Assess the effectiveness of structured teaching program on knowledge regarding management of menopause among women with the age group 45-55 years at selected rural area in Kanpur U.P., India

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Abstract

Introduction: Menopause means permanent cessation of menstruation at the end of reproductive life due to loss of ovarian follicular inactivity. Effectiveness of structured teaching program on knowledge regarding management of menopause among women with the age group 45-55 years at selected rural area in Kanpur.

Objectives: (1). Assess the level of knowledge regarding management of menopause. (2). Effectiveness of Structured teaching programme on knowledge regarding management of menopause. (3). Association between knowledge on management of menopause among women.

Methodology: A pre-experimental study was conducted in Kanpur among menopausal women. Non probability purposive sampling technique was used for the study for selecting 40 samples for this study. The Data collection was done by structured questionnaire regarding management of menopause.

Results: The overall pre-test knowledge score regarding the management of menopause among women that identified as (67.7%) of the women had moderate knowledge and (32.5%) of the women had inadequate knowledge and (0%) of the women had adequate knowledge with mean of pre-test knowledge score was 11.6 and standard deviation was 3.37, whereas the post test score (20%) women had adequate knowledge and (80%) women had moderate knowledge and (0%) women had inadequate knowledge with the mean of post-test knowledge score was 19 and standard deviation 2.07. Hence the stated hypothesis H₁ was accepted and H₂ was rejected.

Keywords: Structured Teaching Program, Knowledge, Management of Menopause.

Introduction

Menopause means permanent cessation of menstruation at the end of reproductive life due to loss of ovarian follicular inactivity. Oestrogen production by the menopausal ovary is minimal and as a result circulating level of oestrogen decline leads to many problem in women’s health including physical and psychological symptoms not everyone experiences the symptoms and to the same degrees. As the general population ages, more women are experiencing menopause. The average age for menopause is 51-52 years, although the age range is from 45-55, indicating the women live at least after menopause. In India 3.1% of the women are already in menopause by the age of 30 – 34 years and which rises to 8% for the age of 35-39 years with the incidence of the menopause being quite rapid after the age of 40-41 years.

Need for the Study

When a woman is healthy, she has the energy and strength to do her daily work, to fulfil many roles in the family and community and Menopause is the momentous time in a woman’s life is a closure of reproductive capability and has emerged as one of the prominent health issues for midlife women. In the world, most women life one third of their life after the reproductive years. Natural menopause may occur in the women between the age of 35 and 60 years of the age 25% of all women experience. Menopause before age of 45years, 50% between 45 to 50 years. The falling level of oestrogen brings about certain changes to menopausal women; these changes are classified into short term, medium term or long term changes. Short term symptoms include hot flashes, night sweats and population.
The Medium term problem are genitourinary tract infection, skin changes and atrophy to vagina and lower urinary tract. The Long term problem are cardiovascular disease, osteoporosis dementia and Alzheimer's disease.

**Hypothesis**

**H1:** There is a significant difference between pre-test and post-test knowledge scores.

**H2:** There is a significant association between the pre-test knowledge scores of the women regarding management of menopause with demographic variables.

**Assumptions**

All Women’s may not have knowledge regarding the management of menopause. Structured teaching programme may improve knowledge regarding the management of menopause among the women.

**Delimitations**

The study limited to the women

- Sample size was 40 women’s.
- 2 weeks of data collection.
- Women residing in Ram Nagar, Kanpur.

**Methodology**

Methodology is the way to systematically solve the research problem. The quantitative evaluatory approach was adopted with Pre-Experimental (one group pre-test and post-test design) research design. The independent variable was structured teaching programme on management of menopause. The dependent variable was Knowledge level regarding the management of menopause in women. The demographic variables was Age, Educational Status, Occupation, Monthly income of the Family, Religion, Type of diet, Type of family and Source of information.

The study was conducted at Ramnagar village in Kanpur which is at 100 meters of distance from Rama University. The Population for the study was women who are living in Kanpur. The Target population for the study was woman’s who are living in Ramnagar, Kanpur. The Accessible population for the study was a woman’s who are living in Ramnagar with the age group of 45-55 years. Sample for the present study was women with the age group of 45 to 55 years and who fulfil the sampling criteria for the present study. Sample size for the present study was 40 women’s with the age group of 45 to 55 years and non-probability purposive sampling technique was used for the study. The data collected from the samples with structured knowledge questionnaire with prior obtained consent from the samples. The collected data was analysed with the help of objectives of the study. The data was entered in excel spread sheet and analysed by using descriptive and inferential statistics.

**Inclusion criteria**

- Women with age group of 45 to 55 years.
- Present during the time of data collection.

**Exclusion criteria**

- Not willing to participate in the study.
- Women below the age group of 45-55 years.

**Development and description of the tool**

The research tool consist of two parts are following.

**Part A:** It consists of demographic characteristics of women such as Age, Educational Status, Occupation, and Monthly income of the Family, Religion, and Type of diet, Type of family and Source of information.

**Part B:** It consists of knowledge items regarding management of menopause. Each item has been given four options with one most appropriate answer. The maximum score of corrected response to each item were ‘ONE’ and for wrong ‘ZERO’

**Scoring Key:** The structured questionnaire on the basics of management of menopause with 30 questions. Each question has 4 options with one accurate answer. The score for correct response to each items was “one” and incorrect response was “zero”. Thus for 30 questions maximum obtainable score was 30 and minimum score was “0”. To find out the effectiveness of structure teaching programme on knowledge scores respondents were categorized into three groups.

**Table 1: Scoring key on management of menopause**

<table>
<thead>
<tr>
<th>Sl. no.</th>
<th>Knowledge score ranges</th>
<th>Level of knowledge</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0-10</td>
<td>Inadequate</td>
</tr>
<tr>
<td>2</td>
<td>11-20</td>
<td>Moderate</td>
</tr>
<tr>
<td>3</td>
<td>21-30</td>
<td>Adequate</td>
</tr>
</tbody>
</table>

**Knowledge score on Management of Menopause**

**Validity of the tool:** Content validity of the tools and STP was established in consultation with the guide and experts in the field of nursing. Their opinion and suggestion were taken to modify the tools and STP.

**Methods of the data collection:** Initial consent was obtained from the study samples and data collection was done with the help of structured questionnaire regarding management of menopause among the women with age group of 45 to 55 years.

**Ethical consideration:** Written permission was obtained from the concerned head of the village. Written consent was obtained from the samples, the purpose and detail of the study was explained to the study subject and an informant in their own language.

**Data collection procedure:** The data collection was scheduled for the month of April 2019 for two weeks. Before the data collection the investigators was obtained the formal permission from the study subjects to conduct study. A Survey was done to identify the menopausal women fulfilling eligible criteria. Non probability purposive sampling technique was used to select the study sample. The Pre-test data was collected by using structured knowledge questionnaire on menopause followed by performing structured teaching programme regarding management of menopause to the eligible study samples. After one week gap Post-test data was done from the same study samples as like pre-test.

**Plan for data analysis:** The data was planned to analyse on the basis of objectives of the study. The obtained data was analysed by descriptive and inferential statistics. Descriptive
and inferential statistics was planned as follows;

Descriptive statistics: It describing the demographic variables and level of knowledge by number (N), Frequency (F), Percentage (%) Mean (X), and Standard Deviation (S.D) was planned.

Inferential statistics: The paired-t test was used to find out the effectiveness of teaching programme on Management of Menopause.

• The 'chi-square test was used to find out the association between the demographic variables with their pre-test knowledge scores.

Data analysis and interpretation: Non-probability purposive sampling technique was used to select 40 menopausal women in Ramnagar and to assess the knowledge regarding the management of menopause. The data is coded, organized and analysed by using descriptive statistics and inferential statistics. The data Analysis and interpretation was done based on the objectives of the study in two phase. The first phase of the study was taken up to assess the pre-test knowledge on management of menopause among menopausal women. The second phase of the study intended to evaluate effectiveness of planned teaching programme by pre-test and post-test knowledge on management of menopause among menopausal women.

Presentation of the data: The data was obtained were analysed and presented under the following sections.

Section-A: Frequency and percentage distribution of demographic variables of Women.

Section-B: Pre-test and post-test knowledge score of women regarding management of Menopause.

Section-C: knowledge levels of women on management of menopause in terms of Mean and standard deviation.

Section-D: Effectiveness of structured teaching programme on knowledge regarding management of menopause.

Section-E: Association between the pre-test knowledge score of women with their selected demographics variables.

Table 2: Pre-test and post-test knowledge score of women regarding management of menopause

<table>
<thead>
<tr>
<th>Level of knowledge</th>
<th>PRE-TEST</th>
<th>POST-TEST</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency</td>
<td>Percentage</td>
</tr>
<tr>
<td>Adequate</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Moderate</td>
<td>27</td>
<td>67.5</td>
</tr>
<tr>
<td>Inadequate</td>
<td>13</td>
<td>32.5</td>
</tr>
</tbody>
</table>

The above Cylindrical diagram on percentage wise distribution of women according to their knowledge levels shows that, the pre-test knowledge scores were Moderate knowledge 27(67.5%), Inadequate knowledge were 13(32.5) and post-test knowledge scores were as adequate knowledge were 8(20%), Moderate knowledge score was 80(32%).

Table 3: Knowledge levels of women on management of menopause in terms of mean and standard deviation

<table>
<thead>
<tr>
<th>Knowledge Score</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRE- TEST</td>
<td>11.6</td>
<td>3.2</td>
</tr>
<tr>
<td>POST- TEST</td>
<td>19</td>
<td>20</td>
</tr>
</tbody>
</table>

The above table explains that the knowledge scores of women on management of menopause as pre-test Mean was 11.6 with SD 3.2 and post -test knowledge score Mean was 19 and SD 2.0. The data identified that there is a significant difference between pre- test and post-test mean level of knowledge on management of menopause among menopausal women. The mean score before and after administration of structured teaching program has shown a significant difference. The mean total knowledge score before intervention was increased to after intervention. From above inference, it is made clear that structured teaching programme had a positive impact on knowledge regarding management of menopause among women’s. Hence i.e.: There is a significant difference between pre -test and post -test mean level of knowledge on management of menopause among menopausal women. Researcher came to the conclusion that all the women knowledge improved in the post test.

Table 4: Effectiveness of teaching programme on knowledge regarding management of menopause

<table>
<thead>
<tr>
<th>Effectiveness of Structured teaching program</th>
<th>paired-t value</th>
<th>df</th>
<th>t - test table value</th>
<th>Inference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>5.99</td>
<td>39</td>
<td>2.0</td>
<td>Significant</td>
</tr>
</tbody>
</table>

The above analysis explains effectiveness of STP on Management of Menopause in terms of paired-'t'. The comparisons of the pre- test and post-test knowledge score was done by the paired-'t’ test. The t- test was assessed at 0.05 level of significance. The statistical value of the paired-t test was 5.99 and t- table value at 39freedom was2.02. Here calculated -'t’ value greater than table value that means there is significant difference in the pre -test and post- test knowledge score. Hence we accepted the stated hypothesis H1is significant at 0.05 level of significance and we accept H1is true. It concludes that, the structured teaching programme on knowledge regarding management of menopause among women’s was effective to improve the knowledge.

Association between the pretest knowledge score of women with their selected demographics variables

The above association of demographic variables with their knowledge score explains that, there is no significant association of knowledge scores on management of menopause with their selected demographic variables as
Age, Educational status, Type of family, Occupation, Religion, Monthly family income, Type of diet, No of children and source of information. Hence the stated hypothesis H2 was rejected at the significance level of 0.05.

Summary and Conclusion
The study findings disclose that, out of 40 women most of them (60%) of the women was the age group of 48-50 years, (50%) of women’s educational status had primary education, (57.5%) of women belongs to joint family, (95%) of women belongs to Hindu religion, (37.5%) of women was 5000-10000- was monthly family income, (50%) of women had two children, (37.5%) of women was home maker and business, (87.5%) of was vegetarian type of diet, (57.5%) of women get information from family members, majority of women had moderately adequate knowledge regarding management of menopause and significant difference in pre and post-test knowledge score but there is no association between socio demographic variable and knowledge score of women on management of menopause.

After detailed analysis, this study leads to the following conclusions
Menopause is a progressive condition that is characterized by a condition in a particular age group which can lead to the risk of osteoporosis. The Majority of women (80%) have adequate knowledge regarding the management of menopause. The Most women gave correct response regarding good source of calcium and iron. There is no association between socio-demographic variables and knowledge score at 0.05interval.
There is need of awareness among women in rural areas regarding management of menopause. This study suggested that medical professional should focused on promoting knowledge by giving health education regarding the management of menopause among women in rural areas.

Recommendations
On the basis of findings, it is recommended that-
• The similar study may be replicated on large sample, the similar study can be conducted in clinical area.

Reference