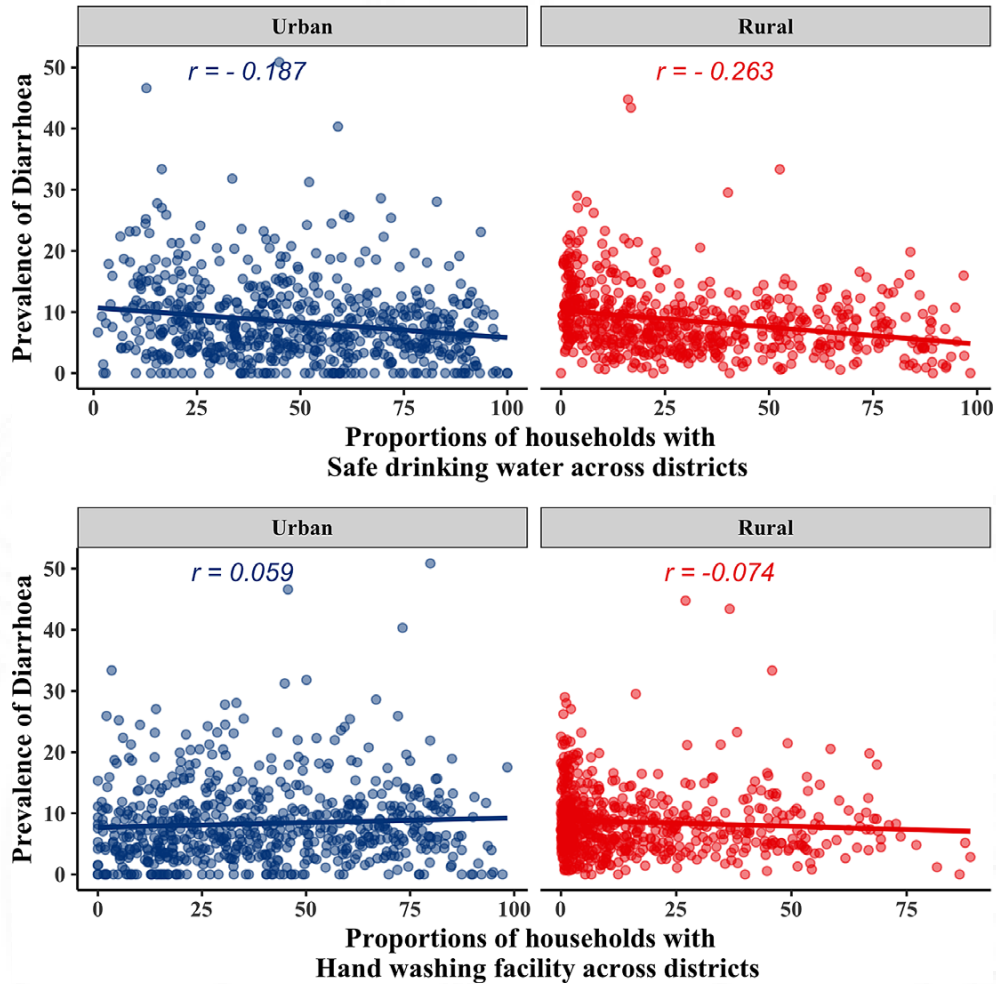


Figure 2. Relationship between prevalence of diarrhoea and conceptualized variables of safe drinking water and hand washing facility at district level, NFHS-4, 2015–2016.

sensitivity analysis for urban and rural areas. We used the median level of safe drinking water as a cut off to group the districts into below median and above median levels and then examined the association with prevalence of diarrhoea using Ordinary Least Squares (OLS) regression and the relationship is visualised in Figure 3. The ratio of the below median slope to the above median slope in urban areas was 1.21 when compared to 44.8 in rural areas indicating that the association is more sensitive at lower levels of safe drinking water in rural areas.

Discussion

One of the possible reasons behind the revealed contradictions could be that the questions or the observations being made in the survey discount specificity of contexts in defining safety. The JMP defines the levels for sanitation, drinking water and hand hygiene and the measurement indicators to enable their comparability across nations. The NFHS-4 too adopts these measures for estimates in their reports. Use of these measures in an Indian context does not seem to offer reliable patterns of association with relevant

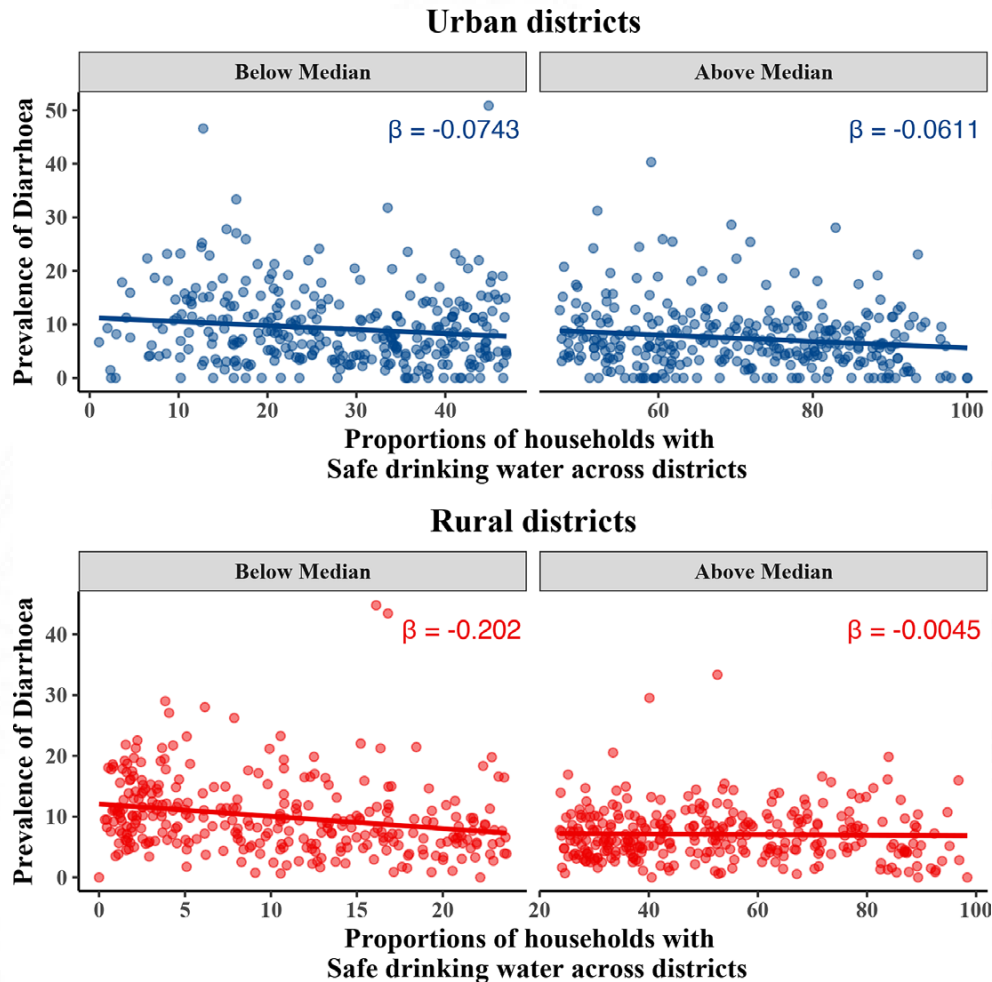


Figure 3. Sensitivity analysis of the relationship between prevalence of diarrhoea and safe drinking water at a district level, NFHS-4, 2015–2016

outcomes. The purpose of asking about the source of drinking water is to assess its cleanliness (International Institute for Population Sciences, 2014). Households having access to an improved source of water supply need not necessarily connote the use of safe water. The way water is stored and treated also plays a part in determining its safety. The definition of safe drinking water needs to be re-calibrated to account for the potential impact on health, particularly the health of vulnerable children.

In the instruction manual for data collectors for NFHS-4 they are required to ask the respondent “to show where the members of the household wash their hands”. If the location is observed then the presence of water or any detergent is also noted (International Institute for Population Sciences, 2014). The problem with this instruction is that it does not specify the instructor to look for any sink or device to regulate the flow of water as described by JMP. In such circumstances areas in the household used for washing clothes or vessels can be labelled as the facility for handwashing. One way to eliminate such potential errors is to be explicit about the purpose for collecting information on WASH indicators and ensuring that they unambiguously represent hand hygiene with respect to sanitation. However, this study is not without limitations. The analysis was carried out at a district level and there is a potential for ecological fallacy *i.e.* findings at the district level may not hold true at an individual level and *vice versa*.

The degree of association has been demonstrated using correlation coefficients and this does not necessarily indicate causation.

Conclusion

Based on the exploration made by us it is evident that there remains a fallacy in collection of information in terms of their content, execution and reporting by the respondents. Often comparability of such information across various settings may not be worth the effort. A thought needs to be spared on collection of such information given its scientific potential for exploration and verification.

Author Contributions. BV and UM conceived and designed the study. BV performed statistical analysis which was verified by UM. Both BV and UM drafted the paper.

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Data Availability Statements. The National Family and Health Survey- 4 (NFHS-4) data is available in the following link: <https://dhsprogram.com/data/available-datasets.cfm>. The data can be accessed by registering on the portal by stating the purpose of its intended use.

Conflict of Interest. Conflicts of Interest: Author BV and Author UM declare none.

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Publications: <ul style="list-style-type: none"> Ramanathan M, Vijayan B. Covariates of diarrhoea among under-five children in India: Are they level dependent?. PLoS One. 2019;14(8):e0221200. Published 2019 Aug 21. doi:10.1371/journal.pone.0221200 Vijayan B. Observation of unsafe medical practice during research in a healthcare-deprived area. Indian J Med Ethics. 2020 Jan-Mar;V(1):16-17. doi: 			

10.20529/IJME.2020.012. PMID: 32103805.

- **Vijayan B**, Ramanathan M. Prevalence and clustering of diarrhoea within households in India: some evidence from NFHS-4, 2015-16. J Biosoc Sci. 2021 Jan;53(1):108-120. doi: 10.1017/S0021932020000073. Epub 2020 Mar 4. PMID: 32127053.
- **Vijayan, B.** & Mishra, U. (2020). Associating State of Water and Sanitation with Childhood diarrhoea: Anomalies and Contradictions: Anomalies in analyzing Water and Sanitation data. Experimental Results, 1, E6. doi:10.1017/exp.2020.9
- **Vijayan B**, Ramanathan M, Rangamani S, Joe W, Gopinathan S, Mishra US. Treatment and rehabilitation of stroke patients in India: A gendered analysis based on repeated cross-sectional national sample surveys on health, 2014 and 2019. Health Care Women Int. 2021 Jun 14:1-18. doi: 10.1080/07399332.2021.1931226. Epub ahead of print. PMID: 34125652.

Paper/Poster presentations:

- Presented paper on the “Prevalence of Diarrhea among the under-five population and improved sanitation in India: A district level analysis” at the Annual Science fete, April 2015 held at SCTIMST
- Presented paper on the “Gender effects in hospitalization and rehabilitation due to stroke. Evidence from the 71st round of the NSSO,2014” at AMCCON, December 2015 held at SCTIMST
- Presented a poster titled “Relevance of privacy for data collection in Public Health study: Field experiences from Gadag district, Karnataka” at National Bioethics Conference (NBC), January 12-15, 2017, held at Pune
- Presented paper on the “Access to health care among under five children in the Banjara community, Karnataka” at the Annual Science fete, April 2017 held at SCTIMST
- Presented a paper titled “Ethnography in a denotified tribe: Risk benefit analysis of small incentive for monitoring chronic disease” at 14th World Congress of Bioethics & IJME’s 7th National Bioethics Conference held between December 5-7, 2018 at Bangalore
- Presented a paper on “Ethnographic Research among Tribal groups in North Karnataka” as a part of the symposium on “Public Health ethics and qualitative research: Experiences from the field” at 14th World Congress of Bioethics & IJME’s 7th National Bioethics Conference held between December 5-7, 2018 at Bangalore
- Presented a paper titled “Prevalence and clustering of diarrhoea within households in India: some evidence from NFHS 4, 2015-16” at “Population, Health and Society in India through the lens of the latest NFHS round” held on December 13-14, 2018 at Centre de Sciences Humaines, Delhi

Signature:



Date: 22nd June 2021

Place: Trivandrum

A1 Measures of discrimination by the health system

Table A1: Measures of discrimination by the health system

	DISCRIMINATION		Countries	Population
	OUTCOME	PROCESS		
Questions in large scale surveys	<ol style="list-style-type: none"> 1. California Health Interview Survey (CHIS) 2003 2. Behavioural Risk Factor Surveillance System (BRFSS) 2004-2013 3. Health Care Quality Survey (HCQS) 4. Trajectories and Origins (TeO) 2008-2009 	<ol style="list-style-type: none"> 1. National Survey of Functional Health (NSFH) 2. HCQS 3. CHIS 2001 4. New Hampshire Racial and Ethnic Approaches to Community Health (NH REACH) 5. BRFFS 6. Aligning Forces for Quality (AF4Q) 7. Kaiser Family Foundation Survey (KFF) 	<p>United States</p> <p>France</p>	<p>US- AA,whites, hispanics, American Indian, Pacific islanders, Asians</p> <p>France- 18-59 year olds. immigrants and individuals born to one immigrant</p>
Implicit Association Test	IAT (Blair 2013;Sabin 2008; Sabin 2015)	IAT (Blair et al 2013)	United States	Primary care providers, hypertensive patients who are white/black/latinos. Non providers, white faculty, fellows and residents
Scales	<ol style="list-style-type: none"> 1. Listening To Mothers (LTM)-3 2. Measure of Indigenous Racism Experience (MIRE) 3. Sub scale from Interpersonal Process of Care Survey (IPCS) 4. Multidimensional scale 5. Consumer Assessment of Healthcare Providers and Systems (CAHPS) 	<ol style="list-style-type: none"> 1. CAHPS 2. Perception of Racism Scale (PRS) Schedule of Racist Events (SRE) 3. Discrimination in Medical Setting (DMS) 4. Perceived Prejudice in Health Care (PPHC) 5. Detroit Area Discrimination Scale (DAS) 6. Group Based Medical Mistrust Scale (GBMMS) 7. The HIV/AIDS Provider Stigma Inventory (HAPSI) 8. HIV/AIDS Stigma Instrument—PLWA (HASI- P) 9. HIV/AIDS Stigma Instrument—Nurse (HASI- N) 10. Attitudes towards PLHIV 11. Opening Minds Scale for Health Care Providers (OMS-HC) 12. Health Care Provider HIV/AIDS Stigma Scale (HPASS) 13. Modified version of Life experiences Stress Scale 	<p>United States</p> <p>Australia</p> <p>United Kingdom</p> <p>Ethiopia</p> <p>Multi country (Lesotho, Malawi, South Africa, Tanzania, Swaziland)</p> <p>Multi country (China, Dominica, Egypt, Kenya, Puerto rico, St Christopher and Nevis , Thailand)</p> <p>Canada</p> <p>Sweden</p>	<p>African American (AA) women, AA/Latinos/whites-students/staff/faculty at a university, Muslim women, Arab Americans, South Asians, Hispanics, women attending maternity care in Australia, men and women with sickle disease, Aborigines in Australia, different groups with mental illness, health care providers- AIDS,PLHIV and nurses caring for them, clinical and non clinical staff</p>
Index	1. Index of discrimination	<ol style="list-style-type: none"> 2. EOD 3. Perception of racism in health care index 4. Stigma index in health care setting (India) 	United States, India	Black and white women, dalit and non dalit children, hospital staff, client receiving in patient care and care givers, Cardiac patients
Ecological analysis	Gaskin 2012		United States	AA, Asian, Hispanics



A2 Institute Ethics Committee Clearance- Phase 1

श्री चित्रा तिरुनाल आयुर्विज्ञान और प्रौद्योगिकी संस्थान, त्रिवेन्द्रम
तिरुवनन्तपुरम - ६९५०११, केरल, इंडिया

SREE CHITRA TIRUNAL INSTITUTE FOR MEDICAL SCIENCES AND TECHNOLOGY, TRIVANDRUM
Thiruvananthapuram - 695 011, Kerala, India
(An Institute of National Importance under Govt. of India)

Grams : Chitramet, Phone : +91-471-2443152, Fax : +91-471-2550728 / 2446433, E-mail : sct@sctimst.ac.in, Website : www.sctimst.ac.in

Institutional Ethics Committee (IEC Regn No. ECR/189/Inst/KL/2013)

SCT/IEC/1141/DECEMBER-2017

19.12.2017

Mr. Bevin Vinay Kumar VN
PhD student, AMCHSS
SCTIMST, Thiruvananthapuram

Dear Mr. Bevin Vinay Kumar,

The Institutional Ethics Committee reviewed and discussed your application to conduct the study entitled "UNDERSTANDING ACCESS TO HEALTH CARE AMONG BANJARAS: AN ETHNOGRAPHIC STUDY IN GADAG DISTRICT, KARNATAKA (IEC/1141)" on 16th December, 2017.

The following documents were reviewed:

Original submission

1. Covering Letter addressed to the Chairman, IEC, SCTIMST dated 14.11.2017 with checklist
2. TAC Approval Letter
3. IEC Application Form
4. Project Proposal
5. Questionnaire
6. Observation guidelines
7. Interview guidelines for community leaders, community members and health care providers in English and Kannada
8. Informed Consent Form for community leaders, community members, health care providers and health care providers (observation) in English and Kannada
9. CV of Principal Investigator and Co-Principal Investigators

Revised submission

1. Covering Letter addressed to the Chairman, IEC, SCTIMST dated 19.12.2017 with checklist
2. Copy of IEC Recommendation Letter dated 18.12.2017
3. List of changes made as recommended by IEC
4. TAC Approval Letter
5. IEC Application Form
6. Project Proposal
7. Questionnaire
8. Observation guidelines
9. Interview guidelines for community leaders, community members and health care providers in English and Kannada
10. Informed Consent Form for community leaders, community members, health care providers and health care providers in English and Kannada
11. Informed Consent Form for health care providers and health care providers-observation in English and Kannada
12. CV of Principal Investigator and Co-Principal Investigators

Page 1 of 2

The following members of the Ethics Committee were present at the meeting held on 16th December, 2017 at G. Parthasarathi Board Room, AMCHSS, SCTIMST

SL. No.	Member Name	Highest Degree	Gender	Scientific /Non Scientific	Affiliation with Institution(s)
1.	Dr. R V G Menon	M Tech, PhD	Male	Lay Person (Chairman)	No
2.	Dr. Rema M. N	MD	Female	Basic Medical Scientist	No
3.	Dr. S S Giri Sankar	LL.M. Ph.D.	Male	Legal Expert	No
4.	Dr. Aneesh V Pillai	BA. LLB (Hons.), LLM, Ph. D, SET (Law)	Male	Legal Expert	No
5.	Mr. Sathesh Chandran	MSW, PGDPM	Male	Lay person/ NGO/ Social Scientist	No
6.	Smt. Sathi Nair	MA (English Literature)	Female	Lay Person	No
7.	Dr. P. Manickam	BSMS, MSc (Epid), PhD	Male	Health Science Expert/ Social Scientist	No
8.	Dr. Christina George	MD Psychiatry	Female	Clinician	No
9.	Dr. Harikrishnan S	MD, DM (Cardiology) DNB (Cardiology)	Male	Clinician	Yes
10.	Dr. V. Raman Kutty	M D, M Phil, M P H	Male	Health Sciences Expert/Clinician	Yes
11.	Dr. Mala Ramanathan	PhD	Female	Social Scientist (Member Secretary)	Yes

IEC Decision

The IEC approved the conduct of the study in the present form.

Remarks:

The Institutional Ethics Committee expects to be informed about the progress of the study, any SAE occurring in the course of the study, any changes in the protocol and patient information/informed consent and asks to be provided a copy of the final report.

There was no member of the study team who participated in voting / decision making process. The ethics committee is organized and operated according to the requirements of Good Clinical Practice and the requirements of the Indian Council of Medical Research (ICMR).

Sincerely,


Mala Ramanathan
 Member Secretary, IEC

A3 Institute Ethics Committee Clearance- Phase 2



श्री चित्रा तिरुनाल आयुर्विज्ञान और प्रौद्योगिकी संस्थान, त्रिवेन्द्रम
तिरुवनन्तपुरम - ६९५०११, केरल, इंडिया

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Grams : Chitramel, Phone : +91-471-2443152, Fax : +91-471-2550728 / 2446433, E-mail : sct@sctimst.ac.in, Website : www.sctimst.ac.in

Institutional Ethics Committee (IEC Regn No. ECR/189/Inst/KL/2013/RR-16)

SCT/IEC/ 1328/JANUARY-2019

24.01.2019

Mr. Bevin Vinay Kumar VN
PhD Student, AMCHSS
SCTIMST, Thiruvananthapuram

Dear Mr. Bevin Vinay Kumar,

The Institutional Ethics Committee reviewed your application to conduct the study entitled "ACCESS TO AND UTILIZATION OF HEALTH CARE AMONG ADULTS AGED FIFTY OR MORE IN GADAG DISTRICT, KARNATAKA (IEC/1328)" on 24th January, 2019.

The following documents were reviewed:

Original submission

1. Covering letter addressed to the Chairman, IEC, SCTIMST dated 04.01.2019 with check list
2. TAC Approval Letter 3. IEC Application Form 4. Project Proposal
5. Participant Information Sheet and Informed Consent Form in English and Kannada
6. Village Infrastructure Information 7. Questionnaire in English and Kannada 8. CV of Principal Investigator and Co-PI

Revised submission

1. Covering letter addressed to the Chairman, IEC, SCTIMST dated 22.01.2019 with check list
2. Copy of IEC Recommendation Letter dated 16.01.2019 3. List of changes made as recommended by IEC
4. TAC Approval Letter 5. IEC Application Form 5. Project Proposal
7. Participant Information Sheet and Informed Consent Form in English and Kannada
8. Village Infrastructure Information 9. Questionnaire in English and Kannada 10. CV of Principal Investigator and Co-PI

The IEC Review Criteria

The study fulfils the expedited criteria from ethics review criteria vide section 9.1 of the Standard Operating Procedures (April 2017) of the SCTIMST-IEC.

IEC Decision

The IEC approved the conduct of the study in the present form.

Remarks:

The Institutional Ethics Committee expects to be informed about the progress of the study, any SAE occurring in the course of the study, any changes in the protocol and patient information/informed consent and asks to be provided a copy of the final report.

There was no member of the study team who participated in voting / decision making process. The ethics committee is organized and operated according to the requirements of Good Clinical Practice and the requirements of the Indian Council of Medical Research (ICMR).

Sincerely,

Dr. R V G Menon
Chairperson, IEC

A4 Informed consent for in-depth interview of individuals- Phase 1
Understanding access to health care among Banjaras: An ethnographic study in Gadag District, Karnataka

Information sheet

I'm Bevin Vinay Kumar V N, currently pursuing my PhD at Achutha Menon Centre for Health Science Studies (AMCHSS), Sree Chitra Tirunal Institute for Medical Sciences and Technology (SCTIMST). As a part of my PhD work I'm doing a study titled "Understanding the access to health care by Banjaras: Ethnographic study"

Purpose of the study:

I am trying to document how you or any of your family members did when sick and pathways to treatment. While seeking care what are the difficulties you or your family members faced and the response of the providers.

About the study:

This study is being conducted in Gadag District, Karnataka as a part of the doctoral work. I would be interviewing around 10 to 12 individuals about their experiences with the health care system. This study is being conducted under the supervision of my guide, Professor Mala Ramanathan at AMCHSS.

Participation and benefits:

If you agree to participate in the study, then you would be required to answer a set of questions. I would ask questions related to the sickness experienced by you or your family members, health care seeking for the sickness and experience of care seeking at the facility. This would take about 30 to 45 minutes of your time. The information given by you would be recorded using a recording device and also in the form of notes. Recording the conversation would help me to analyse in detail later on. The study will not be on any benefit to you but it would help to find out the ways in which you interacted with the health care system, the difficulties you face or faced and the response of the health care system.

Confidentiality of data:

The information shared by you would be kept confidential and be used for research purpose. Only two persons, myself and my guide would have access to this information. Your individual identity would not be shared with anyone.

Withdrawal from the study:

You are free and have the right to refuse to answer any of the questions and can withdraw from the interview at any point of time and there would be no penalty for the same.

If you have any clarifications regarding the study you can contact me or Dr Mala Ramanathan, member-secretary of the Institute Ethics Committee (IEC) of SCTIMST.

Researcher

Bevin Vinay Kumar V N
PhD Scholar
AMCHSS, SCTIMST
Mob- 9886482006
Email: bevinvinay@gmail.com

Guide and Member Secretary, IEC

Mala Ramanathan
Professor
AMCHSS, SCTIMST
Tel- 0471- 2524234
Email: mala@sctimst.ac.in

**Understanding access to health care among Banjaras: An ethnographic study in Gadag District,
Karnataka**

Consent Form

I, _____, aged ____ years declare that

I have read and understood the information sheet for the study and have had the opportunity to ask questions []

I understand that the participation in this study is voluntary and that I'm free to withdraw at any time and without giving any reasons []

I agree not to restrict the use of any data or results that arise from this study provided such a use is only for scientific purpose(s) []

I agree to take part in the study []

Place:

ID:

Date:

Signature:

If the Participant is illiterate:

Name of Witness:

Signature of witness:

Signature of Researcher:

A5 Informed consent for in-depth interview of individuals (Kannada)-Phase 1

ಬಂಜಾರ ಸಮುದಾಯದಲ್ಲಿ ಆರೋಗ್ಯ ರಕ್ಷಣೆ ಪಡೆಯುವ ಮಾರ್ಗದ ತಿಳಿಯುವಿಕೆ: ಕರ್ನಾಟಕದ ಗದಗ ಜಿಲ್ಲೆಯಲ್ಲಿ ಒಂದು ಜನಾಂಗೀಯ ಅಧ್ಯಯನ

ಬಂಜಾರ ಸಮುದಾಯದಲ್ಲಿ ಆರೋಗ್ಯ ರಕ್ಷಣೆ ಪಡೆಯುವ ಮಾರ್ಗದ ತಿಳಿಯುವಿಕೆ: ಕರ್ನಾಟಕದ ಗದಗ ಜಿಲ್ಲೆಯಲ್ಲಿ ಒಂದು ಜನಾಂಗೀಯ ಅಧ್ಯಯನ

ಮಾಹಿತಿ ಪುಟ

ನಾನು ಬೆವಿನ್ ವಿನಯ್ ಕುಮಾರ್ ವಿ.ಎನ್., ಪ್ರಸ್ತುತದಲ್ಲಿ "ಅಚ್ಚುತ ಮೆನನ್ ಸೆಂಟರ್ ಫಾರ್ ಹೆಲ್ತ್ ಸೈನ್ಸ್ ಸ್ಟಡೀಸ್"(ಎ.ಎಮ್.ಸಿ.ಎಚ್.ಎಸ್.ಎಸ್.), "ಶ್ರೀ ಚಿತ್ರ ತಿರುನಾಳ್ ಇನ್ಸ್ಟಿಟ್ಯೂಟ್ ಫಾರ್ ಮೆಡಿಕಲ್ ಸೈನ್ಸ್ ಆಂಡ್ ಟೆಕ್ನಾಲಜಿ" (ಎಸ್.ಸಿ.ಟಿ.ಐ.ಎಮ್.ಎಸ್.ಟಿ) ಯಲ್ಲಿ ನನ್ನ ಪಿ.ಎಚ್.ಡಿ ಪದವಿ ಮಾಡುತ್ತಿದ್ದೇನೆ.

ಅದರ ಒಂದು ಭಾಗವಾಗಿ ನಾನು "ಬಂಜಾರ ಸಮುದಾಯದಲ್ಲಿ ಆರೋಗ್ಯ ರಕ್ಷಣೆ ಪಡೆಯುವ ಮಾರ್ಗದ ತಿಳಿಯುವಿಕೆ: ಜನಾಂಗೀಯ ಅಧ್ಯಯನ" ಎಂಬ ವಿಷಯದ ಬಗ್ಗೆ ಅಧ್ಯಯನ ನಡೆಸುತ್ತಿದ್ದೇನೆ.

ಅಧ್ಯಯನದ ಉದ್ದೇಶ:

ನೀವು ಅಥವಾ ನಿಮ್ಮ ಕುಟುಂಬದ ಸದಸ್ಯರು ಅನಾರೋಗ್ಯ ಪೀಡಿತರಾದಾಗ ಆದ ಅನುಭವ ಮತ್ತು ಅದಕ್ಕೆ ತೆಗೆದುಕೊಂಡ ಚಿಕಿತ್ಸಾ ವಿಧಾನಗಳನ್ನು ದಾಖಲಿಸಲು ನಾನು ಪ್ರಯತ್ನಿಸುತ್ತಿದ್ದೇನೆ. ಆರೈಕೆ ಪಡೆಯುವಾಗ ನೀವು ಅಥವಾ ನಿಮ್ಮ ಕುಟುಂಬ ವರ್ಗ ಅನುಭವಿಸಿದ ಕಷ್ಟಗಳು ಮತ್ತು ಸೇವೆ ಒದಗಿಸುವವರಿಂದ ಪಡೆದ ಪ್ರತಿಕ್ರಿಯೆ.

ಅಧ್ಯಯನದ ಬಗ್ಗೆ:

ಡಾಕ್ಟರೇಟ್ ಪದವಿಯ ಒಂದು ಭಾಗವಾಗಿ ಈ ಅಧ್ಯಯನವನ್ನು ಕರ್ನಾಟಕದ ಗದಗ ಜಿಲ್ಲೆಯಲ್ಲಿ ಕೈಗೊಳ್ಳಲಾಗುತ್ತಿದೆ. ಆರೋಗ್ಯ ರಕ್ಷಣಾ ವ್ಯವಸ್ಥೆಯ ಬಗ್ಗೆ ಆದ ಅನುಭವಗಳನ್ನು ಹಂಚಿಕೊಳ್ಳಲು ನಾನು ಸುಮಾರು ೧೦ ರಿಂದ ೧೨ ವ್ಯಕ್ತಿಗಳನ್ನು ಸಂದರ್ಶಿಸುತ್ತೇನೆ. ಈ ಅಧ್ಯಯನವು ಎ.ಎಮ್.ಸಿ.ಎಚ್.ಎಸ್.ಎಸ್ ನ ನನ್ನ ಮಾರ್ಗದರ್ಶಿಗಳಾದ ಪ್ರೊ. ಮಾಲಾ ರಾಮನಾಥನ್‌ರವರ ಮಾರ್ಗದರ್ಶನದ ಅಡಿಯಲ್ಲಿ ನಡೆಯುತ್ತದೆ.

ಭಾಗವಹಿಸುವಿಕೆ ಹಾಗೂ ಲಾಭಗಳು:

ನೀವು ಈ ಅಧ್ಯಯನದಲ್ಲಿ ಪಾಲ್ಗೊಳ್ಳಲು ಒಪ್ಪಿದಲ್ಲಿ ಕೆಲವು ಪ್ರಶ್ನೆಗಳನ್ನು ಉತ್ತರಿಸಬೇಕಾಗುತ್ತದೆ. ನೀವು ಅಥವಾ ನಿಮ್ಮ ಕುಟುಂಬ ವರ್ಗ ಅನುಭವಿಸಿದ ಅನಾರೋಗ್ಯದ ವಿವರ, ಚಿಕಿತ್ಸೆ ಪಡೆದ ವಿವರ ಹಾಗೂ ಚಿಕಿತ್ಸಾಕೇಂದ್ರದಲ್ಲಿ ಪಡೆದ ಸೌಲಭ್ಯಗಳ ಬಗ್ಗೆ ಪ್ರಶ್ನೆಗಳನ್ನು ಕೇಳುತ್ತೇನೆ. ಇದು ನಿಮ್ಮ ಸುಮಾರು ೩೦ ರಿಂದ ೪೫ ನಿಮಿಷಗಳ ಸಮಯ ತೆಗೆದುಕೊಳ್ಳುತ್ತದೆ. ನೀವು ನೀಡುವ ಮಾಹಿತಿಯನ್ನು ರೆಕಾರ್ಡ್ ಕೂಡ ಮಾಡಿ ಬರಹದ ರೂಪದಲ್ಲಿ ಸಹ ಸಂಗ್ರಹಿಸಲಾಗುತ್ತದೆ. ನಮ್ಮ ನಡುವೆ ನಡೆಯುವ ಮಾತುಕಥೆಯನ್ನು ರೆಕಾರ್ಡ್ ಮಾಡುವುದರಿಂದ ನನಗೆ ಮುಂದೆ ವಿವರವಾಗಿ ಅದನ್ನು ವಿಶ್ಲೇಷಿಸಲು ಸಹಕಾರಿಯಾಗುತ್ತದೆ. ಈ ಅಧ್ಯಯನದಿಂದ ನಿಮಗೆ ಯಾವ ರೀತಿಯ ಲಾಭವಿಲ್ಲದಿದ್ದರೂ, ಆರೋಗ್ಯ ರಕ್ಷಣಾ ವ್ಯವಸ್ಥೆಯ ಜೊತೆ ನೀವು ನಡೆದುಕೊಂಡ ರೀತಿ, ನೀವು ಅನುಭವಿಸಿದ ಅಥವಾ ಅನುಭವಿಸುವ ಕಷ್ಟಗಳು ಹಾಗೂ ಅದಕ್ಕೆ ಆರೋಗ್ಯ ರಕ್ಷಣಾ ವ್ಯವಸ್ಥೆ ಪ್ರತಿಕ್ರಿಯಿಸಿದ ರೀತಿಗಳನ್ನು ತಿಳಿದುಕೊಳ್ಳುವಲ್ಲಿ ಸಹಾಯ ಮಾಡುತ್ತದೆ.

ಮಾಹಿತಿಯ ಗೌಪ್ಯತೆ:

ನೀವು ನೀಡುವ ಮಾಹಿತಿಯನ್ನು ಗೌಪ್ಯವಾಗಿರಿಸಲಾಗುತ್ತದೆ ಹಾಗೂ ಅಧ್ಯಯನಕ್ಕೆ ಮಾತ್ರ ಉಪಯೋಗಿಸಲಾಗುತ್ತದೆ. ಕೇವಲ ಇಬ್ಬರಿಗೆ, ಅಂದರೆ ನಾನು ಹಾಗೂ ನನ್ನ ಮಾರ್ಗದರ್ಶಕರಿಗೆ ಮಾತ್ರ ಈ ಮಾಹಿತಿಗಳ ಲಭ್ಯತೆ ಇರುತ್ತದೆ. ನಿಮ್ಮ ವಯಸ್ಕಿ ಗುರುತನ್ನು ಯಾರೊಂದಿಗೂ ಹಂಚಿಕೊಳ್ಳಲಾಗುವುದಿಲ್ಲ.

ಅಧ್ಯಯನದಿಂದ ಹಿಂದೆ ಸರಿಯುವುದು:

ನೀವು ಬಯಸಿದಲ್ಲಿ ಯಾವ ಪ್ರಶ್ನೆಗಳಿಗಾದರೂ ಉತ್ತರಿಸದೇ ಇರುವ ಹಕ್ಕಿದೆ ಮತ್ತು ಸಂದರ್ಶನದ ಯಾವ ಘಟ್ಟದಲ್ಲಾದರೂ ಅದರಿಂದ ಹಿಂದೆ ಸರಿಯಬಹುದಾಗಿದೆ. ಇದಕ್ಕೆ ಯಾವ ರೀತಿಯ ಶುಲ್ಕವನ್ನು ವಿಧಿಸಲಾಗುವುದಿಲ್ಲ.

ಈ ಅಧ್ಯಯನದ ಬಗ್ಗೆ ನಿಮಗೆ ಯಾವ ರೀತಿಯ ಸ್ಪಷ್ಟೀಕರಣ ಬೇಕಿದ್ದರೂ ನೀವು ನನ್ನನ್ನು ಅಥವಾ ಡಾ. ಮಾಲಾ ರಾಮನಾಥನ್, ಎಸ್.ಸಿ.ಟಿ.ಐ.ಎಮ್.ಎಸ್.ಟಿ ಯ ಇನ್ಸ್ಟಿಟ್ಯೂಟ್ ಎಥಿಕ್ಸ್ ಕಮಿಟಿ(ಐ.ಇ.ಸಿ)ಯ ಸದಸ್ಯ-ಕಾರ್ಯದರ್ಶಿಯನ್ನು ಸಂಪರ್ಕಿಸಬಹುದು.

ಸಂಶೋಧಕ

ಬೆವಿನ್ ವಿನಯ್ ಕುಮಾರ್ ವಿ.ಎನ್

ಪಿ.ಎಚ್.ಡಿ ವಿದ್ಯಾರ್ಥಿ

ಮೊಬೈಲ್: 9886482006

ಈ ಮೈಲ್: bevinvinay@gmail.com

ಮಾರ್ಗದರ್ಶಿ ಮತ್ತು ಸದಸ್ಯ- ಕಾರ್ಯದರ್ಶಿ,ಐ.ಇ.ಸಿ

ಮಾಲಾ ರಾಮನಾಥನ್

ಪ್ರೊಫೆಸರ್

Tel- 0471- 2524234

ಈ ಮೈಲ್: mala@sctimst.ac.in

ಸಮ್ಮತಿ ಪತ್ರ

ನಾನು, _____, ವಯಸ್ಸಿನ _____ ವರ್ಷಗಳ ಎಂದು ಘೋಷಿಸಲು

ನಾನು ಓದಲು ಮತ್ತು ಅಧ್ಯಯನ ಮಾಡಿ ಹಾಳೆ ಅರ್ಥ ಮತ್ತು ಪ್ರಶ್ನೆಗಳನ್ನು ಕೇಳಲು ಅವಕಾಶ ನೀಡಲಾಯಿತು []

ನಾನು ಈ ಅಧ್ಯಯನದಲ್ಲಿ ಪಾಲ್ಗೊಳ್ಳುವಿಕೆಯನ್ನು ಸ್ವಯಂಪ್ರೇರಿತ ಎಂದು ಅರ್ಥ ಮತ್ತು ನಾನು ಯಾವುದೇ ಸಮಯದಲ್ಲಿ ಮತ್ತು ಯಾವುದೇ ಕಾರಣ ನೀಡದೆ ಹಿಂದಕ್ಕೆ ತೆಗೆದುಕೊಳ್ಳಬಹುದು []

ನಾನು ಈ ಅಧ್ಯಯನದಿಂದ ಉದ್ಭವಿಸುವ ಯಾವುದೇ ಡೇಟಾ ಅಥವಾ ಬಳಸುವುದರಿಂದಾಗಿ ನಿರ್ಬಂಧಿಸಲು ಇಂತಹ ಬಳಕೆಯು ವೈಜ್ಞಾನಿಕ ಉದ್ದೇಶಕ್ಕಾಗಿ ಮಾತ್ರ ಒದಗಿಸಲು ಒಪ್ಪುತ್ತೇನೆ []

ನಾನು ಅಧ್ಯಯನದಲ್ಲಿ ಭಾಗವಹಿಸಲು ಒಪ್ಪಿಕೊಳ್ಳುತ್ತೇನೆ []

ಸ್ಥಳ.....

ದಿನಾಂಕ.....

ಐಡಿ.....

ಸಹಿ.....

ಪಾಲ್ಗೊಳ್ಳುವವರು ಅನಕ್ಷರಸ್ಥ ವಾಗಿದ್ದರೆ :

ಸಾಕ್ಷಿಯ ಹೆಸರು.....

ಸಂಶೋಧಕ ಸಹಿ.....

ಸಾಕ್ಷಿಯ ಸಹಿ.....

A6 Informed consent for in-depth interview of Community leaders- Phase 1
Understanding access to health care among Banjaras: An ethnographic study in Gadag District, Karnataka

Information sheet

I am Bevin Vinay Kumar V N, currently pursuing my PhD at Achutha Menon Centre for Health Science Studies (AMCHSS), Sree Chitra Tirunal Institute for Medical Sciences and Technology (SCTIMST). As a part of my PhD work I'm doing a study titled "Understanding access to health care among Banjaras: An ethnographic study in Gadag District, Karnataka"

Purpose of the study:

I'm trying to document how the Banjara people interact with the providers from the health care system. While seeking care what are the difficulties they face or the ease with which they access care, the response of the health care system to the needs of the community.

About the study:

This study is being conducted in Gadag District, Karnataka as a part of the doctoral work. I would be interviewing village heads or representatives in the Thanda. This study is being conducted under the supervision of my guide, Professor Mala Ramanathan at AMCHSS.

Participation and benefits:

If you agree to participate in the study, then you would be required to answer a set of questions. The questions would be related to the people in the Thanda, access to resources, difficulties faced by the people in the community and the different health programs being carried out by the government. This would take about 30 to 45 minutes of your time. The information given by you would be recorded using a recording device and also in the form of notes. Recording the conversation would help me to analyse in detail later on. The study will not be on any benefit to you but it would help to find out the ways in which your community members interact with the health care system, the difficulties they face or faced and how the health care system caters to the needs of your people.

Confidentiality of data:

The information shared by you would be kept confidential and be used for research purpose. Only two persons, myself and my guide would have access to this information. Your individual identity would not be shared with anyone.

Withdrawal from the study:

You are free and have the right to refuse to answer any of the questions and can withdraw from the interview at any point of time and there would be no penalty for the same.

If you have any clarifications regarding the study you can contact me or Dr Mala Ramanathan, member-secretary of the Institute Ethics Committee (IEC) of SCTIMST.

Researcher

Bevin Vinay Kumar V N
PhD Scholar
AMCHSS, SCTIMST
Mob- 9886482006
Email: bevinvinay@gmail.com

Guide and Member Secretary, IEC

Mala Ramanathan
Professor
AMCHSS, SCTIMST
Tel- 0471- 2524234
Email: mala@sctimst.ac.in

**Understanding access to health care among Banjaras: An ethnographic study in Gadag District,
Karnataka**

Consent Form

I, _____, aged ____ years declare that

I have read and understood the information sheet for the study and have had the opportunity to ask questions []

I understand that the participation in this study is voluntary and that I'm free to withdraw at any time and without giving any reasons []

I agree not to restrict the use of any data or results that arise from this study provided such a use is only for scientific purpose(s) []

I agree to take part in the study []

Place:

ID:

Date:

Signature:

If the Participant is illiterate:

Name of Witness:

Signature of witness:

Signature of Researcher:

A7 Informed consent for in-depth interview of Community leaders (Kannada)-

Phase 1

ಬಂಜಾರ ಸಮುದಾಯದಲ್ಲಿ ಆರೋಗ್ಯ ರಕ್ಷಣೆ ಪಡೆಯುವ ಮಾರ್ಗದ ತಿಳಿಯುವಿಕೆ: ಕರ್ನಾಟಕದ ಗದಗ ಜಿಲ್ಲೆಯಲ್ಲಿ ಒಂದು ಜನಾಂಗೀಯ ಅಧ್ಯಯನ

ಮಾಹಿತಿ ಪುಟ

ನಾನು ಬೆವಿನ್ ವಿನಯ್ ಕುಮಾರ್ ವಿ.ಎನ್., ಪ್ರಸ್ತುತದಲ್ಲಿ "ಅಚ್ಯುತ ಮೆನನ್ ಸೆಂಟರ್ ಫಾರ್ ಹೆಲ್ತ್ ಸೈನ್ಸ್ ಸ್ಟಡೀಸ್"(ಎ.ಎಮ್.ಸಿ.ಎಚ್.ಎಸ್.ಎಸ್.), "ಶ್ರೀ ಚಿತ್ರ ತಿರುನಾಳ್ ಇನ್ಸ್ಟಿಟ್ಯೂಟ್ ಫಾರ್ ಮೆಡಿಕಲ್ ಸೈನ್ಸ್ ಆಂಡ್ ಟೆಕ್ನಾಲಜಿ" (ಎಸ್.ಸಿ.ಟಿ.ಐ.ಎಮ್.ಎಸ್.ಟಿ) ಯಲ್ಲಿ ನನ್ನ ಪಿ.ಎಚ್.ಡಿ ಪದವಿ ಮಾಡುತ್ತಿರುವೆನು.

ಅದರ ಒಂದು ಭಾಗವಾಗಿ ನಾನು "ಬಂಜಾರ ಸಮುದಾಯದಲ್ಲಿ ಆರೋಗ್ಯ ರಕ್ಷಣೆ ಪಡೆಯುವ ಮಾರ್ಗದ ತಿಳಿಯುವಿಕೆ: ಕರ್ನಾಟಕದ ಗದಗ ಜಿಲ್ಲೆಯಲ್ಲಿ ಒಂದು ಜನಾಂಗೀಯ ಅಧ್ಯಯನ" ಎಂಬ ವಿಷಯದ ಬಗ್ಗೆ ಅಧ್ಯಯನ ನಡೆಸುತ್ತಿದ್ದೇನೆ.

ಅಧ್ಯಯನದ ಉದ್ದೇಶ:

ಆರೋಗ್ಯ ರಕ್ಷಣಾ ವ್ಯವಸ್ಥೆಯ ಸೇವಾದಾರರ ಜೊತೆ ಬಂಜಾರ ಸಮುದಾಯದವರು ಯಾವ ರೀತಿಯಲ್ಲಿ ಸಂಪನ್ಮೂಲ ಸಂಪನ್ಮೂಲದ ದಾಖಲಿಸುವ ಪ್ರಯತ್ನ ಮಾಡುತ್ತಿದ್ದೇನೆ. ಚಿಕಿತ್ಸೆ ಪಡೆಯುವಾಗ ಅವರು ಅನುಭವಿಸುವ ಕಷ್ಟಗಳು ಅಥವಾ ಸುಲಭವಾಗಿ ಚಿಕಿತ್ಸೆ ಪಡೆಯುವ ರೀತಿ ಹಾಗೂ ಆ ಸಮುದಾಯದ ಜನರ ಅಗತ್ಯಗಳಿಗೆ ಆರೋಗ್ಯ ರಕ್ಷಣಾ ವ್ಯವಸ್ಥೆ ಸ್ಪಂದಿಸುವ ರೀತಿಯನ್ನು ದಾಖಲಿಸುತ್ತೇನೆ.

ಅಧ್ಯಯನದ ಬಗ್ಗೆ:

ಡಾಕ್ಟರೇಟ್ ಪದವಿಯ ಒಂದು ಭಾಗವಾಗಿ ಈ ಅಧ್ಯಯನವನ್ನು ಕರ್ನಾಟಕದ ಗದಗ ಜಿಲ್ಲೆಯಲ್ಲಿ ಕೈಗೊಳ್ಳಲಾಗುತ್ತಿದೆ. ತಾಂಡದಲ್ಲಿನ ಹಳ್ಳಿ ಪ್ರಮುಖರನ್ನು ಅಥವಾ ಪ್ರತಿನಿಧಿಗಳನ್ನು ನಾನು ಸಂದರ್ಶಿಸುತ್ತೇನೆ. ಈ ಅಧ್ಯಯನವು ಎ.ಎಮ್.ಸಿ.ಎಚ್.ಎಸ್.ಎಸ್ ನ ನನ್ನ ಮಾರ್ಗದರ್ಶಿಗಳಾದ ಪ್ರೊ. ಮಾಲಾ ರಾಮನಾಥನ್‌ರವರ ಮಾರ್ಗದರ್ಶನದ ಅಡಿಯಲ್ಲಿ ನಡೆಯುತ್ತದೆ.

ಭಾಗವಹಿಸುವಿಕೆ ಹಾಗೂ ಲಾಭಗಳು:

ನೀವು ಈ ಅಧ್ಯಯನದಲ್ಲಿ ಪಾಲ್ಗೊಳ್ಳಲು ಒಪ್ಪಿದಲ್ಲಿ ಕೆಲವು ಪ್ರಶ್ನೆಗಳನ್ನು ಉತ್ತರಿಸಬೇಕಾಗುತ್ತದೆ. ತಾಂಡದಲ್ಲಿನ ಜನರಿಗೆ, ಸಂಪನ್ಮೂಲಗಳ ಲಭ್ಯತೆ, ಸಮುದಾಯದಲ್ಲಿ ಜನರು ಅನುಭವಿಸುವ ಕಷ್ಟಗಳು ಮತ್ತು ಸರ್ಕಾರದ ವತಿಯಿಂದ ನಡೆಯುವ ವಿವಿಧ ಆರೋಗ್ಯ ಕಾರ್ಯಕ್ರಮಗಳಿಗೆ ಸಂಬಂಧಪಟ್ಟ ಪ್ರಶ್ನೆಗಳಿರುತ್ತವೆ. ಇದು ನಿಮ್ಮ ಸುಮಾರು ೩೦ ರಿಂದ ೪೫ ನಿಮಿಷಗಳ ಸಮಯ ತೆಗೆದುಕೊಳ್ಳುತ್ತದೆ. ನೀವು ನೀಡುವ ಮಾಹಿತಿಯನ್ನು ರೆಕಾರ್ಡ್ ಕೂಡ ಮಾಡಿ ಬರಹದ ರೂಪದಲ್ಲಿ ಸಹ ಸಂಗ್ರಹಿಸಲಾಗುತ್ತದೆ. ನಮ್ಮ ನಡುವೆ ನಡೆಯುವ ಮಾತುಕಥೆಯನ್ನು ರೆಕಾರ್ಡ್ ಮಾಡುವುದರಿಂದ ನನಗೆ ಮುಂದೆ ವಿವರವಾಗಿ ಅದನ್ನು ವಿಶ್ಲೇಷಿಸಲು ಸಹಕಾರಿಯಾಗುತ್ತದೆ. ಈ ಅಧ್ಯಯನದಿಂದ ನಿಮಗೆ ಯಾವ ರೀತಿಯ ಲಾಭವಿಲ್ಲದಿದ್ದರೂ, ನಿಮ್ಮ ಜನಾಂಗದವರು ಆರೋಗ್ಯ ರಕ್ಷಣಾ ವ್ಯವಸ್ಥೆಯ ಜೊತೆ ನಡೆದುಕೊಳ್ಳುವ ರೀತಿಯ ಬಗ್ಗೆ, ಅವರುಗಳು ಅನುಭವಿಸಿದ/ವ ಕಷ್ಟಗಳ ಬಗ್ಗೆ ಹಾಗೂ ಆರೋಗ್ಯ ರಕ್ಷಣಾ ವ್ಯವಸ್ಥೆಯು ಜನರ ಬೇಡಿಕೆಗಳನ್ನು ಪೂರೈಸುವ ರೀತಿಯನ್ನು ತಿಳಿಯಲು ಸಹಕಾರಿಯಾಗಿರುತ್ತದೆ.

ಮಾಹಿತಿಯ ಗೌಪ್ಯತೆ:

ನೀವು ನೀಡುವ ಮಾಹಿತಿಯನ್ನು ಗೌಪ್ಯವಾಗಿರಿಸಲಾಗುತ್ತದೆ ಹಾಗೂ ಅಧ್ಯಯನಕ್ಕೆ ಮಾತ್ರ ಉಪಯೋಗಿಸಲಾಗುತ್ತದೆ. ಕೇವಲ ಇಬ್ಬರಿಗೆ, ಅಂದರೆ ನಾನು ಹಾಗೂ ನನ್ನ ಮಾರ್ಗದರ್ಶಕರಿಗೆ ಮಾತ್ರ ಈ ಮಾಹಿತಿಗಳ ಲಭ್ಯತೆ ಇರುತ್ತದೆ. ನಿಮ್ಮ ವಯಕ್ತಿಕ ಗುರುತನ್ನು ಯಾರೊಂದಿಗೂ ಹಂಚಿಕೊಳ್ಳಲಾಗುವುದಿಲ್ಲ.

ಅಧ್ಯಯನದಿಂದ ಹಿಂದೆ ಸರಿಯುವುದು:

ನೀವು ಬಯಸಿದಲ್ಲಿ ಯಾವ ಪ್ರಶ್ನೆಗಳಿಗಾದರೂ ಉತ್ತರಿಸದೇ ಇರುವ ಹಕ್ಕಿದೆ ಮತ್ತು ಸಂದರ್ಶನದ ಯಾವ ಘಟ್ಟದಲ್ಲಾದರೂ ಅದರಿಂದ ಹಿಂದೆ ಸರಿಯಬಹುದಾಗಿದೆ. ಇದಕ್ಕೆ ಯಾವ ರೀತಿಯ ಶುಲ್ಕವನ್ನು ವಿಧಿಸಲಾಗುವುದಿಲ್ಲ.

ಈ ಅಧ್ಯಯನದ ಬಗ್ಗೆ ನಿಮಗೆ ಯಾವ ರೀತಿಯ ಸ್ಪಷ್ಟೀಕರಣ ಬೇಕಿದ್ದರೂ ನೀವು ನನ್ನನ್ನು ಅಥವಾ ಡಾ. ಮಾಲಾ ರಾಮನಾಥನ್, ಎಸ್.ಸಿ.ಟಿ.ಐ.ಎಮ್.ಎಸ್.ಟಿ ಯ ಇನ್ಸ್ಟಿಟ್ಯೂಟ್ ಎಥಿಕ್ಸ್ ಕಮಿಟಿ(ಐ.ಇ.ಸಿ)ಯ ಸದಸ್ಯ-ಕಾರ್ಯದರ್ಶಿಯನ್ನು ಸಂಪರ್ಕಿಸಬಹುದು.

ಸಂಶೋಧಕ

ಬೆವಿನ್ ವಿನಯ್ ಕುಮಾರ್ ವಿ.ಎನ್

ಪಿ.ಎಚ್.ಡಿ ವಿದ್ಯಾರ್ಥಿ

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ಮಾಲಾ ರಾಮನಾಥನ್

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ಸಮ್ಮತಿ ಪತ್ರ

ನಾನು, _____, ವಯಸ್ಸಿನ _____ ವರ್ಷಗಳ ಎಂದು ಘೋಷಿಸಲು

ನಾನು ಓದಲು ಮತ್ತು ಅಧ್ಯಯನ ಮಾಡಿ ಹಾಳೆ ಅರ್ಥ ಮತ್ತು ಪ್ರಶ್ನೆಗಳನ್ನು ಕೇಳಲು ಅವಕಾಶ ನೀಡಲಾಯಿತು []

ನಾನು ಈ ಅಧ್ಯಯನದಲ್ಲಿ ಪಾಲ್ಗೊಳ್ಳುವಿಕೆಯನ್ನು ಸ್ವಯಂಪ್ರೇರಿತ ಎಂದು ಅರ್ಥ ಮತ್ತು ನಾನು ಯಾವುದೇ ಸಮಯದಲ್ಲಿ ಮತ್ತು ಯಾವುದೇ ಕಾರಣ ನೀಡದೆ ಹಿಂದಕ್ಕೆ ತೆಗೆದುಕೊಳ್ಳಬಹುದು []

ನಾನು ಈ ಅಧ್ಯಯನದಿಂದ ಉದ್ಭವಿಸುವ ಯಾವುದೇ ಡೇಟಾ ಅಥವಾ ಬಳಸುವುದರಿಂದಾಗಿ ನಿರ್ಬಂಧಿಸಲು ಇಂತಹ ಬಳಕೆಯು ವೈಜ್ಞಾನಿಕ ಉದ್ದೇಶಕ್ಕಾಗಿ ಮಾತ್ರ ಒದಗಿಸಲು ಒಪ್ಪುತ್ತೇನೆ []

ನಾನು ಅಧ್ಯಯನದಲ್ಲಿ ಭಾಗವಹಿಸಲು ಒಪ್ಪಿಕೊಳ್ಳುತ್ತೇನೆ []

ಸ್ಥಳ.....

ದಿನಾಂಕ.....

ಐಡಿ.....

ಸಹಿ.....

ಪಾಲ್ಗೊಳ್ಳುವವರು ಅನಕ್ಷರಸ್ಥ ವಾಗಿದ್ದರೆ :

ಸಾಕ್ಷಿಯ ಹೆಸರು.....

ಸಂಶೋಧಕ ಸಹಿ.....

ಸಾಕ್ಷಿಯ ಸಹಿ.....

A8 Informed consent for in-depth interview of Healthcare providers- Phase 1
Understanding access to health care among Banjaras: An ethnographic study in Gadag District, Karnataka

Information sheet

I am Bevin Vinay Kumar V N, currently pursuing my PhD at Achutha Menon Centre for Health Science Studies (AMCHSS), Sree Chitra Tirunal Institute for Medical Sciences and Technology (SCTIMST). As a part of my PhD work I'm doing a study titled "Understanding access to health care among Banjaras: An ethnographic study in Gadag District, Karnataka"

Purpose of the study:

I'm trying to document the function of the health care system in the Thandas where the Banjaras reside, the different health programs being carried out and the response of the Banjaras to the health care system.

About the study:

This study is being conducted in Gadag District, Karnataka as a part of the doctoral work. I would be interviewing different providers ranging from doctors, nurses, para medical staff and field workers. This study is being conducted under the supervision of my guide, Professor Mala Ramanathan at AMCHSS.

Participation and benefits:

If you agree to participate in the study, then you would be required to answer a set of questions. The questions would be related to the functioning of the health centre, the various activities being carried out, health problems in the thandas and their response to the health system. This would take about 30 to 45 minutes of your time. The information given by you would be recorded using a recording device and also in the form of notes. Recording the conversation would help me to analyse in detail later on. The study will not be on any benefit to you but it would help to find out how the health system functions in a Thanda and caters to the needs of the people there.

Confidentiality of data:

The information shared by you would be kept confidential and be used for research purpose. Only two persons, myself and my guide would have access to this information. Your individual identity would not be shared with anyone.

Withdrawal from the study:

You are free and have the right to refuse to answer any of the questions and can withdraw from the interview at any point of time and there would be no penalty for the same.

If you have any clarifications regarding the study you can contact me or Dr Mala Ramanathan, member-secretary of the Institute Ethics Committee (IEC) of SCTIMST.

Researcher

Bevin Vinay Kumar V N
PhD Scholar
AMCHSS, SCTIMST
Mob- 9886482006
Email: bevinvinay@gmail.com

Guide and Member Secretary, IEC

Mala Ramanathan
Professor
AMCHSS, SCTIMST
Tel- 0471- 2524234
Email: mala@sctimst.ac.in

**Understanding access to health care among Banjaras: An ethnographic study in Gadag District,
Karnataka**

Consent Form

I, _____, aged ____ years declare that

I have read and understood the information sheet for the study and have had the opportunity to ask questions []

I understand that the participation in this study is voluntary and that I'm free to withdraw at any time and without giving any reasons []

I agree not to restrict the use of any data or results that arise from this study provided such a use is only for scientific purpose(s) []

I agree to take part in the study []

Place:

ID:

Date:

Signature:

If the Participant is illiterate:

Name of Witness:

Signature of witness:

Signature of Researcher:

A9 Informed consent for in-depth interview of Healthcare providers

(Kannada)- Phase 1

ಬಂಜಾರ ಸಮುದಾಯದಲ್ಲಿ ಆರೋಗ್ಯ ರಕ್ಷಣೆ ಪಡೆಯುವ ಮಾರ್ಗದ ತಿಳಿಯುವಿಕೆ: ಕರ್ನಾಟಕದ ಗದಗ ಜಿಲ್ಲೆಯಲ್ಲಿ ಒಂದು ಜನಾಂಗೀಯ ಅಧ್ಯಯನ

ಮಾಹಿತಿ ಪುಟ

ನಾನು ಬೆವಿನ್ ವಿನಯ್ ಕುಮಾರ್ ವಿ.ಎನ್., ಪ್ರಸ್ತುತದಲ್ಲಿ "ಅಚ್ಯುತ ಮೆನನ್ ಸೆಂಟರ್ ಫಾರ್ ಹೆಲ್ತ್ ಸೈನ್ಸ್ ಸ್ಟಡೀಸ್"(ಎ.ಎಮ್.ಸಿ.ಎಚ್.ಎಸ್.ಎಸ್), "ಶ್ರೀ ಚಿತ್ರ ತಿರುನಾಳ್ ಇನ್ಸ್ಟಿಟ್ಯೂಟ್ ಫಾರ್ ಮೆಡಿಕಲ್ ಸೈನ್ಸ್ ಆಂಡ್ ಟೆಕ್ನಾಲಜಿ" (ಎಸ್.ಸಿ.ಟಿ.ಐ.ಎಮ್.ಎಸ್.ಟಿ) ಯಲ್ಲಿ ನನ್ನ ಪಿ.ಎಚ್.ಡಿ ಪದವಿ ಮಾಡುತ್ತಿರುತ್ತೇನೆ.

ಅದರ ಒಂದು ಭಾಗವಾಗಿ ನಾನು "ಬಂಜಾರ ಸಮುದಾಯದಲ್ಲಿ ಆರೋಗ್ಯ ರಕ್ಷಣೆ ಪಡೆಯುವ ಮಾರ್ಗದ ತಿಳಿಯುವಿಕೆ: ಕರ್ನಾಟಕದ ಗದಗ ಜಿಲ್ಲೆಯಲ್ಲಿ ಒಂದು ಜನಾಂಗೀಯ ಅಧ್ಯಯನ" ಎಂಬ ವಿಷಯದ ಬಗ್ಗೆ ಅಧ್ಯಯನ ನಡೆಸುತ್ತಿದ್ದೇನೆ.

ಅಧ್ಯಯನದ ಉದ್ದೇಶ:

ತಾಂಡ ಪ್ರದೇಶದಲ್ಲಿ ವಾಸಿಸುವ ಬಂಜಾರರಲ್ಲಿ ಪ್ರಚಲಿತವಿರುವ ಆರೋಗ್ಯ ರಕ್ಷಣಾ ವ್ಯವಸ್ಥೆಯ ಕಾರ್ಯಚಲನೆಯನ್ನು , ಬಂಜಾರರಲ್ಲಿ ಪ್ರಚಲಿತವಿರುವ ವಿವಿಧ ಆರೋಗ್ಯ ಕಾರ್ಯಕ್ರಮಗಳ ಬಗ್ಗೆ ಮತ್ತು ಅವರುಗಳಿಂದ ಅದಕ್ಕಿರುವ ಪ್ರತಿಯೆಯ ಬಗ್ಗೆ ದಾಖಲಿಸುವ ಪ್ರಯತ್ನ ನನ್ನದು.

ಅಧ್ಯಯನದ ಬಗ್ಗೆ:

ಡಾಕ್ಟರೇಟ್ ಪದವಿಯ ಒಂದು ಭಾಗವಾಗಿ ಈ ಅಧ್ಯಯನವನ್ನು ಕರ್ನಾಟಕದ ಗದಗ ಜಿಲ್ಲೆಯಲ್ಲಿ ಕೈಗೊಳ್ಳಲಾಗುತ್ತಿದೆ. ವಿವಿಧ ಸೇವೆಗಳನ್ನು ಪೂರೈಸುವ ವೈದ್ಯರು, ದಾದಿಯರು, ಅರವೈದ್ಯಕೀಯ ಸಿಬ್ಬಂದಿ ಹಾಗೂ ಕ್ಷೇತ್ರ ಕಾರ್ಯಕರ್ತರನ್ನು ಸಂದರ್ಶನ ಮಾಡಲಿದ್ದೇನೆ. ಈ ಅಧ್ಯಯನವು ಎ.ಎಮ್.ಸಿ.ಎಚ್.ಎಸ್.ಎಸ್ ನ ನನ್ನ ಮಾರ್ಗದರ್ಶಿಗಳಾದ ಪ್ರೊ. ಮಾಲಾ ರಾಮನಾಥನ್‌ರವರ ಮಾರ್ಗದರ್ಶನದ ಅಡಿಯಲ್ಲಿ ನಡೆಯುತ್ತದೆ.

ಭಾಗವಿಸುವಿಕೆ ಮತ್ತು ಲಾಭ:

ನೀವು ಈ ಅಧ್ಯಯನದಲ್ಲಿ ಪಾಲ್ಗೊಳ್ಳಲು ಒಪ್ಪಿದಲ್ಲಿ ಕೆಲವು ಪ್ರಶ್ನೆಗಳನ್ನು ಉತ್ತರಿಸಬೇಕಾಗುತ್ತದೆ. ಆರೋಗ್ಯ ಕೇಂದ್ರದ ಕಾರ್ಯನಿರ್ವಣೆ, ಅಲ್ಲಿ ನಡೆಯುವ ವಿವಿಧ ಚಟುವಟಿಕೆಗಳು, ತಾಂಡ ಪ್ರದೇಶದಲ್ಲಿರುವ ಆರೋಗ್ಯ ಸಮಸ್ಯೆಗಳು ಮತ್ತು ಆರೋಗ್ಯ ವ್ಯವಸ್ಥೆಯ ಬಗ್ಗೆ ಅವರುಗಳ ಪ್ರತಿಕ್ರಿಯೆಗಳ ವಿಚಾರವಾಗಿ ಪ್ರಶ್ನೆಗಳಿರುತ್ತವೆ. ಇದು ನಿಮ್ಮ ಸುಮಾರು ೩೦ ರಿಂದ ೪೫ ನಿಮಿಷಗಳ ಸಮಯ ತೆಗೆದುಕೊಳ್ಳುತ್ತದೆ. ನೀವು ನೀಡುವ ಮಾಹಿತಿಯನ್ನು ರೆಕಾರ್ಡ್ ಕೂಡ ಮಾಡಿ ಬರಹದ ರೂಪದಲ್ಲೂ ಸಹ ಸಂಗ್ರಹಿಸಲಾಗುತ್ತದೆ. ನಮ್ಮ ನಡುವೆ ನಡೆಯುವ ಮಾತುಕಥೆಯನ್ನು ರೆಕಾರ್ಡ್ ಮಾಡುವುದರಿಂದ ನನಗೆ ಮುಂದೆ ವಿವರವಾಗಿ ಅದನ್ನು ವಿಶ್ಲೇಷಿಸಲು ಸಹಕಾರಿಯಾಗುತ್ತದೆ. ಈ ಅಧ್ಯಯನದಿಂದ ನಿಮಗೆ ಯಾವ ತರಹದ ಲಾಭಗಳಿಲ್ಲದಿದ್ದರೂ, ತಾಂಡ ಪ್ರದೇಶದಲ್ಲಿ ಆರೋಗ್ಯ ವ್ಯವಸ್ಥೆಯ ಹೇಗೆ ಕಾರ್ಯನಿರ್ವಹಿಸುತ್ತದೆ ಹಾಗೂ ಅವರುಗಳ ಅಗತ್ಯಗಳನ್ನು ಹೇಗೆ ಪೂರೈಸುತ್ತದೆ ಎಂದು ತಿಳಿಯುವಲ್ಲಿ ಸಹಾಯ ಮಾಡುತ್ತದೆ.

ಮಾಹಿತಿಯ ಗೌಪ್ಯತೆ:

ನೀವು ನೀಡುವ ಮಾಹಿತಿಯನ್ನು ಗೌಪ್ಯವಾಗಿರಿಸಲಾಗುತ್ತದೆ ಹಾಗೂ ಅಧ್ಯಯನಕ್ಕೆ ಮಾತ್ರ ಉಪಯೋಗಿಸಲಾಗುತ್ತದೆ. ಕೇವಲ ಇಬ್ಬರಿಗೆ, ಅಂದರೆ ನಾನು ಹಾಗೂ ನನ್ನ ಮಾರ್ಗದರ್ಶಕರಿಗೆ ಮಾತ್ರ ಈ ಮಾಹಿತಿಗಳ ಲಭ್ಯತೆ ಇರುತ್ತದೆ. ನಿಮ್ಮ ವಯ್ಯಕ್ತಿಕ ಗುರುತನ್ನು ಯಾರೊಂದಿಗೂ ಹಂಚಿಕೊಳ್ಳಲಾಗುವುದಿಲ್ಲ.

ಅಧ್ಯಯನದಿಂದ ಹಿಂದೆ ಸರಿಯುವುದು:

ನೀವು ಬಯಸಿದಲ್ಲಿ ಯಾವ ಪ್ರಶ್ನೆಗಳಿಗಾದರೂ ಉತ್ತರಿಸದೇ ಇರುವ ಹಕ್ಕಿದೆ ಮತ್ತು ಸಂದರ್ಶನದ ಯಾವ ಘಟ್ಟದಲ್ಲಾದರೂ ಅದರಿಂದ ಹಿಂದೆ ಸರಿಯಬಹುದಾಗಿದೆ. ಇದಕ್ಕೆ ಯಾವ ರೀತಿಯ ಶುಲ್ಕವನ್ನು ವಿಧಿಸಲಾಗುವುದಿಲ್ಲ.

ಈ ಅಧ್ಯಯನದ ಬಗ್ಗೆ ನಿಮಗೆ ಯಾವ ರೀತಿಯ ಸ್ಪಷ್ಟೀಕರಣ ಬೇಕಿದ್ದರೂ ನೀವು ನನ್ನನ್ನು ಅಥವಾ ಡಾ. ಮಾಲಾ ರಾಮನಾಥನ್, ಎಸ್.ಸಿ.ಟಿ.ಐ.ಎಮ್.ಎಸ್.ಟಿ ಯ ಇನ್ಸ್ಟಿಟ್ಯೂಟ್ ಎಥಿಕ್ಸ್ ಕಮಿಟಿ(ಐ.ಇ.ಸಿ)ಯ ಸದಸ್ಯ-ಕಾರ್ಯದರ್ಶಿಯನ್ನು ಸಂಪರ್ಕಿಸಬಹುದು.

ಸಂಶೋಧಕ

ಬೆವಿನ್ ವಿನಯ್ ಕುಮಾರ್ ವಿ.ಎನ್

ಪಿ.ಎಚ್.ಡಿ ವಿದ್ಯಾರ್ಥಿ

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ಮಾಲಾ ರಾಮನಾಥನ್

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ಸಮ್ಮತಿ ಪತ್ರ

ನಾನು, _____, ವಯಸ್ಸಿನ _____ ವರ್ಷಗಳ ಎಂದು ಘೋಷಿಸಲು

ನಾನು ಓದಲು ಮತ್ತು ಅಧ್ಯಯನ ಮಾಡಿ ಹಾಳೆ ಅರ್ಥ ಮತ್ತು ಪ್ರಶ್ನೆಗಳನ್ನು ಕೇಳಲು ಅವಕಾಶ ನೀಡಲಾಯಿತು []

ನಾನು ಈ ಅಧ್ಯಯನದಲ್ಲಿ ಪಾಲ್ಗೊಳ್ಳುವಿಕೆಯನ್ನು ಸ್ವಯಂಪ್ರೇರಿತ ಎಂದು ಅರ್ಥ ಮತ್ತು ನಾನು ಯಾವುದೇ ಸಮಯದಲ್ಲಿ ಮತ್ತು ಯಾವುದೇ ಕಾರಣ ನೀಡದೆ ಹಿಂದಕ್ಕೆ ತೆಗೆದುಕೊಳ್ಳಬಹುದು []

ನಾನು ಈ ಅಧ್ಯಯನದಿಂದ ಉದ್ಭವಿಸುವ ಯಾವುದೇ ಡೇಟಾ ಅಥವಾ ಬಳಸುವುದರಿಂದಾಗಿ ನಿರ್ಬಂಧಿಸಲು ಇಂತಹ ಬಳಕೆಯು ವೈಜ್ಞಾನಿಕ ಉದ್ದೇಶಕ್ಕಾಗಿ ಮಾತ್ರ ಒದಗಿಸಲು ಒಪ್ಪುತ್ತೇನೆ []

ನಾನು ಅಧ್ಯಯನದಲ್ಲಿ ಭಾಗವಹಿಸಲು ಒಪ್ಪಿಕೊಳ್ಳುತ್ತೇನೆ []

ಸ್ಥಳ.....

ದಿನಾಂಕ.....

ಐಡಿ.....

ಸಹಿ.....

ಪಾಲ್ಗೊಳ್ಳುವವರು ಅನಕ್ಷರಸ್ಥ ವಾಗಿದ್ದರೆ :

ಸಾಕ್ಷಿಯ ಹೆಸರು.....

ಸಂಶೋಧಕ ಸಹಿ.....

ಸಾಕ್ಷಿಯ ಸಹಿ.....

A10 Informed consent for observation of health facilities- Phase 1
Understanding access to health care among Banjaras: An ethnographic study in Gadag District, Karnataka

Information sheet

I am Bevin Vinay Kumar V N, currently pursuing my PhD at Achutha Menon Centre for Health Science Studies (AMCHSS), Sree Chitra Tirunal Institute for Medical Sciences and Technology (SCTIMST). As a part of my PhD work I'm doing a study titled "Understanding access to health care among Banjaras: An ethnographic study in Gadag District, Karnataka"

Purpose of the study:

I am trying to document the functioning of the health care system which caters to the villages and Thandas where the Banjaras reside. I would like to observe the functioning of the health facility and the interactions of the professionals with those seeking care.

About the study:

This study is being conducted in Gadag District, Karnataka as a part of the doctoral work. I would be observing the functioning of the health facility, the type of care being provided, the users of care and interactions between provider and user. This study is being conducted under the supervision of my guide, Professor Mala Ramanathan at AMCHSS.

Participation and benefits:

If you agree to participate in the study, then you would be required to permit me to observe the various functioning of the health facility, day to day activities being carried out and the interactions of the staff with the users of care. These observations would be made without causing any inconvenience to any staff or functioning of the health facility. At any point, you can restrict my access to specific sites for reasons related to privacy of patients or others who work in the facility. Observations would be recorded in the form of field notes which would be analysed. The study will not be on any benefit to you but it would help to find out the functioning of the health facility and how it caters to the needs of the people of the village and thanda.

Confidentiality of data:

The observations made would be kept confidential and be used for research purpose. Only two persons, myself and my guide would have access to this information. The identity of the health centre or specific individuals working with it or using it will not be shared with anyone.

Withdrawal from the study:

You are free and have the right to refuse to allow me from observing the functioning and can withdraw your permission for observation at any point of time and there would be no penalty for the same.

If you have any clarifications regarding the study you can contact me or Dr Mala Ramanathan, member-secretary of the Institute Ethics Committee (IEC) of SCTIMST.

Researcher

Bevin Vinay Kumar V N
PhD Scholar
AMCHSS, SCTIMST
Mob- 9886482006
Email: bevinvinay@gmail.com

Guide and Member Secretary, IEC

Mala Ramanathan
Professor
AMCHSS, SCTIMST
Tel- 0471- 2524234
Email: mala@sctimst.ac.in

**Understanding access to health care among Banjaras: An ethnographic study in Gadag District,
Karnataka**

Consent Form

I, _____, aged ____ years declare that

I have read and understood the information sheet for the study and have had the opportunity to ask questions []

I understand that the participation in this study is voluntary and that I'm free to withdraw permission for observation at any time and without giving any reasons []

I agree not to restrict the use of any data or results that arise from this study provided such a use is only for scientific purpose(s) []

I agree to take part in the study []

Place:

ID:

Date:

Signature:

Signature of Researcher:

A11 Informed consent for observation of health facilities (Kannada)- Phase 1

ಬಂಜಾರ ಸಮುದಾಯದಲ್ಲಿ ಆರೋಗ್ಯ ರಕ್ಷಣೆ ಪಡೆಯುವ ಮಾರ್ಗದ ತಿಳಿಯುವಿಕೆ: ಕರ್ನಾಟಕದ ಗದಗ್ ಜಿಲ್ಲೆಯಲ್ಲಿ ಒಂದು ಜನಾಂಗೀಯ ಅಧ್ಯಯನ

ಮಾಹಿತಿ ಪುಟ

ನಾನು ಬೇವಿನ ವಿನಯ್ ಕುರ್ಮಾ ವಿ ನ್, ಪ್ರಸ್ತುತದಲ್ಲಿ "ಅಚ್ಚುತ ಮೆನನ್ ಸೆಂಟರ್ ಫಾರ್ ಹೆಲ್ತ್ ಸೈನ್ಸ್ ಸ್ಟಡೀಸ್ (ಆ ಮ್ ಸಿ ಹ್ ಸ್ ಸ್), ಶ್ರೀ ಚಿತ್ರ ತಿರುನಾಳ್ ಇನ್ಸ್ಟಿಟ್ಯೂಟ್ ಫಾರ್ ಮೆಡಿಕಲ್ ಸೈನ್ಸಸ್ ಅಂಡ್ ಟೆಕ್ನಾಲಜಿ (ಸ್ ಸಿ ಟಿ ಈ ಮ್ ಸ್ ಟಿ) ಯಲ್ಲಿ ನನ್ನ ಪಿ.ಹೆ.ಡಿ ಪದವಿ ಮಾಡಿರುತ್ತೇನೆ. ಅದರ ಒಂದು ಭಾಗವಾಗಿ ನಾನು "ಬಂಜಾರ ಸಮುದಾಯದಲ್ಲಿ ಆರೋಗ್ಯ ರಕ್ಷಣೆ ಪಡೆಯುವ ಮಾರ್ಗದ ತಿಳಿಯುವಿಕೆ: ಕರ್ನಾಟಕದ ಗದಗ್ ಜಿಲ್ಲೆಯಲ್ಲಿ ಒಂದು ಜನಾಂಗೀಯ ಅಧ್ಯಯನ" ಎಂಬ ವಿಷಯದ ಬಗ್ಗೆ ಅಧ್ಯಯನ ನಡೆಸುತ್ತಿದ್ದೇನೆ.

ಅಧ್ಯಯನದ ಉದ್ದೇಶ

ನಾನು ಹಳ್ಳಿಗಳಿಗೆ ಮತ್ತು ತಾಂಡಾ ಪ್ರದೇಶದಲ್ಲಿ ವಾಸಿಸುವ ಬಂಜಾರರಲ್ಲಿ ಪ್ರಚಲಿತವಿರುವ ಆರೋಗ್ಯ ರಕ್ಷಣಾ ವ್ಯವಸ್ಥೆಯ ಕಾರ್ಯಚಾಲನೆಯನ್ನು ಕಾರ್ಯಗತಗೊಳಿಸಲು ನಾನು ಪ್ರಯತ್ನಿಸುತ್ತಿದ್ದೇನೆ. ಆರೋಗ್ಯ ಸೌಲಭ್ಯದ ಕಾರ್ಯಚಟುವಟಿಕೆಯನ್ನು ಮತ್ತು ವೃತ್ತಿಪರರನ್ನು ಆರೈಕೆ ಮಾಡುವವರೊಂದಿಗೆ ಸಂವಹನ ನಡೆಸುವುದನ್ನು ನಾನು ಗಮನಿಸಲು ಬಯಸುತ್ತೇನೆ.

ಅಧ್ಯಯನದ ಬಗ್ಗೆ

ಗದಗ್ ಜಿಲ್ಲೆಯ ಕರ್ನಾಟಕದಲ್ಲಿ ಈ ಅಧ್ಯಯನವನ್ನು ಡಾಕ್ಟರೇಟ್ ಕೆಲಸದ ಭಾಗವಾಗಿ ನಡೆಸಲಾಗುತ್ತಿದೆ. ಆರೋಗ್ಯ ಸೌಲಭ್ಯದ ಕಾರ್ಯಚಟುವಟಿಕೆಯನ್ನು ನಾನು ಗಮನಿಸುತ್ತಿದ್ದೇನೆ, ಒದಗಿಸುವ ಕಾಳಜಿಯ ಪ್ರಕಾರ, ಒದಗಿಸುವವರು ಮತ್ತು ಬಳಕೆದಾರರ ನಡುವಿನ ಕಾಳಜಿ ಮತ್ತು ಸಂವಹನಗಳ ಬಳಕೆದಾರರು. ಆ ಮ್ ಸಿ ಹ್ ಸ್ ಸ್ ನಲ್ಲಿ ನನ್ನ ಮಾರ್ಗದರ್ಶಕ, ಪ್ರೊಫೆಸರ್ ಮಾಲಾ ರಾಮನಾಥನ್ ಮೇಲ್ವಿಚಾರಣೆಯಲ್ಲಿ ಈ ಅಧ್ಯಯನವನ್ನು ನಡೆಸಲಾಗುತ್ತಿದೆ.

ಭಾಗವಹಿಸುವಿಕೆ ಮತ್ತು ಲಾಭ

ನೀವು ಅಧ್ಯಯನದಲ್ಲಿ ಪಾಲ್ಗೊಳ್ಳಲು ಒಪ್ಪಿಕೊಂಡರೆ, ಆರೋಗ್ಯ ಸೌಲಭ್ಯದ ವಿವಿಧ ಕಾರ್ಯಗಳನ್ನು ದಿನದ ಚಟುವಟಿಕೆಗಳನ್ನು ನಡೆಸುವ ದಿನ ಮತ್ತು ಆರೈಕೆಯ ಬಳಕೆದಾರರೊಂದಿಗೆ ಸಿಬ್ಬಂದಿಗಳ ಸಂವಹನಗಳನ್ನು ವಿಧಿಸಲು ನೀವು ನನ್ನನ್ನು ಅನುಮತಿಸಬೇಕಾಗಿರುತ್ತದೆ. ಆರೋಗ್ಯ ಸೌಲಭ್ಯದ ಯಾವುದೇ ಸಿಬ್ಬಂದಿ ಅಥವಾ ಕಾರ್ಯನಿರ್ವಹಣೆಗೆ ಯಾವುದೇ ಅನಾನುಕೂಲತೆ ಉಂಟಾಗದಂತೆ ಈ ಅವಲೋಕನಗಳನ್ನು ಮಾಡಲಾಗುವುದು. ಯಾವುದೇ ಹಂತದಲ್ಲಿ, ರೋಗಿಗಳ ಗೌಪ್ಯತೆ ಅಥವಾ ಸೌಲಭ್ಯದಲ್ಲಿ ಕೆಲಸ ಮಾಡುವ ಇತರರಿಗೆ ಸಂಬಂಧಿಸಿದ ಕಾರಣಗಳಿಗಾಗಿ ನೀವು ನಿರ್ದಿಷ್ಟ ಸ್ಥಳಗಳಿಗೆ ನನ್ನ ಪ್ರವೇಶವನ್ನು ನಿರ್ಬಂಧಿಸಬಹುದು. ಅವಲೋಕನಗಳನ್ನು ಕ್ಷೇತ್ರ ಕ್ಷೇತ್ರಗಳ ರೂಪದಲ್ಲಿ ದಾಖಲಿಸಲಾಗುತ್ತದೆ, ಅದು ವಿಶ್ಲೇಷಿಸಲ್ಪಡುತ್ತದೆ. ಅಧ್ಯಯನವು ನಿಮಗೆ ಯಾವುದೇ ಪ್ರಯೋಜನವಾಗುವುದಿಲ್ಲ ಆದರೆ ಇದು ಆರೋಗ್ಯ ಸೌಲಭ್ಯದ ಕಾರ್ಯಚಟುವಟಿಕೆಯನ್ನು ಕಂಡುಹಿಡಿಯಲು ಸಹಾಯ ಮಾಡುತ್ತದೆ ಮತ್ತು ಗ್ರಾಮ ಮತ್ತು ತಂಡ ಜನರ ಅಗತ್ಯಗಳನ್ನು ಪೂರೈಸುತ್ತದೆ.

ಮಾಹಿತಿಯ ಗೌಪ್ಯತೆ

ಮದ್ದಿದ ಅವಲೋಕನಗಳನ್ನು ಗೌಪ್ಯವಾಗಿರಿಸಲಾಗುವುದು ಮತ್ತು ಸಂಶೋಧನಾ ಉದ್ದೇಶಕ್ಕಾಗಿ ಬಳಸಲಾಗುವುದು. ಕೇವಲ ಎರಡು ವ್ಯಕ್ತಿಗಳು, ನನ್ನ ಮತ್ತು ನನ್ನ ಮಾರ್ಗದರ್ಶಿಯು ಈ ಮಾಹಿತಿಯನ್ನು ಪ್ರವೇಶಿಸಬಹುದು. ಆರೋಗ್ಯ ಕೇಂದ್ರದ ಗುರುತಿಸುವಿಕೆ ಅಥವಾ ನಿರ್ದಿಷ್ಟ ವ್ಯಕ್ತಿಗಳು ಅದರೊಂದಿಗೆ ಕೆಲಸ ಮಾಡುತ್ತಿದ್ದಾರೆ ಅಥವಾ ಅದನ್ನು ಬಳಸುವುದರಿಂದ ಯಾರೊಂದಿಗೂ ಹಂಚಿಕೊಳ್ಳಲಾಗುವುದಿಲ್ಲ.

ಅಧ್ಯಯನದಿಂದ ಹಿಂತೆಗೆದುಕೊಳ್ಳುವುದು

ನೀವು ಸ್ವತಂತ್ರವಾಗಿರುವಿರಿ ಮತ್ತು ಕಾರ್ಯನಿರ್ವಹಣೆಯನ್ನು ಗಮನಿಸುವುದರಿಂದ ನನ್ನನ್ನು ಅನುಮತಿಸಲು ನಿರಾಕರಿಸುವ ಮತ್ತು ಸಮಯದ ಯಾವುದೇ ಸಮಯದಲ್ಲಿ ವಿಕೃತಿಗಾಗಿ ನಿಮ್ಮ ಅನುಮತಿಯನ್ನು ಹಿಂತೆಗೆದುಕೊಳ್ಳಬಹುದು ಮತ್ತು ಅದಕ್ಕೆ ಯಾವುದೇ ದಂಡವಿಲ್ಲ. ಅಧ್ಯಯನದ ಬಗ್ಗೆ ನೀವು ಯಾವುದೇ ಸ್ಪಷ್ಟೀಕರಣವನ್ನು ಹೊಂದಿದ್ದರೆ ನೀವು ನನ್ನನ್ನು ಸಂಪರ್ಕಿಸಬಹುದು ಅಥವಾ ಸ್ ಸಿ ಟಿ ಈ ಮ್ ಸ್ ಟಿ ನ ಇನ್ಸ್ಟಿಟ್ಯೂಟ್ ಎಥಿಕ್ಸ್ ಕಮಿಟಿಯ (ಈ ಈ ಸಿ) ಸದಸ್ಯ-ಕಾರ್ಯದರ್ಶಿ ಡಾ ಮಾಲಾ ರಾಮನಾಥನ್.

ಸಂಶೋಧಕ

ಬೇವಿನ ವಿನಯ್ ಕುರ್ಮಾ ವಿ ನ್
ಪಿ. ಹ್ . ಡಿ ವಿದ್ಯಾರ್ಥಿ
ಮೊಬೈಲ್- 9886482006
ಈಮೈಲ್- bevinvinay@gmail.com

ಮಾರ್ಗದರ್ಶಿ ಮತ್ತು ಸದಸ್ಯ- ಕಾರ್ಯದರ್ಶಿ, ಐ ಈ ಸಿ
ಮಾಲಾ ರಾಮನಾಥನ್
ಪ್ರೊಫೆಸರ್
ಫೋನ್- 0471- 2524234
ಈಮೈಲ್- mala@sctimst.ac.in

ಸಮ್ಮತಿ ಪತ್ರ

ನಾನು, _____, ವಯಸ್ಸಾದ ____ ವರ್ಷಗಳ ಎಂದು ಘೋಷಿಸಲು

ನಾನು ಅಧ್ಯಯನದ ಮಾಹಿತಿ ಹಾಳೆ ಓದಿದ್ದೇನೆ ಮತ್ತು ಅರ್ಥಮಾಡಿಕೊಂಡಿದ್ದೇನೆ ಮತ್ತು ಪ್ರಶ್ನೆಗಳನ್ನು ಕೇಳಲು ಅವಕಾಶವನ್ನು ಹೊಂದಿದ್ದೇನೆ. []

ಈ ಅಧ್ಯಯನದಲ್ಲಿ ಪಾಲ್ಗೊಳ್ಳುವಿಕೆಯು ಸ್ವಯಂಪ್ರೇರಿತವಾಗಿದೆ ಮತ್ತು ಯಾವುದೇ ಸಮಯದಲ್ಲಿ ಯಾವುದೇ ವಿಕಲ್ಪವಿಲ್ಲದೆ ವಿಕಲ್ಪವಿಲ್ಲದ ಅನುಮತಿಯನ್ನು ನಾನು ಹಿಂತೆಗೆದುಕೊಳ್ಳುತ್ತೇನೆ ಎಂದು ನಾನು ಅರ್ಥಮಾಡಿಕೊಂಡಿದ್ದೇನೆ. []

ನಾನು ಈ ಅಧ್ಯಯನದ ಉದ್ದವಿರುವ ಯಾವುದೇ ದೇಶ ಅಥವಾ ಬಳಸುವುದರಿಂದಾಗಿ ನಿರ್ಬಂಧಿಸಲು ಇಂತಹ ಬಳಕೆಯು ವೈಜ್ಞಾನಿಕ ಉದ್ದೇಶಕ್ಕಾಗಿ ಮಾತ್ರ ಒದಗಿಸಲು ಒಪ್ಪುತ್ತೇನೆ. []

ನಾನು ಅಧ್ಯಯನದಲ್ಲಿ ಭಾಗವಹಿಸಲು ಒಪ್ಪಿಕೊಳ್ಳುತ್ತೇನೆ. []

ಸ್ಥಳ

ಅಯ್ ಡಿ.....

ದಿನಾಂಕ.....

ಸಹಿ.....

ಸಂಶೋಧಕ ಸಹಿ.....

A12 Interview Guidelines for Community members- Phase 1
Understanding access to health care among Banjaras: An ethnographic study in Gadag District,
Karnataka

Interview Guidelines- Community members

I'm trying to understand about what you did when you or anybody in the family was sick, how you got treatment and what happened when you visited the hospital and what the health care providers said to you and what happened with the treatment.

1. What were the symptoms that caused you to become recognise that you or somebody in the family was sick? How do you know that this is an illness that needs care?
2. What did you do? Did you provide any treatment? What are all the things you did by way of treatment or care at home? Why did you consider treatment outside home? Where did you go? When did you go there?
3. Why did you go to this particular provider? Is there any reason for going there? How is this provider different from others?
4. Can you describe the interaction with this provider?
5. How would you describe your relations with this provider? Do all persons enjoy similar relations with him/her? Why is there a difference?
6. Would you send people like you to this provider for treatment? Why? Why not?
(if reporting negative treatment or discrimination) –when things like this happen, how do people like you deal with it? What do you do?
7. What have you heard about others experience in that setup?
8. What were the experiences they mentioned to you within this system? (explore- are all the places the same? What were the places where you had a similar experience? How will you describe your experiences in those places?

(Observe for expression or body languages during the conversation)

A13 Interview Guidelines for Community members (Kannada)- Phase 1
ಬಂಜಾರ ಸಮುದಾಯದಲ್ಲಿ ಆರೋಗ್ಯ ರಕ್ಷಣೆ ಪಡೆಯುವ ಮಾರ್ಗದ ತಿಳಿಯುವಿಕೆ: ಕರ್ನಾಟಕದ ಗದಗ ಜಿಲ್ಲೆಯಲ್ಲಿ ಒಂದು ಜನಾಂಗೀಯ ಅಧ್ಯಯನ

ಸಂದರ್ಶನದ ಮಾರ್ಗಸೂಚಿಗಳು- ಸಮುದಾಯದ ಸದಸ್ಯರು

ನೀವು ಅಥವಾ ನಿಮ್ಮ ಕುಟುಂಬದವರು ಅನಾರೋಗ್ಯ ಪೀಡಿತರಾದಾಗ ಏನು ಮಾಡಿದಿರಿ, ಚಿಕಿತ್ಸೆಯ ವಿಧಾನಗಳು ಹಾಗೂ ಆರೋಗ್ಯ ಸೇವಾದಾರರ ಜೊತೆ ನಿಮ್ಮ ಮಾತುಕತೆಗಳ ಬಗ್ಗೆ ತಿಳಿಯಲು ಯತ್ನಿಸುತ್ತಿದ್ದೇನೆ.

೧. ನೀವು ಅಥವಾ ನಿಮ್ಮ ಮನೆಯವರ ಆರೋಗ್ಯ ಸರಿಯಿಲ್ಲ ಎಂದು ತಿಳಿಯಲು ಯಾವ ರೋಗಲಕ್ಷಣಗಳು ಕಾರಣವಾದವು?

೨. ನೀವು ಏನು ಮಾಡಿದಿರಿ? ನೀವು ಯಾವುದಾದರೂ ಚಿಕಿತ್ಸೆ ನೀಡಿದಿರೇ? ಚಿಕಿತ್ಸೆಯ ರೂಪದಲ್ಲಿ ಏನು ಮಾಡಿದಿರಿ ಅಥವಾ ಮನೆಯಲ್ಲಿ ಹೇಗೆ ಆರೈಕೆ ಮಾಡಿದಿರಿ? ಮನೆಯ ಚಿಕಿತ್ಸೆಯಲ್ಲದೇ ಹೊರಗಡೆ ಚಿಕಿತ್ಸೆ ತೆಗೆದುಕೊಳ್ಳುವ ಬಗ್ಗೆ ಏಕೆ ಯೋಚಿಸಿದಿರಿ? ಚಿಕಿತ್ಸೆಗಾಗಿ ಎಲ್ಲಿ ಹೋದಿರಿ? ಮತ್ತು ಯಾವಾಗ?

೩. ಆ ಸೇವಾದಾರರ ಬಳಿಯೇ ಹೋಗಲು ಕಾರಣ?

೪. ಈ ಸೇವಾದಾರರ ಜೊತೆ ನಿಮ್ಮ ಮಾತುಕತೆಯ ವಿವರ ತಿಳಿಸುವಿರಾ?

೫. ಈ ಸೇವಾದಾರರ ಜೊತೆ ನಿಮ್ಮ ಸಂಬಂಧ ಹೇಗೆ? ಬೇರೆ ಎಲ್ಲರೂ ಅವರೊಂದಿಗೆ ಇದೇ ತರಹದ ಸಂಬಂಧ ಇಟ್ಟುಕೊಂಡಿದ್ದಾರೆಯೇ? ವ್ಯತ್ಯಾಸಕ್ಕೆ ಕಾರಣಗಳೇನು?

೬. ನಿಮ್ಮಂತಹ ಜನರನ್ನೇ ಈ ಸೇವಾದಾರರ ಬಳಿ ಕಳಿಸಲು ಇಚ್ಛಿಸುತ್ತೀರ? ಯಾಕೆ? ಇಲ್ಲವಾದಲ್ಲಿ ಯಾಕೆ? (ವಿರುದ್ಧ ಚಿಕಿತ್ಸೆ ಅಥವಾ ಬೇಧಭಾವ)-ಈ ರೀತಿ ಆದಾಗ ನಿಮ್ಮಂತಹ ಜನರು ಅದನ್ನು ಹೇಗೆ ನಿಭಾಯಿಸುತ್ತೀರ? ಏನು ಮಾಡುತ್ತೀರ?

೭. ಈ ರೀತಿಯ ಅನುಭವಗಳ ಬಗ್ಗೆ ಸಮುದಾಯದಲ್ಲಿ ಬೇರಿಯವರು ಹೇಳಿದಾರೆಯೇ?

(ಮಾತುಕತೆಯ ಸಮಯದಲ್ಲಿ ಅವರ ಮುಖಭಾವ ಹಾಗೂ ದೇಹಚಲನೆಯ ಬಗ್ಗೆ ಗಮನಹರಿಸಬೇಕು)

A14 Interview Guidelines for Community leaders- Phase 1
Understanding access to health care among Banjaras: An ethnographic study in Gadag District, Karnataka

Interview Guidelines- Village leaders/ward members/panchayat representatives

I'm trying to understand more about your community, your way of life, the relationship that you share with others in the village and the interactions with the health care providers.

1. Can you tell me about the history of your people and how you settled in the 'thanda' here?
2. What are the kind of occupations that people here are engaged in? Do they own lands or business or work for others? What kind of jobs can they do and what can or do they not do? Why is it so?
3. What are the kinds of representation available to the community in the local body or the constituency?
4. How would you describe the relationship between the Banjaras and the others in the village? Why do you say that?
5. What are the benefits or schemes being implemented or active by the government?
6. What are the difficulties faced by the community and what has been done about it?
7. How often do health workers (like ASHA or ANM) visit the thanda and the houses and what problems do they experience in functioning?
8. Diseases that are common in the thanda and remedial measures that are taken by the govt system?
9. Where do members in the community go for seeking healthcare for ailments? Are there any difficulties faced by them?
10. There are reports of people being treated badly in hospitals or clinics because of their caste. Have you experienced or heard of any such behaviour experienced by others in these places? If so, what had happened- can you describe the incident or what you have heard? Was anything done about this experience? if any
11. Have you been involved or intervened in any kind of conflict situation between the Banjaras and non banjaras?
12. How have the persons in the health systems related to the community? (according to you)

A15 Interview Guidelines for Community leaders (Kannada)- Phase 1

ಬಂಜಾರ ಸಮುದಾಯದಲ್ಲಿ ಆರೋಗ್ಯ ರಕ್ಷಣೆ ಪಡೆಯುವ ಮಾರ್ಗದ ತಿಳಿಯುವಿಕೆ: ಕರ್ನಾಟಕದ ಗದಗ ಜಿಲ್ಲೆಯಲ್ಲಿ ಒಂದು ಜನಾಂಗೀಯ ಅಧ್ಯಯನ

ಸಂದರ್ಶನದ ಮಾರ್ಗಸೂಚಿಗಳು- ಗ್ರಾಮದ ಪ್ರಮುಖರು/ವಾರ್ಡ್ ಸದಸ್ಯರು/ಪಂಚಾಯತ್ ಪ್ರತಿನಿಧಿಗಳು

ನಿಮ್ಮ ಸಮುದಾಯ, ಜೀವನ ಶೈಲಿ, ನಿಮ್ಮ ಹಳ್ಳಿಯಲ್ಲಿ ನೀವು ಇತರರೊಂದಿಗೆ ಇಟ್ಟುಕೊಂಡಿರುವ ಸಂಬಂಧ, ಹಾಗೂ ನಿಮ್ಮ ಆರೋಗ್ಯ ಸೇವಾದಾರರ ಜೊತೆ ನಿಮ್ಮ ಸಂವಹನೆಯ ಬಗ್ಗೆ ಹೆಚ್ಚು ತಿಳಿದುಕೊಳ್ಳಲು ಪ್ರಯತ್ನಿಸುತ್ತಿದ್ದೇನೆ.

೧. ನಿಮ್ಮ ಜನರ ಇತಿಹಾಸ ಹಾಗೂ ನೀವು ಇಲ್ಲಿ, ತಾಂಡದಲ್ಲಿ, ಬಂದು ನೆಲೆಸಿದ ರೀತಿಯನ್ನು ನನಗೆ ತಿಳಿಸುತ್ತೀರ?

೨. ಇಲ್ಲಿಯ ಜನರು ಯಾವ ರೀತಿಯ ಉದ್ಯೋಗಗಳಲ್ಲಿ ತೊಡಗಿಸಿಕೊಂಡಿದ್ದಾರೆ? ಅವರ ಬಳಿ ಸ್ವಂತ ಜಮೀನು ಇದೆಯೇ ಅಥವಾ ವ್ಯವಹಾರದಲ್ಲಿ ತೊಡಗಿಸಿಕೊಂಡಿದ್ದಾರೆಯೇ ಅಥವಾ ಬೇರೆಯವರ ಬಳಿ ಕೆಲಸ ಮಾಡುತ್ತಾರೆಯೇ?

೩. ಸಮುದಾಯದ ಜನರು ಸ್ಥಳೀಯ ಸಂಸ್ಥೆಗಳಲ್ಲಿ ಅಥವಾ ಕ್ಷೇತ್ರದಲ್ಲಿ ಯಾವ ಯಾವ ರೀತಿಯಲ್ಲಿ ಪ್ರತಿನಿಧಿಸಬಹುದಾಗಿದೆ?

೪. ಹಳ್ಳಿಯಲ್ಲಿ ಬಂಜಾರರ ಮತ್ತು ಇತರೆ ಜನರ ನಡುವಿನ ಸಂಬಂಧವನ್ನು ಹೇಗೆ ವಿವರಿಸಬಹುದು?

೫. ಸರ್ಕಾರದಿಂದ ಸಿಗುವ ಸೌಲಭ್ಯಗಳಾವುವು ಅಥವಾ ಯಾವ ಯಾವ ಯೋಜನೆಗಳು ಜಾರಿಯಾಗಿವೆ?

೬. ಸಮುದಾಯದವರು ಎದುರಿಸುವ ತೊಂದರೆಗಳಾವುವು ಹಾಗೂ ಅದರ ನಿವಾರಣೆಗೆ ಯಾವ ಕ್ರಮ ಕೈಗೊಂಡಿದೆ?

೭. ಆರೋಗ್ಯ ಕಾರ್ಯಕ್ರಮ(ಆಶಾ ಅಥವಾ ಎ.ಎನ್.ಎಮ್) ಎಷ್ಟು ದಿನಗಳಿಗೊಮ್ಮೆ ತಾಂಡಕ್ಕೆ ಭೇಟಿ ನೀಡುತ್ತಾರೆ ಹಾಗೂ ಅವರ ಕಾರ್ಯನಿರ್ವಹಣೆಗೆ ಬರುವ ತೊಡಕುಗಳಾವುವು.

೮. ಸಾಮಾನ್ಯವಾಗಿ ತಾಂಡದಲ್ಲಿ ಇರುವ ಖಾಯಲೆಗಳಾವುವು ಹಾಗೂ ಅವುಗಳ ಪರಿಹಾರ ಹೇಗೆ?

೯. ಚಿಕಿತ್ಸೆಗಾಗಿ ಸಮುದಾಯದ ಜನರು ಎಲ್ಲಿಗೆ ಹೋಗುತ್ತಾರೆ? ಅವರುಗಳು ಎದುರಿಸುವ ತೊಂದರೆಗಳಾವುವು?

೧೦. ಜಾತಿಯ ಆಧಾರದ ಮೇಲೆ ಆಸ್ಪತ್ರೆ ಅಥವಾ ಕ್ಲಿನಿಕ್‌ಗಳಲ್ಲಿ ಜನರನ್ನು ಕೆಟ್ಟದಾಗಿ

ನೆಡೆಸಿಕೊಳ್ಳುತ್ತಾರೆಯೇ ವರದಿಗಳಿವೆ. ನಿಮಗೆ ಇದರ ಅನುಭವವಾಗಿದೆಯೇ ಅಥವಾ ಇನ್ನಿತರು ಈ ರೀತಿ ಅನುಭವಿಸಿದ ಬಗ್ಗೆ ತಿಳಿದಿದೆಯೇ? ಹಾಗಾಗಿದ್ದಲ್ಲಿ, ಆ ಸನ್ನಿವೇಶವನ್ನು ವಿವರಿಸಲು ಸಾಧ್ಯವೆ? ಈ ಅನುಭವದ ಬಗ್ಗೆ ಯಾವುದಾದರೂ ಕ್ರಮ ಕೈಗೊಂಡಿತ್ತೇ?

೧೧. ಬಂಜಾರ ಮತ್ತು ಬಂಜಾರೇತರ ಜನರ ಮಧ್ಯೆ ನಡೆದ ಯಾವುದಾದರೂ ಸಂಘರ್ಷಗಳಲ್ಲಿ ನೀವು ಭಾಗಿಯಾಗಿದ್ದರೇ ಅಥವಾ ಮಧ್ಯಸ್ಥಿಕೆ ವಹಿಸಿದ್ದೀರ?

೧೨. ನಿಮ್ಮ ಪ್ರಕಾರ ಆರೋಗ್ಯ ವ್ಯವಸ್ಥೆಗೆ ಸಂಬಂಧಪಟ್ಟವರು ಸಮುದಾಯದ ಜೊತೆ ಯಾವ ರೀತಿಯ ಸಂಬಂಧ ಹೊಂದಿದ್ದಾರೆ?

A16 Interview Guidelines for Healthcare providers- Phase 1
Understanding access to health care among Banjaras: An ethnographic study in Gadag District,
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Interview Guidelines- Providers (Doctors/Asha/ANM/Village health worker)

I'm trying to understand about the community where you serve, the different national and state programs being carried out, interactions with the community, general health of the community and their receptiveness to the health system in general.

1. Can you tell me about the community that you serve and your roles and responsibilities towards them?
2. How would you describe the health status, practice and behaviours of different communities under CHC/PHC/Sub Center?
3. Have you experienced any problems with any community? If yes then what did you do about it?
4. What are the differences within the population you cater to in this region? What are the different groups and how do they behave?
5. What are the different approaches you use to cater to these varying needs? How are these needs different and how do you recognise these differences?
6. What are the conflicts you have experienced in providing care to these communities and how have you dealt with them? How were you able to solve them?

A17 Interview Guidelines for Healthcare providers (Kannada)- Phase 1

ಬಂಜಾರ ಸಮುದಾಯದಲ್ಲಿ ಆರೋಗ್ಯ ರಕ್ಷಣೆ ಪಡೆಯುವ ಮಾರ್ಗದ ತಿಳಿಯುವಿಕೆ: ಕರ್ನಾಟಕದ ಗದಗ ಜಿಲ್ಲೆಯಲ್ಲಿ ಒಂದು ಜನಾಂಗೀಯ ಅಧ್ಯಯನ

ಸಂದರ್ಶನದ ಮಾರ್ಗಸೂಚಿಗಳು - ಸೇವೆ ನೀಡುವವರು (ಡಾಕ್ಟರ್‌ಗಳು/ಆಶಾ/ಎ.ಎನ್.ಎಮ್/ಗ್ರಾಮದ ಆರೋಗ್ಯ ಕಾರ್ಯಕರ್ತರು)

ಆರೋಗ್ಯ ವ್ಯವಸ್ಥೆಯನ್ನು ಗಮನಿಸಿದ ನಂತರ ಸಂದರ್ಶನವನ್ನು ಕೈಗೊಳ್ಳಲಾಗುತ್ತದೆ. ಗಮನಿಸಿದ ನಡವಳಿಕೆಗಳ ಸ್ಪಷ್ಟ ಚಿತ್ರಣ ಪಡೆಯಲು ಇದು ಸಹಕಾರಿಯಾಗುತ್ತದೆ.

ನೀವು ಸೇವೆ ಸಲ್ಲಿಸುವ ಸಮುದಾಯದ ಬಗ್ಗೆ, ಅಲ್ಲಿ ನಡೆಸಲಾಗುವ ವಿವಿಧ ರಾಷ್ಟ್ರೀಯ ಮತ್ತು ರಾಜ್ಯ ಕಾರ್ಯಕ್ರಮಗಳು, ಸಮುದಾಯದವರೊಂದಿಗಿನ ಸಂವಹನೆ, ಸಮುದಾಯದ ಸಾಮಾನ್ಯ ಆರೋಗ್ಯ ಮತ್ತು ಸಾಮಾನ್ಯವಾಗಿ ಆರೋಗ್ಯ ವ್ಯವಸ್ಥೆಯನ್ನು ಅವರು ಗ್ರಹಿಸುವ ರೀತಿಗಳನ್ನು ಅರ್ಥೈಸಿಕೊಳ್ಳುವ ಪ್ರಯತ್ನ ನನ್ನದು.

೧. ನೀವು ಸೇವೆ ಸಲ್ಲಿಸುತ್ತಿರುವ ಸಮುದಾಯದ ಬಗ್ಗೆ ಹಾಗೂ ಅಲ್ಲಿ ನಿಮ್ಮ ಪಾತ್ರ ಮತ್ತು ಜವಾಬ್ದಾರಿಗಳ ಬಗ್ಗೆ ತಿಳಿಸುತ್ತೀರ?

೨. ಸಿ.ಎಚ್.ಸಿ/ಪಿ.ಎಚ್.ಸಿ/ಉಪ ಕೇಂದ್ರದ ಅಡಿಯಲ್ಲಿ ಬರುವ ವಿವಿಧ ಸಮುದಾಯದವರ ಆರೋಗ್ಯ ಸ್ಥಿತಿ, ಅಭ್ಯಾಸಗಳು ಹಾಗೂ ಅವರ ನಡವಳಿಕೆಗಳನ್ನು ನೀವು ಹೇಗೆ ವಿವರಿಸುತ್ತೀರ?

೩. ಯಾವುದಾದರೂ ಸಮುದಾಯದ ಜೊತೆ ನೀವು ಯಾವುದಾದರೂ ಸಮಸ್ಯೆ ಎದುರಿಸಿದ್ದೀರ? ಹೌದು ಎಂದಾಗಿದ್ದಲ್ಲಿ ನೀವು ಅದರ ಬಗ್ಗೆ ಏನು ಮಾಡಿದಿರಿ?

೪. ನೀವು ಸೇವೆ ಸಲ್ಲಿಸುವ ಈ ಪ್ರದೇಶದ ಜನರಲ್ಲಿ ಏನಾದರೂ ವ್ಯತ್ಯಾಸಗಳಿವೆಯೆ?

೫. ಈ ವಿವಿಧ ಬೇಡಿಕೆಗಳನ್ನು ಪೂರೈಸುವಲ್ಲಿ ನೀವು ಉಪಯೋಗಿಸುವ ವಿವಿಧ ವಿಧಾನಗಳಾವುವು?

೬. ಈ ಸಮುದಾಯದವರಿಗೆ ಸೇವೆ ಸಲ್ಲಿಸುವಾಗ ನೀವು ಅನುಭವಿಸಿದ ತೊಂದರೆಗಳೇನು ಹಾಗೂ ಅವುಗಳನ್ನು ಹೇಗೆ ನಿಭಾಯಿಸಿದ್ದೀರಿ?

A19 Observation guidelines in Community and Health facility- Phase 1

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Observation guidelines- community

	Observation	Notes
1	Day to day life in the Banjar/Thanda (settlement)(description of everyday life- what happens outside of the homes, how households interact with each other, what are the meanings of social hierarchy, good health and illness, care seeking and how do health care system personnel approach the people of the thanda, etc)	
2	Interactions among the Banjaras and non Banjaras in the village	
3	Access to resources like water, sanitation, health care etc in the Thanda	

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4	Visiting the workplace (mostly agricultural fields)	
5	Activities done during leisure time	
6	Behaviour of people with Banjaras in public spaces (note differences by age/sex/occupation)	
7	Critical event documentation – when illness is reported in the community	

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Observation guidelines- Health care system

	Observation	Notes
1	Visit to the health care facilities (both government and private – formal and informal; and observe interactions between the users and providers	
2	Structure and functioning of health centres catering largely to thandas and non-thanda population	
3	Time spent by the doctor for each patient and if possible type of care provided (note the difference by thanda members who are obviously dressed/visible and those that are not)	

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4	Providers or health workers who visit the village and their interactions in the village setting(note the difference by thanda members who are obviously dressed/visible and those that are not)	
5	Body language and behaviour of different providers while interacting with people(note the difference by thanda members who are obviously dressed/visible and those that are not)	
6	Nature of examination by the provider for different patients (eg touch vs no touch, providing sample medications, not doing so, etc)	

A20 Permission letter for contacting ASHA workers for settlement information-

Phase 2



ಕರ್ನಾಟಕ ಸರ್ಕಾರ

ಜಿಲ್ಲಾ ಪಂಚಾಯತ, ಗದಗ

ಜಿಲ್ಲಾ ಆರೋಗ್ಯ ಮತ್ತು ಕುಟುಂಬ ಕಲ್ಯಾಣ ಅಧಿಕಾರಿಗಳ ಕಾರ್ಯಾಲಯ, ಗದಗ.

ದೂರವಾಣಿ ಸಂ: 08372-233996, 231744, ಫ್ಯಾಕ್ಸ್ ಸಂ: 08372-239597 ಇಮೇಲ್:dhogadag@gmail.com

ಕ್ರ.ಸಂ/ಜಿಆಕುಕಆಗ/೨೩೪/2018-19

ದಿನಾಂಕ: 07-03-2019

ಸುತ್ತೋಲೆ

ವಿಷಯ: ಜಿಲ್ಲೆಯ ಲಂಬಾಣಿ ತಾಂಡಾಗಳ ಆರೋಗ್ಯದ ಬಗ್ಗೆ ಸಾಮಾನ್ಯ ಮಾಹಿತಿಯನ್ನು ಒದಗಿಸುವ ಕುರಿತು.

ಉಲ್ಲೇಖ: ಶ್ರೀ ಚಿತ್ರಾ ತಿರುನಲ್ ಇನ್‌ಸ್ಟಿಟ್ಯೂಟ್ ಫಾರ್ ಮೆಡಿಕಲ್ ಸೈನ್ಸ್ & ಟೆಕ್ನಾಲಜಿ ತಿರುವನಂತಪುರಂ ಇವರ ಪತ್ರ ಸಂಖ್ಯೆ: ಡಿ.ಎ.ಎ/ಫಿ.ಎಫ್-6945/ಎಸ್.ಸಿ.ಟಿ.ಆರ್. ಎಂಎಸ್.ಟಿ /2019 ದಿನಾಂಕ: 01-02-2019

ಮೇಲ್ಕಾಣಿಸಿದ ವಿಷಯ ಹಾಗೂ ಉಲ್ಲೇಖಕ್ಕೆ ಸಂಬಂಧಿಸಿದಂತೆ ಶ್ರೀ ಬೇವಿನ ವಿನಯಕುಮಾರ ಎ.ಎನ್ (ನೊಂದಣಿ ಸಂಖ್ಯೆ-2016/ಪಿ.ಎಚ್.ಡಿ/10) ಇವರು ಜಿಲ್ಲೆಯಲ್ಲಿನ ಅಧೀನ ಸಂಸ್ಥೆಯಲ್ಲಿನ ಲಂಬಾಣಿ ತಾಂಡಾಗಳಿಗೆ ಭೇಟಿ ನೀಡಿ ಆರೋಗ್ಯಕ್ಕೆ ಸಂಬಂಧಿಸಿದ ಸಾಮಾನ್ಯ ಮಾಹಿತಿಯನ್ನು ಸಂಗ್ರಹಿಸಲು ಸಹಕಾರಿಸುವುದು ಮತ್ತು ಆಶಾ ಕಾರ್ಯಕರ್ತೆಯರಿಗೆ ಸಹಾಯ ನೀಡಲು ಸೂಚಿಸಲಾಗಿದೆ.

ಜಿಲ್ಲಾ ಆರೋಗ್ಯ ಮತ್ತು ಕುಟುಂಬ
ಕಲ್ಯಾಣ ಅಧಿಕಾರಿಗಳು, ಗದಗ.

ಪ್ರತಿಯನ್ನು :

- 1) ತಾಲ್ಲೂಕಾ ಆರೋಗ್ಯಾಧಿಕಾರಿಗಳು ಗದಗ/ ಮುಂಡರಗಿ /ರೋಣ /ನರಗುಂದ/ ಶಿರಹಟ್ಟಿ ಇವರಿಗೆ ಮಾಹಿತಿಗಾಗಿ ಹಾಗೂ ಅಧೀನ ಸಂಸ್ಥೆಗಳಿಗೆ ಮಾಹಿತಿ ನೀಡುವುದು.
- 2) ಶ್ರೀ ಬೇವಿನ ವಿನಯಕುಮಾರ ಎ.ಎನ್, ಪಿ.ಎಚ್.ಡಿ ಸ್ಕಾಲರ್, ಎ.ಎಮ್.ಸಿ.ಎಚ್.ಎಸ್, ಎಸ್.ಸಿ.ಟಿ.ಆರ್. ಎಂಎಸ್.ಟಿ ತಿರುವನಂತಪುರಂ ಇವರಿಗೆ ಮಾಹಿತಿ ಸಂಗ್ರಹಿಸಲು.
- 3) ಕಚೇರಿ ಪ್ರತಿ

A21 Tanda and Village infrastructure schedule- Phase 2

Tanda and Village Infrastructure schedule

1	Village name	
2	Village code	
3	Panchayat under which the villages come under	
4	Tanda was established first or the village	1. Tanda 2. Village
5	Geographical location (Coordinates)	
6	Road in the village (Observation)	1. Paved roads 2. Paved roads but not maintained 3. Gravel road 4. Dirt/Mud road 5. Paved with concrete 6. Others
7	Drains in the village (Observation)	1. Katcha/Open 2. Pucca/Covered 3. No drainage system 4. Others
8	Amenities (Observation)	
	PDS Ration Shops	Y/N
	Bus stop	Y/N
	Bus shelter	Y/N
	Bank	Y/N
	If No Bank, where is the nearest (Kmts)	Place: Kmts:
	Post office	Y/N
	If No Post Office, where is the nearest (Kmts)	Place: Kmts:
	ShuddhNeeru (Community RO plant)	Y/N
	Anganwadi	Y/NNumber:
	ASHA worker	Y/NNumber:
	Milk Cooperative Society	Y/N
	Community hall	Y/N
	Panchayat building	Y/N
	School	1. Primary School (1-5) 2. Middle School (6-8) 3. Secondary School (9-10) 4. PUC (11-12) 5. College 6. Vocational/ Technical institute
	Subcentre	Y/N
	Primary Health Centre	Y/N
	Community Health Centre	Y/N
	Government Dispensary	Y/N
	Veterinary centre	Y/N
	Pharmacy/Medical store	Y/N
	BAMS/AYUSH doctor clinic	Y/N
	Rural medical Practitioner (RMP) clinic	Y/N
9	Electricity 9.1 Does this village have electricity?	Y/N

	9.2 How many hours a day is there power usually?	_____
10	Main source of water supply to the village	<ol style="list-style-type: none"> 1. Pond 2. Borewell 3. Government supply/Pipeline 4. River 5. Well 6. Others
11	Population 11.1 Approximate number of households in the village 11.2 Approximate number of people residing in the village	_____ _____
12	Bus facility 12.1 Is there bus facility in this village? 12.2 If yes, what is the frequency of buses on a usual day? 12.3 If no, how far is the closest bus availability	<ol style="list-style-type: none"> 1. Yes, Bus stop 2. Yes, Hand wave 3. No <ol style="list-style-type: none"> 1. Varies 2. 1 time a day 3. 2-6 times per day 4. 7 and more times per day _____ Kmts

A22 Informed consent for Quantitative survey- Phase 2

Information sheet

I'm Bevin Vinay Kumar V N, currently pursuing my PhD at Achutha Menon Centre for Health Science Studies (AMCHSS), Sree Chitra Tirunal Institute for Medical Sciences and Technology (SCTIMST). As a part of my PhD work I'm doing a study titled "Access to and utilisation of health care among adults aged fifty or more in Gadag District, Karnataka"

Purpose of the study:

I'm trying to understand what you did when you became sick and what you did to get treatment. I am trying to understand what are the difficulties you faced while seeking care and the response of the providers.

About the study:

This study is being conducted in Gadag District, Karnataka as a part of the doctoral work. The aim of the study is to look at the access to health access and the experiences with the health care system between those residing in the village and the Thandas. I would be interviewing around 600 adults who are more than 50 years of age from the villages and the thandas in Gadag district about their experiences with the health care system. This study is being conducted under the supervision of my guide, Professor Mala Ramanathan at AMCHSS, SCTIMST.

Participation and benefits:

If you agree to participate in the study, then you would be required to answer a set of questions. This would take about 30 to 45 minutes of your time. The information given by you would be documented using a small mobile phone like instrument called tablet to enter the data. The study will not be on any benefit to you but it would help to find out the ways in which you interacted with the health care system when you were sick, the difficulties you face or faced and the response of the health care system.

Confidentiality of data:

The information shared by you would be kept confidential and be used for research purpose. Only two persons, myself and my guide would have access to this information. Your individual identity would not be shared with anyone.

Withdrawal from the study:

You are free and have the right to refuse to answer any of the questions and can withdraw from the interview at any point of time and there would be no penalty for the same.

If you have any clarifications regarding the study you can contact me or my guide or Dr.Manickam, a member of the Ethics Committee to seek any clarifications.

Researcher

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Guide

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Member, IEC

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Chennai 600077
Email:manickam@nie.gov.in

**Access to and utilisation of health care among adults aged fifty or more in Gadag
District, Karnataka
Consent Form**

I, _____, aged ____ years declare that

I have read and understood the information sheet for the study and have had the opportunity to ask questions []

I understand that the participation in this study is voluntary and that I'm free to withdraw at any time and without giving any reasons []

I agree not to restrict the use of any data or results that arise from this study provided such a use is only for scientific purpose(s) []

I agree to take part in the study []

Place:

ID:

Date:

Signature:

If the Participant is illiterate:

Name of Witness:

Signature of witness:

Signature of Researcher:

A23 Informed consent for Quantitative survey (Kannada)- Phase 2

ಕರ್ನಾಟಕದ ಗದಗ ಜಿಲ್ಲೆಯಲ್ಲಿ ಐವತ್ತು ಅಥವಾ ಅದಕ್ಕಿಂತ ಹೆಚ್ಚಿನ ವಯಸ್ಸಿನವರಲ್ಲಿ ಆರೋಗ್ಯ ರಕ್ಷಣೆಗಾಗಿ ಪ್ರವೇಶ ಮತ್ತು ಬಳಕೆ

ಮಾಹಿತಿ ಪುಟ

ನಾನು ಬೆವಿನ್ ವಿನಯ್ ಕುಮಾರ್ ವಿ.ಎನ್., ಪ್ರಸ್ತುತದಲ್ಲಿ "ಅಚ್ಚುತ ಮೆನನ್ ಸೆಂಟರ್ ಫಾರ್ ಹೆಲ್ತ್ ಸೈನ್ಸ್ ಸ್ಟಡೀಸ್"(ಎ.ಎಮ್.ಸಿ.ಎಚ್.ಎಸ್.ಎಸ್), "ಶ್ರೀ ಚಿತ್ರ ತಿರುನಾಳ್ ಇನ್ಸ್ಟಿಟ್ಯೂಟ್ ಫಾರ್ ಮೆಡಿಕಲ್ ಸೈನ್ಸ್ ಆಂಡ್ ಟೆಕ್ನಾಲಜಿ" (ಎಸ್.ಸಿ.ಟಿ.ಐ.ಎಮ್.ಎಸ್.ಟಿ) ಯಲ್ಲಿ ನನ್ನ ಪಿ.ಎಚ್.ಡಿ ಪದವಿ ಮಾಡುತ್ತಿರುತ್ತೇನೆ.

ಅದರ ಒಂದು ಭಾಗವಾಗಿ ನಾನು "ಕರ್ನಾಟಕದ ಗದಗ ಜಿಲ್ಲೆಯಲ್ಲಿ ಐವತ್ತು ಅಥವಾ ಅದಕ್ಕಿಂತ ಹೆಚ್ಚಿನ ವಯಸ್ಸಿನವರಲ್ಲಿ ಆರೋಗ್ಯ ರಕ್ಷಣೆಗಾಗಿ ಪ್ರವೇಶ ಮತ್ತು ಬಳಕೆ" ಎಂಬ ವಿಷಯದ ಬಗ್ಗೆ ಅಧ್ಯಯನ ನಡೆಸುತ್ತಿದ್ದೇನೆ.

ಅಧ್ಯಯನದ ಉದ್ದೇಶ:

ನೀವು ಅನಾರೋಗ್ಯ ಪೀಡಿತರಾದಾಗ ಆದ ಅನುಭವ ಮತ್ತು ಅದಕ್ಕೆ ತೆಗೆದುಕೊಂಡ ಚಿಕಿತ್ಸಾ ವಿಧಾನಗಳನ್ನು ದಾಖಲಿಸಲು ನಾನು ಪ್ರಯತ್ನಿಸುತ್ತಿದ್ದೇನೆ. ಆರೈಕೆ ಪಡೆಯುವಾಗ ನೀವು ಅನುಭವಿಸಿದ ಕಷ್ಟಗಳು ಮತ್ತು ಸೇವೆ ಒದಗಿಸುವವರಿಂದ ಪಡೆದ ಪ್ರತಿಕ್ರಿಯೆ.

ಅಧ್ಯಯನದ ಬಗ್ಗೆ:

ಡಾಕ್ಟರೇಟ್ ಪದವಿಯ ಒಂದು ಭಾಗವಾಗಿ ಈ ಅಧ್ಯಯನವನ್ನು ಕರ್ನಾಟಕದ ಗದಗ ಜಿಲ್ಲೆಯಲ್ಲಿ ಕೈಗೊಳ್ಳಲಾಗುತ್ತಿದೆ. ಆರೋಗ್ಯದ ಪ್ರವೇಶಕ್ಕೆ ಮತ್ತು ಗ್ರಾಮದಲ್ಲಿ ವಾಸಿಸುವವರ ಮತ್ತು ತಂಡ ನಡುವಿನ ಆರೋಗ್ಯ ರಕ್ಷಣೆ ವ್ಯವಸ್ಥೆಯ ಅನುಭವಗಳ ಪ್ರವೇಶವನ್ನು ನೋಡುವುದು ಈ ಅಧ್ಯಯನದ ಗುರಿಯಾಗಿದೆ. ಆರೋಗ್ಯ ರಕ್ಷಣಾ ವ್ಯವಸ್ಥೆಯ ಬಗ್ಗೆ ಆದ ಅನುಭವಗಳನ್ನು ಹಂಚಿಕೊಳ್ಳಲು ತಂಡ ಮತ್ತು ಗ್ರಾಮದಿಂದ ಸುಮಾರು 600 ವ್ಯಕ್ತಿಗಳನ್ನು ಸಂದರ್ಶಿಸುತ್ತೇನೆ. ಈ ಅಧ್ಯಯನವು ಎ.ಎಮ್.ಸಿ.ಎಚ್.ಎಸ್.ಎಸ್ ನ,ಎಸ್.ಸಿ.ಟಿ.ಐ.ಎಮ್.ಎಸ್.ಟಿ ನನ್ನ ಮಾರ್ಗದರ್ಶಿಗಳಾದ ಪ್ರೊ. ಮಾಲಾ ರಾಮನಾಥನ್‌ರವರ ಮಾರ್ಗದರ್ಶನದ ಅಡಿಯಲ್ಲಿ ನಡೆಯುತ್ತದೆ.

ಭಾಗವಹಿಸುವಿಕೆ ಹಾಗೂ ಲಾಭಗಳು:

ನೀವು ಈ ಅಧ್ಯಯನದಲ್ಲಿ ಪಾಲ್ಗೊಳ್ಳಲು ಒಪ್ಪಿದಲ್ಲಿ ಕೆಲವು ಪ್ರಶ್ನೆಗಳನ್ನು ಉತ್ತರಿಸಬೇಕಾಗುತ್ತದೆ. ನೀವು ಅನುಭವಿಸಿದ ಅನಾರೋಗ್ಯದ ವಿವರ, ಚಿಕಿತ್ಸೆ ಪಡೆದ ವಿವರ ಹಾಗೂ ಚಿಕಿತ್ಸಾಕೇಂದ್ರದಲ್ಲಿ ಪಡೆದ ಸೌಲಭ್ಯಗಳ ಬಗ್ಗೆ ಪ್ರಶ್ನೆಗಳನ್ನು ಕೇಳುತ್ತೇನೆ. ಇದು ನಿಮ್ಮ ಸುಮಾರು 30 ರಿಂದ 45 ನಿಮಿಷಗಳ ಸಮಯ ತೆಗೆದುಕೊಳ್ಳುತ್ತದೆ. ನೀವು ನೀಡಿದ ಮಾಹಿತಿ ಟ್ಯಾಬ್ಲೆಟ್ ಎಂಬ ಉಪಕರಣದಂತಹ ಸಣ್ಣ ಮೊಬೈಲ್ ಫೋನ್ ಬಳಸಿ ಮಾಹಿತಿ ದಾಖಲಿಸುತ್ತದೆ. ಈ ಅಧ್ಯಯನದಿಂದ ನಿಮಗೆ ಯಾವ ರೀತಿಯ ಲಾಭವಿಲ್ಲದಿದ್ದರೂ, ಆರೋಗ್ಯ ರಕ್ಷಣಾ ವ್ಯವಸ್ಥೆಯ ಜೊತೆ ನೀವು ನಡೆದುಕೊಂಡ ರೀತಿ, ನೀವು ಅನುಭವಿಸಿದ ಅಥವಾ ಅನುಭವಿಸುವ ಕಷ್ಟಗಳು ಹಾಗೂ ಅದಕ್ಕೆ ಆರೋಗ್ಯ ರಕ್ಷಣಾ ವ್ಯವಸ್ಥೆ ಪ್ರತಿಕ್ರಿಯಿಸಿದ ರೀತಿಗಳನ್ನು ತಿಳಿದುಕೊಳ್ಳುವಲ್ಲಿ ಸಹಾಯ ಮಾಡುತ್ತದೆ.

ಮಾಹಿತಿಯ ಗೌಪ್ಯತೆ:

ನೀವು ನೀಡುವ ಮಾಹಿತಿಯನ್ನು ಗೌಪ್ಯವಾಗಿರಿಸಲಾಗುತ್ತದೆ ಹಾಗೂ ಅಧ್ಯಯನಕ್ಕೆ ಮಾತ್ರ ಉಪಯೋಗಿಸಲಾಗುತ್ತದೆ. ಕೇವಲ ಇಬ್ಬರಿಗೆ, ಅಂದರೆ ನಾನು ಹಾಗೂ ನನ್ನ ಮಾರ್ಗದರ್ಶಕರಿಗೆ ಮಾತ್ರ ಈ ಮಾಹಿತಿಗಳ ಲಭ್ಯತೆ ಇರುತ್ತದೆ. ನಿಮ್ಮ ವಯಸ್ತಿಕ ಗುರುತನ್ನು ಯಾರೊಂದಿಗೂ ಹಂಚಿಕೊಳ್ಳಲಾಗುವುದಿಲ್ಲ.

ಅಧ್ಯಯನದಿಂದ ಹಿಂದೆ ಸರಿಯುವುದು:

ನೀವು ಬಯಸಿದಲ್ಲಿ ಯಾವ ಪ್ರಶ್ನೆಗಳಿಗಾದರೂ ಉತ್ತರಿಸದೇ ಇರುವ ಹಕ್ಕಿದೆ ಮತ್ತು ಸಂದರ್ಶನದ ಯಾವ ಘಟ್ಟದಲ್ಲಾದರೂ ಅದರಿಂದ ಹಿಂದೆ ಸರಿಯಬಹುದಾಗಿದೆ. ಇದಕ್ಕೆ ಯಾವ ರೀತಿಯ ಶುಲ್ಕವನ್ನು ವಿಧಿಸಲಾಗುವುದಿಲ್ಲ.

ಈ ಅಧ್ಯಯನದ ಬಗ್ಗೆ ನಿಮಗೆ ಯಾವ ರೀತಿಯ ಸ್ಪಷ್ಟೀಕರಣ ಬೇಕಿದ್ದರೂ ನೀವು ನನ್ನನ್ನು ಅಥವಾ ಡಾ. ಮಾಲಾ ರಾಮನಾಥನ್, ಎಸ್.ಸಿ.ಟಿ.ಐ.ಎಮ್.ಎಸ್.ಟಿ ಯ ಇನ್ಸ್ಟಿಟ್ಯೂಟ್ ಎಡಿಕ್ಸ್ ಕಮಿಟಿ(ಐ.ಇ.ಸಿ)ಯ ಸದಸ್ಯ-ಕಾರ್ಯದರ್ಶಿಯನ್ನು, ಅಥವಾ ಎಡಿಕ್ಸ್ ಸಮಿತಿಯ ಸದಸ್ಯ ಡಾ. ಮ್ಯಾನಿಕಮ್ ಸಂಪರ್ಕಿಸಬಹುದು.

ಸಂಶೋಧಕ

ವಿನಯ್ ಕುಮಾರ್ ವಿ.ಎನ್

ಪಿ.ಎಚ್.ಡಿ ವಿದ್ಯಾರ್ಥಿ

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ಸದಸ್ಯ, ಐ.ಇ.ಸಿ ಬೆವಿನ್

ಡಾ. ಮ್ಯಾನಿಕಮ್

ವಿಜ್ಞಾನಿ ಇ

ಎನ್.ಐ.ಇ.ಚಿನ್ಮೈ

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ಸಮ್ಮತಿ ಪತ್ರ

ನಾನು, _____, ವಯಸ್ಸಿನ _____ ವರ್ಷಗಳ ಎಂದು ಘೋಷಿಸಲು

ನಾನು ಓದಲು ಮತ್ತು ಅಧ್ಯಯನ ಮಾಡಿ ಹಾಳೆ ಅರ್ಥ ಮತ್ತು ಪ್ರಶ್ನೆಗಳನ್ನು ಕೇಳಲು ಅವಕಾಶ ನೀಡಲಾಯಿತು []

ನಾನು ಈ ಅಧ್ಯಯನದಲ್ಲಿ ಪಾಲ್ಗೊಳ್ಳುವಿಕೆಯನ್ನು ಸ್ವಯಂಪ್ರೇರಿತ ಎಂದು ಅರ್ಥ ಮತ್ತು ನಾನು ಯಾವುದೇ ಸಮಯದಲ್ಲಿ ಮತ್ತು ಯಾವುದೇ ಕಾರಣ ನೀಡದೆ ಹಿಂದಕ್ಕೆ ತೆಗೆದುಕೊಳ್ಳಬಹುದು []

ನಾನು ಈ ಅಧ್ಯಯನದಿಂದ ಉದ್ಭವಿಸುವ ಯಾವುದೇ ಡೇಟಾ ಅಥವಾ ಬಳಸುವುದರಿಂದಾಗಿ ನಿರ್ಬಂಧಿಸಲು ಇಂತಹ ಬಳಕೆಯು ವೈಜ್ಞಾನಿಕ ಉದ್ದೇಶಕ್ಕಾಗಿ ಮಾತ್ರ ಒದಗಿಸಲು ಒಪ್ಪುತ್ತೇನೆ []

ನಾನು ಅಧ್ಯಯನದಲ್ಲಿ ಭಾಗವಹಿಸಲು ಒಪ್ಪಿಕೊಳ್ಳುತ್ತೇನೆ []

ಸ್ಥಳ.....

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ಸಹಿ.....

ಪಾಲ್ಗೊಳ್ಳುವವರು ಅನಕ್ಷರಸ್ಥ ವಾಗಿದ್ದರೆ:

ಸಾಕ್ಷಿಯ ಹೆಸರು.....

ಸಂಶೋಧಕ ಸಹಿ.....

ಸಾಕ್ಷಿಯ ಸಹಿ.....

A25 Interview Schedule - Phase 2

Access to and utilisation of health care among adults aged fifty or more in Gadag District, Karnataka

Section I[Household Information]

Name of Village/Thanda: _____ Village/Thanda: _____
 Unique Id of the Respondent: _____ Date of Interview: _____
 Name of the Respondent: _____ Sex: _____
 GIS coordinates of the Respondents House: _____ Age: _____

Now I would like to ask you some information regarding the Household

1	What is the main source of water for _____ in this household?	Codes
	a. Drinking	
	b. Washing	
	c. Cooking	
	d. Bathing	
2	a. In the last three months did you face any problem with the water you used for drinking and cooking?	Y N
	b. If yes, then what are the problems?	
3	<i>If the household reports that they receive piped water for any of the above purposes then ask the questions below</i>	
	a. How many days of the week do you get water from the water connection?	
	b. During the past two weeks, what is the longest duration when water did not come?	
	c. How many hours do you get water supply usually?	
	d. Is water available throughout the day or only during certain hours?	Codes
4	How do you store the water collected?	Codes
5	a. What type of toilet facility the members of this household use?	
	b. Where is this toilet located?	

Codes for Items

Item 1: 1. Own Piped Water Connection, 2. Neighbour's piped connection, 3. Public tap, 4. Tanker (public), 5. Tanker (private), 6. Protected well in your land, 7. Protected well outside your land, 8. Protected public well, 9. Unprotected well in your land, 10. Unprotected well outside your land, 11. Unprotected public well, 12. Bore well, 13. Rainwater harvesting system, 14. River, stream, lake, pond, 15. Stream water taken through pipe, 16. Community RO, 17. Other

Item 2b: 1. Insufficient water availability, 2. Irregular supply, 3. Bad taste, 4. Bad odour, 5. Water was coloured, 6. Water was cloudy, 7. Others (Specify).....

Item 3d: 1. Throughout the day, 2. Certain hours

Item 4: 1. Tank, 2. Cemented tank, 3. Barrel, 4. Pots/Buckets, 5. Others _____

Item 5a: 1. Flush to piped sewer system, 2. Flush to septic tank, 3. Flush/pour flush to pit latrine, 4. Flush/pour flush to elsewhere, 5. Ventilated improved pit latrine, 6. Composting toilet, 7. Pit latrine with slab, 8. is a dry pit latrine whereby the pit is fully covered by a slab or platform that is fitted either with a squatting hole or seat, 9. No facilities/bush/field, 10. Others (specify).....

Item 5b: 1. Inside the house, 2. Outside the house, but within the premises, 3. Others (specify).....

6	Does your household have:	
	a. Electricity	Y N
	b. A Mattress	Y N
	c. A pressure cooker	Y N
	d. A chair	Y N
	e. A cot or bed?	Y N
	f. A table	Y N
	g. An electric fan	Y N
	h. Television?	Y N
	i. Sewing machine?	Y N
	j. Computer	Y N
	k. Refrigerator?	Y N
	l. Air conditioner / air cooler?	Y N
	m. Washing machine?	Y N
	n. Watch or clock?	Y N
	o. Bicycle	Y N
	p. Motorcycle or scooter	Y N
	q. Animal drawn cart?	Y N
	r. Car	Y N
	s. Water pump	Y N
	t. Thresher	Y N
	u. Tractor	Y N
	v. LPG cylinder	Y N
7	What is the Caste or Tribe of the household head?	codes
8	a. Does anybody in this household possess land? (Y/N)	
	b. If Yes, type of possession	codes
	c. Area of land possessed	
	d. Area under cultivation?	
	e. Duration for which the land is cultivated	
	f. Type of crops grown in the past 365 days?	codes
	g. Source of irrigation	codes
9	Does the household possess any of the below farm equipment's?	codes
10	Does your household own any of the following animals:	codes

Codes for Items

Item 7: 1. Scheduled Caste, 2. Scheduled Tribe, 3. Other Backward Caste, 4. None of them, 5. Don't know

Item 8b: 1. Owned and possessed; 2. Leased-in; 3. Otherwise possesses, 4. Leased out, 5. Forest land, 6. Others (specify).....

Item 8f: 1. Cereals, 2. Pulses, 3. Oilseeds, 4. Vegetables, 5. Other crops (specify).....

Item 8g: 1. Canal; 2. minor surface works (pond, tank etc); 3. Ground water (well, tubewell...); 9. Others (specify).....

Item 9: 1. power tiller, tractor, 2. Thresher, cane crusher, oil crusher, 3. Pump and other water lifting equipment; 4. Others (specify).....

Item 10: 1. Cows/bulls/buffaloes, 2. horses/donkeys/mules, 3. Goats, 4. Sheep, 5. Chickens/Ducks, 6. None of the above

11	a. What is the principal source of income for the household	codes
	b. Did you or anyone in your family received money from persons of this HH residing outside the village/tanda during the last 12-month period?	Y N DK
	c. Periodicity of the money received	codes
	d. Amount received (12 month period)	
	e. Who is the person sending the money?	codes
	f. If source of income is pension or other similar means, then how is the money received by you?	codes
	g. If remittances are being received then how is the money received by you	codes
12	a. Is there any member of this household who is currently living outside Gadag?	Y N
	b. If Yes, then how many of them (Exclude children (de jure members), include adults \geq 18)	
	c. If Yes, then what is the purpose of them living outside?	codes
	d. How often do they visit this household in a year?	
	e. Do any of the migrant members family stay with you right now at least for more than six months?	Y N
	f. If Yes to the question above , then who	codes
	g. What is the purpose of their stay?	codes
13	a. In the past six months, did anybody from the Public Health System (Health worker) visit this Household?	Y N DK
	b. If No, then can you remember the last visit?	
	c. If yes, then who is that health worker (Most recent visit)	codes
	d. Reason for them visiting the household?	codes
	e. Did they enter your house? (Y/N/Don't Know)	Y N DK
	f. If No, what do you think are the possible reasons?	

Codes for Items

Item 11a: 1. Cultivation, 2. Allied agriculture , 3. Agricultural wage labour, 4. Non agricultural wage labour, 5. Artisan/Independent, 6. Petty shop/Small business, 7. Organized Trade/Business, 8. Salaried employment , 9. Profession NEC, 10. Pension/Rent/Dividend, etc., 11. Others (specify)

Item 11c: 1. Monthly, 2. Quarterly, 3. Half yearly, 4. Annually, 5. Other regular periods, 6. No fixed pattern

Item 11e: 1. Son, 2. Daughter, 3. Son in law, 4. Daughter in law, 5. Father, 6. Mother, 7. Others (specify).....

Item 11 f & g: 1. Through postal money order, 2. Through bank transfer, 3. Through bank transfer collected by someone known on my behalf, 4. Brought by someone known to me from the source, 5. others (specify).....

Item 12c: 1. Work/Employment- Organised, 2. Work/Employment- Unorganised, 3. Business, 4. Education, 5. Others (specify).....

Item 12f: 1. Children, 2. Spouse, 3. Others (specify).....

Item 12g: 1. Education, 2. Health problems, 3. Treatment for health problems, 4. Livelihood, 5. Caretaker role, 6. Others (specify).....

Item 13c: 1. JHA (Male), 2. JHA (Female), 3. ANM, 4. Medical Officer, 5. Others (specify).....

Item 13d: 1. Gave advice on diseases/illness, 2. Checked water storage, 3. Spraying of DDT, 4. Visited because I was sick, 5. To check if any member in the household had any sickness, 6. Other (specify).....

13	g. Has the health worker given you any advice related to health?	Y	N	DK
	h. Did you understand the information given by the health worker?	Y	N	DK
	i. Did the ASHA worker visit your house in the past 6 months?	Y	N	DK
	j. Did the ASHA worker give you information related to health?	Y	N	DK
	k. Do you understand the information given by the ASHA worker?	Y	N	DK
14	a. Does this household have any relatives in this village?	Y	N	
	b. If yes then how many families/households?			
	c. Do they help when anybody in this household is sick?	Y	N	
15	a. Did any member in this household die in the past 365 days?	Y	N	
	b. Sex of the person who died?			codes
	c. Whether medical attention received before death?	Y	N	DK
	d. Whether hospitalised?	Y	N	DK
	e. Total expenditure incurred (including hospitalisations and the expenditure post death)			
	f. Financial help received (Amount)			

Codes for Items

Item 15b: 1. Female, 2. Male

Section II [Individual Information]

I'm going to ask you a few questions about your employment, habits and clothing usually worn

16	a. Have you been away from Gadag for employment purposes? {Does not include temporary work assignments}	Y N
	b. If Y, then what is the occupation that you were involved in?	codes
	c. Are you still involved in that occupation?	Y N
	d. If no longer involved in that occupation, then what is the reason for return	
17	a. Do you consume alcoholic drinks such as beer, wine, spirits or "Sere"?	Y N
	b. If Yes to above, During the past 12 months how frequently have you had at least one alcoholic drink?	codes
	c. From where do you get your alcohol usually?	codes
18	a. What is the type of clothing usually worn by you?	codes
	b. Clothing worn by you when you go to a health facility?	codes

Codes for Items

Item 16b: 1. Work/Employment- Organised, 2. Work/Employment- Unorganised, 3. Business, 5. Others (specify).....

Item 17b: 1. Daily, 2. 5-6 days per week, 3. 1-4 days per week, 4. 1-3 days per month, 5. Less than once a month

Item 17c: 1. In the village shop, 2. Licensed liquor shop, 3. Locally brewed, 4. Others (specify).....

Item 18a & b: 1. Dhothi/Panche, 2. Pant/Shirt, 3. Saree, 4. Churidars, 5. Lamani dress for women

Item 19 a & b: 1. HSC/ANM/ASHA/AWW, 2. PHC/dispensary/CHC/mobile medical unit, 3. public hospital, 4. private doctor/clinic, 5. private hospital, 6. RMP, 7. BAMS/BHMS, 8. RMP who visits the village, 9. Others (specify).....

CODES FOR 20a

<i>Reported Diagnosis and/or Main Symptom</i>	<i>Code</i>	<i>Reported Diagnosis and/or Main Symptom</i>	<i>Code</i>
INFECTION		EYE	
<i>Fever with loss of consciousness or altered consciousness</i>	01	<i>Discomfort/pain in the eye with redness or swellings/ boils</i>	27
<i>Fever with rash/ eruptive lesions</i>	02	<i>Cataract</i>	28
<i>Fever due to DIPHTHERIA, WHOOPING COUGH</i>	03	<i>GLAUCOMA</i>	29
<i>All other fevers</i>	04	<i>Decreased vision (chronic) NOT including where decreased vision is corrected with glasses</i>	30
<i>(Includes malaria, typhoid and fevers of unknown origin, all specific fevers that do not have a confirmed diagnosis)</i>		<i>Others (including disorders of eye movements – strabismus, nystagmus, ptosis and adnexa)</i>	31
TUBERCULOSIS	05	EAR	
<i>Filariasis</i>	6	<i>Earache with discharge/bleeding from ear/ infections</i>	32
<i>Tetanus</i>	07	<i>Decreased hearing or loss of hearing</i>	33
<i>HIV/AIDS</i>	08	CARDIO-VASCULAR	
<i>Other sexually transmitted diseases</i>	09	<i>HYPERTENSION</i>	34
<i>Jaundice</i>	10	<i>Heart disease: Chest pain, breathlessness</i>	35
<i>Diarrheas/ dysentery/ increased frequency of stools with or without blood and mucus in stools</i>	11	RESPIRATORY	
<i>Worms infestation</i>	12	<i>Acute upper respiratory infections (cold, runny nose, sore throat with cough, allergic colds included)</i>	36
CANCERS		<i>Cough with sputum with or without fever and NOT diagnosed as TB</i>	37
<i>CANCERS (known or suspected by a physician) and occurrence of any growing painless lump in the body</i>	13	<i>Bronchial asthma/ recurrent episode of wheezing and breathlessness with or without cough over long periods or known asthma)</i>	38
BLOOD DISEASES		GASTRO-INTESTINAL	
<i>Anaemia (any cause)</i>	14	<i>Diseases of mouth/teeth/gums</i>	39
<i>Bleeding disorders</i>	15	<i>Pain in abdomen: Gastric and peptic ulcers/ acid reflux/ acute abdomen</i>	40
ENDOCRINE, METABOLIC, NUTRITIONAL		<i>Lump or fluid in abdomen or scrotum</i>	41
DIABETES	16	<i>Gastrointestinal bleeding</i>	42
<i>Under-nutrition</i>	17	SKIN	
<i>Goitre and other diseases of the thyroid</i>	18	<i>Skin infection (boil, abscess, itching) and other skin disease</i>	43
<i>Others (including obesity)</i>	19	MUSCULO-SKELETAL	
PSYCHIATRIC & NEUROLOGICAL		<i>Joint or bone disease/ pain or swelling in any of the joints, or swelling or pus from the bones</i>	44
<i>Mental retardation</i>	20	<i>Back or body aches</i>	45
<i>Mental disorders</i>	21	INJURIES	
<i>Headache</i>	22	<i>Accidental injury, road traffic accidents and falls</i>	52
<i>Seizures or known epilepsy</i>	23	<i>Accidental drowning and submerision</i>	53
<i>Weakness in limb muscles and difficulty in movements</i>	24	<i>Burns and corrosions</i>	54
<i>Stroke/ hemiplegia/ sudden onset weakness or loss of speech in half of body</i>	25	<i>Poisoning</i>	55
<i>Others including memory loss, confusion</i>	26	<i>Intentional self-harm</i>	56
GENITO-URINARY		<i>Assault</i>	57
<i>Any difficulty or abnormality in urination</i>	46	<i>Contact with venomous/harm-causing animals and plants</i>	58
<i>Pain the pelvic region/reproductive tract infection/ Pain in male genital area</i>	47	<i>Symptom not fitting into any of above categories</i>	59
<i>Change/irregularity in menstrual cycle or excessive bleeding/pain during menstruation and any other gynaecological and andrological disorders incl. male/female infertility</i>	48	<i>Could not even state the main symptom</i>	60
OBSTETRIC		<i>Childbirth – Caesarean/ normal/ any other (for both live birth and stillbirth)</i>	88
<i>Pregnancy with complications before or during labour (abortion, ectopic pregnancy, abortion, hypertension, complications during labour)</i>	49		
<i>Complications in mother after birth of child</i>	50		
<i>Illness in the newborn/ sick newborn</i>	51		

Section III (Care seeking for Ailments)
 The next set of questions is about your health, care seeking for illness and also the experiences with the health care provider
Section III A (Acute Ailments)

20A	I'm going to ask you about the sickness that you had in the past 90 days <i>{List all the ailments in the past 90 days and ask the questions that follow for the most recent acute ailment}</i>		
	a. Can you tell me about the nature of the illness that you were suffering from? <i>{If No acute illness then skip to 20B}</i>		
	a1. Illness 1 (Codes)		
	a2. Illness 2 (Codes)		
	a3. Illness 3 (Codes)		
	a4. Illness 4 (Codes)		
	a5. Illness 5 (Codes)		
<i>{Repeat Section 21A for every ailment mentioned in 20A.a}</i>			
21A	a. How long have you been having this [] ailment?		
	b. Did you visit a health facility for this illness?	Y N	
	c. If no then what are the reasons for not visiting any health facility	Open ended	
	d. Where all did you seek treatment for this ailment? <i>{List out all the facilities visited in order from the first to the last}</i>	1. _____ 2. _____ 3. _____ 4. _____ 5. _____	

Item 21d: 1. HSC/ANM/ASHA/AWW, 2. PHC/dispensary/CHC/mobile medical unit, 3. public hospital, 4. private doctor/clinic, 5. private hospital, 6. RMP, 7. BAMS/BHMS, 8. Stayed at home, 9. Self medication, 10. Showed to RMP who visits the village, 11. Others(specify).....

<i>Ask the following details for the most recent illness. If the respondent has visited three providers for the ailment/illness, ask the following questions wrt all three providers. If the respondent has visited more than three providers then ask the following question for the first and the last visit</i>			
	Provider 1	Provider 2	Provider 3
22A			
Transportation to health facility <i>I'm going to ask a few questions about the transportation to the health facility that you recently visited for illness</i>			
a. How did you go to the health facility?	codes	codes	codes
b. {If Bus/Auto} Can you tell me the process of reaching the facility?			
b1. Time from house to bus stop			
b2. Direct transport or any changes on the way?			
b3. Can you tell me the sequence from the house to reaching the facility	□□□□□ codes	□□□□□ codes	□□□□□ codes
b4. Overall, how much time did it take for you to reach the facility			
b5. Did you return the same way?			
b6. If no to b5, then can you tell me the sequence?	□□□□□ codes	□□□□□ codes	□□□□□ codes

Item 22a: 1. Bus, 2. Two wheeler, 3. Auto, 4. Car, 5. Others (specify).....
Item 22 b2: 1. Direct transport, 2. Changes on the way
Item 22 b3& b6: 1. House, 2. Bus stop, 3. Bus, 4. Auto, 5. Walking, 6. Lift on bike/bicycle

23A		
a. What is the reason for using this facility		
b. How long did you have to wait from the time you went to the facility to be seen by the provider?		

24A	Expenditure I'm going to ask you about the expenses incurred for the hospital visit including those who are accompanying you			
	a. Doctors fees			
	b. Registration fees, if any			
	c. Diagnostic tests, if any			
	d. Transportation costs			
	e. Medicine charges			
	f. Bribe or "Kushigokara"			
	g. Food cost			
	h. How did you raise the money used for paying for the above mentioned costs	codes	codes	codes

Item 24h: 1. Household income / savings, 2. Borrowings, 3. Contribution from friends/family, 4. Daily wage, 5. Government pension, 6. Other sources.....

25A	a. Did the provider prescribe any injection or IV bottle?	Y	N	
	b. If not administered, then why was it not			
	c. Did you ask for it?	Y	N	
	d. If injection or IV was prescribed, who administered it for you?	Y	N	
	e. Where was the injection administered (Body site)?	codes		
	f. How many injections were administered?			

26A	Behaviour of Health care provider			
	a. Did the provider spend adequate time with you as he/she did with others? <i>Did the provider avoid touching you during examination?</i>	Y	N	DK
		Y	N	DK
		Y	N	DK

	c. Did the provider give you enough information about your health condition as he/she did to others?	Y	N	DK	Y	N	DK	Y	N	DK
	d. Did the provider speak to you rudely?	Y	N	DK	Y	N	DK	Y	N	DK
	e. Did the provider use derogatory words while speaking to you?	Y	N	DK	Y	N	DK	Y	N	DK
	f. While waiting for the consultation, were you forced to make way for other person when it was your turn?	Y	N	DK	Y	N	DK	Y	N	DK
	g. Were you made to wait for long to get the medicines prescribed when compared to others?	Y	N	DK	Y	N	DK	Y	N	DK
	h. Were you made to wait for long to get your injection or IV bottle when compared to others?	Y	N	DK	Y	N	DK	Y	N	DK
	i. Would you go back to this provider for any other ailments?	Y	N	DK	Y	N	DK	Y	N	DK
	j. If no to the question above, then why?									
27A	Why didn't you go to a Private clinic/Government hospital <i>{If the respondent answered that they went to a private clinic, then this question who ask regarding why they didn't go to the government and vice versa}</i>				codes			codes		

Item 26: 1. Long waiting time, 2. High cost, 3. Very far, 4. Providers are rude, 5. Providers have too much "sokku", 6. Not getting the correct treatment, 7. Others (specify).....

Section II B (Chronic Ailments)

		Y	N	
20B	a. Have you ever been diagnosed with a health problem for which you took medications or need to take medications on a continuous basis?			
	b. Can you tell me about the health problem that required follow up care or continued treatment?			
	a1. Illness 1 (Codes)			
	a2. Illness 2 (Codes)			
	a3. Illness 3 (Codes)			
	a4. Illness 4 (Codes)			
	a5. Illness 5 (Codes)			
	c. Do you have a notebook for recording your blood test and BP measurements? {Ask only if the illness coded above included Diabetes or hypertension}	Y	N	
{Repeat Section 21B for every ailment mentioned in 20B.b}				
21B	a. How long have you been having this _____ ailment?			
	b. Did you visit a health facility for this ailment in the past three months?	Y	N	
	c. If no then what are the reasons for not visiting any health facility	Open ended		
	d. Where all did you seek treatment for this ailment? {List out all the facilities visited in order from the first to the last}			1. _____ 2. _____ 3. _____ 4. _____ 5. _____

Item 21B. d.: 1. HSC/ANM/ASHA/AWW. 2. PHC/dispensary/CHC/mobile medical unit, 3. public hospital, 4. private hospital, 5. private doctor/clinic, 6. RMP, 7.

BAMS/BHMS, 8. Stayed at home, 9. Self medication, 10. Showed to RMP who visits the village, 11. Others(specify).....

Ask the following details for chronic ailment that was diagnosed first. If the respondent has visited three providers for the chronic ailment/ailment that required regular follow up care, ask the following questions wrt all three providers for visits in the past three months. If the respondent has visited more than three providers, then ask the following question for the first and the last visit. If the respondent has visited the same provider multiple times in the past three months, then ask about the most recent visit.

	Provider 1	Provider 2	Provider 3
22B			
Transportation to health facility <i>I'm going to ask a few questions about the transportation to the health facility that you recently visited</i>			
a. How did you go to the health facility?	codes	codes	codes
b. {If Bus/Auto} Can you tell me the process of reaching the facility?			
b1. Time from house to bus stop (In minutes)			
b2. Direct transport or any changes on the way?			
b3. Can you tell me the sequence from the house to reaching the facility	□□□□□ codes	□□□□□ codes	□□□□□ codes
b4. Overall, how much time did it take for you to reach the facility			
b5. Did you return the same way?			
b6. If no to b5, then can you tell me the sequence?	□□□□□ codes	□□□□□ codes	□□□□□ codes

Item 22B.a.1. Bus, 2. Two wheeler, 3. Auto, 4. Car, 5. Others (specify).....
Item 22B. b2: 1. Direct transport, 2. Changes on the way
Item 22B. b3& b6: 1. House, 2. Bus stop, 3. Bus, 4. Auto, 5. Walking, 6. Lift on bike/bicycle

23B	a. What is the reason for using this facility	
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	b. How long did you have to wait from the time you went to the facility to be seen by the provider?			
24B	Expenditure I'm going to ask you about the expenses incurred for the hospital visit including those who are accompanying you			
	a. Doctors fees			
	b. Registration fees, if any			
	c. Diagnostic tests, if any			
	d. Transportation costs			
	e. Medicine charges			
	f. Bribe or "Kushigaskara"			
	g. Food cost			
	h. How did you raise the money used for paying for the above mentioned costs	codes		codes

Item 24B. h: 1. Household income / savings, 2. Borrowings, 3. Contribution from friends/family, 4. Daily wage, 5. Government pension, 6. Other sources.....

25B	g. Did the provider prescribe any injection or IV bottle?	Y	N	
	h. If not administered, then why was it not			
	i. Did you ask for it?	Y	N	
	j. If injection or IV was prescribed, Who administered it for you?	Y	N	
	k. Where was the injection administered (Body site)?	codes		
	l. How many injections were administered?			

Item 25B. e: 1. Buttocks, 2. Upper arm, 3. Other site

26B	Behaviour of Health care provider	Y	N	DK	Y	N	DK	Y	N	DK
	a. Did the provider spend adequate time with you as he/she did with others?	Y	N	DK	Y	N	DK	Y	N	DK
	b. Did the provider avoid touching you during examination?	Y	N	DK	Y	N	DK	Y	N	DK
	c. Did the provider give you enough information about your health condition as he/she did to others?	Y	N	DK	Y	N	DK	Y	N	DK
	d. Did the provider speak to you rudely?	Y	N	DK	Y	N	DK	Y	N	DK
	e. Did the provider use derogatory words while speaking to you?	Y	N	DK	Y	N	DK	Y	N	DK
	f. While waiting for the consultation, were you forced to make way for other person when it was your turn?	Y	N	DK	Y	N	DK	Y	N	DK
	g. Were you made to wait for long to get the medicines prescribed when compared to others?	Y	N	DK	Y	N	DK	Y	N	DK
	h. Were you made to wait for long to get your injection or IV bottle when compared to others?	Y	N	DK	Y	N	DK	Y	N	DK
	i. Would you go back to this provider for any other ailments?	Y	N	DK	Y	N	DK	Y	N	DK
	j. If no to the question above, then why?									
27B	Why didn't you go to a Private clinic/Government hospital {If the respondent answered that they went to a private clinic, then this question who ask regarding why they didn't go to the government and vice versa}				codes			codes		

Item 27B: 1. Long waiting time, 2. High cost, 3. Very far, 4. Providers are rude, 5. Providers have too much "sokku", 6. Not getting the correct treatment, 7. Others (specify).....

A26 Interview schedule (Kannada)- Phase 2

**Access to and utilisation of health care among adults aged fifty or more
in Gadag District, Karnataka
ವಿಭಾಗ I [ಮನೆಯ ಮಾಹಿತಿ]**

ಗ್ರಾಮ / ತಾಂಡಾ ಹೆಸರು:
ಪ್ರತಿವಾದಿಯ ಅನನ್ಯ ಐಡಿ:
ಹೆಸರು:
ಜಿ.ಐ.ಎಸ್:

ಗ್ರಾಮ / ತಾಂಡಾ ಸಂಖ್ಯೆ:
ಸಂದರ್ಶನ ದಿನಾಂಕ:
ಲಿಂಗ:
ವಯಸ್ಸು:

ಈಗ ನಾನು ಮನೆವಾರ್ತೆಯ ಬಗ್ಗೆ ಕೆಲವು ಮಾಹಿತಿಗಳನ್ನು ಕೇಳುತ್ತೇನೆ.

೧	ಈ ಮನೆವಾರ್ತೆಗೆ - ನೀರಿನ ಮುಖ್ಯ ಮೂಲ ಯಾವುದು?	
	ಎ) ಕುಡಿಯುವದಕ್ಕಾಗಿ	
	ಬಿ) ಬಟ್ಟೆ ಒಗೆಯಲು	
	ಸಿ) ಅಡುಗೆ ಮಾಡಲು	
	ಡಿ) ಸ್ನಾನಕ್ಕಾಗಿ	
೨	ಕಳೆದ ೩ ತಿಂಗಳಲ್ಲಿ ಕುಡಿಯಲು ಹಾಗೂ ಅಡುಗೆ ಮಾಡಲು ನೀರಿನ ತೊಂದರೆಯನ್ನು ಅನುಭವಿಸಿದ್ದೀರಾ? ಹೌದಾದರೆ, ಯಾವ ಸಮಸ್ಯೆಗಳು ಉಂಟಾದವು?	
೩	ಈ ಮನೆಯವರು ಮೇಲಿನ ಯಾವುದೇ ಉದ್ದೇಶಕ್ಕಾಗಿ ಕೊಳುವೆ ನೀರನ್ನು ಪಡೆದಿರುವುದಾದರೆ ಈ ಕೆಳಗಿನ ಪ್ರಶ್ನೆಗಳನ್ನು ಕೇಳಿರಿ.	
	ಎ) ಈ ನೀರಿನ ಸಂಪರ್ಕದಿಂದ ವಾರದಲ್ಲ ಎಷ್ಟು ದಿನ ನೀರನ್ನು ಪಡೆಯುತ್ತೀರಿ?	
	ಬಿ) ಕಳೆದ ಎರಡು ವಾರಗಳಲ್ಲಿ ನೀರು ಬರದೇ ಇದ್ದ ಹೆಚ್ಚಿನ ಅವಧಿಯನ್ನು ತಿಳಿಸಿ?	
	ಸಿ) ಸಾಮಾನ್ಯವಾಗಿ ಎಷ್ಟು ತಾಸು ನೀರನ್ನು ಪಡೆಯುತ್ತೀರಿ?	
	ಡಿ) ನೀರು ದಿನವಿಡೀ ದೊರೆಯುತ್ತದೆಯೋ? ಅಥವಾ ಕೆಲವು ತಾಸುಗಳಲ್ಲಿ ಮಾತ್ರವೇ?	
೪	ನೀವು ನೀರನ್ನು ಹೇಗೆ ಸಂಗ್ರಹಿಸಿ ಇಡುತ್ತೀರಿ?	
೫	ಎ) ಈ ಮನೆಯ ಸದಸ್ಯರು ಯಾವ ತರಹದ ಶೌಚಾಲಯವನ್ನು ಉಪಯೋಗಿಸುತ್ತೀರಿ?	
	ಬಿ) ಶೌಚಾಲಯವು ಯಾವ ಸ್ಥಳದಲ್ಲ ಇದೆ?	

Item ೧: ೧. ಸ್ವಂತ ಪೈಪ್ ವಾಟರ್ ಕನೆಕ್ಷನ್, ೨. ಪಕ್ಕದ ಮನೆಯವನು ಪೈಪ್ ಕನೆಕ್ಷನ್, ೩. ಸಾರ್ವಜನಿಕ ಟ್ಯಾಪ್, ೪. ಟ್ಯಾಂಕರ್ (ಸಾರ್ವಜನಿಕ), ೫. ಟ್ಯಾಂಕರ್ (ಖಾಸಗಿ), ೬. ನಿಮ್ಮ ಭೂಮಿಯಲ್ಲಿ ಸುರಕ್ಷಿತ ಬಾವಿ, ೭. ನಿಮ್ಮ ಭೂಮಿ ಹೊರಗೆ ಸುರಕ್ಷಿತ ಬಾವಿ, ೮. ಸುರಕ್ಷಿತ ಬಾವಿ (ಸಾರ್ವಜನಿಕ), ೯. ನಿಮ್ಮ ಭೂಮಿಯಲ್ಲಿ ಅಸುರಕ್ಷಿತ ಬಾವಿ, ೧೦. ನಿಮ್ಮ ಭೂಮಿ ಹೊರಗೆ ಅಸುರಕ್ಷಿತ ಬಾವಿ , ೧೧. ಅಸುರಕ್ಷಿತ ಸಾರ್ವಜನಿಕ ಬಾವಿ, ೧೨. ಬೋರ್ವೆಲ್, ೧೩. ಮಳೆನೀರು ಕೊಯ್ಲು ವ್ಯವಸ್ಥೆ, ೧೪. ನದಿ, ಹರಿವು, ಸರೋವರ, ಕೊಳ, ೧೫. ನದಿ ಪೈಪ್ ಮೂಲಕ ತೆಗೆದ ನೀರು, ೧೬. ಶುದ್ಧ ನೀರು, ೧೭. ಇತರೆ

Item ೫: ೧. ನೀರಿನ ಲಭ್ಯತೆ ಸಾಕಷ್ಟಿಲ್ಲ, ೨. ಅನಿಯಮಿತ ಸರಬರಾಜು, ೩. ಕೆಟ್ಟ ರುಚಿ, ೪. ಕೆಟ್ಟ ವಾಸನೆ, ೫. ನೀರು ಬಣ್ಣ, ೬. ನೀರು ಮೋಡ, ೭. ಇತರೆ

Item ೩: ೧. ದಿನವಿಡೀ, ೨. ಕೆಲವು ಗಂಟೆಗಳ

Item ೪: ೧. ಟ್ಯಾಂಕರ್, ೨. ಸಿಮೆಂಟ್ ಟ್ಯಾಂಕರ್, ೩. ಬ್ಯಾರೆಲ್, ೪. ಬಿಂದಿಗೆ / ಬಕೆಟ್, ೫. ಇತರೆ

Item ೫: ೧. ಪೈಪ್ ಒಳಚರಂಡಿ ವ್ಯವಸ್ಥೆಗೆ ಫ್ಲಾಟ್ ಮಾಡಿ, ೨. ಸೆಪ್ಟಿಕ್ ಟ್ಯಾಂಕ್ ಫ್ಲಾಟ್ ಮಾಡಿ, ೩. ಫ್ಲಾಟ್ / ಫ್ಲಾಟ್ ಗೆ ಹೊಳಪಿಸಿ ಲ್ಯಾಟ್ರಿನ್, ೪. ಫ್ಲಾಟ್ / ಬೇರೆಡೆಗೆ ಫ್ಲಾಟ್ ಮಾಡಿ, ೫. ಗಾಳಿ ಸುಧಾರಿತ ಪಿಟ್ ಲ್ಯಾಟ್ರಿನ್, ೬. ಕೊಳೆತ ಟಾಯ್ಲೆಟ್, ೭. ಪಿಟ್ ಲೇಔಟ್ ಚಪ್ಪಡಿ, ೮. ಒಣ ಪಿಟ್ ಲ್ಯಾಟ್ರಿನ್ ಮೂಲಕ ಪಿಟ್ ಸಂಪೂರ್ಣವಾಗಿ ಸ್ಕ್ಯಾಬ್ ಅಥವಾ ಪ್ಲಾಸ್ಟಿಕ್‌ನಿಂದ ಆವೃತವಾಗಿರುತ್ತದೆ, ಅದು ಒಂದು ಸ್ಕ್ಯಾಟಿಂಗ್ ರಂಧ್ರ ಅಥವಾ ಸೀಟಿನಲ್ಲಿ

ಹೊಂದಿಕೊಳ್ಳುತ್ತದೆ. ೯. ಯಾವುದೇ ಸೌಲಭ್ಯಗಳು / ವೊದರು / ನೆಲ, ಗಂ. ಇತರೆ

Item ೫೪ ಗ. ಮನೆ ಒಳಗೆ, ೨. ಮನೆಯ ಹೊರಗೆ, ಅದರ ಆವರಣದಲ್ಲಿ, ೩. ಇತರೆ (ನಿರ್ದಿಷ್ಟಪಡಿಸಿ)

೩	ನಿಮ್ಮ ಮನೆಯಲ್ಲಿ ಈ ಕೆಳಗಿನವುಗಳನ್ನು ಹೊಂದಿರುವಿರೋ?		
	ಎ) ವಿದ್ಯುತ್	ಹೌದು	ಇಲ್ಲ
	ಬಿ) ಹಾಸಿಗೆ	ಹೌದು	ಇಲ್ಲ
	ಸಿ) ಪ್ರೆಷರ್ ಕುಕ್ಕರ	ಹೌದು	ಇಲ್ಲ
	ಡಿ) ಕುರ್ಚಿ	ಹೌದು	ಇಲ್ಲ
	ಇ) ಮಂಚ ಅಥವಾ ಗಾಡಿ	ಹೌದು	ಇಲ್ಲ
	ಎಫ್) ಟೇಬಲ್	ಹೌದು	ಇಲ್ಲ
	ಜಿ) ವಿದ್ಯುತ್ ಪಂಕಾ	ಹೌದು	ಇಲ್ಲ
	ಹೆಚ್) ದೂರದರ್ಶನ	ಹೌದು	ಇಲ್ಲ
	ಐ) ಹೊಲಗೆ ಯಂತ್ರ	ಹೌದು	ಇಲ್ಲ
	ಜೆ) ಗಣಕಯಂತ್ರ	ಹೌದು	ಇಲ್ಲ
	ಕೆ) ರೆಫ್ರಿಜರೇಟರ್	ಹೌದು	ಇಲ್ಲ
	ಎಲ್) ಹವಾನಿಯಂತ್ರಕ / ಏರ್ ಕೂಲರ್	ಹೌದು	ಇಲ್ಲ
	ಎಂ) ವಾಷಿಂಗ್ ಮಶಿನ್ (ಬಟ್ಟೆ ಒಗೆಯುವ ಯಂತ್ರ)	ಹೌದು	ಇಲ್ಲ
	ಎನ್) ಕೈ ಗಡಿಯಾರ / ಗೋಡೆ ಗಡಿಯಾರ	ಹೌದು	ಇಲ್ಲ
	ಒ) ಸೈಕಲ್	ಹೌದು	ಇಲ್ಲ
	ಪಿ) ಮೋಟಾರು ಸೈಕಲ್ ಅಥವಾ ಸ್ಕೂಟರ್	ಹೌದು	ಇಲ್ಲ
	ಕ್ಯೂ) ಚಕ್ರಡಿ	ಹೌದು	ಇಲ್ಲ
	ಆರ್) ಕಾರು	ಹೌದು	ಇಲ್ಲ
	ಎಸ್) ವಾಟರ್ ಪಂಪ್	ಹೌದು	ಇಲ್ಲ
	ಐ) ತ್ರೆಷರ್	ಹೌದು	ಇಲ್ಲ
	ಯು) ಟ್ರ್ಯಾಕ್ಟರ್	ಹೌದು	ಇಲ್ಲ
	ವಿ) ಎಲ್.ಪಿ.ಜಿ. ಸಿಲೆಂಡರ್	ಹೌದು	ಇಲ್ಲ
೭	ಮನೆಯ ಯಜಮಾನನ ಜಾತಿ ಅಥವಾ ಗೋತ್ರ ಯಾವುದು?		
೮	ಎ) ಈ ಮನೆಯಲ್ಲಿ ಯಾರಿಗಾದರೂ ಜಮೀನು ಇದೆಯೋ?	ಹೌದು	ಇಲ್ಲ
	ಬಿ) ಹೌದಾದರೆ ಯಾವ ತರಹದ ಒಡೆತನ?		
	ಸಿ) ಹೊಂದಿರುವ ಜಮೀನಿನ ವಿಸ್ತೀರ್ಣ?		
	ಡಿ) ಒಕ್ಕಲುತನ ಮಾಡುವ ಪ್ರದೇಶ?		
	ಇ) ವ್ಯವಸಾಯ ಮಾಡಿಕೊಂಡು ಬಂದ ಕಾಲಾವಧಿ?		
	ಎಫ್) ಈ ಹಿಂದಿನ ೩೬೫ ದಿನಗಳಲ್ಲಿ ಬೆಳೆಯಲಾದ ಬೆಳೆ ಯಾವುದು?		
	ಜಿ) ನೀರಾವರಿಯ ಮೂಲ		
೯	ಈ ಮನೆಯವರು ಈ ಕೆಳಗಿನ ಯಾವುದಾದರೂ ವ್ಯವಸಾಯ ಸಾಮಗ್ರಿಗಳನ್ನು ಹೊಂದಿದ್ದಾರೋ?		
೧೦	ಈ ಮನೆಯವರು ಕೆಳಗಿನ ಯಾವುದಾದರೂ ಪ್ರಾಣಿಗಳನ್ನು ಹೊಂದಿದ್ದಾರೋ?		

Item ೭: ಗ. ಪರಿಶಿಷ್ಟ ಜಾತಿ, ೨. ನಿಗದಿತ ಬುಡಕಟ್ಟು, ೩. ಹಿಂದುಳಿದ ಜಾತಿ, ೪. ಯಾವುದೂ ಇಲ್ಲ, ೫. ಗೊತ್ತಿಲ್ಲ
Item ೮: ಗ. ಮಾಲೀಕತ್ವ ಮತ್ತು ಹೊಂದುವುದು; ೨. ಗುತ್ತಿಗೆ ತೆಗೆದುಕೊಳ್ಳಲಾಗಿದೆ; ೩. ಇಲ್ಲದಿದ್ದರೆ, ೪. ಗುತ್ತಿಗೆ ನೀಡಿತು, ೫. ಇತರೆ
Item ೯: ಗ. ಧಾನ್ಯಗಳು, ೨. ದ್ವಿದಳ ಧಾನ್ಯಗಳು, ೩. ತೈಲ ಬೀಜಗಳು, ೪. ತರಕಾರಿಗಳು, ೫. ಇತರ ಬೆಳೆಗಳು
Item ೧೦: ಗ. ಕಾಲುವೆ; ೨. ಸಣ್ಣ ಮೇಲ್ಮೈ ಕೆಲಸಗಳು (ಕೊಳ, ಟ್ಯಾಂಕ್ ಇತ್ಯಾದಿ); ೩. ಅಂತರ್ಜಲ (ಬಾವಿ, ಟ್ಯಾಬ್ ಬಾವಿಗಳು ...); ೬. ಇತರರು
Item ೧೧: ಗ. ವಿದ್ಯುತ್ ಟೆಲರ್, ಟ್ರಾಕ್ಟರ್, ೨. ಥೆಶರ್, ಕಬ್ಬಿನ ಕ್ರಾಷರ್, ತೈಲ ಕ್ರಾಷರ್, ೩. ಪಂಪ್ ಮತ್ತು ಇತರ ನೀರಿನ ತರಬೇತಿ ಸಾಧನಗಳು; ೪. ಇತರರು
Item ೧೨: ಗ. ಹಸುಗಳು / ಎಲುಬುಗಳು / ಎಮ್ಮೆಗಳು, ೨ ಕುದುರೆಗಳು / ಕತ್ತೆ / ಹೆಸರಗತ್ತೆ, ೩. ಆಡುಗಳು, ೪. ಕುರಿ, ೫ ಕೋಳಿ / ಬಾತುಕೋಳಿಗಳು

೧೧	ಎ) ಈ ಮನೆಯ ಮುಖ್ಯ ಆದಾಯ ಮೂಲ ಯಾವುದು?	
	ಬಿ) ಕಳೆದ ೧೨ ತಿಂಗಳ ನ ಅವಧಿಯಲ್ಲಿ ನೀವು ಅಥವಾ ನಿಮ್ಮ ಮನೆಯ ಸದಸ್ಯರು ಹಳ್ಳಿ ಅಥವಾ ತಾಂಡಾದಿಂದ ಹೊರಗಿರುವ ವ್ಯಕ್ತಿಯಿಂದ ಹಣವನ್ನು ಪಡೆದಿರುತ್ತೀರಾ?	ಹೌದು ಇಲ್ಲ ಗೊತ್ತಿಲ್ಲ
	ಸಿ) ಹಣ ಪಡೆದ ನಿರ್ದಿಷ್ಟ ಕಾಲಾವಧಿ	
	ಡಿ) ಪಡೆದ ಹಣ (೧೨ ತಿಂಗಳಲ್ಲಿ)	
	ಇ) ಯಾವ ವ್ಯಕ್ತಿ ಹಣವನ್ನು ಕಳುಹಿಸುತ್ತಾನೆ?	
	ಎಫ್) ಆದಾಯದ ಮೂಲ ಪಿಂಚಣಿ ಅಥವಾ ಅದೇ ತರಹದ ಇತರ ಮೂಲಗಳಿಂದ ಪಡೆಯುವಿರಾದರೆ ನೀವು ಹಣವನ್ನು ಪಡೆಯುವ ವಿಧಾನ ಯಾವುದು?	
	ಜಿ) ಹಣ ರವಾನೆಯನ್ನು ಸ್ವೀಕರಿಸುವುದಾದರೆ ನೀವು ಹಣವನ್ನು ಹೇಗೆ ಪಡೆಯುತ್ತೀರಿ.	
೧೨	ಎ) ಈ ಮನೆಯ ಯಾವುದೇ ಸದಸ್ಯ ಸದ್ಯ ಗದಗದಿಂದ ಹೊರಗೆ ವಾಸಿಸುತ್ತಾರೋ?	ಹೌದು ಇಲ್ಲ
	ಬಿ) ಹೌದಾದರೆ, ಎಷ್ಟು ಸದಸ್ಯರು? (ಮಕ್ಕಳನ್ನು ಹೊರತುಪಡಿಸಿ)	
	ಸಿ) ಹೌದಾದರೆ, ಯಾವ ಉದ್ದೇಶಕ್ಕಾಗಿ ಹೊರಗೆ ವಾಸಿಸುತ್ತಾರೆ?	
	ಡಿ) ಒಂದು ವರ್ಷದಲ್ಲ ಎಷ್ಟು ಬಾರಿ ಮನೆಗೆ ಭೇಟಿ ಕೊಡುತ್ತಾರೆ?	
	ಇ) ಕುಟುಂಬದ ಯಾವುದೇ ವಲಸಿಗ ಸದಸ್ಯ ಸದ್ಯ ನಿಮ್ಮೊಂದಿಗೆ ೬ ತಿಂಗಳಿಗಿಂತ ಜಾಸ್ತಿ ಇದ್ದಾನೋ?	ಹೌದು ಇಲ್ಲ
	ಎಫ್) ಮೇಲಿನ ಪ್ರಶ್ನೆಗೆ ಹೌದು ಎಂದಾದರೆ, ಅವರು ಯಾರು?	
	ಜಿ) ಯಾವ ಉದ್ದೇಶಕ್ಕಾಗಿ ಉಳಿದುಕೊಂಡಿದ್ದಾರೆ?	
೧೩	ಎ) ಈ ೬ ತಿಂಗಳ ಅವಧಿಯಲ್ಲಿ ಯಾವುದೇ ಪಿಹೆಚ್‌ಸಿ (ಹೆಲ್ಪರ್) ಈ ಮನೆಯನ್ನು ಸಂದರ್ಶಿಸಿದ್ದಾರೋ?	ಹೌದು ಇಲ್ಲ ಗೊತ್ತಿಲ್ಲ
	ಬಿ) ಇಲ್ಲ ಎಂದಾದರೆ ಅವರ ಕೊನೆಯ ಸಂದರ್ಶನ ಯಾವಾಗ ಎಂದು ನೆನಪಿದೆಯೋ?	
	ಸಿ) ಹೌದಾದರೆ, ಆ ಹೆಲ್ಪರ್ ಯಾರು? (ಹತ್ತಿರದ ಸದ್ಯದ ಸಂದರ್ಶನ)	
	ಡಿ) ಮನೆಯು ಸಂದರ್ಶಿಸಿದ ಕಾರಣ	
	ಇ) ಅವರು ನಿಮ್ಮ ಮನೆಯನ್ನು ಪ್ರವೇಶಿಸಿದ್ದಾರೋ?	ಹೌದು ಇಲ್ಲ ಗೊತ್ತಿಲ್ಲ

	(ಹೌದು/ಇಲ್ಲ/ಗೊತ್ತಿಲ್ಲ)	
	ಎಫ್) ಇಲ್ಲವಾದರೆ, ನಿಮ್ಮ ಅನಿಸಿಕೆಯ ಪ್ರಕಾರ ಕಾರಣವೇನು?	
	ಜಿ) ಆರೋಗ್ಯ ಸಮಾಲೋಚಕ (ಹೆಲ್ತ್‌ವರ್ಕರ್) ನಿಮಗೆ ಯಾವುದೇ ಆರೋಗ್ಯ ಸಲಹೆಯನ್ನು ಕೊಟ್ಟಿರುತ್ತಾರೋ?	ಹೌದು ಇಲ್ಲ ಗೊತ್ತಿಲ್ಲ
	ಹೆಚ್) ಆರೋಗ್ಯ ಸಮಾಲೋಚಕ ಕೊಟ್ಟ ಮಾಹಿತಿ ನಿಮಗೆ ಅರ್ಥವಾಗಿದೆಯೋ?	ಹೌದು ಇಲ್ಲ ಗೊತ್ತಿಲ್ಲ
	ಐ) ಕಳೆದ ೬ ತಿಂಗಳಲ್ಲಿ ಆಶಾ ಕಾರ್ಯಕರ್ತೆ ನಿಮ್ಮ ಮನೆಯನ್ನು ಸಂದರ್ಶಿಸಿದ್ದಾರೋ?	ಹೌದು ಇಲ್ಲ ಗೊತ್ತಿಲ್ಲ
	ಜೆ) ಆಶಾ ಕಾರ್ಯಕರ್ತೆ ನಿಮಗೆ ಆರೋಗ್ಯಕ್ಕೆ ಸಂಬಂಧಿಸಿದ ಮಾಹಿತಿಯನ್ನು ಕೊಟ್ಟಿದ್ದಾರೋ?	ಹೌದು ಇಲ್ಲ ಗೊತ್ತಿಲ್ಲ
	ಕೆ) ಆಶಾ ಕಾರ್ಯಕರ್ತೆ ತಿಳಿಸಿದ ಮಾಹಿತಿಯು ನಿಮಗೆ ಅರ್ಥವಾಗಿದೆಯೋ?	ಹೌದು ಇಲ್ಲ ಗೊತ್ತಿಲ್ಲ
೧೪	ಎ) ಈ ಹೆಚ್ಚು ಈ ಮನೆಯ ಸಂಬಂಧಿಕರು ಇದ್ದಾರೋ?	ಹೌದು ಇಲ್ಲ
	ಬಿ) ಹೌದಾದರೆ, ಎಷ್ಟು ಕುಟುಂಬಗಳು / ಮನೆತನಗಳು?	
	ಸಿ) ಈ ಮನೆಯಲ್ಲಿ ಯಾರಾದರೂ ಅನಾರೋಗ್ಯವಾದಾಗ ಅವರು ನಿಮಗೆ ಸಹಾಯ ಮಾಡುತ್ತಾರೋ?	ಹೌದು ಇಲ್ಲ
೧೫	ಎ) ಕಳೆದ ೩೬೫ ದಿನಗಳಲ್ಲಿ ಈ ಮನೆಯ ಯಾವುದಾದರೂ ಸದಸ್ಯ ಮರಣ ಹೊಂದಿದ್ದಾರೋ?	
	ಬಿ) ಮರಣ ಹೊಂದಿದವರ ಅಂಗ	
	ಸಿ) ಮರಣ ಹೊಂದುವದಕ್ಕಿಂತ ಮುಂಚೆ ವೈದ್ಯಕೀಯ ಚಿಕಿತ್ಸೆ ಹೊಂದಿದ್ದಾರೋ?	ಹೌದು ಇಲ್ಲ
	ಡಿ) ಆಸ್ಪತ್ರೆಗೆ ಸೇರಿಸಲಾಗಿದೆಯೋ?	ಹೌದು ಇಲ್ಲ
	ಇ) ಒಟ್ಟು ಆದ ವೆಚ್ಚ (ದವಾಖಾನೆಯ ಖರ್ಚು ಮತ್ತು ಮರಣಾ ನಂತರದ ಖರ್ಚು)	
	ಎಫ್) ಹೊಂದಿದ ಆರ್ಥಿಕ ಸಹಾಯ (ಹಣ)	

Item ೧೧೫: ೧. ಕೃಷಿ, ೨. ಕೃಷಿ ಸಂಬಂಧಪಟ್ಟ, ೩. ಕೃಷಿ ವೇತನ ಕಾರ್ಮಿಕರ, ೪. ಕೃಷಿ ವೇತನ ಕಾರ್ಮಿಕರಲ್ಲದವರು, ೫. ಕುಶಲಕರ್ಮಿ / ಸ್ವತಂತ್ರ, ೬. ಪೆಟ್ಟಿ ಅಂಗಡಿ / ಸಣ್ಣ ವ್ಯಾಪಾರ, ೭. ಸಂಘಟಿತ ವ್ಯಾಪಾರ / ಉದ್ಯಮ, ೮. ಸಂಬಳದ ಉದ್ಯೋಗ, ೯. ವೃತ್ತಿಯು, ೧೦. ಪಿಂಚಣಿ / ಬಾಡಿಗೆ / ಡಿವಿಡೆಂಡ್, ಇತ್ಯಾದಿ, ೧೧. ಇತರೆ

Item ೧೧೬: ೧. ಮಾಸಿಕ, ೨. ತ್ರೈಮಾಸಿಕ, ೩. ಅರ್ಧ ವಾರ್ಷಿಕ, ೪. ವಾರ್ಷಿಕವಾಗಿ, ೫. ಇತರೆ ನಿಯಮಿತ ಅವಧಿಗಳು, ೬. ಯಾವುದೇ ಸ್ಥಿರ ಮಾದರಿಯಿಲ್ಲ

Item ೧೧೭: ೧. ಮಗ, ೨. ಮಗಳು, ೩. ಅಳಿಯ, ೪. ಸೊಸೆ, ೫. ತಂದೆ, ೬. ತಾಯಿ, ೭. ಇತರರು.....

Item ೧೧೮ & ೧೧೯: ೧. ಫೋಸ್ಟರ್ ಮನಿ ಆರ್ಟ್ ಮೂಲಕ, ೨. ಬ್ಯಾಂಕ್ ವರ್ಗಾವಣೆ ಮೂಲಕ, ೩. ನನ್ನ ಪರವಾಗಿ ತಿಳಿದಿರುವ ಯಾರಾದರೂ ಸಂಗ್ರಹಿಸಿದ ಬ್ಯಾಂಕ್ ವರ್ಗಾವಣೆ ಮೂಲಕ, ೪. ಮೂಲದಿಂದ ನನಗೆ ತಿಳಿದಿರುವ ಯಾರಾದರೂ, ೫. ಇತರರು

Item ೧೨೦: ೧. ಕೆಲಸ / ಉದ್ಯೋಗ- ಸಂಘಟಿತ, ೨. ಕೆಲಸ / ಉದ್ಯೋಗ- ಅಸಂಘಟಿತ, ೩. ವ್ಯಾಪಾರ, ೪. ಶಿಕ್ಷಣ, ೫. ಇತರರು

Item ೧೨೧: ೧. ಮಕ್ಕಳು, ೨. ಸಂಗಾತಿ, ೩. ಇತರರು

Item ೧೨೨: ೧. ಶಿಕ್ಷಣ, ೨. ಆರೋಗ್ಯ ಸಮಸ್ಯೆಗಳು, ೩. ಆರೋಗ್ಯ ಸಮಸ್ಯೆಗಳಿಗೆ ಚಿಕಿತ್ಸೆ, ೪. ಜೀವನಾಧಾರ, ೫. ಆರೈಕೆಯ ಪಾತ್ರ, ೬. ಇತರರು

Item ೧೨೩: ೧. ಎಲಾಂ (ಪುರುಷ), ೨. ಎಲಾಂ (ಸ್ತ್ರೀ), ೩. ನರ್ಸ್-೦೬೫, ೪. ವೈದ್ಯಕೀಯ ಅಧಿಕಾರಿ, ೫. ಇತರರು ..

Item ೧೨೪: ೧. ಕಾಯಿಲೆ / ಅನಾರೋಗ್ಯದ ಬಗ್ಗೆ ಸಲಹೆ ನೀಡಿ, ೨. ಪರಿಶೀಲಿಸಿದ ನೀರಿನ ಸಂಗ್ರಹ, ೩. ಡಿಡಿಟಿಯನ್ನು ಸಿಂಪಡಿಸುವುದು, ೪. ನಾನು

ದೋಗಿಗಳ ಕಾರಣದಿಂದಾಗಿ ಭೇಟಿ ನೀಡಿದ್ದೇನೆ. ಔ. ಮನೆಯ ಯಾವುದೇ ಸದಸ್ಯರು ಯಾವುದೇ ಕಾಯಿಲೆ ಹೊಂದಿದ್ದರೆ, ೩. ಇತರ

Item ೧೫.೪ ೧. ಸ್ತ್ರೀ, ೨. ಪುರುಷ

ಭಾಗ ೨ (ವೈಯಕ್ತಿಕ ಮಾಹಿತಿ)

ನಿಮ್ಮ ಉದ್ಯೋಗ ಹವ್ಯಾಸ ಹಾಗೂ ಉಡುಗೆ, ತೊಡುಗೆಯ ಬಗ್ಗೆ ಕೆಲವು ಪ್ರಶ್ನೆಗಳನ್ನು ಕೇಳುತ್ತೇನೆ.

೧೩	ಎ) ಉದ್ಯೋಗದ ಸಲುವಾಗಿ ನೀವು ಗದಗದಿಂದ ಹೊರಗೆ ಇದ್ದೀರಾ? (ತಾತ್ಕಾಲಿಕ ಉದ್ಯೋಗಗಳನ್ನು ಹೊರತುಪಡಿಸಿ)	ಹೌದು	ಇಲ್ಲ
	ಬಿ) ಹೌದಾದರೆ, ಯಾವ ಉದ್ಯೋಗದಲ್ಲ ನಿರತರಾಗಿದ್ದೀರಿ?		
	ಸಿ) ಈವರೆಗೂ ಆ ಉದ್ಯೋಗದಲ್ಲ ಮುಂದುವರಿಯುತ್ತಿದ್ದೀರಾ?	ಹೌದು	ಇಲ್ಲ
	ಡಿ) ಆ ಉದ್ಯೋಗದಲ್ಲ ಇಲ್ಲದಿದ್ದರೆ, ನೀವು ಹಿಂತಿರುಗಿ ಬರಲು ಕಾರಣವೇನು?		
೧೪	ಎ) ನೀವು ಜಿಯರ್, ವೈನ್, ಸ್ಟಿರಿಂಗ್ ಅಥವಾ ಶೆರೆ ಮುಂತಾದ ಮದ್ಯಪಾನಗಳನ್ನು ಸೇವಿಸುತ್ತಿದ್ದೀರಾ?	ಹೌದು	ಇಲ್ಲ
	ಬಿ) ಹಾದಾದರೆ, ಕಳೆದ ೧೨ ತಿಂಗಳಲ್ಲಿ ಪದೇ ಪದೇ ಎಷ್ಟು ಬಾರಿ ಯಾವುದಾದರೂ ಒಂದು ಮದ್ಯಪಾನಮಾಡಿದ್ದೀರಿ?		
	ಸಿ) ಸಾಮಾನ್ಯವಾಗಿ ನೀವು ಮದ್ಯಪಾನವನ್ನು ಎಲ್ಲೆಂದೆ ಪಡೆಯುತ್ತೀರಿ?		
೧೫	ಎ) ಸಾಮಾನ್ಯವಾಗಿ ನೀವು ಯಾವ ತರಹದ ಬಟ್ಟೆಯನ್ನು ಧರಿಸುತ್ತೀರಿ?		
	ಬಿ) ಆರೋಗ್ಯ ಕೇಂದ್ರಕ್ಕೆ ಹೋಗುವಾಗ ಯಾವ ಬಟ್ಟೆಯನ್ನು ಧರಿಸುತ್ತೀರಿ?		

Item ೧೬.೪ ೧. ಕೆಲಸ / ಉದ್ಯೋಗ- ಸಂಘಟಿತ, ೨. ಉದ್ಯೋಗ / ಉದ್ಯೋಗ- ಅಸಂಘಟಿತ, ೩. ವ್ಯವಹಾರ, ೪. ಇತರ

Item ೧೭.೪ ೧. ದಿನ, ೨. ವಾರಕ್ಕೆ ೫-೬ ದಿನಗಳು, ೩. ವಾರಕ್ಕೆ ೧-೪ ದಿನಗಳು, ೪. ತಿಂಗಳಿಗೆ ೧-೩ ದಿನಗಳು, ೫. ತಿಂಗಳಿಗಿಂತ ಕಡಿಮೆ

Item ೧೮.೪: ೧. ಗ್ರಾಮ ಅಂಗಡಿಯಲ್ಲಿ, ೨. ಪರವಾನಗಿ ಪಡೆದ ಮದ್ಯದ ಅಂಗಡಿ, ೩. ಸ್ಥಳೀಯವಾಗಿ ತಯಾರಿಸಲಾಗುತ್ತದೆ, ೪. ಇತರರು

Item ೧೯.೪ ೩ ೪ ೧. ಧೋತಿ / ಪ್ಯಾಂಚ್, ೨. ಪಂತ್ / ಶರ್ಟ್, ೩. ಸಾರಿ, ೪. ಚುರಿಡಾರ್ಸ್, ೫. ಲಮಾನಿಯ ಮಹಿಳೆಯರ ಉಡುಪು

ಭಾಗ-೩. (ಅನಾರೋಗ್ಯದ ಕಾಳಜಿ)

ಮುಂದಿನ ಪ್ರಶ್ನೆಗಳು ನಿಮ್ಮ ಆರೋಗ್ಯ, ಅನಾರೋಗ್ಯದ ಕಾಳಜಿ ಹಾಗೂ ಆರೋಗ್ಯ ಕಾಳಜಿ ವಹಿಸುವವರೊಂದಿಗಿರುವ ಅನುಭವ
ಭಾಗ-೩.೨ (ತೀವ್ರ ತರಹದ ಅನಾರೋಗ್ಯ)

೨೦ಎ	ಕಳೆದ ೯೦ ದಿನಗಳು ನಿಮಗೆ ಉಂಟಾದ ಅನಾರೋಗ್ಯದ ಬಗ್ಗೆ ಕೆಲವು ಪ್ರಶ್ನೆಗಳನ್ನು ಕೇಳುತ್ತೇನೆ (ಕಳೆದ ೯೦ ದಿನಗಳಲ್ಲಿ ಉಂಟಾದ ಅನಾರೋಗ್ಯಗಳ ಪಟ್ಟಿ ಹಾಗೂ ಇತ್ತೀಚಿನ ತೀವ್ರತರಹದ ಅನಾರೋಗ್ಯದ ಬಗ್ಗೆ ಪ್ರಶ್ನೆಗಳನ್ನು ಕೇಳುವುದು)			
	ಎ) ನೀವು ಅನುಭವಿಸುತ್ತಿರುವ ರೋಗದ ಲಕ್ಷಣಗಳನ್ನು ತಿಳಿಸಬಲ್ಲರಾ?			
	ಅನಾರೋಗ್ಯ ೧ (ಸಂಕೇತ) ಕೋಡ್			
	ಅನಾರೋಗ್ಯ ೨ (ಸಂಕೇತ) ಕೋಡ್			
	ಅನಾರೋಗ್ಯ ೩ (ಸಂಕೇತ) ಕೋಡ್			
	ಅನಾರೋಗ್ಯ ೪ (ಸಂಕೇತ) ಕೋಡ್			
	ಅನಾರೋಗ್ಯ ೫ (ಸಂಕೇತ) ಕೋಡ್			

(೨೦ಎ. ಯಲ್ಲಿ ತಿಳಿಸಲಾದ ಪ್ರತಿ ಅನಾರೋಗ್ಯಕ್ಕೆ ೨೧ಎ ಯ ಪ್ರಶ್ನೆಗಳನ್ನು ಪುನರಾವರ್ತಿಸಿರಿ)

೨೧ಎ	ಎ) ಎಷ್ಟು ಸಮಯದಿಂದ ಈ () ರೋಗದಿಂದ ನರಳುತ್ತೀರಿ?				
	ಬಿ) ಈ ಅನಾರೋಗ್ಯಕ್ಕಾಗಿ ಆರೋಗ್ಯ ಕೇಂದ್ರಕ್ಕೆ ಭೇಟಿ ನೀಡಿದ್ದೀರಾ?	ಹೌದು	ಇಲ್ಲ	ಇಲ್ಲ	ಇಲ್ಲ
	ಸಿ) ಇಲ್ಲವಾದರೆ, ಆರೋಗ್ಯ ಕೇಂದ್ರಕ್ಕೆ ಭೇಟಿ ಕೊಡದಿರಲು ಕಾರಣ.				
	ಡಿ) ಈ ಅನಾರೋಗ್ಯಕ್ಕೆ ಬೇರೆ ಯಾವ ಕಡೆಗಳಲ್ಲಿ ಚಿಕಿತ್ಸೆ ಪಡೆದಿರುತ್ತೀರಿ (ಮೊದಲನಿಂದ ಕೊನೆಯವರೆಗೆ ಪಡೆದ ಚಿಕಿತ್ಸಾ ಸೌಲಭ್ಯದ ಪಟ್ಟಿ)				

Item ೨೧ ಡಿ: 1. ಎಚ್‌ಎಸ್‌ಸಿ / ಎಎನ್‌ಎಂ / ಆಶಾ / ಎಡಬ್ಲ್ಯೂ ಡಬ್ಲ್ಯೂ 2. ಪಿ.ಹೆಚ್.ಸಿ / ಡಿಸ್ಪೆನ್ಸರಿ / ಸಿಎಚ್‌ಸಿ / ಮೆಡಿಕಲ್ ವೈದ್ಯಕೀಯ ಘಟಕ, 3. ಸಾರ್ವಜನಿಕ ಆಸ್ಪತ್ರೆ, 4. ಖಾಸಗಿ ವೈದ್ಯರು / ಕ್ಲಿನಿಕ್, 5. ಖಾಸಗಿ ಆಸ್ಪತ್ರೆ, 6. ಆರ್‌ಎಂ‌ಪಿ, 7. ಬಿಎಂ‌ಎನ್ / ಬಿಎಚ್‌ಎಂಎನ್ / ಬಿಎಚ್‌ಎಂಎನ್, 8. ಮನೆಯಲ್ಲಿ ಉಳಿಯುವುದು, 9. ಸ್ವಯಂ ಚಿಕಿತ್ಸೆ, 10. ಗ್ರಾಮಕ್ಕೆ ಭೇಟಿ ನೀಡುವ ಆರ್‌ಎಂ‌ಪಿ ತೋರಿಸಲಾಗಿದೆ, 11. ಇತರರು

೨೨ಎ	ಆರೋಗ್ಯ ಸೌಕರ್ಯಕ್ಕೆ ಹೋಗಲು ಸಾರಿಗೆ ವ್ಯವಸ್ಥೆ ನೀವು ಇತ್ತೀಚೆಗೆ ಅನಾರೋಗ್ಯಕ್ಕೆ ಆರೋಗ್ಯ ಸೌಕರ್ಯ ಕೇಂದ್ರಕ್ಕೆ ಭೇಟಿ ನೀಡಲು ಉಪಯೋಗಿಸಿದ ಸಾರಿಗೆ ವ್ಯವಸ್ಥೆಯ ಬಗ್ಗೆ ಕೆಲವು ಪ್ರಶ್ನೆಗಳನ್ನು ಕೇಳುತ್ತೇನೆ.			
	ಎ) ನೀವು ಆರೋಗ್ಯ ಸೌಕರ್ಯ ಕೇಂದ್ರಕ್ಕೆ ಹೋಗಿರುತ್ತೀರಿ?			

	ಬಿ)ಬಸ್/ಅಟೋ) ಆರೋಗ್ಯ ಸೌಕರ್ಯ ಕೇಂದ್ರವನ್ನು ನೀವು ಯಾವ ಸಾರಿಗೆಯಿಂದ ತಲುಪಿರುವಿರಿ ಎಂದು ತಿಳಿಸಿ.				
	ಬಿಗ) ಮನೆಯಿಂದ ಬಸ್ ನಿಲ್ದಾಣದವರೆಗೆ ತೆಗೆದುಕೊಳ್ಳುವ ವೇಳೆ.				
	ಬಿಒ) ನೇರ ಸಾರಿಗೆ ವ್ಯವಸ್ಥೆಯೇ ಅಥವಾ ಮಧ್ಯೆ ದಾರಿಯಲ್ಲಿ ಬದಲಾವಣೆ ಇದೆಯೇ?				
	ಬಿಒ) ಮನೆಯಿಂದ ಆರೋಗ್ಯ ಕೇಂದ್ರಕ್ಕೆ ತಲುಪುವ ಕ್ರಮವನ್ನು ತಿಳಿಸುವಿರಾ?				
	ಬಿಒ) ಒಟ್ಟಿನಲ್ಲಿ ಆರೋಗ್ಯ ಸೌಕರ್ಯಕ್ಕೆ ತಲುಪಲು ಎಷ್ಟು ಸಮಯ ತೆಗೆದುಕೊಳ್ಳುತ್ತೀರಿ.				
	ಬಿಒ) ನೀವು ಹಿಂದಿರುಗಿ ಅದೇ ದಾರಿಯಲ್ಲಿ ಬರುತ್ತೀರಾ?	ಹೌದು	ಇಲ್ಲ	ಹೌದು	ಇಲ್ಲ
	ಬಿಒ) ಇಲ್ಲವಾದರೆ ನೀವು ಯಾವ ಕ್ರಮವನ್ನು ತೆಗೆದುಕೊಳ್ಳುತ್ತೀರಿ ಎಂದು ತಿಳಿಸಿ.				
೨೩.ಎ	ಎ) ಈ ಸೌಕರ್ಯವನ್ನು ಉಪಯೋಗಿಸಲು ಕಾರಣವೇನು?				
	ಬಿ) ಸೌಕರ್ಯ ಪಡೆದುಕೊಳ್ಳಲು ನೀವು ಹೋದ ವೇಳೆಯಲ್ಲಿ ಎಷ್ಟು ಸಮಯ ಕಾಯಬೇಕಾಗುತ್ತದೆ.				

Item ೨೨.ಎ: 1. ಬಸ್, 2. ದ್ವಿಚಕ್ರ ವಾಹನ, 3. ಆಟೋ, 4. ಕಾರು, 5. ಇತರೆ
Item ೨೨.ಬಿ: 1. ನೇರ ಸಾರಿಗೆ, 2. ದಾರಿಯಲ್ಲಿ ಬದಲಾವಣೆಗಳು
Item ೨೨.ಬಿಒ & ಬಿಒ: 1. ಮನೆ, 2. ಬಸ್ ನಿಲ್ದಾಣ, 3. ಬಸ್, 4. ಆಟೋ, 5. ವಾಹಿಂಗ್, 6. ಬೈಕ್ / ಬೈಸಿಕಲ್ ಮೇಲೆ ಎತ್ತುವ

೨೪.ಎ	ವೆಚ್ಚ				
	ನೀವು ಹಾಗೂ ನಿಮ್ಮ ಜೊತೆಗಾರರು ದವಾಖಾನೆಯನ್ನು ಸಂದರ್ಶಿಸಿದಾಗ ಅದ ಖರ್ಚಿನ ಬಗ್ಗೆ ಕೆಲವು ಪ್ರಶ್ನೆಗಳನ್ನು ಕೇಳುತ್ತೇನೆ.				
	ಎ) ವೈದ್ಯಕೆ ಶುಲ್ಕ				
	ಬಿ) ನೋಂದಣಿಯ ಶುಲ್ಕ, ಇದ್ದರೆ				
	ಸಿ) ರೋಗಲಕ್ಷಣ ಪರೀಕ್ಷೆ, ಇದ್ದರೆ				
	ಡಿ) ಸಾರಿಗೆಯ ಖರ್ಚು				
	ಇ) ಚಿಕಿತ್ಸೆಯ ಖರ್ಚು				
	ಎಫ್) ಲಂಚ ಅಥವಾ ಖುಷಿಗೋಸ್ಕರ				
	ಜಿ) ಊಟದ ಖರ್ಚು				
	ಹೆಚ್) ಮೇಲೆ ಕಾಣಿಸಿದ ಖರ್ಚುಗಳನ್ನು ನೀವು ಹೇಗೆ ಹೊಂದಿಸುತ್ತೀರಿ?				

Item ೨೪.ಎ.ಹೆಚ್ ಂ) ಮನೆಯ ಆದಾಯ/ಉಳಿತಾಯ, ೨) ಸಾಲ, ೩) ಸ್ನೇಹಿತರು/ಕುಟುಂಬದವರಿಂದ ಕೊಡುಗೆ, ೪) ದಿನಗೂಲಿ, ೫) ಸರ್ಕಾರದ ಪಿಂಚಣಿ, ೬) ಇತರೆ ಮೂಲಗಳು

೨೫ಎ	ಎ) ಒದಗಿಸುವವರು ಚುಚ್ಚುಮದ್ದು ಹಾಗೂ ಒಗಿ ಬಾಟಲಗಳನ್ನು ತೆಗೆದುಕೊಳ್ಳಲು ಚೇತು ಬರೆದಿದ್ದಾರೋ?			
	ಬಿ) ಔಷಧಿ ಕೊಡದಿದ್ದರೆ, ಯಾಕೆ?			
	ಸಿ) ನೀವು ಆ ಬಗ್ಗೆ ವಿಚಾರಿಸಿದ್ದೀರಾ?			
	ಡಿ) ನಿಮಗೆ ಚುಚ್ಚುಮದ್ದು ಅಥವಾ ಒಗಿ ಬಾಟಲಗಳನ್ನು ಬರೆದಿದ್ದರೆ, ಯಾರು ತೆಗೆದುಕೊಳ್ಳಲು ತಿಳಿಸಿದರು.			
	ಇ) ಚುಚ್ಚುಮದ್ದು ಎಲ್ಲಗೆ ಕೊಡಲಾಯಿತು? (ಶರೀರದ ಭಾಗ)			
	ಎಫ್) ಎಷ್ಟು ಚುಚ್ಚುಮದ್ದುಗಳನ್ನು ಕೊಡಲಾಯಿತು.			

Item ೨೫ ಎ : 1. ಯಾವುದೂ, 2. ಇಂಜೆಕ್ಷನ್, 3. IV ಬಾಟಲ್, 4. ಎರಡೂ
Item ೨೫ ಡಿ: 1. ಡಾಕ್ಟರ್, 2. ನರ್ಸ್, 3. ಇತರರು
Item ೨೫ ಇ: 1. ವೈದ್ಯಗಳು, 2. ಮೇಲ್ವಿಚಾರಣೆ ತೋಳು, 3. ಇತರ ಸೈಟ್ _____

೨೬ಎ	ಆರೋಗ್ಯ ಕಾಳಜಿ ಮಾಡುವವರ ನಡವಳಿಕೆ: ಎ) ಆರೋಗ್ಯ ಕಾಳಜಿ ಮಾಡುವ (ಅವನು/ಅವಳು) ಬೇರೆಯವರೊಂದಿಗೆ ತೆಗೆದುಕೊಳ್ಳುವ ಸಾಕಷ್ಟು ಸಮಯ ನಿಮ್ಮೊಂದಿಗೂ ಸಹ ತೆಗೆದುಕೊಂಡರೋ?	ಹೌದು ಇಲ್ಲ ಗೊತ್ತಿಲ್ಲ	ಹೌದು ಇಲ್ಲ ಗೊತ್ತಿಲ್ಲ	ಹೌದು ಇಲ್ಲ ಗೊತ್ತಿಲ್ಲ
	ಬಿ) ಆರೋಗ್ಯ ತಜ್ಞನೊಂದಿಗೆ ಸಮಯದಲ್ಲ ಆರೋಗ್ಯ ಕಾಳಜಿ ಮಾಡುವವರು ನಿಮ್ಮನ್ನು ಮುಟ್ಟಲು ಹಿಂಜರಿಯುತ್ತಾರೋ?	ಹೌದು ಇಲ್ಲ ಗೊತ್ತಿಲ್ಲ	ಹೌದು ಇಲ್ಲ ಗೊತ್ತಿಲ್ಲ	ಹೌದು ಇಲ್ಲ ಗೊತ್ತಿಲ್ಲ
	ಸಿ) ಆರೋಗ್ಯ ಕಾಳಜಿ ಮಾಡುವವರು ಬೇರೆಯವರಿಗೆ ತಿಳಿಸಿದ ಹಾಗೆ ನಿಮಗೂ ಸಹ ನಿಮ್ಮ ಆರೋಗ್ಯದ ಪರಿಸ್ಥಿತಿಯ ಬಗ್ಗೆ ಸಾಕಷ್ಟು ಮಾಹಿತಿಯನ್ನು (ಅವನು/ಅವಳು) ಕೊಟ್ಟಿರುತ್ತಾರೋ?	ಹೌದು ಇಲ್ಲ ಗೊತ್ತಿಲ್ಲ	ಹೌದು ಇಲ್ಲ ಗೊತ್ತಿಲ್ಲ	ಹೌದು ಇಲ್ಲ ಗೊತ್ತಿಲ್ಲ
	ಡಿ) ಆರೋಗ್ಯ ಕಾಳಜಿ ಮಾಡುವವರು ನಿಮ್ಮೊಂದಿಗೆ ಒರಟಾಗಿ ಮಾತಾಡಿದರೋ?	ಹೌದು ಇಲ್ಲ ಗೊತ್ತಿಲ್ಲ	ಹೌದು ಇಲ್ಲ ಗೊತ್ತಿಲ್ಲ	ಹೌದು ಇಲ್ಲ ಗೊತ್ತಿಲ್ಲ
	ಇ) ಆರೋಗ್ಯ ಕಾಳಜಿ ಮಾಡುವವರು ನಿಮ್ಮೊಂದಿಗೆ ಮಾತಾನಾಡುವಾಗ ಹೀನಾಯವಾದ ಮಾತುಗಳನ್ನು ಆಡಿದರೋ?	ಹೌದು ಇಲ್ಲ ಗೊತ್ತಿಲ್ಲ	ಹೌದು ಇಲ್ಲ ಗೊತ್ತಿಲ್ಲ	ಹೌದು ಇಲ್ಲ ಗೊತ್ತಿಲ್ಲ
	ಎಫ್) ನೀವು ಸಲಹೆಗಾಗಿ ಕಾಯುತ್ತಿರುವಾಗ, ನಿಮ್ಮ ಸರತಿ ಬಂದಾಗ, ನಿಮ್ಮನ್ನು ಒತ್ತಾಯದಿಂದ ನಿಲ್ಲಿಸಿ ಬೇರೆಯವರನ್ನು ಚಿಟ್ಟಿರುತ್ತಾರಾ?	ಹೌದು ಇಲ್ಲ ಗೊತ್ತಿಲ್ಲ	ಹೌದು ಇಲ್ಲ ಗೊತ್ತಿಲ್ಲ	ಹೌದು ಇಲ್ಲ ಗೊತ್ತಿಲ್ಲ
	ಜಿ) ನಿಮಗೆ ಬರೆದುಕೊಟ್ಟ ಔಷಧಿಯನ್ನು ತೆಗೆದುಕೊಳ್ಳಲು ಹೋದಾಗ ಇತರರಿಗಿಂತ ಜಾಸ್ತಿ ಸಮಯವನ್ನು ತೆಗೆದುಕೊಂಡರು ಎಂದು	ಹೌದು ಇಲ್ಲ ಗೊತ್ತಿಲ್ಲ	ಹೌದು ಇಲ್ಲ ಗೊತ್ತಿಲ್ಲ	ಹೌದು ಇಲ್ಲ ಗೊತ್ತಿಲ್ಲ

	ಅನಿಸಿದೆಯೇ?			
	ಹೆಚ್) ನೀವು ಚುಚ್ಚುಮದ್ದು ಅಥವಾ ಪಗಿ ಬಾಟಲಗಳನ್ನು ತೆಗೆದುಕೊಳ್ಳಲು ಹೋದಾಗ ಬೀರಿಯವರಿಗಿಂತ ಜಾಸ್ತಿ ಸಮಯವನ್ನು ತೆಗೆದುಕೊಂಡರು ಎಂದು ಅನಿಸಿದೆಯೇ?	ಹೌದು ಇಲ್ಲ ಗೊತ್ತಿಲ್ಲ	ಹೌದು ಇಲ್ಲ ಗೊತ್ತಿಲ್ಲ	ಹೌದು ಇಲ್ಲ ಗೊತ್ತಿಲ್ಲ
	ಐ) ಇನ್ನೊಮ್ಮೆ ಅಸ್ವಸ್ಥರಾದಾಗ ಅದೇ ಆರೋಗ್ಯ ಕಾಳಜಿ ಮಾಡುವವರ ಬಳಿ ಹೋಗುವಿರೋ?	ಹೌದು ಇಲ್ಲ ಗೊತ್ತಿಲ್ಲ	ಹೌದು ಇಲ್ಲ ಗೊತ್ತಿಲ್ಲ	ಹೌದು ಇಲ್ಲ ಗೊತ್ತಿಲ್ಲ
	ಜೆ) ಮೇಲಿನ ಪ್ರಶ್ನೆಗೆ ಇಲ್ಲ ಎಂದಾದರೆ ಯಾಕೆ?			
೨೭ಎ	ನೀವು ಖಾಸಗಿ ಆಸ್ಪತ್ರೆ ಅಥವಾ ಸರಿಕಾರಿ ಆಸ್ಪತ್ರೆಗೆ ಯಾಕೆ ಹೋಗಿಲ್ಲ?			

Item ೨೭ಎ: ೧. ದೀರ್ಘ ಕಾಯುವ ಸಮಯ, ೨. ಹೆಚ್ಚಿನ ವೆಚ್ಚ, ೩. ತುಂಬಾ, ೪. ಪೂರೈಕೆದಾರರು ಅಸಭ್ಯರಾಗಿದ್ದಾರೆ, ೫. ವೈದ್ಯರಿಗೆ ಹೆಚ್ಚು ಸೊಕ್ಕು, ೬. ಸರಿಯಾದ ಚಿಕಿತ್ಸೆಯನ್ನು ಪಡೆಯುವುದು, ೭. ಇತರರು
.....

ವಿಭಾಗ ೨ ಬಿ (ದೀರ್ಘಕಾಲದ ವ್ಯಾಧಿ)

೨೦ಬಿ	ಎ)				
	ಬಿ) ಅನಾರೋಗ್ಯಕ್ಕಾಗಿ ಪುನಃನಿರೀಕ್ಷಿಸಿದ ಅಥವಾ ಮುಂದುವರಿಸಲಾಗುವ ಚಿಕಿತ್ಸೆಯ ಬಗ್ಗೆ ತಿಳಿಸುವಿರಾ?				
	ಎ೧) ಅನಾರೋಗ್ಯ ೧ (ಸಂಕೇತ) ಕೋಡ್				
	ಎ೨) ಅನಾರೋಗ್ಯ ೨ (ಸಂಕೇತ) ಕೋಡ್				
	ಎ೩) ಅನಾರೋಗ್ಯ ೩ (ಸಂಕೇತ) ಕೋಡ್				
	ಎ೪) ಅನಾರೋಗ್ಯ ೪ (ಸಂಕೇತ) ಕೋಡ್				
	ಎ೫) ಅನಾರೋಗ್ಯ ೫ (ಸಂಕೇತ) ಕೋಡ್				
	ಸಿ) ನೀವು ರಕ್ತ ತಪಾಸಣೆ ಅಥವಾ ಬಿ.ಪಿ. ತಪಾಸಣೆಯನ್ನು ದಾಖಲಿಸಲು ಪುಸ್ತಕವನ್ನು ಇಟ್ಟಿರುತ್ತೀರಾ?	ಹೌದು	ಇಲ್ಲ	ಹೌದು	ಇಲ್ಲ

(೨೦ಬಿ. ಯಲ್ಲಿ ತಿಳಿಸಲಾದ ಪ್ರತಿ ಅನಾರೋಗ್ಯಕ್ಕೆ ೨೧ಬಿ ಯ ಪ್ರಶ್ನೆಗಳನ್ನು ಪುನರಾವರ್ತಿಸಿರಿ)

೨೧ಬಿ	ಎ) ಎಷ್ಟು ಸಮಯದಿಂದ ಈ () ರೋಗದಿಂದ ನರಳುತ್ತೀರಿ?				
	ಬಿ) ಈ ಅನಾರೋಗ್ಯಕ್ಕಾಗಿ ಆರೋಗ್ಯ ಕೇಂದ್ರಕ್ಕೆ ಭೇಟಿ ನೀಡಿದ್ದೀರಾ?	ಹೌದು	ಇಲ್ಲ	ಹೌದು	ಇಲ್ಲ
	ಸಿ) ಇಲ್ಲವಾದರೆ, ಆರೋಗ್ಯ ಕೇಂದ್ರಕ್ಕೆ ಭೇಟಿ ಕೊಡದಿರಲು ಕಾರಣ.				
	ಡಿ) ಈ ಅನಾರೋಗ್ಯಕ್ಕೆ ಬೇರೆ ಯಾವ ಕಡೆಗಳಲ್ಲಿ ಚಿಕಿತ್ಸೆ ಪಡೆದಿರುತ್ತೀರಿ (ಮೊದಲನಿಂದ ಕೊನೆಯವರೆಗೆ ಪಡೆದ ಚಿಕಿತ್ಸಾ ಸೌಲಭ್ಯದ ಪಟ್ಟಿ)				

Item ೨೧ಬಿ ಡಿ: 1. ಎಚ್‌ಎಸ್‌ಸಿ / ಎಎನ್‌ಎಂ / ಆಶಾ / ಎಡಬ್ಲ್ಯೂಡಬ್ಲ್ಯೂ, 2. ಪಿ.ಹೆಚ್.ಸಿ / ಡಿಪ್ಲೆನರಿ / ಸಿಎಚ್‌ಸಿ / ಮೊಬೈಲ್ ವೈದ್ಯಕೀಯ ಘಟಕ, 3. ಸಾರ್ವಜನಿಕ ಆಸ್ಪತ್ರೆ, 4. ಖಾಸಗಿ ವೈದ್ಯರು / ಕ್ಲಿನಿಕ್, 5. ಖಾಸಗಿ ಆಸ್ಪತ್ರೆ, 6. ಆರ್‌ಎಂ‌ಪಿ, 7. ಬಿಎಂ‌ಎಸ್ / ಬಿಎಚ್‌ಎಂಎಸ್, 8. ಮನೆಯಲ್ಲಿ ಉಳಿಯುವುದು, 9. ಸ್ವಯಂ ಔಷಧಿ, 10. ಗ್ರಾಮಕ್ಕೆ ಭೇಟಿ ನೀಡುವ ಅರ್ಪಣೆಗೆ ತೋರಿಸಲಾಗಿದೆ, 11. ಇತರರು

೨೨ಬಿ	ಆರೋಗ್ಯ ಸೌಕರ್ಯಕ್ಕೆ ಹೋಗಲು ಸಾರಿಗೆ ವ್ಯವಸ್ಥೆ ನೀವು ಇತ್ತೀಚೆಗೆ ಅನಾರೋಗ್ಯಕ್ಕೆ ಆರೋಗ್ಯ ಸೌಕರ್ಯ ಕೇಂದ್ರಕ್ಕೆ ಭೇಟಿ ನೀಡಲು ಉಪಯೋಗಿಸಿದ ಸಾರಿಗೆ ವ್ಯವಸ್ಥೆಯ ಬಗ್ಗೆ ಕೆಲವು ಪ್ರಶ್ನೆಗಳನ್ನು ಕೇಳುತ್ತೇನೆ.				
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	ಎ) ನೀವು ಆರೋಗ್ಯ ಸೌಕರ್ಯ ಕೇಂದ್ರಕ್ಕೆ ಹೇಗೆ ಹೋಗಿರುತ್ತೀರಿ? ಬಿ)ಬಸ್/ಆಟೋ ಆರೋಗ್ಯ ಸೌಕರ್ಯ ಕೇಂದ್ರವನ್ನು ನೀವು ಯಾವ ಸಾರಿಗೆಯಿಂದ ತಲುಪಿರುವಿರಿ ಎಂದು ತಿಳಿಸಿ. ಐ) ಮನೆಯಿಂದ ಬಸ್ ನಿಲ್ದಾಣದವರೆಗೆ ತೆಗೆದುಕೊಳ್ಳುವ ವೇಳೆ. ಐಒ) ನೇರ ಸಾರಿಗೆ ವ್ಯವಸ್ಥೆಯೇ ಅಥವಾ ಮಧ್ಯೆ ದಾರಿಯಿಲ್ಲ ಬದಲಾವಣೆ ಇದೆಯೇ? ಐಓ) ಮನೆಯಿಂದ ಆರೋಗ್ಯ ಕೇಂದ್ರಕ್ಕೆ ತಲುಪುವ ಕ್ರಮವನ್ನು ತಿಳಿಸುವಿರಾ? ಐಏ) ಒಟ್ಟಿನಲ್ಲಿ ಆರೋಗ್ಯ ಸೌಕರ್ಯಕ್ಕೆ ತಲುಪಲು ಎಷ್ಟು ಸಮಯ ತೆಗೆದುಕೊಳ್ಳುತ್ತೀರಿ. ಐಞ) ನೀವು ಹಿಂದಿರುಗಿ ಅದೇ ದಾರಿಯಲ್ಲಿ ಬರುತ್ತೀರಾ? ಐಞಒ) ಇಲ್ಲವಾದರೆ ನೀವು ಯಾವ ಕ್ರಮವನ್ನು ತೆಗೆದುಕೊಳ್ಳುತ್ತೀರಿ ಎಂದು ತಿಳಿಸಿ.	ಇಲ್ಲ	ಹೌದು	ಇಲ್ಲ	ಹೌದು	ಇಲ್ಲ	ಹೌದು	ಇಲ್ಲ
೨೩.ಬಿ	ಎ) ಈ ಸೌಕರ್ಯವನ್ನು ಉಪಯೋಗಿಸಲು ಕಾರಣವೇನು? ಬಿ) ಸೌಕರ್ಯ ಪಡೆದುಕೊಳ್ಳಲು ನೀವು ಹೋದ ವೇಳೆಯಲ್ಲಿ ಎಷ್ಟು ಸಮಯ ಕಾಯಬೇಕಾಗುತ್ತದೆ.							

Item ೨೨.ಎ: 1. ಬಸ್, 2. ದ್ವಿಚಕ್ರ ವಾಹನ, 3. ಆಟೋ, 4. ಕಾರು, 5. ಇತರೆ
Item ೨೨.ಬಿ: 1. ನೇರ ಸಾರಿಗೆ, 2. ದಾರಿಯಲ್ಲಿ ಬದಲಾವಣೆಗಳು
Item ೨೨.ಬಿ. & ಐಞ: 1. ಮನೆ, 2. ಬಸ್ ನಿಲ್ದಾಣ, 3. ಬಸ್, 4. ಆಟೋ, 5. ವಾಹಿನ್, 6. ಬೈಕ್ / ಬೈಸಿಕಲ್ ಮೇಲೆ ಮತ್ತು

೨೪.ಬಿ	ವೆಚ್ಚ ನೀವು ಹಾಗೂ ನಿಮ್ಮ ಜೊತೆಗಾರರು ದವಾಖಾನೆಯನ್ನು ಸಂದರ್ಶಿಸಿದಾಗ ಅದ ಖರ್ಚಿನ ಬಗ್ಗೆ ಕೆಲವು ಪ್ರಶ್ನೆಗಳನ್ನು ಕೇಳುತ್ತೇನೆ. ಎ) ವೈದ್ಯಕರ ಶುಲ್ಕ ಬಿ) ನೋಂದಣಿಯ ಶುಲ್ಕ, ಇದ್ದರೆ ಸಿ) ರೋಗಲಕ್ಷಣ ಪರೀಕ್ಷೆ, ಇದ್ದರೆ ಡಿ) ಸಾರಿಗೆಯ ಖರ್ಚು ಇ) ಜೆಷ್ಠಿಯ ಖರ್ಚು ಎಫ್) ಲಂಚ ಅಥವಾ ಖುಷಿಗೋಸ್ಕರ ಜಿ) ಊಟದ ಖರ್ಚು ಹೆಚ್) ಮೇಲೆ ಕಾಣಿಸಿದ ಖರ್ಚುಗಳನ್ನು ನೀವು ಹೇಗೆ ಹೊಂದಿಸುತ್ತೀರಿ?							
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೨೪.ಬಿ.ಹೆಚ್) ೧) ಮನೆಯ ಆದಾಯ/ಉಳಿತಾಯ, ೨) ಸಾಲ, ೩) ಸ್ನೇಹಿತರು/ಕುಟುಂಬದವರಿಂದ ಕೊಡುಗೆ, ೪) ದಿನಗೂಲಿ, ೫) ಸರ್ಕಾರದ ಪಿಂಚಣಿ, ೬) ಇತರೆ ಮೂಲಗಳು

೨೫ಬ	ಎ) ಒದಗಿಸುವವರು ಚುಟ್ಟುಮದ್ದು ಹಾಗೂ ಏಗಿ ಬಾಟಲಗಳನ್ನು ತೆಗೆದುಕೊಳ್ಳಲು ಚೇಟ ಬರೆದಿದ್ದಾರೋ?			
	ಬಿ) ಔಷಧಿ ಕೊಡದಿದ್ದರೆ, ಯಾಕೆ?			
	ಸಿ) ನೀವು ಆ ಬಗ್ಗೆ ವಿಚಾರಿಸಿದ್ದೀರಾ?			
	ಡಿ) ನಿಮಗೆ ಚುಟ್ಟುಮದ್ದು ಅಥವಾ ಏಗಿ ಬಾಟಲಗಳನ್ನು ಬರೆದಿದ್ದರೆ, ಯಾರು ತೆಗೆದುಕೊಳ್ಳಲು ತಿಳಿಸಿದರು.			
	ಇ) ಚುಟ್ಟುಮದ್ದು ಎಲ್ಲಗೆ ಕೊಡಲಾಯಿತು? (ಶರೀರದ ಭಾಗ)			
	ಎಫ್) ಎಷ್ಟು ಚುಟ್ಟುಮದ್ದುಗಳನ್ನು ಕೊಡಲಾಯಿತು.			

Item ೨೫ಬ ಎ : 1. ಯಾವುದೂ, 2. ಇಂಜೆಕ್ಷನ್, 3. IV ಬಾಟಲ್, 4. ಎರಡೂ
Item ೨೫ಬ ಡಿ: 1. ಡಾಕ್ಟರ್, 2. ನರ್ಸ್, 3. ಇತರರು
Item ೨೫ಬ ಇ: 1. ವೈಷ್ಯಗಳು, 2. ಮೇಲ್ವಿಚಾರಣೆ ತೋಳು, 3. ಇತರ ಸೈಟ್ _____

೨೬ಬ	ಆರೋಗ್ಯ ಕಾಳಜಿ ಮಾಡುವವರ ನಡವಳಿಕೆ.			
	ಎ) ಆರೋಗ್ಯ ಕಾಳಜಿ ಮಾಡುವ (ಅವನು/ಅವಳು) ಬೇರೆಯವರೊಂದಿಗೆ ತೆಗೆದುಕೊಳ್ಳುವ ಸಾಕಷ್ಟು ಸಮಯ ನಿಮ್ಮೊಂದಿಗೂ ಸಹ ತೆಗೆದುಕೊಂಡರೋ?	ಹೌದು ಇಲ್ಲ ಗೊತ್ತಿಲ್ಲ	ಹೌದು ಇಲ್ಲ ಗೊತ್ತಿಲ್ಲ	ಹೌದು ಇಲ್ಲ ಗೊತ್ತಿಲ್ಲ
	ಬಿ) ಆರೋಗ್ಯ ತಜ್ಞರೊಡನೆ ಸಮಯದಲ್ಲ ಆರೋಗ್ಯ ಕಾಳಜಿ ಮಾಡುವವರು ನಿಮ್ಮನ್ನು ಮುಟ್ಟಲು ಹಿಂಜರಿಯುತ್ತಾರೋ?	ಹೌದು ಇಲ್ಲ ಗೊತ್ತಿಲ್ಲ	ಹೌದು ಇಲ್ಲ ಗೊತ್ತಿಲ್ಲ	ಹೌದು ಇಲ್ಲ ಗೊತ್ತಿಲ್ಲ
	ಸಿ) ಆರೋಗ್ಯ ಕಾಳಜಿ ಮಾಡುವವರು ಬೇರೆಯವರಿಗೆ ತಿಳಿಸಿದ ಹಾಗೆ ನಿಮಗೂ ಸಹ ನಿಮ್ಮ ಆರೋಗ್ಯದ ಪರಿಸ್ಥಿತಿಯ ಬಗ್ಗೆ ಸಾಕಷ್ಟು ಮಾಹಿತಿಯನ್ನು (ಅವನು/ಅವಳು) ಕೊಟ್ಟಿರುತ್ತಾರೋ?	ಹೌದು ಇಲ್ಲ ಗೊತ್ತಿಲ್ಲ	ಹೌದು ಇಲ್ಲ ಗೊತ್ತಿಲ್ಲ	ಹೌದು ಇಲ್ಲ ಗೊತ್ತಿಲ್ಲ
	ಡಿ) ಆರೋಗ್ಯ ಕಾಳಜಿ ಮಾಡುವವರು ನಿಮ್ಮೊಂದಿಗೆ ಒರಟಾಗಿ ಮಾತಾಡಿದರೋ?	ಹೌದು ಇಲ್ಲ ಗೊತ್ತಿಲ್ಲ	ಹೌದು ಇಲ್ಲ ಗೊತ್ತಿಲ್ಲ	ಹೌದು ಇಲ್ಲ ಗೊತ್ತಿಲ್ಲ
	ಇ) ಆರೋಗ್ಯ ಕಾಳಜಿ ಮಾಡುವವರು ನಿಮ್ಮೊಂದಿಗೆ ಮಾತಾನಾಡುವಾಗ ಹೀನಾಯವಾದ ಮಾತುಗಳನ್ನು ಆಡಿದರೋ?	ಹೌದು ಇಲ್ಲ ಗೊತ್ತಿಲ್ಲ	ಹೌದು ಇಲ್ಲ ಗೊತ್ತಿಲ್ಲ	ಹೌದು ಇಲ್ಲ ಗೊತ್ತಿಲ್ಲ
	ಎಫ್) ನೀವು ಸಲಹೆಗಾಗಿ ಕಾಯುತ್ತಿರುವಾಗ, ನಿಮ್ಮ ಸರತಿ ಬಂದಾಗ, ನಿಮ್ಮನ್ನು ಒತ್ತಾಯದಿಂದ ನಿಲ್ಲಿಸಿ ಬೇರೆಯವರನ್ನು ಜಿಜ್ಞಾಸಿಸುತ್ತಾರಾ?	ಹೌದು ಇಲ್ಲ ಗೊತ್ತಿಲ್ಲ	ಹೌದು ಇಲ್ಲ ಗೊತ್ತಿಲ್ಲ	ಹೌದು ಇಲ್ಲ ಗೊತ್ತಿಲ್ಲ
	ಜಿ) ನಿಮಗೆ ಬರೆದುಕೊಟ್ಟ ಔಷಧಿಯನ್ನು ತೆಗೆದುಕೊಳ್ಳಲು ಹೋದಾಗ	ಹೌದು ಇಲ್ಲ	ಹೌದು ಇಲ್ಲ	ಹೌದು ಇಲ್ಲ

	ಇತರರಿಗಿಂತ ಜಾಸ್ತಿ ಸಮಯವನ್ನು ತೆಗೆದುಕೊಂಡರು ಎಂದು ಅನಿಸಿದೆಯೋ?	ಗೊತ್ತಿಲ್ಲ	ಗೊತ್ತಿಲ್ಲ	ಗೊತ್ತಿಲ್ಲ
	ಹೆಚ್) ನೀವು ಚುಚ್ಚುಮದ್ದು ಅಥವಾ ಪಗಿ ಬಾಟಲಗಳನ್ನು ತೆಗೆದುಕೊಳ್ಳಲು ಹೋದಾಗ ಬೇರೆಯವರಿಗಿಂತ ಜಾಸ್ತಿ ಸಮಯವನ್ನು ತೆಗೆದುಕೊಂಡರು ಎಂದು ಅನಿಸಿದೆಯೋ?	ಹೌದು ಇಲ್ಲ ಗೊತ್ತಿಲ್ಲ	ಹೌದು ಇಲ್ಲ ಗೊತ್ತಿಲ್ಲ	ಹೌದು ಇಲ್ಲ ಗೊತ್ತಿಲ್ಲ
	ಐ) ಇನ್ನೊಮ್ಮೆ ಅಸ್ವಸ್ಥರಾದಾಗ ಅದೇ ಆರೋಗ್ಯ ಕಾಳಜಿ ಮಾಡುವವರ ಬಳಿ ಹೋಗುವಿರೋ?	ಹೌದು ಇಲ್ಲ ಗೊತ್ತಿಲ್ಲ	ಹೌದು ಇಲ್ಲ ಗೊತ್ತಿಲ್ಲ	ಹೌದು ಇಲ್ಲ ಗೊತ್ತಿಲ್ಲ
	ಜೆ) ಮೇಲಿನ ಪ್ರಶ್ನೆಗೆ ಇಲ್ಲ ಎಂದಾದರೆ ಯಾಕೆ?			
೨೭ಬ	ನೀವು ಖಾಸಗಿ ಆಸ್ಪತ್ರೆ ಅಥವಾ ಸರ್ಕಾರಿ ಆಸ್ಪತ್ರೆಗೆ ಯಾಕೆ ಹೋಗಿಲ್ಲ?			

Item ೨೭ಬ: ೧. ದೀರ್ಘ ಕಾಯುವ ಸಮಯ, ೨. ಹೆಚ್ಚಿನ ವೆಚ್ಚ, ೩. ತುಂಬಾ, ೪. ಪೂರೈಕೆದಾರರು ಅಸಭ್ಯರಾಗಿದ್ದಾರೆ, ೫. ವೈದ್ಯರಿಗೆ ಹೆಚ್ಚು ಸೊಕ್ಕು, ೬. ಸರಿಯಾದ ಚಿಕಿತ್ಸೆಯನ್ನು ಪಡೆಯುವುದು, ೭. ಇತರರು
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A27 Index construction for *tanda* and village

Variable name	Variable options	Variable scores	Computation & Justification
Roads	Type of roads		The roads were graded in terms of the usability and maintenance. Roads which are paved and maintained are given the highest score and the lowest for dirt or mud road. A single settlement could have different types of roads, so the score was averaged.
	Paved roads	5	
	Paved roads but not maintained	3	
	Gravel roads	2	
	Dirt/mud road	1	
	Paved with concrete	4	
Drains	Type of drains		Drains was given high score if they were covered and lowest score if there were no drains. Since a settlement could have different type of drains the scores was averaged.
	Katcha/Open	2	
	Pucca/covered	3	
	No drainage	1	
Source of water supply	Source of water		Source of water to settlement was graded on the basis of the perceived safety. Borewell supply is groundwater from within the settlement and is given the highest score. Government supply or pipeline even though is treated and supplied is often coloured and has odour and is given a score lower then borewell. The lowest score is for well.
	Borewell	3	
	Government pipeline	2	
	Well	1	
Amenities	PDS	1	Each amenity was scored 1 for its presence and 0 for its absence. This was then summed across multiple amenities for the final score.
	Veterinary centre	1	
	Community hall	1	
	Milk dairy	1	
Bus score	Bus stop		Highest score was assigned if there was a bus stop in the settlement and also if the frequency of bus service was high. In order to capture the worth of the bus stop it was multiplied with the frequency of services for the final score
	Yes	3	
	Yes, only hand wave	2	
	No	1	
	Frequency of services		

	Varies	0.5	
	1 time a day	1	
	2-6 times in a day	2	
	7 and more times in a day	3	
Bank score			The distance to the bank from the settlement was taken as the score for bank. If the bank was located in the settlement, then a score of 0 was assigned to it.
Post office score			Distance to the post office was taken as the score for post office. If the post office was located in the settlement, then a score of 0 was assigned to it.
Allied health score	Anganwadi	1	Anganwadi, ASHA and Community RO contributes directly and indirectly to the health in the settlements. Each were assigned a score of 1 if present in the settlement and summed for the total score.
	ASHA	1	
	Community RO	1	
School score	Primary school (1-5)	1	Each level of educational institution in the settlement was given the same score and this was summed to reflect the presence of multiple levels of schools and colleges.
	Middle school (6-8)	1	
	Secondary school (9-10)	1	
	Vocational/Technical institute	1	
	PUC (11-12)	1	
	College	1	
Public health score	Subcentre	1	Each public health institution was scored 1 for their presence and summed for the total score.
	PHC	1	
	Ayurvedic dispensary	1	
Private facility score	Pharmacy	1	Each private health institution was scored 1 for their presence and summed for the total score.
	BAMS	1	
	RMP	1	

A28 Correlation matrix between infrastructural variables across *tandas* and villages

Correlation matrix between infrastructural variables across *tandas* and villages

Variables	Road score	Drain score	Water score	Amenities score	Bus score	Bank score	Post office score	School score	Health facility score
Tanda									
Road score	1.000								
Drain score	0.139	1.000							
Water score	0.151	0.085	1.000						
Amenities score	0.210	-0.087	-0.108	1.000					
Bus score	0.455**	0.146	-0.180	0.569***	1.000				
Bank score	-0.265	-0.150	-0.071	0.031	-0.099	1.000			
Post office score	-0.329*	-0.016	0.034	-0.108	-0.310*	0.553***	1.000		
School score	0.125	-0.055	0.000	0.487***	0.272	-0.108	-0.251	1.000	
Health facility score	0.278	0.027	0.047	0.246	0.163	-0.196	-0.196	0.392**	1.000
Village									
Road score	1.000								
Drain score	0.090	1.000							
Water score	0.082	-0.120	1.000						
Amenities score	0.012	0.183	0.049	1.000					
Bus score	0.026	0.385**	-0.106	0.218	1.000				
Bank score	-0.234	-0.076	-0.131	-0.257	-0.094	1.000			
Post office score	-0.389**	-0.438**	0.041	-0.221	-0.339*	0.596***	1.000		
School score	0.246	0.160	0.146	0.667***	0.368*	-0.447**	-0.474**	1.000	
Health facility score	0.331*	0.322*	0.147	0.461**	0.285	-0.628***	-0.500***	0.478**	1.000

A29 Construction of Indices for SEM

Variable name	Variable options	Variable scores	Formula	Computation & Justification
Structural discrimination				
Migration score	Household with migrant (m_i)		Value of migration to the household = 0 if $m_i = 0$ if $m_i = 1$ then $\sum_{i=1}^n \left(\frac{n_i}{\text{No. of reasons}} \right) P_i$	Migration is a means of sustaining livelihood, an option that may not be available to many. Therefore, it is an opportunity for survival of household. Migration occurs due to lack of opportunities locally and hence it is deprivation. Within that category, household welfare is better sustained by the rationale for migration. In addition, the number of migrants is again a marker of available persons and relative lack of options. In order to obtain the worth of one migrant, we divide the number of migrants by the reasons for migration to obtain the no of migrants/reason. This is then weighted by the valuation attached to the reasons for migration (for all migrants) to yield a value of migration to the household score.
	Yes	1		
	No	0		
	Number of migrants (n_i)			
	Purpose of Migration (P_i)			
	Work/Employment-Organised	1		
	Work/Employment-Unorganised	0.25		
	Business	0.75		
	Education	0.5		
Land score	Type of possession (b_i)		Land index = $\sum_{i=1}^6 a_i b_i \sum_{i=1}^5 c_i$	The variable takes into account the area of land possessed, the valuation of the nature of ownership and the crops cultivated on the land. Ownership is the most valued as it can
	Owned and possessed	6		
	Leased in	4		
	Leased out	5		
	Forest land	3		

	Shared	2		be exchanged freely and cultivation on it does not come with a price. Lesser the quantity of possession lesser the valuation.
	No land	1		
	Area of land possessed- in acres (a_i)			
	Crops grown (c_i)			
	Cereals	1		
	Pulses	3		
	Oilseeds	4		
	Vegetables	2		
	Silk, cotton, flowers, sugarcane	5		
Socio-Economic status				
Asset score			$\text{wealth index} = \sum_{i=1}^{22} (1 - P)R_i$ <p>P= Percentage of households owning the asset</p>	The assets of the household were assigned a value based on the percentage of households owning the same. The more common the ownership, lesser the value. Therefore, the valuation or the weight was based on (1-P). P being the percentage of households owning the same. The asset ownership was ranked in terms of the number of households owning them. Highest rank was for the least owned item. Lowest rank to the most frequently owned item.
	Items (R_i)			
	Air conditioner			
	Animal drawn cart			
	Bicycle			
	Car			
	Chair			
	Computer			
	Cot			
	Fan			
	Electricity			
	Gas cylinder			
	Mattress			
	Motorcycle			
	Pressure cooker			
	Refrigerator			
	Sewing machine			
	Table			
	Television			

	Thresher			
	Tractor			
	Washing machine			
	Clock/Watch			
	Water pump			
Allied agricultural score				
	Farm Equipment's (e_i)		Allied agriculture index $= \sum_{i=1}^4 e_i + \sum_{i=1}^5 f_i$	This is a combination of ownership of farm equipment and animals. Each item on the list is given a value based on their economic value or actual cost. Regardless of the number of animals owned, each ownership adds value to the potential income and therefore welfare.
	Power tiller/tractor	4		
	Thresher, cane crusher, oil crusher	3		
	Pump and other water lifting equipment	2		
	None of the above/not applicable	1		
	Farm Animals (f_i)			
	Cows/bulls/buffaloes	5		
	Horse/donkey/mules	2		
	Goats	4		
	Sheep	4		
	Chicken/Ducks	3		
	None of the above	1		
Principal source of income score				
	Source of income (s_i)		Principal income score = $\frac{[\sum_{i=1}^n s_i]}{n} r_i$	This is computed as a valuation of the various sources of income (level parameter) and the potential regularity of such income (intensity parameter). There are more than one source of income across households. To adjust
	Cultivation	5		
	Allied agriculture	3		
	Agricultural wage labour	4		
	Non agriculture wage labour	6		

	Artisan/Independent	7		for these multiple sources, the mean of the valuation of each source of income was computed. The fact a household needed multiple sources of income is indicative that a single source of income is insufficient for household welfare at low levels of income. Intensity is captured by the regularity of income. The mean of the income score is multiplied by the regularity to give the principal income score. This regularity for a household is computed on the basis of the highest category of valuation across multiple income sources. For example, if a household had cultivation, pension and salaried income, the regularity score was 3.
	Petty shop/small business	7		
	Organised trade/business	7		
	Salaried employment	8		
	Pension/Rent/dividend	2		
	Others (remittances/contribution from others)	1		
	Regularity of income (r_i)			
	Salaried, organised trade, petty shop/artisan- Most regular	3		
	Cultivation, allied agriculture, pension,- Partly regular	2		
	Agricultural wages, non agricultural wages or contribution by others	1		
Remittance score	Periodicity of money received (p_i)		$R_i = 0$ if no person living elsewhere from household transfers funds For remittances $R_i = \frac{r_i}{12} * p_i$	If the household has a person residing elsewhere and transferring funds to the household, the remittance score is computed as given below, otherwise it is 0. If a specified sum, no matter how small or big is received regularly, its anticipated welfare is greater i.e valued more when the regularity is less or irregular. Therefore, when the
	Monthly	2		
	Quarterly	2		
	Half yearly	1		
	Annually	1		
	Other regular periods/no fixed pattern	1		
	Amount received in 12 month period (r_i)			

				periodicity of remittance in a year is less, it is valued less. The actual amount stated as received in a month weighted by the periodicity to provide the remittance score.
Infrastructure				
Water safety score	Safety (s_i)		Water safety index = $\left(\sum_{i=1}^4 s_i\right) p_j$	Water safety is determined by the water quality and this is dependent on its source. There are four categories of water use, drinking, cooking, washing or bathing. Safety is an issue for drinking and cooking. Safety is also a function of the reliability of the source in terms of frequency and quality. Therefore, safety is a product of both the nature of source and its reliability
	Own Piped water connection	3		
	Neighbours piped connection	3		
	Public tap	3		
	Borewell in community	1		
	Community RO	4		
	Water from field	2		
	Problems during last three months (p_j)			
	Yes	1		
	No	2		
Water access score	Access (a_i)		Water access index = $\sum_{i=1}^3 a_i$	The sources of water for cooking, drinking, washing/bathing were graded in terms of access, by the perceived ease in obtaining water from the source (both time and distance). These were summed up for all use.
	Own Piped water connection	5		
	Neighbours piped connection	4		
	Public tap	3		
	Borewell in community	2		
	Community RO	3		
	Water from field	1		
Sanitation score	Toilet in the households (a_i)		Sanitation index = $a_i u_j$ ($i = 1,2 j = 1,2,3$)	Sanitation is determined by availability and ease of use (access). This is important because the mere
	Yes	2		

	No	1		availability of a toilet does not result in use. Therefore, the toilet score was a product of its availability and use by members of the household.
	Facilities used by the households (u_j)			
	Toilet in the household	3		
	No facilities	2		
	Others specify	1		
Transportation score	Means of transport (i)		Transportation score (acute) = $\sum_{j=1}^m \sum_{i=1}^n x_{ij}^{OA} + \sum_{j=1}^m \sum_{i=1}^n x_{ij}^{RA}$	Seeking treatment involved multiple visits across facilities using different forms of transport. Each means of transport was given a score on the basis of its notional public availability and ease of use as opposed to private transport available to only to those who own it. For acute and chronic illness it is merely a sum. For those who had both it is averaged across acute and chronic conditions.
	Bus/Ambulance/camp	7	Transportation score (chronic) = $\sum_{j=1}^m \sum_{i=1}^n x_{ij}^{OC} + \sum_{j=1}^m \sum_{i=1}^n x_{ij}^{RC}$	
	Share auto	6	Total score = $\frac{\text{Transport score (acute)} + \text{Transport score (chronic)}}{2}$	
	Auto	5	O= onward; A=acute; R=return; C=chronic	
	Car	4	j = 1,2,3 trip number accomplished for health facility	
	Two-wheeler	3		
	Walking	2		
	Visit by RMP/BAMS	1		
	Did not seek care	0.5		
	No illness	0		
Individual discrimination				
Morbidity score	Had acute (a_i) or chronic ailment (b_i) and did not seek care	2	If both illness then $\frac{a_i + b_i}{2}$	This is based on whether care was sought for the ailment experienced. If person had experienced both acute and chronic ailment, the score was the average of both.
	Had acute (a_i) or chronic ailment (b_i) and sought care	1		
Duration of illness score	Duration in months			Duration in months for those with either acute or chronic. If an individual had both acute and chronic illness then the mean duration was computed.

Multiple morbidity score	Number of acute illness in the past three months (a_i)		If both illness then $\frac{a_i + c_i}{2}$	
	Number of chronic illness experienced that continue till date (c_i)			
Funding source score	Source of funding for healthcare (s_{ij})		If only acute illness $\sum_{j=1}^m \sum_{i=1}^n s_{ij}^a$ If only chronic illness $\sum_{j=1}^m \sum_{i=1}^n s_{ij}^c$ If both illness $\frac{\sum_{j=1}^m \sum_{i=1}^n s_{ij}^a + \sum_{j=1}^m \sum_{i=1}^n s_{ij}^c}{2}$ a is acute c is chronic $i = 1$ for multiple sources of the j^{th} provider	The source of funding was categorised in terms of replenishable resources or restrictive in nature. A salary that sustains healthcare is renewable but contributions from family is not. So these sources were graded with the more replenishable resource getting a lower value.
	Household income/saving	2		
	Daily wage	3		
	Contribution from family and friends	3		
	Borrowing	4		
	Pension	5		
	Credit by provider	6		
	No expenditure	1		
	Did not seek care	6.5		
Nature and type of care				
Provider score	Facility visited		If only acute $f_i^a = \frac{1}{n} \sum_{j=1}^n f_j$ If only chronic $f_i^c = \frac{1}{n} \sum_{k=1}^n f_k$ Both acute and chronic $= \frac{f_i^a + f_i^c}{2}$	Each type of provider was given a score in terms of the potential efficacy in terms of resolution of the problem through appropriate and comprehensive care. Each option for seeking care involved multiple visits. Therefore, the facility score is the mean of the type of facilities visited. This was computed separately for acute and chronic. For those who had
	RMP/traditional healer	1		
	BAMS	2		
	SC/Mobile van/PHC	3		
	CHC/TH/DH	4		
	Private clinic/hospital	5		
	Did not visit any facility	0.5		

			$j,k =$ Number of facilities visited by individual	both acute and chronic it was averaged again. This was computed as an average so as to ensure that the efficacy of the possible cure was not misrepresented. For example, if a person sought care from RMP and BAMS provider, the average would be 1.5 which falls between the value for RMP and BAMS.
Waiting time score	Waiting time at the facility for seeking care (w)		<p>If only acute $w_i^a = \sum_{j=1}^n w_j$</p> <p>If only chronic $w_i^c = \sum_{k=1}^n w_k$</p> <p>Both acute and chronic $\frac{w_i^a + w_i^c}{2}$</p> <p>$j,k =$ Number of facilities visited by individual</p>	This is computed as a sum of the time taken across multiple centres visited in minutes for both acute and chronic ailments. For those who had both acute and chronic the waiting time is averaged. For acute and chronic, we have not averaged it across providers because the actual waiting time is the sum of all of it. But for those who had acute and chronic there is a potential trade off in care seeking for wither which can bring the total time per ailment to less than optimal. To be able to identify this across acute and chronic, it has been averaged.
Expenditure score	Expenditure			
	For illness	as is	If only acute $e_i^a = \sum_{j=1}^n e_j$	The expenditure is the sum of what was spent cross providers for those with either only acute or chronic ailment. For those with both acute and chronic illness the expenditure was averaged as there was a trade-off in care seeking for multiple ailments.
	Did not seek care	0.5	If only chronic $e_i^c = \sum_{c=1}^n e_k$	

			Both acute and chronic $\frac{e_i^a + e_i^c}{2}$	
Provider behaviour score	Behaviour of provider		<p>If only acute $b_i^a = \sum_{j=1}^6 b_j$</p> <p>If only chronic $b_i^c = \sum_{k=1}^6 b_k$</p> <p>Both acute and chronic $\frac{b_i^a + b_i^c}{2}$</p> <p>$j, k =$ Number of behaviours reported</p>	<p>Totally 8 items of behaviour were asked. Two out of 8 responses were negative and therefore no variations were observed. The two were “forced to make way for others” and “made to wait for long to get your injection of IV bottle when compared to others”. The score was 1 if anyone reported any negative experience with the provider and 2 if it was not. For answers “don’t know” the score was 0.5 as it implies an inability to even recognise a discriminatory process.</p>
	Spending adequate time (No)	1		
	Avoid touching	1		
	Not giving adequate information	1		
	Speaking rudely	1		
	Derogatory words	1		
	Don’t know	1.5		
	Made to wait long for medicines	1		
	Did not seek care	0.5		
	Did not experience any of this behavior	2		

A30 SEM results for direct effect, indirect and total effects of structural discrimination on care seeking

Equations	Direct effect		Indirect effect		Total effect	
	Tanda	Village	Tanda	Village	Tanda	Village
Migration index						
Land index	-0.09289	-0.04093		[*]	-0.09289	-0.04093
SES index						
Migration index		[*]	-0.01255	-0.00021	-0.01255	-0.00021
Remittance index	-0.04100	-0.00062		[*]	-0.04100	-0.00062
Land index	0.46101***	0.37135***	0.00117	0.00001	0.46218***	0.37136***
Discrimination index						
Migration index		[*]	-0.00022	0.000002	-0.00022	0.000002
SES index		[*]	0.01771	-0.00787	0.01771	-0.00787
Remittance index		[*]	-0.00073	0.000005	-0.00073	0.000005
Household infrastructure index	0.11192*	-0.02900		[*]	0.11192*	-0.02900
Land index	0.04620	0.08687	0.00818	-0.00292	0.05439	0.08394
Remittance index						
Migration index	0.30599***	0.32948***		[*]	0.30599***	0.32948***
Land index		[*]	-0.02842	-0.01349	-0.02842	-0.01349
Household infrastructure index						
Migration index		[*]	-0.00198	-0.00006	-0.00198	-0.00006
SES index	0.15821**	0.27153***		[*]	0.15821**	0.27153***
Remittance index		[*]	-0.00649	-0.00017	-0.00649	-0.00017
Land index		[*]	0.07312*	0.10083***	0.07312*	0.10083***
Transportation index						
Migration index		[*]	0.00031	0.00001	0.00031	0.00001
SES index	-0.01863	-0.07552	-0.00614	0.00300	-0.02477	-0.07253
Discrimination index	-0.34657***	-0.38059***		[*]	-0.34657***	-0.38059***
Remittance index		[*]	0.00102	0.00005	0.00102	0.00005
Household infrastructure index		[*]	-0.03879	0.01104	-0.03879	0.01104
Land index		[*]	-0.02746	-0.05999*	-0.02746	-0.05999*
Facility index						
Migration index		[*]	0.00966	0.00809	0.00966	0.00809
SES index	0.10074*	0.05075	-0.01598	-0.04440	0.08476	0.00635
Discrimination index		[*]	-0.22355***	-0.23301***	-0.22355***	-0.23301***
Remittance index	0.03505	0.02455	-0.00348	-0.000004	0.03157	0.24548
Household infrastructure index		[*]	-0.02502	0.00676	-0.02502	0.00676
Transportation index	0.64505***	0.61224***		[*]	0.64505***	0.61224***
Land index		[*]	0.02785	-0.01822	0.02785	-0.01822

[*] indicates no path. * p>0.05, **p<0.01, ***p<0.001








A31 Plagiarism Report



Document Information

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