

## Research article

**Assessment of existing knowledge about menopausal changes and coping strategies among pre-menopausal women in a regional center in Maharashtra****Nilima Bhore**

Bharati Vidyapeeth deemed university, college of nursing, Sangli, Maharashtra, India

**Abstract**

**Introduction:** Menopause is a natural step in aging process, represents the end of menstruation after the last menstrual periods in the previous 12 months. It occurs gradually in women and indicates the transition from the reproductive to the post reproductive era of a women's life. It is the condition that every woman faces, in later life and can have many associates' effects, which might disrupt the quality of life. **Aim:** A study to assess the existing knowledge regarding menopausal changes and coping strategies to be adopted among pre-menopausal women working in selected colleges of Sangli Miraj Kupwad corporation area. **Subject Population and Methods:** The study consists of 95 premenopausal women working in selected colleges of Sangli Miraj Kupwad corporation area. The subjects' data were collected and analyzed statistically and association between existing knowledge regarding menopausal changes and coping strategies was determined. **Results:** There was no association between existing knowledge regarding menopausal changes and coping strategies with age, education, family status, religion, previous exposure to knowledge, and designation of the subjects. **Conclusion:** Menopause is an important event of a women's life it is important that every women be made aware related to menopausal changes and help her to cope with the changes this can help the women to go smoothly during the menopausal period.

**Keywords:** Menopausal, nursing, menstrual periods, coping strategies.

\*Corresponding author: **Dr. Nilima Bhore**, Principal, Bharati Vidyapeeth College of Nursing, Deemed University, Sangli, Maharashtra, India Email: nilimabhore@yahoo.co.in

**1. Introduction**

Nowadays, health systems have described their plans based on the family's health. Women are considered as the base of family's health, which, in addition to health management of family members, are original patterns of training and propagating a healthy lifestyle to the next generation. Women have a greater population and their average age and life expectancy is more than men, but their imperfection and disability is higher and they face special issues resulting from their

natural and physiological conditions; one of these issues is the menopausal transition period or final years of pregnancy.

Menopause has been defined as the period during which menstruation permanently ceases. It marks the natural biological end of reproduction and it is the turning points in one's life as it brings along many changes. It roughly starts in the early 40s, when for most of the people; it is the best period in their life when their achievement is at the highest point. The challenges between adulthood & despair of old age, comes the change-

Menopause in women and during which lives take a compulsory change of direction [1].

Menopause is a natural step in aging process, represents the end of menstruation after the last menstrual periods in the previous 12 months. It occurs gradually in women and indicates the transition from the reproductive to the post reproductive era of a women's life. It is the condition that every woman faces, in later life and can have many associates' effects, which might disrupt the quality of life [2].

Menopause is a normal milestone experienced annually by 2 million Indian women each year, and many women are concerned about the relation between menopause and health [3]. A Total of 130 million Indian women are expected to live beyond the menopause into old age by 2015. The menopause is emerging as an issue owing to rapid globalization, Urbanization, awareness and increase longevity in urban middle-aged Indian women, who are evolving as a homogeneous group. Improved economic conditions and education may cause the attitude of rural working women to be more positive towards the menopause. However, most remain oblivious of the short- and long-term implication of the morbid conditions associated with middle and old age, simply because of lack of awareness, and the unavailability or ever-increasing cost of the medical and social support systems. Evidence-based medicine is accessible to still only a few Indian women. Most menopausal women go untreated or use unproven alternatives [4].

In the age group of 45-50 years, fatigue (60%), lack of energy, cold hand and feet, hot flushes, cold sweats, weight gain, irritability and nervousness (50%) were common complaints. Whereas, rheumatic pains, fatigue, lack of energy (60%) followed by headache, pain in back, forgetfulness, neck and skull pain (50%) sleep disturbance and depression were frequent symptoms in the age group >50 years. This region shows the main symptoms during menopause and it not only create awareness but also help in education of women regarding an

identification of common menopausal symptoms [5].

Many women arrive at their menopause years without knowing anything about what they might expect, or when or how the process might happen and how long it might take. Very often a woman has not be informed in any way about this stage of life; it may often be the case that she has received no information from her physician or from her older female family members, or from her social group. As a result, a woman who happens to undergo a strong perimenopause with a large number of different effect, may become confused and anxious, fearing that something abnormal in happening to her. This is a strong need for more information and more education among the women regarding menopause [6]. Women have a more complex phase of old age than men because of the dominant effect in them of hormonal changes caused by menopause. However the public health care system does not acknowledge the specific health needs of older women. There has been extensive research on menopause in the West but in India only a few institutes have a recognized the potential of research on of menopause [7].

A study was conducted on physiological problems faced at menopause, in Baroda, Gujarat. A sample of 30 married women between the ages of 39-52 was selected. A checklist was used to know the frequency and intensity of various physiological problems as used perceived by the women during menopause. An interviewed guide was also used to elicit information age at menopause and other related information. Data was analyzed by calculating frequencies and percentages. The result shows that middle age is a period of change and develops and for women this includes the gradual winding down of the reproductive system and ending of childbearing years. Menopause is an important reproductive milestone in a women's life and it brings a women acutely face to face with the reality of aging. The study conclude that awareness campaigns is necessary to informed general public health worker, etc. about menopause

and associated health issues through various form of mass media [8].

World Menopause Day, October 18, saw the India menopause society telling how the change, would impact their lives. But menopause was not always such a big issue for earlier generation women. They simply viewed it as a natural stage in life [9].

Increase lifespan owing to modern medical achievement allows women to spend more than one-third time in menopausal period. Although mechanism of ovarian aging is not fully understood, menopause associated clinical problems can be controlled and improved. Estrogen replacement therapy in conjunction with a progestin regimen not only controls hot flushes, osteoporosis, dyspareunia, and other estrogen-deficiency symptoms, but also prevents the potential risk of estrogen treatment such as endometrial and cardiovascular disorders. In addition to hormonal therapy, nutritional supplement such as calcium and vitamin D, and physical exercise are essential to the well being of women in the post-menopausal period [10].

Menopause is a normal phenomena of aging and women experiencing menopause must have access to comprehensive care, including a complete history, thorough physical examination, risk factor and age-appropriate screening, and patient education. Studies confirm women's lack of knowledge concerning menopause and the need for education on bodily changes and approaches to self-care during transition. Vasomotor flushing, night sweat, vaginal dryness, shortening of the menstrual cycle with heavy flow progression to longer cycles and scant flow and eventual cessation of menses for a period of 12 months confirms menopause. A program of screening and education for self-care can enhance women's quality of life.[11].

Menopause is a natural event that occurs when women has not menstruated naturally for 12 consecutive month .Menopause is accompanied by physical, psychological changes example aches ,skin changes mood swings ,rapid heartbeat etc [12]. According to Indian menopause society (IMS) research

there are currently 65 million Indian women over the age of 45 not only that according to IMS menopause often strikes Indian women as young as 30 to 35 years. As there is world menopause day on 18<sup>th</sup> Oct to create a public awareness regarding menopause .It is postulated that by the year 2030, the world population of menopausal and post menopausal women will be 1.2 billion [13].

As menopausal women demand priority in Indian scenario due to increase in life expectancy and growing population of menopausal women, large efforts are required to educate and make this women aware of menopausal symptoms. This will helps in knowing the early symptoms, reduction of discomfort and fears and unable to seek appropriate medical care if necessary [5].

A study was conducted to assess a decade on: what have we learnt about supporting women with intellectual disabilities through the menopause. The work exploring the age of onset of menopause has suggested that the menopause is earlier in women, but studies exploring what women with intellectual disabilities understand and experience during the menopause are limited In this study 15 women with mild to moderate intellectual disabilities were interviewed using a semi structured interview on one to one basis about their knowledge and understanding of the menopause findings reveal limited accessible information about the menopause and a paucity in the women's knowledge and understanding about the menopause. This suggests a need for more accessible information, in order to increase understanding and the awareness of menopause in these women [14].

Most of the women consider menopause as a natural process and a part of aging, though most of them were bothered by menopausal symptoms, but due to lack of awareness of long-term consequence of menopause and poverty very few women sought for treatment. It is important to encourage school and other educational institutions, medical care providers and the health department to co-operate in educating women about menopause, its symptoms, long term

consequences and treatment options. This effort by educational programs and health care providers will help in increasing public awareness. It also helps significant improvement in both expectancy and quality of life of life in future since menopause is associated with many symptoms, coping with menopause may be difficult, but there are some effective ways to alleviate the symptoms and day to day change. Since different women experience menopause in different ways, coping strategies need to be tailored to individual.

Keeping in the current prevalence and incidence of menopause, it is imperative that women be educated about menopausal changes and coping strategies related to menopause. Thus the investigator feels that it is important to assess the knowledge of premenopausal women regarding menopausal changes and coping strategies in a view to develop a planned teaching programme to increase the knowledge and coping strategies of women regarding menopausal changes.

We planned to assess the existing knowledge regarding menopausal changes and coping strategies to be adopted among premenopausal women working in selected colleges of Sangli Miraj Kupwad corporation area. Association between the selected demographic variables i.e. age, education, occupation, marital status and pretest knowledge score was also observed.

## **2. Subjects and methods**

The present study was conducted in selected colleges of Sangli Miraj Kupwad corporation area. Study population consisted of premenopausal women working in colleges of Sangli Miraj Kupwad corporation area. A total of 95 premenopausal women working in selected colleges of Sangli Miraj Kupwad corporation area were included after fulfilling inclusion criteria including willingness to participate in the study, premenopausal women working in selected colleges of Sangli Miraj Kupwad corporation area, and women between the age group of 38 to 47 who have not yet attained menopause. Premenopausal

women unavailable during data collection were excluded from study.

Permission was taken from the respective authority of the colleges (ACS college, Garware junior college, Garware college of management, Walchand college, Willingdon college, KWC college, Kanya Mahavidyalaya college) to conduct the study. The researcher visited each college and selected the samples according to the criteria.

The data collection process began from 26-Aug-2013 to 04-Sep-2013. Informed consent was taken before filling the questionnaire. The investigator approached the premenopausal women's, introduced her to the premenopausal women's and explained the nature and purpose of the study. The premenopausal women's doubts were clarified and the tool was given to each premenopausal woman and was asked to fill it immediately.

Cluster sampling method was selected as a sampling technique. Samples were selected according to the criteria after obtaining permission from the authority of the selected colleges.

### **Data collection technique and tool**

The data collection tool was divided into two sections. The first section contained demographic data of the premenopausal women. The second section contained 18 questions related to knowledge on menopausal changes and its coping strategies. The correct statement was scored as 1 and the incorrect statement were scored as 0.

### **Validity and reliability of tool**

The content was validated by 14 experts. The experts were selected from various fields based on the topic i.e. 12 from obstetrics and gynecology, 1 from sociology and 1 statistician. There were some corrections given by the experts in the content questionnaire which were made and the content was translated in Marathi. Language experts established the validity of the translated tool. The reliability 'r' of the

questionnaire was 0.7 hence it was found to be reliable

### Pilot study

The pilot study for the present study was conducted from 19-Aug-2013 to 22-Aug-2013 to assess the feasibility of the study. The subjects of pilot study were excluded from the final study.

Ten premenopausal women were selected for the pilot study. The investigator selected the premenopausal women's and explained the purpose of the study, cleared their doubts and got written consent from them for the participation of the study. The tool were given to each premenopausal women and were asked to fill it immediately. Data was statistically analyzed. The pilot study did not show any major flaw in the design of questionnaire. The pilot study helped the investigator to visualize some practical problems that could be faced while conducting the study and gave better insight about research methodology.

### Statistical analysis

Based on the objectives the data was analyzed by using descriptive and inferential statistics. Demographic variables were correlated by using chi-square and Fisher's exact test and frequency distribution and percentage was used to assess knowledge.

## 3. Results

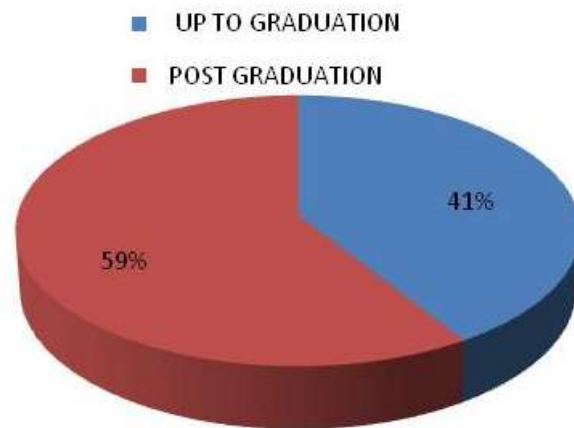
### Demographic details

All included pre-menopausal women were classified in 3 age-groups viz. <40, 40-45 and >45 years. It was observed that 35.8% menopausal women were in age group of >45 years. Least number of pre-menopausal women were identified in age group of <40 years (Table 1). Of 95 women, 58.9% completed their post graduation while remaining were undergraduate. (Fig 1) Approximate 87.4% of women were Hindu while least number of women were Christian (Table 2). Approximate 79% of women were married while 17.9% were widow. Remaining women were unmarried (Fig 2). More than half of the women (55.8%) were part of joint

family (Table 3). 85.3% of women had previous exposure to knowledge regarding premenopausal changes and its coping strategy and 14.7% were not exposed to knowledge regarding premenopausal changes and its coping strategy (Fig 3). 77.9 % of women were teaching staff and 22.1% were nonteaching staff (Fig 4).

Table 1. Age group of subjects

Age-groups	Frequency	Percent
<40	29	30.5%
40-45	32	33.7%
>45	34	35.8%



Women's Education

Figure 1. Education level of subjects.

Table 2. Religion status of subjects

Religion	Frequency	Percentage
Christian	3	3.2%
Hindu	83	87.4%
Muslim	9	9.5%

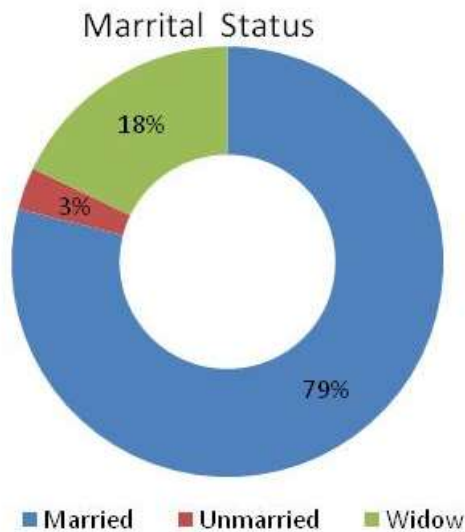


Figure 2. Marital status of subjects.

Table 3. Type of family of the subjects

Type of family	Frequency	Percent
Joint	53	55.8
Nuclear	42	44.2

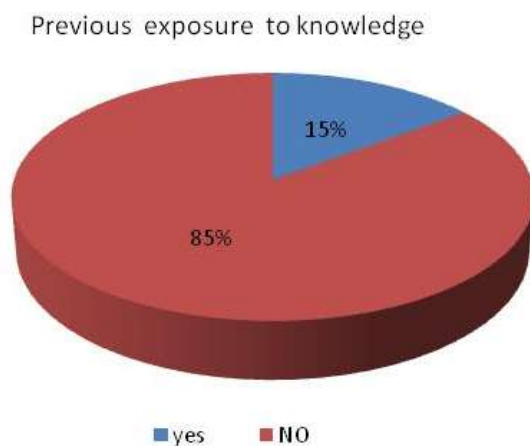


Figure 3. Previous exposure to education regarding coping strategies

### Existing knowledge regarding menopausal changes and its coping strategy of premenopausal women

Structured questionnaire was used to collect the data. The total score was 18 and was divided as 0-4 (poor knowledge score), 5-9 (average knowledge score), 10-14 (good knowledge score) and 15-18 (excellent knowledge score). It was found that majority of premenopausal women

were (60%) having good knowledge score, 30.5% were having average knowledge score and 9.5% were having excellent knowledge score (table 4).

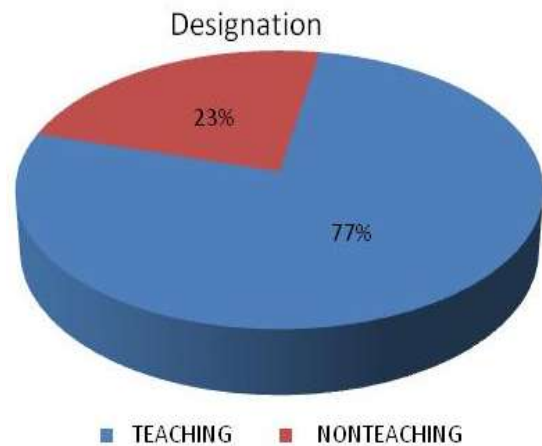


Figure 4. Designation of the subjects

Table 4. Knowledge score of the subjects

Knowledge	Frequency	Percent
5-9 (Average)	29	30.5%
10-14 (Good)	57	60%
15- 18 (Excellent)	9	9.5%

### Association between the knowledge and demographic variables

#### Age is not associated with knowledge of women regarding menopausal changes

It was observed that out of 95 samples 29 women's belong to the age group less than 40 years out of which 12 (41.40%) had average knowledge, 15 (51.70%) had good knowledge and 2 (6.9%) had excellent knowledge. Thirty-two women belonged to the age group between 40-45 out of which 9 (28.10%) average knowledge, 21 (65.60%) had good knowledge and 2 (6.30%) had excellent knowledge score. Thirty-four women belonged to the age group more than 45 years out of which 8 (23.50%) were average, 21 (61.80%) were good and 5 (14.7%) were excellent. It was found that there is no association between knowledge of women regarding menopausal changes and its coping strategy and age of women as the Fisher's Exact Test value is 0.476.

### **Education is not associated with knowledge of women regarding menopausal changes**

It was demonstrated that out of 95 samples 56 were postgraduates out of which 15 (26.80%) had average knowledge score, 33 (58.90%) had good knowledge score and 8 (14.30%) had excellent knowledge score, 39 women's were educated up to graduation out of which 14 (35.90%) had average knowledge score, 24 (61.50%) had good knowledge score and 2.60% had excellent knowledge score. It was found that there is no association between knowledge of women regarding menopausal changes and its coping strategy and education of women as the chi-square calculated value was greater than the table value (0.136).

### **Marital status is not associated with knowledge of women regarding menopausal changes**

It was demonstrated that out of 95 samples, 75 women were married out of which 23 (30.70%) had average knowledge score, 43 (57.30%) had good knowledge score and 9 (12%) had excellent knowledge score, and 20 women were unmarried out of which 6 (30%) had average knowledge score, 14 (70%) had good knowledge score. It is found that there is no significant association between knowledge of women regarding menopausal changes and coping strategy and the marital status of the women as the Fisher's Exact Test value is 0.303.

### **Type of family is not associated with knowledge of women regarding menopausal changes**

It was observed that out of 95 samples 53 women's belongs to joint family out of which 17 (32.10%) had average knowledge score, 31 (58.50%) had good knowledge score and 5 (9.40%) had excellent knowledge score and 42 women's belongs to nuclear family out of which 12 (28.60%) had average knowledge score, 26 (61.90%) had good knowledge score and 4 (9.50%) had excellent knowledge score. It was found that there is no significant association between knowledge of women regarding menopausal changes and its coping strategy and the type of family to which they belong as the Fisher's Exact Test value is 0.951.

### **Previous exposure to knowledge is not associated with knowledge of women regarding menopausal changes**

It was demonstrated that out of 95 samples 81 women's had previous exposure to knowledge out

of which 7 (50%) had average knowledge score, 5 (35.71%) had good knowledge score and 2 (14.2%) had excellent knowledge score and 14 women's were not exposed to previous knowledge out of which 7 (50%) had average knowledge score, 5 (35.71%) had good knowledge score and 2 (14.2%) had excellent knowledge score. It was found that there is no significant association between knowledge of women regarding menopausal changes and its coping strategy and previous exposure to knowledge regarding menopause as the Fisher's Exact Test value is 0.269.

### **Designation is not associated with knowledge of women regarding menopausal changes**

It was found that out of 95 samples, 22 women were nonteaching staff out of which 7 (31.80%) had average knowledge score, 14 (63.60%) had good knowledge score and 4.5% had excellent knowledge score and 73 women were teaching staff out of which 22 (30.1%) had average knowledge score, 43 (58%) had good knowledge score and 8 (11%) had excellent knowledge score. It was found that there is no significant association between knowledge of women regarding menopausal changes and its coping strategy and designation of women as the chi-square calculated value was greater than the table value 0.666.

## **4. Discussion**

It was found that in the demographic data of age 35.8% premenopausal women belongs to the age group of above 45 years, 33.7% belongs to the age group of 40-45 years and 30.5% belongs to the age group below 40 years. In education 58.9% of premenopausal women were post graduates, 36.8% were graduates and 4.3% were having secondary education. A similar study showed that higher educational level was associated with being premenopausal and current hormone use, while women with lower educational attainment were more likely to have surgical amenorrhea [15].

It was found that 87.4% of premenopausal women's belongs to Hindu religion, 9.5% belongs to Muslim religion and 3.2% belongs to Christian religion. It shows that 78.9% of women were married, 17.9% were widow and 3.2% were unmarried. A similar study conducted by Ellen B Gold, Joyce Bromberger and Sybil Samuels showed that women who were single or married were more likely to be premenopausal and less likely to be surgically amenorrheic while widowed



women were more likely to be surgically amenorrheic [15].

It shows that 55.8% of women belongs to joint family where as 44.2% belongs to nuclear family. It shows that 85.3% of women's were not having previous knowledge regarding menopausal changes and its coping strategy while 14.7% of women had previous knowledge. It shows that 77.9% were teaching staff while 22.1% were non teaching staff. A similar study conducted by B Gold, Joyce Bromberger and Sybil Samuels shows that women who were employed were more physically active than other women of their age were more likely to be using hormones.

It shows that 60% of women had average knowledge regarding menopausal changes and its coping strategy, 30.5% of women had poor knowledge and 9.5% had good knowledge. The present study revealed that there is no significant association between demographic variables and knowledge regarding menopausal changes and its coping strategy.

### **Conclusion**

Menopause is an important event of a women's life it is important that every women be made aware related to menopausal changes and help her to cope with the changes this can help the women to go smoothly during the menopausal period.

### **Implications**

The findings of the study will help nurses in the following aspects:

### **Education**

To assess the knowledge of women regarding menopausal changes; to make the women aware regarding menopausal changes and how to cope with the changes; to educate the family members regarding physical and psychological changes and support the women when she is going through menopause.; to communicate these findings to gynecology society, connecting centers; to communicate these study findings to the counselors, gynecological nurses to utilize them during the guidance session.

### **Nursing practice**

Nursing education is developing rapidly in India and nurses from our country can be found all over the world providing care and education. The education curriculum must include imparting knowledge about the use of various teaching

strategies for health education. Now a day's much importance is given to awareness and promotion of health than curative aspect. As the need of the society are continuously changing, newer components must be incorporated in the nursing curriculum. Nursing education must emphasize on preventive aspect of health.

The nursing teacher can use the result of the study as an informative illustration for the students, to make the students aware of the changing trends in the society with increase demand of knowledge regarding menopausal changes and its coping strategy as nurses we should be able to provide knowledge and care to the women undergoing menopause. Nurses can encourage the women to verbalize their feelings and doubts, with guidance and counseling and this should be introduced in the curriculum.

### **Nursing administration**

As part of administration, nurse administrator plays a vital role in the education of all the nurses. The findings of the study should be used as a basis of in-service education programs for nurses so as to make them aware of the problems of menopausal women and communicate the findings to guidance and counseling centers so that they can take an appropriate step to prepare the women for menopausal changes.

### **Nursing research**

Nursing research is an essential aspect of nursing education as it uplifts the profession, develops new nursing norms and enhances the body of nursing knowledge. It also improves the image and perception of nursing in society, which is urgently for the future of nursing.

### **Limitations of the study**

Women's were not comfortable in answering question; Limited period of time for study; limited to the experience level of the investigator.

### **Recommendations of the study**

The present study recommends the following: a similar study can be conducted on a large population for better generalization of findings; a similar study can be done in different setting; a similar study can be implemented by using planned health teaching programme.

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