

A Study to Assess the Knowledge Regarding Premenopausal Symptoms Among Women Aged Between 40-50 Years in A Selected Rural Area, Aizawl, Mizoram

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Abstract—Menopause is a natural process every woman will experience, but understanding its implications is crucial. Without this knowledge, women may face a problematic premenopausal period. The objective of the study is to assess the level of knowledge score regarding premenopausal symptoms among women aged between 40-50 years in a selected rural area, Aizawl, Mizoram and to find out the association between the knowledge among women aged between 40-50 years with their selected demographic variables. A quantitative research approach with a non-experimental descriptive research design was used for the study. The study was conducted among 100 women aged between 40-50 years selected through non-probability purposive sampling technique. The tool for data collection consisted of demographic variables and a self-administered questionnaire. The study categorizes knowledge into three level-Inadequate (0-11), Moderate (12-16), Adequate (17-20)-and assess their distribution across various demographic groups using the Chi-square test for statistical significance. The findings revealed that among 100 premenopausal women, 49% had inadequate knowledge, 36% had moderate knowledge, and 15% had adequate knowledge regarding premenopausal symptoms. Chi-square analysis showed a statistically significant association between knowledge score and age ($x^2 = 6.838, p = 0.0328$), marital status ($x^2 = 14.81, p = 0.0218$), educational status ($x^2 = 17.78, p = 0.0068$), occupation ($x^2 = 18.36, p = 0.0054$), and number of children ($x^2 = 13.75, p = 0.0325$). However, no significant association was found between knowledge score and monthly family income ($x^2 = 1.982, p = 0.739$), menarche ($x^2 = 9.718, p = 0.137$), menstrual cycle ($x^2 = 6.843, p = 0.3356$), previous knowledge ($x^2 = 0.933, p = 0.6271$), and type of family ($x^2 = 4.987, p = 0.2886$). Hence, the research

hypothesis was accepted for age, marital status, educational status, occupation, and number of children, and rejected for income, menarche, menstrual cycle, previous knowledge and type of family.

***Index Terms*—Assess, knowledge, premenopausal symptoms, women aged between 40-50 years, Community Health.**

I. INTRODUCTION

Menopause, the time when a woman stops having menstrual periods, is not a disease or an illness. It is a transition between two phases of a woman's life. Menopause is the time in a female's life when she gets a formal, official signal from her body that she is getting older. This is the time when her menstruation is on the verge of a complete die down. The hot flashes, irritation, mood swings, insomnia, fatigue, etc. are some symptoms of menopause, and there are many more. These symptoms can be unpleasant and tedious to manage.

II. PROBLEM STATEMENT:

"A study to assess the knowledge regarding premenopausal symptoms among women aged between 40-50 years in a selected rural area, Aizawl, Mizoram."

HYPOTHESIS

H₁: There is significant association between knowledge scores with selected demographic variables among women aged between 40-50 years in a selected rural area, Aizawl, Mizoram.

III. METHODOLOGY

The objectives of the study were to assess the level of knowledge regarding premenopausal symptoms among women aged between 40-50 years in a selected rural area, Aizawl, Mizoram and to find out the association between the knowledge score among women aged between 40-50 years with their selected demographic variables. A quantitative research approach with a non-experimental descriptive research design was used for the study. The study was conducted among 100 women aged between 40-50 years selected through non-probability purposive sampling technique. The tool for data collection consisted of demographic variables and a self-administered questionnaire. Content validity of the tool was established by five experts, and reliability was tested using the Split-Half Method followed by Spearman Correlation Coefficient formula. A pilot study was conducted among 10 women aged between 40-50 years in Melthum, Aizawl, Mizoram, to assess the feasibility of the study. Formal permission and informed consent were obtained before data collection. The data collected were analyzed using descriptive statistics such as frequency and percentage, and inferential statistics using the chi-square test to determine the association between premenopausal symptoms and selected demographic variables.

IV. RESULT

Table 1: Frequency and Percentage Distribution of Demographic Variables

n=100

DEMOGRAPHIC VARIABLES	FREQUENCY(f)	PERCENTAGE (%)
AGE		
40-45	37	37
46-50	63	63
MARITAL STATUS		
Single	10	10
Married	49	49
Widowed	28	28
Divorce	13	13
EDUCATION		
Illiterate	6	6
Primary	39	39
High school	46	46
Graduate	9	9
OCCUPATION		
Home Maker	27	27
Employed	19	19
Self Employed	14	14
Unemployed	14	14
INCOME		
5000-10000	37	37
>10000	48	48
>30000	15	15
SECTION B: MENSTRUAL AND REPRODUCTIVE HISTORY		
MENARCHE		
<10yrs	8	8
10-12yrs	13	13
13-15yrs	60	60
>16yrs	19	19

MENSTRUAL CYCLE		
28days	7	7
26dyas	9	9
25days	74	74
Irregular menstruation	10	10
NO. OF CHILDREN		
Nulliparous	6	6
1	23	23
2	41	41
>3	30	30
PREVIOUS KNOWLEDGE		
Yes	82	82
No	18	18
TYPE OF FAMILY		
Nuclear	57	57
Joint	28	28
Extended	12	12

- The data shows that majority i.e., 63 (63%) of women are in the age group of 46-50 years followed by 37 (37%) are in the age group of 40-45 years.
- Distribution of samples with regards to their marital status shows that majority i.e., 49 (49%) of women are married, 28 (28%) of women are widowed, 13 (13%) of women are divorced, 10(10%) of women are single.
- Distribution of samples with regards to their education shows that majority i.e., 46 (46%) of women are high school, followed by 39 (39%) of women are primary, 9 (9%) of women are graduate and 6 (6%) of women are illiterate.
- Distribution of samples with regards to their occupation shows that majority i.e.,40 (40%) of women is self-employed, followed by 27 (27%) of women are home maker, 19 (19%) of women are employed and 14 (14%) of women are unemployed.
- Distribution of samples with regards to their income shows that majority i.e., 48 (48%) of women have >10000 and 37 (37%) of women have 5000-10000 and 15(15%) of women have >30000.
- Distribution of samples with regards to menarche shows that majority i.e.,60(60%) of women begins at 13-15years, followed by 19(19%) of women begins at >16years,13(13%) of women begins at 10-12years and 8(8%) of women begins at <10years.
- Distribution of samples with regards to menstrual cycle shows that majority i.e.,74(74%) of women are 25days, followed by 10(10%) of women are illiterate, 9(9%) of women are 26days and 7(7%) of women are 28days.

- Distribution of samples with regards to number of children shows that majority i.e.,41(41%) of women has 2 children followed by 30(30%) of women have >3 children, 23(23%) of women have 1 child and 6(6%) of women are nulliparous
- Distribution of samples with regards to their previous knowledge of premenopausal symptoms shows that majority i.e., 82(82%) of women have knowledge and 18(18%) does not have knowledge.

TABLE 2: Frequency and Percentage distribution of knowledge score regarding premenopausal symptoms among women aged between 40-50 years.

(n=100)

Level of knowledge	Score Range	Level of knowledge		Mean	Standard Deviation (SD)
		Frequency(f)	Percentage (%)		
Inadequate knowledge	0-11	49	49	14	2
Moderate Knowledge	12-16	15	15		
Adequate knowledge	17-20	36	36		

Data on table 2 shows that the majority i.e., 49(49%) of participants had inadequate knowledge, 36 (36%) had adequate knowledge and 15 (15%) had moderate knowledge regarding premenopausal symptoms.

TABLE NO. 3: Association between knowledge score with selected demographic variables among women aged between 40-50 years.

(n=100)

Demographic variables	Knowledge score			Chi square (x ²)	df	P value	inference
	Inadequate (0-11)	Moderate (12-16)	Adequate (17-20)				
Age				6.838	2	0.0328	S
40-45	11	27	4				
45-50	25	22	11				
Marital Status				14.81	6	0.0218	S
Single	3	5	2				
Married	10	28	11				
Widowed	16	10	2				
Divorced	7	6	-				
Education				17.78	6	0.0068	S
Illiterate	5	1	-				
Primary	12	28	1				
Secondary	16	18	12				
Graduate and above	3	4	2				

Occupation							
Homemaker	6	14	7	18.36	6	0.0054	S*
Employed	12	6	1				
Self-employed	16	17	7				
Unemployed	2	12	-				
Income							
500-10000	13	19	5	1.982	4	0.739	NS
> 10000	18	24	6				
> 30000	5	6	4				
Menarche							
Below 10	5	3	-	9.718	6	0.137	NS
10-12Years	8	5	-				
13-15 Years	18	31	11				
above 16 Years	5	10	4				
Menstrual Cycle							
28	4	3	-	6.843	6	0.3356	NS
26	5	4	-				
25	22	38	14				
Irregular menstruation	5	4	1				
Number of Children							
Nulliparous	3	2	1	13.75	6	0.0325	S
1	11	10	2				
2	18	20	3				
>3	4	17	9				
Previous Knowledge							
Yes	28	42	12	0.933	2	0.6271	NS
No	8	7	3				
Type of Family							
Nuclear	18	32	10	4.987	4	0.2886	NS
Joint	11	12	5				
Extended	7	5	-				

*p<0.05 level of significance

S*=Significant

NS*=Not Significant

The data presented in Table 4 revealed that significant association obtained between the knowledge score with age, marital status, educational status, occupation and number of children at 0.05 level of significance ($p < 0.05$). The other demographic variables like income, menarche, menstrual cycle, previous knowledge and type of family regarding premenopausal symptoms among women aged between 40-50 years were found non-significant.

Hence hypothesis (H_1) is accepted with respect to age, marital status, education, occupation and number of children, whereas it is rejected to income, menarche, menstrual cycle, previous knowledge and type of family.

V. CONCLUSION

From the findings of the present study, it can be concluded that most of the women aged between 40-50 years had inadequate knowledge regarding premenopausal symptoms.

Since the majority of women had inadequate knowledge regarding premenopausal symptoms, community-based health education and awareness programs should be implemented. Nurses can play a key role in providing information, counseling, and educational materials to improve women's knowledge and promote healthy management of premenopausal symptoms

REFERENCE

- [1] S. K. Barathi and S. Kalavathi, "Assessment of knowledge on signs and symptoms of menopause among premenopausal women," *IOSR Journal of Nursing and Health Science*, vol. 3, no. 2, pp. 33–37, 2014. [Online]. Available: <https://www.iosrjournals.org/iosr-jnhs/papers/vol3-issue2/Version-3/D03233337.pdf>. [Accessed: May 31, 2026].
- [2] R. K. Marahatta, "Study of menopausal symptoms among peri and postmenopausal women attending NMCTH," *Nepal Medical College Journal: NMCJ*, vol. 14, no. 3, pp. 251–255, Sep. 2012.
- [3] B. Jayalaxmi, "Comparative evaluation of un-stimulated salivary flow rate, pH, calcium and potassium in pre-menopausal and postmenopausal women, with reference to oral symptoms," M.S. thesis, Rajiv Gandhi University of Health Sciences, India.
- [4] R. Mohta and S. Halder, "Perceptions of self and intimacy in post-menopausal women," *Indian Journal of Health & Wellbeing*, vol. 11, Jun. 2020.
- [5] B. Jayalaxmi, "Comparative evaluation of un-stimulated salivary flow rate, pH, calcium and potassium in pre-menopausal and postmenopausal women, with reference to oral symptoms," M.S. thesis, Rajiv Gandhi University of Health Sciences, India.