

**ACCEPTABILITY OF MENSTRUAL CUP
AMONG THE WOMEN RESIDING IN AN
AREA IN TRIVANDRUM DISTRICT,
KERALA, WHERE FREE MENSTRUAL
CUP DISTRIBUTION WAS DONE**

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**Dissertation submitted in partial fulfilment of the
requirements for the award of the degree of
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DECLARATION

I hereby declare that this dissertation titled – “Acceptability of menstrual cup among the women residing in an area in Trivandrum district, Kerala, where free menstrual cup distribution was done” is a bonafide record of my original research. It has not been submitted to any other university or institution for the award of any degree or diploma. Information derived from the published and unpublished work of others has been duly acknowledged in the text.

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CERTIFICATE

Certified that the dissertation titled - “Acceptability of menstrual cup among the women residing in an area in Trivandrum district, Kerala, where free menstrual cup distribution was done” is a record of the research work undertaken by Dr Sulthana Ansar, in partial fulfillment of the requirements for the award of the degree of Master of Public Health under my guidance and supervision.

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GLOSSARY OF ABBREVIATIONS

HLL	Hindustan Latex Limited
MC	Menstrual cups
NGOs	Non- governmental organization
PMS	Pre menstrual syndrome
STIs	Sexually Transmitted Infections
WHO	World Health Organization

ABSTRACT

Background: The acceptability of menstrual cups in India has been steadily increasing in recent years, but it varies depending on various factors, including region, cultural beliefs, and individual preferences. The study was conducted to estimate the prevalence of menstrual cup use by the women in an area where free menstrual cups were distributed by Thinkal project in Trivandrum district and to describe the experiences and practices of current menstrual cup users.

Method: A community based cross sectional survey was done by collecting data from 200 women of menstruating age (18-55 years), from two urban wards of Thiruvananthapuram corporation (Peroorkada and Kowdiyar), where free menstrual cups were distributed by Thinkal project. Descriptive analysis was done using SPSS V.25.

Result: The study found that 68.5 percent of respondents use menstrual cups, with 60 percent using them for over a year and 91.2 percent relying exclusively on them for comfort and convenience. Leakage was rare (89.1%), with high confidence in prevention (90.5%). Additionally, 81 percent preferred menstrual cups over other products, with material (60.5%), size (37.2%), and cost (18.9%) being key factors. Half advocated for awareness campaigns, and all recommended menstrual cups to non-users. The current use was significantly high among women above 30 years of age, who are married and those who received menstrual cups through Thinkal project compared with their counterparts.

Conclusion: The study reveals high usage and satisfaction with menstrual cups, with most users relying exclusively on them for comfort and convenience. The preference for menstrual cups over other products, driven by factors like material, size, and cost, highlights their appeal and practicality. Moreover, the insights from the study suggests potential impact of targeted initiatives in promoting wider adoption of menstrual cups, particularly among women with low economic status.

CHAPTER 1

INTRODUCTION AND LITERATURE REVIEW

1.1 Introduction

Menstruation, an inherent and universal biological process encountered by every woman, continues to be regarded as a taboo topic in numerous societies despite its natural occurrence and essential role in female reproductive health (Gottlieb, 2020). Despite being a natural and unavoidable aspect of the female reproductive cycle, menstruation frequently poses significant challenges for individuals, stemming from the necessity to effectively manage menstrual hygiene practices to ensure comfort, cleanliness, and overall well-being (Elledge et al., 2018). Approximately 70 percent of the reproductive infections in Indian women are due to poor menstrual hygiene (Varghese et al., 2023). The menstrual hygiene crisis arises from three main challenges: insufficient awareness, limited access to materials, and inadequate facilities, resulting in effects on reproductive health and environmental sustainability, underscoring the urgent need for comprehensive interventions to address these issues and promote better menstrual hygiene practices.

Notwithstanding the pervasive stigma surrounding menstruation, there has been a notable surge in women's awareness of the significance of menstrual health, leading them to actively pursue more environmentally sustainable alternatives to conventional menstrual products such as pads and tampons (Stewart et al., 2009). Among the array of available alternatives for menstrual hygiene management, the menstrual cup has garnered widespread recognition and adoption on a global scale, emerging as a favoured choice among women seeking sustainable and effective solutions for menstruation (Dave et al., 2024). In contrast to single-use disposable products, menstrual cups provide individuals with a durable and environmentally

conscious alternative, allowing for repeated usage and minimizing the ecological footprint associated with menstrual hygiene management (K and Bhandary., 2020). A comprehensive understanding of the acceptability of menstrual cups among individuals undergoing menstruation is imperative, as it serves as a pivotal factor in evaluating their viability as the preferred choice for menstrual hygiene management, thereby informing decision-making processes and facilitating informed choices regarding menstrual health practices (Beksinska et al., 2021).

Various factors, including but not limited to comfort, convenience, cost-effectiveness, and environmental sustainability, collectively contribute to shaping the overall acceptability of menstrual cups among individuals, underscoring the multifaceted nature of considerations involved in assessing their suitability as a preferred menstrual hygiene option (Gharacheh et al., 2021).

This study aims to explore the acceptability of menstrual cups among individuals residing in a specific area in Trivandrum District, Kerala, where free distribution initiatives were conducted.

1.2 Literature review

1.2.1 Menstruation

The World Health Organization (WHO) defines menstruation as a natural, monthly process that typically occurs in individuals with female reproductive systems. During this time, the lining of the uterus, called the endometrium, sheds (Munro et al., 2018). This whole process is part of the menstrual cycle, which usually lasts about 28 days. But, it is different for everyone (Bitzer et al., 2005). When someone has their period, their body gets rid of blood and tissue from the uterus. This blood can be bright red or a bit darker, and it's often mixed with mucus and tissue which happens through the vagina (Critchley et al., 2020). Before and during their period, many people feel different in their bodies and emotions. They

might have cramps, feel bloated, their breasts might be sore, or they could feel moody and tired. These things altogether are called premenstrual syndrome (Hofmeister and Bodden, 2016). Some people might have issues with their periods. For example, their periods might not come at the same time every month, they might bleed a lot (called menorrhagia), or they might not get their periods at all (called amenorrhea). Others might have painful periods, known as dysmenorrhea (Jeffcoate, 1965; Reddish, 2006; Liberty et al., 2023).

The menstrual cycle is a natural process in people with female bodies. It prepares the body for pregnancy and typically lasts about 28 days (Kissow et al., 2022). It starts with period which occurs from day one to five, where bleeding happens as the uterus sheds its lining. Followed by follicular phase which last till day 13 in which the ovaries produce eggs and the uterus lining thickens. Day 14 usually marks the ovulation where an egg is released from the ovary, making it the most fertile time. The last phase is the luteal phase which lasts from day 15 to 28, in which the uterus prepares for a potential pregnancy. If pregnancy doesn't occur, the cycle starts again with menstruation (Mihm et al., 2011). Menarche is a big moment when someone has their first period, usually happening between ages nine and sixteen. It shows that their body is ready for menstruation and, potentially, pregnancy (DiVall and Radovick, 2008). The timing of menarche can be different for everyone and is influenced by things like genes, diet, environment, and family background (Barros et al., 2019). It is often accompanied by other changes like breast growth and hair growth. After menarche, it's important to learn about menstrual hygiene, like using products and staying clean, and how to manage any discomfort (Swenson and Havens, 1987). Menarche is a good time to talk about reproductive health, contraception, and sexually transmitted infections to help individuals make smart choices as they get older. The age of menarche has changed over time because of better nutrition and health. If someone has their first period early or late, it might be because of health issues or diet problems where medical help should be sought (Karapanou and

Papadimitriou, 2010). Maintaining good menstrual hygiene is important to prevent infections and discomfort. It means you should change your pads or tampons often, clean your private area with gentle soap and water, and throw away used products safely (Kuhlmann et al., 2017). Menopause marks the end of monthly periods, signaling a time of physical and hormonal shifts that accompany this natural transition (Minkin, 2019).

1.2.2 Menstrual Hygiene practices

Globally

Throughout history, people have had their periods since the beginning of time, and different cultures have had their own ways of dealing with it (Kaur et al., 2018). Each culture has its own customs, beliefs, and practices related to menstruation. Some cultures celebrate it, while others may have seen it as taboo (Stodart, 2013). Over time, these practices have changed and evolved as societies have developed and people's understanding of health and hygiene has improved. So, the history of how people deal with periods is a complex and ever-changing story. In ancient times, people in places like Mesopotamia, Egypt, Greece, and Rome had their own ways of dealing with periods (Tan et al., 2017). They didn't have the pads or tampons we have today, so they used things like reusable cloth pads or strips of fabric to manage their menstruation. These cloth pads were washed and reused, kind of like how we wash our clothes. It was a simple but effective way for them to handle their periods in ancient times. Some people believed that if someone was on their period, they were impure or not clean (Gottlieb, 2020). In certain societies, people who were menstruating were kept separate from others during their periods. It was seen as a kind of ritual to keep them away from everyone else. These beliefs and practices made menstruation a secretive and sometimes shameful thing in many cultures throughout history. Before we had the pads and tampons we use today, people used all sorts of natural things to manage their periods. They used stuff like moss, animal skins, wool, and grass to absorb the blood (Rothchild and Piya, 2020). But

things changed in the late 1800s and early 1900s when more convenient options came around. That's when disposable pads and tampons started to be made (Farage et al., 2007). These new products were much easier to use and could absorb more blood, making periods a lot more manageable for people (Majeed et al., 2022). Different cultures and regions have their own unique practices related to menstruation (Riley et al., 2020).

In India

In India, there are many different cultures, and each one has its own beliefs and traditions about menstruation (Ghosh and Jamir, 2023). For some, getting your period is seen as a special time when you become a woman, and it's celebrated. But in other places, there are specific rituals or ceremonies that happen when someone starts their period. These beliefs also affect how people manage their periods. For example, in some temples, people who are menstruating are not allowed to go inside. And in certain communities, there are rules about not taking part in religious ceremonies during your period (Singh et al., 2022). So, menstrual hygiene can be influenced by these cultural and religious beliefs in India. Cultural norms can sometimes hinder access to menstrual education and information. Many girls and women in India receive limited or incorrect information about menstruation, leading to misconceptions and inadequate menstrual hygiene practices (Chothe et al., 2014). Some communities in rural areas may still rely on traditional menstrual hygiene practices, such as using cloth or homemade pads. Cultural factors can influence the choice of menstrual products (Parija et al., 2022). In some regions, there is a preference for reusable cloth pads, while in urban areas, disposable sanitary pads are more common. India has seen a shift in cultural attitudes towards menstruation in recent years. Advocacy efforts, education campaigns, and awareness initiatives have challenged taboos and promoted open discussions about menstrual health and hygiene (Olson et al., 2022). Government implemented various programs to promote menstrual hygiene and provide affordable menstrual products. These initiatives aim to

address cultural barriers and to enhance availability of sanitary and clean menstrual essentials (Smith et al., 2020). Over the years, with advancements in technology and healthcare, menstrual hygiene practices in India have seen significant changes. The introduction of disposable sanitary pads and tampons, as well as menstrual cups, has provided more options for managing menstruation. Additionally, awareness campaigns and education initiatives have aimed to break the silence and stigma surrounding periods, promoting better menstrual hygiene practices and empowering individuals to handle their menstruation with grace and ease (Behera et al., 2022). Women's empowerment movements in India have contributed to changing cultural perceptions around menstruation. Women are advocating for their right to manage their menstruation with dignity and are challenging discriminatory practices (Majeed et al., 2022).

In Kerala, like in many parts of India, the history of menstrual hygiene has undergone significant changes over time (Nair et al., 2012). Traditionally, women in Kerala used cloth pads made from natural materials like cotton for menstrual management. These cloth pads were washed and reused, reflecting sustainable practices (Achuthan et al., 2021). However, cultural and religious beliefs surrounding menstruation often led to stigma and restrictions, impacting menstrual hygiene practices (Vinod and Kaimal, 2023). In recent years, there has been a shift towards modern menstrual hygiene products like disposable sanitary pads and menstrual cups. Government initiatives and awareness campaigns have also played a role in promoting better menstrual hygiene practices in Kerala (Divya et al., 2023).

1.2.3 Menstrual cups

Menstrual cups are reusable menstrual products designed to gather menstrual flow rather than soak it up like pads or tampons (Manley et al., 2021). They are flexible, bell-shaped cups made from high quality silicone or latex that are inserted into the vagina to collect menstrual blood (Gharacheh et al., 2021). It offers greater comfort and convenience, as they can be

worn for up to 12 hours without needing to be changed. They are also eco-conscious since they're reusable, for several years, reducing waste. Additionally, menstrual cups are cost-effective in the long run, as they eliminate the need for frequent purchases of disposable pads or tampons (Pokhrel et al., 2021). Some individuals may find them challenging to insert or remove, especially during the initial learning phase. Additionally, there is a risk of leakage if the cup is not properly positioned or sealed. Moreover there are worries regarding menstrual cup use to cause vaginal irritation or infection (Schlievert and Davis, 2020).

1.2.4 Timeline of key developments in the history of menstrual cups

The first patented menstrual cup design similar to modern menstrual cups was developed in the 1930s by American actress and inventor Leona Chalmers. Her design, called the Tassette, was made of rubber and had a bell-like shape (Nelson, 2018). In the late 1930s, other menstrual cup designs began to emerge, including the Dutch company Eureka's cup. However, these early cups were not widely adopted and were largely overshadowed by the commercial success of disposable pads and tampons (Stewart et al., 2009). Menstrual cups gained popularity during the 1960s and 1970s, particularly in the United States and Europe. The latex rubber cups of this era were reusable and gained a following among women seeking alternatives to disposable products (Sundqvist, 2015). During 1980s to 2000s, silicone menstrual cups were introduced. Silicone was a more durable and hypoallergenic material compared to rubber (Dean-Jones, 1989). The most well-known brand, the "Keeper," was introduced in the 1980s and the "Diva Cup" in the 2000s. The 21st century has seen a surge in the popularity of menstrual cups, with various brands and designs available worldwide. Silicone and medical-grade silicone cups have become the norm due to their flexibility, ease of cleaning, and longer lifespan (Howard et al., 2011). Menstrual cup adoption has been driven by growing awareness of environmental sustainability, reduced waste, and cost-effectiveness (Mouhanna et al., 2023). The menstrual cup market has seen

continuous innovation, with various shapes, sizes, and features to cater to individual preferences and needs. Some cups are designed for specific body types, including those for people with a low cervix or heavy flow. Menstrual cups are now used by individuals worldwide. They are especially popular among those seeking eco-friendly and sustainable menstrual hygiene options (Arenas-Gallo et al., 2020).

1.2.5 Acceptability of menstrual cups

The acceptability of menstrual cups has been growing globally in recent years, as more people are discovering and embracing this alternative menstrual hygiene product (van Eijk et al., 2019). Acceptability can vary by region, culture, and individual preferences, but overall, menstrual cups have gained popularity for several reasons (Stewart et al., 2009). One of the primary reasons for the growing acceptability of menstrual cups is their eco-friendliness. Menstrual cups are reusable for several years, which significantly reduces the environmental impact compared to disposable menstrual products (Beksinska et al., 2015). Many people find menstrual cups convenient because they can be worn for up to 12 hours at a time, depending on the flow. This means fewer changes throughout the day, making them suitable for various activities and travel (Kakani and Bhatt, 2017).. Users also report that cups are more comfortable and cause fewer skin irritations or allergies (Das et al., 2024). Menstrual cups are designed to be airtight, which can help reduce menstrual odour compared to disposable products that are exposed to the air. Menstrual cups are reusable and discreet, as they don't produce waste that needs to be disposed of in public trash bins. This can be especially important in regions where menstrual hygiene is a sensitive topic. The availability of menstrual cups can vary by region, and their acceptance may be influenced by access to affordable and quality products. Many people may not be aware of menstrual cups or how to use them correctly. Education and awareness campaigns can help improve acceptance. Menstrual cups are not suitable for everyone. Some individuals may prefer other menstrual

products, and their personal comfort and preferences play a role in acceptability (Arenas-Gallo et al., 2020). Menstrual cups have gained more acceptance in urban areas of India, where access to information and products is more readily available (Patel et al., 2023). In rural areas, traditional practices and lack of awareness about menstrual cups can be barriers to adoption. Non-governmental organizations (NGOs), women's health advocacy groups, and government initiatives have been working to raise awareness about menstrual cups and their benefits. Awareness campaigns aim to dispel myths and misconceptions surrounding menstrual cups (Botello-Hermosa et al., 2024). While menstrual cups can be cost-effective in the long run, the initial investment can be a deterrent for some individuals, especially those with limited financial resources in a country like India (Angeli et al., 2022). Some individuals may have concerns about hygiene and sanitation related to menstrual cups. Proper education on cleaning and maintaining cups is essential to address these concerns. Younger generations in urban areas are often more open to trying new menstrual hygiene products like cups (Abraham et al., 2023). They are also more likely to access information through digital channels, contributing to the growing acceptability. Menstrual cups can offer some advantages in natural disaster or emergency situations, but they also come with certain considerations (Perianes and Roberts, 2020). Menstrual cups are reusable, which makes them a sustainable option during emergencies when access to disposable menstrual products may be limited or disrupted. This reduces the need for frequent resupply. Using a menstrual cup generates less waste compared to disposable pads or tampons. This is particularly beneficial in disaster-stricken areas where waste management may be compromised (Bhattacharjee, 2019). The Thinkal project emerged as a response to the urgent need for menstrual hygiene solutions following the devastating floods in Kerala, initiating the distribution of menstrual cups to address the challenges faced by women in accessing safe and sustainable menstrual hygiene (Varghese et al., 2023). The project, pioneering in nature, was conceived as an

alternative to address the waste disposal issues emerged during the 2018 Kerala floods (Shaili, 2021).

1.2.6 Thinkal Project

The "Thinkal" project is an initiative by HLL Lifecare Limited (formerly Hindustan Latex Limited), a government-owned company in India, aimed at providing affordable and sustainable menstrual hygiene solutions to women and girls (Varghese et al., 2023). The project entails both manufacturing and disseminating menstrual cups under the brand name "Thinkal." Project focuses on addressing the issue of affordability and accessibility of menstrual hygiene products in India. HLL Lifecare Limited developed the Thinkal menstrual cup as a part of this initiative (Eti et al., 2019). In addition to producing menstrual cups, the Thinkal project also includes an educational component. It aims to raise awareness about menstrual health and hygiene, especially in rural and underserved communities (Garikipati, 2021). Education about menstrual cup usage and hygiene is an essential part of this effort. The Thinkal menstrual cups are distributed through various channels, including government health programs, NGOs, schools, and local retailers. The goal is to make these cups accessible to women and girls across different regions of India. The use of menstrual cups aligns with sustainability goals, as they reduce the amount of waste generated compared to disposable sanitary pads and tampons (Durairaj et al., 2023). This has the potential to positively impact the lives of many women and girls by providing them with an affordable and sustainable menstrual hygiene solution. It also aids in diminishing the stigma linked with menstruation and promoting menstrual health (Shanmugham et al., 2024). Sanitary napkins distributed to women in flood hit areas caused challenges in the disposal. HLL introduced M-Cups as an alternative to address this challenge (Madi et al., 2024). Encouraging the use of M-Cups among menstruating women in India will be a novel initiative with a long-term impact like reduced solid waste, reduced public health hazard,

improved menstrual health, safety, convenience and freedom for women (Dave et al., 2024).

1.3 Rationale for the study

The acceptability of menstrual cups is rooted in their economic and environmental sustainability, offering users a cost-effective, eco-friendly and long lasting solution for menstrual hygiene (Arenas-Gallo et al., 2020). The present study proposed here is to assess the acceptability of menstrual cup among women in the areas where free distribution of menstrual cup was done in Thiruvananthapuram district, Kerala. By focusing on an area where free distribution of menstrual cups has been conducted, the study aims to explore strategies to enhance acceptability more effectively. Thus the study can use specific methods to inform people and correct misunderstandings about menstrual cups, which will help more women accept and use them for better menstrual hygiene.

1.4 Objectives

1. To estimate the prevalence of menstrual cup use by the women in an area where free menstrual cups were distributed by Thinkal project in Trivandrum district.
2. To describe the experiences and practices of current menstrual cup users.

CHAPTER 2

METHODOLOGY

2.1 Study design

A quantitative cross-sectional survey was conducted to assess the acceptability of menstrual cup among the women residing in an area in Thiruvananthapuram district, Kerala, where free menstrual cup distribution was done.

2.2 Study setting

The study was conducted in two urban wards in Thiruvananthapuram corporation (Peroorkada and Kowdiyar) where free distribution of menstrual cup was completed in Thiruvananthapuram district, Kerala through Thinkal project. In Trivandrum, 15,000 menstrual cups distribution were completed in 4 wards, which includes Peroorkada, Kowdiyar, Shangumugham and Valiyathura.

2.3 Study population

Female adults with menstruation, who are residing in an area where free menstrual cup was distributed by Thinkal project in Trivandrum district.

Inclusion criteria- All adult females of menstruating age (18-55 years) including who are presently on menstruation, pregnant women and breastfeeding mothers.

Exclusion criteria: All adult females who achieved menopause naturally or through medical or surgical interventions.

2.4 Sample size estimation

The menstrual cup use among general population is low. So, according to a recent study conducted by Gayathri Mallika Sudevan 'Knowledge, Attitude and Practices regarding menstrual cup among females in an urban setting of South Kerala, the use of menstrual cup was only 15% (Sudevan Devan et al., 2022). However, the present study was planning to

conduct in an area where free menstrual cup distribution was completed, the prevalence of menstrual cup use among the study population was anticipated to be 50%.

The calculation was as follows:

Anticipated prevalence (p) = 50%

Margin of error (d) = 10% at 95% CI

The sample size was calculated using the formula

$$N = \frac{3.84 \times p(1-p)}{d^2}$$

The sample size calculated using the formulae is 97, and taking design effect as 2 the sample size was 194, which was approximated to 200.

2.5 Sampling procedure

The list of wards where free distribution of menstrual cup was completed in Thiruvananthapuram corporation was obtained from Thiruvananthapuram corporation online website. Out of four wards in Thiruvananthapuram district, two urban wards were selected. The initial plan was to randomly select 10 residential colonies from each ward, and take a sample of 10 from each residential colony. However, due to practical difficulties faced during the data collection, 10 residential colonies were selected next to each and from each of the residential colony 10 women were selected. (Figure 2.1).

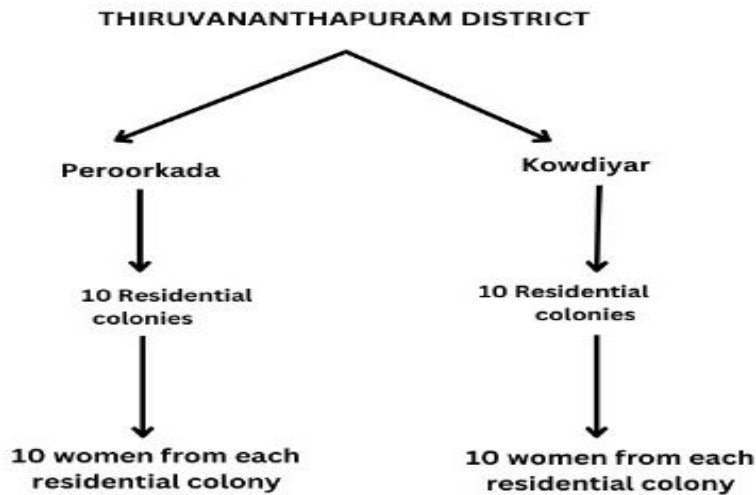


Figure 2.1 Sampling procedure

2.6 Data collection process

After getting permission from the corporation, the ward members were contacted by the investigator before moving to the places for data collection. In each ward, the investigator began the survey, starting from the first house of the residential colony according to the numbering system of the colony, completed till 10 eligible women were included from each residential colony. A checklist was used to record the visits and availability of women in each household. In three to four houses, there were more than one menstruating woman and all of them were included. During the household visit the investigator explained the purpose of the visit and the study. Then they were asked whether there were women between the group of 18-55 years at the house. After the confirmation of eligible women in a household, the information sheet was explained. After clarifying their concerns and queries, they were asked to sign the consent. Then only the interview was conducted. The total number of households visited were around 500, and in that approximately 150 eligible women were not available at home during my visit.

2.7 Data collection instruments

A structured interview schedule was developed in English and translated to Malayalam. The survey was conducted using the translated version of the tool. The participants were interviewed, and their responses were recorded in the hard copy of the tool. The interview schedule was divided into six sections. The different section of the interview schedule is as follows.

Section 1: Background details of the participant

This section covers the details regarding age, education, working status, household expenditure and marital status.

Section 2: Menstrual history

Questions related to menstruation such as age of menarche, duration of menstrual cycle and periods, status of bleeding and details regarding menstruation affecting daily life were included in this section.

Section 3: Details regarding the availability of menstrual cups and menstrual hygiene product presently used by women

This section includes details regarding where they first heard about menstrual cups, method of procurement of cups, if ever used menstrual cups and reasons for continuing the use or not using, preferred menstrual products to use at home and outside home and related questions.

Section 4: Menstrual cup use -women's experiences

Questions included in this section were to assess women's experiences from the use of menstrual cups and reasons for using them.

Section 5: Menstrual cup cleaning practices

This section covers the details regarding the methods used for cleaning and storing menstrual cups.

Section 6: Women's perceptions towards awareness creation and their recommendations

Questions related to women's perceptions towards need for awareness and recommendations along with reasons for the same are included in this section.

2.8 Data entry and analysis

The information was recorded in the hard copy of the instrument, entered into the system using the data entry platform prepared in Google form, and later converted to Microsoft Excel after completing the data entry. The data were analysed with the aid of IBM SPSS Statistics-28 for Windows. The prevalence of menstrual cup use was estimated and the experiences of women using menstrual cups were analysed. Further analysis was carried out to find the association between background factors associated with receiving menstrual cups and its current use. Chi-square test was used to test the associations.

2.9 Ethical considerations

The Institutional Ethics Committee of Sree Chitra Tirunal Institute for Medical Sciences and Technology, Thiruvananthapuram, Kerala had reviewed the study and gave clearance to conduct the study (SCT/IEC/2168/DECEMBER/2023). Before moving to each ward, permission was obtained from each ward member. Participation in the study was completely voluntary. The interview was conducted only after obtaining informed consent from the participants. The participant's identity and personal information were kept confidential.

CHAPTER 3

RESULTS

The result chapter consists of seven sections. The first section includes the socio demographic profile of the study participant. The second section consists of an assessment of the menstrual history of the participant. The third section includes the availability of menstrual cup and menstrual hygiene products used by women. The fourth section includes women's experiences of menstrual cup use. In section five, the menstrual cup cleaning practices are included. The section six assesses the women's perceptions towards awareness creation and their recommendations. The section seven consists of an exploration of background characteristics of women associated with receiving and current use of menstrual cups.

3.1 Socio demographic profile of study participants

The total number of study participants was 200 with a mean age of 32.5 years and standard deviation of 7.8 years (Table.3.1).

TABLE 3.1 – Age of participants

Age	
Mean	32.52
Median	31.00
Standard Deviation	7.838
Minimum	19
Maximum	51

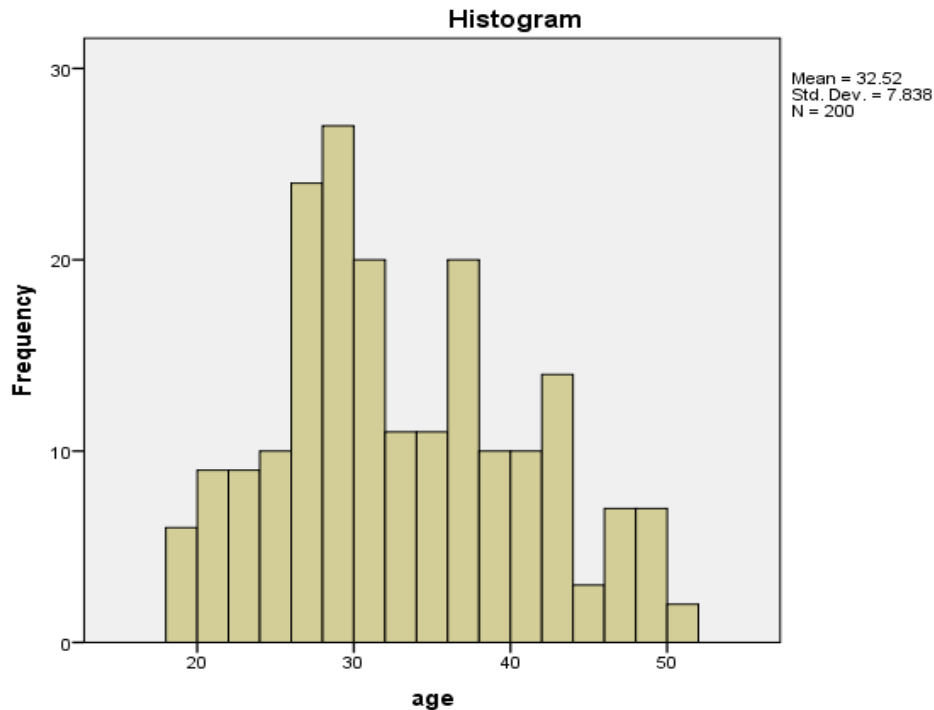


Figure 3.1 Age distribution of study participants

The age of participants was distributed between 19 and 51 years, with a higher peak at 28- 32 years, another peak at 36- 38 years and 42- 44 years (Figure 3.1).

Table 3.2 represents the various socio demographic characteristics of the study participants. Nearly 70 percent of the women participated in the study attained graduate level of education. A higher number of women were employed (43.5%) followed by homemakers (29.5%). A larger portion of the participants, comprising 121 individuals (60.5%), reported monthly expenditures falling between INR 20,000 and 30,000. Out of the total 200 participants, 23 individuals, constituting 11.5 percent of the participants, reported having difficulty managing their monthly expenses. Nearly one-third of participants, totaling 121 individuals (60.5%), reported being married. Furthermore, 16 individuals, accounting for 8 percent of the sample, reported being widowed (Table.3.2).

TABLE 3.2 –Socio-demographic characteristics of study participants

Socio demographic characteristics	Frequency(n)	Percent(%)
Education status		
Higher secondary	34	17
Graduate level	138	69
Post Graduate level	28	14
Working status		
Students	21	10.5
Homemaker	59	29.5
Employed	87	43.5
Self Employed	25	12.5
Daily Wages	8	4
Monthly expenditure(INR)		
10,000- 20,000	31	15.5
20,000- 30,000	121	60.5
>30,000	48	24
Ability to manage monthly expenses		
Yes	177	88.5
No	23	11.5
Marital status		
Single	48	24
Married	121	60.5
Divorced	15	7.5
Widowed	16	8

3.2 Menstrual history of study participants

The table 3.3 represents data on the menstrual history of the study participants. The most common age for menarche was 12 years old (34.5%); where majority of participants attained menarche between ages of 11 and 13. The majority of individuals in the sample, 188 individuals (94%), have menstrual cycles that last between 21 and 35 days.

TABLE 3.3- Menstrual History

Menstrual history	Frequency(n)	Percent(%)
Menarche (in years)		
10	3	1.5
11	54	27
12	69	34.5
13	47	23.5
14	27	13.5
Menstrual cycle		
<21 days	1	0.5
21- 35 days	188	94
>35 days	11	5.5
Periods flow		
1-3 days	152	76
3-7 days	47	23.5
>7 days	1	0.5
Bleeding type		
Less	21	10.5
Moderate	154	77
Heavy	23	11.5
Menstruation affecting daily life		
Not at all	118	59
Somewhat	63	31.5
Largely affecting	19	9.5
Missed work due to menstruation		
Yes	37	18.5
No	163	81.5
Reason for missing activities during menstruation		
Menorrhagia	27	72.9
Abdominal cramps	7	18.9
Dysmenorrhea	2	5.4
Dizziness	1	2.7

A small proportion of the women (5.5%, n=11), experienced menstrual cycles lasting more

than 35 days. Only one individual has menstrual cycles lasting less than 21 days. The majority of individuals (n=152, 76%) experienced periods lasting between one and three days and 154 individuals (77%) reported moderate bleeding during menstruation. Among the respondents, sixty-three individuals (31.5%) stated that menstruation somewhat affects their daily life, while 19 individuals (9.5%) reported that menstruation largely affects their daily life. The majority of respondents, 163 individuals (81.5%), reported not missing work due to menstruation. The table also represents data on the reasons for missing class, work, or other activities during menstruation in the 37 respondents who reported having missed work due to menstruation. The most commonly reported reason for missing activities during menstruation was menorrhagia (excessive menstrual bleeding), with 27 individuals (72.9%) citing this as the cause of missing activities during menstruation.

3.3 Details regarding the availability of menstrual cup and menstrual hygiene products presently used by women

The table 3.4 represents the details regarding availability and awareness of menstrual cups. Among the 200 respondents surveyed, a vast majority, 197 individuals (98.5%), were aware of menstrual cups, with social media being the primary source for 73 individuals (36.5%), followed by recommendations from friends or family members (32.0%), and visits from community health workers as part of the Thinkal project (28.5%). More than half of the participants (60.0%, n=120) reported purchasing the menstrual cup themselves, while 58 individuals (29.0%) received it through the Thinkal project. Of these 178 individuals, 165 (82.5%) reported ever use of menstrual cups, while among non-users, 21 individuals cited fear as the main reason for not using them. Currently, 68.5 percent of respondents are using menstrual cups, with 31.5 percent not using them due to reasons such as pain and discomfort during insertion, removal, or wearing (Table.3.4).

TABLE 3.4 – Menstrual cup availability details

Menstrual cup availability details	Frequency	Percent (%)
Heard of menstrual cup		
Yes	197	98.5
No	3	1.5
First heard from		
Advertisements	1	0.5
Recommendations from friends or family members	64	32
Social media	73	36.5
Through visits of ASHA /health workers / ward members as a part of Thinkal project	57	28.5
Online articles/ forums	5	2.5
Received menstrual cups		
No	22	11
Yes, I bought myself	120	60
Yes, I got through Thinkal project	58	29
Ever used		
No, I never	22	11
Yes, I used	165	82.5
I tried but failed to use	13	6.5
Present users		
Yes	137	68.5
No	63	31.5

TABLE 3.5 - Menstrual hygiene products presently used by women

Menstrual hygiene products presently used by women	Frequency	Percent(%)
Menstrual product		
Sanitary pads	63	31.5
Menstrual cups	126	63
Both	11	5.5
At home		
Sanitary pads	64	32
Menstrual cups	129	64.5
Both	7	3.5
Outside home		
Sanitary pads	63	31.5
Menstrual cups	125	62.5
Both	12	6
Preferred menstrual product during heavy bleeding		
Sanitary pads	63	31.5
Menstrual cups	125	62.5
Both	12	6

The table 3.5 represents data on the menstrual hygiene products currently used by women. Among 200 respondents, 63 percent reported using menstrual cups, 31.5 percent used disposable sanitary pads, and 5.5 percent used both menstrual cups and sanitary pads. The table also indicates that both at home and outside the home, menstrual cups are the preferred menstrual product, with 64.5 percent and 62.5 percent of respondents respectively, while sanitary pads are also commonly used. The majority, 125 individuals (62.5%), prefer menstrual cups for managing heavy bleeding, while 63 individuals (31.5%) opted for

disposable sanitary pads.

3.4 Menstrual cup use- Women’s experiences

Women’s experiences with menstrual cup use were described in this section. Among 137 current users, nearly 60 percent have been using menstrual cups for over a year. The majority, 91.2 percent, exclusively use menstrual cups. Comfort of use (44.5%) and convenience (29.9%) were cited as primary reasons for trying menstrual cups (Table.3.6).

TABLE 3.6 – Duration and use of menstrual cup

Variables	Frequency(n) (N=137)	Percent (%)
Duration of use		
Less than 3 months	3	2.2
3 to 6 months	6	4.4
6 months to 1 year	47	34.3
More than 1 year	81	59.1
Exclusive user		
Menstrual cup and other products	12	8.8
Exclusively Menstrual cup	125	91.2
Decision to try a menstrual cup		
Influenced by friends and family	4	2.9
Avoiding pad disposal	27	19.7
Comfort of use	61	44.5
Convenience	41	29.9
Avoiding inconvenience in washing and drying clothes	11	8
Cost for menstrual products	36	26.3
Avoid allergies and rashes	34	24.8
Out of curiosity	1	0.7

TABLE 3.7 – Experience with the ease of using menstrual cups

Experiences	Frequency(n) (N=137)	Percent(%)
First use- how easy		
Very easy	13	9.5
Somewhat easy	65	47.4
Somewhat difficult	56	40.9
Very difficult	3	2.2
Present use		
Insertion		
-very easy	94	68.6
-somewhat easy	39	28.5
-somewhat difficult	4	2.9
Comfort of use		
-very easy	129	94.2
-somewhat easy	8	5.8
Removal		
-very easy	63	46
-somewhat easy	56	40.9
-somewhat difficult	18	13.1

About 47.4 percent found it somewhat easy to use menstrual cup for the first time. Most found insertion (68.6%) and comfort (94.2%) very easy, and removal was rated very easy by 46 percent and somewhat easy by 40.9 percent (Table. 3.7). Leakage was rare (89.1%), with 90.5 percent are confident to effectively prevent it, and no reported issues of odour, irritation, or infection. Around 81 percent prefer menstrual cups over other products. Material was important to 60.5 percent, while 37.2 percent considered size and 18.9 percent cost when selecting a menstrual cup (Table.3.8).

TABLE 3.8 – Comfort while using menstrual cups and preferences

Experiences	Frequency(n) (N=137)	Percent(%)
Experienced leaks		
Never	122	89.1
Rarely	13	9.5
Occasionally	2	1.5
Confident about preventing leaks by using menstrual cup alone		
Yes	124	90.5
No	13	9.5
Experienced odours		
Never	137	100
Experienced infections or irritations		
Never	137	100
Experienced pain or discomfort		
Never	135	98.5
Rarely	2	1.5
Preference for menstrual cup over other menstrual products		
Strongly Agree	111	81
Agree	22	16.1
Neutral	4	2.9
Factors important for choosing menstrual cup		
Cost	26	18.9
Material	83	60.5
Size	51	37.2

3.5 Menstrual cup cleaning practices

The table 3.9 provides data on cleaning practices of menstrual cup by the users.

TABLE 3.9 – Cleaning practices by menstrual cup users

Cleaning practices	Frequency	Percent(%)
Washing hands before use (yes)	134	97.8
Clean as manufacturer's advise (yes)	137	100
Cleaning methods		
Before periods		
-Boiling in water	136	99.3
-Using a specialised menstrual cup cleanser	1	0.7
During periods		
- Boiling in water	9	6.6
-Using a specialized menstrual cup cleanser	27	19.7
-Rinsing with warm water	62	45.3
-Rinsing with cold water	39	28.5
After periods		
- Boiling in water	106	77.4
- Using a specialized menstrual cup cleanser	26	19
-Rinsing with warm water	5	3.6
Storage		
In a sealed container	20	14.6
In a breathable pouch	117	85.4
Inspect for damages		
Yes	129	94.2
No	8	5.8

Almost all respondents, 97.8 percent, reported washing their hands before using a menstrual cup and also all respondents (100.0%) reported cleaning their menstrual cup according to the manufacturer's advice. Boiling in water is the preferred cleaning method before (99.3%) and

after (77.4%) periods, with rinsing with warm water being the most common cleaning method during periods (45.3%). The majority of respondents opt for a breathable pouch for storage (85.4%). The vast majority of respondents, 129 individuals (94.2%), reported inspecting for damages for menstrual cup regularly.

3.6 Women’s perceptions towards awareness creation and their recommendations

The table 3.10 describes women’s perceptions on the need for awareness and their recommendations. Half of them affirm the need for a campaign. The data also show that all respondents (100%) provided a recommendation of menstrual cups for non-users.

TABLE 3.10- Need for awareness and recommendations

Women’s perceptions on:	Frequency	Percent(%)
NEED FOR CAMPAIGN		
Yes	70	48.5
No	66	51.5
RECOMMEND FOR OTHERS		
Yes	137	100

3.7 Background factors associated with receiving menstrual cups and its current use

The table 3.11 presents data on MC cup acquisition among 200 participants across various demographic categories. It shows that the recipients of menstrual cups through Thinkal project was high among less educated women (58.8%), on the other hand a large number of women with graduation or above bought it themselves, and the observed association between education and acquiring menstrual cups was statistically significant ($P < 0.001$). A similar pattern was seen with respect to monthly expenditure also. The proportion of recipients of

menstrual cup through Thinkal Project was high (58.1%) among women with low household expenditure as compared to other groups (P=0.001) (Table.3.11).

TABLE 3.11 Background factors associated with receiving MC cups

Back ground details	Total	Received MC cups			P-value
	N=200	Not received or buy n(%)	Bought by self n(%)	Got through Thinkal project n(%)	
All	200	22(11)	120(60)	58(29)	
Age group					
<30	85	14(16.5)	51(60)	20(23.5)	0.225
30-39	72	5(6.9)	44(61.1)	23(31.9)	
>/=40	43	3(7)	25(58.1)	15(34.9)	
Education					
Higher secondary	34	3(8.8)	11(32.4)	20(58.8)	<0.001
Graduate level	138	18(13)	83(60.1)	37(26.8)	
Post Graduate level	28	1(3.6)	26(92.9)	1(3.6)	
Working status					
Employed/Self employed	112	12(10.7)	68(60.7)	32(28.6)	0.972
Others	88	10(11.4)	52(59.1)	26(29.5)	
Monthly expenditure					
10000- 20000	31	0(0)	13(41.9)	18(58.1)	0.001
20000- 30000	121	13(10.7)	76(62.8)	32(26.4)	
Above 30000	48	9(18.8)	31(64.6)	8(16.7)	
Marital status					
Married	121	13(10.7)	73(60.3)	35(28.9)	0.988
Others	79	9(11.4)	47(59.5)	23(29.1)	

The table 3.12 shows the background variables associated with the present use of menstrual cups among those who had menstrual cups. The current use was significantly high among

women above 30 years of age, who are married and those who received menstrual cups through Thinkal project compared with their counterparts. Education, monthly expenditure or occupation did not show any significant association with the present use.

TABLE 3.12 Factors associated with current use of menstrual cups

Back ground details	Total	Present User		P- value
	N	No (n, %)	Yes (n, %)	
All	178	41(23.0)	137 (77.0)	
Age group				
<30	71	24(33.8)	47(66.2)	0.011
30-39	67	13(19.4)	54(80.6)	
>/=40	40	4(10)	36(90)	
Education				
Higher secondary	31	6(19.4)	25(80.6)	0.846
Graduate level	120	29(24.2)	91(75.8)	
Post Graduate level	27	6(22.2)	21(77.8)	
Working status				
Employed/Self employed	100	20(20)	80(80)	0.276
Others	78	21(26.9)	57(73.1)	
Monthly expenditure				
10000- 20000	31	6(19.4)	25(80.6)	0.518
20000- 30000	108	28(25.9)	80(74.1)	
Above 30000	39	7(17.9)	32(82.1)	
Marital status				
Married	108	16(14.8)	92(85.2)	0.001
Others	70	25(35.7)	45(64.3)	
Menstrual cup acquired				
Bought self	120	35(29.2%)	85(70.8%)	0.005
Got through Thinkal Project	58	6(10.3%)	52(89.7%)	

CHAPTER 4

DISCUSSION AND CONCLUSION

The purpose of the present study was to estimate the prevalence of menstrual cup use by the women in an area where free menstrual cups were distributed by Thinkal project in Trivandrum district and to describe the experiences and practices of current menstrual cup users. Around 69 percent of respondents were currently using menstrual cups which indicate a substantial adoption of menstrual cups among the surveyed population, suggesting a notable shift in menstrual hygiene practices. Nearly 60 percent of current users have been using menstrual cups for over a year suggesting a sustained satisfaction and acceptance of this menstrual hygiene option. This longevity of use indicates a positive experience and highlights the effectiveness and comfort of menstrual cups over an extended period. Additionally, the fact that 91.2 percent of users exclusively rely on menstrual cups underscores their strong preference for this product, indicating high levels of satisfaction and trust. The primary reasons cited for trying menstrual cups comfort of use (44.5%) and convenience (29.9%) further corroborate this positive user experience. These reasons reflect the importance women place on finding menstrual hygiene products that not only effectively manage their periods but also enhance their comfort and fit seamlessly into their lifestyles. Overall, these findings collectively suggest that women's experiences with menstrual cups are overwhelmingly positive, characterized by sustained usage, exclusivity, and satisfaction driven by comfort and convenience.

4.1 Menstrual cup availability and present use

Insights on awareness, usage, and preferences for menstrual cups offer valuable understanding of their adoption within the surveyed population. Starting with awareness, the high level of awareness of menstrual cups among the respondents, with 98.5 percent being

aware of them, reflects a growing familiarity with this alternative menstrual hygiene option. This aligns with findings from studies by Beksinska et al. (2021) and Sivakami et al. (2019), which have observed increasing awareness of menstrual cups among women in diverse cultural contexts (Beksinska et al., 2021 ; Sivakami et al., 2019). The prominent role of social media and peer recommendations in disseminating information about menstrual cups echoes findings from research by Mason et al. (2013) and Rastogi et al. (2019), highlighting the influence of social networks and community-based initiatives in promoting menstrual hygiene innovations (Mason et al., 2013 ; Rastogi et al., 2019). High rates of self-purchase and community distribution of menstrual cups highlight the importance of accessibility and affordability, supported by Caruso et al. (2019) and Mason et al. (2019) (Mason et al., 2019 ; Caruso et al., 2019). Reasons for not using menstrual cups, like fear of insertion or discomfort, align with Hennegan et al.'s (2019) findings in rural Kenya, highlighting concerns about cleanliness and discomfort (Hennegan et al., 2019). Preference for menstrual cups over pads, especially for heavy bleeding, aligns with studies by Van Eijk et al. (2019) and Sivakami et al. (2019), emphasizing their cost-effectiveness, sustainability, and comfort.(van Eijk et al., 2019 ; Sivakami et al., 2019). Study findings deepen our understanding of factors influencing menstrual product choice, emphasizing awareness, accessibility, and user preferences in shaping menstrual health practices.

4.2 Menstrual cup use- Women's experiences and practices

Nearly 60 percent of current users have been using menstrual cups for over a year, showing long-term adoption of this hygiene option. As per the results of a study conducted by Sudevan et al.(2022), the prevalence of ever users of menstrual cup were as low as 15 percent which showed a much variation to the present study(Sudevan Devan et al., 2022). The increased availability and distribution of menstrual cups, particularly through the Thinkal project in the study area, likely contributed to greater awareness and adoption among

participants. The exclusive use of menstrual cups by the majority of users reflects their strong preference and satisfaction with the product's efficacy, aligning with previous research findings by Beksinska et al. (2021), which have observed high levels of user retention and satisfaction among long-term menstrual cup users (Beksinska et al., 2021). The primary reasons cited for trying menstrual cups, including comfort of use and convenience, resonate with findings from research by Van Eijk et al. (2019) and Sivakami et al. (2019), which have identified similar factors driving menstrual cup adoption (van Eijk et al., 2019 ; Sivakami et al., 2019). Most users find menstrual cups easy to use with minimal leakage and no reported issues of odour, irritation, or infection, highlighting their effectiveness and user-friendly nature. These findings align with research by Mason et al. (2013) which have highlighted user satisfaction and positive experiences with menstrual cups among diverse populations (Mason et al., 2013). Around 81 percent of users prefer menstrual cups, indicating strong endorsement for this hygiene option. This preference aligns with research by Caruso et al. (2019) and Mason et al. (2019), which found users prefer menstrual cups for their cost-effectiveness, sustainability, and comfort. (Caruso et al., 2019; Mason et al., 2019). The factors considered important when selecting a menstrual cup, such as material, size, and cost, mirror findings from studies by Hennegan et al. (2019) and Tegegne et al. (2018), which have identified user preferences and priorities in menstrual cup design and features (Hennegan et al., 2019 ; Tegegne et al., 2018). Innovating and customizing menstrual cup products can boost satisfaction and adoption across diverse populations. High handwashing rates before using menstrual cups align with guidelines, promoting infection prevention and menstrual health safety. Research by Hennegan et al. (2019) and Mason et al. (2019) supports this practice (Hennegan et al., 2019 ; Mason et al., 2019). Universal adherence to manufacturer's cleaning instructions for menstrual cups ensures product effectiveness and user safety, as recommended by Van Eijk et al. (2019) (van Eijk et al., 2019). Boiling menstrual cups before

and after use, a widely favoured method, aligns with recommended sterilization practices endorsed by Caruso et al. (2019) (Caruso et al., 2019). The preference for warm water rinsing during periods aligns with user-friendly menstrual hygiene practices advocated by Sivakami et al. (2019) and Tegegne et al. (2018) (Sivakami et al., 2019 ; Tegegne et al., 2018). The majority preference for breathable pouch storage for menstrual cups aligns with product integrity maintenance recommendations. Beksinska et al. (2021) emphasize its significance for hygiene and care (Beksinska et al., 2021). Regular inspection for menstrual cup damages reflects proactive product maintenance and safety awareness, supported by Matteson et al. (2019) and Hennegan et al. (2019) (Matteson and Zaluski, 2019 ; Hennegan et al., 2019). Half of the respondents affirming the need for a campaign highlights recognition of gaps in menstrual health education and awareness, echoing findings by Mason et al. (2013) and Hennegan et al. (2019) on the importance of targeted interventions and awareness campaigns in addressing misinformation and stigma (Mason et al., 2013 ; Hennegan et al., 2019). Unanimous endorsement of menstrual cups for non-users reflects strong satisfaction and alignment with Beksinska et al.'s (2021) findings on user advocacy (Beksinska et al., 2021). The recommendation of menstrual cups to non-users suggests a desire to share positive experiences and promote the adoption of sustainable menstrual hygiene practices within the community. The findings from the study underscore the role of awareness campaigns and user recommendations in promoting menstrual health and sustainable menstrual hygiene practices.

4.3 Background factors associated with receiving menstrual cups and its current use

The observed association between education level, household expenditure, and acquisition of menstrual cups underscores the influence of socio-economic factors on access to menstrual hygiene products. The higher proportion of less educated women receiving menstrual cups

through the Thinkal project suggests a potential disparity in access to menstrual hygiene resources based on educational attainment. Research by Van Eijk et al. (2016) and Mason et al. (2019) has highlighted the importance of education in shaping menstrual health knowledge, attitudes, and practices, with lower education levels often associated with limited access to information and resources (Eijk et al., 2016 ; Mason et al., 2019). Conversely, the finding that a large number of women with higher education levels purchased menstrual cups themselves reflects greater financial autonomy and purchasing power among this demographic group. Studies by Sivakami et al. (2019) and Tegegne et al. (2018) have observed similar patterns of increased access to menstrual hygiene products among women with higher socio-economic status, highlighting the role of economic empowerment in overcoming barriers to access (Sivakami et al., 2019 ; Tegegne et al., 2018). The association between household expenditure and acquisition of menstrual cups further underscores the influence of economic factors on access to menstrual hygiene resources. The higher proportion of women with low household expenditure receiving menstrual cups through the Thinkal project suggests a need for targeted interventions to address financial barriers to access among economically disadvantaged communities. Research by Caruso et al. (2019) has emphasized the importance of affordability in ensuring equitable access to menstrual hygiene products, particularly among low-income populations (Caruso et al., 2019). The findings emphasize socio-economic factors' intersectionality in shaping menstrual hygiene access, stressing targeted interventions for addressing disparities. The findings regarding background variables associated with the present use of menstrual cups provide insights into demographic factors that may influence adoption and usage patterns. While age, marital status, and receipt of menstrual cups through the Thinkal project were significantly associated with current use, education, monthly expenditure, and occupation did not show any significant association. These findings offer valuable considerations for designing targeted

interventions and promoting equitable access to menstrual hygiene products. The higher prevalence of current menstrual cup use among women above 30 years of age aligns with research by Beksinska et al. (2021), which have observed increasing acceptance and adoption of menstrual cups among older women (Beksinska et al., 2021). The significant association between marital status and current menstrual cup use suggests that marital status may influence menstrual hygiene practices and product preferences. Research by Mason et al. (2019) has highlighted the role of social networks and support systems in shaping menstrual health behaviours, with married women potentially benefiting from spousal support and shared decision-making regarding menstrual hygiene options (Mason et al., 2019). The higher current use of menstrual cups among women who received them through the Thinkal project underscores the importance of targeted interventions and access initiatives in promoting menstrual cup adoption. Research by Varghese et al.(2023) has emphasized the effectiveness of community-based programs and distribution initiatives in increasing access to menstrual hygiene products among underserved populations (Varghese et al., 2023). These findings underscore the complex interplay of demographic factors in menstrual cup usage, emphasizing tailored interventions for equitable access to sustainable hygiene options. Holistic approaches, prioritizing inclusivity and user-centered design, are crucial for effective menstrual health interventions.

4.4 Strength and limitations of the study

The strengths of the study achieved a high participation rate, indicating a strong interest and engagement among respondents. However, the study's findings may not be fully generalizable to other populations or regions, as they are based on a specific sample from a particular geographical area.

4.5 Conclusions

The study demonstrates a widespread acceptance and satisfaction with menstrual cups among respondents. The high prevalence of usage, with a significant majority relying exclusively on them for comfort and convenience, underscores their effectiveness in meeting user needs. Rare occurrences of leakage and the absence of reported issues such as odour, irritation, or infections further validate their reliability and suitability. The preference for menstrual cups over other products, driven by factors like material, size, and cost, highlights their appeal and practicality. Advocacy for awareness campaigns and unanimous recommendations to non-users underscore a widespread backing of menstrual cups within the surveyed population. Moreover, insights from the study reveals distinct usage patterns influenced by factors such as education level and household spending, suggesting the potential impact of targeted initiatives in promoting wider adoption, particularly among less educated and lower-income demographics. Basically, these results show that we should keep telling people about menstrual cups, make sure they're easy to get, and consider what different people like so more people can use them. This will help more people benefit from using menstrual cups.

BIBLIOGRAPHY

- Abraham R, Rajan M, Sajithamony, et al. (2023) Knowledge, Acceptability and Misconceptions Regarding Menstrual Cup among College Students of Kerala: A Cross-Sectional Study. *Indian Journal of Public Health Research and Development* 14: 399–406.
- Achuthan K, Muthupalani S, Kolil VK, et al. (2021) A novel banana fiber pad for menstrual hygiene in India: a feasibility and acceptability study. *BMC women's health* 21(1): 129.
- Angeli F, Jaiswal AK and Shrivastava S (2022) Integrating poverty alleviation and environmental protection efforts: A socio-ecological perspective on menstrual health management. *Social Science & Medicine (1982)* 314: 115427.
- Arenas-Gallo C, Ramírez-Rocha G, González-Hakspiel L, et al. (2020) [Acceptability and safety of the menstrual cup: A systematic review of the literature]. *Revista Colombiana De Obstetricia Y Ginecologia* 71(2): 163–177.
- Barros B de S, Kuschnir MCMC, Bloch KV, et al. (2019) ERICA: age at menarche and its association with nutritional status. *Jornal De Pediatria* 95(1): 106–111.
- Behera MR, Parida S, Pradhan HS, et al. (2022) Household sanitation and menstrual hygiene management among women: Evidence from household survey under Swachh Bharat (Clean India) Mission in rural Odisha, India. *Journal of Family Medicine and Primary Care* 11(3): 1100–1108.
- Beksinska M, Nkosi P, Zulu B, et al. (2021) Acceptability of the menstrual cup among students in further education institutions in KwaZulu-Natal, South Africa. *The European Journal of Contraception & Reproductive Health Care: The Official Journal of the European Society of Contraception* 26(1): 11–16.
- Beksinska ME, Smit J, Greener R, et al. (2015) Acceptability and Performance of the Menstrual Cup in South Africa: A Randomized Crossover Trial Comparing the Menstrual Cup to Tampons or Sanitary Pads. *Journal of Women's Health* 24(2). Mary Ann Liebert, Inc., publishers: 151–158.
- Bhattacharjee M (2019) Menstrual Hygiene Management During Emergencies: A Study of Challenges Faced by Women and Adolescent Girls Living in Flood-prone Districts in Assam. *Indian Journal of Gender Studies* 26(1–2). SAGE Publications India: 96–107.
- Bitzer J, Tschudin S and Stadlmayr W (2005) [Menstruation and its impact on women's health]. *Zentralblatt Fur Gynakologie* 127(5): 282–287.
- Botello-Hermosa A, González-Cano-Caballero M, Guerra-Martín MD, et al. (2024) Perceptions, Beliefs, and Experiences about the Menstrual Cycle and Menstruation among Young Women: A Qualitative Approach. *Healthcare* 12(5). 5. Multidisciplinary Digital Publishing Institute: 560.
- Caruso BA, Ellis A, Sclar G, et al. (2019) Building Qualitative Research Capacity Among

- Interdisciplinary Teams to Investigate Girls' Challenges With Menstruation: Process and Lessons Learned From a 14-Country E-Course. *Pedagogy in Health Promotion* 5(4). SAGE Publications Inc: 283–292.
- Chothe V, Khubchandani J, Seabert D, et al. (2014) Students' perceptions and doubts about menstruation in developing countries: a case study from India. *Health Promotion Practice* 15(3): 319–326.
- Critchley HOD, Maybin JA, Armstrong GM, et al. (2020) Physiology of the Endometrium and Regulation of Menstruation. *Physiological Reviews* 100(3): 1149–1179.
- Das P, Saenkunmuang N, Jange I, et al. (2024) Menstrual cups: awareness and acceptability for menstrual hygiene management among women and girls in Pune city. *World Review of Entrepreneurship, Management and Sustainable Development* 20(1). Inderscience Publishers: 85–96.
- Dave KA, Ashfaque MZ and Kumar RS (2024) Preference of Millennial Women Towards Eco-Friendly Menstrual Cups- A Study from Bengaluru Urban District. In: *3rd International Conference on Reinventing Business Practices, Start-ups and Sustainability (ICRBSS 2023)*, 20 February 2024, pp. 943–956. Atlantis Press. Available at: <https://www.atlantis-press.com/proceedings/icrbss-23/125998479> (accessed 18 April 2024).
- Dean-Jones L (1989) Menstrual Bleeding according to the Hippocratics and Aristotle. *Transactions of the American Philological Association (1974-)* 119: 177.
- DiVall SA and Radovick S (2008) Pubertal development and menarche. *Annals of the New York Academy of Sciences* 1135: 19–28.
- Divya S, Thomas TM, Ajmeera R, et al. (2023) Assessment of the Menstrual Problems among Teenage Girls: A Tertiary Care Center Study. *Journal of Pharmacy & Bioallied Sciences* 15(Suppl 1): S281–S284.
- Durairaj T, Periyasamy A, Narayanan S, et al. (2023) Utilization of Modern Menstrual Methods and related unmet needs among college going women in Coimbatore district: An analytical cross-sectional study. Available at: <https://www.researchsquare.com/article/rs-3253194/v1> (accessed 18 April 2024).
- Eijk AM van, Sivakami M, Thakkar MB, et al. (2016) Menstrual hygiene management among adolescent girls in India: a systematic review and meta-analysis. *BMJ Open* 6(3). British Medical Journal Publishing Group: e010290.
- Elledge MF, Muralidharan A, Parker A, et al. (2018) Menstrual Hygiene Management and Waste Disposal in Low and Middle Income Countries-A Review of the Literature. *International Journal of Environmental Research and Public Health* 15(11): 2562.
- Eti M, Shreya MS and Sailakshmi MPA (2019) Knowledge about menstrual cup and its usage among medical students. *International Journal of Reproduction, Contraception, Obstetrics and Gynecology* 8(12). International Journal of Reproduction, Contraception, Obstetrics and Gynecology: 4966–4971.
- Farage M, Elsner P and Maibach H (2007) Influence of usage practices, ethnicity and climate

on the skin compatibility of sanitary pads. *Archives of Gynecology and Obstetrics* 275(6): 415–427.

Garikipati S (2021) Asymmetric Information in Menstrual Health and Implications for Sustainability: Insights from India. In: Bali Swain R and Sweet S (eds) *Sustainable Consumption and Production, Volume I: Challenges and Development*. Cham: Springer International Publishing, pp. 391–412. Available at: https://doi.org/10.1007/978-3-030-56371-4_19 (accessed 18 April 2024).

Gharacheh M, Ranjbar F, Hajinasab N, et al. (2021) Acceptability and safety of the menstrual cups among Iranian women: a cross-sectional study. *BMC women's health* 21(1): 105.

Ghosh N and Jamir L (2023) Men and menstruation in India: time for frank discussions. *Indian Journal of Medical Ethics* VIII(4): 341–342.

Gottlieb A (2020) Menstrual Taboos: Moving Beyond the Curse. In: Bobel C, Winkler IT, Fahs B, et al. (eds) *The Palgrave Handbook of Critical Menstruation Studies*. Singapore: Palgrave Macmillan. Available at: <http://www.ncbi.nlm.nih.gov/books/NBK565616/> (accessed 18 April 2024).

Hennegan J, Shannon AK, Rubli J, et al. (2019) Women's and girls' experiences of menstruation in low- and middle-income countries: A systematic review and qualitative metasynthesis. *PLOS Medicine* 16(5). Public Library of Science: e1002803.

Hofmeister S and Bodden S (2016) Premenstrual Syndrome and Premenstrual Dysphoric Disorder. *American Family Physician* 94(3): 236–240.

Howard C, Rose CL, Trouton K, et al. (2011) FLOW (finding lasting options for women): Multicentre randomized controlled trial comparing tampons with menstrual cups. *Canadian Family Physician* 57(6). The College of Family Physicians of Canada: e208–e215.

Jeffcoate TN (1965) Amenorrhoea. *British Medical Journal* 2(5458): 383–388.

K SB and Bhandary A (2020) Menstrual cup: awareness among reproductive women. *International Journal of Reproduction, Contraception, Obstetrics and Gynecology* 9(4). International Journal of Reproduction, Contraception, Obstetrics and Gynecology: 1382–1388.

Kakani CR and Bhatt JK (2017) Study of adaptability and efficacy of menstrual cup in managing menstrual health and hygiene. *International Journal of Reproduction, Contraception, Obstetrics and Gynecology* 6(7): 3045.

Karapanou O and Papadimitriou A (2010) Determinants of menarche. *Reproductive biology and endocrinology: RB&E* 8: 115.

Kaur Rajanbir, Kaur K and Kaur Rajinder (2018) Menstrual Hygiene, Management, and Waste Disposal: Practices and Challenges Faced by Girls/Women of Developing Countries. *Journal of Environmental and Public Health* 2018: 1730964.

Kissow J, Jacobsen KJ, Gunnarsson TP, et al. (2022) Effects of Follicular and Luteal Phase-

- Based Menstrual Cycle Resistance Training on Muscle Strength and Mass. *Sports Medicine (Auckland, N.Z.)* 52(12): 2813–2819.
- Kuhlmann AS, Henry K and Wall LL (2017) Menstrual Hygiene Management in Resource-Poor Countries. *Obstetrical & Gynecological Survey* 72(6): 356–376.
- Liberty A, Samuelson Bannow B, Matteson K, et al. (2023) Menstrual Technology Innovations and the Implications for Heavy Menstrual Bleeding. *Obstetrics and Gynecology* 141(4): 666–673.
- Madi V, Kn K and Natekar DS (2024) Knowledge Regarding Menstrual Cups and its Usage among Adolescent Girls. *SSR Institute of International Journal of Life Sciences* 10(2): 5084–5090.
- Majeed J, Sharma P, Ajmera P, et al. (2022) Menstrual hygiene practices and associated factors among Indian adolescent girls: a meta-analysis. *Reproductive Health* 19(1): 148.
- Manley H, Hunt JA, Santos L, et al. (2021) Comparison between menstrual cups: first step to categorization and improved safety. *Women's Health (London, England)* 17: 17455065211058553.
- Mason L, Nyothach E, Alexander K, et al. (2013) 'We keep it secret so no one should know'-a qualitative study to explore young schoolgirls attitudes and experiences with menstruation in rural western Kenya. *PLoS One* 8(11): e79132.
- Mason L, Nyothach E, Eijk AM van, et al. (2019) Comparing use and acceptability of menstrual cups and sanitary pads by schoolgirls in rural Western Kenya. *International Journal of Reproduction, Contraception, Obstetrics and Gynecology* 8(8): 2974–2982.
- Matteson KA and Zaluski KM (2019) Menstrual Health as a Part of Preventive Health Care. *Obstetrics and Gynecology Clinics of North America* 46(3): 441–453.
- Mihm M, Gangooly S and Muttukrishna S (2011) The normal menstrual cycle in women. *Animal Reproduction Science* 124(3–4): 229–236.
- Minkin MJ (2019) Menopause: Hormones, Lifestyle, and Optimizing Aging. *Obstetrics and Gynecology Clinics of North America* 46(3): 501–514.
- Mouhanna JN, Simms-Cendan J and Pastor-Carvajal S (2023) The Menstrual Cup: Menstrual Hygiene With Less Environmental Impact. *JAMA* 329(13): 1114–1115.
- Munro MG, Critchley HOD, Fraser IS, et al. (2018) The two FIGO systems for normal and abnormal uterine bleeding symptoms and classification of causes of abnormal uterine bleeding in the reproductive years: 2018 revisions. *International Journal of Gynaecology and Obstetrics: The Official Organ of the International Federation of Gynaecology and Obstetrics* 143(3): 393–408.
- Nair MKC, Chacko DS, Ranjith Darwin M, et al. (2012) Menstrual disorders and menstrual hygiene practices in higher secondary school girls. *Indian Journal of Pediatrics* 79 Suppl 1: S74-78.

- Nelson A (2018) Q&a: What is the role of a menstrual cup? Available at: <https://www.ogmagazine.org.au/20/4-20/qa-what-is-the-role-of-a-menstrual-cup/> (accessed 18 April 2024).
- Olson MM, Alhelou N, Kavattur PS, et al. (2022) The persistent power of stigma: A critical review of policy initiatives to break the menstrual silence and advance menstrual literacy. *PLOS global public health* 2(7): e0000070.
- Parija PP, Sharma N, Salve HR, et al. (2022) A qualitative study regarding menstrual hygiene in a rural community of Haryana, India. *Journal of Tropical Pediatrics* 68(6): fmac083.
- Patel K, Dwivedy S, Panda N, et al. (2023) Is menstrual cup a sustainable and safe alternative in menstrual hygiene management? A qualitative exploratory study based on user's experience in India. *Clinical Epidemiology and Global Health* 20: 101212.
- Perianes MB and Roberts T-A (2020) Transnational Engagements: From Debasement, Disability, and Disaster to Dignity—Stories of Menstruation Under Challenging Conditions. In: Bobel C, Winkler IT, Fahs B, et al. (eds) *The Palgrave Handbook of Critical Menstruation Studies*. Singapore: Springer, pp. 337–345. Available at: https://doi.org/10.1007/978-981-15-0614-7_26 (accessed 18 April 2024).
- Pokhrel D, Bhattarai S, Emgård M, et al. (2021) Acceptability and feasibility of using vaginal menstrual cups among schoolgirls in rural Nepal: a qualitative pilot study. *Reproductive Health* 18(1): 20.
- Rastogi S, Khanna A and Mathur P (2019) Uncovering the challenges to menstrual health: Knowledge, attitudes and practices of adolescent girls in government schools of Delhi. *Health Education Journal* 78(7). SAGE Publications Ltd: 839–850.
- Reddish S (2006) Dysmenorrhoea. *Australian Family Physician* 35(11): 842–844, 846–849.
- Riley AH, Slifer L, Hughes J, et al. (2020) Results from a literature review of menstruation-related restrictions in the United States and Canada. *Sexual & Reproductive Healthcare: Official Journal of the Swedish Association of Midwives* 25: 100537.
- Rothchild J and Piya PS (2020) Rituals, Taboos, and Seclusion: Life Stories of Women Navigating Culture and Pushing for Change in Nepal. In: Bobel C, Winkler IT, Fahs B, et al. (eds) *The Palgrave Handbook of Critical Menstruation Studies*. Singapore: Palgrave Macmillan. Available at: <http://www.ncbi.nlm.nih.gov/books/NBK565614/> (accessed 18 April 2024).
- Schlievert PM and Davis CC (2020) Device-Associated Menstrual Toxic Shock Syndrome. *Clinical Microbiology Reviews* 33(3): e00032-19.
- Shaili V (2021) A Study on Menstrual Hygiene Management at the Bottom of Pyramid in India. 3795881, SSRN Scholarly Paper. Rochester, NY. Available at: <https://papers.ssrn.com/abstract=3795881> (accessed 18 April 2024).
- Shanmugham V, Murugesan A and G V (2024) Usage of menstrual cups among the doctors of reproductive age group in a tertiary care centre in Kancheepuram, Tamil Nadu, India- An observational study. *Clinical Epidemiology and Global Health* 25: 101473.

- Singh Aditya, Chakrabarty M, Singh S, et al. (2022) Menstrual hygiene practices among adolescent women in rural India: a cross-sectional study. *BMC public health* 22(1): 2126.
- Sivakami M, Maria Van Eijk A, Thakur H, et al. (2019) Effect of menstruation on girls and their schooling, and facilitators of menstrual hygiene management in schools: surveys in government schools in three states in India, 2015. *Journal of Global Health* 9(1): 010408.
- Smith AD, Muli A, Schwab KJ, et al. (2020) National Monitoring for Menstrual Health and Hygiene: Is the Type of Menstrual Material Used Indicative of Needs Across 10 Countries? *International Journal of Environmental Research and Public Health* 17(8): 2633.
- Stewart K, Powell M and Greer R (2009) An alternative to conventional sanitary protection: would women use a menstrual cup? *Journal of Obstetrics and Gynaecology: The Journal of the Institute of Obstetrics and Gynaecology* 29(1): 49–52.
- Stodart K (2013) Menstruation celebrated by pre-colonial Māori. *Nursing New Zealand (Wellington, N.Z.: 1995)* 19(9): 13.
- Sudevan Devan GM, Mohanan G, Ajitha GK, et al. (2022) Knowledge, Attitude and Practices Regarding Menstrual Cup Among Females in an Urban Setting of South Kerala. *Journal of Family & Reproductive Health* 16(4): 243–247.
- Sundqvist J (2015) *A Cup of Freedom? : A Study of the Menstrual Cup's Impact on Girls's Capabilities*. Available at: <https://urn.kb.se/resolve?urn=urn:nbn:se:lnu:diva-39445> (accessed 18 April 2024).
- Swenson I and Havens B (1987) Menarche and menstruation: a review of the literature. *Journal of Community Health Nursing* 4(4): 199–210.
- Tan DA, Haththotuwa R and Fraser IS (2017) Cultural aspects and mythologies surrounding menstruation and abnormal uterine bleeding. *Best Practice & Research. Clinical Obstetrics & Gynaecology* 40: 121–133.
- Tegegne TK, Chojenta C, Loxton D, et al. (2018) The impact of geographic access on institutional delivery care use in low and middle-income countries: Systematic review and meta-analysis. *PLOS ONE* 13(8). Public Library of Science: e0203130.
- van Eijk AM, Zulaika G, Lenchner M, et al. (2019) Menstrual cup use, leakage, acceptability, safety, and availability: a systematic review and meta-analysis. *The Lancet. Public Health* 4(8): e376–e393.
- Varghese SD, Hemachandran KS and Parvathy J (2023) Impact of imparting knowledge and awareness on the usage of menstrual cups: A study based on project 'Thinkal' at Alappuzha Municipality in Kerala. *Public Health in Practice (Oxford, England)* 5: 100352.
- Vinod A and Kaimal RS (2023) Perceptions and practices related to menstruation and reproductive health in adolescent girls in an urban population - A cross sectional study. *Journal of Family Medicine and Primary Care* 12(4): 717–721

ANNEXURE -1

**Achutha Menon Centre for Health Science Studies (AMCHSS)
Sree Chitra Tirunal Institute for Medical Sciences & Technology (SCTIMST)
Trivandrum -11**

ACCEPTABILITY OF MENSTRUAL CUP AMONG THE WOMEN RESIDING IN AN AREA, WHERE FREE MENSTRUAL CUP DISTRIBUTION WAS DONE, A CROSS SECTIONAL STUDY IN TRIVANDRUM

PARTICIPANT INFORMATION SHEET

Hello. I am Dr. Sulthana Ansar, currently enrolled in the Master of Public Health programme at the Achutha Menon Centre for Health Sciences Studies, Sree Chitra Tirunal Institute for Medical Sciences and Technology, Thiruvananthapuram. As part of my academic research, I am now conducting a survey entitled examining “Acceptability of menstrual cup among the women residing in an area, where free menstrual cup distribution was done, a cross sectional study in Trivandrum district. If you participate, I would be asking you questions to gather information on the use of menstrual cups as a menstrual hygiene product. I am inviting you to be part of this research survey work. Before you decide to be a participant in this survey or not, you can talk to anyone you feel comfortable with about this research survey. This consent form may contain terms and questions that you do not understand. Please ask me to stop as we go through the questions and I will clarify your doubts before proceeding further. If you have questions later, you can ask them either to me or can contact the Member Secretary of the Institution Ethics Committee. This research survey will require you to complete a questionnaire which will take approximately 15 to 20 minutes. You are invited to participate in this study because I recognize you as a key stakeholder whose experiences and knowledge about menstrual cup can contribute significantly to this investigation. Your participation is purely voluntarily. You are free to choose to take part or not. Even though you gave your consent previously, you are free to withdraw later if you change your mind. Whether you choose to participate or not, no one will be able to identify you and your participation will be anonymous. There will not be any rewards or incentives for participating in the study.

Risks

There is no risk anticipated in the study.

Benefits

Though there might not be direct benefit for you from this study, the information you share will be useful to understand the use and acceptability of menstrual cups, potentially helping to improve menstrual product options for women in the future.

Confidentiality

I will not be sharing information about you to anyone else. The information that I collect from this research survey work will be kept private. Any information about you will have a number on it instead of your name.

Who to contact

If you have any questions, you can ask them now or later. If you wish to ask questions later, you may contact anyone of the following.

PRINCIPAL INVESTIGATOR

NAME: DR SULTHANA ANSAR

ADDRESS:

AMCHSS, SCTIMST,

MEDICAL COLLEGE (PO),

THIRUVANANTHAPURAM-11

EMAIL ID: sulthana93@gmail.com

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INSTITUTIONAL ETHICS COMMITTEE MEMBER SECRETARY

NAME: DR SRINIVAS G

ADDRESS: MEMBER SECRETARY,

INSTITUTIONAL ETHICS COMMITTEE,

SCTIMST, TRIVANDRUM, 695011

CONTACT NUMBER: 04712524689(OFFICE)

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ANNEXURE-2

**Achutha Menon Centre for Health Science Studies (AMCHSS)
Sree Chitra Tirunal Institute for Medical Sciences & Technology (SCTIMST)
Trivandrum -11**

ACCEPTABILITY OF MENSTRUAL CUP AMONG THE WOMEN RESIDING IN AN AREA, WHERE FREE MENSTRUAL CUP DISTRIBUTION WAS DONE

INFORMED CONSENT FORM

I have been invited to participate in the thesis titled “Acceptability of menstrual cup among the women residing in an area, where free menstrual cup distribution was done, a cross sectional study in Trivandrum” I have read the information provided regarding the study, or it has been read to me. I have had the opportunity to ask questions about it and the questions I have been asked have been answered to my satisfaction. I am aware that there is minimal risk in participating in the study. I understand there is no immediate direct benefit in the study. I know I will not be incentivised for the participation. I understand my personal information will remain confidential. I know that I can withdraw my consent at any point of the study. I consent voluntarily to be a participant in this study.

Participant ID:

Name of the participant:

Mobile Number:

Signature

Place:

Date:

I confirm that the participant was allowed to ask questions about the study, and all the questions asked by the participant have been answered correctly and to the best of my ability. I confirm that the individual has not been coerced into giving consent and the consent has been given freely and voluntarily.

Name of the Researcher.....

Date.....

Signature of the Researcher.....

ANNEXURE-3

ACCEPTABILITY OF MENSTRUAL CUP AMONG THE WOMEN RESIDING IN AN AREA, WHERE FREE MENSTRUAL CUP DISTRIBUTION WAS DONE, A CROSS SECTIONAL STUDY IN TRIVANDRUM

Interview schedule

Interview details of the participant

Code No	Item	
	Participant id	----- / ---- /----- Code for municipality/code for ward (1-2) /code for residential colony/serial number of household from each residential colony
	Name of ward	
	Name of the residential colony	
	Date of interview	
	Remarks, if any	

Section 1

Background details of the study participant

SL no	Item	Response	Remarks
1	What is your age at your last birthday?	
2	Up to which level have you been educated?	1.Illiterate 2.Literate but no formal education 3.Primary school level (1-7 th STD) 4.High school level (8-10 th STD) 5.Higher secondary level (11-12 th STD) 6.Graduate level 7.Post graduate level and above 8.Others (Specify)	
3	What is your working status at present?	1.Home maker 2.Employed(salaried) 3.Self Employed 4.Informal (daily wages) 5. Others(specify).....	

4	What is the approximate monthly expenditure your family?	1.Below 5000 2.5001- 10000 3.10001-20000 4.20001 – 30000 5.Above 30000	
5	Are you able to meet the monthly household expenditure easily?	1.Yes 2.No	
6	Marital status	1.Married 2.Single 3.Widowed 4.Separated/Divorced	

Section 2
Details related to menstruation

SL no	Item	Response	Remarks
1	How old were you when you had your first period?years	
2	How long is your average menstrual cycle?(days in between 2 cycles)	1. Within 21-35 days 2. >35 days 3. <21 days	
3	On an average, how long does your menstrual period last (in days)?	1. 1-3 days 2. 3-7 days 3. >7 days	
4	How is your bleeding status during periods?	1.Heavy 2.Moderate 3.Less 4.Scarce	
5	Does menstruation affect your daily life?	1. Not at all 2. Somewhat 3. largely affecting	
6	Have you ever missed work, school/ other activities due to menstrual issues?	1.Yes 2.No	
7	If Yes, please specify your reason for missing class /work/other activities during menstruation.	-----	

Section3
Details regarding the availability of menstrual cup
And menstrual hygiene products presently used by women

1.	Have you ever heard about menstrual cup?	1.Yes 2.No	If Yes, proceed to next question
2	From where you first heard about menstrual cups?	1.Online articles/ forums 2.Social media 3.Recommendations from friends/ family members 4.Advertisements 5.Through the visits of health workers/Asha/Ward member (as part of Thinkal project) 6.Others ..	If Others,please specify ----- -----
3	Have you ever received / bought menstrual cup?	1.Yes, I Received through Thinkal project 2.Yes, I Bought myself 3.No, I never had access to menstrual cup 4. Others.....	If the women received or bought mc cup, proceed to next question; otherwise go to Question 8
4	Have you ever used a menstrual cup (used at least once) in your life? It doesn't mean that you used it in atleast one cycle entirely.	1. Yes, I used 2. I tried but failed to use 3. No, I never	
5	If no, Please specify the reason for not using it	_____	Go to question8
6	Are you presently using menstrual cup?	1. Yes 2.No	
7	If no, please specify , why you stop using it	_____	
8	What types of menstrual hygiene products do you typically use during your period? (Multiple answers possible)	1. Sanitary pads(disposable) 2. Cloth 3. Tampons 4. Menstrual cups 5. Periods panties 6. Others	If others, please specify.....
9	What are the menstrual hygiene materials used by you at your home? (Multiple answers possible)	1. Sanitary pads(disposable) 2. Cloth 3. Tampons 4. Menstrual cups 5. Periods panties 6. Others	If others, please specify.....
10	What are the menstrual	1. Sanitary pads(disposable)	If others, please

	hygiene materials used by you at school/ work/any place outside your home? (Multiple answers possible)	2. Cloth 3. Tampons 4. Menstrual cups 5. Periods panties 6. Others	specify.....
11	If any difference in use of menstrual products at home and outside, please specify the reasons.		If same products are used at both places then skip this question And proceed to next question
12	Which is the preferred menstrual product during heavy bleeding days? (you can select multiple option if you use more than one product combined)	1. Sanitary pads(disposable) 2. Cloth 3. Tampons 4. Menstrual cups 5.Periods panties 6.Others	

(If the woman is a current user of menstrual cup, then go to section 4)

Section 4
Menstrual cup use -women's experiences

1	How long have you been using menstrual cup?	1.Less than 3 months 2. 3 to 6 months 3.6 months to 1 year 4. More than 1 year	
2	Do you exclusively use a menstrual cup, or do you use other menstrual products (like cloth, sanitary pads, tampons, etc) in addition to the cup?	1.exclusively menstrual cup 2.menstrual cup and other products 3.exclusively other menstrual products	
3	What influenced your decision to try a menstrual cup?(After listening to the answers, select all that apply)	1. Avoiding pad disposal 2. Avoiding inconvenience in washing/drying clothes 3.No need to spend money every month buying menstrual products 4.Comfort of use 5.Convenience 6. Avoid allergies or rashes 7. Out of curiosity 8. Influence of friend/family members/health worker 9. Others	If others, please specify ---- -----

4	How easy was to use the menstrual cup for the first time when you tried to use it?	1. Very easy 2. Somewhat easy 3. Somewhat difficult 4. Very difficult	
5	Please rate the following aspect of menstrual cup based on your latest experience (the last time when you used menstrual cup), with 1 being very easy and 4 being very difficult		
5.1	Insertion process	1. Very easy 2. Somewhat easy 3. Somewhat difficult 4. Very difficult	
5.2	Comfort during wear	1. Very easy 2. Somewhat easy 3. Somewhat difficult 4. Very difficult	
5.3	Removal process	1. Very easy 2. Somewhat easy 3. Somewhat difficult 4. Very difficult	
6	Do you experience any leaks when using a menstrual cup?	1. Frequently 2. Occassionally 3. Rarely 4. Never	
7	Are you confident in using menstrual cup alone to prevent leaks?	1. Yes 2. No	
8	Have you experienced any odours while using a menstrual cup?	1. Yes, frequently 2. Yes, occasionally 3. No, rarely 4. No, never	
9	Have you experienced any discomfort/ pain while using a menstrual cup?	1. Yes 2. No	
10	Have you experienced any infections/irritations while using a menstrual cup?	1. Yes 2. No	
11	Do you prefer using a menstrual cup over other menstrual products?(like sanitary pads, cloth, napkins, tampons)	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree	
12	According to your opinion, what all factors are important when choosing a menstrual cup?(select all that apply)	1. Cost 5. Size 6. Material(silicon, rubber, etc) 7. Brand reputation 8. Others	If others, please specify ---- -----

Section 5
MENSTRUAL CUP CLEANING PRACTICES

1	Do you always wash your hands thoroughly before handling the menstrual cup?	1.Yes 2.No	
2	Do you clean your menstrual cup according to manufacturer's instructions?	1.Yes 2.No	
3	What cleaning methods do you use to clean your menstrual cup when your cycle begins?	1.Boiling in water 2.Rinsing with warm water 3.Rinsing with cold water 4.Using a specialised menstrual cup cleanser 5. Wiping with a damp cloth 6. Others, please specify.....	If others, please specify.....
4	What cleaning methods do you use to clean your menstrual cup during your periods?	1.Boiling in water 2.Rinsing with warm water 3.Rinsing with cold water 4.Using a specialised menstrual cup cleanser 5. Wiping with a damp cloth 6. Others, please specify.....	If others, please specify.....
5	What cleaning methods do you use to clean your menstrual cup after your cycle ends?	1.Boiling in water 2.Rinsing with warm water 3.Rinsing with cold water 4.Using a specialised menstrual cup cleanser 5. Wiping with a damp cloth 6. Others, please specify.....	If others, please specify.....
6	How do you store your menstrual cup between cycles?	1.In a breathable pouch/bag 2.In a sealed container 3.others	If others, please specify.....
7	Do you regularly inspect your menstrual cup for signs of wear/ damage?	1.Yes 2.No	

Section 6
Women's perceptions towards awareness creation and their recommendations

1	Do you think there should be more education and awareness campaign about menstrual cups?	1.Yes 2.No	
---	--	---------------	--

2	If Yes, how do you think this awareness can be improved?		
3	Would you recommend menstrual cups to someone who has never used before?	1.Yes 2.No	
4	If yes, what factors made you to recommend menstrual cups?		
5.	If no, what concerns or reservations do you have about not recommending menstrual cups?		

Thank you for your cooperation and participation

ANNEXURE-4

സൗജന്യ ആർത്തവ ക്ഷ്യി വിതരണം നടന്ന കേരളത്തിലെ തിരുവനന്തപുരം ജില്ലയിലെ ഒരു പ്രദേശത്ത് താമസിക്കുന്ന സ്ത്രീകൾക്കിടയിൽ ആർത്തവ ക്ഷ്യിനുള്ള സ്വീകാര്യതയെ കുറിച്ചുള്ള പഠനം

പങ്കെടുക്കുന്നവരുടെ അറിവിലേക്കായുള്ള പഠന വിവരണ പത്രിക

നമസ്കാരം , ഞാൻ ഡോക്ടർ സുൽത്താന അൻസാർ ആണ്, നിലവിൽ തിരുവനന്തപുരം ശ്രീചിത്ര തിരുനാൾ ഇൻസ്റ്റിറ്റ്യൂട്ട് ഫോർ മെഡിക്കൽ സയൻസസ് ആൻഡ് ടെക്നോളജിയിലെ അധ്യക്ഷനാണ് സെന്റർ ഫോർ ഹെൽത്ത് സയൻസ് സ്റ്റഡീസിൽ മാസ്റ്റർ ഓഫ് പബ്ലിക് ഹെൽത്ത് (എംപിഎച്ച്) പഠിക്കുന്നു. എന്റെ പഠനത്തിന്റെ ഭാഗമായി " തിരുവനന്തപുരം ജില്ലയിലെ സൗജന്യ ആർത്തവ ക്ഷ്യി വിതരണം നടത്തിയ ഒരു പ്രദേശത്ത് താമസിക്കുന്ന സ്ത്രീകൾക്കിടയിൽ ആർത്തവ ക്ഷ്യിന്റെ സ്വീകാര്യത " എന്ന വിഷയത്തിൽ ഞാൻ ഒരു പഠനം നടത്തുകയാണ്. ഇതുമായി ബന്ധപ്പെട്ട വിവര ശേഖരണത്തിന്റെ ഭാഗമാകാൻ ഞാൻ നിങ്ങളെ ക്ഷണിക്കുന്നു .നിങ്ങൾ പങ്കെടുക്കുകയാണെങ്കിൽ, ആർത്തവ ശുചിത്വ ഉൽപ്പന്നമായി ആർത്തവ ക്ഷ്യികൾ ഉപയോഗിക്കുന്നതിനെക്കുറിച്ചുള്ള വിവരങ്ങൾ ഞാൻ നിങ്ങളോട് ചോദിക്കും. ഏകദേശം 15 മുതൽ 20 മിനിറ്റ് വരെ സമയം ഈ ചോദ്യാവലി പൂർത്തിയാക്കുന്നതിനു വേണ്ടി വരും , ചോദ്യങ്ങളുമായി ബന്ധപ്പെട്ട് എന്തെങ്കിലും സംശയങ്ങൾ ഉണ്ടെങ്കിൽ നിങ്ങൾക്ക് എന്നോട് ചോദിക്കാവുന്നതാണ്.. നിങ്ങളുടെ പങ്കാളിത്തം പൂർണ്ണമായും സ്വമേധയാ ഉള്ളതാണ്. പങ്കെടുക്കണോ വേണ്ടയോ എന്ന് തീരുമാനിക്കാൻ നിങ്ങൾക്ക് സ്വാതന്ത്ര്യമുണ്ട്. ഏതെങ്കിലും ചോദ്യങ്ങൾ നിങ്ങൾക്ക് ബുദ്ധിമുട്ടുണ്ടാക്കുന്ന പക്ഷം അതിനു മറുപടി തരാതിരിക്കാനും , അഥവാ ഈ സർവ്വേയിൽ നിന്നും പിന്മാറണമെന്ന് തോന്നിയാൽ പിന്മാറാനും നിങ്ങൾക്ക് സ്വാതന്ത്ര്യം ഉണ്ട് . നിങ്ങൾ പറയുന്ന വിവരങ്ങളുടെ രഹസ്യത്വം ഞാൻ ഉറപ്പു നൽകുന്നു. പഠനത്തിൽ പങ്കെടുക്കുന്നതിന് പ്രതിഫലമോ പ്രോത്സാഹനങ്ങളോ ഉണ്ടാകില്ല.

അപകടസാധ്യതകൾ:

നിങ്ങളുടെ വിലയേറിയ കുറച്ചു സമയം ഈ സർവ്വേയ്ക്കായി ചിലവാക്കണം എന്നതൊഴിച്ചാൽ നിങ്ങൾക്ക് ഇതിൽ പങ്കെടുക്കുന്നതുകൊണ്ടു മറ്റുവിധത്തിലുള്ള യാതൊരു ബുദ്ധിമുട്ടുകളോ അപകടസാധ്യതകളോ ഇല്ല.

ആനുകൂല്യങ്ങൾ:

ഈ പഠനത്തിൽ നിന്ന് നിങ്ങൾക്ക് നേരിട്ടുള്ള പ്രയോജനം ഉണ്ടായേക്കില്ലെങ്കിലും, നിങ്ങൾ പങ്കിടുന്ന വിവരങ്ങൾ ആർത്തവ ക്ഷ്യികളുടെ ഉപയോഗവും സ്വീകാര്യതയും മനസ്സിലാക്കാൻ ഉപയോഗപ്രദമാകും, ഭാവിയിൽ സ്ത്രീകൾക്ക് ആർത്തവ ഉൽപ്പന്ന ഓപ്ഷനുകൾ മെച്ചപ്പെടുത്താൻ ഇത് സഹായിക്കും.

രഹസ്യമാക്കൽ:

നിങ്ങളെ കുറിച്ചുള്ള വിവരങ്ങൾ ഞാൻ മറ്റാരോടും പങ്കുവയ്ക്കില്ല. ഞാൻ ശേഖരിക്കുന്ന വിവരങ്ങൾ ഈ ഗവേഷണ സർവ്വേ പ്രവർത്തനങ്ങൾക്ക് മാത്രമേ ഉപയോഗിക്കുകയുള്ളൂ. മറ്റൊരു ആവശ്യത്തിനും ഇത് ഉപയോഗിക്കില്ല. സ്വകാര്യമായി സൂക്ഷിക്കുകയും ചെയ്യും.

ആരെയാണ് ബന്ധപ്പെടേണ്ടത്:

നിങ്ങൾക്ക് എന്തെങ്കിലും ചോദ്യങ്ങളുണ്ടെങ്കിൽ, ഇനിപ്പറയുന്നവരിൽ ആരെയെങ്കിലും നിങ്ങൾക്ക് ബന്ധപ്പെടാം.

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ANNEXURE-5

സൗജന്യ ആർത്തവ ക്ഷ്യാ വിതരണം നടന്ന കേരളത്തിലെ തിരുവനന്തപുരം ജില്ലയിലെ ഒരു പ്രദേശത്ത് താമസിക്കുന്ന സ്ത്രീകൾക്കിടയിൽ ആർത്തവ ക്ഷ്യാനുള്ള സ്വീകാര്യതയെ കുറിച്ചുള്ള പഠനം

പങ്കെടുക്കുന്നതിനുള്ള സമ്മത പത്രം

തിരുവനന്തപുരം ജില്ലയിലെ “സൗജന്യ ആർത്തവ ക്ഷ്യാ വിതരണം നടത്തിയ ഒരു പ്രദേശത്ത് താമസിക്കുന്ന സ്ത്രീകൾക്കിടയിൽ ആർത്തവ ക്ഷ്യാനുള്ള സ്വീകാര്യത” എന്ന തലക്കെട്ടിലുള്ള പഠനത്തിൽ പങ്കെടുക്കാൻ എന്നെ ക്ഷണിച്ചിട്ടുണ്ട്. പഠനവുമായി ബന്ധപ്പെട്ട് നൽകിയിരിക്കുന്ന വിവരങ്ങൾ ഞാൻ വായിച്ചിട്ടുണ്ട്, അല്ലെങ്കിൽ അത് എനിക്ക് വായിച്ചുതന്നിട്ടുണ്ട്. അതിനെക്കുറിച്ച് ചോദ്യങ്ങൾ ചോദിക്കാൻ എനിക്ക് അവസരം ലഭിച്ചു, എന്നോട് ചോദിച്ച ചോദ്യങ്ങൾക്ക് എനിക്ക് തൃപ്തികരമായ ഉത്തരം ലഭിച്ചു. പഠനത്തിൽ പങ്കെടുക്കുന്നതിൽ അപകടസാധ്യതയില്ലെന്ന് എനിക്കറിയാം. ഗവേഷണത്തിൽ പങ്കെടുക്കുന്നതിനാൽ നേരിട്ട് ഉള്ള ഒരു പ്രയോജനവും ഇല്ല എന്ന് ഞാൻ മനസ്സിലാക്കുന്നു. എന്റെ സ്വകാര്യ വിവരങ്ങൾ രഹസ്യമായി തുടരുമെന്ന് ഞാൻ മനസ്സിലാക്കുന്നു. പഠനത്തിന്റെ ഏത് ഘട്ടത്തിലും എനിക്ക് എന്റെ സമ്മതം പിൻവലിക്കാൻ കഴിയുമെന്ന് എനിക്കറിയാം. ഈ പഠനത്തിൽ പങ്കാളിയാകാൻ ഞാൻ സ്വമേധയാ സമ്മതിക്കുന്നു.

പങ്കെടുക്കുന്നയാളുടെ ഐഡി:

പങ്കെടുക്കുന്നയാളുടെ പേര്:

മൊബൈൽ നമ്പർ:

ഒപ്പ്

സ്ഥലം:

തീയതി:

പഠനത്തെ കുറിച്ച് ചോദ്യങ്ങൾ ചോദിക്കാൻ അനുവദിച്ചിട്ടുണ്ടെന്നും ചോദിച്ച എല്ലാ ചോദ്യങ്ങൾക്കും കൃത്യമായും എന്റെ കഴിവിന്റെ പരമാവധി ഉത്തരം നൽകിയിട്ടുണ്ടെന്നും ഞാൻ സ്ഥിരീകരിക്കുന്നു. സമ്മതം നൽകാൻ വ്യക്തിയെ നിർബന്ധിച്ചിട്ടില്ലെന്നും, സമ്മതം സ്വതന്ത്രമായും സ്വമേധയാ നൽകിയിട്ടുണ്ടെന്നും ഞാൻ സ്ഥിരീകരിക്കുന്നു.

ഗവേഷകന്റെ പേര്.....

തീയതി.....

ഗവേഷകന്റെ ഒപ്പ്.....

ANNEXURE -6

സൗജന്യ ആർത്തവ ക്ലിപ്ത വിതരണം നടന്ന കേരളത്തിലെ തിരുവനന്തപുരം ജില്ലയിലെ ഒരു പ്രദേശത്ത് താമസിക്കുന്ന സ്ത്രീകൾക്കിടയിൽ ആർത്തവ ക്ലിപ്തങ്ങളെ സ്വീകാര്യതയെ കുറിച്ചുള്ള പഠനം

അഭിമുഖ പട്ടിക

പങ്കെടുക്കുന്നയാളുടെ അഭിമുഖ വിശദാംശങ്ങൾ

കോഡ് നമ്പർ	ഇനം	
	പങ്കെടുക്കുന്നയാളുടെ ഐ ഡി	----- / ---- /----- മുനിസിപ്പാലിറ്റിയിൽ കോഡ് റെസിഡൻഷ്യൽ കോളനി കോഡ്വാർഡിനുള്ള കോഡ് (1-2)/ഓരോ വാർഡിൽ നിന്നുമുള്ള വ്യക്തികളുടെ വീട്ട് നമ്പർ
	വാർഡിന്റെ പേര്	
	റെസിഡൻഷ്യൽ കോളനിയുടെ പേര്	
	അഭിമുഖ തീയതി	
	മറ്റു അഭിപ്രായങ്ങൾ എന്തെങ്കിലും	

വിഭാഗം 1

പഠനത്തിൽ പങ്കെടുക്കുന്നയാളുടെ പശ്ചാത്തല വിശദാംശങ്ങൾ

SL no	ഇനം	പ്രതികരണം	പരാമർശങ്ങൾ
1	നിങ്ങളുടെ കഴിഞ്ഞ ജന്മദിനത്തിൽ നിങ്ങളുടെ പ്രായം എത്രയാണ്?	
2	നിങ്ങൾ ഏത് തലം വരെ പഠിച്ചിട്ടുണ്ട്?	1.നിരക്ഷരൻ 2.സാക്ഷരരെങ്കിലും ഔപചാരിക വിദ്യാഭ്യാസമില്ല 3.പ്രൈമറി സ്കൂൾ തലം (1-7 STD) 4.ഹൈസ്കൂൾ തലം (8-10th STD) 5.ഹയർ സെക്കൻഡറി ലെവൽ (11-12 STD) 6.ബിരുദതലം 7.പോസ്റ്റ് ഗ്രാജ്വേറ്റ് ലെവലും അതിനുമുകളിലും 8.മറ്റുള്ളവ (വ്യക്തമാക്കുക)	

3	ഇപ്പോൾ നിങ്ങളുടെ തൊഴിൽ സ്ഥിതി എന്താണ്?	1.വീട്ടമ്മ 2.ജോലി (ശമ്പളം) 3.സ്വയം തൊഴിൽ 4.അനൗപചാരിക (പ്രതിദിന വേതനം) 5.മറ്റുള്ളവ (വ്യക്തമാക്കുക)	
4	നിങ്ങളുടെ കുടുംബത്തിന്റെ ഏകദേശ പ്രതിമാസ ചെലവ് എത്രയാണ്?	1.5000-ന് താഴെ 2.5001- 10000 3.10001-20000 4.20001 - 30000 5.30000-ന് മുകളിൽ	
5	പ്രതിമാസ വീട്ട് ചെലവ് എളുപ്പത്തിൽ നിറവേറ്റാൻ നിങ്ങൾക്ക് കഴിയുന്നുണ്ടോ?	1.അതെ 2.അല്ല	
6	വൈവാഹിക നില	1.വിവാഹിത 2.അവിവാഹിത 3.വിധവ 4.വേർപിരിഞ്ഞു/വിവാഹമോചിതർ	

വിഭാഗം 2
ആർത്തവവുമായി ബന്ധപ്പെട്ട വിശദാംശങ്ങൾ

SL no	ഇനം	പ്രതികരണം	പരാമർശങ്ങൾ
1	നിങ്ങളുടെ ആദ്യത്തെ ആർത്തവം വരുമ്പോൾ നിങ്ങൾക്ക് എത്ര വയസ്സായിരുന്നു?	-----	
2	നിങ്ങളുടെ ശരാശരി ആർത്തവചക്രം എത്രയാണ്? (2 സൈക്കിളുകൾക്കിടയിലുള്ള ദിവസങ്ങൾ)	1.21-35 ദിവസത്തിനുള്ളിൽ 2.>35 ദിവസം 3.<21 ദിവസം	
3	ശരാശരി, നിങ്ങളുടെ ആർത്തവം എത്രത്തോളം നീണ്ടുനിൽക്കും (ദിവസങ്ങളിൽ)?	1.1-3 ദിവസം 2.3-7 ദിവസം 3.>7 ദിവസം	
4	ആർത്തവ സമയത്ത് നിങ്ങളുടെ രക്തസ്രാവത്തിന്റെ അവസ്ഥ എങ്ങനെയാണ്?	1.അമിതം 2.മിതമായ 3.കുറവ് 4.വളരെ കുറവ്	
5	ആർത്തവം നിങ്ങളുടെ ദൈനംദിന ജീവിതത്തെ ബാധിക്കുന്നുണ്ടോ?	1. ഇല്ല 2.കുറച്ച് 3.വലിയതോതിൽ ബാധിക്കുന്നു	

6	ആർത്തവ പ്രശ്നങ്ങൾ കാരണം നിങ്ങൾക്ക് എപ്പോഴെങ്കിലും ജോലി, സ്കൂൾ/ മറ്റ് പ്രവർത്തനങ്ങൾ എന്നിവ നഷ്ടമായിട്ടുണ്ടോ?	1. അതെ 2. ഇല്ല	
7	അതെ എങ്കിൽ, ആർത്തവ സമയത്ത് ക്ലാസ് / ജോലി / മറ്റ് പ്രവർത്തനങ്ങൾ നഷ്ടപ്പെടാനുള്ള നിങ്ങളുടെ കാരണം വ്യക്തമാക്കുക.	-----	

വിഭാഗം 3

ആർത്തവ ക്ഷീണത്തെ ലഭ്യത സംബന്ധിച്ച വിശദാംശങ്ങൾ കൂടാതെ സ്ത്രീകൾ നിലവിൽ ഉപയോഗിക്കുന്ന ആർത്തവ ശുചിത്വ ഉൽപ്പന്നങ്ങൾ

1.	ആർത്തവ ക്ഷീണത്തെക്കുറിച്ച് നിങ്ങൾ എപ്പോഴെങ്കിലും കേട്ടിട്ടുണ്ടോ?	1. അതെ 2. ഇല്ല	അതെ എങ്കിൽ, അടുത്ത ചോദ്യത്തിലേക്ക് പോകുക
2	ആർത്തവ ക്ഷീണത്തെക്കുറിച്ച് നിങ്ങൾ ആദ്യമായി കേട്ടത് എവിടെ നിന്നാണ്?	1. ഓൺലൈൻ ലേഖനങ്ങൾ/ ഫോറങ്ങൾ 2. സോഷ്യൽ മീഡിയ 3. സുഹൃത്തുക്കളുടെ/ കുടുംബാംഗങ്ങളിൽ നിന്നുള്ള ശുപാർശകൾ 4. പരസ്യങ്ങൾ 5. ആരോഗ്യ പ്രവർത്തകർ/ആശ/വാർഡ് അംഗം എന്നിവരുടെ സന്ദർശനങ്ങളിലൂടെ (തിങ്കൽ പദ്ധതിയുടെ ഭാഗമായി) 6. മറ്റുള്ളവ ..	മറ്റുള്ളവർ ആണെങ്കിൽ, ദയവായി വ്യക്തമാക്കുക -----
3	നിങ്ങൾക്ക് എപ്പോഴെങ്കിലും ആർത്തവ ക്ഷീണം ലഭിച്ചിട്ടുണ്ടോ / വാങ്ങിയിട്ടുണ്ടോ?	1. അതെ, തിങ്കൽ പ്രോജക്റ്റിലൂടെ എനിക്ക് ലഭിച്ചു 2. അതെ, ഞാൻ തന്നെ വാങ്ങി 3. ഇല്ല എനിക്ക് ഒരിക്കലും ആർത്തവ ക്ഷീണം ലഭിക്കുകയോ ഞാൻ വാങ്ങുകയോ ചെയ്തിട്ടില്ല 4. മറ്റുള്ളവ ..	സ്ത്രീകൾക്ക് ആർത്തവ ക്ഷീണം ലഭിക്കുകയോ വാങ്ങുകയോ ചെയ്യാൻ, അടുത്ത ചോദ്യത്തിലേക്ക് പോകുക; അല്ലെങ്കിൽ ചോദ്യം 8-ലേക്ക് പോകുക
4	നിങ്ങൾ ജീവിതത്തിൽ എപ്പോഴെങ്കിലും ആർത്തവ ക്ഷീണം ഉപയോഗിച്ചിട്ടുണ്ടോ? ഒരു സൈക്കിളിലെ എല്ലാ ആർത്തവ	1. അതെ, ഞാൻ ഉപയോഗിച്ചു 2. ഞാൻ ശ്രമിച്ചുവെങ്കിലും ഉപയോഗിക്കുന്നതിൽ പരാജയപ്പെട്ടു 3. ഇല്ല, ഞാൻ ഒരിക്കലും ഉപയോഗിച്ചിട്ടില്ല	

	നാളുകളിലും ഉപയോഗിച്ച് എന്ന് ഇതിനർത്ഥമില്ല)		
5	ഇല്ലെങ്കിൽ, അത് ഉപയോഗിക്കാത്തതിന് കാരണം വ്യക്തമാക്കുക	_____	ചോദ്യം 8-ലേക്ക് പോകുക
6	നിങ്ങൾ നിലവിൽ ആർത്തവ ക്ലപ്പ് ഉപയോഗിക്കുന്നുണ്ടോ?	1.അതെ 2.ഇല്ല	
7	ഇല്ലെങ്കിൽ, ദയവായി വ്യക്തമാക്കുക , എന്തുകൊണ്ടാണ് നിങ്ങൾ ഇത് ഉപയോഗിക്കുന്നത് നിർത്തിയത്?	_____	
8	നിങ്ങളുടെ ആർത്തവത്തിൽ നിങ്ങൾ സാധാരണയായി ഏത് തരത്തിലുള്ള ആർത്തവ ശുചിത്വ ഉൽപ്പന്നങ്ങളാണ് ഉപയോഗിക്കുന്നത്? (ഒന്നിലധികം ഉത്തരങ്ങൾ സാധ്യമാണ്)	1.സാനിറ്ററി പാഡുകൾ (ഡിസ്പോസിബിൾ) 2.തുണി 3.ടാംപോൺസ് 4.ആർത്തവ ക്ലപ്പുകൾ 5.ആർത്തവ പാൻറീസ് 6.മറ്റുള്ളവ -	മറ്റുള്ളവയെക്കുറിച്ച് ദയവായി വ്യക്തമാക്കുക
9	നിങ്ങളുടെ വീട്ടിൽ നിങ്ങൾ ഉപയോഗിക്കുന്ന ആർത്തവ ശുചിത്വ ഉൽപ്പന്നങ്ങൾ എന്തൊക്കെയാണ്? (ഒന്നിലധികം ഉത്തരങ്ങൾ സാധ്യമാണ്)	1.സാനിറ്ററി പാഡുകൾ (ഡിസ്പോസിബിൾ) 2.തുണി 3.ടാംപോൺസ് 4.ആർത്തവ ക്ലപ്പുകൾ 5.ആർത്തവ പാൻറീസ് 6.മറ്റുള്ളവ	മറ്റുള്ളവയെക്കുറിച്ച് ദയവായി വ്യക്തമാക്കുക
10	സ്കൂളിൽ / ജോലിസ്ഥലത്ത് / വീടിന് പുറത്തുള്ള ഏതെങ്കിലും സ്ഥലത്ത് നിങ്ങൾ ഉപയോഗിക്കുന്ന ആർത്തവ ശുചിത്വ ഉൽപ്പന്നങ്ങൾ എന്തൊക്കെയാണ്? (ഒന്നിലധികം ഉത്തരങ്ങൾ സാധ്യമാണ്)	1. സാനിറ്ററി പാഡുകൾ (ഡിസ്പോസിബിൾ) 2.തുണി 3.ടാംപോൺസ് 4.ആർത്തവ ക്ലപ്പുകൾ 5.ആർത്തവ പാൻറീസ് 6.മറ്റുള്ളവ	മറ്റുള്ളവയെക്കുറിച്ച് ദയവായി വ്യക്തമാക്കുക
11	വീട്ടിലും പുറത്തും ആർത്തവ ഉൽപ്പന്നങ്ങളുടെ ഉപയോഗത്തിൽ എന്തെങ്കിലും വ്യത്യാസമുണ്ടെങ്കിൽ, കാരണങ്ങൾ വ്യക്തമാക്കുക .	-----	രണ്ടിടത്തും ഒരേ ഉൽപ്പന്നങ്ങളാണ് ഉപയോഗിക്കുന്നതെങ്കിൽ ഈ ചോദ്യം ഒഴിവാക്കുക അടുത്ത ചോദ്യത്തിലേക്ക് പോകുക
12	കനത്ത രക്തസ്രാവമുള്ള ദിവസങ്ങളിൽ ഏറ്റവും ഇഷ്ടപ്പെട്ട ആർത്തവ	1.സാനിറ്ററി പാഡുകൾ (ഡിസ്പോസിബിൾ) 2.തുണി	

	<p>ഉൽപ്പന്നം ഏതാണ്? (ഒന്നിൽ കൂടുതൽ ഉൽപ്പന്നങ്ങൾ സംയോജിപ്പിച്ചാൽ നിങ്ങൾക്ക് ഒന്നിലധികം ഓപ്ഷനുകൾ തിരഞ്ഞെടുക്കാം)</p>	<p>3. ടാംപോൺസ് 4. ആർത്തവ കപ്പുകൾ 5. ആർത്തവ പാൻറീസ് 6. മറ്റുള്ളവ</p>	
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(സ്ത്രീ നിലവിൽ ആർത്തവ കപ്പ് ഉപയോഗിക്കുന്ന ആളാണെങ്കിൽ, സെക്ഷൻ 4-ലേക്ക് പോകുക)

വിഭാഗം 4
ആർത്തവ കപ്പ് ഉപയോഗം -സ്ത്രീകളുടെ അനുഭവങ്ങൾ

1	<p>നിങ്ങൾ എത്ര കാലമായി ആർത്തവ കപ്പ് ഉപയോഗിക്കുന്നു?</p>	<p>1.3 മാസത്തിൽ താഴെ 2.3 മുതൽ 6 മാസം വരെ 3.6 മാസം മുതൽ 1 വർഷം വരെ 4.1 വർഷത്തിൽ കൂടുതൽ</p>	
2	<p>നിങ്ങൾ ആർത്തവ കപ്പ് മാത്രമാണോ ഉപയോഗിക്കുന്നത്, അതോ കപ്പിന് പുറമെ മറ്റ് ആർത്തവ ഉൽപ്പന്നങ്ങൾ (തുണി, സാനിറ്ററി പാഡുകൾ, ടാംപണുകൾ മുതലായവ) ഉപയോഗിക്കുന്നുണ്ടോ?</p>	<p>1. ആർത്തവ കപ്പ് മാത്രം 2. ആർത്തവ കപ്പും മറ്റ് ഉൽപ്പന്നങ്ങളും 3. മറ്റ് ആർത്തവ ഉൽപ്പന്നങ്ങൾ</p>	
3	<p>ആർത്തവ കപ്പ് പരീക്ഷിക്കുന്നതിനുള്ള നിങ്ങളുടെ തീരുമാനത്തെ സ്വാധീനിച്ചത് എന്താണ്? (ഉത്തരങ്ങൾ ശ്രദ്ധിച്ച ശേഷം, ബാധകമായതെല്ലാം തിരഞ്ഞെടുക്കുക)</p>	<p>1. പാഡ് നിർവഹണം ഒഴിവാക്കൽ 2. വസ്ത്രങ്ങൾ കഴുകുന്നതിൽ/ഉണക്കുന്നതിൽ അസൗകര്യം ഒഴിവാക്കുക 3. ആർത്തവ ഉൽപ്പന്നങ്ങൾ വാങ്ങാൻ എല്ലാ മാസവും പണം ചെലവഴിക്കേണ്ടതില്ല 4. ഉപയോഗത്തിന്റെ സുഖം 5. സൗകര്യം 6. അലർജിയോ തിണർപ്പുകളോ ഒഴിവാക്കുക 7. ജീജ്ഞാസയിൽ നിന്ന് 8. സുഹൃത്തിന്റെ/കുടുംബാംഗങ്ങളുടെ/ആരോഗ്യ പ്രവർത്തകന്റെ സ്വാധീനം 9. മറ്റുള്ളവ</p>	<p>മറ്റുള്ളവയെക്കുറിച്ച് ദയവായി വ്യക്തമാക്കുക...</p>
4	<p>നിങ്ങൾ ആദ്യമായി ആർത്തവ കപ്പ് ഉപയോഗിക്കാൻ ശ്രമിച്ചപ്പോൾ അത് ഉപയോഗിക്കുന്നത് എത്ര എളുപ്പമായിരുന്നു?</p>	<p>1. വളരെ എളുപ്പമാണ് 2. കുറച്ച് എളുപ്പമാണ് 3. കുറച്ച് ബുദ്ധിമുട്ടാണ് 4. വളരെ ബുദ്ധിമുട്ടാണ്</p>	
5	<p>നിങ്ങളുടെ ഏറ്റവും പുതിയ അനുഭവത്തെ അടിസ്ഥാനമാക്കി (നിങ്ങൾ അവസാനമായി ആർത്തവ കപ്പ് ഉപയോഗിച്ചപ്പോൾ) ആർത്തവ കപ്പിന്റെ ഇനിയൊരു കാര്യങ്ങൾ റേറ്റുചെയ്യുക, ഒന്ന് വളരെ</p>		

	എളുപ്പവും 4 വളരെ ബുദ്ധിമുട്ടുള്ളതുമാണ്		
5.1	അകത്തേക്കു വെയ്ക്കുന്നത്	1. വളരെ എളുപ്പമാണ് 2. കുറച്ച് എളുപ്പമാണ് 3. കുറച്ച് ബുദ്ധിമുട്ടാണ് 4. വളരെ ബുദ്ധിമുട്ടാണ്	
5.2	ധരിക്കുന്ന സമയത്ത് ആശ്വാസം	1. വളരെ എളുപ്പമാണ് 2. കുറച്ച് എളുപ്പമാണ് 3. കുറച്ച് ബുദ്ധിമുട്ടാണ് 4. വളരെ ബുദ്ധിമുട്ടാണ്	
5.3	തിരിച്ചു എടുക്കുന്നത്	1. വളരെ എളുപ്പമാണ് 2. കുറച്ച് എളുപ്പമാണ് 3. കുറച്ച് ബുദ്ധിമുട്ടാണ് 4. വളരെ ബുദ്ധിമുട്ടാണ്	
6	ആർത്തവ ക്ലഷ്ട ഉപയോഗിക്കുമ്പോൾ എന്തെങ്കിലും ചോർച്ച അനുഭവപ്പെടുന്നുണ്ടോ?	1. ഇടയ്ക്കിടെ 2. വല്ലപ്പോഴും 3. അപൂർവ്വമായി 4. ഒരിക്കലും ഇല്ല	
7	ആർത്തവ സമയത്ത് ആർത്തവ ക്ലഷ്ട മാത്രം ഉപയോഗിക്കുന്നതിൽ നിങ്ങൾക്ക് ആത്മവിശ്വാസമുണ്ടോ?	1. അതെ 2. ഇല്ല	
8	ആർത്തവ ക്ലഷ്ട ഉപയോഗിക്കുമ്പോൾ നിങ്ങൾക്ക് എന്തെങ്കിലും ദുർഗന്ധം അനുഭവപ്പെട്ടിട്ടുണ്ടോ?	1. ഇടയ്ക്കിടെ 2. വല്ലപ്പോഴും 3. അപൂർവ്വമായി 4. ഒരിക്കലും ഇല്ല	
9	ആർത്തവ ക്ലഷ്ട ഉപയോഗിക്കുമ്പോൾ നിങ്ങൾക്ക് എന്തെങ്കിലും അസ്വസ്ഥത/വേദന അനുഭവപ്പെട്ടിട്ടുണ്ടോ?	1. അതെ 2. ഇല്ല	
10	ആർത്തവ ക്ലഷ്ട ഉപയോഗിക്കുമ്പോൾ നിങ്ങൾക്ക് എന്തെങ്കിലും അണുബാധ അനുഭവപ്പെട്ടിട്ടുണ്ടോ?	1. അതെ 2. ഇല്ല	
11	മറ്റ് ആർത്തവ ഉൽപ്പന്നങ്ങളെ അപേക്ഷിച്ച് ആർത്തവ ക്ലഷ്ട ഉപയോഗിക്കുന്നതാണോ നിങ്ങൾ ഇഷ്ടപ്പെടുന്നത്?	1. ശക്തമായി വിധേയമാക്കുന്നു 2. വിധേയമാക്കുന്നു 3. ന്യൂനമായി 4. സമ്മതിക്കുന്നു 5. ശക്തമായി സമ്മതിക്കുന്നു	

	(സാന്നിറ്ററി പാഡുകൾ, തുണി, നാപ്പിനുകൾ, ടാപ്‌ബ്ബുകൾ തുടങ്ങിയവ)		
12	നിങ്ങളുടെ അഭിപ്രായമനുസരിച്ച്, ഒരു ആർത്തവ ക്ഷ്യിതിരഞ്ഞെടുക്കുമ്പോൾ എന്തെല്ലാം ഘടകങ്ങളാണ് പ്രധാനം? (ബാധകമായതെല്ലാം തിരഞ്ഞെടുക്കുക)	1. ചെലവ് 2. വലിപ്പം 3. മെറ്റീരിയൽ (സിലിക്കൺ, റബ്ബർ മുതലായവ) 4. ബ്രാൻഡ് പ്രശസ്തി 5. മറ്റുള്ളവ	മറ്റുള്ളവയെക്കുറിച്ച് ദയവായി വ്യക്തമാക്കുക...

വിഭാഗം 5
ആർത്തവ ക്ഷ്യി വ്യതിയാക്കൽ രീതികൾ

1	ആർത്തവ ക്ഷ്യി കൈകാര്യം ചെയ്യുന്നതിന് മുമ്പ് നിങ്ങൾ എല്ലായ്പ്പോഴും കൈകൾ നന്നായി കഴുകാറുണ്ടോ?	1. അതെ 2. ഇല്ല	
2	നിർമ്മാതാവിന്റെ നിർദ്ദേശങ്ങൾ അനുസരിച്ച് നിങ്ങളുടെ ആർത്തവ ക്ഷ്യി വ്യതിയാക്കുന്നുണ്ടോ?	1. അതെ 2. ഇല്ല	
3	നിങ്ങളുടെ സൈക്സിൾ ആരംഭിക്കുമ്പോൾ നിങ്ങളുടെ ആർത്തവ ക്ഷ്യി വ്യതിയാക്കാൻ നിങ്ങൾ എന്ത് വ്യതിയാക്കൽ രീതികളാണ് ഉപയോഗിക്കുന്നത്?	1. വെള്ളത്തിൽ തിളപ്പിക്കൽ 2. ചൂടുവെള്ളം ഉപയോഗിച്ച് കഴുകുക 3. തണുത്ത വെള്ളം ഉപയോഗിച്ച് കഴുകുക 4. ഒരു പ്രത്യേക ആർത്തവ ക്ഷ്യി ക്ലൈൻസർ ഉപയോഗിക്കുന്നു 5. നന്നത്ത തുണി ഉപയോഗിച്ച് തുടയ്ക്കുക 6. മറ്റുള്ളവ, ദയവായി വ്യക്തമാക്കുക.....	മറ്റുള്ളവ, ദയവായി വ്യക്തമാക്കുക.....
4	നിങ്ങളുടെ ആർത്തവ സമയത്ത് നിങ്ങളുടെ ആർത്തവ ക്ഷ്യി വ്യതിയാക്കാൻ നിങ്ങൾ എന്ത് വ്യതിയാക്കൽ രീതികളാണ് ഉപയോഗിക്കുന്നത്?	1. വെള്ളത്തിൽ തിളപ്പിക്കൽ 2. ചൂടുവെള്ളം ഉപയോഗിച്ച് കഴുകുക 3. തണുത്ത വെള്ളം ഉപയോഗിച്ച് കഴുകുക 4. ഒരു പ്രത്യേക ആർത്തവ ക്ഷ്യി ക്ലൈൻസർ ഉപയോഗിക്കുന്നു 5. നന്നത്ത തുണി ഉപയോഗിച്ച് തുടയ്ക്കുക 6. മറ്റുള്ളവ, ദയവായി വ്യക്തമാക്കുക.....	മറ്റുള്ളവ, ദയവായി വ്യക്തമാക്കുക.....
5	നിങ്ങളുടെ സൈക്സിൾ അവസാനിച്ചതിന് ശേഷം നിങ്ങളുടെ ആർത്തവ	1. വെള്ളത്തിൽ തിളപ്പിക്കൽ 2. ചൂടുവെള്ളം ഉപയോഗിച്ച് കഴുകുക	മറ്റുള്ളവ, ദയവായി വ്യക്തമാക്കുക.....

	കപ്പ് വൃത്തിയാക്കാൻ നിങ്ങൾ എന്ത് വൃത്തിയാക്കൽ രീതികളാണ് ഉപയോഗിക്കുന്നത്?	3. തണുത്ത വെള്ളം ഉപയോഗിച്ച് കഴുകുക 4. ഒരു പ്രത്യേക ആർത്തവ കപ്പ് ക്ലോസർ ഉപയോഗിക്കുന്നു 5. നന്നെത്ത തുണി ഉപയോഗിച്ച് തുടയ്ക്കുക 6. മറ്റുള്ളവ, ദയവായി വ്യക്തമാക്കുക.....	
6	സൈക്കിളുകൾക്കിടയിൽ നിങ്ങളുടെ ആർത്തവ കപ്പ് എങ്ങനെയാണ് സൂക്ഷിക്കുന്നത്?	1. ആർത്തവ കപ്പിന്റേ കൂടെ പ്രത്യേകം കിട്ടിയ ബാഗിൽ / പൗച്ചിൽ 2. അടച്ച പാത്രത്തിൽ 3. മറ്റുള്ളവ	. മറ്റുള്ളവ, ദയവായി വ്യക്തമാക്കുക.....
7	നിങ്ങളുടെ ആർത്തവ കപ്പിന് തേയ്മാനം/ കേടുപാടുകൾ ഉണ്ടോ എന്ന് നിങ്ങൾ പതിവായി പരിശോധിക്കാറുണ്ടോ?	1. അതെ 2. ഇല്ല	

വിഭാഗം 6

അവബോധം സൃഷ്ടിക്കുന്നതിനോടുള്ള സ്ത്രീകളുടെ ധാരണകളും അവരുടെ ശുപാർശകളും

1	ആർത്തവ കപ്പുകളെ കുറിച്ച് കൂടുതൽ വിദ്യാഭ്യാസവും ബോധവൽക്കരണവും നടത്തണമെന്ന് നിങ്ങൾ കരുതുന്നുണ്ടോ?	1. അതെ 2. ഇല്ല	
2	അതെ എങ്കിൽ, ഈ അവബോധം എങ്ങനെ മെച്ചപ്പെടുത്താനാകുമെന്ന് നിങ്ങൾ കരുതുന്നു?		
3	ഇതുവരെ ഉപയോഗിക്കാത്ത ഒരാൾക്ക് നിങ്ങൾ ആർത്തവ കപ്പുകൾ ശുപാർശ ചെയ്യുമോ?	1. അതെ 2. ഇല്ല	
4	ഉണ്ടെങ്കിൽ, ആർത്തവ കപ്പുകൾ ശുപാർശ ചെയ്യാൻ നിങ്ങളെ പ്രേരിപ്പിച്ച ഘടകങ്ങൾ ഏതാണ്?		

5.	ഇല്ലെങ്കിൽ, ആർത്തവ കപ്പുകൾ ശുപാർശ ചെയ്യാതിരിക്കാനുള്ള കാരണങ്ങൾ എന്തെല്ലാം എന്ന് വ്യക്തമാക്കുക?		
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നിങ്ങളുടെ സഹകരണത്തിനും പങ്കാളിത്തത്തിനും നന്ദി



ANNEXURE-7

IEC APPROVAL LETTER



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Institutional Ethics Committee

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DHR Registration No:EC/NEW/INST/2022/2775

SCT/IEC/2168/DECEMBER/2023

11.01.2024

Dr. Sulthana Ansar
MPH Student, AMCHSS
SCTIMST, Thiruvananthapuram

Dear Dr. Sulthana Ansar,

The Institutional Ethics Committee held on 30th December, 2023, reviewed and discussed your application to conduct the study titled "ACCEPTABILITY OF MENSTRUAL CUP AMONG THE WOMEN RESIDING IN AN AREA WHERE FREE MENSTRUAL CUP DISTRIBUTION WAS DONE IN THIRUVANANTHAPURAM DISTRICT, KERALA (IEC /2168)".

Principal Investigator	Dr. Sulthana Ansar, MPH Student, AMCHSS, SCTIMST
Co-Principal Investigator(s)	Dr. Jessa V T, Scientist C, AMCHSS, SCTIMST
Duration of the study	3 months

The following members of the Ethics Committee were present at the meeting held on 30th December, 2023

SL. No.	Member Name	Highest Degree	Gender	Scientific /Non Scientific	Affiliation with Institution(s)
1.	Smt. Sathi Nair	MA (English Literature)	Female	Lay Person	No
2.	Dr. Kala Kesavan P	MBBS,MD	Female	Basic Medical Scientist	No
3.	Adv. Priya Kaimal	LLM, MBL	Female	Legal Expert	No
4.	Dr. P. Manickam	BSMS, MSc (Epid), PhD	Male	Health Science Expert/ Social Scientist	No
5.	Dr. Christina George	MD Psychiatry	Female	Clinician	No
6.	Dr. Narayanan Namboodiri. K K	MBBS,MD,DM	Male	Clinician	Yes
7.	Dr. Biju Soman	MBBS,MD, DPH, MSc, DLSHTM	Male	Basic Medical Scientist	Yes

The following documents were reviewed:

Original submission

1. Checklist Form
2. Covering letter addressed to the Chairman, IEC, SCTIMST dated 30.11.2023
3. Responses/Amendments made based on the Reviewer's comments
4. IEC Application Form
5. Declaration Form
6. Research Proposal
7. Checklist of tool in English and Malayalam
8. Participant Information Sheet and Informed Consent Form in English and Malayalam
9. Interview schedule in English and Malayalam
10. CV of Principal Investigator and Guide
11. SRC Recommendation Letter

Revised submission

1. Checklist Form
2. Covering letter addressed to the Chairman, IEC, SCTIMST dated 10.01.2024
3. Responses/Amendments made based on the Reviewer's comments
4. Copy of IEC Recommendation letter dated 09.01.2023
5. Responses/Amendments made based on the Reviewer's comments
6. IEC Application Form
7. Declaration Form
8. Research Proposal
9. Checklist of tool in English and Malayalam
10. Participant Information Sheet and Informed Consent Form in English and Malayalam
11. Interview schedule in English and Malayalam
12. CV of Principal Investigator and Guide

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 / Guide 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. G. Srinivas
Member Secretary, IEC

MEMBER SECRETARY
INSTITUTIONAL ETHICS COMMITTEE (IEC)
SCTIMST, THIRUVANANTHAPURAM



ANNEXURE-8

PLAGIARISM CHECK REPORT



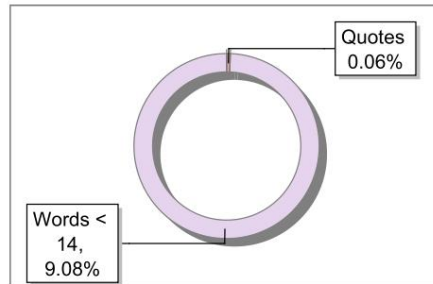
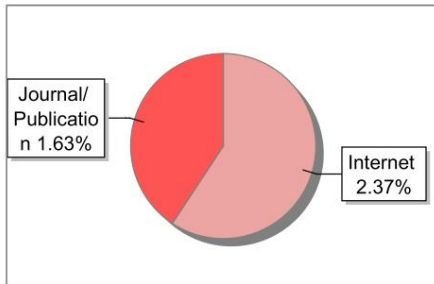
The Report is Generated by DrillBit Plagiarism Detection Software

Submission Information

Author Name	Sulthana Ansar
Title	ACCEPTABILITY OF MENSTRUAL CUP AMONG THE WOMEN RESIDING IN AN AREA IN TRIVANDRUM DISTRICT, KERALA, WHERE FREE MENSTRUAL CUP DISTRIBUTION WAS DONE
Paper/Submission ID	1708209
Submitted by	jissa@sctimst.ac.in
Submission Date	2024-04-28 09:41:53
Total Pages	38
Document type	Dissertation

Result Information

Similarity **4 %**



Exclude Information

Quotes	Excluded
References/Bibliography	Excluded
Sources: Less than 14 Words %	Excluded
Excluded Source	0 %
Excluded Phrases	Excluded

Database Selection

Language	English
Student Papers	Yes
Journals & publishers	Yes
Internet or Web	Yes
Institution Repository	Yes

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