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Prevalence of Menopausal Symptoms in Bangladeshi Women

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ABSTRACT
Background: *Life expectancy of women has increased a lot so they have to leave more than half of their life span in estrogen deficiency state with menopausal symptoms. These are mainly vasomotor symptoms, mood disorder and genitourinary syndrome of menopause (GSM). If they are not properly addressed it reduces the quality of life of these women.*
Objective: *Our study aimed to determine the prevalence of menopause symptoms that of vasomotor, psychological and genitourinary syndrome of menopause among Bangladeshi women and to see its effect on their quality of life.*
Methods: *This cross-sectional observational study was carried out in the Department of Obstetrics and Gynaecology, Z.H. Sikder Women's Medical College, Dhaka and Medinova centre, from January 2022 to December 2023. A total of 517 menopause women were aged between 45-60 years were enrolled in the study by random sampling. The Menopause Rating Scale (MRS) was used to evaluate menopausal symptoms. Face to face interview was done by the doctors. Informed consent from women & ethical permission from the institute were taken. Statistical analyses of the results were be obtained by using window-based Microsoft Excel and Statistical Packages for Social Sciences (SPSS-24).*
Results:
Distribution of vasomotor (Somatic) domain of the study population, was observed 430 (83.2%) patients with Hot flushes & sweating, 61(11.89%) patients with Palpitation (Heart discomfort), 369(71.4%) patients with Sleep Problem, and 299 (57.83%) patients with Joint and muscular discomfort. Regarding Psychosocial domain 52(10.05%) had depressive mood, 130(25.14%) had irritability, 155(29.98%) had anxiety and 388(75.05%) had physical and mental exhaustion. Distribution of GSM complaints, it was observed 424 (82.1%) had vaginal dryness, 317(61.3%) had dyspareunia and 2372(44.87%) had bladder problem .
Conclusion: *Study showed, vasomotor symptoms and genitourinary syndrome of menopause were the most prevalent symptoms. Also a fair number of menopause women suffer from psychological disorders. That significantly impairs the quality of life.*
Keywords: *Menopause, Menstrual cycles, genitourinary syndrome of menopause.*

I. INTRODUCTION

Menopause is a normal physiological & natural event. Menopause is a definite phase in a woman's life when her ovaries stop producing estrogen and her menstrual cycle stops. It also marks the end of her fertility. The diagnosis of menopause is made only after a woman has not had a period for twelve full months. The estrogen deficiency of menopause produces variety of symptoms that can affect the quality of life, these are vasomotor symptoms e in hot flushes, night sweats, palpitation then psychological disorders like low mood, anxiety, depression and GSM which includes vaginal dryness, repeated urinary infection, dysparunea. Also, it has long term health impact such as osteoporosis and cardiovascular diseases. [1, 2]

Vasomotor symptoms are the main bothering and common symptom in the early menopause. They include hot flushes, night sweats, and palpitation and are termed vasomotor symptoms because of vascular reactivity with initial prominent vasodilatation. Hot flushes are transient periods of intense heat in the upper part of the body usually accompanied by sweating. Hot flushes and night sweats are experienced by about 40-% in early transition, increasing to 60 -80% in late menopausal women. [3] About 25% it can be severe to cause significant distress. Sleep disturbances caused by hot flushes and sweating can lead to lethargy, poor physical functioning and depressed mood.

Mood swings, anxiety, and depression are some of the psychological symptoms during menopausal change. Nearly half of women on menopause transition can get easily irritated. They become less patient with the members of the family, friends, colleagues, and often feel tired and sad. With emotional changes they can appear nervous, stressful, and sometimes aggressive. Depression is more common in the menopause transition and early post menopause than premenopausal. A number of reports indicate that there is significant increase in risk of new-onset depression in women during menopause. [4]

GSM-It is a new term for a condition more renowned as atrophic vaginitis. It is consisting of genital, urological, and sexual problems affecting postmenopausal women. With a prevalence ranging from 36 to 90%, it affects many peri- and post-menopausal women. In pre-menopausal years, it can be found in 19% of women aged 40–45. [5, 6]

This symptomatology affects the quality of lives not only that estrogen deficiency state also produces long term squeal like osteoporosis, cardiovascular diseases, musculskeletal problems, decreased cognitive skills. These symptoms need to be properly managed to prevent the progression of long-term consequences.

The poor QOL of menopausal women would toll huge burden on public health care in developing countries like Bangladesh. Therefore, the aim of our study is to determent the prevalence of menopausal symptoms and its effect on QOL among women of Bangladesh.

II. METHODOLOGY

This cross-sectional observational study was carried out in the Department of Obstetrics & Gynaecology, Zoynul Haque Sikder Women's Medical College & Hospital, from January 2022 to December 2023. A total of 517 menopause women aged between 45-60 years were enrolled in the study by random sampling. Face to face interview was taken by the doctors with pre-designed questionnaires including the menopause rating scale (MRS) to assess the prevalence of Vasomotor/Somatic symptoms, Psychological symptoms and GSM/urogenital symptoms.

Women enrolled in the study were in Bengali. Doctors & Health care providers were trained about the signs & symptoms of menopause so that they were comfortable to get the history by translating it in Bangla.

The MRS scale, a self-administrative standardized questionnaire. MRS includes

Table I: Description of the symptoms of MRS [7]

ITEM	DESCRIPTION
1.	Hot flushes, sweating (episode of sweating)
2.	Irritability (feeling nervous, inner tension, feeling aggressive,
3.	Heart discomfort (unusual awareness of heart beat, Palpitation, tiredness
4.	Sleep problems (difficulty falling sleep, difficulty in sleeping through the night, waking up too early)
5.	Depressive mood (feeling 'down', sad, on the verge of tears, lack of derive, mood swings, loneliness,)
6.	Anxiety (inner restlessness, feeling 'panicky')
7.	Physical and mental exhaustion (general decrease in performance, impaired memory, decrease in concentration, forgetfulness, fatigue, headache, dizziness)
8.	Sexual problems (change in sexual desire, in sexual activity and satisfaction)
9.	Bladder problems (difficulty in urinating, increase need to urinate, bladder incontinence)
10	Dryness of the vagina (sensation of dryness or burning in the vagina, difficulty with sexual intercourse)
11	Joint and muscular discomfort (joint pain, muscle pain, backache)

Symptom frequency and intensity, were obtained and were assessed and correlated to demographic data. It is a validated questionnaire that consists of 11 items grouped into three categories-somatic, psychological, and urogenital. Each item is a menopausal symptom which is graded on a 5-point, with a minimum score of 0 and maximum of 4. Each symptom is rated from 0 to 4 as "no symptom," "mild," "moderate," and "severe," respectively. The overall score ranges from 0 to 44. Somato-vegetative subscale consists of 4 items i.e., Hot flushes or sweating, heart discomfort, sleeping problems, joint or muscular discomfort. Psychological subscale consists of 4 items i.e., Depressive mood, Irritability, Anxiety and Physical or mental exhaustion. Uro-genital subscale consist of 3 items i.e., sexual problems, Bladder problems and Dryness of vagina. Depending on the severity, each symptom is scored from 0 to 4 on Likert's scale with 0 being none and 4 being extremely severe. Somato-vegetative domain has a total score ranging from 0 to 16; uro-genital domain has total score from 0 to 12; psychological has total score ranging from 0 to 16. The overall score ranges from 0 to 44. This total score determines severity of menopausal symptoms in the form of no or little (score 0–4), mild (score 5–8), moderate (score 9–16) and severe (score 17–44). The higher the score of a domain, the more severe the problem and the greater is the degree of impairment of QOL. [8,9]

A cut off value of score up to 8 revealed good QOL i.e., no/little to mild symptoms and score ≥9 i.e. moderate to severe symptoms, revealed poor QOL.

We considered demographical variables – age, occupation, education, weight, height, BMI, age of menopause, time since menopause, alcohol/smoking, drugs, MHT, hobby, habits. The primary outcome of the study was to measure the prevalence of Vasomotor symptoms, psychological symptoms and the GSM according to MRS and the Impact of these symptoms on the quality of life of these women. We excluded menopause women having serious illness like cancer, severe psychosis, severe hypertension or uncontrolled diabetes or thyroid disorder and with chronic skin disease

Statistical analyses of the results were be obtained by using window-based Microsoft Excel and Statistical Packages for Social Sciences (SPSS-24). Descriptive analysis was performed using univariate statistics to report means and standard deviations (SDs) for the continuous variables and frequency distribution for the categorical variables. Chi-square analysis and Fisher's exact test were performed to compare the frequency of categorical variables.

III. RESULTS

Table-1: Age distribution of the study population

Age	N = 517	(%)
45-50	107	20.5
51-55	240	46.5
56-60	170	32.8

Table-1 shows age distribution of the study population, it was observed **107**(**20.5**%) patients were belonged to age 45-50 years, **240**(**46.5**%) patients were 51-55 years and 1**70**(**32.8**%) patients were 56-60 years.

Table -2: Educational status of women

Educational status	N = 517	(%)
Primary education	320	61.8
High school education	87	16.7
Higher secondary education	110	21.3

Table-2 shows **educational status** distribution of the study population, it was observed 87(16.7%) patients were Primary education, 320(61.8%) patients were High school education and 110(21.3%) patients were Higher secondary education.

Table -3: Nature of work of women

Nature of work	N = 517	(%)
Unemployed	323	62.5
Un skilled worker	134	25.9
Semi-skilled worker	60	11.5

Table-3 shows **Nature of work** distribution of the study population, it was observed 323(62.5%) patients were Unemployed, 134(25.9%) patients were Unskilled worker and 60(11.5%) patients were Semi-skilled worker.

Table -4: Marital status of women

Marital status	N = 517	(%)
Single	6	1.06
Married	490	94.8
Widow	13	2.51
Separated	8	1.54

Table-4 shows **Marital status** distribution of the study population, it was observed 6(1.06%) patients were Single, 490(94.8%) patients were Married, 13(2.51%) patients were Widow and 8(1.54%) patients were Separated.

Table -5: Types of family

Type of family	N = 517	(%)
Nuclear family	406	78.5
Joint family	101	19.5
Extended family	10	1.9

Table-5 shows types of family distribution of the study population, it was observed 406(78.5%) patients were nuclear family, 101(19.5%) patients were Joint family and 10(1.9%) patients were Extended family.

Table -6: Distribution of Vasomotor (Somatic)

Symptoms	n = 517	(%)
Hot flushes sweating	430	83.2
Palpitation (Heart discomfort)	61	11.89
Sleep Problem	369	71.4
Joint and muscular discomfort	299	57.83
Mean±SD		

Table-6 shows **distribution of vasomotor (Somatic) domain** of the study population, it was observed 430(83.2%) patients were Hot flushes sweat**ing**, **61**(**11.89**%) patients were **Palpitation (Heart discomfort), 369**(**71.4**%) patients were **Sleep Problem,** and **299**(**57.83**%) patients were **Joint and muscular discomfort**.

Table -7: Distribution of Psychosocial Domain

Symptoms	N = 517	(%)
Depressive mood	52	10.05
Irritability	130	25.14
Anxiety	155	29.98
Physical and mental exhaustion	388	75.05
Mean±SD		

Table-7 shows **distribution of psychosocial domain** of the study population, it was observed **52**(**10.05**%) patients had **depressive mood**, **130**(**25.14**%) patients had **irritability**, **155**(**29.98**%) patients had Feeling **anxiety** and **388**(**75.05**%) patients had **physical and mental exhaustion**.

Table -8: Distribution of Physical Domain

Symptoms	N = 517	(%)
Tiredness	412	79.6
Weight gain	207	40.3
Changes in the texture of the skin	102	20
Dry and itching skin	65	13.5
Hyper pigmentation of the skin	86	16.6

Table-8 shows **distribution of physical domain** of the study population, it was observed **412**(**79.6**%) patients had Tiredness, **207**(**40.3**%) patients had Weight gain, **102**(**20.0**%) patients had Changes in the texture of the skin**, 65**(**13.5**%) patients had Dry and itching skin and **86**(**16.6**%) patients had Hyper pigmentation of the skin.

Table -9: Distribution of GSM (Urogenital complaint)

GSM	N = 517	(%)
Vaginal dryness	424	82.1
Sexual problem	317	61.3
Bladder problem	297	45.0

Table-9 shows distribution of sexual complaints of the study population, it was observed 424(82.1%) patients had changes in vaginal dryness, 317(61.3%) patients had pain during sexual problem and 297(57.4%) patients had Bladder problem.

IV. DISCUSSION

The average life expectancy of a Bangladeshi woman is 74.3 years. One third or more of women's life is now going to be spent in the post-menopause, a state of estrogen deficiency. It is estimated that women live more than 30 years following natural menopause, which commonly occurs between 48 and 52 years, in developed countries. [10, 11] Our study showed the mean age of menopause is around 47 (±sd, 95% CI) years.

This finding has some similarities with some other studies. [12] The mean age of menopause in Bangladeshi women was found to be much less than their Western counterpart, which is around 51 years. [13] The present study stated the mean age of menarche was 12.34 (SD 1.4 years). This finding is comparable to other studies conducted in India. [12] Menopause is associated with a marked decrease in ovarian estrogen production. The low estrogen levels in postmenopausal women may trigger vasomotor symptoms (hot flashes) and, in time, the onset of symptoms of genitourinary syndrome, including vaginal dryness and dyspareunia and psychological disorder.

Our women are quite oblivious regarding their complains of menopause symptoms, but on enquiry they express the main sufferings. Nevertheless, women use to come and complain but that is the tip of iceberg.

In our study (Table-6) showed distribution of vasomotor domain of the study population, it was observed 430(83.2%) patients were Hot flushes, 369(71.4%) patients were Night sweats and 61(11.89%) patients were Profuse sweating along with hot flushes. Similar findings were discovered in a study conducted by Joseph et al in Manipal, India, [14, 15] which revealed that 96.4% of study participants experienced somatic complaints. In contrast, Bairy L et al. found that the study population had fewer vasomotor symptoms and had a lower incidence of hot flushes and profuse sweating (<50%).

Also, Vasomotor symptoms in our study were reported similar studies with the studies of [16, 17]. But our finding was higher than other studies. [18] In our study, menopausal women reported the following psychosocial and physical symptoms: forgetfulness 371 (71.8%), anxiety 269 (52.3%), exhaustion 412 (79.6%), lack of energy 368 (71.2%), and difficulties sleeping 312 (60.4%). Similar research, like ours, have found that Asian women had a high prevalence of physical and psychological disorders. According to the findings of a study conducted by Bairy, study participants complained more about physical symptoms than about other dimensions, with more than 50% of women complaining of exhaustion (64.7%), impaired memory (60.5%), and problems sleeping (51.7%). [19] The current study's findings in the psychosocial domain were comparable with another study finding by Karamkar, who stated that feeling uncomfortable or apprehensive (94%), lack of energy (88%) and difficulties sleeping (84%) were more common among the study population. [20]

GSM causes silent suffering for our menopause women; it brings conjugal disharmony. So, knowledge of the concept of GSM and its impact on the quality of life is paramount importance since it affects millions of Bangladeshi women and women of worldwide as well. For this reason, good knowledge about the GSM and trusting diagnosis can be valuable tools for the safety and efficacy of treatment of these women. In the studies of Sarmento and Tadir -most common symptoms include vaginal dryness (78%) and dyspareunia (76%). [21, 22]

Our study revealed, distribution of sexual complaints of the study population, it was observed 424 (82.1%) patients had changes in sexual desire, 317(61.3%) patients had pain during sexual intercourse and 297(57.4%) patients had vaginal dryness. Our findings were higher than the study of pan-European study which enrolled 3,000 women between the ages of 55–75 years and that evaluated the aspects of urogenital aging (UGA) observed that a total of 30% of women experiment from symptoms from urogenital atrophy. [23] Probably this discrepancy was because this study had most elderly women who were less engaged with sexual activity.

Limitations of the study

The present study was conducted in a very short period due to time constraints and funding limitations. The small sample size was also a limitation of the present study.

V. CONCLUSION

In this study, vasomotor symptoms and genitourinary syndrome of menopause were the most prevalent and severely rated menopausal symptoms. They significantly impair the quality of life. Also, a significant number of menopause women suffer from psychological disorders. In the light of our findings, climacteric symptoms of menopause women should be properly addressed to prevent the progression of the underline pathology. Otherwise, our women will suffer from poor quality of life silently. We need to end the silent sorrows of estrogen deficiency squeal.

VI. RECOMMENDATION

This study can serve as a pilot to much larger research involving multiple centers that can provide a nationwide picture, validate regression models proposed in this study for future use and emphasize points to ensure better management and adherence.

REFERENCE

[1]. Taffe JR, Dennerstein L. Menstrual patterns leading to the final menstrual period.Menopause 2002 ;9: 32
[2]. McKinlay SM, Brambilla DJ, Posner JG. The normal menopause transitions. Maturitus 1992;14; 103
[3]. Thurston EC, Joffe H. Vasomotor symptoms and menopause: findings from the study of women's Health across the Nation. Obstet/Gynecol Clin North Am 2011; 38:489

[4]. Cohen LS, Soares CN, Joffe H. Diagnosis of management of mood disorder during the menopausal transition. Am J Med 2005 ;118; Suppl 12B:93
[5]. Joseph N, Nagaraj K, Saralaya V, Nelliyanil M, Rao PJ. Assessment of menopausal symptoms among women attending various outreach clinics in South Canara District of India. Journal of mid-life health. 2014 Apr;5(2):84.
[6]. Ali RR, Mohamed SA, Moustafa MF, El Saied SF. Impact of menopausal symptoms on quality of life among women in Qena city. Assiut Scientific Nursing Journal. 2014 Dec 1;2(4.0):37-46.
[7]. Hauser GA, Huber IC, Keller PJ, Lauritzen C, Schneider HP. Evaluation der klinischen beschwerden (menopause rating scale). Zentralbl Gynakol. 1994;116(1):16-23.
[8]. Heinemann K, Ruebig A, Potthoff P, Schneider HP, Strelow F, Heinemann LA, Thai DM. The Menopause Rating Scale (MRS) scale: a methodological review. Health and Quality of life Outcomes. 2004 Dec; 2:1-8.
[9]. Chuni N, Sreeramareddy CT. Frequency of symptoms, determinants of severe symptoms, validity of and cut-off score for Menopause Rating Scale (MRS) as a screening tool: a cross-sectional survey among midlife Nepalese women. BMC women's health. 2011 Dec;11(1):1-9.
[10]. Dicker D, Nguyen G, Abate D, Abate KH, Abay SM, Abbafati C, Abbasi N, Abbastabar H, Abd-Allah F, Abdela J, Abdelalim A. Global, regional, and national age-sex-specific mortality and life expectancy, 1950–2017: a systematic analysis for the Global Burden of Disease Study 2017. The lancet. 2018 Nov 10;392(10159):1684-735.
[11]. Palacios S, Henderson VW, Siseles N, Tan D, Villaseca P. Age of menopause and impact of climacteric symptoms by geographical region. Climacteric. 2010 Oct 1;13(5):419-28.
[12]. Krishnamoorthy Y, Sarveswaran G, Jayaseelan V, Sakthivel M, Arivarasan Y, Bharathnag N. Assessment of quality of life based on psychological, somatovegetative, and urogenital health problems among postmenopausal women in Urban Puducherry, South India: A cross-sectional observational study. Journal of Mid-life Health. 2018 Oct;9(4):173.
[13]. World Health Organization. Report of a WHO Scientific Group. Research on the Menopause in the 1990s. WHO technical report series. 1996;866.
[14]. Joseph N, Nagaraj K, Saralaya V, Nelliyanil M, Rao PJ. Assessment of menopausal symptoms among women attending various outreach clinics in South Canara District of India. Journal of mid-life health. 2014 Apr;5(2):84.
[15]. Bairy L, Adiga S, Bhat P, Bhat R. Prevalence of menopausal symptoms and quality of life after menopause in women from South India. Australian and New Zealand Journal of Obstetrics and Gynaecology. 2009 Feb;49(1):106-9.
[16]. Joshi M, Nair S. Epidemiological study to assess the menopausal problems during menopausal transition in middle age women of Vadodara, Gujarat, India. Indian J Obstet Gynaecol Res. 2015;2(3):163-8.
[17]. Ahsan M, Mallick AK, Singh R, Prasad RR. Assessment of menopausal symptoms during perimenopause and postmenopause in tertiary care hospital. Journal of Basic and Clinical Reproductive Sciences. 2015;4(1):14-9.
[18]. Shre ES, Trout K, Singh SP, Singh AK, Mohan SK, Joshi A. Severity and clustering of menopausal symptoms among obese and nonobese postmenopausal women in India. Journal of Pharmacy & Bioallied Sciences. 2016 Apr;8(2):106.
[19]. Khatoon F, Sinha P, Shahid S, Gupta U. Assessment of menopausal symptoms using modified menopause rating scale (MRS) in women of Northern India. Int J Reprod Contracept Obstet Gynecol. 2018;7(3):947-51.
[20]. Sood A, Singh M, Raina S, Bhardwaj A, Chander V, Manhas A. Study of menopausal symptoms in the nursing staff and female attendants in a rural medical college. Tropical Journal of Medical Research. 2017 Jul 1;20(2):185-.
[21]. Sarmento AC, Fernandes FS, Marconi C, Giraldo PC, Eleutério-Júnior J, Crispim JC, Gonçalves AK. Impact of microablative fractional radiofrequency on the vaginal health, microbiota, and cellularity of postmenopausal women. Clinics. 2020 Aug 3;75.
[22]. Tadir Y, Iglesia C, Alexiades M, Davila GW, Guerette N, Gaspar A. Energy-based treatment for gynecologic conditions including genitourinary syndrome of menopause: consensus, controversies, recommendations, and FDA clearance. Lasers in surgery and medicine. 2019 Apr;51(4):315-7.
[23]. Barlow DH, Samsioe G, Van Geelen JM. A study of European womens' experience of the problems of urogenital ageing and its management. Maturitas. 1997 Jul 1;27(3):239-47.