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Menopause Related Health Problems and Quality of Life of Menopausal Women from Urban Slums of Western Maharashtra: An Observational Study

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ABSTRACT

Introduction: During menopause, women may experience vasomotor, psychosocial, physical, as well as sexual dysfunction. Studies on menopausal issues and health demand priority in the Indian scenario due to the growing population of menopausal women as a result of their increased life expectancy.

Materials& Methods: A cross-sectional study was conducted using a predesigned, structured questionnaire based on sociodemographic variables and menopausal symptoms as per the MEN-QOL questionnaire and administered by the investigator. Postmenopausal women coming to UHTC were selected purposively until the sample size was reached and interviewed. Data collected were coded and entered in an Excel sheet. Values were expressed in the form of frequency and percentages.

Results: The mean age at menopause was 48.8 years. Most frequent menopausal symptoms were aching in muscle and joints (72.9%), feeling tired (65%), poor memory (61.4%), lower backache (49%), and difficulty in sleeping (54.3%). The vasomotor and sexual domains complained when compared to physical and psychological domains.

Conclusion: The age at onset of menopause in an urban area of southwestern Maharashtra is 48.8 years which is four years more than the mean menopause age for Indian women. The most frequent menopausal symptoms were aching in muscle and joints, feeling tired and poor memory.

Keywords: Menopausal symptoms, Quality of life

INTRODUCTION

The term menopause is defined as the permanent cessation of menstruation resulting from the loss of ovarian follicular activity. The World Health Organization (WHO) defines menopause as 12 consecutive months of amenorrhea for which there is no other obvious pathological or physiological cause.[1] Menopause commonly occurs around the age of 51 years throughout the world.[2] Menopause is a period of hormonal changes in addition to the changes in sense of self in family and work life.[1] In addition to the early-stage medical problems such as hot flashes, night sweats, difficulty sleeping, exhaustion, and anxiety due to estrogen inefficiency, late-stage medical problems such as osteoporosis, osteoporotic fractures, cardiovascular disease, urogenital symptoms, and so on, are experienced.[3] At the same time, women have concerns related to aging, loss of fertility, changes in body image, and health problems. These problems when considered along with the accompanying social implications affect the overall quality of life (QOL) negatively.[4, 5]

Other studies indicate that the menopausal period negatively affects the quality of life.[4] It is estimated

that 1.2 billion women will be in the peri-menopause and post-menopause stages by 2030. Thus, the difficulties of menopause and the resulting decreased quality of life would be faced by a significant number of women. The WHO defines the quality of life as individuals' perception of their position in life in the context of the culture and value systems in which they live and concerning their goals, expectations, standards, and concerns.[6] There is inherent clinical and public health interest in the age at which the final menstrual cycle is reached since the age at which normal menopause occurs can be a predictor of aging and health. Due to genetic, cultural, lifestyle, socioeconomic, academic, behavioral, and dietary variables, the person response to menopause differs considerably. Postmenopausal symptoms can inadvertently cause socio-cultural consequences that ultimately affect their quality of life. The poor quality of life among a high proportion of women in the menopausal phase would place a significant burden on public health care in developing countries like India. Therefore, this study was conducted to learn about the average age of menopause, prevalence of various menopausal symptoms and their implications of the overall quality of life in women residing in the urban slums of Western Maharashtra.

OBJECTIVES

The study was conducted to establish the average age of menopause and study the prevalence of menopausal symptoms and to study the quality of life among menopausal women.

MATERIALS AND METHODS

A community-based descriptive cross-sectional study was conducted among postmenopausal women in the field practice area of Urban Health Training Centre (UHC), Solapur from 1st October 2018 to 31st January 2019.

Inclusion criteria: Women in the early post-menopausal stage who were permanent residents of the study area and had given verbal consent were included in the study.

Exclusion criteria: Women who fulfilled the above criteria but had undergone medical or surgical menopause or had undergone chemotherapy/radiotherapy-induced ovarian failure or were taking hormone replacement therapy after natural menopause were excluded.

Sample size: It was calculated using the formula

$Z^2 P (100-P)/ L^2$ (Z = 1.96 for 95% confidence interval, P = estimated prevalence, taken as 69.1% as per the average prevalence of various menopausal symptoms from a similar study, [7] L = allowable error taken as 5%).

Thus, $n = 1.96^2 \times 69.1 (100 - 69.1)/52 = 329$;

Samples were selected using convenience sampling until the sample size was met and 355 participants were included in the study. The study protocol was approved by the Ethics Committee of this institution. Written informed consent was obtained from all participants before the start of the interview for data collection. No ethical issues were involved as it is merely observational in nature.

Data collection instrument: A predesigned, structured questionnaire based on Socio-demographic variables, menopause specific quality of life (MENQOL) [8-10] questionnaires, and Utian quality of life questionnaire was used to interview eligible participants by a house-to-house visit.[11, 12]

MENQOL questionnaire is a validated instrument used to measure health-related quality of life in middle-aged women in the years beyond the onset of menopause. It consists of 29 items grouped into four domains: vasomotor (1–3), psychosocial (4–10), physical (11–26) and sexual (27–29) [8-10]. For frequency of the MENQOL symptoms, participants were asked to rate whether they had experienced the symptom in the past month. If the answer to an item is yes, it was counted as presence of that symptom. The main outcome of this study was menopausal symptoms among the study participants. The UQOL was used to measure menopause-specific quality of life. The UQOL is a 23-item scale with four domains: occupational quality of life (items 2, 3, 6, 17, 18, 19, and 23); sexual quality of life (items 4, 5, and 14); health quality of life (items 7, 8, 9, 10, 16, 21, and 22); and emotional quality of life (items 1, 11, 12, 13, 15, and 20). Each question had a five-point Likert scale result, and women specified their agreement or non-agreement with the statements based on what they experienced in the previous month. The questions were written either positively or negatively. The minimum and maximum points achievable in the questionnaire are 23 and 115, respectively, and higher points in the questionnaire and sub-dimensions indicate a higher quality of life [11, 12].

Definition of Menopause: The World Health Organization (WHO) defines menopause after 12 consecutive months of amenorrhea for which there is no other obvious pathological or physiological cause.[1]

Definition of Early Post-menopause stage: The duration since menopause is less than or equal to and does not exceed 5 years.[13]

Data analysis: Data collected in the questionnaire were coded and entered in Microsoft Excel sheet.

Values were expressed in the form of percentages, mean and standard deviation. Tables were prepared. Statistical significance was set at P ≤ 0.05.

RESULTS

Overall, the mean age among 355 study participants was 45.73 ± 3.28 years. The maximum number of participants, i.e., 192 (54.08%), were in the age group of 45–49 years. The least number of participants, i.e., 26 (7.32%), belonged to the age group of 40–44 years. The majority 198 (55.77%) were Hindus, while 159 (43.38%) were Muslims.

Table 1: Socio-demographic profile of study participants (n=355)

Sociodemographic variables	Women (%)
Age (years)	
40-44	26 (7.32)
45-49	192 (54.08)
50-54	92 (25.91)
55-59	45 (12.67)
Religion	
Hindu	198 (55.77)
Muslim	154 (43.38)
Others	3 (0.84)
Education level	
Post Graduate	0
Graduate	1 (0.28)
Diploma	3 (0.84)
High school	32 (9.01)
Middle school	61 (17.18)
Primary school	213 (60)
Illiterate	45 (12.67)
Occupation	
Professional	1 (0.003)
Semi-professional	2 (0.56)
Clerical, Shop-owner, Farmer	2 (0.56)
Skilled worker	1 (0.28)
Semi-skilled	2 (0.56)
Unskilled	41 (11.54)
Unemployed	306 (86.19)
Socio-Economic status	
Upper	1 (0.28)
Upper Middle	2 (0.56)
Lower Middle	63 (17.74)
Upper Lower	186 (52.39)
Lower	103 (29.01)
Marital status	
Married	337 (94.92)
Single/Divorced/Widowed	18 (5.07)

Table 3. Distribution of participants' UQOL-T means quality-of-life scores

UQOL-T subscales (n = 355)	Mean	Min	Max	Standard Deviation
Occupational quality of life	18.36	13	33	4.46
Sexual quality of life	7.29	5	10	0.93
Health quality of life	21.06	17	29	2.95
Emotional quality of life	18.78	16	27	2.04
Overall	65.50	55	85	10.39

Among them, most of the participants 213 (60%) had completed their primary schooling. A majority (86.19%) of the participants were homemakers (Table no 1).

Table no 2 shows the frequency of various symptoms among the study participants who are grouped according to different ages. The mean duration since menopause for each of the age groups is also given, the least duration i.e. 2.34 for age group 40-44 years and maximum duration of 4.91 for age group 55-59 years. The vasomotor symptoms varied from 104 (29.2%) for "sweating" to 67 (18.8%) for "hot flushes". The psychosocial symptoms varied from 218 (61.4%) with participants "experiencing poor memory" to the least common symptom i.e. "feelings of wanting to be alone" which was experienced by 151 study participants (42.5%). The physical symptoms as per MENQOL showed maximum frequency was for "aching in muscles and joints" 259 (72.9%) and the least frequent symptom was "increased facial hairs" seen in 15 post-menopausal women (5%). Overall, the sexual domain had a lesser frequency of symptoms ranging from 119 (33.5%) for "change in sexual desire" to 114 (32.1%) for "avoiding intimacy."

Table 3 shows the distribution of participants' UQOL-T means quality-of-life scores. As per the UQOL-T reference mean score for satisfactory quality of life is 85.

The mean UQOL-T total score of all the participants was determined to be 65.50 +/- 10.39

(Range 55-85). These scores are as follows: 18.36 +/- 4.46 (range 13-33), occupational; 7.29 +/- 0.94 (range 5-10), sexual; 21.06 +/- 2.98 (range 17-29), health; and 18.78+/- 2.08 (range 16-27), emotional. So, the quality of life in each domain is suboptimal.

DISCUSSION

The mean age of menopause observed in our study was 45.73 years. This is almost comparable to the report of Jadhav et al.[14] A study was done in Manipal, Karnataka, in 2009 among 352 postmenopausal women reported mostly physical and psychosocial symptoms such as "aching in muscle and joints" (67.7%), followed by "gets tired easily" (64.8%), "poor memory" (60.5%), "lower backache" (58.8%) to "feeling bloated" (55.1%) as the most common symptoms. The least common symptom was "increased facial hair" (15.3%), which is like the present study.[15]

Another study was done among 542 postmenopausal women in Riyadh, Saudi Arabia in 2017 also reported similar findings.

Table 2: Menopausal symptoms amongst study population

Symptoms	40-44 yrs (n=26) (%)	45-49 yrs (n=192) (%)	50-54 yrs (n=92) (%)	55-59 yrs (n = 45) (%)	Total (n=355) (%)
MDSM	**2.34**	**2.66**	**3.67**	**4.91**	
Vasomotor Symptoms					
Hot flushes or flashes	12 (46.0)	34 (17.7)	18 (19.5)	3 (6.7)	67 (18.8)
Night sweats	10 (38.4)	17 (8.8)	5 (5.4)	0	32 (9)
Sweating	20 (76.9)	58 (30.2)	23 (25)	3 (6.7)	104 (29.2)
Psychosocial symptoms					
Being dissatisfied with my personal life	17 (65.3)	93 (48.4)	49 (53.2)	3 (6.7)	162 (45.6)
Feeling anxious or nervous	15 (57.6)	90 (46.8)	50 (54.3)	4 (8.8)	159 (44.7)
Experiencing poor memory	19 (73.0)	128 (66.6)	35 (38)	36 (80)	218 (61.4)
Accomplishing less than I used to	16 (61.5)	86 (44.7)	19 (20.6)	34 (75.5)	155 (43.6)
Feeling depressed down or blue	15 (57.6)	86 (44.7)	33 (35.8)	23 (51.1)	157 (44.2)
Being impatient with other people	15 (57.6)	86 (44.7)	46 (50)	9 (20)	156 (43.9)
Feelings of wanting to be alone	16 (61.5)	86 (44.7)	36 (39.1)	13 (28.8)	151 (42.5)
Physical symptoms					
Flatulence or gas pains	11 (42.3)	56 (29.1)	10 (10.8)	15 (33.3)	92 (25.9)
Aching in muscles and joints	20 (76.9)	159 (82.8)	60 (65.2)	20 (44.4)	259 (72.9)
Feeling tired or worn-out	21 (80.7)	128 (66.6)	68 (73.9)	21 (46.6)	238 (65)
Difficulty sleeping	17 (65.3)	117 (60.9)	39 (42.3)	20 (44.4)	193 (54.3)
Aches in the back of head or neck	12 (46.1)	55 (28.6)	19 (20.6)	13 (28.8)	99 (27.8)
Decrease in physical strength	16 (61.5)	86 (44.7)	34 (36.9)	18 (40)	154 (43.3)
Decrease in stamina	17 (65.3)	84 (43.7)	25 (27.1)	23 (51.1)	149 (41.9)
Feeling a lack of energy	13 (50)	70 (36.4)	18 (19.5)	10 (22.2)	111 (31.2)
Drying skin	7 (26.9)	54 (28.1)	27 (29.3)	18 (40)	106 (29.8)
Weight gain	11 (42.3)	64 (33.3)	10 (10.8)	16 (35.5)	101 (28.4)
Increased facial hair	1 (3.8)	10 (5.2)	5 (5.4)	2 (4.4)	18 (5)
Changes in appearance texture or tone of the skin	1 (3.8)	35 (18.2)	37 (40.2)	24 (53.3)	97 (27.3)
Feeling bloated	9 (34.6)	30 (15.6)	14 (15.2)	4 (8.8)	57 (16)
Low backache	15 (57.6)	90 (46.8)	40 (43.4)	29 (64.4)	174 (49)
Frequent urination	0	9 (4.6)	6 (6.5)	3 (6.7)	18 (5)
Involuntary urination when laughing or coughing	0	7 (3.6)	17 (18.4)	10 (22.2)	34 (9.5)
Sexual Symptoms					
Change in sexual desire	13 (50)	65 (33.8)	20 (21.7)	21 (46.6)	119 (33.5)
Vaginal dryness during intercourse	13 (50)	57 (29.6)	40 (43.4)	7 (15.5)	117 (32.9)
Avoiding intimacy	12 (46.1)	55 (28.6)	29 (31.5)	18 (40)	114 (32.1)

Most commonly reported symptoms were from the physical domain, namely "aching muscles and joints" (82.1%), "decrease in physical strength" (76.6%), and "feeling tired or worn out" 378 (69.7%). Least common symptoms were "dissatisfied with personal life" (5.5%), "increased facial hair" (10.7%), and "vaginal dryness" (11.1%).[16]

It is known that quality of life is affected negatively by menopause symptoms. However, individual perceptions of health and satisfaction with life are affected by expectations regarding health and the ability to cope with limitations and disabilities.[17] Therefore, two women with the same menopause-related symptoms may perceive a different quality of life concerning the perception of menopause. Perception of menopause can be positive in some cultures in which social status increases with age; however, menopause is also perceived negatively in other cultures. Negative menopausal perception can be associated with aging concerns, a decrease in reproductive ability, focusing on changes in appearance and perceived decreased attractiveness, and/or considering menopause to be a serious disease that needs to be treated. Therefore, cultural factors can affect the perception of menopause, and the perception of menopause can affect the quality of life.[18]

Additionally, in women experiencing pain arising from menopause symptoms, pain thresholds and the levels to which they can tolerate pain can influence the perceived quality of life. Utian et al suggest that the ideal practical assessment in clinical practice would be to combine the UQOL with a validated menopause-related symptom inventory. The UQOL is a suitable scale to assess the quality of life in the menopause stage rather than the menopause symptoms. Given that estimation of the quality of life in menopause could be an essential aspect in the decision-making process related to treatment, lifestyle changes, and follow-up of health status, the translation, and application of such a questionnaire could be of paramount importance in understanding the health-related needs of postmenopausal women worldwide.[11-12]

The mean UQOL-T total score of all the participants was determined to be 65.50 +/- 10.39 (range 55-85). These scores are as follows: 18.36 +/- 4.46 (range 13-33), occupational; 7.29 +/- 0.94 (range 5-10), sexual; 21.06 +/- 2.98 (range 17-29), health; and 18.78+/- 2.08 (range 16-27), emotional. So, the quality of life in each domain is sub-optimal. The overall UQOL scores in the present study (65.50+/-10.39), as well as scores in individual domains, were low compared to studies conducted in Turkey (75.43+/-15.64), Serbia (80.53+/-13.58), and China (82.08+/-13.12).[19]

CONCLUSION

The mean age of onset of menopause was 45.73 +/- 3.28 years. Menopausal symptoms are not associated with the socio-economic status of the women. The commonest menopausal problem was Myalgia & arthritis – 72%. The least common symptom was increased facial hair – 5%. Almost all areas or domains like vasomotor, physical, psychosocial, and sexual which were studied had been found to be impaired in menopausal women supporting the fear about menopause in the community. The overall UQOL was 65.50+/-10.39, less compared to other countries. The quality of life in each domain is sub-optimal. Many women all over the world suffer from menopausal symptoms, and the problem cannot thus be ignored.

RECOMMENDATIONS

The government could concentrate on providing health services to women in the post-reproductive age group also besides women in the reproductive age. This can be achieved by incorporating components related to specific health needs of postmenopausal women in the national health programs.

Information education and communication activities to increase awareness about menopause problems among the general public, family members, and middle-aged women population should be undertaken to improve and maintain their health and psychological quality of life.

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