

To Assess the Effectiveness of Planned Teaching on Knowledge regarding Management of Perimenopausal Symptoms and its Associated Factors among Middle-Aged Women in a Selected Urban Community Area: A Pre-Experimental

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Abstract: In 1990, 40% postmenopausal women lived in industrialized countries and 60% in developing countries. By 2030, the proportion of postmenopausal women living in industrialized region will decline to 24% and 76% will be living in developing countries. In 1990, 40% postmenopausal women lived in industrialized countries and 60% in developing countries. By 2030, the proportion of postmenopausal women living in industrialized region will decline to 24% and 76% will be living in developing countries. **Objectives:** To assess the effectiveness of planned teaching about knowledge regarding management of perimenopausal symptoms and its associated factors among middle-aged women in a selected urban community area, to assess the existing level of knowledge regarding management of perimenopausal symptoms and its associated factors among middle-aged women in a selected urban community area, to evaluate effectiveness of planned teaching on knowledge regarding management of perimenopausal symptoms and its associated factors among middle-aged women in a selected urban community area and to associate the pre-test knowledge scores regarding management of perimenopausal symptoms and its associated factors among middle-aged women in a selected urban community area with their selected demographic variables. **Materials and Methods:** 80 middle aged women participated in this study. Quantitative research design was used. The research design was used pre-experimental one group pre-test post-test research design. Purposive sampling technique was used to select the sample. The data were collected from selected urban community area, using socio demographic data sheet and structured knowledge questionnaires. Consent was obtained from participant in the study. **Results:** In this study, majority of the subjects 67.5% were from the age group 27 of 41 – 45 years, majority of the subjects 48.8% were belongs to Hindu religion, majority of the subjects 36.2% having 20001 – 30000 income, majority of the subjects 33.8% were illiterate, majority of the subjects 63.7% were work as a home maker and majority of the subjects 86.2% not having any previous knowledge regarding perimenopause. In pre-test, majority 68.8% of subjects had average level of knowledge score, 25% had good level of knowledge score, 6.2% had poor level of knowledge score and 0% had very good and excellent level of knowledge score. While in post-test, majority 72.5% of subjects had very good level of knowledge score, 26.3% had excellent level of knowledge score, 1.2% had good level of knowledge score and 0% had poor and average level of knowledge score. **Conclusion:** The written prepared material by the investigator in the form of planned teaching helped the subject to improve their knowledge regarding management of perimenopausal symptoms and its associated factors. It didn't show the significant association in relation to demographics variables.

Keywords: assess, planned teaching, management, perimenopausal symptoms, middle-aged women, urban community area

1. Introduction

Menopause, also known as the climacteric, is the time when menstrual periods permanently stop, marking the end of the reproductive stage for the female human. Menopause is usually a natural change related to a decrease in circulating blood oestrogen levels. It can occur earlier in those who smoke tobacco. Other causes include surgery that removes both ovaries, some types of chemotherapy, or anything that leads to a decrease in hormone levels. At the physiological level, menopause happens because of a decrease in the ovaries' production of the hormone's oestrogen and progesterone.¹

World Menopause Day is an internationally recognized event that was established in 2009 by the International Menopause Society in collaboration with the World Health Organization (WHO). The month of October is Menopause Awareness Month, and World Menopause Day is held annually on 18

October. It aims to break taboo and improve women's health and wellbeing by raising awareness about the symptoms of menopause and the support options available.²

The term "menopause" was coined by a French physician in 1821. A Canadian gynaecologist, Archie Cameron at Montréal General Hospital, was the first to use oestrogen therapy, in 1930, using a human placental extract (Emmeline) discovered by James Collip. Premarin, approved in Canada in 1941 and in the United States the following year, was the most widely prescribed menopausal therapy for the next 60 years.³

In the western world, the average age of menopause is 50. and average age of menopause in Indian women is 45 years. In 1990, 40% postmenopausal women lived in industrialized countries and 60% in developing countries. By 2030, the proportion of postmenopausal women living in industrialized region will decline to 24% and 76% will be

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living in developing countries.⁴

Very few studies are available and are conducted in rural areas to understand menopause. As majority of Indian population resides in rural areas that is 68.84% (2011).⁵

About 25 million women worldwide attained menopause in 1990, this number is expected to increase by two times by the late 2021. It is estimated that by the year 2050, there will be one billion women over the age of 60 years. About 130 million Indian women are expected to live beyond menopause by 2015. It is estimated that there were about 65 million Indian women over the age of 45 years in the year 2006 according to Indian Menopause Society.⁶

The primary objective of that study was to assess the effectiveness of planned teaching about knowledge regarding management of perimenopausal symptoms and its associated factors among middle-aged women in a selected urban community area. The secondary objectives of that study were to assess the existing level of knowledge regarding management of perimenopausal symptoms and its associated factors among middle-aged women in a selected urban community area, to evaluate effectiveness of planned teaching on knowledge regarding management of perimenopausal symptoms and its associated factors among middle-aged women in a selected urban community area and to associate the pre-test knowledge scores regarding management of perimenopausal symptoms and its associated factors among middle-aged women in a selected urban community area with their selected demographic variables.

2. Material and Methods

80 middle aged women participated in this study. Quantitative research design was used. The research design was used pre-experimental one group pre-test post-test research design. Purposive sampling technique was used to select the sample. The data were collected from selected urban community area, using socio demographic data sheet and structured knowledge questionnaires regarding perimenopausal symptoms. Consent was obtained from participant in the study. Prior permission has been obtained from the institutional ethical committee and also permission will be obtained from nagarparishad/ grampanchayat.

Criteria for selection of samples

Inclusion Criteria

The criteria that specify characteristics that a population does have the women who were.

- 1) Present at time of data collection.
- 2) Willing to participate in the study.
- 3) Read and write Marathi and English.
- 4) Belongs to 40 – 60 Years of age.

Exclusion Criteria

It is the criteria that involve people who does not possess the population characteristics women who were

- 1) Under gone health education program regarding perimenopausal symptoms.
- 2) Not available for data collection

Tools

Section I: Demographic Data

It consists of demographic variables of the women to be participated in the study such as it included variables like age in years, religion, income, education, occupation and previous knowledge regarding perimenopause.

Section II: Structured knowledge questionnaire

It consists of 30 multiple choice questions to evaluate the knowledge of the middle-aged women regarding perimenopausal symptoms and its associated factors knowledge regarding perimenopausal symptoms.

Data Collection

The investigator obtains permission from selected area in Yawatmal District, Maharashtra to conduct the pilot study. The pilot study was conducted from 17.12.2025 to 26.12.2025 and then main study was conducted from date 07.01.2026 to 15.01.2026. The scoring techniques are distributed according to poor, average, good, very good and excellent.

Statistical Analysis

Statistical analysis was done using SPSS Version 26.0 (SPSS Inc., Chicago, Illinois, USA). Continuous variables were expressed as Mean+SD and categorical variables were summarized as percentages. Student paired “t” test was used and also chi square test was used for association. The paired t test whichever appropriate was used for comparison of categorical variables. Graphically the data was presented by cylindrical, conical bar diagrams. P-value of less than 0.05 was considered statistically significant. The reliability of that tool was 0.8128 by using Karl Pearson’s correlation coefficient and hence the tools are reliable and valid.

3. Results

Results are divided into four major sections:

Section A:

This section deals with percentage wise distribution of subjects in relation to their demographic variables as shown in table no. 1

Section B:

This section deals with the assessment of knowledge regarding management of perimenopausal symptoms and its associated factors among middle-aged women in a selected urban community area. The level of knowledge score is divided under following heading of poor, average, good, very good and excellent. In pre-test, majority 68.8% of subjects had average level of knowledge score, 25% had good level of knowledge score, 6.2% had poor level of knowledge score and 0% had very good and excellent level of knowledge score. Mean knowledge score in pre-test of the subjects was 10.48 + 2.605. Minimum knowledge score in pre-test was 06 and Maximum Knowledge score in pre-test was 16. While in post-test, majority 72.5% of subjects had very good level of knowledge score, 26.3% had excellent level of knowledge score, 1.2% had good level of knowledge score and 0% had poor and average level of knowledge score. Mean knowledge score in post-test of the subjects was 23.11 + 2.250. Minimum knowledge score in post-test was

18 and Maximum Knowledge score in post-test was 28.

Section C:

This section has dealt with the effectiveness of planned teaching about knowledge regarding management of perimenopausal symptoms and its associated factors among middle-aged women in a selected urban community area. The hypothesis was tested statistically, the level of competency during the pre-test and post-test were compared to prove effectiveness of planned teaching on significance of difference at 5% level of significance was tested with student's paired 't' test and tabulated 't' value was compared with calculated 't' value. Also, the calculated 'p' values were compared with acceptable 'p' value i.e. 0.05 level of significance.

The statistical Student's paired 't' test was applied at 5% level of significance. The tabulated value for $n = 80 - 1$ i.e. 79 Degree of freedom was 79 is that 1.990. The calculated value i.e. 48.994 was much higher than the tabulated value at 5% level of significance. For overall knowledge score of subjects which was statically acceptable level of significance as shown in table no. 2

Section D:

Association of pre-test knowledge score regarding management of perimenopausal symptoms and its associated factors among middle-aged women in a selected urban community area with selected demographic variables.

Analysis reveals that there is no association of knowledge score was found in management of perimenopausal symptoms and its associated factors with demographic variables like age in years, religion, income per month, education, occupation, and previous knowledge regarding perimenopause.

4. Conclusion

The investigator concludes that, according to the findings in the present study shows that majority of women had very good knowledge regarding management of perimenopausal symptoms and its associated factors among middle-aged women. It is observed by the study that there is no association of knowledge was found in middle-aged women with their selected demographic variables. Overall, this study was found to be effective in improving the knowledge of subjects. After the planned teaching on management of perimenopausal symptoms and its associated factors was found to be effective in improving the knowledge of subjects.

Similar study was conducted by Bhagwan Giri V, Taksande V. at Aurangabad District, 2023. After the detailed analysis the overall knowledge of the perimenopausal women was inadequate in pretest and it was increased after teaching programme. Since it seems to be a routine study, with effective menopausal clinic and awareness programmes in each and every zone can improve quality of life.⁷

Similar study also was conducted by Deeksha, Kaur H. at rural areas, Jalandhar, Punjab, 2021. After the conclusion the most of the peri-menopausal women had mild symptoms.

Yoga therapy was effective in reducing menopausal symptoms among post-menopausal women as measured by Modified Greene Climatic Scale.⁸

Conflict of Interest:

The authors have no conflict of interest.

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Table 1: Distribution of subjects in relation to their demographic variables

Demographic Variables	Frequency (f)	Percentage (%)
Age in Years		
41 – 45 Years	54	67.5
46 – 50 Years	08	10
51 – 55 Years	08	10
Above 55 Years	10	12.5
Religion		
Hindu	39	48.8
Muslim	13	16.2
Buddhist	19	23.8
Christian	09	11.2
Others	00	00
Income per Month		
Less than 10000	20	25
10001 – 20000	19	23.8
20001 – 30000	29	36.2
More than 40000	12	15

Education		
Illiterate	27	33.8
Primary	12	15
Higher Secondary	21	26.2
Graduation and above	20	25
Occupation		
Home Maker	51	63.7
Private Sector	08	10
Government Sector	09	11.3
Self-Employed	12	15
Previous Knowledge Regarding Perimenopause		
Yes	11	13.8
No	69	86.2

Table 2: Significance of difference between knowledge scores in pre-test and post-test

Over all	Mean	SD	Mean Difference	t-value	p-value
Pre	10.48	2.605	12.64 + 2.307	48.994	0.0001
Post	23.11	2.250			S. P<0.05
P<0.05 level			S=Significant		