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Effectiveness of an Intervention Package on Menopause Transition Among Rural Women in India

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ABSTRACT

Background: Menopause transition:-It is also known as “PERIMENOPAUSE”. It is the period where natural and fluctuating hormonal changes occur in women body .estrogen and progesterone plays an important role in this changes. Human female ovaries produce fewer amounts of the mentioned hormones as a result there are changes in physiological process of menstruation and psychological aspects of women as well. Which causes irregular period, hot flushes, mood swings, sleep pattern disturbances and vaginal dryness.it starts early 30s to 40s.it may last for 4 to 5 years. But duration may vary from one person other. Many women facing coping problems due to lack of awareness about transition period of menopause Hence researchers decided to conduct this quasi experimental study to promote awareness to the rural women.

Methodology: Quasi experimental one-group pre and posttest design, quantitative approach was adopted to conduct this research study, After ethical clearance and oral and written consent received from total 60 samples who fulfilled the inclusion criteria were selected as study samples by using convenience sampling technique. Pretest was conducted by administered structured interview questionnaire tool one week before an intervention. Video assisted international teaching given to 60 samples followed by post test conducted. Statistical methods such as descriptive and inferential statistical like chi square, paired t test used for data analysis.

Results: After intervention in posttest women gained more knowledge that is about 0% had poor knowledge, 1 % of women had average knowledge,4% had good knowledge and 55% had very good knowledge. Where as in pretest about 31% had poor knowledge, 24% had average knowledge, 5% had good knowledge and 0 % having excellent knowledge .In our research most of participants had poor knowledge on menopause transition. On analyzing the demographic data with the pre-test knowledge of women on Menopause transition, there was a significant association found between knowledge and demographic data like education, occupation, marital status and previous knowledge regarding menopause transition.

Conclusion: This study concluded that proper education will improve the knowledge level of women, through which they could adopt different coping strategies to accept the changes, and modify their life style during or even prior to the period of menopause transition.

KEYWORDS: Menopause, Menopause transition Peri menopause.

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INTRODUCTION

Women are the heart of each family. When woman is tired, entire family function will get altered. During different phases of life women are facing changes in their physical physiological and psychological aspects. There are complex interactions occur between secondary sex hormones, physiological changes of body and emotional issues.

Menopause is the unavoidable change of woman’s life. It occurs due to hormonal changes with advances in ageing. It occurs in their middle adulthood. Menopause is an event in life, not a disease. The word menopause "literally means the end of monthly cycles "from the Greek word “pausis” (cessation) and the 'men'(month).Natural menopause occur in the women between the age

of 35-60 years,25% of all women experience menopause before age of 45 years,50% after the age of 50 year. In India,3.1% of the women are already in menopause by the age of 30-40 year and which rises to 8% for the age of 35-39% years with the incidence of menopause being rapid after the age of 40 year and 45% of women attain menopause between 45-50%.[1]

World health organization reported that mot women experience menopause in between the ages of 45 to 55 years. Per menopause refers to the period where loss of ovarian function and a decline in blood estrogen level. Menopause transition or Peri menopause' is the period extending from the first sign of menopause -usually hot flashes vaginal dryness or irregular menses associated with increases Follicle Stimulating Hormone(FSH) level(>20 IU/ML) -to beyond the complete cessation of menses. The duration of menopause transition varies from 2 to 8 year. During transition to menopause, women may experience vasomotor, urogenital, psycho motor and psychological symptom as well as sexual dysfunction. Overall, menopause causes a wide range of symptoms such as hot flushes, night sweats, aching in muscles and joints, sleeping problems, shortness of breath, weight gain, increased facial hair, depression, irritability, anxiety and sexual problems, heart discomfort, physical and mental exhaustion, vaginal dryness and urinary symptoms such as urine leakage while laughing and coughing[2].These symptoms decreases women's health and effect their biological, psychological and sexual health and causes negative attitude towards menopause. The process of physiological transition may in turn affect their health. Thus it is important that women must enable themselves to accept inevitable changes of menopause transitional period.[2]

Need for the study

In 2020, the research study conducted by nanette santoro et al on the menopause transition, signs, symptoms, and management option .this study result revealed that it is important for clinician to recognize early signs and symptoms of the menopause transition to safe guard women and provide effective treatment option.[3] in order to seek medical help, first the woman should have at-least basic knowledge about her body's physiological and psychological changes. Therefore it is essential to ensure that a woman understands that menopause represents changes of life, not an end of life. Mansoureh Refaei in 2022 conducted a qualitative study to assess women's experience in transition to menopause. The study reported different experiences faced by women during menopause transition which are characterized by fear about future and its consequences, besides, the women approached health care facility, peers and the family for the solutions of their problems [4]

Materials and Methods

The researchers conducted quantitative approach, quasi experimental one group pre and posttest design study to evaluate the effectiveness of an intervention package on knowledge regarding menopause transition among women. The study aimed to observe the **objectives** 1. Assess the demographic status of women 2. Assess the pre-test level of knowledge regarding menopause transition among women in selected area.3.To implement intervention package.4.To assess the post-test level of knowledge regarding menopause transition among women in selected area.5.To find out the association between pretest level of knowledge and demographic data.6.To find out difference between pre-test and post-test level of knowledge of women regarding menopause transition. **Sample** All the women in age between 35-45 years living in selected rural areas of arajiline block, Varanasi whom fulfilled the inclusion criteria were considered as study samples. After college ethical committee clearance, the title, methodology, sample and setting of the study was confirmed. **The research tool** was developed after extensive review of literature and expects guidance which helped the investigator to prepare most suitable questionnaire for Menopause Transition. The research tool has two sections that is section A and section B. Section A contains demographic data such as age, duration of year of menses from menarche to till date , Religion ,Education ,Occupation ,marital status ,number of children and monthly income etc. Section B contains questions to evaluate the effectiveness of an intervention package on knowledge regarding Menopause Transition which includes introduction, causes and Risk Factors, Signs and Symptoms, Complication management, coping strategies of menopause transition and Prevention aspects of menopause transition. Content validity was obtained from subject experts, tool were corrected and modified according to experts' opinion. Prior to data collection, formal written permission was obtained from gram pradhan of Arajiline panchayat to continue the study. **Non randomized convenient sampling technique** was used to select the study samples that fulfilled the inclusion criteria. **Sample size:** 60 samples were selected for research study. Oral and written consent were obtained from study participants prior to data collection. Two Nursing students were being trained and involved for data collection of Pretest with the researchers. Required data were collected in between 9 am to 5pm from women in the age group of 35 to 45 years old. Data were collected from 12 samples on each day, like wise it took one week duration to complete the pretest from 60 samples. After one week of pretest, samples were assembled in private school class room and video assisted education was given by researchers to the women for 45 minutes regarding all the aspects of menopause transition. **Post test** was conducted immediately after the intervention.

Hypothesis: There will be significant association between knowledge of women regarding menopause transition and selected demographic variables.

RESULTS

Data Anaysis

The data is summarized organized , tabulated and analyzed according to the objectives of the study by using descriptive (frequency and percentage) and an inferential statistics (t-test).

S.NO	DATA ANALYSIS	METHOD	REMARKS
1	Descriptive statistics	Number,percentage, Measure of central tendency.	Distribution of demographic variables

2	Inferential statistics	t-test and chi-sqaure	To find out the association between Pre-test knowledge and demographic data To find out association between the level of knowledge Pre-test and Post-test.

After careful data collection, scrutinizing and analyzing the Organization of the study findings as follows:-

Table-1; Section 1: Distribution of the demographic variables.

Variable	**DEMOGRAPHIC VARIABLE**	**FREQUENCY**	**PERCENTAGE**
Woman's Age	(a)32-35 year (b) 35-38 year (c) 38-40 year (d) 40-45 year	7 13 20 20	11.7% 21.7% 33.33% 33.33%
Duration of menstrual history from menarche to till date	(a) 15-20 year (b)20-25 year (b) 25-30 year (d) Above 30	17 16 15 12	28.33% 26.7% 25% 20%
Religion	(a) Hindu (b) Muslim (c) Sikh (d)Christian	60 0 0 0	100% 0% 0% 0%
Education :	(a)1-8th Passed (b) 9-12th Passed (c) Illiteracy (d) Graduated	14 22 0 24	23.33% 36.7% 0% 40%
Occupation:-	(a)Housewife (b) Self employee (c)Government job (d) Private job	56 1 0 3	93.33% 1.7% 0% 5%
Marital Status	(a) Married (b) Unmarried (c) Widow	59 0 1	98.33% 0% 1.7%
Number of Children :-	(a) 1 (b) 2 (c) 3 (d)More than 3	12 27 14 7	20% 45% 23.33% 11.7%
Monthly income of Family :-	(a) 10-15 thousand (b) 15-20 thousand (c) 20-25 thousand (d) Above 25 thousand	21 8 13 18	35% 13.33% 21.7% 30%
Family history of age of Menopause :-	(a) 35 year (b) 40 year (c) 45 year (d) Above 45 year	11 40 24 18	18.33% 11.7% 40% 30%
Previously knowledge regarding menopause symptoms:-	(a) Yes (b) No	45 15	75% 25%
If yes, specify the source of knowledge regarding menopause symptoms	(a) Mass Media (b) Family ,Friends and Relative (c) Health Personnel (d) Others	6 18 12 9	10% 30% 20% 15%

TABLE -1 Shows the frequency and percentage of socio-demographic variables such as Women age, Duration of menses from till date, Religion, Education, Marital status ,Occupation ,Number of children, Monthly income, Family history of menopause ,Knowledge regarding menopause and source of knowledge .

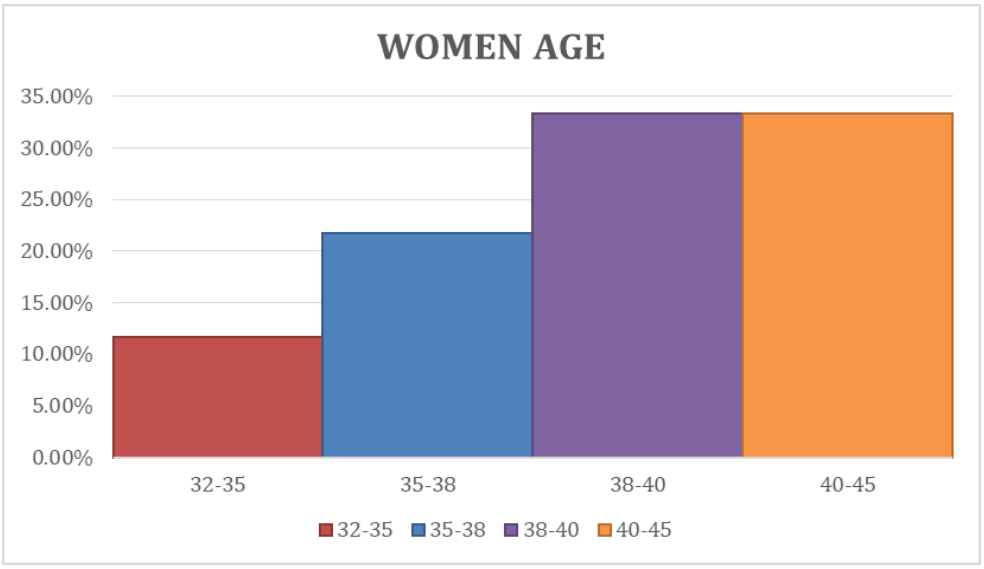

Figure -1 Histogram Representation shows the percentage distribution according to age group

The above figure explains 11.7% women belongs to 32- 35 year of age group , 21.7% women belong to 35-38 year of age, 33.33% belong to 38-40 year of age and 33.33% belong to 40-45 year of age.

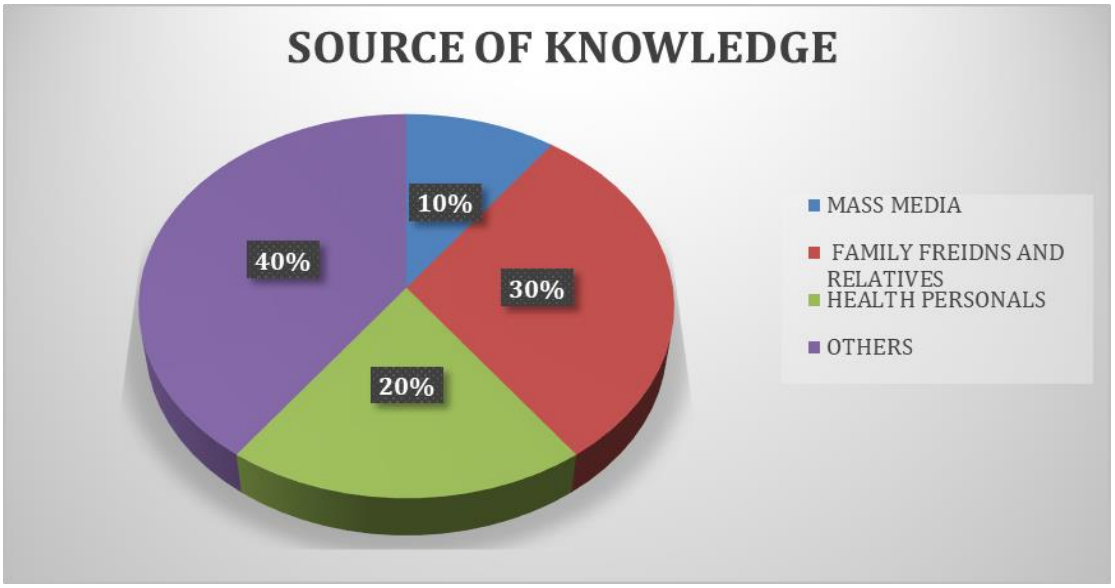

Figure -2 Pie Diagram representation shows the percentage distribution according to source of knowledge regarding menopause symptoms.

About the source of knowledge 10% women having knowledge from mass media, 30% from family, friends and relatives, 20% from health personals and 40% from others.

Section 2: Data on pre -test knowledge level among women.

Table -2:Frequency and percentage distribution of pre-test knowledge score of subjects.

Knowledge Score	Grade	Pre-test score	Experimental Percentage
0-10	Poor	31	52%
11-18	Average	24	40%
19-24	Good	5	8%
25-30	Very good	0	0%

The result of Pretest indicates that the women of experimental group having knowledge is poor (52%), Average (40%) ,Good (8%) and verygood (0%).

Section 3: Data on post-test knowledge level among women.

Table 3: Frequency and Percentage distribution of Post –test knowledge score of subject

Knowledge Score	Grade	Post-test score	Percentage
0-10	Poor	0	0 %
11-18	Average	1	2%
19-24	Good	4	7%
25-30	Very good	55	92%

Post-test result describe the women of experimental group having knowledge is Poor (0%), Average (2%) , Good (7%) and Excellent (92%).

Section 4: To find out the association between Pretest knowledge on menopause transition and demographic variables of women.

Researchers found significance $p<0.05$ level of association between Pretest knowledge on menopause transition and demographic variables such as education, occupation , marital status and previous knowledge regarding menopause transition etc by using x^2 test.

Section 5: Frequency and Percentage distribution of the difference between Pre-test and Post-test level of knowledge score.

Knowledge score	Catagory	classification of women score		Paired t-test value	
		pre-test	Post-test	t-value	Remarks
0-10	Poor	31	0	1.9803	T(cal)<0.05
11-18	Average	24	1		
19-24	Good	5	4		
25-30	Very good	0	55		
TOTAL		60	60		

The above table describes Pre-test knowledge score of Poor (31%),Average (24%) ,Good (5%) and Excellent (0%)and the Post-test result indicates that Poor (0%) of women were having poor knowledge, Average (1%) , Good (4%) and 55% of women had very good knowledge.the differences was found with the implication of paired t test.

DISCUSSION

The researchers conducted an experimental study on to assess the effectiveness of intervention package on Menopause transition among women in selected rural area of arajiline block at Varanasi .We selected 60 samples for our study using convenience sampling method. All the samples were given the tools which consisted of two sections. Section 1-Demographic data of study samples and section 2 contains Questionnaire on Menopause transition. The data were collected and analyzed using experimental and inferential statistics. The study showed that in Pretest, the result indicates that 31% of women were having poor knowledge , Average (24%), Good (5%) and very good (0%).In Post Test, the result indicates that the none of the women were having poor knowledge (0%), Average (1%) ,Good (4%) and (55%) of .then were having very good knowledge.

The current study report is supported by the other study titled women's knowledge and attitudes to the menopause, conducted by Bisma tariq et.al. The study revealed that most of the women had limited knowledge towards menopause. [6]

The other study conducted by Shabana sultan on knowledge, attitude and practices about menopause and menopausal symptoms among midlife school teachers. The study result concluded that most of the women in their study were having knowledge regarding menopause and its symptoms. [7]

Our study finding there were significance ($p<0.05$ level) of association between Pretest knowledge on menopause transition and demographic variables such as education, occupation, marital status and previous knowledge regarding menopause transition. This is similar to the report of study conducted by Monika krzyzanowska on women's knowledge regarding menopausal transition in relation to their socio economic status. The mentioned study revealed that there was significant association found between knowledge on menopause transition and their educational status.[8]

RECOMMENDATION

On the basis of the study following recommendation has been made:
A similar study can be replicated on large sample to generalize the finding.A similar study can be conducted by influencing addition demo-graphical variables that may influence the level of knowledge of women. A similar study can be conducted by using other educational method like role play, self-instructional modules and informational booklets etc.

Training program can be conducted in the community related to awareness of Menopause transition among women.

Further researches can be conducted on the same topic with large samples by comparing experimental and control group. The study would be helpful to the medical personnel.

Head of the department of nursing, policy makers from government are recommended to focus on middle age group women to find their health issues, problems due to normal physiological changes of their body and create awareness , training programme to provide and make them to lead healthy life style in rest of their life.

CONCLUSION

The researchers conducted a quasi-experimental study to assess the effectiveness of intervention package on Menopause transition among women in selected area at Varanasi .The study showed that in Pre-Test the result indicates that women having knowledge is Poor (31%) ,Average (24%) ,Good (5%) and excellent (0%).In Post –Test the result indicates that the women having knowledge is Poor (0%) ,Average (1%) ,Good (4%) and Excellent (55%).This concludes that more training and health education is needed among the women on the Menopause Transition.

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