



“A COMPARATIVE STUDY TO ASSESS THE LEVEL OF KNOWLEDGE REGARDING MANAGEMENT OF PERIMENOPAUSAL SYMPTOMS AMONG WORKING AND NON WORKING WOMEN IN SELECTED DISTRICT OF MAHARASHTRA, WITH VIEW TO DEVELOP AN INFORMATION BOOKLET”

Ms.Padma Gamare, Mr. Zuber Ahmed Sanadi

Assistant professor, Community health nursing, D.y Patil School of nursing, Navi Mumbai

Psychiatric Nursing, D.Y.Patil School Of Nursing, Navi Mumbai

ABSTRACT

INTRODUCTION

According to the Indian menopausal society, many women still do not identify that it is the menopause (or peri menopause) causing their symptoms, they will not conversation about it and – more importantly – they will not ask for help. In addition, if the people closer by them do not know enough about the perimenopause then it makes potentially very hard for women to talk about symptoms they are suffering at home or work.^{8 14} It is no surprise that around half of women have been reported as finding work difficult due to their symptoms of perimenopause. In addition, perhaps more worryingly, it has been estimated that around 10% of women actually stop working altogether because of their severe perimenopausal symptoms. However, it has been noticed that, recognizing the quality of women's subjective opinion of perimenopause has an essential role in level of preparedness towards the perimenopausal symptoms which would help in bringing down the severity of symptoms related to menopause.

OBJECTIVES

- 1) Assess the level of knowledge regarding management of perimenopausal symptoms among working women.
- 2) Assess the level of knowledge regarding management of perimenopausal symptoms among nonworking women.
- 3) To compare the level of knowledge regarding management of perimenopausal symptoms among working and non-working women in selected district of Maharashtra
- 4) To find out association between the level of knowledge regarding management of perimenopausal symptoms among working and nonworking women & selected demographic variables.
- 5) To develop and distribute information booklet among working and nonworking women regarding management of perimenopausal symptoms.

METHODS

In a present study, a quantitative approach and descriptive research design was applied and 50 working and 50 non working women were selected with convenient method. Data were collected using structured knowledge questionnaire and was analyzed using descriptive and inferential statistics.

RESULT

Among working women ,26% have excellent knowledge, 40% of them had good knowledge,28% showed average and 6% with below average knowledge levels.Amongst non-working women, 18% of had good knowledge, 44% displayed average knowledge and 38% exhibited below average knowledge. None of the non-working women revealed excellent knowledge The statistical significance was calculated using chi - square test and the value was $\chi^2=30.587$ which found to be very highly significant at

CONCLUSION

The comparison of overall knowledge score between working women and non-working women. Considering overall, in working women, are having 16.76 mean score where as in non-working women are having 12.26 mean score, so the difference is 4.50. The difference between working women and the non-working women knowledge score is large and it is statistically significant. Differences between

working women and non-working women knowledge was analyzed using unpaired test. $T=3.595^{***}$ significant at level $p=0.001$, $DF=98$.

KEYWORDS- Perimenopausal Symptoms, Menopausal Transition Management Of Perimenopausal Symptoms, Working Women And Non Working Women

BACKGROUND

Menopause transition is the stage where frequent social and hormonal characteristic changes occur in a woman and increasing in life expectation, has led most of the women to attain menopause. As of now, the utilization of health services and seeking help from health professionals to overcome menopause related problem was found be very low. Women approach regarding menopause are powerfully predisposed by social, cultural, occupational and economical situations in which they live and also reproduce the dissimilarity in modes of management for or perceptions of its symptoms.

A study was conducted on awareness of menopause among educated women of Vadodara and reported that only 40% of the women had adequate knowledge about menopause and only 8% had acquired knowledge from doctors. They concluded that most of the educated women are not aware of menopause.¹⁶

A study was conducted on the emergence of menopause in India. It revealed that a

total of 130 million Indian women are expected to live beyond the menopause into old age by 2015. The results showed that a higher number of illiterate women experience premature 18

menopause than educated, the percentage of women hit by premature menopause is marginally lower in urban areas (16.1 percent) as against rural (18.3 percent). 17

Cross-sectional study was conducted in Mumbai, Maharashtra carried out among st

women in the age group of 40 to 50 years during the period of February 2012 to February 2015 to know the epidemiological profile of peri and postmenopausal women. Study concluded that the most common problem faced by the respondents was somatic symptoms. Among those the most common was muscle joint pains 65.1%.18

A study was conducted in Mangalore city, Karnataka, South India, on problems

associated with menopause The study revealed that 62% of the women experienced hot flushes, 46% had headache and developed urinary tract infection, 54% had back pain, 70% had joint and muscle pain, 58% suffered insomnia, 48% gained weight and developed depression,68% had mood disturbances, 54% experienced fatigue. The study recommends Yoga Therapy as one of the treatment methods to relieve the menopausal symptoms19.

Study from India reported working women suffer more from psychological problems

whereas non-working women showed a greater prevalence of somatic symptoms. Many middle-aged women worry about losing their motherhood and attractiveness after menopause, and may suffer from the physical symptoms of menopause. Moreover, perimenopausal women may experience a sense of loss and insignificance after they stop giving values to maternal roles as their children grow and become independent.

In a country like India, women don not open up about their problems related to menopausal health. It is crucial to transform their perception on menopause. Over the last 7- 8 years, many interventions have been taken by Indian Menopause Society in shifting the negative perception on menopause toward positive. However, women still neither start seeking help nor stop feeling dithered, which result in exacerbation on menopausal symptoms. To alleviate menopausal symptoms and prevent menopause-related chronic diseases, awareness and preparedness in menopause transition phage is thought to be as key analyst.

METHODS

Research Approach

The research approach is an umbrella that covers the basic procedure for conducting research.

Quantitative research approach was considered appropriate for the present study. This study was intended to compare the level of knowledge regarding management of perimenopausal symptoms among working women and nonworking women in selected area.

Research Design

Research design is the plan, structure and strategy of the investigation of answering the research questions, it is the overall plan or blue print the researcher selects to carry out the study. The

comparative research design was used to compare the level of knowledge regarding management of perimenopausal symptoms among working women and nonworking women in selected area.

Research Setting

The research setting selected for the present study was urban and rural at selected district of Maharashtra.

2. Identification of Target and Accessible Population

2.1 Target Population

Target population is the group of population that the researcher aims to study and to whom the study findings will be generalized. The target population selected for the study was working women and non-working women at selected district of Maharashtra.

2.2 Accessible Population

Accessible population is the list of population that the researcher finds in the study area. The accessible population selected for the study was working women and non-working women at selected district of Maharashtra.

3. Sample

Sample is the subset of population elements. Sample chosen for these study were working women and non-working women at selected district of Maharashtra.

Sampling Technique

Sampling is the process of selecting a portion of the population to represent it Convenient sampling technique was been used for the present study. The convenient sampling is a type of non-probability sampling method in which the researcher selects the subjects for the study on the basis of convenience of the researcher.

Sample Size

The sample size selected for the study was 50 working women and 50 non-working women at selected district of Maharashtra.

ELIGIBILITY CRITERIA

Inclusion Criteria

The study includes women who are-

- Both Working and non- working residing at selected area
- Women between the age group of 30-50 year.

- Women who are willing to participate in the study.
- Women who are able to read and understand Marathi or English

Exclusion Criteria:-

The study excludes the women who are:-

- Not Available at the time of data collection.
- Already in phase of menopause.

VARIABLES

Variables are the characteristics that vary among the subjects being studied. It is the focus of the study and reflect the empirical aspect of the concepts being studied.

Research Variables

The research variables in this study were level of knowledge regarding management of perimenopausal symptoms among working and non-working women

Demographic Variables

The demographic variables in this study were as age, education, occupation, area, type of family, marital status, dietary pattern, habits, source of information, age at menarche, regularity of menstruation, duration of menstrual cycle, nature of bleeding, surgery

Statistical tests used for analysis of the data are as follows;

1. Descriptive statistics were used to present the Frequency and percentage of demographic variables.
2. Inferential statistics such as;
 - i. Unpaired t-test was used to compare the mean score differences in level of knowledge regarding management of perimenopausal symptoms among working women and non working women.
 - ii. Chi-square test was used to find out the association of level of knowledge regarding management of perimenopausal symptoms with working women and non -working women.
 - iii. Fisher's exact test was used to find out the association between the level of knowledge regarding management of perimenopausal symptoms among working women and non working women and selected demographic variables

RESULTS

SECTION I: A) Distribution of selected demographic variables variables.

Table1: Demographic profile

Demographic variable		Working women		Non-Working women	
		Frequency	%	Frequency	%
AGE	A) 30-35	18	36	17	34
	B) 36-40	9	18	8	16
	C) 40-45	16	32	13	26
	D) 46-50	7	14	12	24
EDUCATION	A) Primary	0	0	15	30
	B) Secondary	12	24	21	42
	C) Graduate	34	68	11	22
	D) Post Graduate	4	8	3	6
OCCUPATION	A) Working	50	50	0	0
	B) Nonworking	0	0	50	50
AREA	A) Urban	25	50	25	50
	B) Rural	25	50	25	50
TYPE OF FAMILY	A) Nuclear	26	52	35	70
	B) Joint	22	44	13	26
	C) Extended	2	4	2	4
MARRITAL STATUS	A) Married	44	88	49	98
	B) Unmarried	6	12	0	0
	C) Widow	0	0	0	0
	D) Divorced	0	0	1	2
DIETARY PATTERN	A)Vegetarian	5	10	6	12
	B) Mixed	45	90	44	88
HABITS	A)Tobacco/Betel Chewing	0	0	9	18
	B) Drinking Coffee And Tea	14	28	14	28
	C) No Habits	36	72	27	54
SOURCE OF INFORMATION	A)Friends/Peer Group	13	26	4	8
	B) Mass Media	17	34	22	44
	C) Relatives	18	36	22	44
	D) Health Personnel	2	4	2	4

Table 1 shows that

➤ Study group of 36% of working women were in the age group 30-35 years, 32% of them were in the age group of 40-45 years, 18% were in the age group of 36-40 years and 14% were at 46-50 year of age.

Whereas 34% of non-working women were in the age group of 30-35 years, 26% of them were in the age group of 40-45 years, 24% were in the age group of 46-50 years and 16% were at 36-40 year of age. Educational status of the group of working women reveals that 68% had graduate, 24% had education up to secondary in standard respectively 8% had the education up to post graduation Whereas Educational status of the group of working women revealed that, 42% were with secondary education, 30% had primary education, 22% were graduates and 6% post graduates

➤ The data regarding occupation confirms that 50% of the study group was working, Whereas 50% was non-working (homemaker).

➤ The data concerning area shows that 50% of working women were residing at urban area and remaining 50% were at rural area.

Whereas 50% non-working women belongs to urban area and another 50% belongs to rural area.

➤ Type of family of working women rectifies that 52% had nuclear family, while 44% had joint family and 4% had extended family.

However 70% of non-working had nuclear family, while, 26% had joint family and 4% had extended family.

➤ 88% working women were married and 12% were unmarried.

Whereas among non working women 98% were married and 2% were unmarried.

➤ In this study 90% of working women had mixed dietary pattern and 10% were vegetarian.

While 88% of nonworking women had mixed dietary pattern and 12% were vegetarian.

➤ 72% of working women had no habit, whereas 28% of them had a habit of drinking excessive coffee or tea.

Whereas among nonworking women 54% had no habits, 18% were with habits of Tobacco /betel chewing and 28% had habits of drinking coffee and tea.

➤ 36% of working women received information from relatives, 34% used mass media, and 26% were known through friends and only 4% of them were informed by health personnel Whereas in non-working women source of information are 44% relatives, 44% mass media, 8% from friend and 4% from health personnel.

SECTION B: DISTRIBUTION OF OBSTETRICAL VARIABLES. Table 2: OBSTETRIC VARIABLES

Obstetric History	Working women		Non-working women	
	(f)	%	(f)	%
A) below 11 years	0	0	2	4

Age at menarche	B) 11-13 years	26	52	16	32
	C) 14-16	23	46	30	60
	D) above 16 years	1	2	2	4
Regularities in menstrual cycle	A) regular	30	60	25	50
	B) irregular	18	36	22	44
	C) anyother	2	4	3	6
Duration of menstruation	A) 3-5 days	39	78	37	74
	B) 6-7 days	10	20	12	24
	C) mare than 7 days	1	2	1	2
Nature of bleeding	A) within normal	36	72	33	66
	B) excessive bleeding	13	26	17	34
	C) any other	1	2	0	0
History of any surgery	A) yes	24	48	22	44
	B) no	26	52	28	56
	C) if yes then specify	24	48	22	44

Table 2 illustrates that

➤ In the study group of working women 52% attained menarche at the age of 11-13 years, 46% of them attained menarche at the age of 14-16 year and 2% of them attained menarche at the age of above 16 year.

Whereas 60% of nonworking women attained menarche at the age of 14-16 years, 32% of them were at the age of 11-13 years, 4% attained menarche at the age group of bellow 11 year and 4% attained the same above 16% year.

➤ As far as, the regulation of menstrual cycle is concerned, 60% of working women were having regular menstruation, and 40% of them were having irregular menstruation. Whereas 50% of non-working women were having regular menstruation, 50% women were having irregular menstruation.

➤ Data regarding duration of menstruation reveals that 78% of the working women had 3-5 days and 20% of them had 6-7 days and 2% of them had above 7 days. Whereas 74% of nonworking women had menstruation for 3-5, 24% had 6-7 days and 2% had menstruation above 7 days.

➤ Considering the nature of bleeding most of them (i.e.) 72% of working women had normal flow, 28% of them had excessive bleeding. Whereas 66% of nonworking women had normal bleeding, 34% of them had excessive bleeding.

➤ 52% of working women were not undergone any surgery and 48% of them had undergone surgery.

Whereas 56% of non-working women did not undergo any surgery and 44% of them did undergo surgery. Data regarding specification of surgery revealed that, both working women and non-working women with history of surgery underwent Tubectomy.

SECTION II: ASSESSMENT OF LEVEL OF KNOWLEDGE.

A. Assessment of Knowledge Percentage among Women of Selected Area.

TABLE 3: Percentage of knowledge about management of perimenopausal symptoms among working women.

Knowledge on	No. of question	Min-max score	Mean	SD	% of mean score
General information about menopause	05	0 - 5	3.18	1.240	63.6%
Causes, signs and symptoms of perimenopause	10	0 - 10	6.74	2.117	67.40%
Management of Perimenopause	10	0 - 10	6.84	2.014	68.40%
Overall	25	0 - 25	16.76	4.303	67.04%

Table 3 shows aspects wise percentage of knowledge regarding management of working women. They are having more knowledge in the management of perimenopause i.e. 68.40% and less knowledge in general information of menopause 63.60%, overall they are having 67.04% of knowledge score.

FIGURE -16 A bar diagram shows Knowledge Percentage among working women

TABLE 4: Percentage of knowledge about Management of Perimenopausal Symptoms among Non-working Women.

Knowledge on	No. of question	Min-max score	Mean	SD	% of mean score
General information about menopause	05	0 - 5	2.07	2.188	41.20%

Causes, signs and symptoms of perimenopause	10	0 - 10	5.16	1.742	47.20%
Management of Perimenopause	10	0 – 10	5.04	2.010	50.40%
Overall	25	0 – 25	12.26	3.416	47.32%

Table 4 shows each aspects wise percentage of knowledge regarding management of nonworking women. They are having more knowledge in the management of perimenopause 50.40% and less knowledge in general information of menopause 41.20%, overall they are having 47.32% of knowledge score.

B. Assessment of Level of Knowledge Among Working Women. Table 5: level of knowledge of working women

Level of knowledge	Working women	%
Below average	3	6%
Average	14	28%
Good	20	40%
Excellent	13	26%
TOTAL	50	100%

Table 4 shows level of knowledge of working women. 26% of working women have excellent knowledge, 40% are having good knowledge and 28% are having average and 6%. below average knowledge respectively.

Table 6: level of knowledge of nonworking women

Level of knowledge	Non-working women	%
Below average	19	38%
Average	22	44%
Good	9	18%
Excellent	0	0
TOTAL	50	100%

Table 6 shows level of knowledge of non-working women.18% non-working women have

good knowledge, 44% having average knowledge, 38% having below average knowledge and nobody excellent knowledge, i.e. 0% .

SECTION III: COMPARISON OF KNOWLEDGE SCORE

A. Comparison of Mean Knowledge Score Table 8: Comparison of Mean Knowledge Score

Knowledge on	Knowledge score				Independent T test
	Working Mean	SD	Nonworking Mean	SD	
General information about menopause	3.18	1.240	2.06	1.168	T=4.649, P<0.001***t
Causes, signs and symptoms of perimenopause	6.74	2.117	5.16	1.742	T=4.075,P<0.001***
Management of Perimenopause					

*significant at $P \leq 0.05$ ** highly significant at $P \leq 0.01$ *** very high significant at $P \leq 0.001$

Table no. 7 shows the comparison of knowledge among working and non-working women regarding management of perimenopausal symptoms.

To begin with the aspects of **General information**, working women scored the mean of

3.18 whereas non-working women were found with the mean scores of 2.06, which confirmed the difference of 1.12, which is statistically very highly significant i.e. $T=4.649$ at $P<0.001$

Considering the aspects of **Causes, signs and symptoms**, working women are having mean score of 6.74 where as non-working women are having mean score 5.16 with the difference of 1.58, and is found statistically very highly significant i.e. $T=4.075$ at $P<0.001$.

While the aspects of **Management of menopause** reflects, 6.84 as the mean score of working group and 5.04 as those of non-working group with the difference of 1.8 which was again found statistically very highly significant i.e. $T=4.474$ at $P<0.001$.

Taking all the aspects into account, the overall mean score of working women and non working women was 16.76 and 12.26, respectively. The difference between mean knowledge scores of working and non-working women is large i.e. 4.50 and it is statistically very highly significant with $T=5.792$ at $P<0.001$. The statistical significance was calculated by using **Unpaired T-Test**.

VARIABLES	Max score	Mean ± SD	Unpaired 't' test	Mean Difference in knowledge with 95% Confidence interval	Percentage of knowledge gain with 95% Confidence Interval	
					Lower	Upper
Working women	25	16.76 ± 4.303	T=5.792 P=0.001*** Df=98	4.500	2.958	6.042
Non-working women	25	12.26 ± 3.416				

B COMPARISON OF OVERALL KNOWLEDGE SCORE

Table 9: Comparison of Overall Knowledge Score

* Significant at $P \leq 0.05$. ** highly significant at $P \leq 0.01$. *** very high significant at $P \leq 0.001$

Table 9. presents the comparison between overall knowledge scores of working women and non-working women, which renders 16.76 and 12.26 as mean scores of working women non-working women respectively, with the difference of 4.50 which is learned to be large and statistically very highly significant i.e. $T=5.792$, $P < 0.001$ at $DF=98$. Differences between working women and non-working women knowledge was analyzed using **Unpaired T-Test**.

B. COMPARISON OF LEVEL OF KNOWLEDGE

Table 10: Comparison of Level of Knowledge among Working and Non-working Women

Level of knowledge	Working women		Non-working women		Chi square test
	No. of women	%	No. of women	%	
Below average	3	6%	19	38%	$\chi^2=30.587$ $P < 0.001$ *** Df= 3.
Average	14	28%	22	44%	
Good	20	40%	9	18%	
Excellent	13	26%	0	0	
TOTAL	50	100%	50	100%	

* Significant at $P \leq 0.05$, ** highly significant at $P \leq 0.01$, *** very high significant at $P \leq 0.001$

Table no. 10 shows the level of knowledge regarding management of perimenopausal symptoms among working women and non-working women. Among working women, 26% have excellent knowledge, 40% of them had good knowledge, 28% showed average and 6% with below average knowledge levels. Amongst non-working women, 18% of had good knowledge, 44% displayed average knowledge and 38% exhibited below average knowledge. None of the non-working women revealed excellent knowledge. The statistical significance was calculated using chi-square test and the value was $\chi^2=30.587$ which found to be very highly significant at $P < 0.001$ with $Df=3$.

DISCUSSION

The major findings of the study

The First objective was to assess the level of knowledge regarding management of perimenopausal symptoms among working women.

Assessing the aspects wise percentage of knowledge regarding management of perimenopause symptoms among working women reveals that they are having more knowledge in the management of perimenopausal symptoms i.e. 68.40% and less knowledge in general information of menopause 63.60%, overall, they have 67.04% of knowledge score.

Whereas the level of knowledge among working women elicit 26% of them have excellent knowledge, 40% have good knowledge and 28% are having average and 6% of them have knowledge below average..

Nilima Bhore.(2015) A study to assess the existing knowledge regarding menopausal changes and coping strategies among premenopausal women working in selected colleges of Sangli, Miraj Kupwad corporation area. study was concluded that premenopausal working women are known to be menopausal symptoms and coping strategy .Working women have more opportunities not only in getting knowledge but also to fulfill their needs related to menopausal health but also in approval, appreciation, and support, as they have a wide range of colleagues, friends etc. outside their home. It was found that the majority of working women had good knowledge.⁶⁵

A similar study was conducted by Ms. Veerpal Kaur, et.al "A Descriptive Study to Assess the Knowledge Regarding Premenopausal Symptoms and Its Management among Middle Aged Women in Bhucho Mandi, Bathinda, Punjab. Objectives of the study were to assess the knowledge regarding premenopausal symptoms and its management among middle aged women. To find an association between the knowledge regarding premenopausal symptoms and its management among middle aged women with their selected demographic variables Women experience various turning points in their life cycle, which may be developmental or transitional. Midlife is one such transitional period which brings about important changes in women. One of those important changes that occur in this stage of life is menopause. Menopause is an unavoidable change in reproductive life cycle, that every women experience in her middle age and beyond. Menopause normally occurs between 45-50 years. The middle aged women should be trained for observing and deviations from normal health to maintain effective surveillance and providing health education for developing desirable health habits. Results: It was found that the majority 104 (52.0%) of respondents had good knowledge regarding premenopausal symptoms and its management. The study was concluded that It was found that the majority of respondents had good knowledge regarding premenopausal symptoms and its management.⁶⁶

Second objective of the study was to assess the level of knowledge regarding management of perimenopausal symptoms among nonworking women.

Assessing the each aspects wise percentage of knowledge regarding management of nonworking women revealed that they are having more knowledge in the management of perimenopause i.e 50.40% and less knowledge in general information of menopause 41.20%, overall they are having 47.32% of knowledge score. Table 4

Whereas level of knowledge of non-working women elicit 18% non-working women have good knowledge, 44% having average knowledge, 38% having below average knowledge and nobody excellent knowledge, i.e. 0% . Table 6

A related study was done by Doyel and Subha [jan 2018] showed that almost all the menopausal symptoms were significantly higher in the rural population than in the urban population. Because the rural women of this study group were mostly illiterate, they were less likely than the urban women to have knowledge on managing and/or preventing the menopausal problems. This could have been a probable explanation for the higher prevalence of the symptoms among the rural women than their urban counterparts.⁶⁷

The findings of present study are alike **Pricesl, Storey, Lake M., et. al, 2014**, a study was conducted to explore the menopause experiences of women living in rural areas. 25 women who were living in rural areas in Nova Scotia, Canada are interviewed. Women living in rural communities describe a need to understand fully the intensity of menopause-related symptoms, including changes to their physical and mental wellbeing. Participants described effective in enhancing the knowledge of premenopausal women regarding menopausal changes.⁶⁸

The Third objective of the study was to compare the level of knowledge regarding management of perimenopausal symptoms among working and nonworking women.

To begin with the aspects of General information, working women scored the mean of 3.18 whereas non-working women were found with the mean scores of 2.06, which confirmed the difference of 1.12, which is statistically very highly significant i.e. $T=4.649$ at $P<0.001$.

Considering the aspects of Causes, signs and symptoms, working women are having mean score of 6.74 where as non-working women are having mean score 5.16 with the difference of 1.58, and is found statistically very highly significant i.e. $T=4.075$ at $P<0.001$.

While the aspects of Management of menopause reflects, 6.84 as the mean score of working group and 5.04 as those of non-working group with the difference of 1.8 which was again found statistically very highly significant i.e. $T=4.474$ at $P<0.001$.

Taking all the aspects into account, the overall mean score of working women and non-working women was 16.76 and 12.26, respectively. The difference between mean knowledge scores of working and non-working women is large i.e. 4.50 and it is statistically very highly significant with $T=5.792$ at $P<0.001$. The statistical significance was calculated by using **Unpaired T-Test**. Table no 9.

The comparison of level of knowledge regarding management of perimenopausal symptoms among working women and non-working women. illustrates, 26% working women have excellent knowledge, 40% of them had good knowledge, 28% showed average and 6% with

below average knowledge levels.

Amongst non-working women, 18% of had good knowledge, 44% displayed average knowledge and 38% exhibited below average knowledge. None of the non-working women revealed excellent knowledge

The statistical significance was calculated using **chi - square test** and the value was

$\chi^2=30.587$ which found to be **very highly significant at $P<0.001$** with $Df=3$.

The above findings are consistent with a comparative study conducted by Nabil Mahmd et al (2015) on Perimenopausal psychiatric aspects in urban versus rural Egyptian women in Menoufiya. working women had low stress and better well-being as compared to non-working women in the menopausal phase. The perimenopausal group had significantly ($P < 0.001$) greater stressful life events than premenopausal women. 66% of perimenopausal women were at a definite risk for illness and 34% were at a moderate risk for illness). Perimenopausal women with psychiatric disorders had significantly greater stressful life

events than those without psychiatric disorders. They also found that 36 (72%) perimenopausal women had significantly ($P < 0.01$) positive attitude compared with five (25%) premenopausal women. A similar comparative study was conducted by Supriya shrivastav (august 2014) which aimed exploring the difference between stress and wellbeing of perimenopausal and menopausal working and non-working women. For this purpose the sample of 120 women (30 perimenopausal working, 30 perimenopausal non-working, 30 menopausal working and (30menopausal non-working) were selected through purposive sampling technique. The study was concluded that working women had low stress and better well-being as compared to non-working women in the menopausal phase. Working women have more opportunities not only in getting knowledge to fulfill their needs related to menopausal health but also in approval, appreciation, and support, as they have a wide range of colleagues, friends etc. outside their home. Whereas in many cases non-working women have limited range of friends, social life etc., they have to rely on their husbands or family members for constant approval and appreciation. Working status also helps in maintaining a positive self-esteem in menopausal women. Hence it can be concluded that if a women is involved in some type of job she can cope better with the stress related to menopause and improve her well-being.⁶⁹

4) The fourth objective of the study to find out association between the level of knowledge regarding management of perimenopausal symptoms among working and nonworking women & selected demographic variables.

The association between level of knowledge of working women and nonworking women and with their selected demographic variables revealed that only area was found to be significantly associated with level of knowledge regarding management of Perimenopausal symptoms. The women residing in urban area were found to have more knowledge regarding management of Perimenopausal symptoms than those reside in rural area. Obstetric variables were not significant. Association between demographic variables and their level of knowledge among working and nonworking women was analyzed using Fisher's exact test. Table no. 10

A similar study was conducted by Shu Xo, Zheng (2015) and found out the variation in

menopausal symptoms with age, education and working/non- working status in North-Indian sub population. The MRS scale, a self-administered standardized questionnaire was applied with additional patients related information for analysis. The results were evaluated for psychological, somatic and urogenital symptoms. Average age at which menopause set in the cohort was found to be 48.7 ± 2.3 yrs. The cohort was divided into peri (35- 45) menopausal, early menopause (46-51) and the postmenopausal (52-65). A significantly higher % of perimenopause women (36%) showed a psychological score ≥ 7 while a higher % of postmenopausal women showed somatic score and urogenital score ≥ 7 . Working women suffer more from psychological symptoms whereas nonworking women showed a greater incidence of somatic symptoms. Educated women showed a lower incidence of psychological and somatic symptoms. Thus, the study concludes that age; level of education, habitat (area of residence) and working/non- working status may also contribute to significant variation of menopausal symptoms.⁷⁰

5) The fifth objective of the study to develop and distribute information booklet among working and nonworking women regarding management of perimenopausal symptoms.

To develop the information booklet, various authentic sources such as books, journals, articles and web sources were reviewed and analyzed and then the scrutinized information was compiled into booklet. The booklet was then validated by many experts not only in the subject but also the experts in English and Marathi language. The booklet covers a systematic, simplified and overall knowledge on general aspects of menopausal and perimenopausal stage, their symptoms and home remedy to manage of perimenopausal symptoms which would definitely help the study samples to manage and overcome ailment related to perimenopausal stage.

After gathering a relevant data was from selected samples by administering structured knowledge questionnaire on management of perimenopausal symptoms and subsequently, the information booklet was distributed to the samples under study. The present study was supported by findings of Rukmuni et.al(2015) descriptive study was conducted to assess knowledge on menopause among pre- menopausal women at selected area of Pondicherry. With objectives to assess the existing knowledge & to find out the association between knowledge and demographic variables of premenopausal women about menopause. A Quantitative research approach and cross sectional descriptive design was used. 300 samples were selected by simple random sampling technique. & structured knowledge questionnaire was applied. The study was done for one month & fifteen samples per day were assessed. The result showed that subjects were in poor knowledge (43%) of ovulation, menopausal problem, medication, nutrition and coping strategies but moderately adequate (58%) in meaning of menopause and adequate knowledge (75%) in the aspect of psychological problem. The finding from Chi-Square test at 5% level revealed that there was no significant between knowledge and demographic variable. Hence the study concluded that the subjects were in need of health awareness program or instructional guide to cope with menopausal problems among the premenopausal women. Researcher distributed booklet on coping strategies.⁵⁵

A similar study was conducted by Kumar Mishra, 2011. Individual variations in menopausal

symptoms were linked to rural urban settings and the associated 11cultural beliefs Cultural factors influencing women's physical and psychological health varied across societies. Attitudes towards menopause may be related to different cultural practices and it also depends on the social construction of menopause. Menopausal transition is the stage at which the accumulated risk factors can lead to chronic diseases and disability. Unless women take preventive care, the burden of disease may be very high in the later ages (Meeta, 2008). Individual variations in menopausal symptoms were linked to rural urban settings and the associated 11cultural beliefs. Any analysis of menopausal symptoms reporting in India should take cognizance of this.⁴⁴

CONCLUSION

The comparison of overall knowledge score between working women and non-working women. Considering overall, in working women, are having 16.76 mean score where as in non-working women are having 12.26 mean score, so the difference is 4.50. The difference between working women and the non-working women knowledge score is large and it is statistically significant. Differences between working women and non-working women knowledge was analyzed using unpaired t test. $T=3.595^{***}$ significant at level $p=0.001$, $DF=98$.

NURSING EDUCATION

- Periodic conferences, seminars workshops and symposium can be arranged to update the knowledge with recent developments.

NURSING ADMINISTRATION

- The nurse administrator should make the responsibility to inculcate the Notion of the holistic care in the staff
- The nurse administrators should encourage the staff nurses to give importance on health tasks.
- Nurse administrators should organize an in-service education program for nurses about the recent developments in menopausal problem management. Nurse administrators should emphasize counseling programs for the clients.

NURSING RESEARCH

This study is a preliminary set up for exploring the concept of knowledge on management of perimenopausal symptoms. The results of this study encourage women in adopting a healthy lifestyle in coping with perimenopausal problems.

LIMITATIONS

- The study was focused only on age group between 30 to 50 years.
- The study was limited 100 samples.

6.4 RECOMMENTATIONS

The study recommends the following for further research

1. A Similar study can be undertaken on a larger sample.
2. A Comparative study can be performed between the pre -menopausal and post-menopausal women
3. A Study can be conducted to compare the menopausal problems among Women with natural menopause to women with surgically induced menopause.

REFERENCES

JOURNALS:

1. Shoji J. Life stages and mental development. *Current Information of Maternal & Child Health*. 2016;54:19–23.
2. Chiu YW, Moore RW, Hsu CE, Huang CT, Liu HW, Chuang HY. Factors Influencing Women's Quality of Life in the Latter Half of Life. *Climacteric*. 2018;11(3):201-11
3. Nayak BK. Menopause. *Health Action* 2018 March; 21(7):18-20.
4. Currie H, Martin K. What is the Menopause? [Phamplate]. London: National Health Statistics. 2015.
5. Jean Hailes Foundation for Women's Health. Menopause: Question and Answer [Phamplate]. Victoria. 2018.
6. Twiss JJ, Wegner J, Hunter M, Kelsay M, Rathe-Hart M, Salado W et al. Perimenopausal symptoms, quality of life, and health behaviors in users and nonusers of hormone therapy. *J Am Acad Nurse Pract* 2007 Nov; 19(11):602-13.
7. Tsehay, Mulatee, Sellakumar et al. treatment menopause NHS media .2018;21(10):500-10
8. Kato I, Toniolo P, Akhmed khanov A, Koenig KL, Shore R, Zeleniuch-Jacquotte A. Prospective study of factors influencing the onset of natural menopause. *J Clin Epidemiol*. 2012 Dec; 51(12):1271-6.
9. Brunner and Suddarth. (2007), Text book of medical surgical nursing, XI edition, Philadelphia: J. B. Lippincott Company
10. Arroyo A, Yeh J. Understanding the menopausal transition, and managing its clinical challenges. *Sexuality, Reproduction & Menopause* 2015; 89 (2):140-1.
11. Kenneth Hill. The demographic of menopause maturities. 23 2(2), 113-127, 2000
12. Sharon Wonshik. (2008), Menopausal symptoms experience: an online forum study *Journal of advanced nursing*, Vol 62(5).
13. Kakkar V, Kaur D, Chopra K, Kaur A, Kaur IP. "Assessment of the variation in menopausal symptoms with age, education and working/non-working status in north- Indian sub population using menopause rating scale (MRS)" *Maturitas*. 2007 Jul 20;57(3):306-14. Epub 2007 Apr 3

14. [Ensieh Noroozi, Nayereh Kasiri Dolatabadi, et al.](#) Knowledge and attitude toward menopause phenomenon among women aged 40–45 years. 2013 May 30; 2:25. doi: [10.4103/2277-9531.112701](#)
15. [Paul Owajiony Dienne, et al.](#) Frequency of Symptoms and Health Seeking Behaviors of Menopausal Women in an Out-Patient Clinic in Port Harcourt, Nigeria. *Glob J Health Sci.* 2014 Jul; 5(4): 39–47.)
16. Fuh JL, Wang SJ, Lee SJ, Lu SR, Juang KD. Quality of life and menopausal transition for middle-aged women on Kinmen Island. *Quality Life Res* 2018;15(4):613-8
17. Akanksha Singh and Shishir Kumar Pradhan. Menopausal symptoms of postmenopausal women in a rural community of Delhi, India. A cross-sectional study. *J Midlife Health.* 2014 Apr-Jun; 5(2): 62–67.
18. Bromberger et. al. Psychological distress and natural menopause am j public health, 2011 sep 91(9):1435-42
19. Twiss JJ, Wegner J, Hunter M, Kelsay M, Rathe-Hart M, Salado W. Perimenopausal symptoms, quality of life, and health behaviors in users and nonusers of hormone therapy. *J Am Acad Nurse Pract* 2017 Nov; 19(11):602-13
20. Fuh JL, Wang SJ, Lee SJ, Lu SR, Juang KD. Quality of life and menopausal transition for middle-aged women on Kinmen Island. *Quality Life Res* 2018.15(4):613-8.
21. Umakant Valvekar, S. Viswanathan. Knowledge of qualified paramedical staffs in understanding the symptomatology and hormonal replacement therapy in menopause. *IJCRR - Vol 08 Issue 07, April.* Pages: 08-12. Date of Publication: 12-Apr-2016)
22. Sengupta A. The emergence of menopause in India. *Climacteric* 2013 June 2; 6(2): 92-95
23. Desai Monali. Awareness about menopause among educated women. *J.Obstet Gynecol Ind.* 2013 may/june; 53(3): P 271-273
24. Tandon VR, Mahajan A, Sharama A. et al. "Prevalence of cardiovascular risk factors in Post-menopausal women. A rural study". *J Midlife Health* .2010 Jan;1(1):26-29
25. Pradhan and Srivastava), Menopause and other correlates, *Indian journal of preventive and social medicine.* .(2003; Vol (34)1.
26. Lu, et al., cross-sectional survey in Australia Out of 29 symptoms, the most frequent symptom reported. (2016), *Menopause* ,Vol 12(3).
27. Ashwin Jadhav¹, Yogita Bavaskar^{2*} *International Journal of Community Medicine and Public Health* .September 2017 .Vol 4 Issue 9 Page 3089
28. Pathak V et al. Study to assess knowledge, attitude and practice regarding menopause among menopausal women attending outdoor in tertiary care centre *Int J Reprod Contracept Obstet Gynecol.* 2017 May;6(5):1848-1853)
29. Nusrat Nisar .et. al Knowledge and attitude and experience of menopause. *J Ayub Med Coll Abbottabad journal* 2008vol 20 pp 56-59
30. Shu Xo, Zheng Y, Cai H, Guh, chen Z " Soy Food Intake And Breast Cancer Survival" *Jama* 2009 Dec 9:302(22):2437-43 S Puri, V et.al (2007), Management of menopausal

women, The new england journal of medicine, Vol 355(22). Choudhury M.L. (2005), Gynaecology for students, First edition, Kolkata: unique print and process.

31. . Larry. J. Copeland. (2000), Text book of gynaecology, Second edition, W.B Saunders

32. Varney's. (2005), Text book of midwifery, IV edition, All India Publishers and distributors

33. Dennerstein L. (1999), Mood and menopausal transition, journal of nervous and mental disease, Vol 187(11).

34. Gayathry Nayak et al. A Study of quality of life among perimenopausal women in selected coastal areas of Karnataka, India J Midlife Health. 2012 Jul-Dec; 3(2): 71–75

35. Mansi Patel, Venu Shah, et al. Current scenario of menopause-related symptoms. 2018; 4(5): 82-86 Shantagayawali, Subedi SN, Yasmin N et al. Health care seeking practice for menopausal problems among women in Syangja district, Nepal. I

36. nt J Health Sci Res. 2016; 6(8): 247-253

37. Elżbieta Grochans. Et. al. Analysis of Sociodemographic, Psychological, and Genetic Factors Contributing to Depressive symptoms in Pre-, Peri- and Postmenopausal Women Int J Environ Res Public Health. 2018 Apr; 15(4): 712. Published online 2018 Apr 10

38. Vasileios, grigoriou, Aretiaugoulea. cross-sectional observational study on Prevalence of vasomotor, psychological, psychosomatic and sexual symptoms in perimenopausal and recently postmenopausal greek women: doi.org/10.3109/1095513590.2010.volume 29, 2013 issue 2

Dilaram Acharya¹, Salila Gautam, Nirmala Neupane, Hari Prasad Kaphle, Jetendra Kumar Singh Health Problems of Women above Forty Years of Age in Rupand District of Nepal International Journal of Health Sciences & Research (www.ijhsr.org) Vol.3; Issue: 3; March 2013.

39. Kwak EK, Park HS, et al. Menopause Knowledge, Attitude, Symptom and Management among Midlife Employed Women J Menopausal Med. 2014 Dec; 20(3): 118-25. doi:10.6118/jmm.2014.20.3.118. Epub 2014 Dec 2

40. Reed SD, Lampe JW, Qu C, et al. Premenopausal vasomotor symptoms in an ethnically diverse population. Menopause. 2014; 21: 153–158. [PubMed] [Google Scholar]

41. Kumar Mishra. Menopausal transition and postmenopausal health problems: a review on its bio-cultural perspectives. April 29, 2011; volume (3), no(4) DOI: [10.4236/health.34041](https://doi.org/10.4236/health.34041)

42. [Maninder Ahuja](#). Age of menopause and determinants of menopause age: A PAN India survey by IMS. 2016 Jul-Sep; 7(3): 126–131. doi: [10.4103/0976-7800.191012](https://doi.org/10.4103/0976-7800.191012)

43. [Sudhaa Sharma](#), [Neha Mahajan](#). Menopausal symptoms and its effect on quality of life

in urban versus rural women: A cross-sectional study. 2015 ; Volume : 6 , Issue : 1 , Page : 16-20.

44. Garg, et al. L-Arginine administration improves cognition and oxidative stress parameters in the hippocampus and frontal lobe of 4-Vinylcyclohexene diepoxide perimenopausal female rats. 2019; Vol 22 No 3.
45. P Kulkarni. Burgeoning menopausal symptoms: An urgent public health concern. 2016 ; Volume : 7 , Issue : 2 : Page : 83-87
46. Vishal R. Tandon, Effect of life-style modification on postmenopausal overweight and obese Indian women: A randomized controlled 24 weeks preliminary study. 2014 Jan-Mar; 5(1): 23–28. doi: 10.4103/0976-7800.127787
47. Kwak EK, Park HS, et al. Menopause Knowledge, Attitude, Symptom and Management among Midlife Employed Women J Menopausal Med. 2014 Dec; 20(3):118-25. doi:10.6118/jmm.2014.20.3.118. Epub 2014 Dec 2.
48. Sultan Alan, Ebru Gozuyesil, et al. Effects of Menopause on the Life of Women Who Experience Hot Flashes and their Health-Seeking Behaviors. International Journal of Caring Sciences May- August 2016 Volume 9 Issue 2, Page 542.)
49. Paul Owajionyi Dienye, et al. Frequency of Symptoms and Health Seeking Behaviors of Menopausal Women in an Out-Patient Clinic in Port Harcourt, Nigeria. Glob JHealth Sci. 2014 Jul; 5(4): 39–47.)
50. Donati S, Cotichini R, et al. Menopause: knowledge, attitude and practice among Italian women. Maturitas. 2009 Jul 20;63 (3):246-52. doi: 10.1016/j. maturitas. 2009.04.001. Epub 2009 May 13.
51. Nikita Kishor Dhanorkar. Assessment of the effectiveness of Planned Teaching on Knowledge Regarding Menopausal Syndrome and its Management among Premenopausal women in selected community area. Int. J. Nur. Edu and Research. 2017; 5(3): 303-309
52. Rukumani. Knowledge on Menopause among Pre-Menopausal Women at Selected Area of Puducherry, India. Research Journal of Family, Community and Consumer Sciences. Vol. 3(8), 1-3, October (2015)
53. Engida Yisma, corresponding , Natnael Eshetu, Stephanie Ly, et al .Prevalence and severity of menopause symptoms among perimenopausal and postmenopausal women aged 30-49 years in Gulele sub-city of Addis Ababa, Ethiopia BMC Womens Health. 2017; 17: 12. doi: 10.1186/s12905-017-0484-x
54. Olaolorun FM, Lawoyin TO. Experience of menopausal symptoms by women in an urban community in Ibadan, Nigeria. Menopause. 2009;16(4):822–830. doi: 10.1097/gme. 0b013e318198d6e7. [PubMed] [CrossRef] [Google Scholar]
55. Thaís R. Silva, Roberta Franz, Maria A. Maturana & Poli M. Spritzer. Associations between body composition and lifestyle factors with bone mineral density according to time since menopause in women from Southern Brazil: a cross-sectional study. (2015); volume 15, Article number: 71
56. Supriya Srivastava, et al. Stress and Well-Being in perimenopausal and menopausal Working and Non-Working Women Indian Journal of Applied Research October 2011; 4(8):559-563. DOI: 10.15373/2249555X/August2015

57. Syeda Fakhar Batool, et al ,Perception of Menopausal Symptoms among Educated versus.NoneducatedWomenbyUsingMenopausalRatingScale(MRS).2014.DOI: 10.4236/ojn.2014.48063) PP. 602-607
58. Nabil R Mohamed, et al, Perimenopausal psychiatric aspects in urban versus rural Egyptian women in Menoufiya Year.2015 ;volume :36,issues:1,page:21-39
59. Hourieh Badali, et al. Comparison of Quality of Life Between Urban and Rural Menopause Women and its Predictors: A Population Base Study. International Journal of Women's Health and ReproductionSciences5. March2017;137-42.. with462.DOI: 10.15296/ijwher.
60. Shilpa K, et al, A comparative study on postmenopausal symptoms in rural and urban women International Journal of Community Medicine and Public Health. Int J Community Med Public Health. 2015 Nov;2(4):604-609 <http://www.ijcmph.com>
61. J Savita Rani Singhal and Wansalan Kuru Shullai,Comparative study of gabapentin and isoflavone in menopausal vasomotor symptoms, midlife health.2016 Jul-Sep; 7(3): 132–139.doi: 10.4103/0976-7800.191017
62. Nilima Bhore. A study to assess the existing knowledge regarding menopausal changes and coping strategies among premenopausal women working in selected colleges of Sangli, Miraj Kupwad corporation area. December 2015. IJNR Vol 1. (2):123-131
63. Ms. Veerpal Kaur, Mrs. Varinderdeep Kaur, et.al“A Descriptive Study to Assess the Knowledge Regarding Premenopausal Symptoms and Its Management among MiddleAged Women in Bhuchho Mandi, Bathinda, Punjab. May. - June .2019; Volume 8, Issue 3 Ser. II.:PP 55-62. org DOI: 10.9790/1959-0803025562. www.iosrjournals
64. Doyel and Subha.using menopause rating scale among middle-aged women of rural area: A cross-sectional study. Int J Med Sci Public Health. 2018; 7(1): 48-52.
65. Pricesl, Storcy, Lake M., et. Al. explore the menopause experiences of women living in rural areas. 2014;16(1):19–24.
66. Nabil R Mohamed, et al, Perimenopausal psychiatric aspects in urban versus rural Egyptian women in Menoufiya Year.2015 ;volume :36,issues:1,page:21-39
67. Shu Xo,Zheng Y,Cai H,Guh,chen Z “ Soy Food Intake And Breast Cancer Survival” Jama. 2009 Dec 9;302(22):2437-43