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A Descriptive Study on Knowledge Regarding Prevention of Osteoporosis among Pre-Menopausal Women in Rural Areas of Waghodia Taluka with a View to Develop Information Booklet

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ABSTRACT

Women are a gift of GOD, Osteoporosis is a condition characterized by a decrease in the density of bone, decreasing its strength and resulting in fragile bones. Osteoporosis literally leads to abnormally porous bone that is compressible, like a sponge and pre menopause is the stage where there is a high risk of osteoporosis. The researcher came across many pre-menopausal women who were having a risk of osteoporosis. The researcher, therefore, felt the need to conduct this kind of study to assess the level of knowledge of pre-menopausal women regarding prevention of osteoporosis.

Keywords: To Assess the Knowledge, Information Booklet.

AIMS AND OBJECTIVES

The aim of this study is to assess the knowledge of premenopausal women regarding the prevention of osteoporosis.

MATERIAL AND METHOD

Pre-experimental one group pre-test research design was adopted to achieve the goal of the study. The tool consists of two parts: First part consists demographic data of the sample and second part consists of Self structured knowledge questionnaire. 120 pre-menopausal women of Pipariya, Ropa, and Mastupura, Waghodia, Vadodara were selected as a sample by convenience sampling technique.

RESULTS

The findings shows that the pre-test knowledge score of pre-menopausal women regarding prevention of osteoporosis with their selected demographic variable such as education (15.64), occupation (13.077), family income (19.743) where found significance at 0.05 level of significance and variable such as Age (2.401), type of family (2.85), type of diet (4.219), and History of osteoporosis (0.059) where not significant at 0.05 level of significances. Thus it can be interpreted that there is a significant association between pre-test level of knowledge among premenopausal women with their selected socio demo graphical variable such as education, occupation and family income. The overall pre-test knowledge score with maximum score 20, Mean score 12.16, Mean percentage 50.8% and Standard deviation.

Association between Pretest and demographic variable: education, occupation, family income are significant at 0.05 level of significance. Whereas the association between age, type of family, type of diet and history of osteoporosis are non-significant at 0.05 level of significance.

CONCLUSION

The following conclusion can be drawn from the study findings, which are supported by evidence from the other literature; The premenopausal women have the adequate knowledge regarding the prevention of osteoporosis. The self-administered questionnaire has shown a remarkable association between socio-demographical variables and their knowledge. Using the statistical formula we have computed the association between the demographic variables and their knowledge.

Womanhood is the period in a female's life after she has passed through childhood and adolescence, generally around the age 18.The word woman can be used generally, to mean any female human or specifically, to mean an adult female human as contrasted with a girl. The word girl originally meant "young person of either sex" in English it was only around the beginning of the 16th century that it came to mean specifically a female child. Nature had form series of transitions from her birth until death, which includes menarche, pregnancy, labour, motherhood, pre-menopause, menopause and post-menopausal stages. The term was originally coined to describe this reproductive age in human females each of these stages includes many physical and physiological changes.[1]

Osteoporosis is a condition characterized by a decrease in the density of bone, decreasing its strength and resulting in fragile bones. Osteoporosis literally leads to abnormally porous bone that is compressible, like a sponge. This disorder of the skeleton weakens the bone and results in frequent fractures (breaks) in the bones. Normal bone is composed of protein, collagen, and calcium, all of which give bone its strength. Bones that are affected by osteoporosis can break (fracture) with a relatively minor injury that normally would not cause a bone to fracture. The fracture can be either in the form of cracking (as in a hip fracture) or collapsing (as in a compression fracture of the vertebrae of the spine). The spine, hips, ribs, and wrists are common areas of bone fractures from osteoporosis although osteoporosis-related fractures can occur in almost any skeletal bone.[2]

RESEARCH METHODOLOGY

Research methodology defines what the activity of research is, how to proceed, how to measure progress, and what continues success. The methodological decision paves crucial implication for the validity of the study findings. Methodological of research indicates the general pattern for organizing the procedure for the empirical study together with the method of obtaining valid and reliable data for an investigation.[45]

Methodology for research indicates the general pattern for organizing the procedure for the empirical study together with the method of obtaining valid and reliable data for problem under investigation.[46]

The methodology of research refers to the investigations of the way of obtaining, organizing and analysing data. Methodological studies or research address the development, validation, an evaluation of research tools or methods. The methodology of research indicates the general pattern for organizing the procedure for the empirical study together with the method of obtaining valid and reliable data for an investigation.

The methodology of research indicates the general pattern of organizing the procedure of gathering valid and reliable data for the problem under investigation. (Kothari, 1996)

This chapter deals with the methodology adopted for assessing “effectiveness of planned teaching programme on knowledge regarding immunization among antenatal mothers at selected villages of waghodia taluka” it includes the research approach, research design, setting of the study, sample and sampling technique development of data collection tools and questionnaire, procedure for data collection and plan for data analysis.

Further, it also in at determining the association between pretest and demographic variable like age, occupation, education, family income and history of osteoporosis of premenopausal women regarding prevention of osteoporosis.

RESEARCH APPROACH

The research approach is a systematic, objective method of discovery with empirical evidence and religious control. The research approach spells out the strategies that the researcher develop

information that is accurate and interpretable. The control is achieved by holding conditions constant and varying only the phenomena under study.

The research approach is an umbrella that covers the basic procedure for conducting the research. A research approach tells the researcher so as to what data to collect and how to analysis it. It also suggests possible conclusion to be drawn from data in view of the nature of problem selected for the study and objectives to accomplish. In order to achieve the desired objectives of the study evaluating research approach will be considered appropriate.

RESEARCH DESIGN

The research design is the" binding force" that holds all of the elements in a research together. The research design is the overall plan for obtaining answers to the questions being studied and for handling the difficulties encountered during the research process.

When embarking on a research question, a research design provides a framework that supports the study and holds it together. Polit and Hungler (1995)

A design is used to structure the research, to show how all of the major parts of the research project the sample or groups, measure, treatments or programmes, and methods of assignments work together to try to address the selected research questions.[47]

The research design helps in the selection of subjects for observation and determines the type of analysis to be used to interpret. The selection of the research design depends upon the purpose of the study and the condition under which the study is conducted. The design normally specifies which of the various types of research plans to implement specific controls to enhance the inter predictability of the results [48]

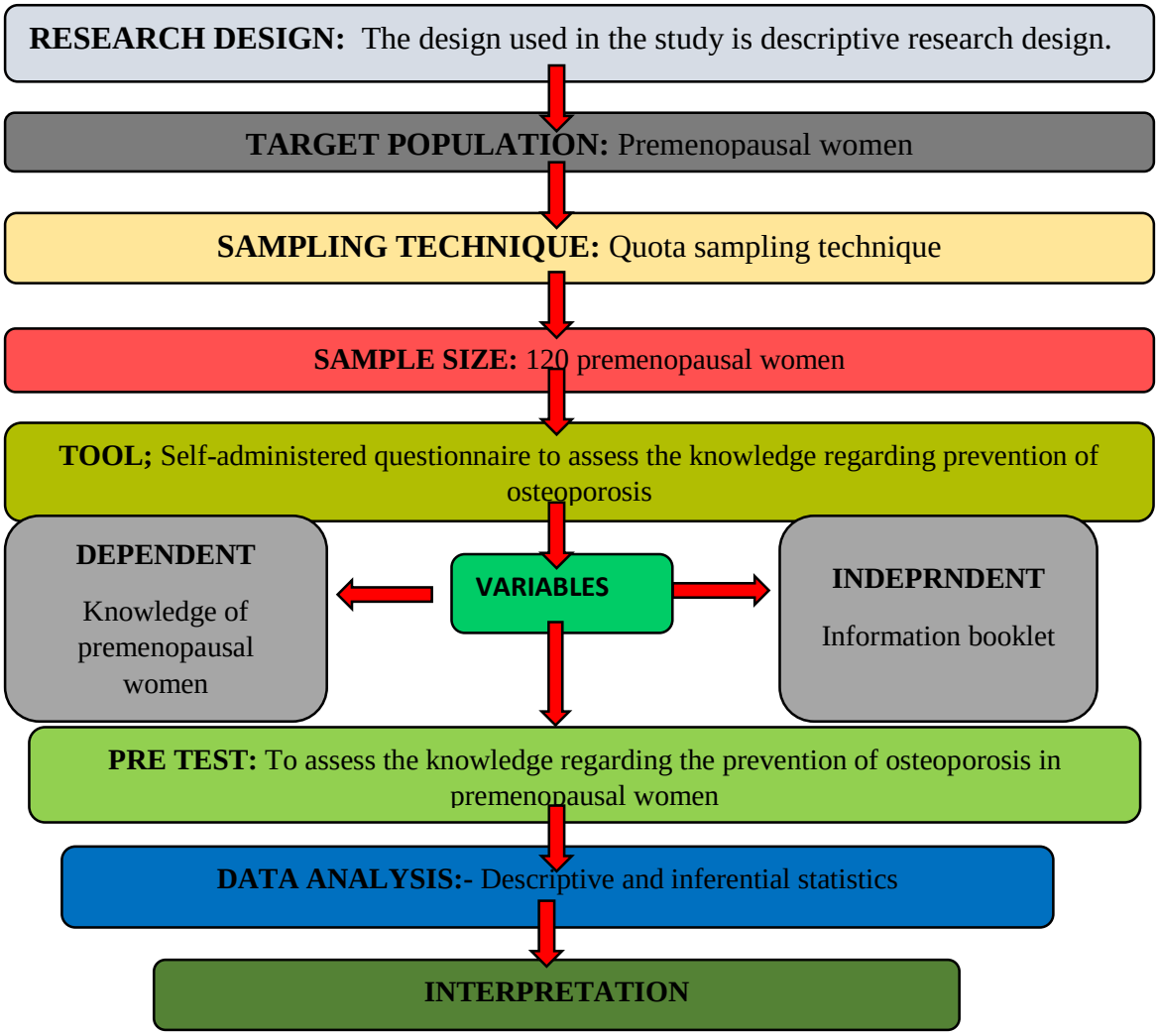

FIG 2: THE FIGURE DESCRIBES THE SYSTEMATIC REPRESENTATION OF RESEARCH METHODOLOGY

VARIABLES

Variables are the condition or characteristics that the experimenter manipulates, controls, variables and this change is studied (Polit, 1977)

A variable is measurable components of an object of event that may fluctuate the quantity or that may be different in quality or from one individual object or event to another individual object or event of the same general class. (B. T. Basavanthappa)

The presumed cause is referred to as the independent variable, and the presumed effect is a referral to as the dependent variable. Based on the objective of the study the major identified were as follows:

Research variables

The variables that are believed to cause influence on knowledge regarding prevention of osteoporosis among pre-menopausal women.

SETTING OF THE STUDY

"Setting '' refers to the area where the study is conducted.

The setting is a physical location and condition in which data collection takes place. (Polit and hunger1999)

Polit. G. F. Hungler .B .P-nursing research principles and methods, Philadelphia; J. B. Lippincott, 1999

The study is conducted in a selected village in Pipariya, Ropa, and Mastupura of waghodia Taluka.

POPULATION

The population is a complete set of individuals or objective that process some common characteristics of interest to the researcher. By identifying the population, the researcher makes clear the group to which the study result can be applied.

A population is the aggregate of cases that meet a designated set of criteria that the researcher is interested in studying. The requirement of defining the population for a research project arises from the need to specify the group to which the result of the study can be generalize.

- Polit and Hunger

The population will consist of prevention of osteoporosis among premenopausal women in selected are of waghodia taluka.

SAMPLE AND SAMPLE TECHNIQUE

Polit and Hungler (1995) state that sample consists of a subset of a population selected to principle in a research study.

The sample is the subset of the units that compose the population .sample is used in research when it is not feasible to study the whole population from which it is drawn. The process of sampling makes it possible to accept a generalise to the intended based on careful observation of variable, within a relatively small proportion of the population.

The samples of the study will be selected by using Quota sampling technique according to inclusive criteria as well as availability of samples from selected Ropa, Mastupura, Piparia of waghodia Taluka, Vadodara District

SAMPLE SIZE

A proportion of the subset of the population is known as a sample. The sample for the present study comprised of 120 pre-menopausal women who full fill the sampling criteria and express willingness to participate in the study.

CRITERIA FOR SELECTION OF SAMPLE

Inclusion Criteria

- Women age between 35-46years.
- Women who are willing to participate.
- Women who are able to read Gujarati or English.

Exclusion Criteria

- A woman who is not present at the time of data collection.

DATA COLLECTION TECHNIQUE AND INSTRUMENTS

The most impotent and crucial aspect of any investigation is the collection of appropriate information which would provide necessary data to answers the question raised in the study.

The study aimed knowledge regarding prevention of osteoporosis among pre-menopausal women

DEVELOPMENT OF TOOL

The question is most frequently a very conscious, pre-planned set of question designed to yield specific information to meet a particular need for research information about a pertinent topic. The research information is attained from respondents normally from a related interested area.

The dictionary definition gives a clearer definition. A question is written or printed form used in gathering information on some subject consisting to be submitted to one or more person.

The tools were prepared on the basis of the objective of the study the following step was adopted in the development of the preparation

- Review of literature provide adequate content for the tool preparation
- Personal experience
- Consultation with experts
- Discussion with Women
- Reliability

DESCRIPTION OF TOOLS

This consist of two parts:

Part A

Consist of demographic variables such as age, education, occupation, type of family, family income, previous knowledge regarding prevention of osteoporosis.

Part B

Structured knowledge questionnaire will be used to assess the level of knowledge regarding prevention of osteoporosis among the pre-menopausal women of the age group of 35-45.

Scoring procedure:

For knowledge assessment – If right answer – 1
If wrong answer – 0

Scoring interpretation:

The knowledge level is arbitrary divides into 3 categories based on self-administered knowledge questionaries' and accordingly, the score was allotted

- Adequate knowledge – 67-100%
- Moderately adequate knowledge - 34-66%
- Inadequate knowledge - < 33%

VALIDITY

Validity in the context of the research design "the approximate truth of an interference.

- Shadish, cook, Compbell, (2002)

Validity refers to the getting result that accurately reflects the concepts being measured. A valid measure refers to the degree to which an instrument measures what it is supposed to be measuring. In practice, validity can also refer to the success of the research in retrieving "valid" results.

Content validity refers to the degree to which test actually measures or is specially related to the traits for which it was designed (Polit, 1999). Identify the universe of contact is not an easy task. It is, therefore, usually suggested that a panel of experts in the field to be used to identify a contact area.

To ensure content validity of the tool, the self-structure question was sent to experts. The experts were selected based on their clinical experts, experience, and interest in the problem being studied. They were requested to give their opinion on the appropriateness and relevance of the item in the tool. The experts were from the field of nursing. Modification of items of simplicity and order was made.

On common agreement, a few additions and deletions were made in the tool and content. As a whole, the suggestion and comments of experts include grammatical correction of sentence. Else the tool was found to be relevant.

The necessary modification has been done as per the expert's advice. The recommendation and suggestion of the expert of the experts were considered to modify the items of tool self-admires structure questioners.

RELIABILITY

Reliability has to do with the quality of the measurement. In its everyday sense, reliability is the "consistency" or "repeatability" of measures. Reliability is the consistency of set measurements or measuring instrument. Reliability does not imply validity. That is a measure is measuring something consistency, but not necessarily what it is supposed to be measuring.

Reliability of research instrument is defined as the extent to which the instrument yields the same results on repeated measures. It is then concerned with consistency, accuracy, precision, stability, equivalence, and homogeneity. The self-structure questioner was tested for reliability. 120 premenopausal women are checked by the questioner. The reliability of tool was established by testing the internal consistency. The internal consistency access by using chi- test method.

DATA COLLECTION PROCEDURE

A formal permission will be obtained from the concerned authority. The data collection will be done within a given period. After a brief introduction of the self and establishing the rapport, the investigator will give complete details about the nature of the study and a written consent will be obtained from the sample and confidentiality of the responses to be assured.

The data collection period extended date 27TH January on which sample was selected according to the selection criteria of the study from the selected village of Waghodia Taluka under Piparia, Ropa and Mastupura, Vadodara, Gujarat and total sample 120 are selected.

In order to obtain a free and true response, the samples were explained the purpose and usefulness of the stud and assured about the confidentiality of their response. Consent was obtained from samples.

PLAN FOR ANALYSIS OF DATA

The process of organizing and synthesis data so as to answer the research question and test hypothesis is known as analysis. It was decided to analyse the data using both descriptive and inferential statistics on the basis of the objectives and hypothesis of the study.

To compute the data, a master sheet would be prepared by the investigator, baseline performs containing sample characteristics would be analyses using frequency and percentage.

DESCRIPTIVE STATISTICS

1. Frequency and percentage distribution are used to describe the demographic variables.
2. Mean and standard deviation will be used to assess the knowledge regarding the prevention of osteoporosis in pre-menopausal women.

INFERENTIAL STATISTICS

1. Chi-square test will be used to associate of the knowledge on osteoporosis symptoms and its prevention with a selected demographic variable.

DATA ANALYSIS AND INTERPRETATION

This chapter presents the analysis and interpretation of data collected from 120 premenopausal women in a selected village in waghodia taluka using self-administer knowledge questionnaire. Purpose of data analysis is to translate the information collected during the course of study into interpretable form so that the research question could be answered. Data gather where analysis using descriptive and inferential statics. The analysis of data of the present study has been organize in relation to the objectives and hypothesis of the study.

OBJECTIVES OF STUDY

1. To assess the knowledge regarding prevention of osteoporosis among pre-menopausal women in rural areas of waghodia taluka.
2. To find out the association between pre-test knowledge scores and selected demographical variables.

3. To develop an informational booklet regarding the prevention of osteoporosis among the pre-menopausal women of rural areas of waghodia taluka.

HYPOTHESES

H_1: There will be significant association between level of knowledge of pre-menopausal women regarding prevention of osteoporosis and selected demographic variable

TABLE 1:- DISTRIBUTION OF PREMENOPAUSAL WOMEN BASED ON SOCIODEMOGRAPHIC VARIABLES.

N=120

Variables		Frequency	Percentage %
Age	A.35-38 yrs	42	35
	B.39-42 yrs	38	31.67
	C.43-46 yrs	40	33.33
Education	A. Illiterate	16	13.33
	B. Primary	49	40.84
	C. Secondary	32	26.67
	D. Graduate	23	19.16
Occupation	A. Homemaker	52	43.33
	B. Agriculture	00	00
	C. Labourer	29	24.16
	D. Private employee	39	32.5
Type of family	A. Joint	69	57.5
	B. Nuclear	51	42.5
	C. Extended	00	00
Family income	A. <5000	40	33.33
	B. 5000-10000	33	27.5
	C. 10000-15000	22	18.33
	D. >15000	25	20.84
Type of diet	A. Vegetarian	75	62.5
	B. Eggiterian	9	7.5
	C. Mixed diet	36	30
History of osteoporosis	A. Yes	24	20
	B. No	96	80

Frequency percentage distribution of premenopausal women

This section deals with frequency & percentage distribution of samples according to their socio-demographic variables.

Table 2: Distribution of sample according to their age group

Characteristics	Category		
		Frequency	Percentage
Age group (years)	35 – 38 years	43	35.83
	39 – 42 years	37	30.83
	43 – 46 years	40	33.34
	Total	120	100%

Picture 1 indicates that majority (35.83) of the samples belongs to the age group between 35-38 yrs followed by 33.34% of the samples are in between 43-46 yrs and only 30.83% of the samples are in between the age group of 39-42 yrs.

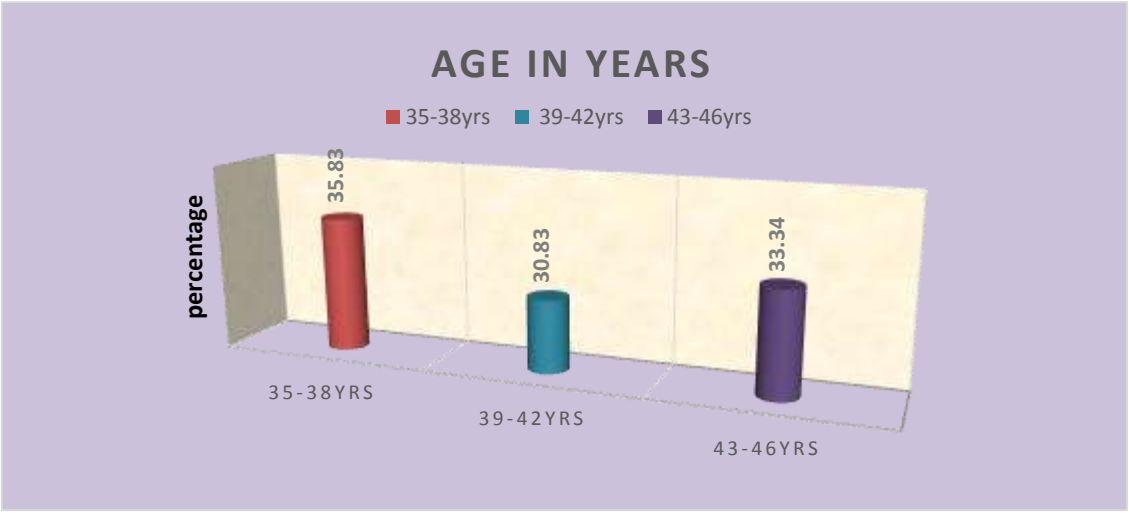

Figure 3: Distribution of sample according to their age group

TABLE 3: DISTRIBUTION OF SAMPLE ACCORDING TO THEIR EDUCATIONAL LEVEL

Characteristics	Category	Respondents	
		Frequency	Percentage
Education	Illiterate	18	15
	Primary	47	39.16
	Secondary	33	27.5
	Graduate	22	18.34
	Total	120	100%

Picture 2 indicates that majority (39.16) of the samples belongs to the primary level of education followed by 27.5% of the samples are having secondary education, 18.34% are graduate and 15% of samples are illiterate.

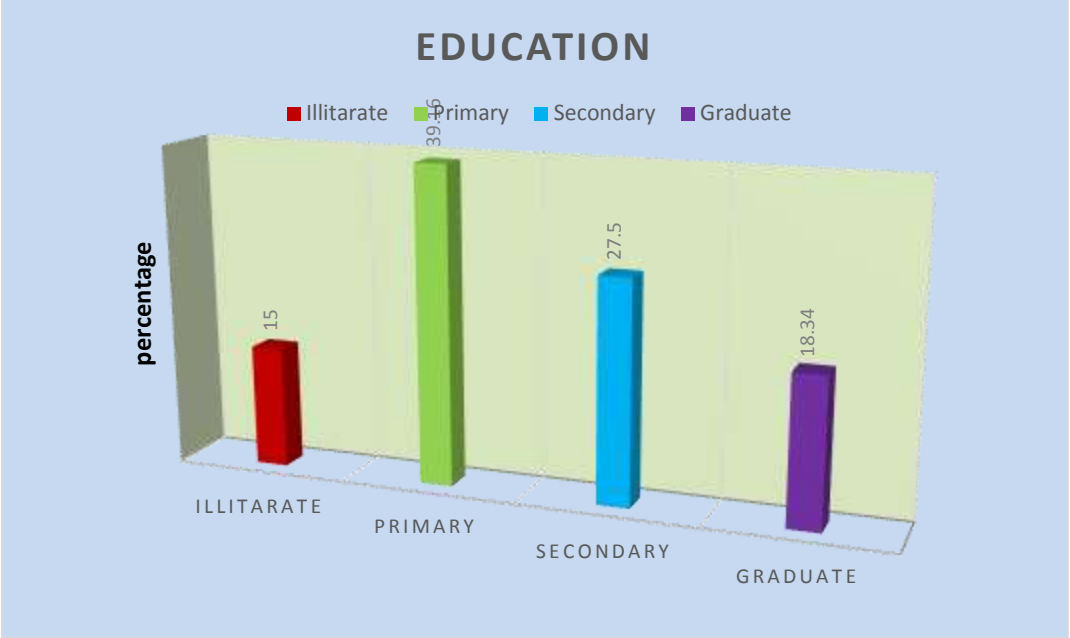

Figure 4: Distribution of sample according to their educational level

TABLE 4: DISTRIBUTION OF SAMPLE ACCORDING TO THEIR OCCUPATION

Characteristics	Category	Respondents	
		Frequency	Percentage
Occupation	House maker	50	41.66
	Private employee	41	34.17
	Labourer	29	24.17
	Total	120	100%

Picture 3 indicate that majority (41.66) of samples are house maker followed by 34.17% are a private employee and 24.17% of samples are laborers.

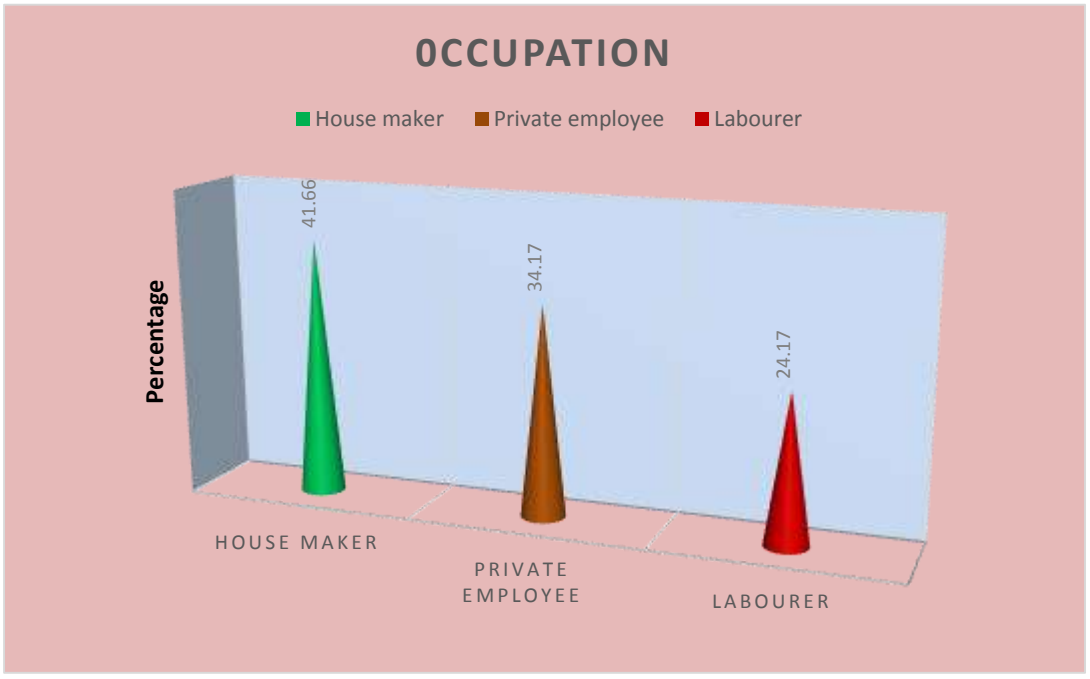

Figure 5: Distribution of sample according to their occupation

Table 5: DISTRIBUTION OF SAMPLE ACCORDING TO THEIR FAMILY INCOME

Characteristics	Category	Respondents	
		Frequency	Percentage
Family income	<5000	39	32.5
	5000 – 10000	34	28.33
	10000 – 15000	22	18.33
	>15000	25	20.84
	Total	120	100%

Picture 4 indicates the majority (32.5) of samples are in category of family income <5000 followed by 28.33% are having 5000-10000rs, 20.84% are having family income >15000 and 18.33% are having 10000-15000rs

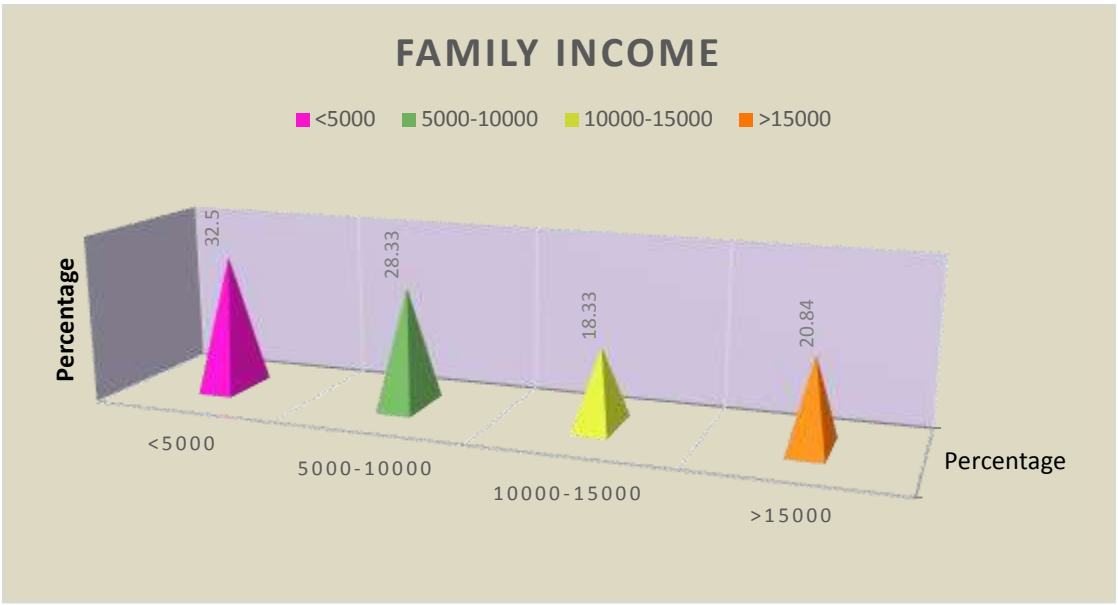

Figure 6: Distribution of Sample According To Their Family Income

Table 6: Distribution of sample according to their type of family

Characteristics	Category	Respondents	
		Number	Percentage
Type of family	Nuclear	51	42.5
	Joint	69	67.5
	Total	120	100%

Picture 5 indicates that majority (67.5) of samples having a joint family, followed by 42.5% of samples having nuclear family.

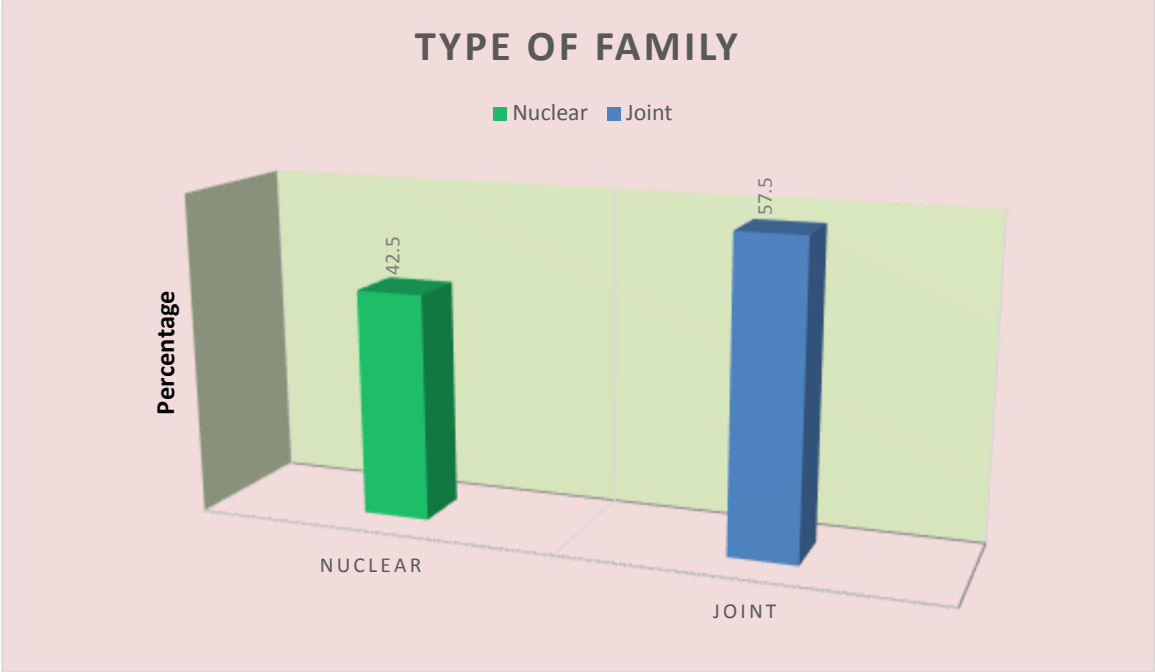

Figure 7: Distribution of sample according to their type of family

Table 7: DISTRIBUTION OF SAMPLE ACCORDING TO THEIR TYPE OF DIET

Characteristics	**Category**	**Respondents**	
		Number	**Percentage**
Type of diet	Vegetarian	73	60.84
	Mixed	47	39.16
	Total	120	100%

Picture 6 indicates that majority (60.84) of the sample are vegetarian followed by 39.16% are having a mixed diet.

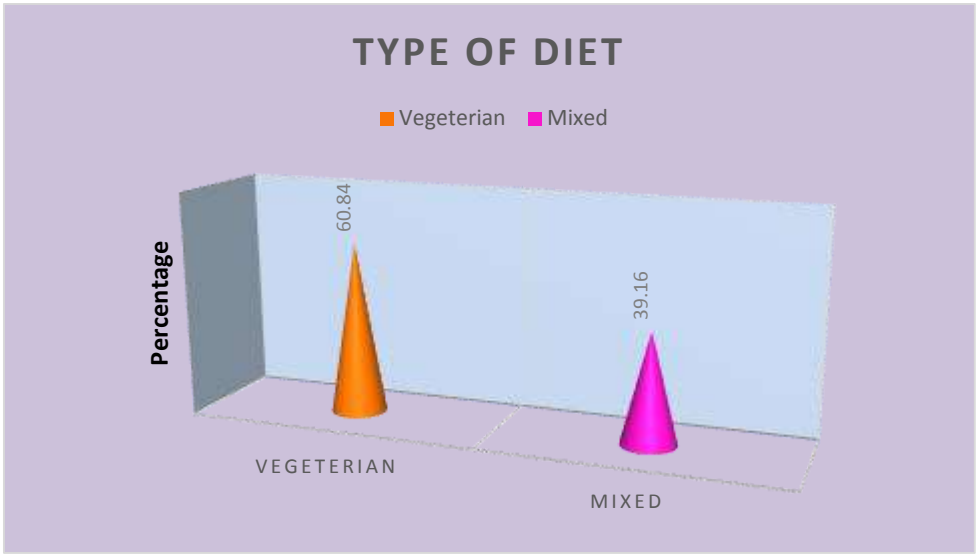

Figure 8: Distribution of sample according to their type of diet

TABLE 8: DISTRIBUTION OF SAMPLE ACCORDING TO THEIR HISTORY OF OSTEOPOROSIS

Characteristics	Category	Respondents	
		Number	%
History of osteoporosis	Yes	25	20.84
	No	95	79.16
	Total	120	100%

Picture 7 indicates that majority (79.16) of the samples are not having the history of osteoporosis followed by 20.84% of samples are having a history of osteoporosis.

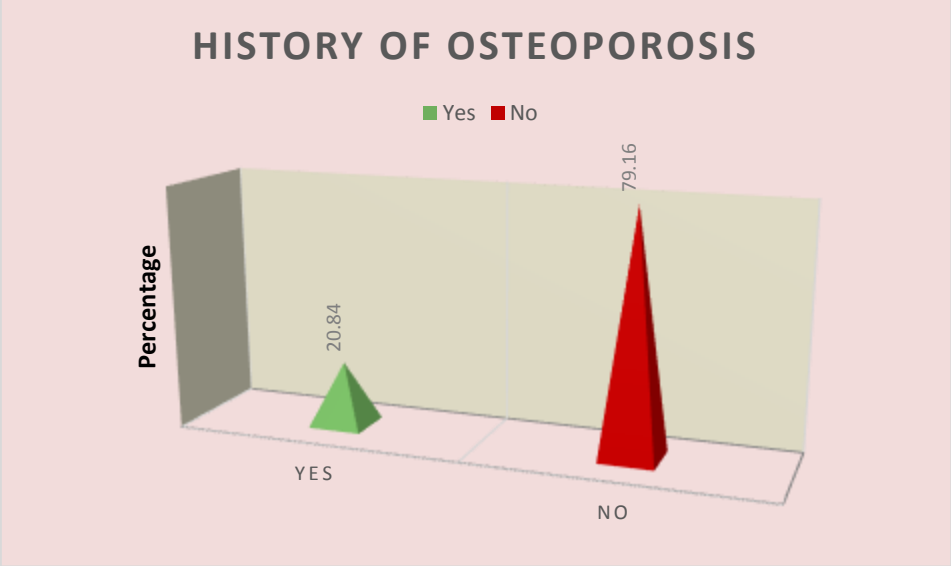

Figure 9: Distribution of sample according to their history of osteoporosis

A DESCRIPTIVE STUDY ON KNOWLEDGE REGARDING PREVENTION OF OSTEOPOROSIS AMONG PREMENOPAUSAL WOMEN IN RURAL AREAS OF WAGHODIA TALUKA WITH A VIEW TO DEVELOP INFORMATION BOOKLET

To assess the knowledge of premenopausal women regarding prevention of osteoporosis and to find a significant association between pre-test knowledge and demographical variable, following research hypotheses were stated:

H_1: There will be a significant association between level of knowledge of pre-menopausal women regarding prevention of osteoporosis and selected demographic variable.

TABLE 9: PRE-TEST KNOWLEDGE SCORE OF PREVENTION OF OSTEOPOROSIS AMONG PREMENOPAUSAL WOMEN

Overall pre-test knowledge score	Maximum score	Mean score	Mean percentage %	Standard deviation
	20	12.16	50.8	2.96

The above table indicates the overall pre-test knowledge score with maximum score 20, Mean score 12.16, Mean percentage 50.8% and Standard deviation

TABLE 10: ASSOCIATION IN PRE-TEST LEVEL OF KNOWLEDGE AMONG PRE-MENOPAUSAL WOMEN WITH THEIR SELECTED SOCIO DEMOGRAPHICAL VARIABLE.

N= 120

Sr. No	Variables		Pre-test knowledge			Chi-square value	df	Inference
			Inadequate	Moderate	Adequate			
1	Age	A.35-38 yrs	8	25	9	2.401	4	Not significant
		B.39-42 yrs	10	24	4			
		C.43-46 yrs	9	26	5			
2	Education	A. Illiterate	8	7	1	15.64	6	Significant
		B. Primary	11	34	4			
		C. Secondary	7	18	7			
		D. Graduate	1	16	6			
3	Occupation	A. Homemaker	13	35	4	13.077	4	Significant
		B. Agriculture	0	0	4			
		C. labourer	11	14	10			
		D.Private employee	3	26	18			
4	Type of family	A. Joint	17	39	13	2.85	2	Not significant
		B. Nuclear	10	36	5			
		C. Extended	0	0	0			
5	Family income	A. <5000	14	21	5	19.743	6	Significant
		B. 5000-10000	7	26	0			
		C.10000-15000	3	11	8			
		D. >15000	3	17	5			
6	Type of diet	A. Vegetarian	13	51	11	4.219	4	Not significant
		B. Eggiterian	2	6	1			
		C. Mixed diet	12	18	6			
7	History of osteoporosis	A. Yes	4	16	4	0.059	2	Not significant
		B. No	23	59	14			

The data shows that the χ^2 value computed between the pre-test knowledge score of pre-menopausal women regarding prevention of osteoporosis with their selected demographic variable such as education (χ^2= 15.64), occupation (χ^2=13.077) ,family income (χ^2=19.743) where found significance at 0.05 level of significance and variable such as Age(χ^2= 2.401), type of family (χ^2= 2.85), type of diet (χ^2=4.219), and History of osteoporosis (χ^2= 0.059) where not significant at 0.05 level of significances. Thus it can be interpreted that there is a significant association between pre-test level of knowledge among premenopausal women with their selected socio demo graphical variable such as education, occupation and family income.

SUMMARY OF THE FINDINGS, CONCLUSION, IMPLICATION, AND RECOMMENDATION

This chapter deal with the discussion of the major findings of the study, summary, and implication to nursing practice and recommendation for further study. The objective of the study was:

OBJECTIVES OF THE STUDY

1. To assess the knowledge regarding prevention of osteoporosis among pre-menopausal women in rural areas of waghodia taluka.

2. To find out the association between pre-test knowledge scores and selected demographical variables.

3. To develop an informational booklet regarding the prevention of osteoporosis among the pre-menopausal women of rural areas of waghodia taluka.

FINDINGS OF THE STUDY AND DISCUSSION

The following are the major findings of the study with discussion:

DEMOGRAPHIC DATA

From the selected 120 samples majority (35.83) of the samples belongs to the age group between 35-38 yrs followed by 33.34% of the samples are in between 43-46 yrs and only 30.83% of the samples are in between the age group of 39-42 yrs, majority (39.16) of the samples belongs to primary level of education followed by 27.5% of the samples are having secondary education, 18.34% are graduate and 15% of samples are illiterate, majority (41.66) of samples are house maker followed by 34.17% are private employee and 24.17% of samples are labourers, majority (32.5) of samples are in category of family income <5000 followed by 28.33% are having 5000-10000rs, 20.84% are having family income >15000 and 18.33% are having 10000-15000rs, majority (67.5) of samples having joint family, followed by 42.5% of samples having nuclear family, (60.84) of sample are vegetarian followed by 39.16% are having mixed diet and majority (79.16) of the samples are not having the history of osteoporosis followed by 20.84% of samples are having history of osteoporosis.

ASSESSING THE KNOWLEDGE REGARDING THE PREVENTION OF OSTEOPOROSIS

The findings shows that the pre-test knowledge score of pre-menopausal women regarding prevention of osteoporosis with their selected demographic variable such as education (15.64), occupation (13.077), family income (19.743) where found significance at 0.05 level of significance and variable such as Age (2.401), type of family (2.85), type of diet (4.219), and History of osteoporosis (0.059) where not significant at 0.05 level of significances. Thus it can be interpreted that there is a significant association between pre-test level of knowledge among premenopausal women with their selected socio demo graphical variable such as education, occupation and family income.

CONCLUSION

The following conclusion can be drawn from the study findings, which are supported by evidence from the other literature;

The premenopausal women have the adequate knowledge regarding the prevention of osteoporosis. The self-administered questionnaire has shown a remarkable association between socio-demographical variables and their knowledge. Using the statistical formula we have computed the association between the demographic variables and their knowledge.

IMPLICATION

The findings of the study have definite implication in daily practice, nursing administration, and nursing research.

- **IMPLICATION ON DAILY PRACTICE**
  The women should enhance the knowledge regarding the osteoporosis. The findings of the study help the women regarding the awareness and the prevention of osteoporosis. It can be useful for the future generation in the improvement of their knowledge.

- **IMPLICATION FOR NURSING RESEARCH**
  The result of the research study contributes to the body of knowledge of nursing. The future investigator can use the methodology as reference material. The suggestion and recommendation can be utilized by the other researchers under conducting further studies to evaluate knowledge and prevention of osteoporosis among premenopausal women.

RECOMMENDATIONS

On the bases of the findings of the study; it is recommended that:

- The study can be utilized to conduct a further research study in the field of knowledge regarding osteoporosis.
- A similar study can be done to prepare self-administer knowledge questionnaire for assessing the knowledge regarding the prevention of osteoporosis in pre-menopausal women.
- A similar study can be done with self-administered questionnaire
- A similar study can be conducted in urban areas.

SUMMARY

This chapter presents a brief account of the present study; the conclusion drawn from the findings, implication, and recommendation for further research in the area.

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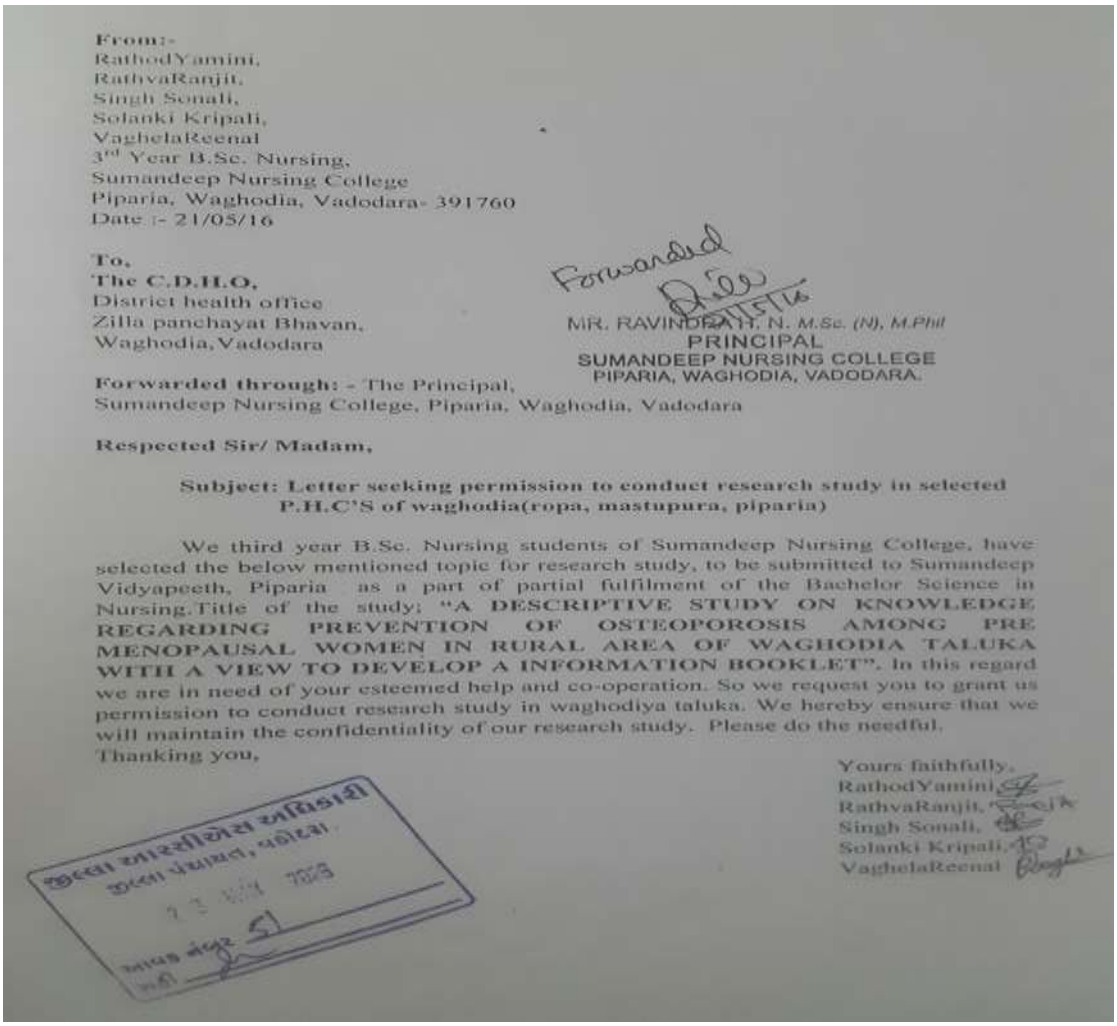
PERMISSION LETTER FOR CONDUCTING RESEARCH STUDY



From:-
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Singh Sonali,
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VaghelaReenal
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Date :- 21/05/16

To,
The C.D.H.O,
District health office
Zilla panchayat Bhavan,
Waghodia, Vadodara

Forwarded

MR. RAVINDRA H. N. M.Sc. (N), M.Phil
PRINCIPAL
SUMANDEEP NURSING COLLEGE
PIPARIA, WAGHODIA, VADODARA.

Forwarded through: - The Principal,
Sumandeep Nursing College, Piparia, Waghodia, Vadodara

Respected Sir/ Madam,

Subject: Letter seeking permission to conduct research study in selected P.H.C'S of waghodia(ropa, mastupura, piparia)

We third year B.Sc. Nursing students of Sumandeep Nursing College, have selected the below mentioned topic for research study, to be submitted to Sumandeep Vidyapeeth, Piparia as a part of partial fulfilment of the Bachelor Science in Nursing.Title of the study: **"A DESCRIPTIVE STUDY ON KNOWLEDGE REGARDING PREVENTION OF OSTEOPOROSIS AMONG PRE MENOPAUSAL WOMEN IN RURAL AREA OF WAGHODIA TALUKA WITH A VIEW TO DEVELOP A INFORMATION BOOKLET".** In this regard we are in need of your esteemed help and co-operation. So we request you to grant us permission to conduct research study in waghodiya taluka. We hereby ensure that we will maintain the confidentiality of our research study. Please do the needful.
Thanking you,

Yours faithfully,
RathodYamini
RathvaRanjit
Singh Sonali
Solanki Kripali
VaghelaReenal

ACKNOWLEDGEMENT

Service to mankind is service to God. I believe in invisible power which guides me always throughout my success. At first I am grateful to almighty GOD whose grace, unconditional love and blessings accompanied me throughout the study.

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I owe a great deal of appreciation and gratitude to my class-coordinator **Mr. Swami PGN. Department of community** Health **Nursing,** Sumandeep Nursing College.

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