Sexual dysfunction in depressed Indian women attending a hospital out patient department in Mumbai

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Introduction

Female sexual dysfunction is a multifactorial and multidimensional condition with biological, psychological and interpersonal determinants. In India, talking about sex and issues related to sex is taboo and spouses are uncomfortable sharing their problems with each other.

Aims

Aim was to study the prevalence and types of sexual dysfunction in depressed females, identify the association between depression and sexual dysfunction and describe the various myths and misconceptions prevalent in the Indian culture about female sexual behavior.

Method

Forty nine females diagnosed with depressive disorder according to the DSM-IV-TR were assessed using the Becks Depression Inventory, Arizona Sexual Experience Scale and Female Sexual Functioning Index. A questionnaire was designed based on the prevalent cultural beliefs in Indian society to assess the myths and misconceptions about the various aspects of sexuality.

Results

Thirty three (67.34%) had clinical sexual dysfunction. The types of sexual dysfunction were as follows; 26 (53%) had lubrication dysfunction, 25 (51%) had orgasmic dysfunction, 24 (49%) had pain, 22 (45%) had dysfunction of desire, arousal and sexual satisfaction. There was significant association between sexual dysfunction and depression. All patients had several myths and misconceptions about menstruation and sexuality, 98% about pregnancy and 84% about breast size.

Conclusion

This study reported high prevalence of sexual dysfunctions in depressed females. All domains of sexual functioning were affected and there was significant association between sexual dysfunction and depression. All the females had myths and misconceptions about various aspects of sexuality like menstruation, sexuality, pregnancy and breast size.

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It also contained questions designed by the authors based on the prevalent cultural beliefs in the Indian society, which assessed the myths and misconceptions about sexuality. All patients were interviewed and administered the following scales in the presence of the female co-investigator or a nurse.

**Beck’s depression inventory (BDI)**
This is a 21 item scale which evaluates the key symptoms of depression (6). Individuals rate themselves on a 0 to 3 scale [0=least, 3=most] with a score range of 0 to 63. A total score was obtained.

**Arizona sexual experience scale (ASEX)**
This scale is designed to measure five core elements of sexual function (7). These core elements are sexual drive, arousal, vaginal lubrication, ability to reach orgasm and satisfaction from orgasm. The items are rated on a six point scale ranging from 1 (hyper function) to 6 (hypo function). A total score of >18 or a score of >5 on any one item indicates clinical sexual dysfunction.

**Female sexual functioning index (FSFI)**
It is a brief, multidimensional, self reported instrument, used to assess the key domains of sexual function in females (8). It assesses six domains of sexual function; desire, physical arousal-sensation, physical arousal-lubrication, orgasm, satisfaction and pain. The individual domain scores and total score of the FSFI were recorded.

ASEX and FSFI scales are freely available on the internet, and are not copyrighted.

**Myths and misconceptions**
A questionnaire was designed by the authors to assess the prevalent myths and misconceptions in females in India as there are no existing standardized scales. The questionnaire assessed myths about breast size, menstruation, pregnancy and sexuality. Each question was rated on a 3 point scale ranging from 1 (least belief) to 3 (most belief). A total score of >18 or a score of >5 on any one item indicates clinical sexual dysfunction.

The BDI, ASEX, FSFI and scale for myths and misconceptions about sexuality such as use of condoms reduce pleasure and potency and that alcohol and certain foods increase sexual desire. They also believed that sexual intercourse alters the gait of men and women and that sexual intercourse leads to weakness and backache. All described penetrative sex as the only type of sexual activity. All felt that sex education should not be given to adolescent children.

| Type of Sexual Dysfunction | Number | Percentage (%) |
|----------------------------|--------|----------------|
| Low Desire                 | 22     | 44.89          |
| Low arousal                | 22     | 44.89          |
| Low lubrication            | 26     | 53.06          |
| Orgasmic dysfunction       | 25     | 51.02          |
| Low satisfaction           | 22     | 44.89          |
| Pain                       | 24     | 48.97          |

**Results**
Forty nine patients were included in the study. The mean age of the sample was 28.9 years (SD 3.03). The age range was 23- 39 years and 40 (81.6%) were aged 25-31 years. Our study was done in a tertiary centre at a metropolitan city. Thirty one (63.26%) patients had completed their secondary education. Majority of our sample (n=46, 94%) were home makers while 3 (6%) were employed. Thirty four (69.38%) were Hindus, 10 (20.4%) were Muslims and 5 (10.2%) were Catholics.

All patients were clinically diagnosed as having Major Depressive Disorder according to DSM-IV-TR criteria. The mean duration of depression was 2 years (SD 1.8). According to the BDI scores 22 (44.89%) had moderate depression, 16 (32.65%) had severe depression and 11(22.44%) had extreme depression.

The total ASEX score was used to assess the presence of clinical sexual dysfunction. Thirty three (67.34%) had clinical sexual dysfunction. Sixteen (32.6%) females did not score more than the cut off score for clinical sexual dysfunction, though they had responded positively to certain items in the ASEX scale. Pearson’s correlation coefficient was used to assess association between depression and sexual dysfunction. There was significant association between ASEX scores with the BDI scores (r=0.4274, p<0.001).

The types of sexual dysfunction were as follows; 26 (53%) had lubrication dysfunction , 25 (51%) had orgasmic dysfunction, 24 (49%) had pain, 22 (45%) had dysfunction of desire, arousal and sexual satisfaction (Table 1).

All patients had myths and misconceptions about menstruation such as woman should not touch anybody or participate in social or religious functions during menstruation and that waste and impure blood is sent out of the body during menstruation. All patients believed that females should not have sexual intercourse during menstruation and sexual intercourse during menstruation was associated with higher chance of contracting venereal diseases. All females had myths and misconceptions about sexuality such as use of condoms reduce pleasure and potency and that alcohol and certain foods increase sexual desire. They also believed that sexual intercourse alters the gait of men and women and that sexual intercourse leads to weakness and backache. All described penetrative sex as the only type of sexual activity. All felt that sex education should not be given to adolescent children.

Of the sample, 98% felt that sexual intercourse should not be performed during pregnancy and that intercourse must be performed several times for a woman to become pregnant.

Misconceptions about breast size was present in 84%. These included beliefs that the sexual desire of a female is directly proportional to the size of the breast (i.e. females with small breast size have less sexual desire and females with large breast size have greater sexual desire) and females with small breast size have less amount of milk in breast so they can’t fulfill the hunger of their babies.

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Discussion

We are not aware of any studies in India which described the prevalence of sexual dysfunction in depressed females. Severity of depression in our study was similar to that in other out patient samples. Rush et al reported that 10.4% had mild symptoms, 38.6% moderate symptoms, 38% severe and 12.9% very severe symptoms of depression (9). Studies from India report prevalence of sexual dysfunction in non depressed women varying from 33.3% to 73.2% (10, 11). Rates of sexual dysfunction in hospital based studies from other developing countries, especially those which used the FSFI scale, report prevalence rates for female sexual dysfunction ranging from 43% to 69% which is similar to that in our study (12-16).

Studies from Western countries, have reported association between sexual dysfunctions and depression (17-20). About two-thirds of our sample (67.34%) had clinical sexual dysfunction, which is similar to rates of 35-72% reported in these studies (2,18,19).

Rates of sexual dysfunction spontaneously reported by patients and elicited by direct questioning by physicians differ by as much as 60% (21). Therefore, because of the high prevalence of sexual dysfunctions in depressed females, it is important to question all patients with depression about sexual function. In our sample, 33% of the patients did not have clinical sexual dysfunction according to the ASEX though they reported some areas of sexual dysfunction. This could be due to better understanding of sexuality, awareness and probably a milder form of depression.

Our study revealed a highly significant association between sexual dysfunction and depression. The cognitive changes of low self esteem, feelings of hopelessness and worthlessness, and negative self evaluation can cause impairment in sexual functioning. Depression is also associated with neurotransmitter changes which may contribute to sexual dysfunction in depression (17).

In our study, all components of sexual functioning were affected, with majority having lubrication dysfunction followed by difficulty in achieving orgasm, pain, low desire, low arousal and low satisfaction. Kennedy et al found that 50% of women had decreased sexual desire, 40% had poor vaginal lubrication and 15% had problems achieving orgasm (22). Singh et al reported the prevalence of sexual dysfunctions in women attending general medical clinics; reduced desire (78%), reduced arousal (91%), reduced lubrication (97%), difficulty achieving orgasm (87%), problems with satisfaction (81%) and pain (64%) which is higher than our sample (11). But these findings were in females aged more than 40 years and these patients had comorbid medical illness. Frohlich and Meston found that the depressive symptoms diminished the desire for sex, causing inhibitions of arousal, lubrication, plateau, orgasm and satisfaction (23). Loss of libido is known to be associated with depression (19, 20). Shah et al found that 30% of depressed patients have loss of libido (21).

Sexual dysfunction may be the presenting complaint in some patients, who are later found to have significant depressive symptoms. In others, low sexual desire may precede the onset of depression. Sexual dysfunction is prevalent in depression and it affects nearly all areas of sexual functioning.

India has a diverse culture and is home to several religions and spiritual beliefs. These influence various aspects of an individual’s life. This was reflected in the various myths and misconceptions about sexuality in our study. There are some Indian studies regarding myths about menstruation. Gupta et al found that 82% of adolescent girls considered menstruation to be impure and polluting and attributed various religious beliefs as contributing to these beliefs (24). However there is very little data regarding cultural misconceptions regarding sex in India (25). Cultural traditions and religious practices influence even literate Indian women, and these can have a negative impact on their sexual and marital happiness.

This study had several limitations. There was a selection bias as the cases were recruited from a tertiary centre and the findings cannot be generalized to the entire population. The sample size in this study was small and this study did not include a control group.

Declaration of interest
None declared.

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References

1. Laumann EO, Paik A, Rosen RC. Sexual dysfunction in the United States: Prevalence and predictors. JAMA 1999; 281:537-44.
2. Angst J. Sexual problems in healthy and depressed patients. Int Clin Psychopharmacol 1998;13:1–4
3. Clayton AH. Female sexual dysfunction related to depression and antidepressant medications. Curr Womens Health Rep 2002; 2 (3):182-7
4. Mathew RJ, Weinman ML. Sexual dysfunctions in depression. Arch Sex Behav 1982;11: 323–8
5. American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorders, 4th edn. text revision, Washington, DC: American Psychiatric Association, 2000
6. Beck AT, Ward CH, Mendelson M et al. Psychometric properties of Beck Depression Inventory: Twenty five years of evaluation. Clin Psychol Rev 1988; 8:77-100
7. McGahuey CA, Gelenberg AJ, Laukes CA et al. The Arizona Sexual Experience Scale: Reliability and validity. J Sex Marital Ther 2000, 26(1):25-40
8. Rosen RC, Heiman J, Leiblum S et al. The Female Sexual Function Index (FSFI): a multidimensional self-report instrument for the assessment of female sexual function. J Sex Mar Ther 2000; 26:191-208
9. Rush AJ, Carlody T and Reimitz PE. The inventory of depressive symptomatology (IDS), Clinician (IDS-C) and Self report (IDS-SR) ratings of depressive symptoms. Int J Methods Psychiatr Res 2000; 9: 45-59
10. Varghese KM, Bansal R, Kekre AN et al. Sexual dysfunction among young married women in southern India. Int Urogynecol J 2012;23:1771-1774
11. Singh JC, Tharyan P, Kekre NS et al. Prevalence and risk factors for female sexual dysfunction in women attending a medical clinic in south India. J Postgrad Med 2009;55:113-20
12. Elnashar AM, El-Dien Ibrahim M, El-Desoky MM et al. Female sexual dysfunction in Lower Egypt. BJOG 2007;114:201-6
13. Fajewonyomi BA, Orji EO, Adeyemo AO. Sexual dysfunction among female patients of reproductive age in a hospital setting in Nigeria. J Health Popul Nutr 2007;25:101-6.
14. Aslan E, Beji NK, Gungor I et al. Prevalence and risk factors for low sexual function in women: a study of 1,009 women in an outpatient clinic of a university hospital in Istanbul. J Sex Med 2008;5:2044-52
15. Ferenidou F, Kapoteli V, Moisidis K et al. Presence of a sexual problem may not affect women's satisfaction from their sexual function. J Sex Med 2008;5: 631-9
16. Garcia S, Moreno S, Aponte H. Prevalence of sexual dysfunction in female outpatients and personnel at a Colombian hospital: correlation with hormonal profile. J Sex Med 2008; 5: 1208-13
17. Levin RJ. The mechanisms of human female sexual arousal. Annu Rev Sex Res 1992;3:1-48
18. Bonierble M., Tignol J. The ELIXIR study: Evaluation of sexual dysfunction in 4 557 depressed patients in France. Curr Med Res Opin 2003; 19(2): 114-124
19. Bartlik B, Kocsis JH, Legere R et al. Sexual dysfunction secondary to depressive disorders. J Gend Specif Med1999; 2(2): 52-60
20. Phillips RL, Slaughter JR. Depression and sexual desire. J Am Physician 2000; 62(4): 782-786
21. Shah F, Sultan A, Dar SI. Depression and prevalence of sexual dysfunction. Pakistan J Med Res 2004; 43(3):104-7
22. Kennedy SH, Dickens SE, Eisfeld BS et al. Sexual dysfunction before antidepressant therapy in major depression. J Affect disorders 1999;56: 201-8
23. Frohlich P, Meston C. Sexual functioningand self reported depressive symptoms among college women.J. Sex Res2002; 39(4):321-325
24. Gupta J, Gupta H. Adolescents and menstruation. The Journ Of Family Welfare 2001; 47(1):1-13
25. Kulhara P, Avasthi A. Sexual dysfunction on the Indian subcontinent. Int Rev Psychiatry 1995; 7: 231-9