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A Cross-Sectional Study of Premenopausal Women's Attitude Toward Menopause going Through Hysterectomy from Khyber Teaching Hospital, Peshawar

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ABSTRACT

Background: Women undergoing early menopause following premenopausal hysterectomy often experience significant fear and health challenges. Understanding their attitudes toward this transition is essential for providing effective healthcare tailored to their needs. **Objective:** This study aimed to assess the attitudes of women toward early menopause following premenopausal hysterectomy performed for gynecological or obstetric reasons. **Methodology:** The study was conducted at Khyber Teaching Hospital, Peshawar, from January to June 2024. Women aged 30–45 years who had not yet attained menopause but underwent premenopausal hysterectomy were included. Exclusion criteria included those on hormone replacement therapy (HRT). Data were collected through a semi-structured questionnaire with two sections: Section A recorded demographic details, while Section B assessed knowledge and attitudes. Data were analyzed using SPSS version 26, with associations evaluated via the Chi-square test ($p \leq 0.05$). **Results:** Among 80 participants, the mean age was 39.3 ± 3.23 years. Most were multiparous (86.3%), and 55% reported a household income below 25,000 PKR. Poor knowledge about early menopause was observed in 55% of participants, while 22.5% showed good knowledge. Positive attitudes toward long-term complications were prevalent (86.3%), with 85% adopting preventive measures. Poor knowledge was significantly associated with lower income (p=0.024) and illiteracy (p=0.001). Multiparity showed no significant correlation with knowledge (p=0.304). **Conclusion:** Despite positive attitudes and proactive measures, knowledge gaps about early menopause were significant, particularly among less educated and low-income groups. Targeted educational programs are essential to bridge these gaps and enhance preparedness for early menopause.

INTRODUCTION

Hysterectomy is the second most cause of intentional removal of uterus after cesarean or C-section in surgery carried out for obstetrics and gynecological reasons in different countries of the world (1–3). The reports of World Health Organization (WHO), estimated that about 13 million surgical operations are carried for hysterectomy worldwide (4). About 6.2 hysterectomies are done per 10,000 women with in an age of 15-49 years (5). The most common reasons for hysterectomies are; dysfunctional uterine bleeding, uterine prolapse, fibroids Hysterectomy is increasing the chances for earl onset of menopause (6).

Menopause is a natural biological process marking the end of women's reproductive years is

a transformative phase associated with numerous physiological changes on the other hand, early menopause affects 5% of women worldwide(7). This abrupt shift triggers a cascade of hormonal changes impacting the quality of life and long-term health. While the challenges of natural menopause are widely acknowledged early menopause often remains shrouded in silence and shrouded in misinformation(7). This silence translates into a significant gap in women's knowledge and understanding of this unique experience leaving them unprepared to navigate its complexities (8). Understanding the knowledge and attitude of these women towards early menopause is imperative for tailored health care interventions. In, Pakistan, where cultural norms socioeconomic factors and health care accessibility play significant roles in shaping women's health experiences, investigating these factors becomes particularly important.

A group of research from United Arab Emirates illustrated that 82 percent of women are going through early onset of menopause that are lacking adequate knowledge (9). The deficiency in knowledge about the condition lead to delayed diagnosis, underutilization of available treatment options, and highlighted anxiety and depression (10). The existing research on menopause primarily focuses on the natural transition experiences by women in their late 40s and early 50s (11).This leaves a critical gap in our understanding of the specific needs and challenges faced by women who experience early menopause(12). Moreover, cultural taboos surrounding menopause and lack of open dialogue further contribute the knowledge deficit leaving women feeling isolated and unspotted (13). To address the knowledge and basic knowhow about this challenge is not only restricted up to the clinicians but is also ought most requirement for empowering women to navigate early menopause with confidence and informed choices. To bring the necessary awareness providing accurate information, and fostering open communication, and to equip women with the tools through which they can manage their symptoms.

Early menopause following premenopausal hysterectomy poses unique challenges for women's health. Understanding women's knowledge and attitudes towards this transition is crucial for providing effective healthcare interventions. So, we carried out this study to determine the knowledge and attitudes of women towards early menopause in patients who have undergone premenopausal hysterectomy for gynecological or obstetric reasons.

METHODOLOGY

This cross-sectional study was conducted at the Obstetrics and Gynecology department of Khyber Teaching Hospital, Peshawar, from January 2023 to June 2023. We included those Women who had not attained menopause and underwent premenopausal hysterectomy and women aged between 30 – 45 years of age while we excluded women who had attained menopause before hysterectomy and also those who were receiving hormone replacement therapy (HRT) by using consecutive nonprobability sampling technique. Taking 8% about menopause knowledge (1) by taking 95% confidence interval and 6% margin of error and the total sample size was 80 by using WHO sample size calculator

Data were collected using a semi-structured questionnaire. Informed verbal consent was obtained from each subject before the survey, with a thorough explanation of the survey's nature and purpose. Assurance of confidentiality and privacy during examinations was provided, and interviews were conducted in a non-hostile and non-judgmental manner, respecting local cultural values and ideas. Health education and counseling regarding the risk factors for the development of different problems were offered to all respondents.

The data questionnaire comprised two sections. Section A focused on demographic details, encompassing sociodemographic variables such as present age, parity, education level, marital status, and socioeconomic status. Age was measured in years, education status was categorized into Nil, Primary, Middle, Matric, and Graduate levels, marital status included four categories (single, married, widowed, and divorced), and socioeconomic status was divided into three categories (poor, middle, upper class). Section B consisted of a series of questions aimed at assessing respondents' knowledge, attitudes, and perceptions. Eleven questions were posed to evaluate the level of knowledge, with each correct response carrying one mark. The total score ranged from 0 to 11, with scores interpreted as good

knowledge (9-11), average knowledge (5-8), and poor knowledge (1-4). Respondents' attitudes toward early menopause were investigated, exploring their opinions about this life event—whether positive, negative, or neutral. Additionally, respondents were asked whether they considered menopause a medical condition or a normal transition. The survey included inquiries about preventive measures for long-term health implications, particularly regarding osteoporosis, and sought to understand attitudes towards the prevention and treatment of long-term complications.

The validity of the questionnaire was assessed using Cronbach's Alpha which was 0.90. Data were analyzed using SPSS version 26. Mean and standard deviation were calculated for numerical variables such as age. Frequency and percentages were computed for qualitative data, including age group, marital status, and education status. Knowledge level and attitude were the main outcomes. Age was converted by dividing the range into 3. chi-square tests/fisher exect test was applied to see the association between knowledge and other demographic variables. All results were presented in the form of tables and graphs.

Table 1

Descriptive Statistics of Categorical Variable

Characteristic	Categories	Frequency	Percentages
Marital status	Single	3	3.8
	Married	76	95.0
	Divorced	1	1.3
Education	Primary	15	18.8
	Middle	2	2.5
	Matric	19	23.8
	Graduate	4	5.0
	Illiterate	38	47.5
	More then graduate	2	2.5
Parity	Nulliparas	8	10.0
	Primipara	3	3.8
	Multipara	69	86.3
Household monthly income in PKR	Poor Less than 25000Rs	44	55.0
	Middle Class - 1-2 lacs	35	43.8
	Upper Class - monthly income of more than 2 Lacs	1	1.3
Presence of Comorbidity	No	65	81.3
	Yes	15	18.8
Age in years	39.3 ± 3.23 (mean±SD)	Range (13)	Min-max (31-44)

RESULTS

The descriptive statistics for key demographic variables are presented in Table 1. Out of a total of 80 participants, the mean age of the participants was 39.3 ± 3.23 years while the majority of participants were married (95.0%), with only a small percentage being single (3.8%) or divorced (1.3%). Regarding education, a significant proportion of participants were illiterate (47.5%), while 23.8% had completed Matric and 18.8% had a primary education. Notably, the study included a diverse range of parties, with a substantial number being multiparous (86.3%). When examining the household monthly income in PKR, 55.0% of participants reported a poor income of less than 25,000 Rs. A substantial portion belonged to the middle class, with monthly incomes ranging from 1-2 lacs (43.8%). Only a minimal percentage reported an upper-class status, with a monthly income exceeding 2 lacs (1.3%). Regarding comorbidities, 18.8% of participants reported the presence of comorbid conditions, while the majority had no comorbidities (81.3%).

(Table 2 illustrates the distribution of knowledge levels across various demographic factors. Looking the age association with age, those having 31-35 of age group, participants displayed diverse knowledge, with 28.6% exhibiting good knowledge and 35.7% showing both average and poor knowledge. For participants over 40(57.6%,P value 0.53) exhibited poor knowledge, suggesting a potential age-related trend with a higher prevalence of poor knowledge among older individuals).

Table 2

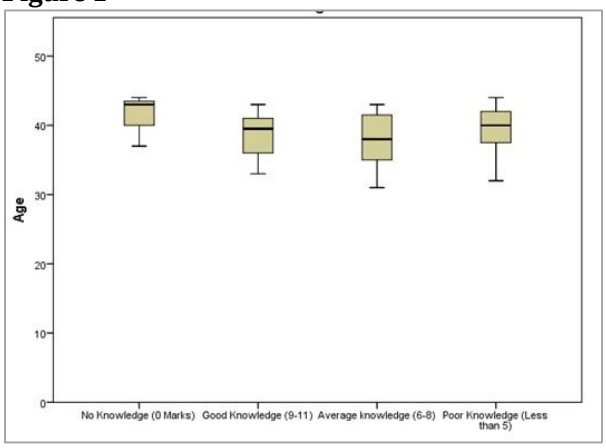
Level of knowledge with different demographic factors

Variable	Categories	No Knowledge (0 Marks)	Good Knowledge (9-11)	Average knowledge (6-8)	Poor Knowledge (Less than 5)	P value
Age	31-35	0(0.0%)	4(28.6%)	5(35.7%)	5(35.7%)	

	36-40	1(3.0%)	7(21.2%)	5(15.2%)	20(60.6%)	0.51
	More then 40	2(6.1%)	7(21.2%)	5(15.2%)	19(57.6%)	
Marital status	Single	0(0.0%)	1(33.3%)	1(33.3%)	1(33.3%)	0.42
	Married	3(3.9%)	17(22.4%)	13(17.1%)	43(56.6%)	
	Divorced	0(0.0%)	0(0.0%)	1(100.0%)	0(0.0%)	
Parity	Nulliparas	0(0.0%)	2(25.0%)	2(25.0%)	4(50.0%)	0.42
	Primipara	0(0.0%)	2(66.7%)	1(33.3%)	0(0.0%)	
	Multipara	3(4.3%)	14(20.3%)	12(17.4%)	40(58.0%)	
Education	Primary	0(0.0%)	5(33.3%)	4(26.7%)	6(40.0%)	0.001
	Middle	0(0.0%)	0(0.0%)	1(50.0%)	1(50.0%)	
	Matric	0(0.0%)	10(52.6%)	9(47.4%)	0(0.0%)	
	Graduate	0(0.0%)	3(75.0%)	0(0.0%)	1(25.0%)	
	Illiterate	3(7.9%)	0(0.0%)	0(0.0%)	35(92.1%)	
	More than graduate	0(0.0%)	0(0.0%)	1(50.0%)	1(50.0%)	
Household monthly income in PKR	Less than 25000	3(6.8%)	3(6.8%)	4(9.1%)	34(77.3%)	0.024
	1-2 lacs	0(0.0%)	15(42.9%)	11(31.4%)	9(25.7%)	
	more than 2 Lacs	0(0.0%)	0(0.0%)	0(0.0%)	1(100.0%)	
Parity	Nulliparas	0(0.0%)	2(25.0%)	2(25.0%)	4(50.0%)	0.304
	Primipara	0(0.0%)	2(66.7%)	1(33.3%)	0(0.0%)	
	Multipara	3(4.3%)	14(20.3%)	12(17.4%)	40(58.0%)	
Presence of Comorbidity	No	1(1.5%)	13(20.0%)	11(16.9%)	40(61.5%)	0.02
	Yes	2(13.3%)	5(33.3%)	4(26.7%)	4(26.7%)	

The boxplot in **Figure 1** displays the trends of age with knowledge. For marital status, the majority of married participants (56.6%) exhibited poor knowledge, whereas single and divorced participants showed more diverse knowledge levels (33.3% each, P value 0.42).

Figure 1



In terms of parity, multiparous individuals had the highest prevalence of poor knowledge (58.0%), while primiparous individuals predominantly demonstrated good knowledge (66.7%). Education level exhibited a significant association with knowledge (p=0.001), whereas illiterate participants showed a higher prevalence of poor knowledge (92.1%). Household monthly income was significantly associated with knowledge levels (p=0.024), with participants earning less than 25000 PKR having a higher prevalence of poor knowledge (77.3%). The presence of comorbidity was also associated with knowledge levels (p=0.02), revealing that participants without comorbidities had a higher prevalence of good knowledge (61.5%).

Table 3

Respondent's attitude towards early menopause

	Categories	Frequency	Percentage
If you have early menopause, how do you perceive this	Positive	53	66.3
	Negative	20	25.0
	Neutral	7	8.8
Do measures to prevent long-term health	Positive	68	85.0
	Negative	6	7.5
	Neutral	6	7.5
What to do with long-term complications?	Positive	69	86.3
	Negative	7	8.8
	Neutral	4	5.0

The attitudes of respondents towards early menopause are outlined in Table 3. Regarding perceptions of early menopause, the majority (66.3%) held a positive outlook, while 25.0% expressed a negative perception, and 8.8% maintained a neutral stance. In terms of measures to prevent long-term health issues, a substantial

85.0% of respondents exhibited a positive attitude, with 7.5% expressing negativity and an additional 7.5% remaining neutral. Similarly, when asked about dealing with long-term complications, a significant 86.3% of respondents had a positive attitude, 8.8% expressed negativity, and 5.0% held a neutral stance.

DISCUSSION

The observed distribution of knowledge levels among premenopausal women who have undergone hysterectomy for gynecological or obstetric reasons underscores the significance of associated factors in shaping understanding and awareness. Our key findings demonstrate that participants aged 31-35 exhibited diverse knowledge levels, including 28.6% with good knowledge and 35.7% with both average and poor knowledge. Conversely, those over 40 displayed a noteworthy 57.6% prevalence of poor knowledge. Marital status demonstrated a distinct influence on knowledge levels, as the majority of married participants (56.6%) exhibited poor knowledge, while single and divorced participants showed more varied knowledge levels. Similarly, parity played a crucial role, with multiparous individuals having the highest prevalence of poor knowledge, contrasting with primiparous individuals who predominantly demonstrated good knowledge. Education level proved to be a significant determinant of knowledge, with illiterate participants showing a markedly higher prevalence of poor knowledge. Furthermore, household monthly income exhibited a significant association with knowledge levels, with participants earning less than 25000 PKR having a higher prevalence of poor knowledge. In terms of comorbidities, participants without concurrent medical conditions demonstrated a higher prevalence of good knowledge. Turning to attitudes towards early menopause, the majority of respondents expressed positive perceptions, favorable attitudes towards preventive measures, and a proactive approach in dealing with long-term complications. Comparing our findings with existing literature, our results contradict with previous studies that have identified age as a crucial determinant of knowledge regarding menopausal issues. The notable trend of higher poor knowledge prevalence among participants over 40 is in contrast with studies suggesting that older age groups may encounter challenges in accessing and assimilating health-related information. A study conducted in the Democratic Republic of Congo found that postmenopausal women were more knowledgeable about menopausal symptoms than premenopausal women (14). Another study found that women in the peri- and post-menopausal stages had significantly higher knowledge about menopause than premenopausal women (15). Possible explanations for this age-related knowledge gap could include generational differences in health education accessibility and evolving societal attitudes toward women's health over time.

Our study showed that marital status demonstrated a distinct influence on knowledge levels, as the majority of married participants exhibited poor knowledge. The statistics are in contrast to the previous studies. A study conducted in Saudi Arabia found that women with higher levels of education and those married for a longer duration had significantly higher knowledge about menopause (16). Similar other studies(17–20) showed that marital support may indirectly influence knowledge acquisition about early menopause. These results demonstrate that several factors like our population studies were married women with lower socioeconomic status or limited access to information about early menopause while the study of culturally specific factors may influence knowledge levels among married women.

The present study revealed a significant association between education level and knowledge about early menopause. Participants with lower education levels, particularly those who were illiterate, demonstrated a markedly higher prevalence of poor knowledge compared to their counterparts with higher education backgrounds. This finding aligns with the vast majority of existing literature, which consistently demonstrates a positive association between higher education levels and better knowledge about menopause(21–23). Participants without concurrent medical conditions displayed a significantly higher prevalence of good knowledge about early menopause in our study. This finding suggests a potential link between health burden and knowledge acquisition, warranting further investigation to elucidate the underlying mechanisms (24). One possible explanation for this

finding is that individuals without concurrent medical conditions may have more cognitive resources available to dedicate to learning and understanding information about early menopause.

CONCLUSION

Our study sheds light on the knowledge and attitudes of women who underwent premenopausal hysterectomy for gynecological reasons. In conclusion, our study reveals demographic associations with knowledge levels, indicating a potential age-related trend with a higher prevalence of poor knowledge among older individuals. Marital status and parity also showcased distinct knowledge patterns, emphasizing the need for targeted interventions. Furthermore, education, household income, and the absence of comorbidities significantly influenced knowledge levels. Our findings also indicate positive attitudes among respondents towards early menopause, preventive measures, and coping with long-term complications. These findings highlight crucial areas for focused education and support to enhance understanding and well-being among this specific population.

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