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"A STUDY TO ASSESS THE EFFECTIVENESS OF PLANNED TEACHING PROGRAM REGARDING PREVENTION OF OSTEOPOROSIS AMONG MENOPAUSAL WOMEN IN TERMS OFKNOWLEDGE IN SELECTED URBAN AREAS OF AHMEDABAD CITY."

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ABSTRACT

Background:

Osteoporosis is not an inevitable part of ageing, it is preventable, so it is vital that allof us, of all ages start taking care of our bones now, before it too late.

Objective:

The aim of the study was to assess the effectiveness of planned teaching program regarding prevention of Osteoporosis among menopausal women and to find out the association between selected demographical variables with the pre-test knowledge score.

DELIMITATION

1. The study is delimited to individuals who belong to the age group of above 45.
2. The study is delimited to a sample size of 60.
3. The study is delimited to those who are willing to participate in the study.

Methods:

A pre-experimental (one group pretest post-test) design was adopted for collecting the data from 60 samples using a structured knowledge questionnaire comprising 30 questions which includes knowledge application and comprehensive domains.

Results:

According to the findings, the mean post-test knowledge score was significantly higher than the mean of pre-test knowledge score with mean difference of(29.33%). The calculated 't' value (13.69) was greater than the tabulated 't' value (2.00)at level of significance. Therefore, the null hypothesis H_0 was rejected and research hypothesis H_1 was accepted and it revealed that the planned teaching program was effective in increasing knowledge among menopausal women. The findings also revealed that marital status and level of literacy has significant association with pre- testknowledge score. Hence, the research hypothesis (H_2) was accepted.

Conclusion:

From the current studies, the following conclusion can be inferred:

We found out the level of knowledge regarding prevention of Osteoporosis among themenopausal women of selected urban areas is Ahmedabad city.

Among 60 samples prior to the administration of planned teaching programme, 49 samples (81.7%) of the sample had poor knowledge regarding prevention of Osteoporosis. While average was observed in 11 samples (18.3%) of the sample and 0 samples (00%) have good knowledge. In the post-test there was marked improvement in the knowledge of the sample with majority 27 samples (45%) gained average knowledge, 14 samples (23.3%) gained poor knowledge and 19 samples (31.7%) gainedgood knowledge.

Introduction:

"Osteoporosis is not an inevitable part of ageing, it is preventable. So it is vital that all of us, of all ages, start taking care of our bones now, before it too late."

- Camilla Parker Bowles

Osteoporosis name comes from Latin for 'porous bones.' 'Osteo' means bone root, 'Por' means small opening that microscopic particles can pass through and 'Osis' means abnormal or pathologic condition. Osteoporosis is a worldwide disease characterized by reduction of bone mass and alteration of bone architecture resulting in increased bone fragility and increased fracture risk. It is a chronic, degenerative disease of the skeleton and a major public health problem that results in decreased bone strength and can increase the risk of bone fracture. Osteoporosis is especially prevalent among elderly women.

Osteoporosis is a medical condition in which the bones become brittle and fragile from loss of tissue, typically as a result of hormonal changes or deficiency of calcium or vitamin D. It is defined as a reduction in the strength of bone leads to an increased risk of fracture. In Osteoporosis the bone density falls 2.5 standards deviation below the mean for young healthy adults of same sex also referred to as T score of 2.5. Osteoporosis is a bone disease that occurs when the body loses too much bone, makes too little bone or both. A correlation between Osteoporosis and the onset of menopause was observed already in the 1960s.

According to the World Health Organization criteria, Osteoporosis is defined as a BMD that lies 2.5 standard deviation or more below the average value for younghealthy women. According to the National Institutes of Health Consensus development Panel on Osteoporosis, Osteoporosis is defined as 'A skeletal disorder characterized by compromised bone strength leading to an increased risk of fracture.'

OBJECTIVES OF THE STUDY

- To assess the pre-test knowledge score regarding prevention of Osteoporosis among menopausal women in selected urban areas ofAhmedabad city.
- To assess the post-test knowledge score regarding prevention of Osteoporosis among menopausal women in selected urban areas ofAhmedabad city.
- To evaluate the effectiveness of Planned teaching programme regarding prevention of Osteoporosis among menopausal women in selected urban areas ofAhmedabad city.
- To determine the association between selected demographic variables and pre-test knowledge level among menopausal women in selected

urban areas of Ahmedabad city.

CONCEPTUAL FRAMEWORK

The term conceptual frame work is the linkage between the actual ideas and beliefs about the phenomenon under study. It is the researcher's understanding about the process of inquiry related to the problem under study, it depicts researcher's map of investigation that how concepts under particular study articulate their respective phenomena, support one another and are connected to each other. Conceptual framework is a group of concepts that are broadly defined and systemically organized to provide a focus a rational the tool for the investigation and interpretation of information. This study aims to evaluate the effectiveness of the planned teaching programme regarding prevention of Osteoporosis in terms of knowledge among menopausal women in selected urban areas of Ahmedabad city.

Input

Refersto the Osteoporosis in menopausal women studying in selected urban areas with their characteristics, level of interest and presence in the planned teaching programme. In present study it refers to the menopausal women of selected urban areas in Ahmedabad city with regard to their demographic data such as age, marital status, level of literacy, family history of musculoskeletal conditions, history of any bone related injuries, socio-economic status and use of birth control pills.

Process

This refers to different operational procedure in the overall programme implementation and includes the factors that facilitate the implementation at various stages of programme development. The different operational procedure is process of development of Planned Teaching Programme through preparing lesson plan, preparation of tool, tool validation and reliability of tool, pilot study, pre-test to assess the knowledge, administration of Planned Teaching Programme to the group and post-test to assess the knowledge of menopausal women of selected urban areas in Ahmedabad city.

Output

Output refers to effectiveness of Planned Teaching Programme resulting in improvement or no improvement of knowledge. In this study output refers to significant increase in knowledge of post-menopausal women in selected urban areas of Ahmedabad city. So investigator has adapted this model for conceptual framework.

Feedback

It is the process by which information is received from each level of system. Its emphasis on the need to strengthen the input and throughout so that it deals to the desirable output, if there is insufficient information gained by planned teaching programme, the whole process has to be repeated to attain the objective.

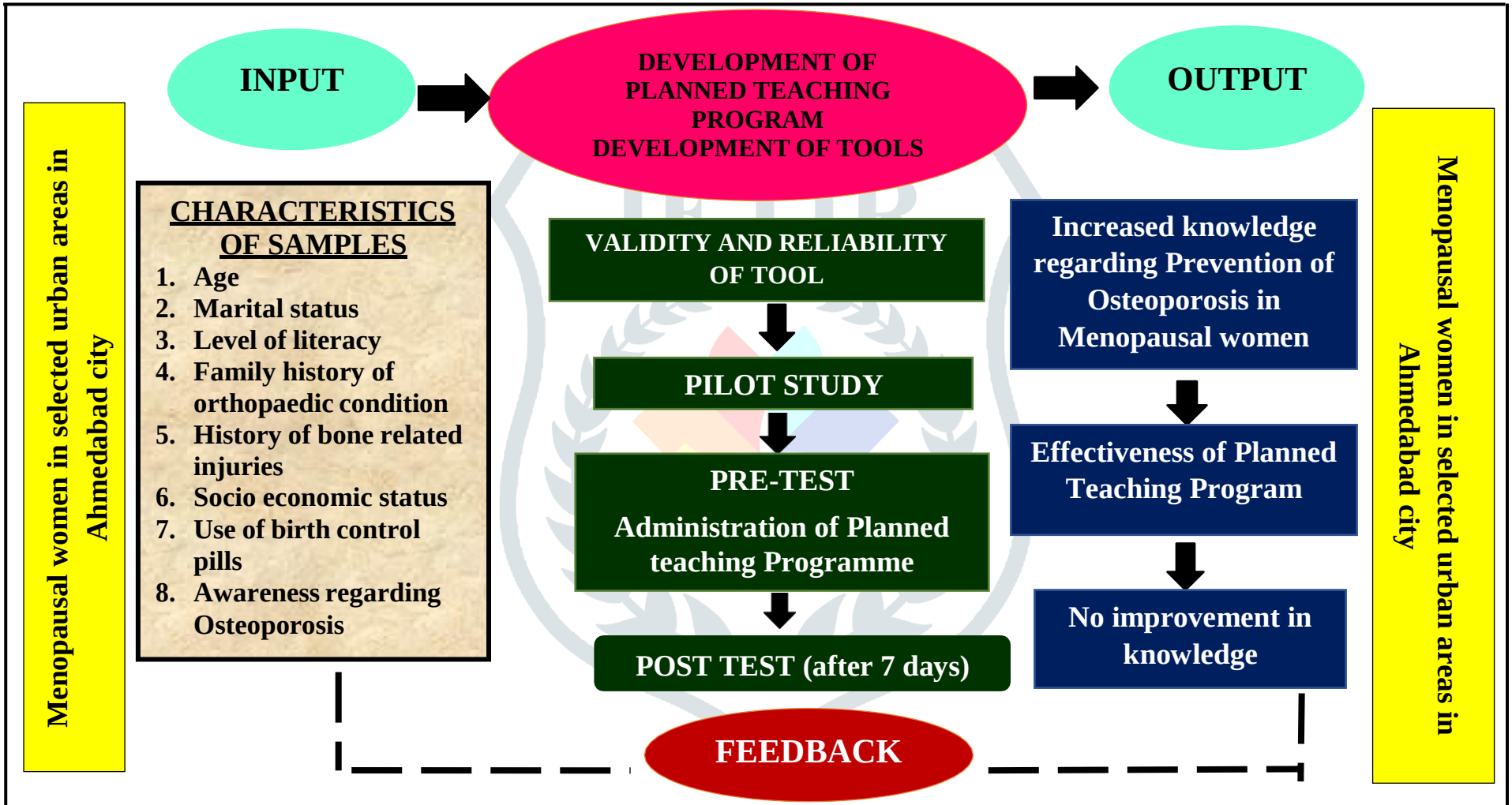

FIGURE 1: CONCEPTUAL FRAMEWORK BASED ON GENERAL SYSTEM MODEL BY LUDWING VON BERTARLANFFY

METHODS:

RESEARCH STATEMENT

"A STUDY TO ASSESS THE EFFECTIVENESS OF PLANNED TEACHING PROGRAMME REGARDING PREVENTION OF OSTEOPOROSIS AMONG MENOPAUSAL WOMEN IN TERMS OF KNOWLEDGE IN SELECTED URBAN AREAS OF AHMEDABAD CITY"

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RESEARCH APPROACH

QUANTITATIVE APPROACH

↓

RESEARCH DESIGN

PRE EXPERIMENTAL ONE GROUP PRE TEST – POST TEST

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POPULATION

MENOPAUSAL WOMEN

↓

SAMPLING TECHNIQUE

NON PROBABILITY PURPUSIVE TECHNIQUE

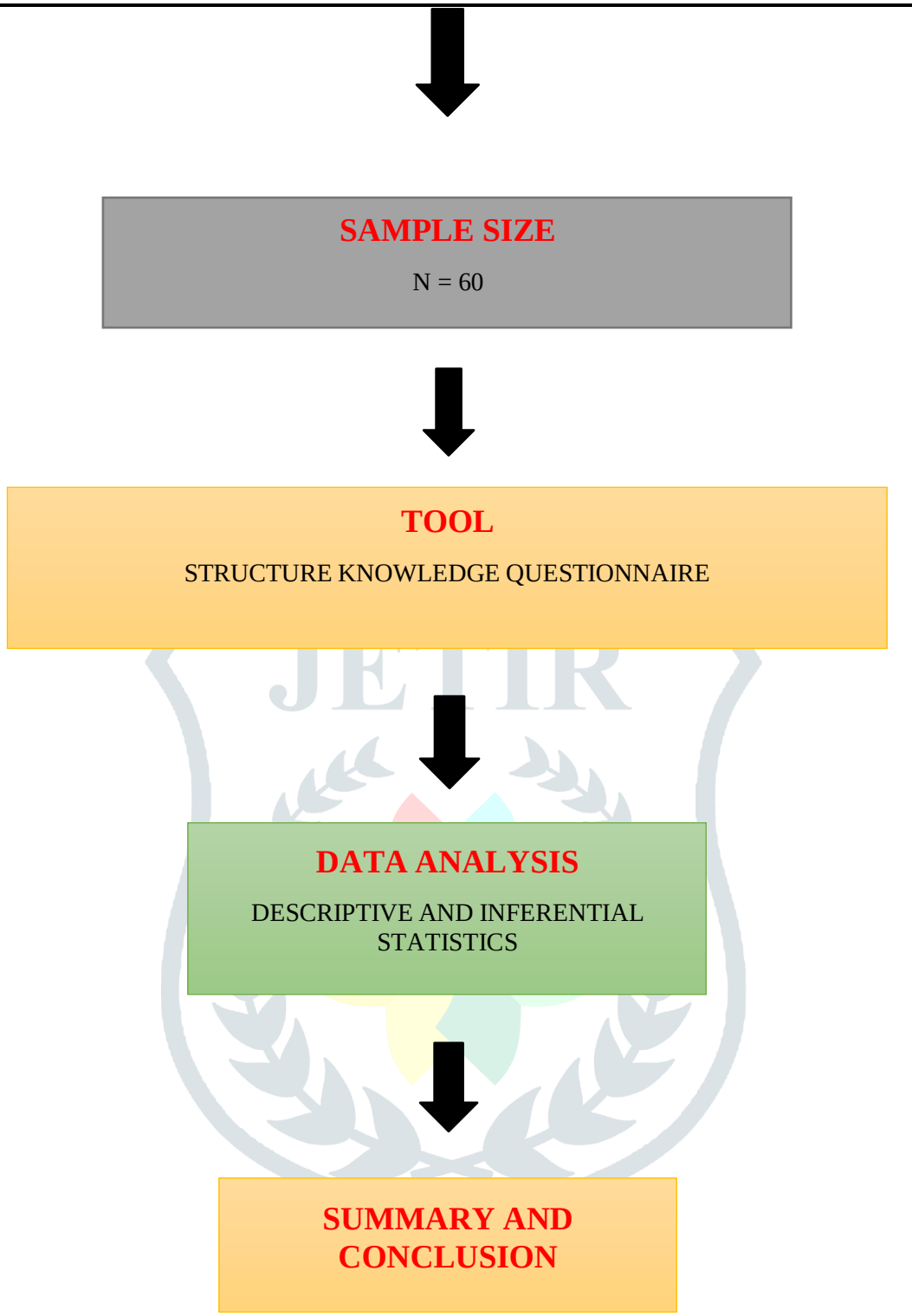


FIGURE: Schematic diagram representing Research Methodology

DESCRIPTION OF THE TOOL

Data collection instrument used is a self-structured knowledge questionnaire whichhas two sections:

SECTION A: Demographic profile

This section comprises demographic data such as Age, Marital status, Level of literacy, Family history of orthopedic condition, History of any bone related injuries, Socio-economic status. No score was given in this section and it was used for descriptive analysis.

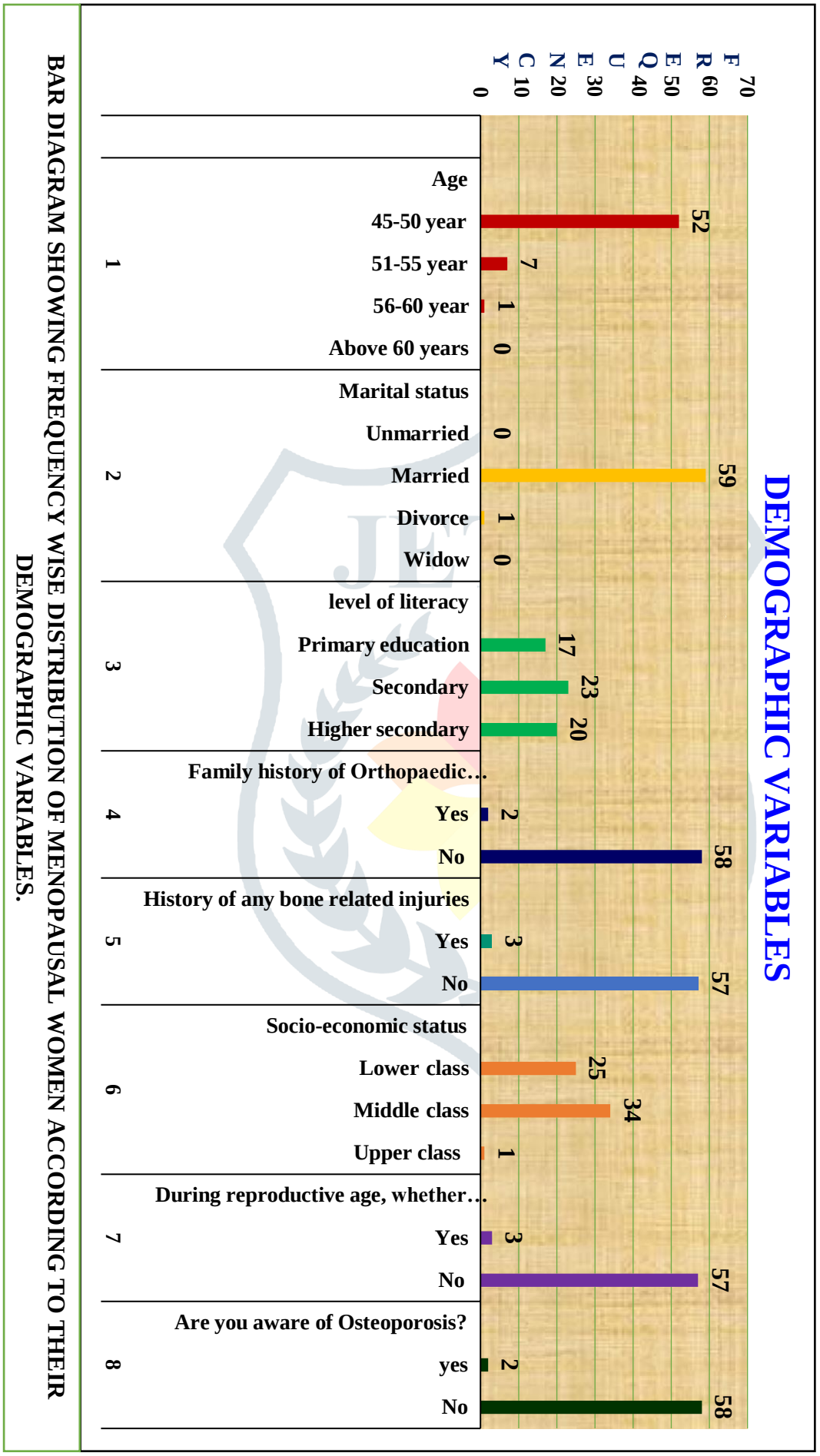
SECTION B: Consists of structured knowledge questionnaires to assess the knowledge regarding prevention of Osteoporosis among menopausal women. The tool consisted of 30 multiple choice questions to measure the level of knowledge regarding for prevention of Osteoporosis among menopausal women. All the items had four response options; 1 correct and 3 wrong answers. The correct answer was given a score of 1 and wrong answer was given a score of 0. The total possible scorewas 30.

SR.NO	RANGE OF SCORE	CATEGORY
1	1-10	POOR
2	11-20	AVERAGE
3	21-30	GOOD

ANALYSIS AND INTERPRETATION OF THE DEMOGRAPHIC DATA OF THE SAMPLES

Frequency and Percentage Wise Distribution of Samples Based on Demographic Data [N=60]

SR N0	PERSONAL DATA		FREQUENCY (F)	PERCENTAGE (%)
1.	Age	45-50 years	52	86.7
		51-55 years	07	11.7
		56-60 years	01	1.7
		Above 60years	00	0.0
2.	Marital status	Unmarried	00	00
		Married	59	98.3
		Divorce	01	1.7
		Widow	00	00
3.	Level of literacy	Primary education	17	28.3
		Secondary	23	38.3
		Higher secondary	20	33.3
4.	Family history of Orthopaedic conditions	Yes	02	3.3
		No	58	96.7
5.	History of any bone related injuries	Yes	03	5
		No	57	95
6.	Socio-economic status	Lower class	25	42
		Middle class	34	57
		Upper class	01	1
7	During reproductive age, whether you were taking any birth control pills?	Yes	03	5
		No	57	95
8	Are you aware of Osteoporosis?	Yes	02	3.3
		No	58	96.7



BAR DIAGRAM SHOWING FREQUENCY WISE DISTRIBUTION OF MENOPAUSAL WOMEN ACCORDING TO THEIR DEMOGRAPHIC VARIABLES.

KNOWLEDGE OF MENOPAUSAL WOMEN REGARDING PREVENTION OF OSTEOPOROSIS.

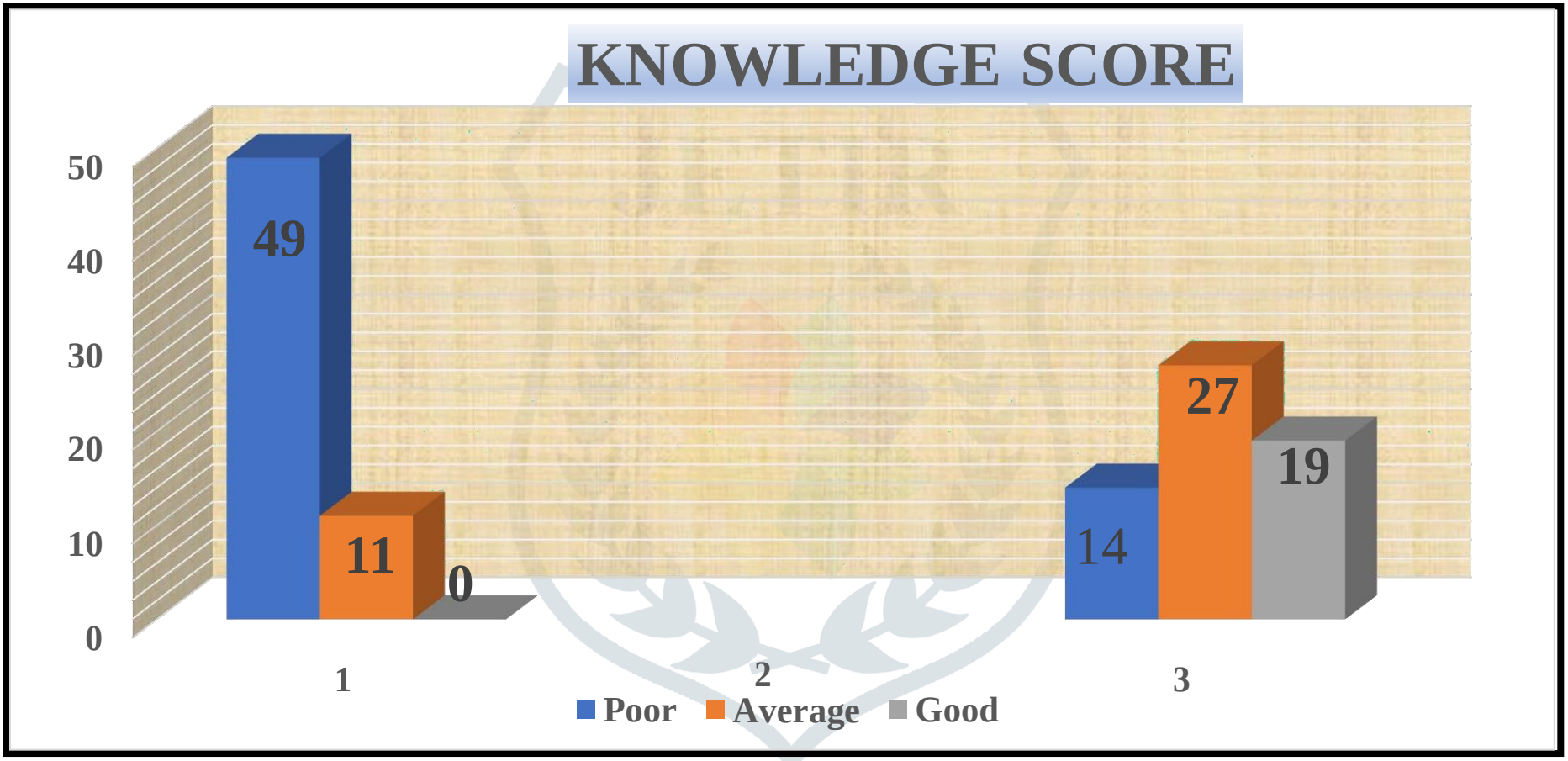
Knowledge of 60 menopausal women were assessed using a structured and analyzed using descriptive statistics.

Distribution category of knowledge score.

LEVEL OF KNOWLEDGE	SCORE
Poor	0-10
Average	11-20
Good	21-30

Frequency and percentage distribution of knowledge of menopausal women.

LEVEL OF KNOWLEDGE	PRE-TEST		POST-TEST	
	FREQUENCY	%	FREQUENCY	%
Poor	49	81.7	14	23.3
Average	11	18.3	27	45.0
Good	00	00	19	31.7
TOTAL	**60**	**100**	**60**	**100**

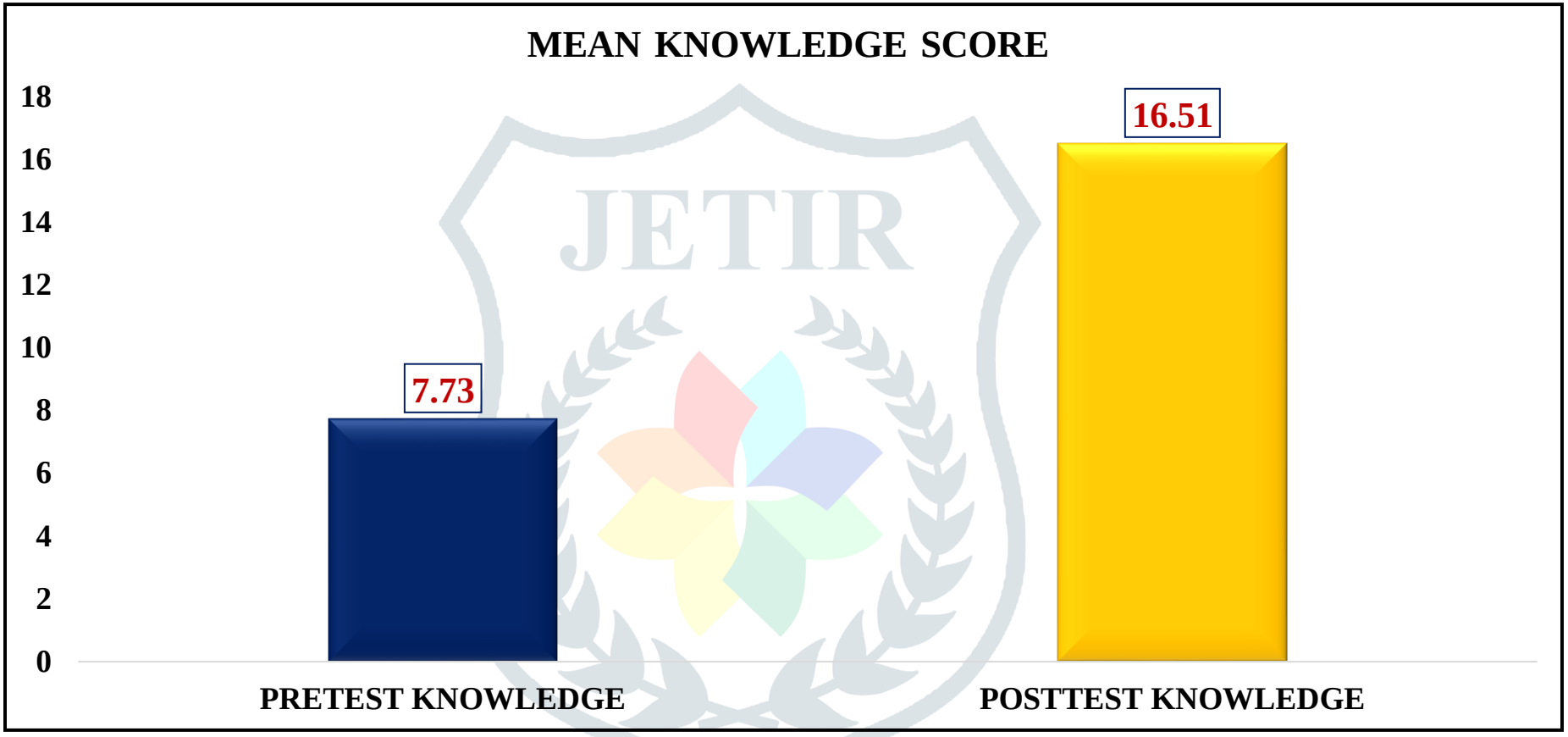


BAR DIAGRAM SHOWING PERCENTAGE DISTRIBUTION OF THE SAMPLE ACCORDING TO THE PRE-TEST AND POST-TEST LEVEL OF KNOWLEDGE.

Mean, mean percentage, mean percentage difference, standard deviation (SD) and "t: test value of the Pre-test and Post-test knowledge of the samples.

(N-60)

KNOWLEDGE SCORE	MEAN	MEAN %	MEAN PERCENTAGE DIFFERENCE	SD	CALCULATED "T" VALUE	DF	TABLE VALUE	SIGNIFICANT/ NON SIGNIFICANT
PRE-TEST KNOWLEDGE	7.73	25.7	29.33	2.6	13.69	59	2.00	SIGNIFICANT
POST-TEST KNOWLEDGE	16.51	55.03		5.2				



BAR DIAGRAM SHOWING THE MEAN PRE-TEST AND POST-TEST LEVEL OF KNOWLEDGE SCORE.

Association between selected demographic variables and the knowledge score of menopausal women regarding prevention of Osteoporosis.

Association between selected demographic variables and the knowledge score of menopausal women regarding prevention of Osteoporosis.

Sr. No	Variable	Category	Frequency	Level of knowledge			DF	Tb value	Chi square test $\chi 2$	Significant
				P	A	G				
1	Age	45-50 year	52	43	09	0	2	5.99	0.75	NS
		51-55 year	07	05	02	0				
		56-60 year	01	01	00	0				
		Above 60 years	00	00	00	0				
2	Marital status	Unmarried	00	00	00	0	1	3.81	**4.53***	S
		Married	59	49	10	0				
		Divorce	01	00	00	0				
		Widow	00	00	00	00				
3	Level of literacy	Primary education	17	12	5	0	2	5.99	**6.94***	S
		Secondary	23	18	5	0				
		Higher secondary	20	19	1	0				
4	Family history of Orthopaedic conditions	Yes	02	02	00	0	1	3.84	046	NS
		No	58	47	11	0				
5	History of any bone related injuries	Yes	03	03	00	0	1	3.84	0.70	NS
		No	57	46	11	0				
6	Socio-economic status	Lower class	25	20	05	0	2	5.99	0.28	NS
		Middle class	34	28	06	0				
		Upper class	01	01	00	0				
7	Taking any birth control pills?	Yes	03	3	0	0	1	3.84	0.70	NS
		No	57	46	11	0				
8	Are you aware of Osteoporosis?	Yes	02	2	00	0	1	3.84	0.46	NS
		No	58	47	00	0				

Key: - (S =SIGNIFICANT, NS= NOT SIGNIFICANT, D.F. = Degree of freedom

P = Poor, A = Average, G = Good)

Conclusion:

From the current studies, the following conclusion can be inferred:

We found out the level of knowledge regarding prevention of Osteoporosis among the menopausal women of selected urban areas is Ahmedabad city.

Among 60 samples prior to the administration of planned teaching programme, 49 samples (81.7%) of the sample had poor knowledge regarding prevention of Osteoporosis. While average was observed in 11 samples (18.3%) of the sample and 0 samples (00%) have good knowledge. In the post-test there was marked improvement in the knowledge of the sample with majority 27 samples (45%) gained average knowledge, 14 samples (23.3%) gained poor knowledge and 19 samples (31.7%) gainedgood knowledge.

- A similar study can be done on small samples.
- A similar study can be done for medical and para-medical students.
- A similar study can be done with the effectiveness of structured teachingprogramme.
- A similar study can be conducted by adding research variable, knowledge andpractice.
- Study can be conducted with different educational level of nursing students.

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