

Original Research Article

Menstrual health practices in women with severe psychiatric disorders

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ABSTRACT

Background: Menstrual hygiene constitutes an essential facet of women's health and dignity. Women diagnosed with severe mental illness frequently encounter obstacles in the maintenance of personal hygiene attributable to cognitive impairments, deficits in self-awareness and reliance on caregivers. Notwithstanding its critical importance, menstrual hygiene continues to be an overlooked dimension of mental health care for this demographic. To assess and compare menstrual hygiene practices among females with severe mental illness and healthy age-matched caregivers using the Menstrual Practice Needs Scale (MPNS-36).

Methods: This cross-sectional, comparative study was conducted at the Department of Psychiatry at Shadan Institute of Medical Sciences, Telangana. A total of 80 participants were recruited through consecutive sampling 40 clinically stable female patients diagnosed with schizophrenia, bipolar affective disorder or obsessive-compulsive disorder and 40 healthy female caregivers as controls. Sociodemographic and clinical details were collected using structured proformas. Menstrual hygiene practices were assessed using the MPNS-36. Data were analyzed using SPSS (22.0) and a p value of <0.05* was considered statistically significant.

Results: The mean age of patients and caregivers was 34.59±5.09 years and 31.14±6.33 years, respectively. Statistically significant differences were observed in domains related to comfort with menstrual materials, adequacy of supplies and worry about running out of materials. Other domains showed no significant intergroup differences.

Conclusions: Women diagnosed with severe mental illnesses exhibited both equivalent and inadequate menstrual hygiene practices in comparison to healthy control subjects. The incorporation of menstrual hygiene education within psychiatric rehabilitation programs is imperative for fostering comprehensive care.

Keywords: Menstrual hygiene, MPNS-36, Menstrual practices, Psychiatric patients, Severe mental illness, Women's health

INTRODUCTION

Menstrual health is a fundamental aspect of women's health, directly influencing physical, emotional and social well-being. However, women with severe psychiatric

disorders represent a particularly vulnerable subgroup where this aspect is often overlooked. These women frequently experience disruptions in personal hygiene, impaired judgment, cognitive deficits and limited insight into self-care. In many cases, this leads to compromised

menstrual hygiene practices, which may contribute to infections, reproductive health problems and diminished quality of life.^{1,2} Severe psychiatric illnesses such as schizophrenia, bipolar affective disorder (BPAD) and obsessive-compulsive disorder (OCD) often result in chronic disability, impaired functional status and dependency on caregivers. The added burden of managing menstruation, which requires a degree of autonomy, privacy and regular maintenance, becomes a significant challenge in this population.^{3,4}

Furthermore, cultural taboos and stigma surrounding both menstruation and mental illness may further marginalize these women and inhibit open discussions about their needs.^{5,6} Despite growing attention to menstrual health in the general population, studies focusing on menstrual practices in women with psychiatric illness remain limited.⁷ This study addresses this gap by evaluating and comparing menstrual health practices among women with severe psychiatric disorders and their female caregivers using the menstrual practice needs scale (MPNS-36).⁸ The comparison with caregivers offers a relevant baseline for understanding deviations in practices among the psychiatric population.

METHODS

Study design and population

This study employed a cross-sectional, comparative observational design, conducted at the Department of Psychiatry at Shadan Institute of Medical Sciences in Telangana, over 6 months (June 2025–December 2025).

The study aimed to assess and compare menstrual hygiene practices among women with severe mental illness and healthy controls.

Group allocation

The allocation was non-randomized and based on consecutive sampling from the outpatient and inpatient psychiatric units.

Participants were allocated into two groups caregiver group (n=40) (Control group): Consisting of 40 healthy, age-matched female caregivers of the patients and Patient group (n = 40): Consisting of 40 females with a diagnosed severe mental illness.

Inclusion criteria

Women aged 18–45 years with a diagnosis of schizophrenia, bipolar affective disorder or obsessive-compulsive disorder (ICD-10), clinically stable and under psychiatric care were included. Participants had to be menstruating and provide informed consent. Age-matched healthy female caregivers without psychiatric illness served as controls.

Exclusion criteria

Women with intellectual disabilities, neurodevelopmental disorders or medical conditions affecting menstruation (e.g., PCOS, thyroid disorders) were excluded. Those who were pregnant, postmenopausal or had substance use disorders in the past six months were also not included.

Study procedure

Eligible participants were approached individually and screened for inclusion and exclusion criteria. For patients, capacity assessment was conducted using the guidelines from the Government of India's capacity assessment document under MHCA, 2017. Participants with confirmed decision-making capacity were provided with a detailed explanation of the study in their preferred language and written informed consent was obtained.

Statistical analysis

Data was analyzed using IBM SPSS Statistics version 22.0. Descriptive statistics such as mean and standard deviation (SD) were used for continuous variables and frequencies and percentages were used for categorical variables. Comparative analysis between the patient and caregiver groups was conducted by using Paired. t test. A p value of <0.05 was considered statistically significant.

RESULTS

A total of 80 participants, consisting of 40 women with severe mental illness and 40 age-matched female caregivers, were enrolled in the study. All participants were biologically female and of reproductive age. The mean age of patients was 34.59±5.09 years, while caregivers had a mean age of 31.14±6.33 years. Both groups consisted entirely of female participants, adhering to the inclusion criteria. In terms of marital status, 57.5% of patients were married, while 65% of caregivers were married; more patients were single (40%) compared to caregivers (35%) and 2.5% of patients were separated.

Educational attainment showed that a greater percentage of patients (42.5%) and caregivers (37.5%) possessed postgraduate degrees, with only 2.5% of caregivers achieving schooling as their highest education, while no patients had only schooling-level education. Occupational roles varied, with 67.5% of patients identified as housewives, contrasting with 52.5% of caregivers; a greater percentage of caregivers (25%) were employed in professional roles compared to patients (10%). Family structure analysis indicated that 62.5% of patients lived in nuclear families, compared to 52.5% of caregivers, while 47.5% of caregivers resided in joint families versus 37.5% of patients. Finally, urban representation was higher in both groups, with 60% of caregivers and 55% of patients living in urban areas (Table 1). Table 2 represents the clinical data which was recorded solely for the patient cohort (n=40). 52.5% of patients had an illness duration

exceeding 11 years, 20% had an illness duration of 6–10 years and 27.5% experienced illness for 2–5 years. Similarly, 50% of patients underwent psychiatric treatment for over 10 years, while 22.5% had treatment for 6–10 years and 22.5% for 2–5 years. Regarding hospitalization, 42.5% of patients had no admissions, 25% had 1–5 admissions and 32.5% had 6–10 admissions. A positive family history of psychiatric illness was noted in only 3 patients (7.5%), with 92.5% lacking such a history.

Psychiatric diagnoses predominantly included schizophrenia (57.5%), followed by obsessive-compulsive disorder (25%) and bipolar affective disorder (17.5%). In Table 3, the MPNS-36 was used to compare menstrual hygiene practices and perceptions between the two groups. The scale evaluates comfort, adequacy, privacy, accessibility and psychosocial factors associated with menstruation. Several statistically significant differences were noted as.

Comfort with menstrual materials

45% of patients vs. 20% of caregivers reported “always” being comfortable ($p=0.001$).

Adequacy of materials

67.5% of patients vs. 80% of caregivers reported “always” having enough materials ($p=0.001$).

Worry about running out of materials

32.5% of patients vs. 25% of caregivers reported “always” being worried ($p=0.001$). Other domains such as cleanliness, comfort carrying/storing materials and concern over leaks showed no significant group differences ($p<0.05$), though descriptive analysis indicated lower satisfaction among patients in many of these areas.

Table 1: Sociodemographic profile of the study participants (n=80).

Variables	Categories	Study groups	
		Caregivers N (%)	Patients N (%)
Age (years)	Mean/SD	31.14±6.33	34.59±5.09
Gender	Female	40 (100%)	100%
Marital status	Single	14 (35%)	16 (40%)
	Married	26 (65%)	23 (57.5%)
	Separated	0 (0%)	2.5%
Education	Schooling	01(2.5%)	0 (0%)
	Intermediate	17 (42.5%)	15 (37.5%)
	Graduate	07 (17.5%)	08 (20%)
	Postgraduate and above	15 (37.5%)	42.5%
Occupation	Professional	10 (25%)	04 (10%)
	Semi-professional	0 (0%)	1 (2.5%)
	Housewife/Household	21 (52.5%)	27 (67.5%)
	Unemployed/Student	09 (22.5%)	20%
Family type	Nuclear	21 (52.5%)	25 (62.5%)
	Joint	19 (47.5%)	37.5%
Locality	Urban	24 (60%)	22 (55%)
	Rural	16 (40%)	18 (45%)

Table 2: Clinical profile of the study participants (patient group) (n=40).

Variables	Categories	Patients N (%)
Duration of illness	2 to 5 years	11 (27.5%)
	6 to 10 years	08 (20%)
	11 to 15 years	52.5%)
Duration of treatment	3 to 6 months	02 (5%)
	2 to 5 years	09 (22.5%)
	6 to 10 years	09 (22.5%)
	>10 years	50%)
Number of hospitalizations	0	17 (42.5%)
	1 to 5	10 (25%)
	6 to 10	32.5%)
Family history of psychiatric illness	Yes	03 (7.5%)
	No	37 (92.5%)
Diagnosis	Bipolar affective disorder	07 (17.5%)
	Obsessive compulsive disorder	10 (25%)
	Schizophrenia	23 (57.5%)

Table 3: Various domains of MPNS 36 of caregivers' and patients' group (n=80).

Questions	Categories	Study groups		P value
		Caregivers N (%)	Patients N (%)	
My mensural materials were comfortable	Never	01 (2.5%)	01 (2.5%)	0.001*
	Sometimes	14 (35%)	12 (30%)	
	Often	17 (42.5%)	09 (22.5%)	
	Always	08 (20%)	45%)	
I had enough of my menstrual materials to change them as often as I wanted to	Never	0 (0%)	0 (0%)	0.001*
	Sometimes	02 (5%)	03 (7.5%)	
	Often	06 (15%)	10 (25%)	
	Always	32 (80%)	67.5%)	
I was satisfied with the cleanliness of my menstrual materials	Never	0 (0%)	0 (%)	0.365
	Sometimes	09 (22.5%)	08 (20%)	
	Often	14 (35%)	13 (32.5%)	
	Always	17 (42.5%)	47.5%)	
I could get more of my menstrual materials when I needed to	Never	01 (2.5%)	01 (2.5%)	0.379
	Sometimes	09 (22.5%)	10 (25%)	
	Often	11 (27.5%)	12 (30%)	
	Always	19 (47.5%)	42.5%)	
I was worried that my menstrual materials would allow blood to pass through to my outer garments	Never	02 (5%)	01 (2.5%)	0.454
	Sometimes	05 (12.5%)	06 (15%)	
	Often	26 (65%)	24 (60%)	
	Always	07 (17.5%)	22.5%)	
I worried that my menstrual materials would move from the place while I was wearing them	Never	0 (0%)	0 (0%)	0.125
	Sometimes	13 (32.5%)	15 (37.5%)	
	Often	21 (52.5%)	20 (50%)	
	Always	06 (15%)	12.5%)	
I worried about how I would get more of my menstrual material if I ran out	Never	03 (7.5%)	01 (2.5%)	0.001*
	Sometimes	04 (10%)	05 (12.5%)	
	Often	23 (57.5%)	21 (52.5%)	
	Always	10 (25%)	13 (32.5%)	
I felt comfortable carrying spare menstrual materials with me outside my home	Never	01 (2.5%)	01 (2.5%)	0.320
	Sometimes	08 (20%)	07 (17.5%)	
	Often	10 (25%)	18 (45%)	
	Always	21 (52.5%)	35%)	
I felt comfortable carrying menstrual materials to the place where I changed them	Never	01 (2.5%)	01 (2.5%)	0.137
	Sometimes	08 (20%)	13 (32.5%)	
	Often	21 (52.5%)	09 (22.5%)	
	Always	10 (25%)	42.5%)	
I felt comfortable storing (keeping) my leftover or cleaned menstrual materials until my next period	Never	02 (5%)	03 (7.5%)	0.681
	Sometimes	07 (17.5%)	07 (17.5%)	
	Often	07 (17.5%)	08 (20%)	
	Always	24 (60%)	22 (55%)	

The * mark represents statistical significance.

DISCUSSION

This study offers insight into the menstrual health practices of women with severe psychiatric disorders a domain that remains under-researched but highly relevant.^{9,10} Findings reveal a paradoxical pattern: while patients reported higher satisfaction and comfort with menstrual materials in some domains, this may reflect limited insight or lower expectations rather than true adequacy.¹¹ The higher proportion of patients who reported always feeling comfortable or having enough materials could be attributed to caregivers' involvement in their menstrual hygiene management. It also raises questions about self-awareness, as patients with chronic mental illness may underreport difficulties or be less likely to recognize

hygiene inadequacies due to cognitive impairment.^{12,13} On the contrary, caregivers expressed higher concern over running out of materials and discomfort in certain menstrual hygiene tasks, suggesting a more realistic appraisal of needs and challenges.

These results are consistent with previous findings indicating that menstrual hygiene often becomes a shared responsibility when women are functionally impaired. Notably, domains related to fear of leakage or shifting of materials were comparably reported between the groups, indicating that concerns about social embarrassment or menstrual accidents persist across both populations. Cultural and psychological dimensions' likely influence

these fears, as shown in earlier studies of menstrual-related anxiety.

The study's strength lies in its comparative design and use of a validated tool (MPNS-36).⁸ However, its limitations include small sample size, single-centre setting and reliance on self-reporting, which may be influenced by cognitive biases in psychiatric populations.

CONCLUSION

Menstrual hygiene practices among women diagnosed with severe psychiatric disorders are influenced by a multifaceted interaction of individual capability, caregiver involvement and systemic support mechanisms. Although a subset of patients has reported satisfactory practices, issues of concern, discomfort and insufficient planning continue to be manifest. There exists a pressing necessity to incorporate menstrual health education and support into standard psychiatric care protocols. Healthcare professionals ought to receive training that enables them to sensitively engage with this issue and caregivers should be equipped with the necessary knowledge and resources. Addressing this overlooked dimension of women's health will not only enhance hygiene outcomes but also preserve dignity and improve the overall quality of life for this marginalized demographic.

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