



Psychiatric Morbidity and Associated Psychosocial Factors in Post Menopausal Women

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KEYWORDS

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ABSTRACT:

Background: Natural menopause marks the irreversible end of menstruation and signals the conclusion of a woman's reproductive years, often accompanied by various psychological and somatic symptoms. Therefore, this study aims to evaluate the prevalence of psychiatric morbidity and explore its association with psychosocial factors among postmenopausal women.

Aim of the study: The aim of the study was to assess the prevalence of psychiatric morbidity and explore its association with psychosocial factors among postmenopausal women.

Methods: This cross-sectional, analytical, descriptive study was conducted at the Departments of Obstetrics and Gynecology, Physical Medicine, and Psychiatry of Bangabandhu Sheikh Mujib Medical University (BSMMU), Dhaka, during 2009–2010. A total of 165 postmenopausal women were selected by purposive sampling. After obtaining informed consent, socio-demographic and psychosocial data were collected through interviews. Psychiatric diagnoses were made using the SCID-CV and DSM-IV-TR criteria. Data were analyzed using SPSS version 12, with statistical significance set at $p < 0.05$.

Results: Among 165 postmenopausal women, 48 (29.1%) had psychiatric disorders, mainly depression (47.9%). Psychiatric morbidity was significantly linked to lower education ($p=0.001$), being a housewife ($p=0.000$), poor family support (e.g., inability to share problems: 52.1% vs. 12.0%, $p=0.000$), dissatisfaction with family environment (64.6% vs. 17.1%, $p=0.000$), loneliness (93.8% vs. 65.8%, $p=0.000$), and feeling like a burden (72.9% vs. 17.9%, $p=0.000$).

Conclusion: Psychiatric morbidity among postmenopausal women was notably associated with poor emotional support, negative self-perception, and lower educational and occupational status.

Introduction

Natural menopause refers to the irreversible end of menstruation due to the depletion of ovarian follicular activity, typically confirmed after 12 consecutive months without menstruation in the absence of any pathological or psychological explanation [1]. It represents a biological milestone signaling the conclusion of a woman's reproductive years as part of the natural aging process [2,3]. Hormonal fluctuations during the perimenopausal phase are associated with a range of somatic, sexual, and psychological symptoms. With rising life expectancy, it is now estimated that women

spend nearly one-third of their lives in the postmenopausal stage [4].

Depression and anxiety are among the most frequently observed psychiatric conditions associated with menopause. One study in India reported that 32.1% of postmenopausal women experienced depression, while 21% were affected by anxiety [5]. Although psychological distress has an estimated prevalence of around 24%, it is often underrecognized by clinicians—especially when women present primarily with physical complaints—leading to missed diagnoses in up to half of



the cases [6-9]. Many middle-aged women report experiencing symptoms of anxiety, with research indicating that up to 51% experience prolonged periods of tension, irritability, and nervousness lasting more than two weeks [10].

A range of psychological and social factors contribute to psychiatric morbidity during menopause. These include a personal history of mood disorders, negative mindset, specific personality traits, exposure to life stressors, limited coping abilities, physical health issues, inadequate education and financial resources, strained personal relationships, and prevailing cultural beliefs about menopause [11]. Psychosocial stressors such as major life changes, ongoing stress, daily frustrations, and negative expectations surrounding menopause further increase the risk of depression [12,13]. Additionally, personality characteristics can influence the intensity of menopausal symptoms, and several of these elements collectively impact the overall quality of life in menopausal women [14].

Challenges in social interactions and workplace responsibilities can significantly reduce the quality of life for women during the postmenopausal phase [15]. Considering the intricate psychological, social, and cultural dynamics of this transition, it is crucial to recognize psychiatric disorders and the related psychosocial stressors affecting postmenopausal women. Early identification and intervention are vital for enhancing mental well-being and improving overall health outcomes in this often-overlooked segment of the population. Therefore, The purpose of the study is to evaluate the prevalence of psychiatric morbidity and explore its association with psychosocial factors among postmenopausal women.

Objective

- To assess the prevalence of psychiatric morbidity and explore its association with psychosocial factors among postmenopausal women.

Methodology & Materials

This cross-sectional, analytical, and descriptive study was conducted at the outpatient departments of Obstetrics and Gynecology, Physical Medicine, and Psychiatry of Bangabandhu Sheikh Mujib Medical University (BSMMU), Dhaka, Bangladesh, between January 2009 and December 2010. A total of 165 postmenopausal women were included in the study, selected based on specific inclusion and exclusion criteria to assess the prevalence of psychiatric morbidity and explore associated psychosocial factors.

Inclusion Criteria

- Women who had experienced cessation of menstruation for at least one year (postmenopausal).

Exclusion Criteria

- Patients who were mute, stuporous, or otherwise non-communicative.
- Patients with cognitive impairment.
- Patients with a history of psychiatric disorders prior to menopause.

Following a preparatory phase from January to December 2009 involving site visits, questionnaire development, and pre-testing on 10% of the estimated sample, data collection was carried out between January and December 2010. Participants were recruited using purposive consecutive sampling. Informed written consent was obtained from all eligible participants. Data were collected via face-to-face interviews using structured questionnaires designed to capture socio-demographic and psychosocial variables. Psychiatric diagnoses were made by the principal investigator using the Structured Clinical Interview for DSM-IV Axis I Disorders (SCID-CV), and confirmed according to DSM-IV-TR criteria. All instruments were reviewed and culturally adapted by local experts. Data were entered into SPSS version 12 and analyzed using descriptive statistics, chi-square tests, and odds ratios. A p-value < 0.05 was considered statistically significant.



Results

Table 1: Socio-Demographic Characteristics of the Study Participants (n = 165)

Variable		Frequency (n)	Percentage (%)
Age	< 40	44	26.7
	40–59	92	55.8
	≥ 60	29	17.6
Habitat	Urban	98	59.4
	Rural	67	40.6
Religion	Islam	158	95.8
	Hindu	7	4.2
Education	Illiterate	42	25.5
	Primary	17	10.3
	Secondary	46	27.9
	SSC+	60	36.4
Occupation	Housewife	128	77.6
	Service	29	17.6
	Retired	8	4.8
Marital Status	Married	124	75.2
	Divorced	6	3.6
	Widowed	35	21.2
Family Pattern	Nuclear	72	43.6
	Joint	93	56.4
Parity	Yes	164	99.4
	No	1	0.6
Number of Children	0–2	49	29.7
	3–5	97	58.8
	6+	19	11.5
Monthly Income (BDT)	5000–10000	21	12.7
	10001–15000	36	21.8
	>15000	108	65.5

Among the 165 postmenopausal women, most were aged 40–59 years (n = 92, 55.8%), followed by <40 years (n = 44, 26.7%) and ≥60 years (n = 29, 17.6%). The mean ages of the participants were 50.60±6.261 years ranging from 45–65 years. The majority were from urban areas (n = 98, 59.4%) and identified as Muslim (n = 158, 95.8%). Regarding education, 60 (36.4%) had SSC or higher, 46 (27.9%) had secondary education, and 42 (25.5%) were illiterate. Most participants were housewives (n = 128, 77.6%). A total of 124 (75.2%) were married, while 35 (21.2%) were widowed. Joint families were more common (n = 93, 56.4%). Nearly all had children (n = 164, 99.4%), with the majority having 3–5 children (n = 97, 58.8%). Most households (n = 108, 65.5%) reported monthly income over BDT 15,000.

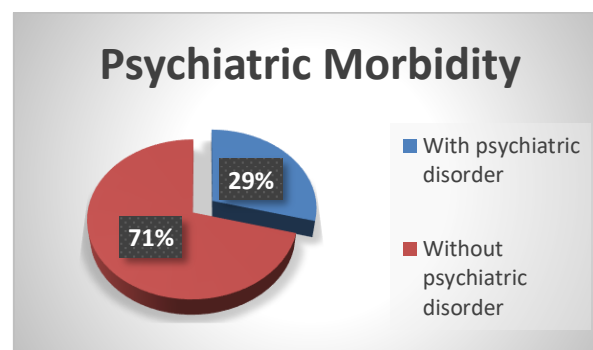


Figure 1: Psychiatric Morbidity Among the Study Participants (n = 165)

Among the 165 postmenopausal study participants, 48 women (29.1%) were found to have psychiatric disorders, whereas 117 women (70.9%) did not exhibit any psychiatric morbidity.

**Table 2: Distribution of Specific Psychiatric Disorders Among Affected Postmenopausal Women (n = 48)**

Types of Psychiatric Disorder	Frequency (n)	Percentage (%)
MDD (Major Depressive Disorder)	23	47.9
BMD (Bipolar Mood Disorder)	4	8.3
Depressive Disorder NOS	4	8.3
Somatoform Disorder	6	12.5
Schizophrenia	1	2.1
Delusional Disorder	2	4.2
Others	6	12.5
Total	48	100.0

Among the 48 postmenopausal women diagnosed with psychiatric disorders, Major Depressive Disorder (MDD) was the most prevalent, affecting 23 participants (47.9%). Other identified conditions included Bipolar Mood Disorder and Depressive Disorder Not Otherwise

Specified, each in 4 participants (8.3%), Somatoform Disorder in 6 (12.5%), Schizophrenia in 2 (4.2%), and Delusional Disorder in 3 (6.3%). Additionally, 6 participants (12.5%) were diagnosed with other psychiatric conditions.

Table 3: Comparison of Socio-Demographic Variables Between Postmenopausal Women With and Without Psychiatric Disorder

Variable	With Psychiatric Disorder (n = 48)	Without Psychiatric Disorder (n = 117)	p-value
Age (years)	<50	18 (37.5%)	0.110
	50–55	24 (50.0%)	
	>55	6 (12.5%)	
	Mean ± SD	50.6 ± 6.261	
Habitat	Urban	27 (56.3%)	0.511
	Rural	21 (43.8%)	
Religion	Islam	2 (4.2%)	0.987
	Hindu	46 (95.8%)	
Education	Illiterate	13 (27.1%)	0.001
	Primary	9 (18.8%)	
	Secondary	20 (41.7%)	
	SSC+	6 (12.5%)	
Occupation	Housewife	47 (97.9%)	0.000
	Service	0 (0.0%)	
	Retired	1 (2.1%)	
Marital Status	Married	38 (79.2%)	0.611
	Divorced	1 (2.1%)	
	Widowed	9 (18.8%)	
Family Pattern	Nuclear	16 (33.3%)	0.100
	Joint	32 (66.7%)	
Parity	Yes	48 (100.0%)	0.523
	No	0 (0.0%)	
No. of Children	0–2	10 (20.8%)	0.224



	3-5	33 (68.8%)	64 (54.7%)	
	6+	5 (10.4%)	14 (12.0%)	
Monthly Income (BDT)	5000-10000	6 (12.5%)	15 (12.8%)	0.071
	10000-15000	16 (33.3%)	20 (17.1%)	
	>15000	26 (54.2%)	82 (70.1%)	

Table 3 compares key socio-demographic characteristics of postmenopausal women diagnosed with psychiatric disorders (n=48) and those without psychiatric disorders (n=117). There were no statistically significant differences between the two groups regarding age distribution (p=0.110), habitat (urban vs. rural, p=0.511), religion (p=0.987), marital status (p=0.611), family pattern (nuclear vs. joint, p=0.100), parity (p=0.523), number of children (p=0.224), and monthly income categories (p=0.071). However, education level and

occupation showed significant differences: women with psychiatric disorders had a higher proportion of lower education levels (p=0.001), with 27.1% illiterate compared to 24.8% in the non-psychiatric group, and fewer had passed SSC+. Additionally, nearly all women with psychiatric disorders were housewives (97.9%) compared to 69.2% in the group without psychiatric disorders, where a substantial proportion were employed in service (p=0.000).

Table 4: Family Environment and Emotional Support Among Postmenopausal Women With and Without Psychiatric Disorder

Variable		With Psychiatric Disorder (n = 48)	Without Psychiatric Disorder (n = 117)	p-value
To share problems with family members	Yes	23 (47.9%)	103 (88.0%)	0.000
	No	25 (52.1%)	14 (12.0%)	
Satisfaction with family environment	Yes	17 (35.4%)	97 (82.9%)	0.000
	No	31 (64.6%)	20 (17.1%)	
Family helps seeking any treatment	Yes	31 (64.6%)	103 (88.0%)	0.001
	No	17 (35.4%)	14 (12.0%)	
Feeling of losing major role in the family	Yes	20 (41.7%)	25 (21.4%)	0.009
	No	28 (58.3%)	92 (78.6%)	
Feeling lonely these days	Yes	45 (93.8%)	77 (65.8%)	0.000
	No	3 (6.2%)	40 (34.2%)	

Table 4 shows that women with psychiatric disorders had significantly lower emotional and familial support. Only 47.9% could share problems with family (vs. 88.0%, p = 0.000), and just 35.4% were satisfied with their family environment (vs. 82.9%, p = 0.000). Family help in

seeking treatment was also less frequent (64.6% vs. 88.0%, p = 0.001). More women with psychiatric disorders felt they were losing their role in the family (41.7% vs. 21.4%, p = 0.009) and reported loneliness (93.8% vs. 65.8%, p = 0.000).

Table 5: Cultural and Self-Perception Factors Associated with Psychiatric Morbidity in Postmenopausal Women

Variable		With Psychiatric Disorder (n = 48)	Without Psychiatric Disorder (n = 117)	p-value
Feel that losing femininity	Yes	6 (12.5%)	6 (5.1%)	0.092



	No	42 (87.5%)	111 (94.9%)	
Regret for losing reproductive life	Yes	5 (10.4%)	17 (14.5%)	0.584
	No	43 (89.6%)	100 (85.5%)	
Feel insecure about marital relationship	Yes	10 (20.8%)	13 (11.1%)	0.128
	No	38 (79.2%)	104 (88.9%)	
Think she is not attractive any more	Yes	23 (47.9%)	44 (37.6%)	0.204
	No	25 (52.1%)	73 (62.4%)	
Feels insecure about marital relationship (<i>dup</i>)	Yes	4 (8.3%)	1 (0.9%)	0.010
	No	44 (91.7%)	116 (99.1%)	
Think she has become a burden these days	Yes	35 (72.9%)	21 (17.9%)	0.000
	No	13 (27.1%)	96 (82.1%)	

Table 5 shows that postmenopausal women with psychiatric disorders more often felt like a burden (72.9% vs. 17.9%, $p = 0.000$) and had greater insecurity in marital relationships ($p = 0.010$). Feelings of reduced attractiveness, loss of femininity, and regret over reproductive loss were also more common in this group, though not statistically significant.

Discussion

This descriptive, cross-sectional, analytical study was conducted at the Departments of Psychiatry, Gynecology & Obstetrics, and Physical Medicine of BSMMU from January 2009 to December 2010, focusing on postmenopausal women. The researcher encountered challenges in sample collection due to the lengthy psychiatric evaluations, which required interested patients to wait for extended periods. To explore the psychosocial factors associated with psychiatric morbidity, questions were designed to assess three domains: awareness of postmenopausal syndrome, family environment, and self-esteem related to marital relationships and reproductive life.

The socio-demographic characteristics observed in this study show notable similarities with findings from previous research. The majority of participants were aged 40–59 years (55.8%), which aligns with the findings of Paulose et al.[16], who reported that 52% of postmenopausal women fell within the 51–55 age group. In terms of education, 27.9% had secondary education and 36.4% had SSC or higher, closely reflecting the 48% with secondary education reported in the same study. A large proportion of participants were married (75.2%), comparable to the 92% marital rate noted by Paulose et al. While 43.6% of participants in our study lived in nuclear families, Paulose et al. reported a slightly higher

proportion (64%) living in such settings. Urban representation was dominant in the current sample (59.4%), a pattern also observed by Shilpa et al.[17], who found that urban women reported more menopausal symptoms compared to their rural counterparts. Collectively, these findings demonstrate a consistent socio-demographic profile of postmenopausal women across regional studies, strengthening the contextual relevance of the present data.

In the present study, nearly one-third (29.1%) of the participants were found to have psychiatric disorders, indicating a significant mental health burden in this population. This finding underscores the vulnerability of postmenopausal women to psychological disturbances, likely influenced by the hormonal, physical, and social transitions occurring during this stage of life. The high prevalence also reflects the importance of early identification and intervention to address mental health needs in this group.

Major Depressive Disorder (MDD) was the most prevalent psychiatric diagnosis, accounting for 47.9% of cases, followed by Somatoform Disorder (12.5%), Bipolar Mood Disorder (8.3%), and Depressive Disorder Not Otherwise Specified (8.3%). Less frequent diagnoses included Schizophrenia (4.2%) and Delusional Disorder (6.3%), with other psychiatric disorders comprising 12.5% of cases. These findings align with Alam et al.[18], who reported a 30.4% prevalence of major depression among middle-aged women in Dhaka, and with Uckardes et al.[19], who found depressive disorders as the most common psychiatric illnesses in an outpatient setting. This uniformity underscores the significant impact of mood disorders, especially depression, among postmenopausal women and stresses



the importance of focused mental health screening and appropriate interventions.

Socio-demographic analysis revealed significant associations between psychiatric morbidity and factors such as education, occupation, and income. Women with psychiatric disorders had higher illiteracy (27.1%) and lower higher education (12.5% with SSC+), echoing Barati et al.[20] who found lower education linked to poorer quality of life. Occupationally, 97.9% of women with psychiatric morbidity were housewives, supporting Barati et al.'s observation that housewives report lower quality of life. Though age was not statistically significant ($p = 0.110$), younger postmenopausal women (<50 years) showed higher psychiatric morbidity, consistent with findings by Kandasamy et al.[21]. Marital status and family pattern showed no significant statistical association, but the distribution mirrored Barati et al.'s suggestion of family support and marital stability impacting mental health—66.7% of women with psychiatric morbidity were from joint families and 79.2% were married. These findings reinforce the multifactorial influences of education, occupation, and family on psychiatric health among postmenopausal women.

Psychosocial variables were significantly associated with psychiatric morbidity. Women with psychiatric disorders were less likely to share problems with family (52.1% vs. 12.0%), less satisfied with family environment (64.6% vs. 17.1%), and received less family support in seeking treatment (35.4% vs. 12.0%). Feelings of loneliness (93.8%) and perceived loss of major family roles (41.7%) were also significantly higher. These results align with Wang et al.[22], who reported poor family functioning and limited social support as predictors of depression in postmenopausal women, highlighting the protective role of family cohesion and emotional connection.

Finally, a significantly greater proportion of women with psychiatric disorders perceived themselves as a burden (72.9% vs. 17.9%), reported feelings of lost femininity (12.5% vs. 5.1%), marital insecurity (20.8% vs. 11.1%), and diminished attractiveness (47.9% vs. 37.6%). These findings correspond with Simbar et al.[23], who linked negative body image and perceived loss of attractiveness to higher anxiety and depression rates. The statistically

significant association with marital insecurity ($p=0.010$) further underlines the psychological impact of changing social and relational roles in menopause. These data underscore the importance of self-perception and social valuation in psychiatric morbidity among postmenopausal women.

Limitations of the study

This study had some limitations:

- The sample size was relatively small, which may limit the statistical power and the generalizability of the findings.
- The study was conducted at a single center, where most participants were from average-income backgrounds, potentially introducing socioeconomic bias.
- The sample may not fully represent the broader population of postmenopausal women with psychiatric morbidity.
- The single-center setting restricts the applicability of the results to diverse demographic or geographic populations.

Conclusion

This study found that nearly one-third (29.1%) of postmenopausal women experienced psychiatric morbidity, with Major Depressive Disorder being the most prevalent. Psychiatric disorders were significantly associated with lower education levels, being a housewife, reduced family support, emotional dissatisfaction, and negative self-perceptions such as feeling like a burden. Although demographic factors like age, income, and marital status showed no significant differences, psychosocial variables—particularly emotional support, role perception, and cultural beliefs—played a critical role in the mental well-being of postmenopausal women. These findings highlight the need for psychosocial interventions alongside routine menopausal care.

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