



Mental health status and hygiene practices among menopausal women aged between 45-55 years in Bangladesh

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Abstract

Menopause, which signifies the end of a woman's reproductive years, is one step in a continuum of life stages. Menopause-related hormonal changes can have an impact on one's social, mental, emotional, and physical health. This study set out to evaluate the mental health status and cleanliness habits of Bangladeshi menopausal women in the 45-55 age range.

Methods: From February to August 2024, 220 women who had been purposefully selected for the study participated in this descriptive cross-sectional survey in four different parts of Dhaka. A semi-structured interview questionnaire was used to gather data. The individuals' mental health was evaluated using the Perceived Stress Scale.

Results: According to this survey, the majority of menopausal women (80.0%) were married, and 60.91% of them had one or more children. This study found that around 74.27% of the individuals were on hormone replacement treatment. Additionally, the study found that nearly half (46.82%) of the participants used antimicrobial soap and 55.0% of the individuals used bar soap for cleaning. In order to maintain perineal cleanliness, 67.27% of people used sanitary napkins and 47.27% of people waxed. According to our survey, 31.8% of women had moderate mental health disorders and 23.4% had severe mental health issues. Additionally, a chi-square test study revealed that among menopausal women, having a chronic illness, smoking, education level, and a positive history of mental illness were all substantially related with poor mental health status (P -value<0.05).

Conclusion: This finding implies that perimenopausal care is crucial for promoting quality of life and healthy aging.

Keywords: Bangladesh, mental health, hygiene, menopause, women, public health

Introduction

For women, the menopause is a major life transition that brings about significant shifts in the balance of sex hormones and may result in issues with both physical and mental health. A 12-month period of spontaneous cessation of menstruation at the age of 45-55 is known as natural menopause. Even though each person's age of onset and duration is unique. The impact of the menopausal transition on women's physical and mental well-being as they age has long been recognized. Menopausal symptoms can start in women several years before menopause and have an impact on their mental health. The frequency and intensity of these symptoms, which include mood swings, vaginal dryness, hot flashes, and disturbed sleep, vary throughout women. For example, when estrogen synthesis stops during menopause, the vulva and vaginal tissues get thinner, drier, and less flexible. Vaginal atrophy and vaginismus are consequently frequently observed. So much so that maintaining proper hygiene is essential throughout the menopause.

Every year, almost 47 million women worldwide experience a drop in hormone production and the end of their menstrual cycle. Menopausal and postmenopausal women are expected to number 1.2 billion worldwide by 2030. Hot flashes (72%), sleep difficulties (64%), and night sweats (58%), according to a 2019 UK Chartered Institute of Personnel and Development (CIPD) study poll of 1409 working women between the ages of 45 and 55, were the most common menopausal complaints. Six out of ten women who reported having menopausal symptoms at work reported being less able to focus.

According to a study done on Bangladeshi women, 30.4% of them suffered from major depression. There was no statistically significant correlation found between major depressive disorder and menopause status. In contrast to pre-menopausal (26.8%) groups, peri-(34.2%) and post-menopausal (33.3%) groups showed higher levels of depression. The study's findings show that middle-aged Bangladeshi women going through the menopause had a

significant prevalence of serious depression. Each and every menopausal symptom had an effect on a woman's mental health. There is evidence to show that Asian women have more menopausal distress than women in North America and Europe, albeit the effects may differ from person to person and region to region. Furthermore, a lot of menopausal women have unusual symptoms, and in Bangladesh, these symptoms may be more severe (Ahmed *et al.*, 2016) ^[1]. To add fuel to the fire, the majority of Bangladeshi women were unaware about the effects of menopause on their quality of life and their menopausal symptoms, given their low socioeconomic status (SES) and low literacy rate.

Research Objectives

General objective

To assess the mental health status and hygiene practices among menopausal women aged between 45-55 years in Bangladesh.

Specific objectives

- To determine the respondents' Sociodemographic attributes.
- To gauge the menopausal women's level of mental wellness.
- To evaluate the participants' hygienic habits
- To assess the relationship between mental health status and Sociodemographic factors.

List of variables

The following variables were used at the time of preparing instruments for data collection:-

- **Background characteristics:** The variables under consideration include marital status, the number of children, the age of the last child, education level, monthly family income, family type, history of mental illness, tobacco use, body mass index, history of chronic illness, and hormone replacement therapy.
- **Variables related to hygiene practices:** Douching, Sitz baths, cleaning techniques, public hair grooming, cleaning soap type, and perineal hygiene.
- **Mental health status:** Perceived Stress Scale.

Methodology

- **Study design:** This research applied descriptive cross-sectional study design to serve different objectives.
- **Study area and Period:** This study was conducted in purposively selected four areas (Mirpur, Uttara, Dhanmondi, and Motijheel) of Dhaka city. The study was conducted from February to August 2024.
- **Study population and sample size:** Study population were the women aged between 45-55 years living in Dhaka city, Bangladesh.

Sample was calculated by following formula:-

$$N = z^2pq/d^2$$

Where,

N=desired sample size

Z=1.96 (95% confidence interval)

$P=(33.3\% \text{ postmenopausal women were more depressed in Bangladesh}) [\text{Morshad Alam } et al., 2020]^{[1]} = 0.333$

$Q=1-P=1-0.333 = 0.667$

$D=5\%$

$So, N=(1.96)^2 (0.333 \times 0.667)/(0.05)^2$

$= 341.30$

Due to time and resource constraints 220 participants were selected for interview.

Sampling Technique: Data was collected through purposive random sampling technique from selected areas in Dhaka city of Bangladesh.

Selection Criteria

Inclusion criteria

- Women who are menopausal range in age from 45 to 55.
- Giving permission to take part in the research.
- Able to engage and willing in physical activities.

Exclusion criterion

- Found to have any other mental illness;
- Unwillingness to take part in the study.

Survey Instruments and quality control

- **Consent form:** This form was formatted in Bangla Language & given to all participants of this study.
- **Questionnaire:** Participants answers to a semi-structured questionnaire were gathered. A variety of questionnaires were pretested to gather input on the questions' appropriateness and applicability.

Data collection methods

For the in-person interview, data regarding background traits and personal hygiene were gathered using a semi-structured interview questionnaire. Interviewers gave participants a brief explanation of the study's aims prior to beginning data collection so they would be psychologically prepared for the particular inquiry. Participants signed an informed written consent form prior to the interview, which guaranteed that no personal information about them would be disclosed.

Mental health status

Perceived Stress Scale Sheldon Cohen developed a scale to gauge one's degree of depression and anxiety. One of the traditional tools for assessing stress is the Perceived Stress Scale (PSS). Despite being created in 1983, the instrument is still widely used to help us comprehend how various circumstances impact our emotions and our perception of stress. This scale asks about thoughts and feelings throughout the previous month.

0 = Never, 1 = Almost Never, 2 = Sometimes, 3 = Fairly Often, 4 = Very Often

- A score between 0 and 13 is regarded as low stress.
- A score between 14 and 26 is regarded as somewhat stressful.
- A score between 27 and 40 is regarded as high for perceived stress.

Data processing and Analysis

Every piece of information was double-checked, validated, and revised to remove any mistakes or discrepancies. After that, data were coded and added to a database using SPSS-V26, a statistical program. The focus of the analysis was on the indicators and the goals of the study.

Utilizing metrics of central tendency, dispersion, confidence interval, etc., a descriptive analysis of all pertinent variables was conducted. Using the Chi-square test, associations and differences between and within variables were examined. A significance level of $p < 0.05$ will be applied to all statistical tests. Furthermore, group differences were examined using the Chi-Square test.

Findings of the study

Socio-demographic information of the respondents

The respondents' Sociodemographic data is displayed in Table 1. The majority of menopausal women (60.91%) had one or two children, and the majority (80.0%) were married. 28.18% of the participants held a degree of graduation or above, and nearly half (46.36%) had completed the SSC and HSC levels of the participants, over half (55.45%) belonged to a nuclear family. With a mean income of 26312.082 (± 4122.341) taka, the majority of participants (41.36%) reported a monthly household income between 21,000 and 30,000 takas. 61.36% of people had a chronic illness, and 21.36% had a history of mental illness of the individuals, 40.0% were overweight, 25.46% were obese, and 56.36% smoked. Approximately 74.27% of the subjects were undergoing hormone replacement treatment. Table 1 Distribution of respondents by socio-demographic characteristics (N=220).

Table 1: Sociodemographic characteristics of the participants

Participants' characteristics		Frequency	% Distribution
Marital status	Married	176	80.0
	Unmarried	7	3.18
	Widowed/Divorced	37	16.82
Number of children	1-2	134	60.91
	3 or more	86	39.09
Age of last child	< 15 years	68	30.91
	≥ 15 years	152	60.09
Level of education	Below S.S.C	56	25.45
	S.S.C to H.S.C	102	46.36
	Graduation and above	62	28.18
Type of family	Nuclear	122	55.45
	Joint	98	44.45
Monthly family income	Up to 20000	45	20.45
	21000-30000	89	41.36
	31000-50000	38	20.36
	Above 50000	48	21.82
Mean \pm SD, 26312.082 \pm 4122.341			
History of mental disorder	Yes	47	21.36
	No	173	78.63
BMI	Underweight	30	13.63
	Normal	46	20.91
	Overweight	88	40.0
	Obese	56	25.46
Use of tobacco	Yes	124	56.36
	No	96	43.64
History of chronic disease	Yes	135	61.36
	No	85	38.64
Hormone replacement therapy	Yes	148	67.27
	No	72	32.73

Information regarding hygiene practice among the participants

Table 2 displays the hygiene habits of women going through menopause of the individuals, 19.55% reported using douching for vaginal hygiene, while a higher percentage (64.09%) took sitz baths. About half (46.82%) of the participants used antimicrobial soap, while 55.0% of the participants used bar soap for cleaning. Women clean with their hands 45.0% of the time, and 40.45% use washcloths.

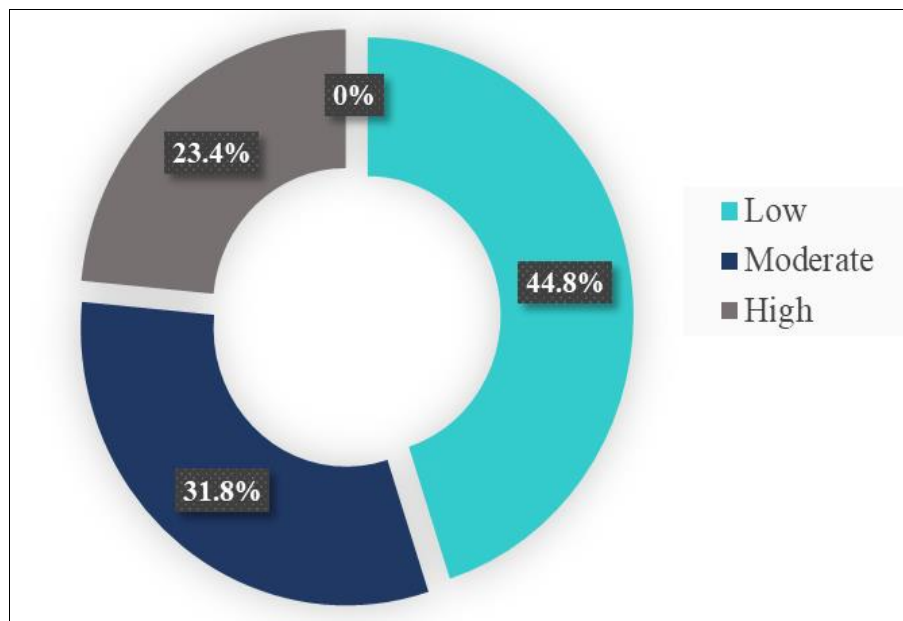
In order to maintain perineal cleanliness, 67.27% of people used sanitary napkins and 47.27% of people waxed.

Mental health status of menopausal women

Figure 1 shows the mental health state of women going through menopause as a pie chart of the women, 31.8% had moderate mental health disorders and 23.4% had severe mental health problems. 44.8%, however, experienced just mild mental health issues.

Table 2: Valvular and vaginal hygiene practice among the participants (N=220)

Participants' characteristics		Frequency	% Distribution
Douching	Yes	43	19.55
	No	177	80.45
Sitz baths	Yes	141	64.09
	No	79	35.90
Cleansing soap type	Bar soap	121	55.00
	Liquid soap	53	24.09
	Body wash	36	16.36
	Other	10	4.54
Antimicrobial soap	Yes	103	46.82
	No	117	53.18
Method of cleaning	Hand	99	45.00
	Wash cloth	89	40.45
	Sponge	19	8.63
	Other	13	5.91
Pubic hair grooming	Shave	92	41.82
	Wax	104	47.27
	Trim	24	10.91
Perineal hygiene	Sanitary napkin	148	67.27
	Witch hazel pads	52	23.64
	Peri care bottle	20	9.10



*Perceived Stress Scale (PSS)

Fig 1: Mental health status of menopausal women (PSS)

The relationship between menopausal women's mental health state and Sociodemographic characteristics was examined using the chi-square test. It is evident that among menopausal women, having a chronic illness, smoking, being married, having a high level of education, and having a positive history of mental illness were all strongly linked

to poor mental health ($P\text{-value} < 0.05$). Certain characteristics, including family type, monthly family income, BMI, and hormone replacement medication, were not shown to have a statistically significant correlation with the individuals' mental health state ($P\text{-value} \geq 0.05$).

Table 3: Association between Sociodemographic factors with mental health among menopausal women

Variables		Mental Health Status			
		Good (%)	Poor (%)	x ²	P-Value
Marital status	Married	9 (17.6)	42 (82.4)	9.89	0.001
	Unmarried	40 (22.7)	106 (77.3)		
	Widowed/Divorced	23 (12.4)	22 (11.8)		
Level of education	Below S.S.C	23 (21.2)	106 (78.8)	10.03	0.002
	S.S.C to H.S.C	52 (20.4)	76 (79.6)		
	Graduation and above	41 (13.9)	42 (11.7)		

Type of family	Nuclear	22 (30.1)	51 (69.9)	0.37	0.064
	Joint	18 (21.4)	66 (78.6)		
Monthly family income	Up to 20000	49 (16.1)	87 (83.9)	1.178	0.314
	21000-30000	21 (19.8)	75 (80.2)		
	31000-50000	15 (20.4)	63 (72.6)		
	Above 50000	46 (12.1)	56 (73.9)		
History of mental disorder	Yes	20 (22.5)	109 (77.5)	19.16	0.003
	No	42 (20.4)	144 (79.6)		
BMI	Underweight	9 (22.0)	32 (78.0)	1.056	0.115
	Normal	29 (19.3)	121 (80.7)		
	Overweight	20 (22.5)	58 (77.5)		
	Obese	42 (20.4)	63 (79.6)		
Use of tobacco	Yes	23 (19.2)	23 (19.2)	16.78	0.002
	No	38 (27.1)	38 (27.1)		
History of chronic disease	Yes	45 (31.0)	44 (35.0)	10.23	0.000
	No	64 (17.9)	56 (17.9)		
Hormone replacement therapy	Yes	42 (32.0)	41 (30.0)	0.675	0.212
	No	57 (14.1)	67 (18.9)		

Discussion

The purpose of this study was to evaluate menopausal women in Bangladesh who were between the ages of 45 and 55 in terms of their mental health and cleanliness habits. In this study, 220 postmenopausal women between the ages of 45 and 55 participated in interviews. According to the PSS Scale, intermediate mental health disorders affected 31.8% of women, while severe mental health problems affected 23.4% of them. 44.8%, however, experienced just mild mental health issues. The majority of menopausal women (60.91%) had one or two children, and the majority (80.0%) were married. 28.18% of the participants held a degree of graduation or above, and nearly half (46.36%) had completed the SSC and HSC levels of the participants, over half (55.45%) belonged to a nuclear family. With a mean income of 26312.082 (± 4122.341) taka, the majority of participants (41.36%) reported a monthly household income between 21,000 and 30,000 taka. 61.36% of people had a chronic illness, and 21.36% had a history of mental illness of the individuals, 40.0% were overweight, 25.46% were obese, and 56.36% smoked. Approximately 74.27% of the subjects were undergoing hormone replacement treatment. Similar to our study, Polisseni, *et al.* (2009) [2] found that 36.8% of women experienced depression at menopause. This study was conducted in Brazil. The prevalence of depression in postmenopausal women was reported to be 59.8% in an Iranian study by Afshari, *et al.*, which is higher than the current study (Afshari P, *et al.*, 2015) [3] of these women, 39.8% had mild depression and 16% had moderate depression.

Women in the younger age group were found to have higher rates of depression. 76.9% of women in the 41-45 age range reported having mild depression, while 19.2% reported having moderate depression. In women aged 46-50, 60.6% had mild depression and 4.2% had moderate depression; in women aged 51-55, mild and moderate depression were represented by 21.8% and 1.9%, respectively; in women aged 56-60, 18.4% had mild depression and none had moderate depression. According to data, depression was more common in young postmenopausal women, which is consistent with a study conducted in Turkey by Unsal, *et al.* that found depression was more common in women who went through the menopause early (less than 39 years of age), (Unsal A *et al.*, 2011) [4].

Chi-square test analysis was used in this study to assess the relationship between menopausal women's mental health status and Sociodemographic characteristics. It is evident that among menopausal women, having a chronic illness, smoking, being married, having a high level of education, and having a positive history of mental illness were all strongly linked to poor mental health ($P\text{-Value} < 0.05$). Certain characteristics, including family type, monthly family income, BMI, and hormone replacement medication, were not shown to have a statistically significant correlation with the individuals' mental health state ($P\text{-Value} \geq 0.05$). According to a study done in Beijing city by Li *et al.*, depression in postmenopausal women was found to be associated with socioeconomic status (Li Y *et al.*, 2008) [5]. This suggests that the prevalence of depression was higher among women from lower socioeconomic status than among those from higher socioeconomic status.

According to our research, married women who had positive relationships with their husbands were happier, whereas women who were widowed or divorced had higher rates of depression. These differences were shown to be statistically significant ($p < 0.05$). Similar results were found in a Punjab study by Bansal *et al.*, which found that widowed women experienced more severe depression than married women (Bansal P *et al.*, 2015) [6]. Similar results were observed in a study carried out in Beijing city by Li *et al.*, which found that women who were separated or divorced had higher rates of depression (Li Y *et al.*, 2008) [5].

According to the current study, women who lack literacy had a higher prevalence of depression. It was revealed that there was a statistically significant difference ($p < 0.05$) between the percentage of literate and illiterate women who had mild and moderate depression (57.8% and 5.2%, respectively) and 2.7% and 32.4%, respectively. Similar results were observed in a study by Afshari *et al.*, which discovered a relationship between education level and postmenopausal women's prevalence of depression (Afshari P *et al.*, 2015) [3]. Additionally, the results of a study by Choi *et al.* on Korean women revealed that economic position and education level are significant predictors of menopausal depression (Choi H *et al.*, 2004) [7].

Conclusion

The purpose of this study was to evaluate menopausal

women in Bangladesh who were between the ages of 45 and 55 in terms of their mental health and cleanliness habits. According to this survey, the majority of menopausal women (80.0%) were married, and 60.91% of them had one or more children. With a mean income of 26312.082 (± 4122.341) taka, the majority of participants (41.36%) had a family income of between 21,000 and 30,000 taka per month. This study also showed that around 74.27% of the individuals were on hormone replacement treatment. Additionally, the study found that nearly half (46.82%) of the participants used antimicrobial soap and 55.0% of the individuals used bar soap for cleaning. To maintain perineal cleanliness, 67.27% of people used sanitary napkins and 47.27% of people waxed. According to our survey, 31.8% of women had moderate mental health disorders and 23.4% had severe mental health issues. Additionally, a chi-square test study revealed that among menopausal women, having a chronic illness, smoking, education level, and a positive history of mental illness were all substantially related with poor mental health status ($P\text{-value} < 0.05$). These results assist decision-makers in implementing the best interventions to lessen menopausal women's mental health burdens and enhance hygienic habits.

Recommendations

- In order to lower anxiety and depression in menopausal women, intervention strategies pertaining to mental health care services must be developed.
- Enhancing counseling services with family members will help minimize women's feelings of dread and loneliness during this time of transition.
- In order to lower stress and improve restful sleep, menopausal women should be encouraged to make lifestyle changes such as exercising, eating a healthy diet, practicing meditation, and engaging in religious activities.
- It is imperative to initiate health education and health promotion initiatives to inform women about appropriate hygiene practices during this critical period.

Conflict of Interest

Not available

Financial Support

Not available

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