Prevalence of menopausal symptoms among rural women in Bangladesh

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Original Article

Abstract

BACKGROUND: Menopause is a physiological process in women's life causing a variety of vasomotor, psychological, physical, and sexual symptoms. The aim of the study was to determine the prevalence of menopausal symptoms among rural women in Bangladesh.

METHODS: This cross-sectional study was conducted from 1st January to 31st December 2018 on 384 postmenopausal women aged 40-70 years and selected by convenience sampling in the rural areas of Faridpur District in Bangladesh. We used the Menopause-Specific Quality of Life Questionnaire (MENQOL) for measuring the prevalence of menopausal symptoms. SPSS software was used for data analysis.

RESULTS: The mean age of menopause was 47.13 ± 4.30 years. Out of 384 postmenopausal women, the most common symptoms in the vasomotor domain were 'sweating' (98.2%) and 'hot flushes' (94.5%). In the psychological domain, the most common symptoms were 'accomplishing less than I used to' (99.7%) and 'experiencing poor memory' (98.2%). In the physical domain, the most common symptoms were 'decreases in physical strength' (100%), 'feeling lack of energy' (100%), 'changes in appearance, texture, or tone of skin' (100%), 'decreased stamina' (99.7%), 'dry skin' (99.7%), and 'feeling tired or worn out' (97.1%). Out of 60.9% married menopausal women, the most common symptoms in the sexual domain were 'change in sexual desire' (58.6%) and 'avoiding intimacy' (58.3%).

CONCLUSION: Many of the menopausal symptoms were frequent except 'increased facial hair', 'weight gain', and 'willing to be alone', which were present in 2 (0.5%), 119 (31.0%), and 122 (31.8%) women, respectively.

KEYWORDS: Prevalence; Menopause; Bangladesh

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Introduction

Menopause is a feminine milestone signaling not only the end of women's reproductive phase but also introducing them to a new phase of life.[1] It is a normal physiological process that is defined as the permanent cessation of menstrual period for 12 months or more due to cessation of ovarian hormone production.[2,3] Lack of these hormones causes various menopausal symptoms.[1,4]

Nowadays, with increasing life expectancy and life span, women spend one-third of their lifetime after menopause.[5] In the coming decades with the aging of the worldwide population, it is estimated that 1.2 billion women worldwide will be menopausal or postmenopausal by the year 2030.[6]

Menopause is a universal event in a women's life causing a variety of vasomotor, physical, psychological, and sexual symptoms.[7] The nature, frequency, and severity of symptoms differ not only among the individuals of different countries but also in the same population with different cultures

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and ethnicities.[1,8]

The age of natural menopause is between 45 and 50 years. Early menopause is defined as menopause occurring before the age of 45 years, whereas premature menopause occurs before the age of 40 years.[2]

Postmenopausal women have a high prevalence of menopausal symptoms that significantly affect their quality of life (QOL).[9] Although menopause-related symptoms have been widely studied in Western countries, few data are available in Asia, especially in South East Asia.[10] In a developing country like Bangladesh, there are few epidemiological data regarding menopause.

In order to improve the health quality of menopausal women, we need in-depth data about the menopausal symptoms. The result of this study may help the researcher and policy makers to formulate preventive and promotive measure for the healthy life of rural menopausal women.

Methods

This cross-sectional study was conducted from 1st January to 31st December 2018 on 384 menopausal women aged 40-70 years in different villages of Faridpur District of Bangladesh. Data were gathered using convenience sampling. To conduct this study, formal ethical approval was obtained from the Institutional Review Board (IRB) of the National Institute of Preventive and Social Medicine (NIPSOM). Before data collection, informed written consent was obtained from every participant after explaining the aim and purpose of the study. Inclusion criteria for statistical analysis consist of women having physiological menopause, age group between 40 to 70 years, and not menstruating during the past 12 months. Women with induced menopause, simple hysterectomy, history of physical and mental disorders, and those who refused to participate were excluded from the study. Data were collected by face to face interview. The interview was taken at home of the participant ensuring the privacy and confidentiality as far as possible. We used the Menopause-Specific Quality of Life Questionnaire (MENQOL) for measuring the prevalence of menopausal symptoms. MENQOL is a 29-item questionnaire which is divided into four domains: physical, vasomotor, psychosocial, and sexual. With regards to menopausal symptoms, the women were asked if they had experienced these symptoms in the previous one-month period. In these women, a number of demographic variables including current age, age of menopause, marital status, educational level, and working status were also recorded. SPSS software (version 20, IBM Corporation, Armonk, NY, USA) was used to analyze data. Data were statistically described in terms of mean, standard deviation (SD), frequencies, and percentages.

Results

A total of 384 women aged 40-70 years participated in this study. The mean age of the woman was 58.02 ± 7.57 years.

Majority (98%) of the menopausal women were Muslim, 92.7% illiterate (unable to read or write), 97.4% housewives, 60.9% married, and 51% had 4 or more children. The mean age at menopause was 47.13 ± 4.30 years. Maximum age of menopause was 55 years and a minimum age of menopause was 40 years (Table 1).

Many of the menopausal symptoms were frequent except 'increased facial hair', 'weight gain', and 'willing to be alone', which were present in 2 (0.5%), 119 (31.0%), and 122 (31.8%) women, respectively. It was observed that out of 384 participants, the most common symptoms in the vasomotor domain were 'sweating' (n = 377, 98.2%) and 'hot flushes' (n = 363, 94.5%). In psychosocial domain, the most common symptoms were 'accomplishing less than I used to' (n = 383, 99.7%) and 'experiencing poor memory' (n = 377, 98.2%).

Table 1. Socio-demographic characteristics of the studied participants

Characteristics	n (%)
Age (year)	
< 50	69 (18.0)
≥ 50	315 (82.0)
Religion	
Muslim	378 (98.0)
Hindu	6 (2.0)
Level of education	
Illiterate	356 (92.7)
Primary	24 (6.3)
Secondary	4 (1.0)
Occupation	
Housewife	374 (97.4)
Day laborer	10 (2.6)
Marital status	
Married	234 (60.9)
Widow	139 (36.2)
Divorced	11 (2.9)
Number of children	
0-3	188 (49.0)
4 and more	196 (51.0)
Age of menopause (year)	
40-45	152 (39.6)
46-50	144 (37.5)
51-55	88 (22.9)

In physical domain, the most common symptoms were 'decreases in physical strength' (n = 384, 100%), 'feeling lack of energy' (n = 384, 100%), 'changes in appearance, texture, or tone of skin' (n = 384, 100%), 'decreased stamina' (n = 383, 99.7%), 'dry skin' (n = 383, 99.7%), and 'feeling tired or worn out' (n = 373, 97.1%). In sexual domain, out of 234 (60.9%) married participants, the most common symptoms were 'change in sexual desire' (n = 225, 58.6%) and 'avoiding intimacy' (n = 224, 58.3%) (Table 2).

Discussion

Menopause has emerged as an important issue in women's health. The individual response to menopause and estrogen deficiency varies considerably due to genetic, cultural, lifestyle, socioeconomic, educational, and dietary factors.[7]

Table 2. Frequency and percentage of menopausal symptoms

No	Symptoms	Yes [n (%)]	No [n (%)]
A.	Vasomotor domain		
1.	Hot flushes	363 (94.5)	21 (5.5)
2.	Night sweats	317 (82.6)	67 (17.4)
3.	Sweating	377 (98.2)	7 (1.8)
B.	Psychosocial domain		
4.	Dissatisfaction with personal life	310 (80.7)	74 (19.3)
5.	Feeling anxious or nervous	338 (88.0)	46 (12.0)
6.	Experiencing poor memory	377 (98.2)	7 (1.8)
7.	Accomplishing less than I used to	383 (99.7)	1 (0.3)
8.	Feeling depressed, down, or blue	342 (89.1)	42 (10.9)
9.	Impatience with other people	197 (51.3)	187 (48.7)
10.	Willing to be alone	122 (31.8)	262 (68.2)
C.	Physical domain		
11.	Flatulence (wind) or gas pain	316 (82.3)	68 (17.7)
12.	Aching in muscles and joints	348 (90.6)	36 (9.4)
13.	Feeling tired or worn out	373 (97.1)	11 (2.9)
14.	Difficulty in sleeping	296 (77.1)	88 (22.9)
15.	Aches in back of neck or head	339 (88.3)	45 (11.7)
16.	Decreases in physical strength	384 (100)	-
17.	Decreased stamina	383 (99.7)	1 (0.3)
18.	Feeling lack of energy	384 (100)	-
19.	Dry skin	383 (99.7)	1 (0.3)
20.	Weight gain	119 (31.0)	265 (69.0)
21.	Increased facial hair	2 (0.5)	382 (99.5)
22.	Changes in appearance, texture, or tone of skin	384 (100)	-
23.	Feeling bloated	202 (52.6)	182 (47.4)
24.	Low backache	323 (84.1)	61 (15.9)
25.	Frequent urination	232 (60.4)	152 (39.6)
26.	Involuntary urination when laughing or coughing	199 (51.8)	185 (48.2)
D.	Sexual domain		
27.	Change in sexual desire	225 (58.6)	9 (2.3)
28.	Vaginal dryness during intercourse	212 (55.2)	22 (5.7)
29.	Avoiding intimacy	224 (58.3)	10 (2.6)

Identifying the symptoms that are most troublesome to women during the menopause is necessary for research, clinical care, and public health policy.[11] Due to the fact that few studies have been conducted in Bangladesh on menopausal symptoms, the aim of the present study was to assess the prevalence of menopausal symptoms. In this study, prevalence of menopausal symptoms was measured by MENQOL scale.

The mean age at menopause in this study was 47.13 ± 4.30 years. This is lower than studies done in Saudi Arabia (48.3 ± 3.0 years), Malaysia (51.28 ± 2.28 years)**,** Singapore (49.1 years), Thailand (48.7 years), Pakistan (52.17 ± 6.019 years), and Egypt (48.1 years).[2,12-15]But this is slightly higher than that found by Karma *et al.* (2018) in Punjab, India, where mean age of attaining menopause was 45.80 ± 4.49 years.[7]

Many studies reported that 'hot flushes' and 'sweating' were the most common symptoms in menopausal women,[16,17] that was similar to our findings. However, in a Singaporean study by Chim et al., the frequency of hot flushes and night sweats was 17.6% and 8.9%, respectively, and that was considerably lower than our results.[18] Vasomotor symptoms are usually related to hormonal changes during menopause periods;[19] therefore, this difference may have been due to genetic or socio-cultural diversity and also differences in diet, especially the consumption of phytoestrogenic foods.

The most prevalent psychosocial symptoms in our study population were 'accomplishing less than I used to' and 'experiencing poor memory'. 'Accomplishing less than I used to' was defined as being unable to maintain daily activities. However, in several studies, the most common symptom that was reported was 'poor memory'.[18,20,21] But a study in Tehran, Iran, showed that 'feeling anxious or nervous' was the most common problem in this domain.[22]

Regarding somatic symptoms, our study showed that all postmenopausal women had a complaint of 'decreases in physical strength' (100%), 'feeling lack of energy' (100%), and 'changes in appearance, texture, or tone of skin' (100%). 'Feeling lack of energy' is similar to several studies done in Iran,[5,17,22,23] Singapore,[18] Ecuador,[20] and Oman.[21] Somatic and psychological symptoms are not related to menopausal status, because these symptoms are multi-factorial, rather than being due to hormonal imbalance, and menopausal women usually experience these symptoms due to health problems related to aging.

Our results concerning sexual symptoms showed that out of 60.9% of married participants, 58.6% experienced 'change in sexual desire', 58.3% experienced 'avoiding intimacy', and 55.2% faced 'vaginal dryness' after menopause. In Iranian women and in Korean women, the most common symptom was 'change in sexual desire'.[5,24] In Singaporean women, the most common symptom was 'avoiding intimacy'[18] and in Ecuadorian women, the rate of 'avoiding intimacy' was 76.5%.[20] In one study, 'avoiding intimacy' was reported in 92% of women.[22]

Conclusion

The findings of this study expand understanding of the menopause symptoms in rural women in Bangladesh. The current study concluded that a significantly higher proportion of postmenopausal women suffered from menopausal symptoms. The prevalence of most of the menopausal symptoms was high except for 'increased facial hair', 'weight gain', and 'willing to be alone'. In short, almost all areas or domains evaluated were impaired in menopausal women. Women need special care and attention in their postmenopausal period to improve the QOL. Thus, government could concentrate on providing health services by incorporating components related to specific health needs of postmenopausal women in the national health programs.

Conflict of Interests

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References

1. Nisar N, Sikandar R, Sohoo NA. Menopausal symptoms: Prevalence, severity and correlation with sociodemographic and reproductive characteristics. A cross sectional community based survey from rural Sindh Pakistan. J Pak Med Assoc. 2015; 65(4): 409-13.
2. AlDughaither A, AlMutairy H, AlAteeq M. Menopausal symptoms and quality of life among Saudi women visiting primary care clinics in Riyadh, Saudi Arabia. Int J Womens Health. 2015; 7: 645-53.
3. Soules MR, Sherman S, Parrott E, Rebar R, Santoro N, Utian W, et al. Executive summary: Stages of Reproductive Aging Workshop (STRAW). Climacteric. 2001; 4(4): 267-72.
4. Dennerstein L, Dudley EC, Hopper JL, Guthrie JR, Burger HG. A prospective population-based study of menopausal symptoms. Obstet Gynecol. 2000; 96(3): 351-8.
5. Abedzadeh-Kalahroudi M, Taebi M, Sadat Z, Saberi F, Karimian Z. Prevalence and severity of menopausal symptoms and related factors among women 40-60 years in Kashan, Iran. Nurs Midwifery Stud. 2012; 1(2): 88-93.
6. Sussman M, Trocio J, Best C, Mirkin S, Bushmakin AG, Yood R, et al. Prevalence of menopausal symptoms among mid-life women: Findings from electronic medical records. BMC Womens Health. 2015; 15: 58.
7. Karma D, Saini S, Singh S, Sehgal DK. Quality of life among post-menopausal women in rural area of Punjab. Journal of Medical Science and Clinical Research. 2018; 6(1): 32471-7.
8. Randolph JF, Sowers M, Gold EB, Mohr BA, Luborsky J, Santoro N, et al. Reproductive hormones in the early menopausal transition: relationship to ethnicity, body size, and menopausal status. J Clin Endocrinol Metab. 2003; 88(4): 1516-22.
9. Kamal N, Seedhom A. Quality of life among postmenopausal women in rural Minia, Egypt. East Mediterr Health J. 2017; 23(8): 527-33.
10. Rahman SA, Zainudin SR, Mun VL. Assessment of menopausal symptoms using modified Menopause Rating Scale (MRS) among middle age women in Kuching, Sarawak, Malaysia. Asia Pac Fam Med. 2010; 9(1): 5.
11. Asadi M, Jouyandeh Z, Nayebzadeh F. Prevalence of menopause symptoms among Iranian women. J Family Reprod Health. 2012; 6(1): 1-3.
12. Melby MK, Anderson D, Sievert LL, Obermeyer CM. Methods used in cross-cultural comparisons of vasomotor symptoms and their determinants. Maturitas. 2011; 70(2): 110-9.
13. Boulet MJ, Oddens BJ, Lehert P, Vemer HM, Visser A. Climacteric and menopause in seven South-east Asian countries. Maturitas. 1994; 19(3): 157-76.
14. Nisar N, Sohoo NA. Frequency of menopausal symptoms and their impact on the quality of life of women: A hospital based survey. J Pak Med Assoc. 2009; 59(11): 752-6.
15. Ibrahim ZM, Sayed Ahmed WA, El-Hamid SA. Prevalence of menopausal related symptoms and their impact on quality of life among Egyptian women. Clin Exp Obstet Gynecol. 2015; 42(2): 161-7.
16. Al-Olayet A, Al-Qahtani I, Dalal I, Al-Essa F, Al-Saleek R, Al-Moutary L, et al. Severity of menopausal symptoms, and knowledge attitude and practices towards menopause among Saudi women. Sci Res Essays. 2010; 5(24): 4077-9.
17. Askari F, Basiri Moghadam K, Basiri Moghadam M, Torabi S, Gholamfarkhani S, Moharreri M, et al. Age of natural menopause and compare The incidence of its early complications in menopause transition stages in women from Gonabad city. Horizon Med Sci. 2012; 17(4): 42-8.
18. Chim H, Tan BH, Ang CC, Chew EM, Chong YS, Saw SM. The prevalence of menopausal symptoms in a community in Singapore. Maturitas. 2002; 41(4): 275-82.
19. 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; 57(3): 306-14.
20. Chedraui P, Hidalgo L, Chavez D, Morocho N, Alvarado M, Huc A. Menopausal symptoms and associated risk factors among postmenopausal women screened for the metabolic syndrome. Arch Gynecol Obstet. 2007; 275(3): 161-8.
21. El Shafie K, Al Farsi Y, Al Zadjali N, Al Adawi S, Al Busaidi Z, Al Shafaee M. Menopausal symptoms among healthy, middle-aged Omani women as assessed with the Menopause Rating Scale. Menopause. 2011; 18(10): 1113-9.
22. Rostami A, Ghofranipour FA, Ramazanzadeh F, Kazemnejad A. The effect of health education program on quality of women's life in menopause. Daneshvar Med. 2004; 11(49): 19-24.
23. Delavar MA, Hajiahmadi M. Factors affecting the age in normal menopause and frequency of menopausal symptoms in northern Iran. Iran Red Crescent Med J. 2011; 13(3): 192-8.
 Lee MS, Kim JH, Park MS, Yang J, Ko YH, Ko SD, et al. Factors influencing the severity of menopause symptoms in Korean post-menopausal women. J Korean Med Sci. 2010; 25(5): 758-65.