A Study to Assess the Knowledge of Family Members Regarding the Prevention and Care of Hypertension among Elderly People Admitted in Medical Ward at B.V.V Sangha's H.S.K Medical College and Research Center, Navanagar, Bagalkot, District Karnataka

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Abstract:- India is gradually observing a phenomenon of elderly population. Increased life expectancy has resulted in growing of population of aged throughout the world. In 2011 there are nearly 104 million elderly persons (aged 60years or above) in India. A report released by the United Nations Population Fund and Help Age India suggested that the number of elderly persons is expected to grow to 173 million by 2026[3].

➢ *Objectives*
- To assess the knowledge about hypertension among the family members.
- To assess the knowledge of family members regarding prevention and care of hypertension.
- To associate the knowledge about the hypertension with their selected social Demographic variables.

➢ *Hypothesis*
H[1] - The family members will be having some knowledge about care and prevention of hypertension.
H[2] -There will be significant association between the knowledge about hypertension with their selected socio demographic variables.

➢ *Methods*
The research approach adapted for the study was descriptive survey approach. The population selected for the study was 100 clients respondent from medical ward at B.V.V Sangha's H S K Medical college Hospital and research Center Navanagar, Bagalkot. The study subjects was selected by using non probability purposive sampling. The data was collected by using structured knowledge questionnaires. Section -1 consist demographic performs 14 items, section II consist of 32 items content validation and establishment of reliability. Modification of questions were done according to the suggestions given by the experts, pre listing and reliability of the questionnaire was done. The reliably coefficient for knowledge were 0.8019 and the validity score were 0.8955 which were acceptable.

➢ *Results*
The findings revealed the average knowledge score to be 66.6%, the socio demographic variables of age, sex, education, occupation, income, relation with client, age of client, duration of disease, suffering from disease and sources of information were found to be significantly influencing knowledge level.

➢ *Interpretation and Conclusion*
The present study revealed that family members had considerably moderate knowledge regarding prevention and care of hypertension among elderly. The findings of the study concluded that Most of the respondents were had information on prevention and care of hypertension through mass media.

I. INTRODUCTION

An ageing is a developmental phase in the life process, which begins at conception and continues until death. Old age is the last stage in the journey of life and closing period in the life span of human beings with decreased capacity to adaptation. We cannot heal old age, we have to protect them and help them to extend their life span[1].

Elderly people are vulnerable to physiological, mental and social crisis and to a typical presentation of geriatric problem.

Currently 962 million people in the world are aged 60 or over years in the world, comprising 13 per cent of global population. And is expected to more than double by 2050[2].

Medical problems of old age are chronic illness, multiplicity of pathology, disability, degenerative disease, such as hypertension, diabetics, cataract, glaucoma, cancer, deafness, stroke, coronary artery disease, cerebro-vascular accidents, falls, fractures, malnutrition, GIT disturbance, parkinsonism, gout spondylitis, asthma, urinary tract infection, chronic bronchitis and hormonal imbalance. Urbanization, industrialization joint family breakdown, unemployment, rising cost of living, changing social value, high dependency rate, loss of authority, generation gap, lack of planning for old age and emotional instability are other problems[4].

II. RESEARCH METHODOLOGY

The present study was aimed at assessing the knowledge of family members in regarding prevention and care of hypertension among elderly admitted in medical ward B.V.V. Sangha's H.S.K. Medical college and Research Centre, Bagalkot.

➢ Research Approach:
Research approach is the most significant part of any research. The appropriate choice of the research approach depends upon the purpose of the research study, which was undertaken the approach to research is his umbrella basic procedure for conducting research.

The research approach adopted in the present study is descriptive survey, which is considered as appropriate because this study aims at assessing the knowledge members regarding hypertension prevention and care among elderly in the family.

➢ Research Design:
The term research design refers to plan or organization of a scientific investigation. Research design helps the researcher in selection of subjects, manipulation of experimental variable, control procedure of extraneous variables, procedure of the data collection and the type of statistical analysis to be used to interpret the data design for testing hypothesis of causal relationship among variables.

The research design adopted for the present study was descriptive design which facilitates the identification of inter-relationship of situation within short period of time. The researcher tried to find the relationship between health problems by this design.

➢ Independent Variable:
In this study the care and prevention of hypertension in elder people admitted in medical ward was independent variable.

➢ Dependent Variable:
In this study knowledge of family members was dependent variable.

➢ Socio-Demographic Variables:
In this study the socio demographic variable such as age in years, gender, and religion, and monthly income, type of family, educational qualification, type of diet, relation with client.

➢ Setting of the Study:
The study was conducted family members of patient admitted in medical ward at B.V.V. Sanghas, H.S.K. Medical College and Research center Hospital, Navanagar, Bagalkot.**Populations:**- Target population for the present study was attending family members of patient admitted in medical ward at B.V.V. Sanghas, H.S.K. Medical College and Research center Hospital, Navanagar, Bagalkot.

➢ Sampling Technique:
A sample is a portion of the population that has been selected to represent population of interest. It is a subject of the population of interest. Sample size for the present study were family members between the age group of 20-51 and above Purposive sampling technique is a strategy in which the researcher's knowledge of the population and its elements are used to select a sample which is typical to representing the population. Purposive sample technique, a type of non-probability sampling approach was found to be appropriate for the present study.

➢ Development and Description of the Tool:
An instrument selected in a research should be as for as possible the vehicle that would be best obtained data from drawing conclusion which pertinent to the study.

Based on the objective of the study. A structured questionnaire was prepared in order to assess the knowledge of family members regarding prevention and care of hypertension among elderly. It is considered to be an appropriate and effective instrument.

➢ Reliability of the Tool:
The finding of the study revealed that the family members had moderate knowledge and reliability of the tool was found to be 0.8019.

➢ Data Collection:
Permission was obtained from the head of the institution and the participants before collecting the data, the investigator was present personally and explained the need and importance of the study to the participants and requested their cooperation. The tool were given individual to the subjects and their doubts were cleared. They had to complete it on the same day and not to discuss it with anyone. The investigator was personally present with the subject when they answered the items. The total procedure took 30 minutes after which the investigator collected the tool from the subjects. The period of data collection ranges from 13-02-19 to 20-02-2019.

III. RESULTS

A descriptive approach was adopted to assess the knowledge of family members regarding prevention and care of hypertension from elderly Data collected from 100 family members was tabulated, analyzed and interpreted by using descriptive and inferential statistics based on the objective of the study.

Presentation of Data

To begin with, data was entered in a master sheet, for tabulation and statistical processing. The findings were presented under following headings.

Section I: Demographic characters of respondents.
Section II: Area wise knowledge scores of family members regarding prevention and care of hypertension among elderly.
Section III: Distribution according to association between knowledge scores with their selected demographic variables.

Section I: Demographic characteristics of Respondents

Variables	No of respondents	percentage
Age (in years)		
20-30 years	26	26
31-40 years	13	13
41-50 years	40	40
51 years and above	21	21
Gender		
Male	69	31
female	31	56
Religion		
Hindu	56	34
Muslim	10	10
Christian	34	34

Table 1:- Distribution of respondents according to the age, sex and religion

The data presented in Table-1 reveals distribution of respondents according to age, sex, and religion.

In the present study 40% respondents were belonging to age group between 41-50 years, followed by 26% respondents were in the age group of 20-30 years, 21%respondents were in the age group of 50 years and above and 13% were between the age group of 31-40 years.

In this study 69% of respondents were male and 31% respondents were found to be females.
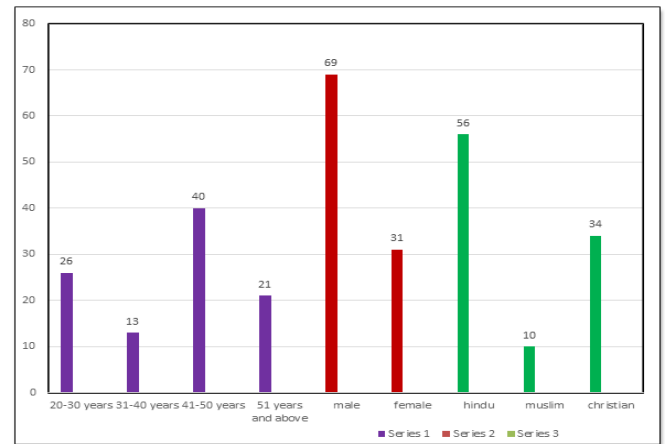

Fig 3:- Distribution of respondents according to age, sex, and religion.

Variables	No of respondents	Percentage
Type of family		
nuclear	77	77
joint	17	17
extended	6	6
Educational Qualification		
illiterates	18	18
PUC	63	63
graduate and above	19	19

Table-2:- Distribution of respondents according to type of family, educational qualification.

Table-2 reveals that Distribution of respondents according to type of family, educational qualification.

With regard to the type of family, 77% of respondents belongs to nuclear family, 17% respondents were belongs to joint family, and 16% belongs to extended family.

With regard to educational qualification, 68% respondents were PUC, 19% respondents were graduates and above and illiterates were 18%.
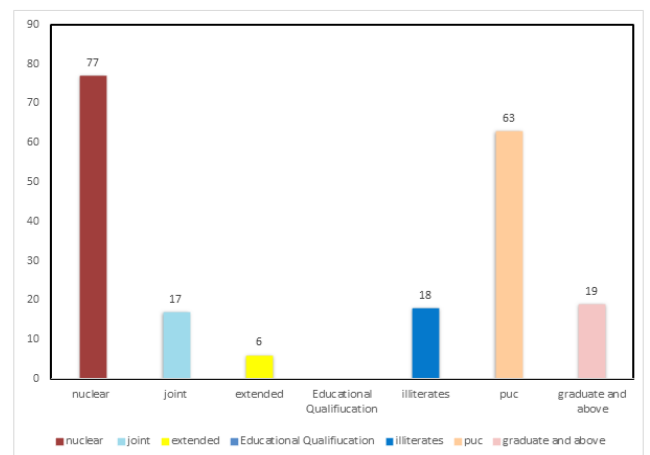

Fig 4:- Distribution of respondents according to type of family, educational qualification.

Variable	No .of respondents	Percentage
Labor	15	15
Private employee	37	37
Govt. employee	20	20
Self-employee	9	9
House wife	19	19
Family monthly income		
Rs.3000-4000	66	66
Rs.4000-5000	11	11
Rs.5000-6000	13	13
Rs.6000 and above	10	10
Type of diet		
Vegetarian	58	58
Non-Vegetarian	42	42

Table-3:- Distribution of respondents according to occupation, monthly income and, type of diet.

Table -3 reveals the Distribution of respondents according to occupation, monthly income and, type of diet.

With regard to occupation, 37% respondents are private employ, govt. employ are of 20%, 19% respondents are house wise, 15% respondents are labor, and 9% respondents self employs.

In relation to monthly income 66% respondents earn between 3000-4000, 13% respondents have income between 5000-6000, 11% respondents get income between 4000-5000,and 10% were earning 6000 and above.

In the present study 58% respondents belongs to vegetarian, 42% respondents were of non-vegetarian diet.
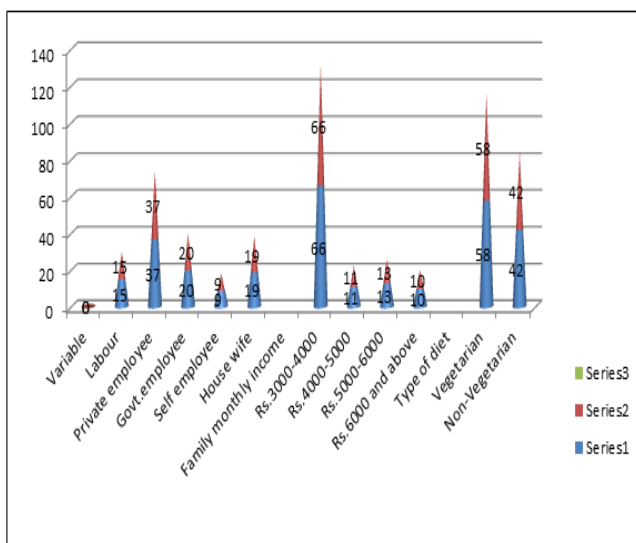

Figure-Distribution of respondents according to occupation, monthly income and, type of diet.

Variables	No of respondents	Percentage
Relationship with client		
Mother/mother in law	30	30
father /father in law	31	31
Grand mother	11	11
Grand father	28	28
Age of client		
40-50 years	19	19
51-60 years	11	11
61-70 years	31	31
71 years and above	39	39

Table 4:- Distribution of respondents according to relationship with client and client age.

Table 4 reveals the Description of respondents according to relationship with client and client's age.

The relation of 31% respondents were father/ father in law 30% respondents were mother/mother in law, 11% respondents were grandmother and 28% were grandfather.

The data on age of client 39% were age 71years and above 31% clients between 61-70 years 19% clients were between age group of 40-50 years, and 11% clients were between 51-60 years.
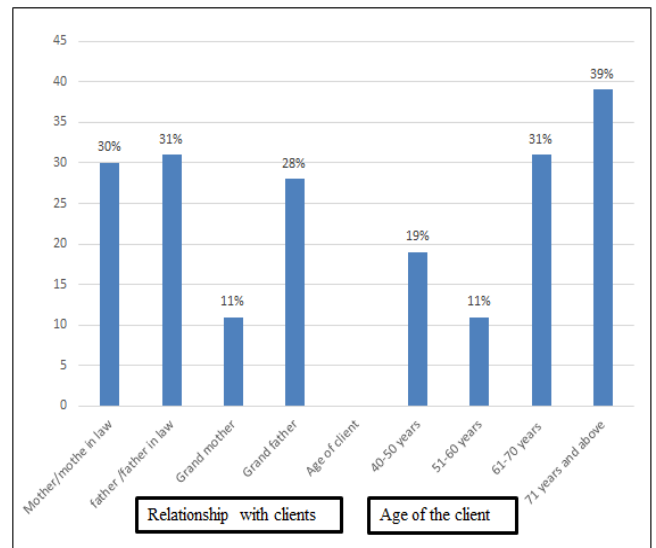

Fig 6:- Distribution of respondents according to relationship with client and client's a

Variables	No of respondents	Percentage
Clients disease		
Hypertension	36	36
Heart disease	24	24
Diabetics	25	25
None of the above	15	15
Duration of disease		
1-5 year	86	86
6-10 year	7	7
11 years and above	7	7
source of health information		
Doctor	27	27
Family friends	20	20
Mass media(TV, radio, Newspaper)	53	53
Total		

Table-5:- Distribution of respondents according to client's disease, duration of disease, and source of health information.

Table 5 reveals the description of respondents according to client's disease, duration of disease and source of health information.

With regard to disease, 36% of respondent's clients were suffering with Hypertension, 25% respondent's clients were suffering from heart disease and with 15% of respondent's clients were suffering from other diseases. Majority of 86% respondent's clients were suffering from disease were between 1-5 years, 7% respondents clients were between 6-10 years and 7% respondents clients were suffering from disease from 11 years and above.

53% of the respondents received health information regarding hypertension through mass media, 17% had information by doctors and 20% got the information on hypertension through family friends.
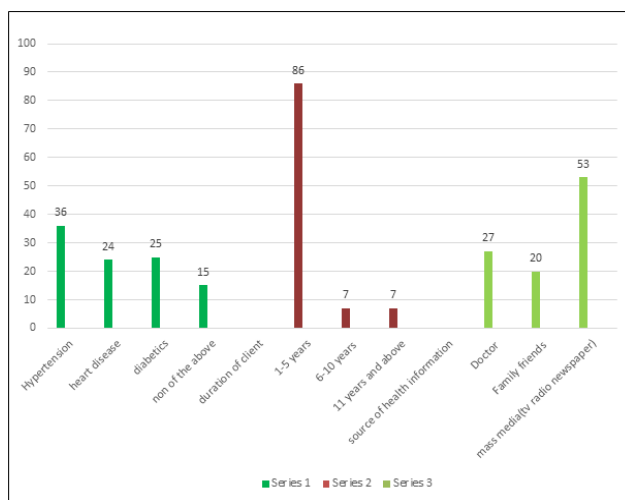

Fig 7:- description of respondents according to client's disease, duration of disease and source of health information.

Section II Assessment of knowledge of family members regarding hypertension.

Distribution of study subjects according to level of knowledge.
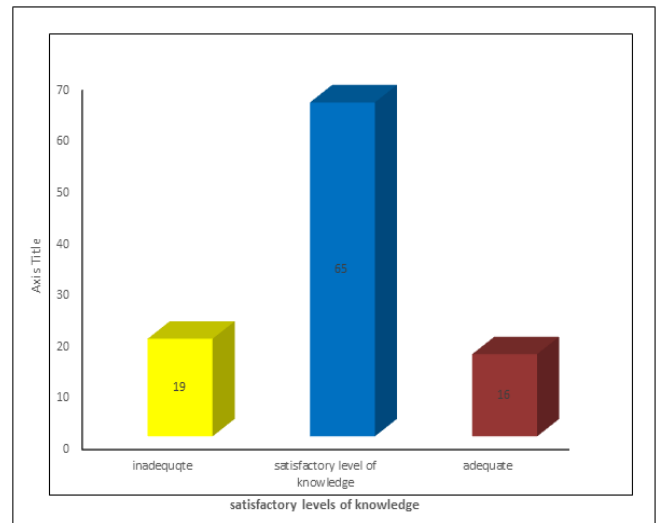

Fig 8:- Distribution of respondents according to level of knowledge scores.

According to the graph 65%. Respondents found to be satisfactory, 19% are at in adequate, and 16% respondents were with adequate knowledge regarding hypertension. The respondents who scored <40 were considered with inadequate, 40% above scorers were considered as satisfactory and > more than 70 were considered with adequate knowledge regarding hypertension.

Section III Percentage Distribution of respondents according to level of care.
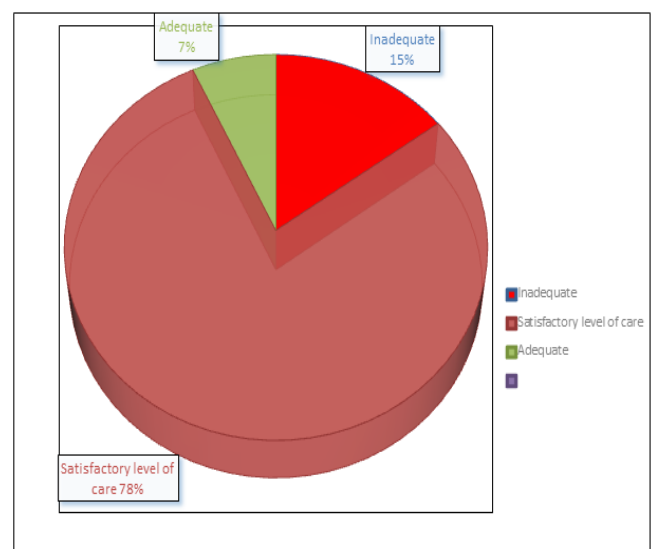

Fig 9:- Distribution of respondents according to level of care

In this study 78% of respondents were satisfactory, 15% respondents were inadequate and 7% of respondents were knowing about care of elderly with hypertension.

Age in years	Inadequate	%	Moderate	Per	adequate	Per	Chi-square	Df	P-value
20-30 years	19	73	7	26.92	0	0	90.336	6	0
31-40 years	0	0	13	100	0	0			
41-50 years	0	0	35	87.5	5	12.5			
51 years above	0	0	10	47.61	11	52.13			
Combines	19	19	65	65	16	16			

Table 6:- Association between age and knowledge of respondents on hypertension among elderly.

The data from the table-6 it is seen that the calculated chi-square value is90.3360. Referring chi-square table for 6df, x2= 12.59. The calculated chi-square is more than 6df, chi-square, P< 0.05 value. Hence there is a significant association between occupation and the knowledge of correspondents.

Overall knowledge scores of respondents associated with age found to be 19% of respondents have inadequate knowledge 65% have moderate knowledge and 16% have adequate knowledge.

Gender	Inadequate	Per	Moderate	Per	Adequate	Per	Chi-square	Df	p-value
Male	10	14.47	47	68.1	12	17.3	2.982	2	0.2252
Female	9	29.03	18	58	14	12.9			
Combines	19	19	65	65	16	16			

Table 7:- Association between gender and knowledge of respondents on hypertension among elderly

The data from the table-6 it is seen that the calculated chi-square value is 2.9820. Referring chi-square table for 2df, x2- 4.036. The calculated chi-square is more than 2df, chi-square, P< 0.05 value. Hence there is a significant association between gender and the knowledge of correspondents.

58.06% of female respondents have moderate knowledge and 29.03% have inadequate knowledge and 12.09% have adequate knowledge. Father male respondents possess slightly higher knowledge compared to females.

Occupation	Inadequate	Per	Moderate	Per	Adequate	Per	Chi-squared	Df	p-value
Labor	3	20	11	73.33	1	6.67			
Private employee	11	29.73	26	70.27	0	0	42.546	8	0
Govt employee	2	10	7	35	11	55			
Self-employee	0	0	5	55.56	4	44.4			
House wife	3	15.79	16	84.21	0	0			

Table 8:- Association between occupation and knowledge of respondents on Hypertension among elders.

The data presented in table-8 reveals that calculated chi-square value is42.546. Referring chi-square table for 8df, x2-37.03 the calculated chi-square is more than 8df, chi-square, P< 0.05 hence there is a significant association between occupation and knowledge of respondents.

Educational Qualification	Inadequate	Per	Moderate	Per	Adequate	per	Chi-square	Df	p-value
Illiterate	18	100	0	0	0	0			
PUC	1	1.59	57	90.48	5	7.94	112.626	4	0
Graduate and above	0	0	8	42.11	11	57.89			

Table 9:- Association between educational qualification and knowledge of Respondents on hypertension among elders

The data presented in table-9 reveals that calculated chi-square value is 112.626. Referring chi-square table for 4df, X2=9.49 the calculated chi-square is more than 4df, chi-square, P< 0.05 hence there is a significant association between educational qualification and knowledge of respondents. 57.89% of respondents that are graduates and above have adequate knowledge and 42.11% have moderate knowledge.

Type of diet	inadequate	per	Moderate	per	Adequate Per	per	Chi-square	Df	p-value
Veg	0	0	42	72.41	16	27.59			
Non-veg	19	0	23	100	0	0	109.761	4	0

Table 10:- Association between types of client and knowledge of respondents on hypertension among elderly

The data presented in table-10 reveals that calculated chi-square value is 109.761. Referring chi-square table for 4df, X2 -9.49 the calculated chi-square is more than 4df, chi-square, P<0.05. Hence there is a significant association between type of diet and knowledge of respondents.

Age of client	Inadequate	Per	Moderate	Per	Adequate	Per	Chi-square	Df	p-value
40-50 yrs.	1	5.26	10	52.63	8	42.12			
51-60yrs	5	45.46	6	54.45	0	0	17.746	6	0.0069
61-70 yrs	6	19.36	22	70.97	3	9.68			
71 yrs and above	7	39.29	27	69.23	5	12.82			

Table-11:- Association between client's age and knowledge of respondents On hypertension among elders

The data presented in table-11 reveals that calculated chi-square value is 17.746. Referring chi-square table for 6df, X-12.59 the calculated chi-square is more than 6df, chi-square, P<0.05. Hence there is a significant association between client's age and knowledge of respondents.

Source of health information	Inadequate	Per	Moderate	Per	Adequate	Per	Chi-square	Df	p-value
Doctor	19	70.37	8	29.63	0	0			
Family friends	0	0	4	20	16	80	109.761	4	0
Mass media (Tv, Radio, newspaper)	0	0	53	100	0	0			

Table-12:- Association between sources of health information and knowledge of respondents On hypertension among elders

The data presented in table-12 reveals that calculated chi-square value is109.761. Referring chi-square table for 4df, x2 =9.49 the calculated chi-square is more than 4df, chi-square, P<0.05. Hence there is a significant association between source of health information and knowledge of respondents.

SUMMARY

This chapter presents a brief Summary of the study and its major findings The main aim of the Study was to assess knowledge, of family members regarding prevention and care of Hypertension among elderly.

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