Perception and Awareness of Menopause among Premenopausal Women of Different Socioeconomic Backgrounds

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ABSTRACT

Objective: To assess the knowledge of premenopausal women belonging to different socioeconomic backgrounds, about symptoms, treatment, myths, and causes of early or late onset of menopause.

Materials and methods: The cross-sectional study was conducted at the Ziauddin University hospital over a period of 8 months. A sample size of 300 was taken. Socioeconomic status was determined by inquiring about income *per capita*. Knowledge and perception of the premenopausal women were assessed. Data were entered and analyzed using version 20 of SPSS.

Results: The upper class seemed to be highly aware of the common menopausal symptoms. Young females from the lower class had least knowledge about menopause, followed by middle class. 55% of women considered menopause to be a natural aging process rest believed that it is a clinical condition. The majority, with a negative perspective, belonged to lower socioeconomic class.

Conclusion: About a quarter of Pakistanis are living below the poverty line, and since the study suggests that women from this stratum have poor knowledge about menopause, there is a great need for spreading awareness to this class. This study would help improve the quality of life of women belonging to the lower class and would eventually decrease morbidity and mortality due to the consequences of menopause. There is limited research in Pakistan about the knowledge of women regarding menopause, and the focus is diverted more towards evaluating the experience of menopause rather than perception. Adverse socioeconomic conditions are likely to leave deep imprints on psychological well-being of an individual. Hence it can be a major risk factor for the difference in opinion and perception as well as knowledge.

Keywords: Cross-sectional study, Menopause, Myths, Perception, Premenopausal, Socioeconomic status.

Journal of South Asian Federation of Menopause Societies (2019): 10.5005/jp-journals-10032-1162

INTRODUCTION

Menopause is an inevitable psychological as well as biological event in the reproductive life of every woman. It is cessation of menstrual cycles and periods for 12 consecutive months. The reason is depletion of ovarian function either naturally, or iatrogenic due to bilateral removal of ovaries or ovarian exposure to chemicals and radiation.[1] Menopause is linked to a series of problems that arise from ovarian hormones' deficiency, especially estrogen and progesterone. Menstrual cycle ceases gradually after transition of ovarian function through multiple stages: premenopause, perimenopause, and postmenopause.[2]

Average age of menopausal women in Pakistan is 49.3 years.[3] The age at which menopause occurs is between 45 years and 55 years for women worldwide.[4] Mean age is 50 years and 9 months globally.[1] In terms of pattern and age, menopause itself varies all around the world; this is seconded by various studies.[5] Pakistan is the world's fifth-most-populous country with a population of 210 million. It has a growth rate of 2.40. The population of Pakistan represents 2.56 percent of the world's total population[6] and is expected to reach 236 million by 2020. 16 million (7.1%) people will be aged more than 60 years, and hence it will have a very large number of menopausal women.[7] A few population-based studies have shown a high prevalence of menopausal symptoms between 40% and 70%,[8] whereas Asian surveys range between 10% and 50%.[9] Turkey reported a prevalence of 35–90%.[10] Women's knowledge, perception, and experience about menopausal symptoms are influenced by many biological, psychological, social, and cultural factors.[11]

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Socioeconomic status in Pakistan is determined by dividing the total population into three classes based on the income of an individual. People who earn Rs 3,000–19,000 per month belong to the lower class, Rs 20,000–1,00,000 belong to the middle class whereas those earning above this fall in the upper-class category.[12] Approximately 55 million (24.3%) Pakistanis are living below the poverty line.[13,14] According to the Global Wealth Report in 2015, Pakistan has the 18th largest "middle class" in the world.[15] 54 million (38%) people belong to the middle class, and 3.7 million (2%) people make the upper social class of Pakistan.[16]

Lower social class comprises women who lack basic necessities, are least educated, confined to kitchen work, and exposed to physical and mental stress. Middle-class women have least to

good exposure to medical knowledge. The upper class comprises highly educated and socially aware women. A lot of research has been done worldwide and in Pakistan for the assessment of menopausal knowledge among women of different age groups, ethnic backgrounds, educational levels, etc., but to the best of authors' knowledge no one has regarded socioeconomic status. It can be a factor for a difference in opinion and perception regarding menopause, and that is what this study suggests.

MATERIALS AND METHODS

Setting

The study was conducted at two campuses of Ziauddin University hospital, one situated at Clifton and the other at Keamari. Both provide tertiary care. Clifton is one of the posh areas of Karachi and Ziauddin Hospital there, which attracts the elite, upper, and upper-middle class. Keamari residents mostly belong to lower and lower-middle-class, therefore Ziauddin Hospital Keamari campus, caters to these socioeconomic strata.

Study Design

Prospective descriptive cross-sectional study.

Sample Size

300 females were included in the study by random selection that fulfilled the inclusion criteria.

Time Period

September 2017 to April 2018.

Inclusion Criteria

- Premenopausal women (30–40 years of age) were interviewed.
- Equal number of women, i.e., 100 each from the lower, middle and upper class were included.

Exclusion Criteria

- Early menopausal women.
- Who had never heard about menopause.
- Who had undergone any ovarian or uterine surgeries.

Questionnaire

Questionnaires were filled by authors after informed consent from participants. Privacy was maintained throughout the interview. Details of participant's sociodemographic characteristics were recorded.

Socioeconomic status was determined by inquiring about income per month. Knowledge and perception of the participant women were assessed by asking them about the correct option for age of menarche and menopause, definition and causes for its early and late onset, as well as their awareness about certain menopausal symptoms and treatment options.

Statistical Analysis

Data were analyzed using version 20 of SPSS. Chi-square was applied, and p value < 0.05 was taken as significant.

RESULTS

A sample size of 300 women belonging to a range of 30 to 40 years was taken. The mean age was 34.54 ± 3.28. The sample was divided

Table 1: Sociodemographic characteristics

Socioeconomic class	Marital status			
	Married	Unmarried	Divorced/ separated	Widow
Lower	61	36	0	3
Middle	66	31	2	1
Upper	71	23	3	3
Total (300)	198 (66%)	90 (30%)	5 (1.6%)	7 (2.3%)

Socioeconomic class	Education			
	None	Primary	Secondary	Higher
Lower	56	21	21	2
Middle	9	25	25	41
Upper	5	7	25	63
Total (300)	70 (23%)	53 (18%)	71 (24%)	106 (35%)

Socioeconomic class	Employment	
	Housewife/ unemployed	Employed
Lower	87	13
Middle	64	36
Upper	74	26
Total (300)	225 (75%)	75 (25%)

into three socioeconomic classes and analyzed accordingly. 100 women from each class were interviewed.

Sociodemographic characteristics are shown in Table 1.

Of the total participants, 77% (230) had gained primary, secondary, or higher education, whereas 23% (70) were completely uneducated. 19% (44), 39.5% (91) and 41% (95) of the lower, middle and upper class, respectively, were educated. The lower class had the maximum number of uneducated women, i.e., 56 (80%) in contrast to the upper class, which had only 5 (1.6%). Similarly, upper-class women were noticed to be most highly educated of 59% (63/106) when compared to middle 39% (41/106), and the lower class 2% (2/106).

Figure 1 represents different sources of knowledge regarding menopause among young women.

The most popular source of knowledge regarding menopause among participants was relatives 77 (26%). The second was doctors 66 (22%) followed by friends 63 (21%). 11% (32) of the females gained knowledge through television, radio, magazines, or more than one source. 10% (30) knew about it because of attending educational sessions.

Of the total participants, 59 (26%) and 16 (14%) from the lower class, 83 (35%) and 35 (30%) from the middle class, 93 (40%) and 65 (56%) from the upper class knew the correct ages for menarche and menopause. 22 (19%) lower-class women had correct knowledge about the definition of menopause followed by 36 (36%) of the middle class and 57 (50%) of the upper class.

Table 2 demonstrates the knowledge about common symptoms of menopause among women from different socioeconomic classes. It can be seen that 53% of the lower class people, 26% of the middle class, and only 21% of the upper class did not have any knowledge about common symptoms of menopause. 51% (864/1700) women had no idea about menopausal symptoms.

Correct identification of the causes for early- and late-onset menopause is illustrated in Table 3.
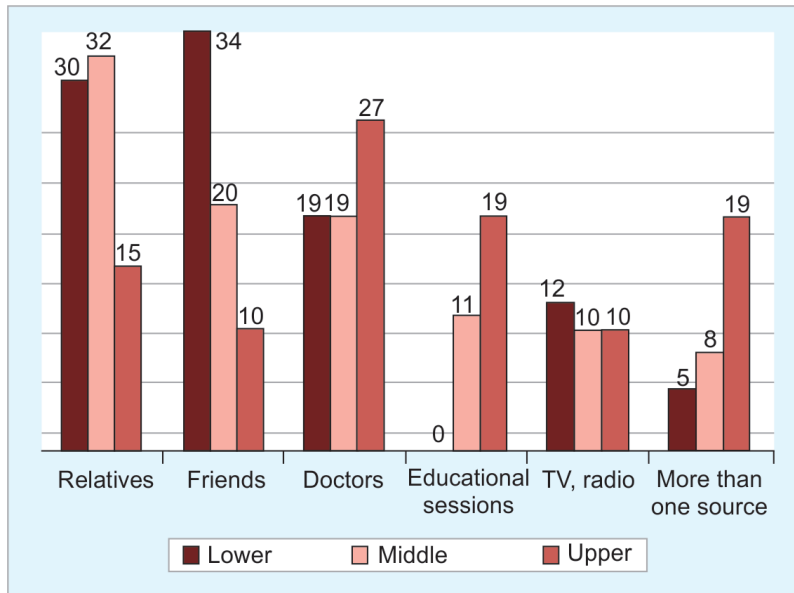
Fig. 1: Source of knowledge regarding menopause among participants

Table 2: Knowledge about common symptoms of menopause among women from different socioeconomic classes

| | Class | | | | | | | | |
| | Lower | | | Middle | | | Upper | | |
Symptom	Y	N	No clue	Y	N	No clue	Y	N	No clue
Hot flushes	40	21	39	64	23	13	51	43	6
Palpitation	51	30	19	66	21	13	47	45	8
Headaches	43	31	26	72	19	9	47	46	7
Body/joint ache	50	33	17	62	18	20	44	39	17
Breast tenderness	26	50	24	52	35	13	80	14	6
Lethargy	43	25	32	58	31	11	39	48	13
Sleep disturban CE	44	34	22	52	40	8	47	44	9
Irritabilty	54	17	29	64	30	6	60	34	6
Depression	64	21	15	53	38	9	35	56	9
Forgetfulness	41	26	33	59	26	15	58	32	10
Loss of libido	54	31	15	54	37	9	45	43	12
Dyspareunia	38	19	43	57	21	22	64	23	13
Vaginal dryness	46	27	27	49	32	19	48	28	24
UTI/incontinence	48	13	39	64	18	18	64	25	11
Dry skin	45	29	26	56	31	13	71	21	8
Dry hair	42	26	32	38	46	16	16	68	16
Brittle nails	36	41	23	36	57	7	14	79	7
Total percentage	30	28	53	37	31	26	33	41	21

Table 3: Correct identification of the causes for early- and late-onset menopause

	Cause	Lower class	Middle class	Upper class	Total
Early onset menopause	Decreased BMI	47 (25%)	67 (35%)	75 (40%)	189
	Nulliparity	47 (26%)	52 (29%)	79 (44%)	178
	Smoking	52 (24%)	76 (35%)	92 (42%)	220
	Depression	75 (32%)	72 (31%)	88 (37%)	235
	Poverty	77 (33%)	72 (31%)	84 (36%)	233
	Radiation/chemicals	54 (26%)	58 (28%)	93 (45%)	205
Late onset menopause	Increased BMI	48 (26%)	66 (35%)	74 (39%)	188
	Multiparity	45 (26%)	51 (29%)	79 (45%)	175
	Late onset menarche	43 (33%)	43 (33%)	46 (35%)	132

The 367 women (24%; out of 1500) who had no knowledge about menopausal consequences were comprised of 187 (51%) of the lower class, 100 (27%) of the middle and only 80 (22%) of the upper class.

Sixty-three of the total 300 respondents, i.e., 21%, had no idea that menopause can lead to osteoporosis. 93 (31%), 74 (25%), 59 (20%) and 78 (26%) had no clue that it could cause cardiovascular diseases, cancers, weight gain, and diminished vision respectively.

Knowledge about treatment options of menopause among women, varied vastly as shown by the bar graph in Figure 2.

Out of the common myths regarding menopause, considering it to be an indication of old age was more popular between lower (95%) and middle class (88%) whereas upper-class women (47% each) believed in two myths, one that it is an end of sexual life and second that the symptoms only appear after menopause has begun.

Figure 3 shows the percentages of popular myths regarding menopause.

Whereas 166 (55%) of the women considered menopause to be a natural aging process, 134 (45%) believed that it is a clinical condition/disease. 64 women from lower, 54 from middle and only 16 from the upper class considered the latter.

Discussion

Perception of menopause is not the same around the world; a vast variation exists in women from different ethnic backgrounds.[17]

Premenopausal women from all socioeconomic strata were interviewed so that an estimation of the number of ignorant female population could be made at an earlier stage. This would also help in identifying the target class that deserves maximum attention for awareness. Results showed that more than two-thirds were married. Majority of uneducated women belonged to the lower class in contrary to which the upper class consisted of the highly educated whereas middle-class females had mostly studied
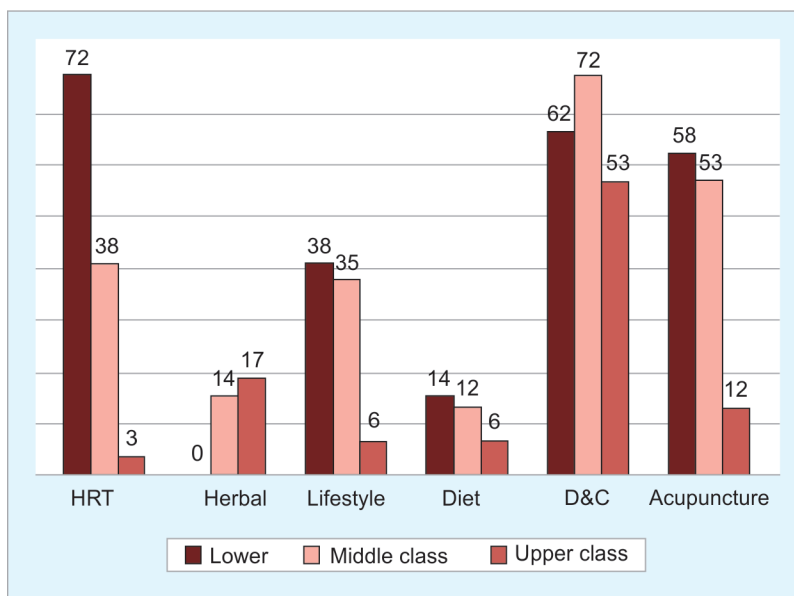

Fig. 2: Knowledge about treatment options of menopause among women from different socioeconomic classes
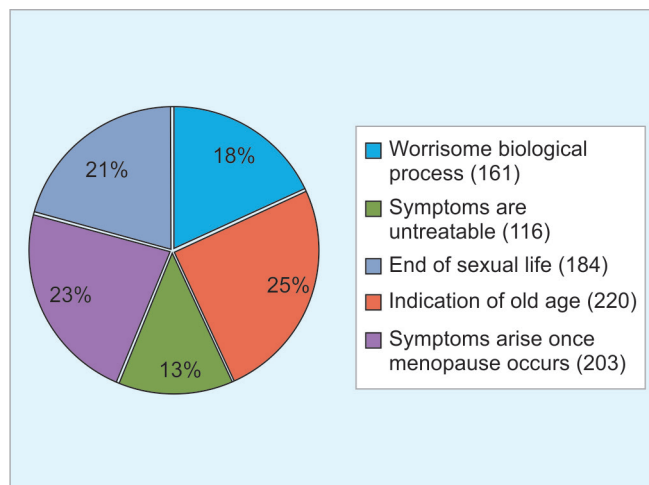

Fig. 3: Popular myths regarding menopause

until the 5th grade or maximum 10th standard with a negligible number of illiterate women. This was similar to a study conducted in Hyderabad.[18]

Only a quarter of the women included in the current study was either unemployed or were housewives. 75% were employed. Working and uneducated women suffer more from psychological and somatic symptoms.[19] In the authors' opinion, working women might be more knowledgeable about social and health issues. But arguing about this is beyond the scope of this survey.

Women in this study reported relatives to be the first source of knowledge, followed by doctors, friends, and media. Very few gained knowledge through more than one source. Some from the upper class and middle class knew about menopause because of attending educational sessions. Another study conducted in Karachi also had relatives as the first source.[20] But the study by Fouzia et al. suggested that 60% had heard about menopause from a health-care provider.[21]

Correct answers for the age of menarche and menopause were given by upper-class women followed by the middle and then the lower class. When asked about the definition of menopause majority of the wrong answers were given by the lower class.

There are certain factors that lead to early or delayed onset of menopause. A study conducted in Boston, Massachusetts, proposed that women who suffer economic distress were at a 1.75 times higher risk of perimenopause and 1.2 years earlier menopause as compared to women reporting no lifetime economic distress.[22] Another study done at California, USA, suggested that socioeconomic status affects the age at natural menopause onset.[23] Early menopause protects against breast cancer, but increases the chances for uterine and ovarian cancer as well as cardiovascular disease.[24,25] The common causes of early menopause are smoking, radiation, chemotherapy,[25] underweight, low income, less education,[26] lack of exercise, nulliparity, breastfeeding, early age of menarche, and occupational or environmental stress. The known causes for late onset of menopause are increased BMI, multiparity, menarche at a later age, strenuous exercises, and specific geographical and racial factors.[25] In this study, the upper class seemed to be well aware of all the causes for both early and late onset of menopause followed by the middle and then the lower class. Lower middle class women only identified correctly depression and poverty to be the causal factors.

Social and cultural beliefs influence menopause symptoms, and almost 80% of women suffer from physical and psychological symptoms in the West.[27] Various symptoms, especially those mentioned in MRS (menopausal rating scale), were added to the questionnaire to assess the knowledge of women, regarding menopause. According to the literature survey in Pakistan, lethargy, body aches, and backaches were found to be the most common menopausal symptoms.[28] In the current study among all the symptoms, most of the women from lower-class identified depression, middle class considered headache, whereas majority of the upper class thought dry skin to be a common symptom of menopause. Altogether the lower class was again the most unaware. Almost half of the women from the entire sample had zero knowledge about the symptoms of menopause.

Western women tend to have better information about consequences of menopause.[29] In this study, it was suggested that 75% of females had some clue about the main adverse effects of menopause. Only a quarter were unaware; among this 51% were

from the lower class, followed by the middle and upper class. One-fifth had no clue that menopause could lead to weight gain, and a similar fraction (21%) was naive to osteoporosis. A quarter of the total participants gave no response to cancers and vision disturbances, whereas 31% did not know that menopause could increase the risk for cardiovascular diseases. This was quite similar to a survey conducted at Mexico City, which illustrated that 83.8% of women have knowledge about climacteric symptoms and 90% knew about osteoporosis in particular,[30] identical results were yielded by Sadia et al.'s[31] study about assessment of young women's knowledge about menopausal symptoms, done in 2013 at Karachi. Contrary to this a survey by Farah et al.[32] conducted in 2010 about perception of menopause among elderly women showed that only a small number of women were aware of consequences of menopause and diminished vision was recognized as the most famous implication followed by osteoporosis.

Some of the basic treatment options adopted by women for decreasing the severity of menopausal symptoms are hormone replacement therapy (HRT), herbal remedies, lifestyle changes, calcium-rich diet, dilatation and curettage (D and C) and a traditional Chinese treatment method: acupuncture.[33] Many international and national studies suggest that knowledge about HRT is scarce.[34] This study showed that knowledge about these treatment options varied class wise. Lower- and middle-class women had heard of popular herbal remedies and stressed upon specific diet plans for relief of menopausal symptoms, but only a few heard about HRT. The upper class was found to be very well aware of HRT. Acupuncture and D and C were least popular solutions among women in the current study. Myths regarding menopause are still prevailing globally.[35,36] The current study suggested that most women from the lower and middle class considered menopause to be an indication of old age, and believed that its symptoms appear only when the actual menopause commences. A large proportion among the upper class thought that it would end their sexual life and deemed the process to be worrisome. Although the least as compared to the above myths but a good number believed that symptoms were untreatable. This was identical to the response by most Asian women as majority consider menopause as an expected part of life.[37] Keeping in view these findings, it can be said that myths rule all minds regardless of socioeconomic status.

Women in eastern societies view menopause as a natural process and hold a positive attitude.[38] More than half of the premenopausal women included in the current study believed the same. Majority having negative thoughts about menopause belonged to the lower class, and most of the upper-class women had an optimistic attitude. Similar findings were by Farah et al.,[32] who suggested that 78.5% perceived menopause as a natural process, and Mahajan et al.[39] found that 44% of the women are affected in a negative manner during the menopause stage. Similar were the results achieved by a survey done in Punjab.[40]

In this study, majority of illiterate women belonged to the lower class and with least knowledge about menopause. This suggests that this class direly needs awareness.

CONCLUSION

The study identifies that doctors are not the first source of knowledge among the premenopausal population; this means physicians should discuss this topic with patients more often as to spread correct knowledge and alleviate negative attitudes

and myths. The current study indicates that among the three socioeconomic classes, premenopausal women from the lower class have the least knowledge about menopause, its symptoms and treatment.

CLINICAL SIGNIFICANCE

Since the life expectancy is rising all over the world, it will make more women live up to the age of menopause. Hence they should have awareness about the health risks menopause can expose them to as well as the prevention. Majority of the women of Pakistan belong to the lower class strata, and hence to decrease the morbidity and mortality caused by menopausal effects, this class should be familiarized with the inevitable process of menopause.

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