



EVALUATION OF THE EFFECTIVENESS OF INFORMATIONAL BOOKLET ON KNOWLEDGE REGARDING PERI-MENOPAUSAL SYMPTOMS AND ITS MANAGEMENT IN KOLHAPUR

Nursing

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ABSTRACT

Background: Perimenopause marks a transition from a woman's reproductive period to a non-reproductive period. This is accompanied by a myriad of hormonal changes which leads to symptoms like mood swings, depression, hot flashes, etc. Although, most women are aware of menopause, there is a sparse idea about perimenopause which necessitates the need for the study.

Aim: To Evaluate the effectiveness of informational booklet on knowledge regarding peri-menopausal symptoms and its management

Methodology: A pre-experimental study was carried out among schoolteachers from three schools in Kolhapur. A structured questionnaire and an informational booklet on perimenopause, its symptoms and management was developed and validated by experts in the field. A pilot study (n=10) was carried out to check the feasibility of the tool. For Main study 60 school teachers were selected. The questionnaire was filled by the participants (pre-test) and scoring was done. The informational booklet was provided and after a week, the questionnaire was again filled (post-test) and were scored accordingly. Significance between scores was calculated by Wilcoxon sign rank test and association between variables were calculated by chi-square test.

Results: The mean pre-test score was 13.67 ± 2.83 . Post the intervention of the informational booklet, there was a significant improvement in scores ($P < 0.05$). The mean post-test score was 20.33 ± 2.89 .

Conclusion: The informational booklet improved the knowledge of participants about perimenopause. Therefore, informational booklets and literature are an effective tool to impart knowledge and spread awareness about perimenopause.

KEYWORDS

hormones, menstruation, perimenopause,

INTRODUCTION:

Perimenopause, better known as menopausal transition, marks the physiological changes from a reproductive period to menopausal period. It has been suggested that perimenopause can last for varying time periods in different women, however the precise time period is ill-defined. The median time period is speculated to be of four years.^{1,2} It is due to the decline of ovarian function and occurs well before actual menopause. It is accompanied by profound changes in hormones and reproductive cycle. Perimenopause begins with irregularities in the menstrual period and continues till the cessation of menstrual cycle.³

According to the consensus meeting of the Indian Menopause Society, 2008, the number of perimenopausal women is on a rise in India, with an average age 47.5 years for Indian women and average life expectancy of 71 years.⁴ The number of perimenopausal women is estimated to go up to 1,200 million by the year 2030.⁵ Although, perimenopause is a physiological process that every woman goes through, in India talking about it is still a taboo. Women are not comfortable talking about their reproductive health.⁶ Consequently, studies pertaining to the knowledge and health assessment, and management of perimenopause have been very few, especially in India.^{8,9} This calls for a need for more studies, in order to improve the awareness about perimenopause and its among women, which would in turn aid in improving their overall Quality of Life (QoL). The purpose of the present study was to evaluate the effectiveness of an in-house informational booklet on knowledge of peri-menopausal symptoms and management in the Kolhapur district.

METHODOLOGY:

The study sample comprised on 60 female school teachers above the age of 35 years and willing to participate in the study were selected by non-probability sampling technique from three schools of Kolhapur. Individuals who were already educated about menopause were excluded.

The questionnaire tool consisted of two sections. The first, section A comprised of questions related to socio-demographic variables like age, educational qualifications, habitat, source of information about perimenopause and marital status.

The second section, section B was developed to assess the participants' knowledge on perimenopause and its management. It was a structured

knowledge based questionnaire on perimenopausal symptoms and management. There were 30 multiple choice questions covering the topics of anatomy of uterus, menstrual cycle, meaning, causes, symptoms and management of perimenopause.

The informational booklet was developed after an extensive literature review and referring to textbooks on obstetrics, gynaecology and nursing. The designed booklet contained information on the anatomy and physiology of the uterus, menstrual cycle and its process, perimenopause and menopause, causes, symptoms and management of perimenopause. The tool was prepared in English and was also translated to the local language (Marathi).

The tool was presented to the faculties of D. Y. Patil College of Nursing, Kolhapur. Following this, the questionnaire and informational booklet was sent to 17 experts including those in the field of obstetrics and gynaecology, internal medicine, obstetric and gynaecological nursing, statisticians and language experts. After considering the suggestions of the experts, modifications were made to the tool and was finalized for the pilot study.

Reliability of the tool was assessed by administering the tool at a pilot scale in 10 female school teachers. Reliability of the knowledge items was tested by Karl Pearson's correlation, which computed to be $r=0.75$ indicating it to be a good tool.

For the main study, permission was obtained from the respective authorities of the three schools. A well informed and written consent was taken from the participants and were assured of the confidentiality of their responses. Same procedure was followed as in the pilot study and scoring was done accordingly. That is each question in the structured questionnaire carried one mark. Correct answers were given one, while wrong answers were given zero. Maximum score was 30. A score of 21-30 was graded as good, 11-20 was graded as average and 0-10 was graded as poor.

For the comparison of pre-and post-test scores, Wilcoxon-Sign-Rank Test was used. For computing association between pre-test score and socio-demographic variables, Chi-Square test was used. A p-value of <0.05 was considered as significant.

RESULTS:

The difficulty and discriminative index of the tool was calculated. According to the Difficulty Index there were five difficult questions, 15 good questions and 10 easy questions. Likewise, in the discriminative questions, seven were excellent questions, 18 were good questions and five poor questions.¹⁰

The first part of the tool included details of the socio-demographic variables (table 1). The age of the participants ranged from 36 to 55 years. 52% of participants were between 41-55 years. The predominant educational qualification was master's in arts with a Bachelor's in Education. 77% of participants belonged to the urban areas and 97% of the participants were married. While 45 % of them advocated their knowledge of perimenopause to mass media, there were 42% of them who agreed that they did not have any knowledge of perimenopause.

Table 1. Socio-demographic distribution of the variables

Variables	Subcategories	Frequency (n=60)
Age	36-40	15
	41-45	31
	46-50	11
	51-55	3
Education	B.A., B.Ed.	10
	M.A., B.Ed.	29
	B.Sc., B.Ed.	20
	Graduate Diploma in Arts	1
Habitat	Rural	46
	Urban	14
Source of information	Friends	5
	Relatives	3
	Mass media	27
	None	25
Marital Status	Married	58
	Unmarried	2
<i>B.A.; Bachelor's in arts, M.A.; Master's in Arts, B.Sc.; Bachelor's in science, B.Ed.; Bachelor's in education</i>		

The second part contained questions on the knowledge of perimenopause. A distribution of the scores are presented in Figure 1. The mean pre-test score was 13.67 ± 2.83 . Before the intervention only 3% were scored good, while 83% scored average. The pre-test scores were shown to be significantly associated with the source of information of perimenopause ($P=0.0005$). On the contrary, no association between age, habitat and marital status with the pre- or post- test scores have been reported.

Post the intervention of the informational booklet, there was a significant improvement ($P= 0.0001$) in scores. The mean post-test score was calculated to be 20.33 ± 2.89 . 47% of the participants scored good, whereas 53% of them scored average. None of them scored poor. There was a significant increase in the number of women who scored good and average, pre- and post- the intervention booklet ($P=1.064e^{-06}$ for good, $P=0.0206$ for average)

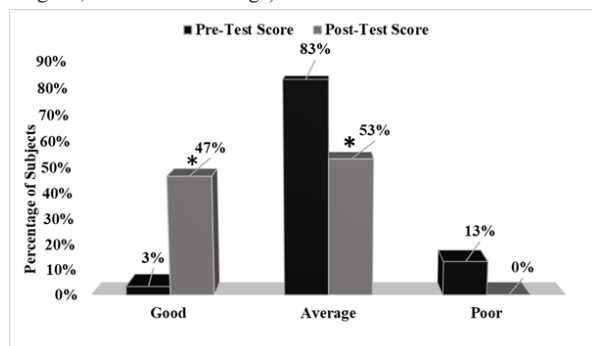


Figure 1. Distribution of pre- and post-test scores, data is presented in percentage (n=60), * indicates significance

DISCUSSION:

Perimenopause is a universal reproductive phenomenon, characterized by drastic changes in the female sex hormone levels in females. It is usually referred to as the transition from reproductive to non-reproductive phase.¹¹ Although, there are a few studies for the management of menopause syndrome (MS), studies relating to

perimenopause have been scarce, necessitating the need of more studies on it, for its better management.

Even though perimenopausal symptoms in women are not life threatening, they have tremendous impact on the physical and mental wellbeing of the women going through it, thereby affecting their overall Quality of Life.¹² Women undergoing perimenopause have been shown to be predisposed to first episode or recurrence of depression and anxiety.¹³ Also, the data on the factors affecting the perimenopause are inconsistent.¹⁴ Educated women and women aware of the symptoms and knowledge about perimenopause have been shown to better manage it, along with better access to the healthcare facilities and improved Quality of Life.¹⁵ This identifies the need for improved awareness about perimenopause in women going through it and in women progressing into perimenopause. Education and awareness about perimenopause are expected to prove useful in better dealing with the related symptoms both at physical and mental levels.

Most women in the study were between 41-45 years of age, similar to a study by Deotale et al.¹⁶ Normally, the average onset of perimenopause has been proposed to be around 45 years.¹⁷ As per the World Health Organization (WHO), the average age of menopause in developed countries was shown to be 51 years but 43-49 in developing countries. In India, the mean age of menopause is estimated to be 46.2 years.^{18,19}

Factors like age, education and habitat did not have any association with the pre-test scores. As all the participants were teachers, all of them were qualified with a minimum of bachelor's degree. Also, most of them belonged to urban areas, most of them were poorly informed about the symptoms and management of perimenopause. Their level of education, marital status and age did not have any association on the pre-test scores.

While, the most prevalent source of information regarding perimenopause was the mass media, there were a considerable fraction of women who had very little or no idea about perimenopause. Health professionals were also considered as a source of information in an Asian study.²⁵ This is in contrast with a study involving Filipina Americans groups, who identified that their primary source of information was through female friends and relatives.²⁶ Similar perception was also reported in a different study by Paudyal et al.²⁷ Morgan et al stated that most women were confused about the transition to menopause mostly due to the lack of factual information and presentation of symptoms.²⁸ Lack of factual information has been shown to directly affect any decision making process, in general and also holds true in how the women undergoing through perimenopause cope up with it.²⁹ This suggests that for a country like India, where talking about menstruation and reproductive health of women is still a taboo, there must be more discussions on peri- and post menopause, its symptoms and consequences, in order to help women in better managing its conditions, while carrying out their day to day life. Awareness programmes through information booklet, PowerPoint presentations, and meet-ups can also benefit in providing women an opportunity to learn about perimenopause.

CONCLUSION:

The informational booklet had a positive impact on the knowledge of women about symptoms and management of perimenopause. There is lack of knowledge regarding perimenopause in women, which are needed to be addressed, through better communication and awareness.

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