A STUDY TO ASSESS THE KNOWLEDGE AND PRACTICE ABOUT RISK FACTORS OF STROKE AMONG CARE GIVERS

PROJECT REPORT

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CERTIFICATE

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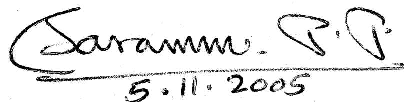
Submitted in partial fulfillment of the requirement for the Diploma in Neuro Nursing from the Sree Chitra Tirunal Institute for Medical Sciences and Technology.



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CHAPTER – 1

1.1 INTRODUCTION

Stroke is the third most common cause of death in the United States. Through out the world, stroke is a frequent cause of death and disability. More than 750,000 people have a new or recurrent stroke each year in the united states ; Four out of five families are offered by a stroke some times during their life time (National Stroke Association (NSA 2002).

Stroke occurs when oxygen supply to a localized area in the brain is interrupted resulting destruction of neural tissue and brain damage. The most effective way to decrease the harden of stroke is prevention. Prevention becomes very important after a stroke to prevent another stroke, regardless, whether the patient is followed in stroke prevention clinic or not. Education is needed to the patient and caregivers' about the control of modifiable risk factor of stroke.

1.2 BACKGROUND OF THE STUDY

Patients delay in responding to stroke as an emergency in part because they have lack of information about stroke risk, symptoms and warning signs of stroke. The National Institute of Neurological Disorders and Stroke (NINDS), provide a sampling of approaches that increase awareness of these groups. Lessons learned included are :

1. Program planning should start with a community needs assessment
2. A variety of strategies can be applied to meet the community needs & resources.
3. Educational principles and models should be utilized in planning affective program.

(Daley Sheila – 1997)

There has been a gradual decline in the incidence of stroke and stroke mortalities in many industrialized countries in recent years. This is due to stroke prevention through the increased recognition and treatment of risk factors. Many factors contribute the risk of stroke, the risk factors classified into modifiable and non modifiable risk factors can be reduced or eliminated through out the life.

Modifiable risk factors of stroke are hypertension (HTN) diabetes mellitus (DM), hyperlipidemia, cardiovascular diseases (Myocardial infraction, Atrial fibrillation, valvular disease), obesity, smoking and stress Client education is aimed at stroke prevention by

- Adequate blood procure control
- Care of diabetes mellitus
- Proper treatment of cardiovascular disease
- Maintaining an ideal body weight
- Maintaining safe cholesterol levels.
- Smoking cessation
- Reducing stress

Hypertension is the most important modifiable risk factor for both ischemic and hemorrhagic stroke. Adequate blood pressure control is associated with a reduction in stroke incidence. Diabetes mellitus increases the risk of stroke and morbidity and mortality after stroke. In Diabetic Mellitus, the mechanism is related to neurovascular changes in people with diabetes mellitus. Cardiovascular diseases are also associated with an increased risk of stroke.

A low fat, low-salt diet positively affect both blood pressure and weight. Exercise is also key to reducing stress, decrease weight, maintaining a healthy body and increasing Cardiac fitness. Anticoagulation therapy can greatly reduce the risk of stroke in individuals with valvular diseases, atrial fibrillation. Careful control of blood sugar level can reduces the risk of heart disease and stroke. Smoking cessation is an important consideration in stroke prevention.

The peoples are also aware about the warning sign of stroke.

The five classic early warning signs are :-

- Numbness, weakness or paralysis of the face, arm or leg, occurring on one side of the body.
- Difficulty in swallowing, speaking or understanding
- Sudden blurred or decreased vision in one or both eyes.
- A sudden, severe, unexplainable headache
- Dizzness or loss of balance.

1.3 NEED AND SIGANIFICANCES OF THE STUDY

Careful attention to the known risk factors leads to an appreciable reduction in long term morbidity and mortality rate. This study helps the people to understand the relationship of stroke with hypertension, diabetes mellitus, hyperlipidemia, cardiovascular diseases, obesity, smoking and stress.

"Classis risk factors" increase the risk of recurrence. Stroke is not an inevitable consequence, so by identifying and modifying risk factors are opportunities to reduce the incidence and mortality in this condition (Rodgers Helen – 2004).

Reports from different countries have implicated different factors associated with rise of stroke. In the Framingham study, hypertension, diabetus mellitus, cardio vascular diseases, hyperlipidemia and smoking were found to be important risk factors. Paffenberger found increased stroke death rate in association with reduced physical activity, increased weight for height, and abnormal glucose metabolism. (Agarawal S.K – 1967).

Effective strategies for prevention of stroke need to be implemented early, monitored frequently and maintained long term after-ever stroke. (Hardiac Kate – 2004).

Framingham study indicate that cigarettes smoking increases the risk of cerebral infraction threefold. (Sahi A.L E.C. Hatman and S.M. Aronson - 1979)

Considering the above factors the investigator felt that there is a need to asses the knowledge and practice about risk factors of stroke among caregivers' attending the stroke clinic of SCTIMST.

1.4 STATEMENT OF THE PROBLEM

A study to asses the knowledge and practice about risk factors of stroke among caregivers' of patients attending stroke clinic, at Sree Chithra Tirunal Institute Medical science and Technology, Thiruvananthapuram.

1.5 DEFINITION OF TERMS

Knowledge	:	Refers to the respondent's, verbal responses to the test, items on the risk factors of stroke.
Practice	:	It includes types of diet given and the activities followed at home.
Risk factors	:	In this study, refers to hypertension, diabetes mellitus, hyperlipidemia, cardiac abnormalities, obesity, smoking and stress, the presence of which predisposes an individual to develop recurrent stroke.
Stroke	:	Includes medically diagnosed by ischemic stroke, hemorrhagic stroke and transient ischemic attacks.
Care givers	:	It refers to the person who take care of the patient at home.
Stroke Clinic	:	Clinic which provide follow up for the stroke patients at SCTIMST.

1.6 OBJECTIVES OF THE STUDY

1. To asses the knowledge of risk factors of stroke among caregivers' of patients attending the stroke clinic.

2. To asses the activities practiced towards the modification of risk factors.

3. To prepare a pamphlet on risk factor modification.

1.7 METHODOLOGY

The Survey approach was used in the study. The data was collected from 30 persons for the study, who are attending the stroke clinic of SCTIMST with stroke patients. After obtaining informed consent from the caregivers', a multiple choice questionnaire was given. The questions are related to the risk factors of stroke. It is to asses the knowledge and practice among caregivers' of patients who are attending the clinic. The validity of the tools are checked by the experts of SCTIMST. The duration of the study is August to October 2005. A prepared pamphlet on risk factor modification was gives to them after assessing their knowledge level.

1.8 LIMITATION

This study was limited to :

- Patients attending stroke clinic with care givers only.
- Sample size in limited to 30 samples only.
- Time for data collection is limited to one month.
- The assessment of knowledge was limited to responses to the objective type test item.
- The assessment of practice was also limited to responses to the objective type test item.

1.9 SUMMARY

This chapter deals with introduction, background of the study, need and significance of the study, statement of the problem, definition of terms, objectives of the study, methodology and limitations.

1.10 ORGANISATION OF THE REPORT.

Chapter II presents a summary of related studies reviewed, chapter III deals with methodology of this study, Chapter IV analysis and interprets the findings and Chapter V presents a summary of the study, conclusion, implementation, limitation and recommendation. The report also includes a selected bibliography and appendices.

CHAPTER – II

REVIEW OF RELATED LITERATURE

Review of literature is an important aspect of any research project from beginning to end. It gives character insight into the problem and helps in selecting methodology, tool and analyzing data. With these in view, an intensive review of literature has been done. Related literature was reviewed in depth, so as to broaden the understanding of selected problem.

The review of literature relevant to the study is presented in the following sections.

a. Studies related to risk factors of stroke.
b. Studies on assessing the risk factors of stroke and brief educational intervention.

a. Studies related to risk factors of stroke.

Hardie Kate (2004) conducted a study on Ten-years risk of first recurrent stroke and disability after first recurrent stroke and disability after first-ever stroke. The purpose of this study was to determine the absolute frequency of first recurrent stroke and disability and the relative frequency of recurrent stroke, in perth, "Western Australia". The study duration is 12 months period beginning from February 1989. All cases underwent standardized interviews and neurological assessment. Information obtained

included data on associated illness, risk factors for vascular disease and pattern of disability and social activity in the immediate premorbid period. The study was committed of 328 patients. The study was approved by the committee for Human Rights at the University of Western Australia and by the confidentiality of Health Information Committee of the Health Department of Western Australia. Over 10 years of follow-up the findings show that the cumulative risk of a first recurrent stroke was 43%, the risk of first recurrent stroke in 6 times greater than the risk of first-ones stroke in the general population of the same age and sex, almost one half of survivors remain disabled and one seventh require institutional care.

AGRAWAL J.K, P.N. SOMANI AND B.C. KATIYAR (1976), conducted a study of risk factors in Non embolic cerebrovascular disease. The aim of this study was to evaluate various clinical and biochemical alteration as possible stroke risk factors in non embolic cerebrovascular disease (NECVP) patients as compared to the controls. It is a prospective hospital based study of the risk factors in 122 patients, admitted to the neurology and general medical unit of the University Hospital, during the period from March 1971 to October 1972. The aetiological categorization of NECVD was done following careful history clinical examination and lumbar puncture. The result of this study point to the presence of certain risk factors in Nonembolin carebrovascular disease patients which need an epidemiological confirmation.

A study was conducted by Rodgers Heles (2004) to asses risk factors for first-ever stroke in older people in the North East of England. A 5 year follow-up study of population based cohort of 44400 subjects aged >65 yrs in Northern England. The purpose of this study was to determine the risk factors for stroke in older people. The study area covered both rural and urban areas and the population in 99% white. The data obtained from primary care records and a questionnaire about socio demographic details, health and lifestyle and health status. On Multivariate Analysis, risk factors for stroke in older people included atrial fibrillation (hazard ratio – 2.03), smoking (1.72) and cardiovascular disease (1.55). The hazard ratio per 10mm Hg increase in systolic blood pressure was 1.15. Age was associated with a hazard ratio of 1.74 per 10 years increase.

A population based prospective cohort study carried out by Li Cairu Gunner Engstrom and others (2005), on blood pressure control and risk of stroke. The aim of this study was to evaluate the relationship between the incidence of first ever stroke and the quantity of BP control in Swedish men and women with treatment for hypertension. Study population was from 1991 to 1996, all men and women, born between 1923 to 1950 and lining in the Malmo area in the Southern part of Sweden. Data was collected by questionnaire in combination with clinical examination at the screaning center. Findings of this study revealed that in the whole cohort, 16648 subjects (60%) had hypertension and 23% of then received treatment. Among

treated screening center. Findings of this study revealed that in the whole cohort,16648 subjects (60 %) had hypertension and 23% of then received treatment. Among treated hypertension and 23% of them received treatment. Among treated hypertension, 88.2% had BP levels ≥ 140/90 mm of Hg. and 49.5% had BP levels ≥160/100 mm of Hg During the follow up, 137 strokes occurred among treated hypertensive subjects. The crude incidence of stroke was 289/ 100,000 person- year in controlled hypertensive subjects and 705/100,000 person-year in treated hypertensive subjects with BP≥ 140/90mm of Hg.

Flossman Enrico, Peter. M and Rothewell (2005) conducted a study on family history of stroke in patients with transient Ischemic attack (TA)in relation to hypertension and other intermediate phenotypes. Researchers used a structured questionnaire to prospectively record clinical data. The data collected from all TIA patients seen at 3 dedicated TIA clinic an Oxford from 2002 to 2003. The sample size consisted of 783 patients. The result shows that family history of stroke was strongly related to history of hypertension. But there was no association between family history of stroke and age, diabetes, smoking, and plasma glucose. The conclusion of this study was the strong association between hypertension and family history of stroke suggests that familiar susceptibility to cerebral ischemia in attributable at least partly, to familial predisposition to hypertension.

A study was conducted by Weimar Christian, Klaus Kraywinkel and others (2002) on Etiology, duration and pronging of treatment ischemic attacks (TAIS). The objective of this study was to determine if TAIS of short duration (4 hour) and loing duration (1 hour to< 24 hours) differ from each other and form ischemic stroke. Inception cohorts of 1429 patients with acute TIAs and 5206 patients with ischemic stroke were prospectively documented in 15 German medical Centers with neurology departments an acute stroke units. Out come after 3 months was assessed in 72.8% of patients with TIAs. The result of the study was patients with TIAs, especially those with symptoms lasting less than 1 hour, were significantly more likely to have a history of TIAs and les likely to have diabetes mellitus, hypertension or atrial fibrillation at admission compared those with ischemic stroke.

b. Studies on assessing the risk factors of stroke and brief educational intervention.

Lindsey Jan (2000) conducted a study on implementing a stroke risk assessment program in a community setting. The purpose of study was to lower the risk by identifying high risk individuals and educating the community about recognition and prevention of stroke. From April 1 to June 30, 1998 screenings were offered free-of charge at 61 public sites. A brief health history was taken and risk factor assessments were performed. The data was collected from 3,116 participants. This study were conducted on

North western Pennsylnania Country, included 36 public and 25 private location. The findings show that the community is willing to learn about stroke and their health status.

A study was conducted by Nagaraja. D, S.G. Gurumurthy and others (1996), the use of multivariate analysis in assessing the risk factors of cerebrovascular disorders. The aim of this study was to assessment of risk factors involved in the etiopathogenesis of stroke. One hundred and one patients with completed stroke and 50 patients with TIA seen at the department of neurology of NIMHANS constitute the experimental group. The data was collected from Socio-demographic data, detailed physical examination and data relating to the life style. The duration of study period is three years, from 1971 to1973. The findings show that the awareness of risk factors in the former have led to appropriate management measures and also public educational program which have definitely contributed to the decline in the incidence. Such program also have a potential scope in the prevention of cerebrovascular disorders.

Miller Tilka Elaine and Judaith Spilker (2003) conducted a study on readiness to change and brief educational interventions. Successful strategies to reduce stroke risk. The purpose of this study was to identify effective educational intervention for 'at-risk' groups that will help reduce their stroke risk and improve the speed of seeking treatment remain of paramount

importance. Three groups of 20 participants, each with multiple risk factors for stroke. The study was conducted an African Americans, surgery approach was used for this. The duration of data collection is from November 1998 to February 1999. The study supported the usefulness of the brief intervention model to reduce modifiable stroke-risk factors and increase stroke knowledge, the necessity of additional longitudinal research that refines the targeting of intervention for diverse racial cultural and age group was acknowledged.

A study was conducted by Daley Sheila, Janet Braimab and others, on education to improve stroke awareness and emerged response. Program developed at the eight centers of the National Institute of Neurological Disorders and stroke (NINDS) provide a sampling of approaches that increase awareness in these groups. The sample consisted of 1600 population by direct interview method during the period of two year from 1992. This study focused on - promotion of recognition of stroke onset emergency response and risk factor education – maximization of available resources to obtain these goals. The message of this study was simple, "stroke is an emergency, Time is break".

The literature review also helped in design of the study, development of tool, information about sample, data collection procedure and plan of analysis.

CHAPTER III

METHODOLGOY

3.1 Introduction

Methodology is a way of systemically solve the problem. It may be understood as a science of studying how research scientifically is doing C.R Kothari (1990). This chapter provides a brief description of different steps taken to conduct this study. It included research approach, research design, setting, the sample and sampling technique, development of tool, description of tool pilot study, data collection procedure and plan of analysis.

3.2 RESEARCH APPROACH

The survey approach was selected as the objectives of the study were (i) to asses the knowledge of risk factors of stroke among caregivers' of patients attending the stroke clinic, and (ii)to asses the activities practiced towards the modification of risk factors. More over survey approach is suitable for educational fact finding in a relatively small sample.

3.3 RESEARCH DESIGN

Research design is concerned with overall frame work for conducting the study. For fulfilling the objectives of the study, the following design as utilized for collection and analysis of data, as shown in Figure. 1.

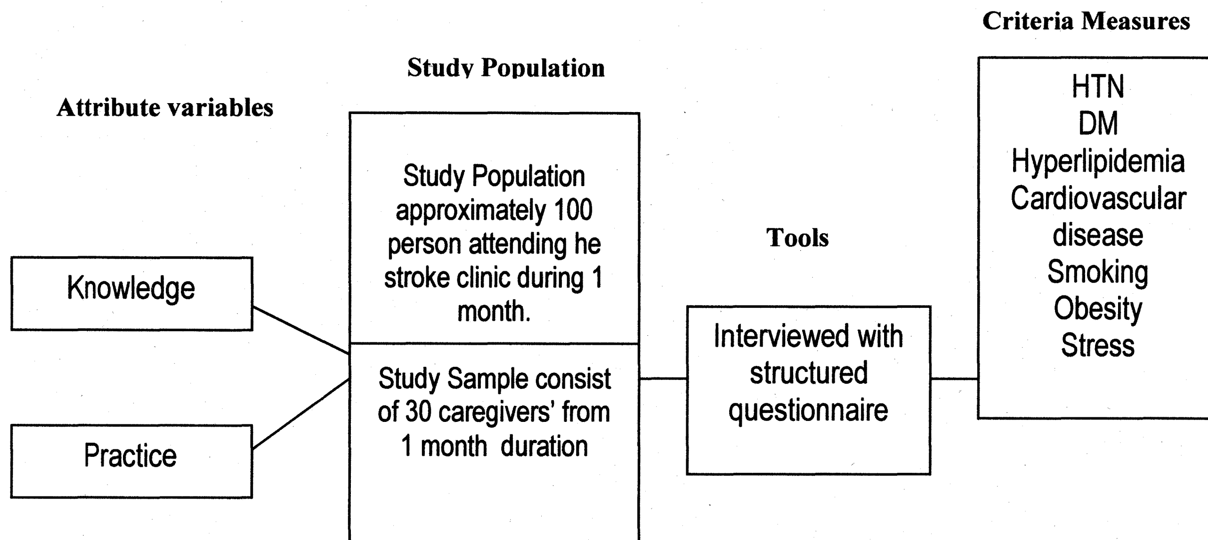


Fig. 3.3.1

3.4 SETTING OF THE STUDY

The study was conducted in "Sree Chitra Tirunal Institute for Medical Sciences and Technology , Trivandrum.

The rationale for selecting SCTIMST for study was the investigator was most familiar with this institution. In addition to that the specialty clinic for stroke is conducing in very few hospital all over the Kerala. In SCTIMST, stroke clinic is on all Fridays from 9 am to 1 pm.

3.5 POPULATION

The population for the study was caregivers' coming with the patients, attending the stroke clinic in SCTIMST. There are approximately 100 person attending the stroke clinic during one month duration.

3.6 SAMPLE AND SAMPLING TECHNIQUES.

Convenient sampling technique was used to select the samples for the study. Two stage random sampling was used for the present study. In the first stage, 5 samples were selected for the pilot study. In the second stage the 30 person were selected for this study.

In this study approximately 100 population is included. Out of this investigator look 30 sample for study from four weeks duration. The duration of study period included from August 2005 to September 2005.

3.6.1 Criteria for sample collection .

Inclusion Criteria.

- Care givers who were willing to participiple in the study.
- Care givers who can understand and speak Malayalam.

Exclusion Criteria.

- Patients attending the stroke clinic without their caregivers'.

3.7 DEVELOPMENT OF TOOL

An extensive review and study of literature helped in preparing items for the tool. The tools examines and content validity is tested by the experts of SCTIMST. A multiple choice questionnaire of 30 question is prepared based on the literature. After obtaining permission from the authorities, it was interviewed with care givers.

The steps taken for development of tool are presented below.

Step I :A structured questionnaire of 30 questions for assessing the knowledge and practice was made based on the literature reviewed and on expert's opinion.

Step 2 : The tool was pilot test on a sample of 5 persons. The time taken for completion of the test varied from 10 to 15 mts.

Step 3 : The pilot study gave information regarding the feasibility and effectiveness of the study. For each responds scoring also done, then study is continued with this tool.

3.8 DESCRIPTION OF TOOL

The tool used in the present study consisted of two parts.

Part I - It comprised of demographic characteristics of stroke patients such as age, sex, educational status, occupation, month and year of first stroke, length of hospital stay, and demographic characteristics of care giver such as name, age, relationship and educational status.

Part II - It consist of 30 questions for the knowledge and practice about risk factors stroke among care givers. In this 15 questions for assessing the knowledge regarding risk factors including hypertensions, diabetes mellitus, hyperlipidemia cholesterol, smoking, obesity and stress. And 12 questions for asses the activities practiced towards the modification of risk factors.

For each item three alternative answers were given, out of which only one answer was the best. Test scoring was done by giving a credit of one for the best response and a weight of Zero for other responses or omissions. The possible range of knowledge score was zero to 15 (0-15). And the possible range of practices was zero to 12. Five subscale scores for hypertension,

diabetus mellitus, hyperlipidemia) cardiovascular diseases and others like stress, obesity and smoking zero to 3 for diseases and zero to 4 for others were calculated for the subcategories.

3.9 PILOT STUDY

After obtaining permission from the authorities study started on 26/08/05. The purpose of this pilot study was to modify the original tools and pamphlets. Interviewed the care givers of stroke patients with a structured questionnaire, after getting signed consent. With necessary modification the tool was pilot tested on a convenient sample of 5 caregivers' initially. The time taken for completion of the interview is varied from 10 to 15 mts. The pilot study gave information regarding the feasibility and effectives of the study. The pilot study participants were excluded from the main study. For each responds scoring also done, then study is continued with this tool.

3.10 DATA COLLECTION

The data were collected from stroke clinic of SCTIMST. Formal permission was obtained from the authorities of SCTIMST. Period of data collection was from 2nd September to 30th September 2005.

The investigator was introduced to the caregivers' about the purpose of the study and the confidentiality of their responses were assessed. The time

taken for completion of the interview was 10 to 15mts. A pamphlet on risk factor modification by the investigator was given to each caregiver for future reference.

3.11 PLAN OF ANALYSIS

A plan for data analysis was developed by the investigator after the pilot study. The data obtained from knowledge and practice test would be analysed by descriptive statistics. Percentages would be used for describing the sample. Both pie & bar diagram would be utilized to represent the distribution of total scores and subscores in the different content areas.

3.12 SUMMARY

This Chapter presented the research approach used for the study, research design of the study, setting of the study, sample and sampling techniques, development of description of tool, pilot study, data collection procedure and plan of analysis

CHAPTER IV

ANALYSIS AND INTERPRETATOIN

This Chapter analyses and interprets the data obtained from knowledge and practice test administered to 30 care givers of stroke patients in the stroke clinic of SCTIMST.

The purpose of the present study was to asses the knowledge about risk factors of stroke among caregivers' of patients attending the stroke clinic, to asses the activities practiced towards the modification of risk factors and also to prepare a pamphlet on risk factor modification.

The analysis of data are presented in three section.

I. Sample characteristics

II. A. Data on caregivers' knowledge and practices in all risk factors.

B. Data on care givers knowledge in each risk factors.

III. Data on patients with various risk factors.

4.1 Description on Sample Characteristics.

Sample of 30 caregivers' were selected for the study. The demographic data included were age, sex, education and occupation of the care givers.

TABLE – I

N = 30

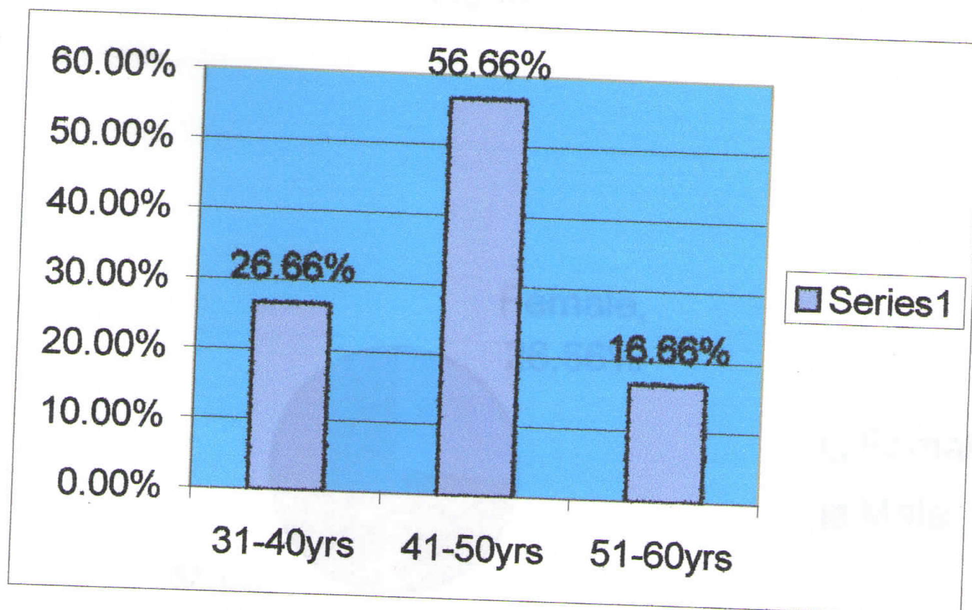
Distribution of caregivers among demographic variables.

Demographic Data	Total number	Percentage
a. Age		
31-40yrs	8	26.66%
41-50 yrs	17	56.66%
51-60 yrs	5	16.66%
b. Sex		
Male	22	73.33%
Female	8	26.66%
c. Educational Status		
Primary < 7Std.	5	16.66%
Secondary < 12std	14	46.66%
Graduate > 12 Std	11	36.66%
d. Occupation		
Working	8	26.66%
Not working	18	60%
Rtd.	4	13.33%

a. Distribution of caregivers among their age groups as presented in Table 1 are shown in figure 4.1.1 as bar diagram.

N = 30

Fig. 4.1.1

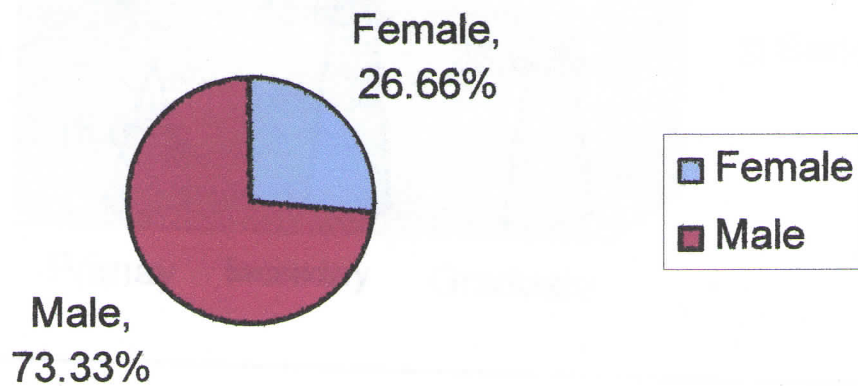


This bar diagram represents age in X axis and % in Y axis. In this figure maximum number of caregivers' come under the age group of 41-50yrs (56.66 %) and minimum number of caregivers' come under the age group of 51 to 60 yrs (16.66%).

b. Distribution of caregivers' according to the sex as presented in the Table 1 are shown in figure 4.1.2 as Pie Diagram.

N = 30

Fig. 4.1.2

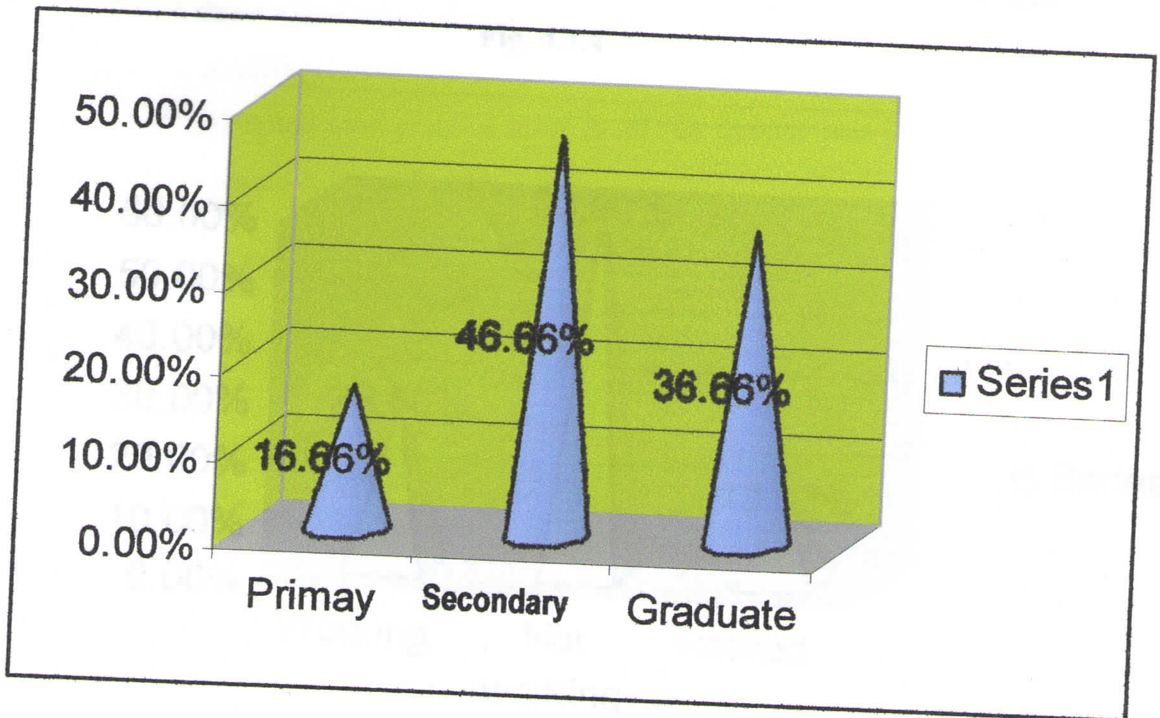


This Pie Diagram represent the distribution of each care givers according to the sex. Male caregivers are morethan the female.

c. Distribution of care givers according to their educational status.

N = 30

Fig. 4.1.3

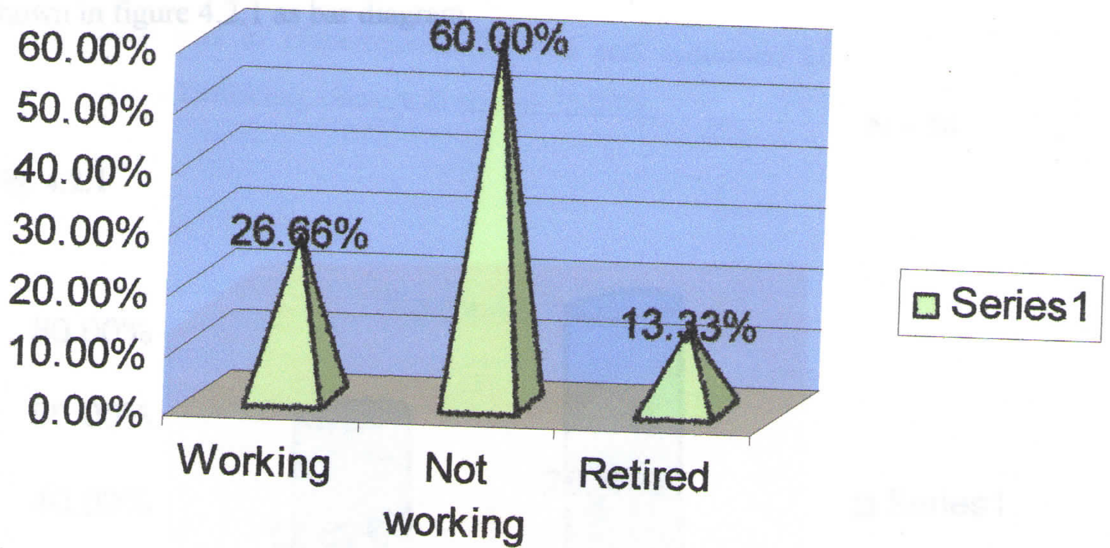


This bar diagram represents educational status in X axis and Percentage in Y axis. Maximum number of care givers come under the secondary level (< 12th Std.).

d. Distribution of caregivers' according to the Occupational status as presented in Table 1 are shown in Figure 4.1.4

N =30

Fig. 4.1.4



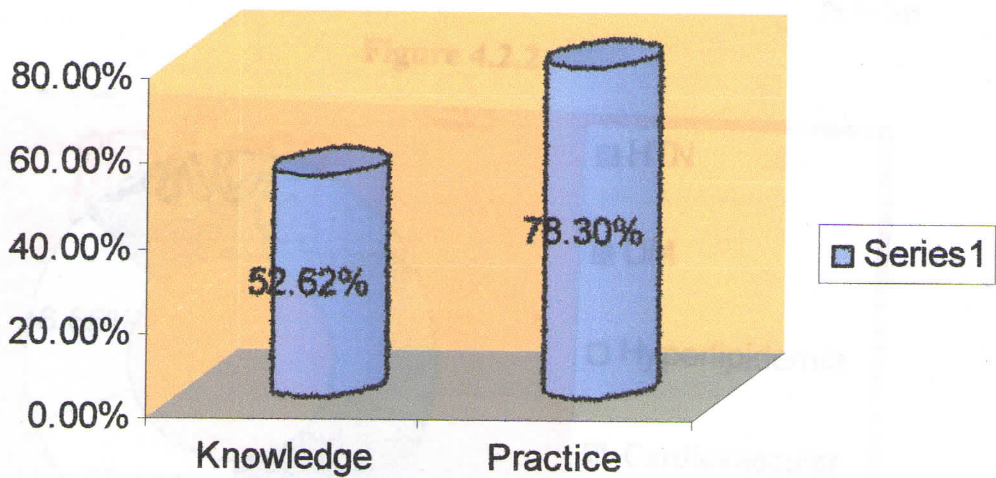
This bar diagram represent the occupational status of the care givers in X axis and Percentage in Y axis. Maximum number of caregivers' came under the group of not working.

4.2.1 Data on care givers knowledge and practices in all risk factors

This part of analysis show the distribution of total sample of 30 care givers and their knowledge about the risk factors and activities practiced towards the modification of risk factors. Total knowledge score in all content area was 52.62% and total practice score in all risk factors was 78.30%. Data are shown in figure 4.2.1 as bar diagram.

N = 30

Fig. 4.2.1



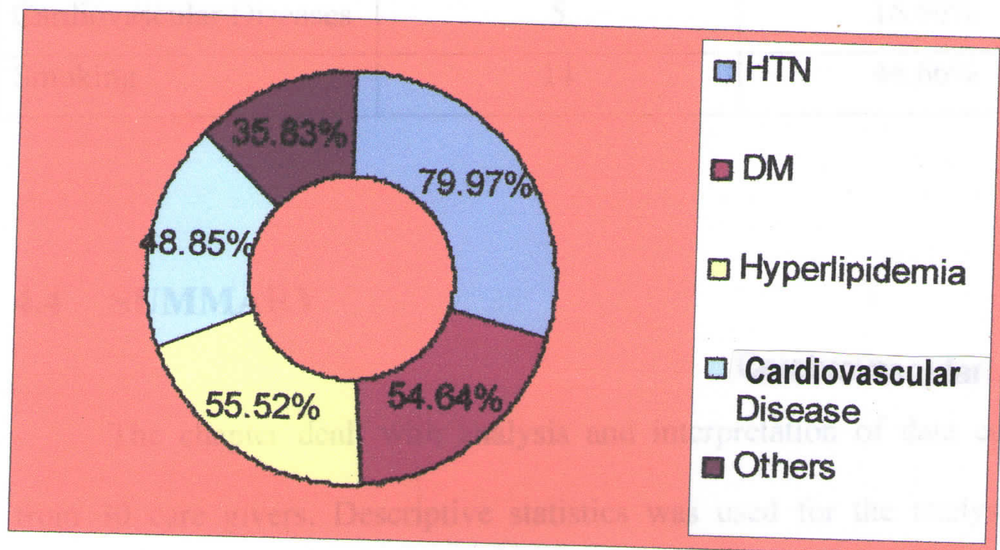
4.2.2 Data on care givers knowledge in each risk factors

This part of the analysis shows the mean knowledge, subscores achieved in various risk factors was ; Hypertention, Diabetes Mellitus, Hyperlipidemia, Cardiovascular diseases and others such as smoking, obesity & stress. Data are presented in the form of doughnut diagram for purpose of comparison.

The mean knowledge subscores achieved by total sample in specific content area are shown in figure 4.2.2. Data indicated that the maximum knowledge score was in Hypertension 79.97% and minimum knowledge score was in others (smoking, obesity & stress) 35.83%.

N = 30

Figure 4.2.2



4.3 Data on patients with various risk factors on the basis of caregivers knowledge.

Table 2

N = 30

F=Number of patients with each risk factors

Risk Factors	F	Percentage
Family History	8	26.66%
Hypertension	18	60%
Diabetes Mellitus	13	43.33%
Hyper Lipidemia	6	20.00%
Cardiovascular Diseases	5	16.66%
Smoking	14	46.66%

4.4 SUMMARY

The chapter dealt with analysis and interpretation of data collected from 30 care givers. Descriptive statistics was used for the analysis. Bar diagrams and pie diagrams were used to describe the knowledge and practice scores of the sample.

CHAPTER – V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

This chapter gives a brief account of the present study including conclusions drawn from the findings and possible application of the result. Recommendation for future research and suggestions for improving the present study are also presented.

5.1 SUMMARY

This study was undertaken to asses the knowledge and practice about risk factors of stroke among care givers of patients attending stroke clinic at SCTIMST, Trivandrum.

The specific objectives of the study were :

c. To asses the knowledge of risk factors of stroke among caregivers'' of patients attending the stroke clinic.

d. To asses the activities practiced towards the modification of risk factors.

e. To prepare a pamphlet on risk factor modification.

Need of the study was the careful attention to the known risk factors leads to an appreciable reduction in long term morbidity and mortality rate. Education is one method of improving knowledge about the risk factors and activities practiced on risk factor modification. The assessment of baseline knowledge being the first step in any successful education programmes.

The review of related literature helped the investigator in understanding the risk factors determining methodology and developing the tool and prepare pamphlet on risk factor modification.

A structured questionnaire of 30 questions was developed content validity was determined and pilot testing was done.

The study was conducted in Sree Chitra Tirunal Institute of Medical Science and Technology at Stroke Clinic, Trivandrum, Kerala in September 2005. The sample comprised of 30 caregivers'' of stroke patients attending the stroke clinic.

The data obtained were analysed by using descriptive statistics. Both bar and pie diagrams were utilized to represent the distribution of knowledge and practice on the basis of scores obtained in all risk factors and each following in each risk factors : Hypertension, diabetes mellitus, Hyperlipidemia, Cardiovascular Diseases and others (smoking, obesity & stress)

5.2 THE MAJOR FINDINGS OF THE STUDY WERE : -

- The knowledge scores of caregivers' in this study is 52.62%
- The practice score of caregivers' in this study is 78.30%
- The mean knowledge subscores in each risk factors in that maximum knowledge score was in Hypertension 79.97% and minimum knowledge score was in others (it includes obesity, smoking and stress) 35.83%

5.3 IMPLICATIONS

Few Implications can be drawn from the findings of this study. This information can be used by Staff Nurses, Student Nurses and Other Health Professionals. Instructional programs on health education helps in the promotion of educational aspect of the caregivers'. Pamphlet on risk factor modification aids in equipping the knowledge in caregivers' and patients. In future for the promotion of knowledge in younger generation related topics can be included in their academic section.

5.4 LIMITATIONS

The limitations in this study are

1. The tool has been developed by the investigator as no standardized tool was available.
2. Study was limited to the stroke clinic at SCTIMST, Trivandrum.

5.5 CONCLUSION

Based on the findings of the study the following conclusions were drawn.

1. The knowledge of care givers about the risk factors of stroke is 52.62%).
2. The activities practiced by the caregivers' towards risk factor modification of patient is 78.30%.

Even though the subjects are not well aware of the risk factors and the methods to prevent or reduce it, they are following the measures to reduce risk as per Doctors advice without knowing the risk factors of stroke. It shows that if they have adequate knowledge regarding the risk factors and measures to reduce it the out come will be much better.

5.6 RECOMMENDATION

The following recommendation are made on the basis of the present study.

1. A similar study can be conducted in other health care institutions. .
2. A study can be done to find out the effectiveness of planned health education in stroke patients towards risk factor modification.
3. A similar study can be replicated in community settings.

APPENDICES

a. Tools – Questionnaire

CONSENT

I am willing to co-operate with you, for assessing our knowledge regarding the disease condition (about risk factors) using a questionnaire. Having understood that this is a part of a study "to asses the knowledge & practice about risk factors of CVA among relatives of patients attending stroke clinic". I here by give my consent, participate in this study.

(Signature of relatives the patient)

Name :

Age :

Sex :

Educational Status :

Occupation :

Year and date of first stroke :

Duration of hospital stay :

Name of care givers

Age :

Sex :

Relationship with patient :

Educational Status :

Present medications :

	At present	**Previous**
Blood pressure		
Blood Sugar		
Cholesterol		

1. Which of the following patients are more prone to develop stroke

   a. Hypertensive patients b. Diabetic patients

   c. Hyperlipidemic patients d. Cardiac patients e. All of the above

2. Is there any chance of recurrence

   a. Yes b. No c. Don't know

3. Among the following disease conditions which are all the problem your patient have.

   a. Hypertenion b. Diabetes mellitus

   c. Cardiac disease d. Hyperlipidemia

4. He \she can able to do her \his own activities

   a. able with the help b. no need of assistance c. not able to do

5. Which of the following are the warning signs of stroke

   a. Sudden weakness/numbness b. Blurring of vision

   c. Difficulty in swallowing d. Dizziness and loss of balance.

   e. Pain in hands & legs

6. Any of the family members are having heart attack or stroke.

   a. Yes b. No

   If yes, state the relationship

7. Are your patient is smoker

   a. Present b. previous c. not smoker

8. One of the factors that may lead to heart attack is

   a. Low blood pressure b. high blood pressure

   c. Normal blood pressured. do not know

9. Effective management of blood pressure affect the stroke patients by

   a. Increasing death rate b. decreasing death c. do not know

10. Taking common salt in excess

    a. May cause high blood pressures b. May cause high cholesterol

    c. May cause low blood sugar.

11. You can able to doing regular follow up with patient

    a. Yes b. No

12. He/she take any type of diet control

    a. yes decrease salt/ decrease sugar/decrease fat. b. No

13. She/he done regular BP Monitoring

    a. Weekly b. Monthly c. No

14. Stroke patients had to control blood sugar level with in normal limits.

    a. Yes b. No c. Don't Know

15. Which of the following statement s are strictly followed by diabetic patients.

    a. Regular medicines b. Regular medicine, exercise & diet

    c. Regular exercise.

16. Which of the following condition are occur due to high blood pressure.

    a. Heart attack b. Stroke

    c. Kidney disease d. Back pains

17. Do you know, she/he checking blood for sugar periodically

    a. Yes b. No c. Don't Know

18. Are you adopting any measures to relieve mental stress.

    a. Hearing music b. Reading c. Gardening

    d. Watching TV c. Unknown

19. Which of the following food item has highest fat content.

    a. Egg yolk b. Chicken c. Rice

20. If his / her cholesterol level is greater than 200, need attention to control.

    a. Yes b. No c. Do not know

21. Do you give, medicines at correct dose at correct time.

    a. Yes b. No c. Not Sure

22. Do you know –he/she checking blood for PT if he/she taking anticoagulant or antiplatelet

    a. Yes b. No c. Unknown

23. Is there any relationship between stroke and smoking

    a. Yes   b. No   c. Unknown

24. Cigarette smoking can effect brain circulation by

    a. Over expanding the blood vessels.

    b. Narrowing of blood vessels   c. Blood vessel rupture

25. The chance of stroke in obese patients are

    a. Increasing   b. Decreasing   c. Unknown.

26. Which of the following in more chance for occurring stroke.

    a. Stress   b. back pain   c. Heavy work

27. He/she doing any type of exercise

    a. Yes   b. No   d. Don't know

28. Exercise influence the chance of stroke

    a. Increasing   b. Decreasing   c. Unknown.

29. Obese and cardiac patients should avoid taking

    a. Fruits,   b. Vegetables   c. Fired foods

    d. Boiled food.

30. Health status of the patient undergoing regular exercise in

    a. Improve   b. Increase   c. increasing the

    bodyweight.

സമ്മതപത്രം

രോഗിയുടെ അസുഖവുമായി ബന്ധപ്പെടുത്തിയും, അറിവു പരിശോധിക്കുന്നതിനായും എന്നോടു കുറച്ചു ചോദ്യങ്ങൾ ചോദിക്കുന്നതിലും, അതിലെ പോരായ്മകൾ എന്നെ പറഞ്ഞു മനസ്സിലാക്കിതരുന്നതിനും ഞാൻ പൂർണ്ണമായി സമ്മതിക്കുന്നു. ഇത് ഒരു പഠനത്തിന്റെ ഭാഗമായാണ്. അതായത് "പക്ഷാഘാതം ഇനിയും വരാൻ സാധ്യതയുള്ള കാര്യങ്ങൾ (ഘട്ടങ്ങൾ) എന്തെല്ലാമാണ്, അവ തടയാൻ എന്തെല്ലാം കാര്യങ്ങൾ പക്ഷാഘാതം ഉള്ള രോഗിയെ നോക്കുന്നവർ ചെയ്യുന്നു. എന്നതിനെപ്പറ്റി" ഉള്ള പഠനത്തിനുവേണ്ടി ഞാൻ സഹകരിച്ചു കൊള്ളാമെന്ന് സമ്മതിക്കുന്നു.

ഒപ്പ്

ഒപ്പ്

രോഗിയുടെ പേര് :

വയസ്സ് :

സ്ത്രീ / പുരുഷൻ :

അസുഖം :

വിദ്യാഭ്യാസം യോഗ്യത :

ജോലി :

ആദ്യം പക്ഷാഘാതം വന്നതിന്റെ

തിയതിയും വർഷവും :

ആശുപത്രിയിൽ കിടന്ന കാലയളവ് :

രോഗിയെ പരിചരിക്കുന്ന ആളുടെ പേര് :

വയസ്സ് :

സ്ത്രീ / പുരുഷൻ

രോഗിയുമായി ഉള്ള ബന്ധം :

വിദ്യാഭ്യാസ യോഗ്യത :

ഇപ്പോൾ കഴിക്കുന്ന മുരുന്നുകളുടെ വിവരം :

	ഇപ്പോഴത്തെ	കഴിഞ്ഞ പ്രാവശ്യത്തെ
രക്ത സമ്മർദ്ദം		
കൊളസ്ട്രോൾ		
ബ്ലഡ് ഷുഗർ		

1. താഴെ പറയുന്നവയിൽ ഏതുക്കൂട്ടർക്കാണ്, സാധാരണ ജനങ്ങളേക്കാൾ പക്ഷാഘാതം വരാൻ കൂടുതൽ സാധ്യത.
   a. പ്രമേഹ രോഗികൾക്ക് b. രക്ത സമ്മർദ്ദം ഉള്ളവർക്ക്
   c. കൊളസ്ട്രോൾ കൂടുതൽ ഉള്ളവരിൽ d. ഹൃദ്രോഗമുള്ളവരിൽ
   e. മേൽപ്പറഞ്ഞതെല്ലാം

2. പക്ഷാഘാതം വീണ്ടും വരാൻ സാധ്യതയുണ്ടോ ?
   a. ഉണ്ട് b. ഇല്ല c. അറിയില്ല

3. നിങ്ങളുടെ രോഗിയ്ക്ക് താഴെപ്പറയുന്നവയിൽ ഏതെങ്കിലും അസുഖങ്ങൾ ഉണ്ടോ ?
   a. രക്താതി സമ്മർദ്ദം b. പ്രമേഹം
   c. ഹൃദയ സംബന്ധമായ അസുഖം d. അമിത കൊഴുപ്പ് (കൊളസ്ട്രോൾ)

4. രോഗിക്ക് സ്വന്തം കാര്യങ്ങൾ തനിയെ ചെയ്യാൻ കഴിയുന്നുണ്ടോ
   a. ഉണ്ട് b. ഇല്ല

5. ഇവയിൽ ഏതെക്കെയാണ് പക്ഷാഘാതത്തിന്റെ പ്രാരംബലക്ഷണങ്ങൾ
a. പെട്ടെന്നുള്ള തളർച്ച / പെരുപ്പ് b.കാഴ്ചമങ്ങൽ
c. വിഴുങ്ങാൻ ബുദ്ധിമുട്ട് d. തലക്കറക്കവും,
[illegible]മ്പോൾ മറിഞ്ഞ് മറിഞ്ഞ് പോവുക. e. കൈകാലുകളിൽ വേദന

6. രോ[illegible]ടുംബത്തിൽ ആർക്കെങ്കിലും ഹൃദയസ്തംഭനമോ പക്ഷാഘാതമോ[illegible]ണ്ടോ ?
a. ഉണ്ട്
ആ വ്യക്തിയുമായിട്ടുള്ള ബന്ധ[illegible]

7. രോഗി എപ്പോഴെങ്കിലും പുകവലിച്ചിട്ടു[illegible]
a. ഉണ്ട് b. ഇല്ല c. പു[illegible]ന്നു.
ഉണ്ടെങ്കിൽ എത്രകാലം പുകവലിച്ചു

8. താഴെപ്പറയുന്നവയിൽ ഏതാണ് പക്ഷാഘാതം വരാൻ സാധ്യത ഉള്ള[illegible]
a.കുറഞ്ഞ രക്തസമ്മർദ്ദം b.കൂടിയത്
c. സാധാരണനിലയുള്ളത് d. അറിയില്ല

9. കൃത്യമായി നിങ്ങൾ രോഗിയുടെ പരിശോധനയ്ക്ക് കൊണ്ട് വരാറുണ്ടോ, ഇല്ലയോ.
a. ഉണ്ട് b.ഇല്ല c. വല്ലപ്പോഴും മുടങ്ങും.

10. രക്താണി സമ്മർദ്ദം ക്രമീകരിക്കുന്നതിലൂടെ പക്ഷാഘാതം മൂലമുള്ള മരണ നിരക്ക് ഒരളവുവരെ,
a. കുറയ്ക്കുന്നു. b.കൂട്ടുന്നു. c. അറിയില്ല.

11. സാധാരണയിൽ കൂടുതൽ ഉപ്പ് കൂട്ടിയാൽ
a. രക്താതി സമ്മർദ്ദം ഉണ്ടാകുന്നു. b. കൊഴുപ്പിന്റെ അളവ് കൂടുന്നു.
c. പഞ്ചസാരയുടെ അളവ് കുറയയ്ക്കുന്നു.

12. രോഗിക്ക് എന്തെങ്കിലും തരത്തിലുള്ള ആഹാര നിയന്ത്രണം ഉണ്ടോ
a. ഉണ്ട് - ഉപ്പ് കുറഞ്ഞ ഭക്ഷണം / മധുരം കുറച്ച് / കൊഴുപ്പു കുറഞ്ഞത് /സാധാരണ നിലയിലുള്ളത്. b.ഇല്ല

13. രോഗിയുടെ പ്രഷർ ഇടയ്ക്ക് പരിശോധിക്കാറുണ്ടോ ?
a. ഉണ്ട് - ആണ്ടിലൊരിക്കൽ/മാസത്തിലൊരിക്കൽ b. ഇല്ല.

14. പക്ഷാഘാതമുള്ള രോഗികൾ, രക്തത്തിലെ പഞ്ചാസാരയുടെ കാര്യത്തിൽ എന്തെങ്കിലും ശ്രദ്ധ ചെലുത്തേണ്ട ആവശ്യകത ഉണ്ടോ ?
a. ഉണ്ട് b. ഇല്ല c. അറിയില്ല.

15. താഴെപ്പറയുന്നവയിൽ ഏതാണ് പ്രമേഹരോഗികൾ പാലിക്കേണ്ടത്.
a. കൃത്യമായ മരുന്നുകൾ കഴിക്കണം
b. ഭക്ഷണ നിയന്ത്രണവും വ്യായാമവും മരുന്നും
c. സ്ഥിരമായി വ്യായാമം ചെയ്യുക.

16. താഴെപ്പറയുന്നവയിൽ ഏതൊക്കെയാണ് പ്രമേഹം മൂലം വരാൻ സാധ്യതയുള്ള രോഗങ്ങൾ
a. ഹൃദയസ്തംഭനം b. പക്ഷാഘാതം
c. വൃക്കരോഗങ്ങൾ d. നടുവേദന

17. പഞ്ചസാരയുടെ അളവ് പരിശോധിക്കാനായി രോഗിയുടെ ബ്ലഡ് പരിശോധിക്കാറുണ്ടോ
a. ഉണ്ട് - മാസത്തിലൊരിക്കൽ / ആഴ്ചയിലൊരിക്കൽ b. ഇല്ല

18. നിങ്ങൾ രോഗിക്ക്, മാനസികവിഷമം അനുഭവപ്പെടാതിരിക്കാൻ എന്തെങ്കിലും മാർഗ്ഗങ്ങൾ ചെയ്യുന്നുണ്ടോ ?
a. പാട്ടുകൾ കേൾക്കും b. വായന
c. റ്റി.വി കാണും d. ചെടികൾ നനയ്ക്കുക

19. രക്തത്തിലെ കൊഴുപ്പിന്റെ അളവ് കൂട്ടുന്ന ഭക്ഷണ പദാർത്ഥം
a. മുട്ട b. കോഴിഇറച്ചി c. ചോറ്

20. നിങ്ങളുടെ രോഗിക്ക്, ശരീരത്തിലെ കൊഴുപ്പിന്റെ അളവ് 200-ൽ കൂടുതൽ ആണെങ്കിൽ നിയന്ത്രിക്കേണ്ട
ആവശ്യം ഉണ്ടോ ?
a. ഉണ്ട് b.ഇല്ല c. അറിയില്ല.

21. നിങ്ങൾ രോഗിക്ക് മരുന്നുകൾ കൃത്യസമയത്ത് ശരിയായ അളവിൽ നൽകുന്നുണ്ടോ.
a. ഉണ്ട് b. വല്ലപ്പോഴും ഒന്നോ, രണ്ടോ
മരുന്നുകൾ മുടങ്ങാറുണ്ട് c. അറിയില്ല
d. രോഗിയാണ് കഴിക്കുന്നത്.

22. രക്തം കട്ടപിടിക്കാതിരിക്കാനുള്ള മരുന്നുകൾ കഴിക്കുന്നവർ രക്തം കൃത്യമായി പരിശോധിക്കാറുണ്ടോ ?
a. ഉണ്ട് b.ഇല്ല c.അറിയില്ല

23. പക്ഷാഘാതവും പുകവലിയും തമ്മിൽ എന്തെങ്കിലും ബന്ധമുണ്ടോ ?
a. ഉണ്ട് b. ഇല്ല c. അറിയില്ല.

24. പുകവലി രക്തയോട്ടത്തെ ബാധിക്കുന്നത് എങ്ങനെ ?
a. രക്ത കുഴലുകൾ വികസിപ്പിക്കുന്നു.
b. രക്ത കുഴലുകൾ തടസപ്പെടുത്തുന്നു / ചുരുങ്ങുന്നു
c. രക്ത കുഴലുകൾ പൊട്ടുന്നു
d. അറിയില്ല.

25. അമിതവണ്ണമുള്ളവർക്ക് സാധാരണ ജനങ്ങളേക്കാൾ പക്ഷാഘാതം വരാൻ സാധ്യത
a. കൂടുന്നു. b. കുറയുന്നു. c. അറിയില്ല.

26. താഴെപ്പറയുന്നവയിൽ ഏതാണ് പഘാഘാതം വരാൻ സാധ്യത ഉള്ളത്.
a. മാനസിക വിഷമം b. നടുവേദന c. കട്ടിയുള്ള ജോലികൾ

27. രോഗി എന്തെങ്കിലും വ്യായാമം ചെയ്യുന്നുണ്ടോ ?
a. ഉണ്ട് a. ഇല്ല
c. അറിയില്ല d. കുറച്ചു ദൂരം നടക്കും.

28. വ്യായാമം പക്ഷാഘാതം വരാൻ ഉള്ള സാധ്യത
a. കൂട്ടും b. കുറയ്ക്കും c. അറിയില്ല.

29. അമിതവണ്ണം, ഹൃദ്രോഗം എന്നിവയുള്ളവർ താഴെപ്പറയുന്നവയിൽ ഏതാണ് ഉപേക്ഷിക്കേണ്ടത്.
a. പഴങ്ങൾ b. പച്ചക്കറികൾ
c. പൊരിച്ച ഭക്ഷണങ്ങൾ d. പുഴുങ്ങിയ ആഹാരം

30. സ്ഥിരമായ വ്യായാമം നിങ്ങളുടെ രോഗിയുടെ ആരോഗ്യനില
a. മെച്ചപ്പെടുത്തുന്നു b. ക്ഷീണം ഉണ്ടാക്കുന്നു
c. ശരീര ഭാരം കൂട്ടുന്നു.

Answer Key

1. e
2. a
3. a
4. a
5. c
6. b
7. b
8. b
9. a
10. a
11. a
12. a
13. a
14. a
15. b
16. a and b
17. a
18. a
19. b
20. a
21. a
22. a
23. a
24. b
25. a
26. a
27. a
28. a
29. d
30. a

c. PAMPHLET ON RISK FACTOR MODIFICAITON

STROKE

PRECAUTIONS

After a stroke the chance of another stroke is more condition that leading to recurrent stroke are – hypertension, diabetes mellitus hyper lipidemia, cardiovascular diseases, smoking, obesity and stress.

The controlling of these risk factors help to reducing the incidence of recurrent stroke.

INSTRUCTIONS

WARNING SIGNS OF STROKE

- Numbness, weakness or paralysis of the body
- Sudden blurred or decreased vision in one or both yeas.
- Difficulty in speaking , swallowing or understanding.
- A sudden, severe, unexmplainble headache
- Dizzness or loss of balance.

CONTROLLING THE RISK FACTORS

1. HYPER TENSION

1. Do not stop antihypertensive drugs abruptly
2. Check the Blood Pressure regular intervals.
3. Doing regular follow up and follow the doctors instruction.

II HEART DISEASES.

1. Patients with heart disease should taken medicines regularly.
2. Patients after valve disease or after valve replacement should take anticoagulant drugs and check prothrombin time once in a 2 weeks.
3. The dose of medicine should be adjusted according with the permission of prescribed doctor.
4. This measures help the brain to prevent further bleeding or clotting.

III. DIABETES MELLITUS

1. Regular diet and accurate exercise helps in controlling diabetes.
2. Diabetes mellitus is the main cause for myocardial infraction, stroke and renal diseases.
3. Periodic blood sugar monitoring & regular medical follow up should be necessary.

IV. Hyperlipedemia

1. Check serum cholesterol level atleast once in a year.
2. If serum Cholestrol level is above 240, then there is high risk for stroke ; Serum cholesterol should be kept below 200.
3. Our body is receiving cholesterol from two sources mainly
   1. From food
   2. From Liver
4. Low fat diet and good exercise can deduce cholesterol level in blood.

V. SMOKING

1. Nicotine is the harmful substance which can accumulate in walls of blood vessels mainly in the carotid artery.
2. It also reduces the oxygen content of the blood and change in the blood viscosity .
3. So it is better to stop smoking.

VI. OBESITY

1. Diabetes mellitus, hyeperlipidemia, cardiovascular diseases Arthritis etc are more in obese persons.
2. obesity can be reduced by controlling the diet and maintaining regular exercise.

VII MENTAL STRESS

1. When we are facing a stressful situation over body responds to it by secreting more adrenalin into the blood stream. In response to this, fatty acids in the blood vessels get increased and there by causing obstruction of blood vessels and results in ischemic stroke.

2. Always think about the positive aspect of life, forget the loss things and avoid negative thinks.

DIET

- Avoid fried items, cheese, ghee, vanaspathi, meet etc.
- Include fish items.
- Usage of edible oils to be minimized.
- Use of salt, pickles, pappad, backed items, bread etc to be minimized.
- Sugar, Jaggary should be avoided by diabetic patients. In fruits they can have watermelon papaya & guava, not more ripened.
- Cereals, leafy vegetables, pulses can be included in diet.

EXERCISE

1. Regular exercise should be done.

2. Walking in a calm and clear environment for ½ hr morning or evening is good for health.

The advantages of exercise

- Control glucose content in blood
- Control hypertension
- Controlling the body weight
- Blood circulation can be regulated
- Decreasing the LDL in blood
- The chance of atherosclerosis is less
- Reduce the mental stress.

പക്ഷാഘാതം

വീണ്ടും വരാതിരിക്കാനുള്ള മുൻ കരുതലുകൾ

ഒരിക്കൽ പക്ഷാഘാതം വന്നിട്ടുള്ളവർക്ക് വീണ്ടും വരാനുള്ള സാധ്യതയുണ്ട്. ഇതിലേയക്ക് നയിക്കുന്ന ഘടകങ്ങൾ

ഇവ നിയന്ത്രിച്ചാൽ ഒരളവുവരെ പക്ഷാഘാതം വരാനുള്ള സാധ്യത കുറയും.

രോഗികൾ പാലിക്കേണ്ട നിർദ്ദേശങ്ങൾ

പക്ഷാഘാതത്തിന് മുന്നോടിയായി വരുന്ന സൂചനകൾ

കൈകാലുകളുടെ തളർച്ച

- ശരീരത്തിന്റെ ഒരു വശത്തുണ്ടാകുന്ന മരവിപ്പ്
- ഒരു വശത്തെ ദൃശ്യങ്ങൾ മുഴുവൻ പെട്ടെന്നു കാണാതെ വരിക
- പെട്ടെന്ന് സംസാര ശേഷി നഷ്ടമാകുക
- നടക്കുമ്പോൾ ബാലൻസ് തെറ്റുക.
- പെട്ടെന്ന് ഉണ്ടാകുന്ന അതിഭയങ്കരമായ തലവേദന
- സാധാരണ കാര്യങ്ങൾപോലും പെട്ടെന്ന് ഓർത്തു എടുക്കാൻ വയ്യാത്ത് അവസ്ഥ.
- ചുണ്ടുകൾ ഒരു വശത്തേക്ക് കോടുക.

ഈ ലക്ഷണങ്ങളൊക്കെ പൊടുന്നനെ അനുഭവപ്പെടും. അതും വളരെക്കുറച്ചു നേരത്തേക്ക് മാത്രമാകാം. (ഏതാനും മിനിട്ടുകൾ) ഇവയിൽ ഏതെങ്കിലും അനുഭവപ്പെട്ടാൽ എത്രയും പെട്ടെന്ന് ഡോക്ടറെ കണ്ട് പരിശോധിക്കുക.

രോഗങ്ങൾ നിയന്ത്രിക്കുക

1. രക്തസമ്മർദ്ദം

1. രക്താതി സമ്മർദ്ദത്തിന് മരുന്നു കഴിക്കുന്നവർ അത് മുടക്കാതിരിക്കുക
2. കുറച്ചുനാൾ മരുന്ന് കഴിക്കുമ്പോൾ പലർക്കും രക്തസമർദം സാധാരണ നിലയിലാകും. അതോടെ മരുന്ന് കഴിക്കുന്നത് നിർത്തുകയും ചെയ്യും. ഇങ്ങനെ ഒരു കാരണവശാലും ചെയ്യരുത്.
3. രക്തസമ്മർദം സാധാരണ നിലയിൽ നിർത്താൻ ഡോക്ടറുടെ നിർദ്ദേശങ്ങൾ പാലിക്കുക.
4. മാസത്തിലൊരിക്കൽ എങ്കിലും രക്തസമ്മർദ്ദം കൂടുതലുള്ളവർ അത് പരിശോധിക്കണം.

II ഹൃദ്രോഗങ്ങൾ

1. ഹൃദയ സംബന്ധമായ ഏതെങ്കിലും രോഗമുണ്ടെങ്കിൽ കൃത്യമായി മരുന്ന് കഴിക്കുകയും രോഗം നിയന്ത്രിച്ച് നിർത്തുകയും വേണം.
2. ഹൃദയ വാൽവിന് തകരാറുള്ളവരും വാൽവ് മാറ്റിവച്ചവുരും രക്തം കട്ടപിടിക്കാതിരിക്കാനുള്ള മരുന്നുകൾ മുടങ്ങാതെ കഴിക്കണം.
3. ഇവ രണ്ടാഴ്ചയിലൊരിക്കൽ രക്തപരിശോധന നടത്തി ആവശ്യത്തിന് മരുന്നിന്റെ അളവ് ക്രമീകരിക്കണം.
4. രക്തസ്രാവം ഒഴിവാക്കാനും രക്തം കട്ട പിടിക്കാതിരിക്കാനും ഈ കരുതൽ ആവശ്യമാണ്.

III പ്രമേഹം

1. ചിട്ടയായ ജീവിത ക്രമവും ഭക്ഷണ നിയന്ത്രണവും ആണ് ഇതിൽ പ്രധാനം. ഹൃദയസ്തംഭനം,

പക്ഷാഘാതം, വൃക്ക രോഗങ്ങൾ തുടങ്ങിയ പ്രശ്നങ്ങളുടെ മുഖ്യകാരണം പ്രമേഹമാണ്.

2. ഡോക്ടർ നിർദ്ദേശിച്ചിട്ടുള്ള ഇടവേളകളിൽ രക്തത്തിലെ ഗ്ലൂക്കോസിന്റെ അളവ് പരിശോധിക്കുകയും യഥാസമയം ഡോക്ടറുടെ ഉപദേശം തേടുകയും വേണം.

3. ഒരിക്കൽ ഇൻസുലിൻ എടുക്കേണ്ടിവന്നാൽ ജീവിതകാലം മുഴുവൻ ഇഞ്ചക്ഷൻ വേണ്ടിവരുമെന്ന ധാരണ തെറ്റാണ്.

IV. കൊളസ്ട്രോൾ

1. വർഷത്തിൽ ഒരിക്കലെങ്കിലും രക്തത്തിലെ കൊളസ്ട്രോളിന്റെ അളവ് പരിശോധിക്കണം.

2. കൊളസ്ട്രോളിന്റെ നില 240 ൽ കൂടുതലാണെങ്കിൽ പക്ഷാഘാതം ഉണ്ടാകാനുള്ള സാധ്യത കൂടുതലാണ്. 200ൽ താഴെയാകുന്നതാണ് ഏറ്റവും നല്ലത്.

3. കൊളസ്ട്രോൾ പ്രധാനമായും രണ്ട് വിധത്തിലാണ് നമ്മുടെ ശരീരത്തിൽ ലഭിക്കുന്നത്.

1. നമ്മൾ കഴിക്കുന്ന ഭക്ഷണത്തിൽ നിന്ന്

2. കരൾ നിർമ്മിക്കുന്നതിൽ നിന്ന്

4. കൊഴുപ്പ് കുറഞ്ഞ ആഹാരം വഴിയും, ചിട്ടയായ വ്യായാമം വഴിയും ശരീരത്തിലെ കൊഴുപ്പിന്റെ അളവ് കുറയ്ക്കാൻ കഴിയും

V പുകവലി

1. തലച്ചോറിലേക്ക് രക്തം എത്തിക്കുന്ന കഴുത്തിലെ പ്രധാന ധമനിയായ കരോട്ടിഡ് ധമനിയിൽ കൊഴുപ്പ് അടിയുന്നതിന്റെ പ്രധാന കാരണം പുകവലിയാണ്.

2. സിഗരറ്റ് പുകയില നിക്കോട്ടിനിൽ ഉള്ള കാർബൺ മോണോക്സൈഡ് തലച്ചോറിലേക്ക് പോകുന്ന രക്തത്തിലെ ഓക്സിജന്റെ അളവ് കുറയ്ക്കും. മാത്രമല്ല പുക കലരുമ്പോൾ രക്തത്തിന് കട്ടി കൂടും.

3. പുകവലി നിർബന്ധമായും ഉപേക്ഷിക്കുക.

VI. അമിത വണ്ണം

1. പ്രമേഹം ഉയർന്ന കൊളസ്ട്രോൾ നില, ഹൃദ്രോഗം, വാതം, തുടങ്ങിയ പ്രശ്നങ്ങളൊക്കെ അമിത വണ്ണക്കാരിൽ താരതമ്യേന കൂടുതലാണ്.

2. ഭക്ഷണം ക്രമീകരിച്ചും വ്യായാമം ചെയ്തും നിങ്ങളുടെ തൂക്കം അനുയോജ്യമായ നിലയിൽ എത്തിക്കണം.

VII . മാനസിക സമ്മർദ്ദം

1. മാനസിക സമ്മർദ്ദത്തിന് അടിപ്പെടുമ്പോൾ അഡ്രിനാലിൻ എന്ന ഹോർമോൺ രക്തത്തിൽ കലരുന്നു. രക്തധമിനികളിൽ ഫാറ്റി ആസിഡിന്റെ അളവ് കൂടുകയും അതുവഴി രക്തക്കുഴലുകൾ ചുരുങ്ങുകയും ഹൃദ്രോഗം മസ്തിഷ്കാഘാതം എന്നിവയ്ക്ക് ഇടയാക്കുകയും ചെയ്യും.

2. ജീവിതത്തിലെ നഷ്ടങ്ങളും പോരായ്മകളും മാത്രം ഓർത്ത് നിരാശപ്പെടാതെ നേട്ടങ്ങളെക്കുറിച്ച് ചിന്തിക്കുക.

ഭക്ഷണ ക്രമീകരണം

1. എണ്ണമയമുള്ള ഭക്ഷണ സാധനങ്ങൾ, വറുത്തതും പൊരിച്ചതുമായ ആഹാരം, കൊഴുപ്പ് കൂടിയ മാംസം, ചീസ്, പാടനീക്കാത്ത പാൽ, നെയ്യ്, വെണ്ണ വനസ്പതി, ബേക്കറി സാധനങ്ങൾ എന്നിവ ഒഴിവാക്കുക.

2. ഭക്ഷണത്തിൽ മൽസ്യം ഉൾപ്പെടുത്തുക.

3. ഭക്ഷ്യ എണ്ണയുടെ ഉപയോഗം പരിമിതിപ്പെടുത്തുക.

4. ഉപ്പിന്റെ അളവ് കുറയ്ക്കുക, സംസ്കരിച്ച് ആഹാരങ്ങൾ, ഉണക്കമീൻ, അച്ചാർ, പപ്പടം, ബ്രഡ് എന്നിവ കഴിക്കുന്നത് കുറയ്ക്കുക.

5. പഞ്ചസാര, ശർക്കര, ചക്കര മുതലായവ പ്രമേഹരോഗികൾ ഉപയോഗിക്കാതിരിക്കുക. പഴവർഗ്ഗങ്ങളിൽ അധികം പഴുക്കാത്ത തണ്ണിമത്തൻ, പപ്പായ, പേരയ്ക്ക എന്നിവ കഴിയ്ക്കാവുന്നതാണ്.

6. പയറുവർഗ്ഗങ്ങളും, ധാന്യങ്ങളും, ഇലക്കറികളും ധാരാളം കഴിക്കുക.

വ്യായാമം

1. സ്ഥിരമായി വ്യായാമം ചെയ്യുക.

2. നടത്തം എല്ലാവർക്കും പറ്റിയ വ്യായാമം ആണ്. രാവിലെയോ വൈകിട്ടോ തെളിഞ്ഞ അന്തരീക്ഷത്തിൽ വേണം നടക്കാൻ. ആഴ്ചയിൽ 5 ദിവസമെങ്കിലും അര മണിക്കൂർ വീതം നടക്കുക.

വ്യായാമങ്ങൾ കൊണ്ടുള്ള പ്രയോജനങ്ങൾ

1. ഗ്ലൂക്കോസ് നില ക്രമീകരിക്കുന്നു.
2. രക്തസമ്മർദ്ദം നിയന്ത്രിക്കുന്നു.
3. ശരീര ഭാരം നിയന്ത്രിക്കുന്നു.
4. രക്തസംക്രമണം അനുകൂലമാക്കുന്നു.
5. ചീത്ത കൊളക്ട്രോളായ എൽ.ഡി.എൽ കുറയ്ക്കുന്നു.
6. രക്തക്കുഴലുകളിൽ തടസമുണ്ടാകാനുള്ള സാധ്യത കുറയുന്നു.
7. മാനസിക സമ്മർദ്ദം കുറയ്ക്കുന്നു.
8. സന്ധികളുടെ ആരോഗ്യം മെച്ചപ്പെടുത്തുന്നു.
9. അടഞ്ഞുപോയ ചെറുചെറു രക്തധമിനികൾ തുറക്കുന്നു.
10. ആന്തരികവും ബാഹ്യവുമായ താളക്കേടുകളെ അതിജീവിക്കാനുള്ള കാര്യക്ഷമത കൈവരുന്നു.

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