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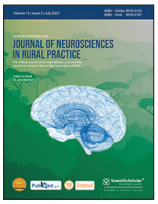

Original Article

Sexual and reproductive health problems among women with mental illness attending tertiary care psychiatric outpatient clinic in India: A cross-sectional study

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ABSTRACT

Objectives: Sexual and reproductive health (SRH) is a vital concern among women with mental illness (WMI) due to the increased risk for unplanned pregnancy, sexually transmitted infections (STIs), and poor obstetric outcomes. Objective of the study was to explore the current use of family planning (FP) methods, symptoms of STIs and sexual dysfunction among WMI.

Materials and Methods: This descriptive study involved 404 WMI of reproductive age (18-49 years) attending tertiary care psychiatric outpatient clinics in India. During face-to-face interviews, centers for disease control and prevention (CDC)-reproductive health assessment toolkit-FP questionnaire, STI questionnaire and Female sexual function index (FSFI) were used to collect the data.

Results: Of 404 WMI, 261(64.6%) were users, and 137 (33.9%) were non-users of FP methods. About 6(1.5%) WMI did not respond FP methods question. Female sterilization was the highest among the users, 244(93%). Among non-users, 100 (73%) were unaware of choosing the effective method of FP. Most of the WMI, 377(93.3%), were unaware of STIs. The symptoms of STI reported include unusual genital discharge 62(15.3%) and genital ulcers/sores 58(14.4 %). Most of them, 76(63.3%), were not on any treatment. The most common reason for not taking treatment was feeling ashamed 70(92.1%). Female sexual dysfunction was reported in 176(43.6%). Most of the WMI had difficulties in the arousal domain 288(71.3%), followed by low desire 233(57.7%) and dissatisfaction 186(46%).

Conclusion: Most WMI underwent sterilization. Non-users of FP methods were not aware of choosing the effective method. Awareness about STIs was poor, and feeling ashamed was the primary reason for not availing of medical help. Nearly half of the WMI reported sexual dysfunction, among which arousal difficulties, low desire and dissatisfaction were common. Health professionals need to increase awareness about FP methods and symptoms of STIs among WMIs. Women require appropriate counselling regarding SRH and treatment for sexual dysfunction.

Keywords: Sexual health, Reproductive health, Family planning, Sexually transmitted infections, Women, Mental illness

INTRODUCTION

Women with mental illness (WMI) are disadvantaged because of their gender and mental illnesses.[1] They may experience serious reproductive health problems, which include improper use of contraception and unmet needs for family planning (FP) services.[2] Both severe mental illnesses (schizophrenia spectrum disorders and bipolar disorder) and common mental disorders (depression and anxiety spectrum disorders) among women are associated with lower rates of FP method use and choice of less effective methods.[3,4] This may place a significant risk for unintentional pregnancies and the possible occurrence of adverse perinatal outcomes.[5] WMI have limited knowledge of health-care access and poor awareness about FP services.[6]

WMI may be at higher risk for acquiring sexually transmitted infections (STIs) because of high-risk sexual behavior.[7,8] The increased frequency of STIs and related sequelae is also attributed to higher poverty rates, placement in dangerous circumstances, and inadequate access to health care for WMI.[9] The risk of newly diagnosed STIs such as syphilis, genital warts, and trichomoniasis may be higher during episodes of mania or psychosis.[10,11] Most women with

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schizophrenia are at a higher risk of contracting infections during sexual intercourse.[12] Engaging in unsafe sexual behavior and not complying with FP measures may cause chronic pelvic pain, increased risk of cervical cancer, and ectopic pregnancy among WMI.[13]

Psychiatric disorders are a risk factor for women to develop sexual dysfunction.[14] Sexual difficulties can be side effects of psychotropic medications, and sometimes, sexual dysfunction can lead to psychiatric manifestation.[15] Female sexual dysfunction (FSD) appears to be linked to psychological conditions such as low self-esteem, body image problems, strained relationships with partners, and long-term stress.[16,17] Further, many women do not discuss sexual functioning with physicians because they perceive these issues as unrelated to illness or because they feel uncomfortable talking about them.[18]

Existing pieces of literature have found that WMI has poor knowledge of methods of FP, higher risk for STIs, and presence of sexual dysfunction.[4,9,19] Still, we need more data, especially in the Indian context. Therefore, the present study was conceptualized to examine the current use of FP methods, symptoms of STIs, and sexual dysfunction among WMI currently in remission.

MATERIALS AND METHODS

Design and setting

A cross-sectional study was carried out in tertiary care psychiatric outpatient clinic in Bangalore, India, from September 2020 to April 2021. The institutional ethics committee granted its approval.

Study participants

WMI belonging to the reproductive age group (18–49 years of age), married, duration of illness not <1 year, brief psychiatric rating scale (BPRS) ≤18, and able to communicate with Kannada or English or Tamil language were invited to participate in the study. WMI having a clinical history of cognitive deficit, hearing and speech disorder, and unwillingness to participate were excluded. The sample size was calculated based on previous literature on the prevalence of sexual dysfunction (46%) among WMI, using EZR software version 1.40. The confidence interval was fixed as 95% with a 0.05 significance level.[19,20] We used a purposive sampling technique. After obtaining written informed consent, a one-to-one interview was conducted in privacy, ensuring sensitivity, and taking adequate steps to mitigate distress.

Study tools

- Sociodemographic variables: Age, years of education, income, occupation, religion, type of family, past medical illness, current mental illness (International Classification of Diseases-10 diagnosis), duration of illness, age at marriage, history of childbirth, number of children, and habits.
- FP questionnaire: An unstructured questionnaire was adopted from the Centers for Disease Control and Prevention (CDC)-Reproductive health assessment tool kit.[21] It had five items, including a willingness to have a baby in the future, currently using FP methods, the reason for not using the method, and awareness of the FP method.
- STI questionnaire: An unstructured questionnaire was adopted from CDC-Reproductive health assessment tool kit.[21] It had six items that measured the knowledge of STIs and their symptoms, the prevalence of self-reported symptoms of STIs, treatment-seeking behavior, and reason for not taking treatment.
- Female sexual function index: A 19-item multidimensional self-report questionnaire with ratings ranging from 0 to 5. The domains of sexual functioning are desire, arousal, lubrication, orgasm, satisfaction, and pain. The cut-off value for the total score is 26.55. The reliability (Internal consistency) was calculated using Cronbach's alpha of 0.98.[22]

Questionnaires were translated into Kannada and Tamil languages, and a back translation was done. It was verified, and the items were compared, reconciled the differences, and approved by the subject experts. A pilot study was conducted among 24 Kannada-speaking and 11 Tamil-speaking WMI (n = 35) and found that it was appropriate with the language used.

Statistical analysis

Data were entered in Excel and analyzed using IBM SPSS version 22 for Windows.[23] Descriptive statistics such as frequency, percentage, mean, standard deviation, median, and interquartile range were used to describe the sociodemographic variables, current use of FP methods, symptoms of STIs, and sexual dysfunction.

RESULTS

Baseline characteristics of study participants

A total of 420 WMI consented to participate, of which 16 withdrew their consent during the assessment. Their mean age, years of education, income, occupation, religion, type of family, past medical illness, current diagnosis, age at marriage, number of children, and habits are shown in Table 1.

Current use of FP methods

Most of the WMI, 327 (80.9%), responded that they do not want to have a baby in the future. Among the current users of

Table 1: Sociodemographic characteristics of the subjects (*n*=404).

Demographic variables	*n* (%)
Age (years)	36.47 (6.96)#
Years of education	9.73 (5.02)#
Income	0 (0–7275)#
Occupation	
Homemaker	210 (52)
Agriculture	27 (6.7)
Skilled workers	151 (37.3)
Professionals	16 (4)
Religion	
Hindu	349 (86.4)
Muslim	28 (6.9)
Christian	27 (6.7)
Type of the family	
Nuclear	259 (64.1)
Joint	145 (35.9)
Past medical illness	
Yes	88 (21.8)
No	316 (78.2)
Current mental illness (ICD-10 criteria)	
Anxiety disorder	65 (16.1)
BPAD	102 (25.2)
Depression	90 (22.3)
Psychotic disorder	138 (34.2)
OCD	9 (2.2)
Duration of illness	4 (1–7)#
Age at marriage	19.32 (4.44)#
History of childbirth	
Yes	344 (85.1)
No	60 (14.9)
Number of children	
None	60 (14.9)
One	70 (17.3)
Two	196 (48.5)
Three	59 (14.6)
More than three	19 (4.7)
Habits	
Alcohol	1 (0.3)
Tobacco	45 (11.1)
None	358 (88.6)

Data presented is frequency with percentage in parenthesis # - Mean (SD) or Median (Q1–Q3). BPAD: Bipolar affective disorder, OCD: Obsessive-compulsive disorder

FP methods 261 (64.6%), female sterilization 244 (93.5%) was most common, followed by coitus interruptus 6 (2.3%), male condom 4 (1.5%), and copper T 7 (2.7%). The most common reasons for WMI not using FP methods 137 (33.9%) were to have children 54 (39%) and not having sexual contact 53 (39%). Regarding awareness of FP methods, among 137 (33.9%) WMI, 100 (73%) were not aware of anyone method. Table 2 shows current use and awareness about FP methods among WMI.

Awareness and symptoms of STIs

Most WMI 377 (93.3%) were unaware of STIs, and 1 (0.3%) did not respond. In the past 12 months, symptoms of STIs reported were unusual foul-smelling genital discharges 62 (15.3%) and genital ulcers or sores 58 (14.4%). Among them, 44 (36.7%) had taken treatment, and 76 (63.3%) did not take treatment. The reasons for not taking treatment included feeling ashamed 70 (92.1%) and 6 (7.9%) could not afford it. Table 3 shows awareness and symptoms of STIs among WMI.

Sexual dysfunction

FSD was reported by 176 (43.6%) WMI and the domains affected are arousal 288 (71.3%), desire 233 (57.7%), and satisfaction 186 (46%). Difficulties in the domains of lubrication, orgasm, and pain were reported by 170 (42%), 168 (41.6%), and 150 (37%), respectively. Table 4 shows sexual dysfunction among WMI.

DISCUSSION

The study attempted to explore the current use of FP methods, symptoms of STIs, and sexual dysfunction among WMI belonging to the reproductive age group attending tertiary care psychiatric outpatient clinic in India. Nearly two-thirds (64.6%) of WMI were users of FP methods, and female sterilization (93.5%) was the most common. A similar finding was noted among women with schizophrenia, where in majority underwent female sterilization.[4] Female sterilization as the most common method is limited by our study's cross-sectional nature; hence we cannot draw a relationship between mental illness and choice of FP method used. However, female sterilization remains the most popular modern contraceptive method among married women aged 18–49.[24] The most reported reason for the preference for female sterilization was its safety and surety.

Very few WMI were practicing coitus interruptus, condom use by partners, and copper T. This was in line with a study conducted in Kerala.[25] It was noted that WMI are not using FP methods such as oral contraceptive pills, injectables, implants, and female condoms. This could be because of a lack of knowledge due to limited access to information or fear of interactions between medication and FP methods.

Less than one-third of WMI expressed that they were not following any method of FP, and the reasons were planning pregnancy in the future, not having sexual intercourse, lack of awareness, opposition from partners to use contraceptive methods, lack of access, and method-related reason such as side effects and inconvenient use. Similar findings from previous studies in India and other countries reported reasons for not using FP methods, including wanting to have another child, fear of side effects with psychiatric medications,

Table 2: Current use and awareness about family planning methods among women with mental illness (*n*=404).

Items	Categories		
	Yes	No	No response
	n (%)	*n* (%)	*n* (%)
Wants to have baby in the future	72 (17.8)	327 (80.9)	5 (1.3)
Currently using any method to delay or avoid pregnancy	261 (64.6)	137 (33.9)	6 (1.5)
FP method used			
Female sterilization	244 (93.5)		
Coitus interruptus	6 (2.3)		
Male condom	4 (1.5)		
IUD	7 (2.7)		
Reason for not using FP method			
Wants more children		54 (39)	
Not having sex		53 (39)	
Lack of knowledge		4 (3)	
Method related reason		3 (2)	
Opposition to use		10 (7)	
Lack of access		2 (1.5)	
Other reason		2 (1.5)	
No response		9 (7)	
Awareness of FP methods			
Pills		17 (12.4)	
Coitus interruptus		2 (1.5)	
Female sterilization		1 (0.73)	
Copper T		1 (0.73)	
Lactational amenorrhea		1 (0.73)	
Injectables		1 (0.73)	
Male condom		7 (5)	
Implants		1 (0.73)	
IUD		6 (4.4)	
Not aware of any method		100 (73)	

Data presented is frequency with percentage parenthesis. FP: Family planning, IUD: Intrauterine device

Table 3: Awareness and symptoms of sexually transmitted infections among women with mental illness (*n*=404).

Items	Categories		
	Yes	No	No response
	n (%)	*n* (%)	*n* (%)
Have you ever heard of diseases that can be transmitted through sexual intercourse, other than HIV/AIDS?	26 (6.4)	377 (93.3)	1 (0.3)
Awareness of signs and symptoms of sexually transmitted infections			
Abdominal pain	4 (15.3)		
Foul-smelling vaginal discharge	9 (35)		
Genital ulcers/sores	1 (3.7)		
Don't know	12 (46)		
Have you had any unusual genital discharge in the past 12 months, such as foul-smelling or green/curd-like discharge?	62 (15.3)	342 (84.7)	0 (0)
Have you had any genital ulcers or sores in the past 12 months?	58 (14.4)	346 (85.6)	0 (0)
The last time you had any unusual genital discharge, genital ulcers, or sores, did you seek treatment?	44 (36.7)	76 (63.3)	0 (0)
Reason for not taking treatment			
Feeling ashamed		70 (92.1)	
Could not afford		6 (7.9)	

Data presented is frequency with percentage in parenthesis. HIV: Human immunodeficiency virus, AIDS: Acquired immunodeficiency syndrome

Table 4: Sexual dysfunction among women with mental illness (*n*=404).

Domains	Sexual dysfunction present *n* (%)	Mean (SD)
Total score	176 (43.6)	11.61 (10.76)
Desire	233 (57.7)	3.45 (1.96)
Arousal	288 (71.3)	3.31 (2.36)
Lubrication	170 (42)	3.75 (2.59)
Orgasm	168 (41.6)	3.82 (2.61)
Satisfaction	186 (46)	4.26 (2.1)
Pain	150 (37)	3.95 (2.61)

Data presented is frequency with percentage in parenthesis. SD: Standard deviation

lack of awareness, and inconvenience to use.[4,24,26] Spousal opposition, not having sex, was the other reason for not using FP method.[27] Most of the women not using FP methods were unaware of various practices of FP, and very few were knowledgeable about contraceptive pills, coitus interruptus, copper T, lactational amenorrhea, injectables, male condom, and implants. A similar finding was noted in a study from Kerala wherein 10.4% were unaware of any FP methods, and most commonly known contraceptive measures to women with schizophrenia are female sterilization, copper T, condoms, and oral contraceptive pills.[25]

In our study, most WMI (93.3%) were unaware of STIs, and nearly half reported foul-smelling genital discharge, genital ulcers, or sores in the past 12 months. Among WMI having symptoms of STIs, more than half did not take treatment because of feeling ashamed. Similar findings were reported among women with depressive disorder, wherein women were at significantly higher sequential risk of STI.[27] Another study supporting our finding reported from Brazil wherein more than one-quarter of the persons with mental illness (25.8%) reported symptoms of STI, including genital discharges (35.8%), genital ulcers (14.2%), and warts (7.6%).[28] WMI are at greater risk of STIs, given the fact that they have high-risk sexual behaviors such as practicing unprotected sex, starting sexual life earlier, having more than one sexual partner, exchange of money for sex, and having a partner that refuses to use condoms.[8]

Our study reported FSD in nearly half of WMI who were asymptomatic (BPRS<18). Most WMI had difficulties in the arousal domain, followed by low desire and dissatisfaction. Problems in lubrication, orgasm, and pain were also reported.

Similar study findings reported FSD among women with depression were in the domain of orgasm and satisfaction, women with schizophrenia had higher rates of problems in achieving arousal and satisfaction. Women with bipolar disorder reported FSD only in the ability to reach orgasm.[29] Another study found the overall prevalence of FSD among women treated with antidepressants was 33.3%, with a higher prevalence for those on escitalopram (42.9%) than on agomelatine (22.6%).[30]

Strength and limitation

This is the only study from India to explore three components of sexual and reproductive health (SRH), namely FP, STI, and sexual health. Strength of the study includes the adaptation of standardized tools for assessment, pilot evaluation before actual recruitment, and one-to-one interview without any limitation in the time to explore SRH problems. All WMI were asymptomatic at the time of recruitment into the study, indicating that they could express and mental illness *per se* was not a limiting factor. Our study has few limitations, this was cross-sectional assessment of WMI attending tertiary care psychiatric outpatient clinic, and hence, generalizability of the findings is limited. Each psychiatric disorder was not studied separately with FP, STIs, and sexual health. Sexual dysfunction and its relation to psychotropic medications were not explored.

CONCLUSION

WMI must be encouraged to attend FP counseling to adopt the most appropriate method. This would be required to prevent further reproductive complications such as unwanted pregnancy, unsafe abortion, and STIs. Effective use of FP methods and prevention of STIs and promotion of sexual health are essential components of preventive reproductive health care. Therefore, mental health professionals need to pay particular attention to make WMI more aware of various FP methods and routine clinical evaluation should include screening for STIs and sexual dysfunction.

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Disclaimer

This paper is part of the researcher's PhD study and the contents are allowed to be mentioned in the thesis.

Declaration of patient consent

The authors certify that they have obtained all appropriate consent.

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Nil.

Conflicts of interest

There are no conflicts of interest.

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