A Comparative Study to Assess the Effectiveness of Planned Teaching Programme on Knowledge Regarding Prevention of Osteoporosis Among Post-Menopausal Women in Selected Rural and Urban Areas, Bangalore

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ABSTRACT

Women are at a risk for early bone loss related to menopause. This study was conducted to assess and compare the knowledge of rural and urban post-menopausal women regarding prevention of osteoporosis. Objectives:- 1. To assess the rural and urban areas post-menopausal women's knowledge regarding prevention of osteoporosis in terms of pretest knowledge scores. 2. To assess the effectiveness of planned teaching programme regarding prevention of osteoporosis 3. To find out the association between the pre test knowledge of rural and urban post-menopausal women regarding the prevention of osteoporosis with selected demographic variables. Methodology:- The study adopted a pre experimental design with comparison with evaluative approach. The data was collected from 100 post-menopausal women, 50 from rural and 50 from urban areas through convenient sampling technique in Bengaluru rural area and Amruthahalli urban area of Bangalore. Results- Study indicated that there was a significant difference in the pre test and post test knowledge level of rural and urban post-menopausal women. Conclusion: The study concludes that the planned teaching programme was effective in improving the knowledge level of rural and urban post menopausal women regarding the prevention of osteoporosis

Key Words: Prevention of osteoporosis, Post menopausal women, planned teaching programme, Rural, Urban

BACKGROUND AND PURPOSE

Women are at a risk for early bone loss related to menopause. In postmenopausal women, estrogen production and bone calcium storage decreases. Estrogen appears to protect against bone loss. Accelerated bone loss occurs with women who have early or surgically induced menopause or amenorrhea as a result of prolactin-producing pituitary tumors or anorexia nervosa or in those who undertake intense long-distance running associated with undernourishment. This study was conducted to assess and compare the knowledge of rural and urban post-menopausal women regarding prevention of osteoporosis.

OBJECTIVES:-

1) To assess the rural areas post-menopausal women's knowledge regarding prevention of osteoporosis in terms of pretest knowledge scores.
2) To assess the urban areas post-menopausal women's knowledge regarding prevention of osteoporosis in terms of pretest knowledge scores.
3) To assess the effectiveness of planned teaching programme by comparing the pre and post test knowledge scores of rural and urban post-menopausal women.
4) To find out the association between the pre test knowledge of rural and urban post-

menopausal women regarding the prevention of osteoporosis with selected demographic variables.

HYPOTHESIS:-

H1- There will be significant difference between the pre and posttest knowledge scores of rural and urban postmenopausal women regarding prevention of osteoporosis at p<0.05 level.

H2- There will be a significant association between the pretest knowledge scores of the rural and urban post-menopausal women with selected demographic variables at <0.05 level.

REVIEW OF LITERATURE:-

The investigator organized the literatures in the following categories.

- Literatures related to post-menopausal women s knowledge regarding osteoporosis
- Literatures related to prevention of post-menopausal osteoporosis.
- Literatures related to planned teaching programme on postmenopausal osteoporosis.

METHODOLOGY

Research Approach:- Research approach used in this study is evaluative research approach.

Research Design:- The present study is a pre experimental design with comparison with comparison was adapted to assess the effectiveness of planned teaching programme.

Setting of the study:- The present study was undertaken in rural areas under Bagaluru Primary Health Centre and Urban areas of Amruthahalli primary health centre.
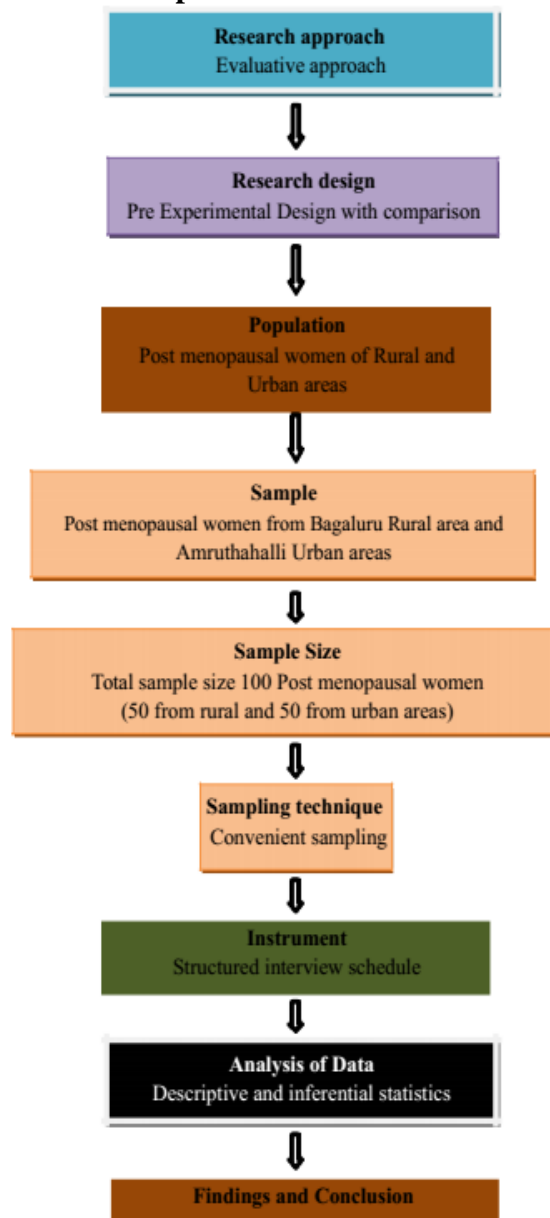
Variables: - Variables of the present study were the following Independent variable: Planned teaching programme regarding the prevention of osteoporosis. Dependent variables: Knowledge of rural and urban post-menopausal women.

Sample & Sampling Technique:- In this study the 100 sample were selected with convenient sampling technique

Data Collection tool: - A structured interview schedule was prepared to assess the knowledge of postmenopausal women regarding the prevention of osteoporosis. it include two Part , Part - I: Demographic Data, Part - II: Knowledge questionnaires

Data Collection Procedure:- The data collection was done for 4 weeks in rural areas and urban areas, A formal written permission was obtained from the District Health officer, health and family welfare department, Bangalore and data collected within a given period from 11-01-2014 to 11-02-2014.

Schematic representation of the research


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Research approach
Evaluative approach
        ⇩
Research design
Pre Experimental Design with comparison
        ⇩
Population
Post menopausal women of Rural and Urban areas
        ⇩
Sample
Post menopausal women from Bagaluru Rural area and Amruthahalli Urban areas
        ⇩
Sample Size
Total sample size 100 Post menopausal women
(50 from rural and 50 from urban areas)
        ⇩
Sampling technique
Convenient sampling
        ⇩
Instrument
Structured interview schedule
        ⇩
Analysis of Data
Descriptive and inferential statistics
        ⇩
Findings and Conclusion
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RESULTS

In the study majority 68% of subjects in rural area and 86% in urban area belong to the age group of 51-60 years. Regarding to the education majority 44% of rural post-menopausal women and 54% of urban post-menopausal women has completed Secondary education. Majority 64% of rural post-menopausal women and 60% of urban postmenopausal women were house wives. Regarding family income majority of the rural post-menopausal women (56%)reported family income between Rs. 5001-10000 per month, and 70% urban postmenopausal women's family income was between Rs. 10001-15000. Majority 70% of rural post-menopausal women and 90% of urban postmenopausal women were living in nuclear family. Majority 76% of rural post-menopausal

women and 80% of urban postmenopausal women's subjects belongs to Hindu religion. Majority 68% of rural post-menopausal women and 32% of urban postmenopausal women had information from mass media such as TV/ Radio and only 16% of rural post-menopausal women and 24% of urban post-menopausal women had information from Health personnel.

Majority 52% of the rural and 42% of the urban post-menopausal women had inadequate knowledge and 48% of the rural and 58% of the urban postmenopausal women had moderate knowledge in the pre test. After administration of planned teaching programme38% of the rural and 66% of the urban women had adequate knowledge and 48% of the rural and 32% of the urban women had moderate knowledge regarding the prevention of osteoporosis.
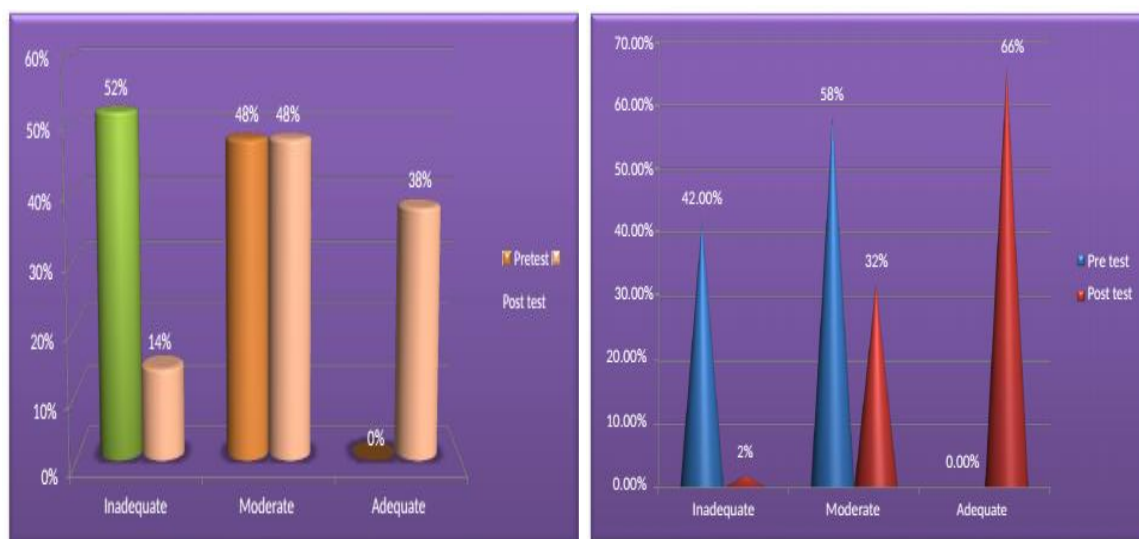

Figure 1

The overall mean pre test knowledge score obtained by the rural postmenopausal women was 14.82 (49.4%) with the standard deviation of 2.265 and urban women 15.24 (50.08%) with standard deviation 3.068 which indicates the post menopausal women had inadequate knowledge in the pre test. post test knowledge score of the rural women was 20.62 (68.73%) with the standard deviation of 3.958 and urban women 23.44 (783.13%) with the standard deviation of 2.873 which indicates the improvement in the knowledge scores of rural and urban post-67 menopausal women. The overall mean knowledge score obtained by the urban post-menopausal women was 30.12 (75.3%) with the standard deviation of 4.473.
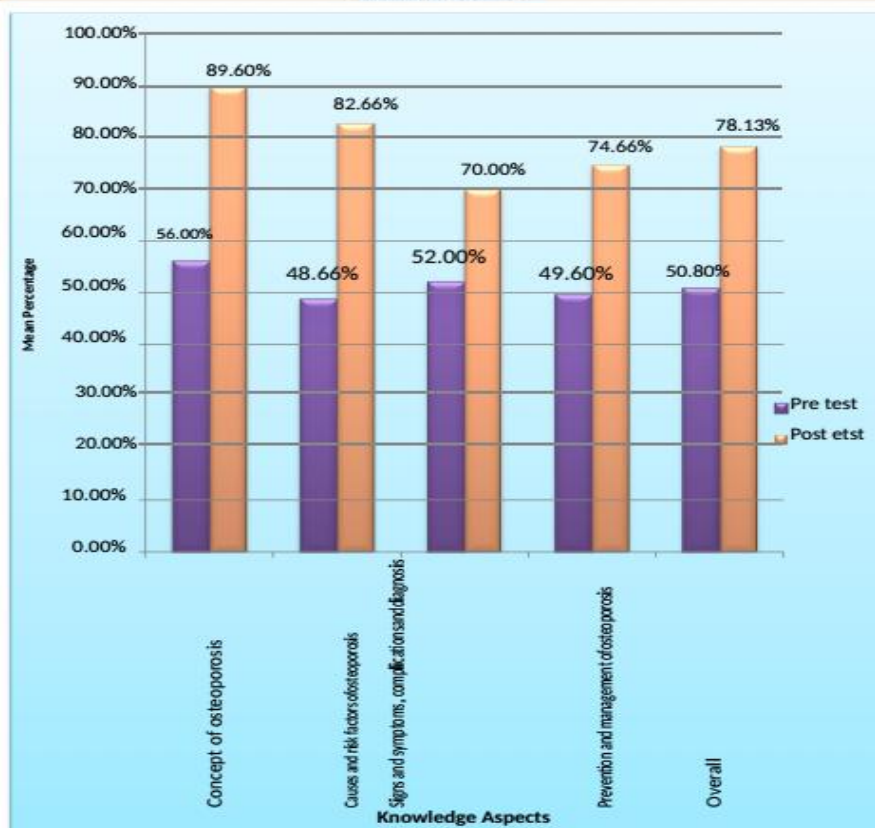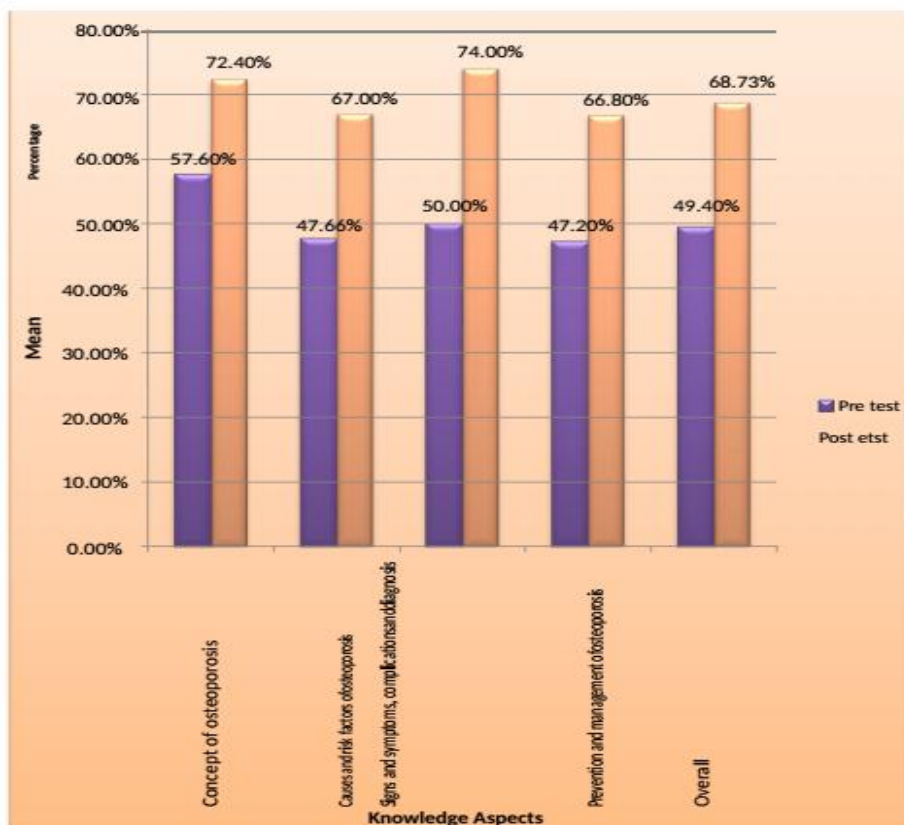
The obtained t value of rural women 8.712 and urban women 14.55 shows the significant difference between the pre test and post test knowledge scores of rural and urban women at the level of p<0.01. The obtained t value of pre test knowledge scores of rural and

urban women 0.741 shows that there is no significant difference between the pre test knowledge scores of rural and urban women at the level of $p<0.01$.

There was no statistically significant association between the knowledge score of the rural and urban post-menopausal women with demographic variables such as age, education, occupation, family income, family type, religion and source of information at the probability level of $p<0.05$ and $P<0.01$.

able 16: Association of pre test knowledge scores rural post-menopausal women with the demographic variables.

N = 50

Variables	Below Median	Median and above	Chi square	Df	P value (0.05)	Inference
1. Age in years						
a. 40-50 years	5	6				
b. 51-60 years	13	21	0.948	2	5.99	NS
c. Above 60 years	1	4				
2. Education						
a. illiterate	3	6				
b. primary education	8	8				
c. secondary education	6	16	3.182	3	7.82	NS
d. degree and above	2	1				
3. Occupation						
a. semi govt employee	1	1				
b. private employee	0	3				
c. coolie	6	7	2.331	3	7.82	NS
d. house wife	12	20				
4. Monthly Family income						
a. less than Rs. 5000	5	10				
b. 5001-10000	11	17				
c. 10001-15000	1	4	4.109	3	7.82	NS
d. 15001 and above	2	0				
5. Family type						
a. Nuclear	11	24	2.138	1	3.84	NS
b. Joint	8	7				
6. Religion						
a. Hindu	14	24				
b. Muslims	3	5	0.267	2	5.99	NS
c. Christian	2	2				
7. Source of information						
a. mass media	13	21				
b. school teacher	1	5				
c. health personnel	4	4	1.771	3	7.82	NS
d. others	1	1				

CONCLUSION

The study concludes that the planned teaching programme was effective in improving the knowledge level of rural and urban post menopausal women regarding the prevention of osteoporosis. Also there was significant difference between the post test knowledge level of rural and urban post menopausal women regarding prevention of osteoporosis.

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