Sexual Attitudes, Knowledge And Function Of Women With Diabetes

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Citation

Abstract
Sexual function is a neglected aspect of health in women with diabetes, though it contributes greatly towards quality of life and feeling of well being. This study was carried out to assess the sexual attitudes, knowledge and function of women with diabetes attending an endocrine–gynaecology clinic in north India. 158/177 (89.26%) respondents were concerned about their sexual health, and felt it was an important determinant of general health. 79/ 177 (44.63%) felt that diabetes lowered their self esteem while 126/177 (71.18%) thought that it reduced their physical attractiveness. 100/177 (56.49%) answered that diabetes affected their sexuality, while 29/177(16.38%) complained that their less illness reduced their ‘desirability’ in their spouses eyes’. Only 7/177 (3.95%) said that sexuality had been discussed with them by an earlier health care provider, a gynaecologist. However 147/177 (83.59%) subjects said they would appreciate sexual counseling as a part of their routine diabetes care. 2/177 (1.21%) were willing to initiate a discussion on sexual health with their diabetes care provider, while 175/177 (98.87%) expected their health worker to explore the topic. All patients (100%) expected complete privacy and confidentiality. 127/177 (71.75%) preferred to receive sexual counseling from a gynaecologist, 18/177 (10.16%) from the nurse educator, 18/177(10.16%) from the clinical psychologist, and 14/177(7.9%) from female multi purpose diabetes workers. 170/177 (96.1%) expected a successful sexual counselor to be married, 177/177 (100%) felt that she should be able to speak the local dialect fluently and 177/177 (100%) felt that she should be female. 100/177 (56.49%) wanted interaction with a counselor of the same age while 77/177 (43.5%) preferred an older counselor.77/177 (43.5%) preferred use of non-direct or non-threatening words to describe sexual anatomy, while the rest welcomed usage of actual vocabulary. Only 16/177 (9%) patients were aware of the term ‘G spot’. 28/177 (15.81%) knew what the clitoris was, and 120/177 (67.79%) understood the terms ‘orgasm’ and ‘arousal’. The chief source of knowledge about sexuality was print media (24/177; 13.55%), television (32/177; 18.1%) friends (39/177; 22.1%) and female relatives (73/177; 41.24%). Only 3/177 (1.69%) mentioned a health care provider/doctor as the chief source of knowledge. 80/177 (45.19%) women complained of desire disorder, 111/177 (62.71%) of arousal disorder, and 177 (84.75%) of orgasmic disorder. 36/177 (20.38%) experienced pain disorder. The incidence of all types of disorder was higher in women aged > 40 years.

INTRODUCTION
Sexuality and sexual function are a part of a woman’s overall health and well being. This is especially true for women with diabetes mellitus. Aspects of a woman’s sexual function should be included in the general assessment of her illness, and appropriate counseling and treatment should be offered as needed.

Sexual concerns and sexual dysfunction are common in women. A 60% of the women questioned had concerns about their sexuality (1, 2). One–third of the women lacked interest in sex, 20% said that sex was not pleasurable, 15% experienced pain with intercourse, up to 50% experienced difficulty becoming aroused, 50% noted difficulty reaching orgasm, and up to 25 % were unable to reach orgasm. The situation may be worse in women with diabetes, and is compounded by the reluctance of health care providers to discuss these matters with patients.

The sexual response cycle in women is mediated psychologic, environmental, and physiologic (hormonal, vascular, muscular, and neurological) factors. The initial phase of the sexual response of cycle is desire followed by arousal, plateau, orgasm, and resolution (3,4).There is wide variability in the response of different individuals, and each phase can be affected by ageing, illness, medication, alcohol, illicit drugs, and relationship with spouse.

Both acute and chronic illnesses can create depression, a distorted body image, physical discomfort, and disturbances
in the hormonal, vascular, and neurologic integrity needed for sexual functioning (5,6). Endocrine and metabolic disturbances, such as diabetes mellitus, hyperprolactinemia, testosterone deficiency, estrogen deficiency states, and hypothyroidism can affect the sexual response (7).

This study has been designed to assess the sexual attitudes and functions of premenopausal women with diabetes attending an endocrine-gynaecology centre in north India. Incidence of different sexual dysfunctions in these women was also compared with controls not having diabetes.

**MATERIAL & METHODS**

200 consecutive married premenopausal women with diabetes were administered a pretested 20 point questionnaire. These questions were designed to assess the quality of sexual function in different domains: desire, arousal, orgasm and pain. The questions also assessed attitudes and knowledge related to sexuality.

The control group consisted of 100 consecutive married premenopausal non diabetic women attending an obstetric clinic in the same hospital. These women were asked questions related to sexual dysfunction.

The questionnaire was administered by a gynaecologist, senior nurse educator or qualified clinical psychologist. Adequate time was given to patients in complete privacy, with assurance of confidentiality.

The questionnaire was prepared in English as well as in Hindi. Specific verbal translations for two local languages, Punjabi and Haryanvi, were available with the diabetes care providers.

**RESULTS**

100 married premenopausal diabetic women completed the questionnaire giving the response rate of 88.5%. In the control group 100 % subjects filled up the questionnaire. The age distribution ranged from 24 to 48 years in the diabetes group (mean 33.14 ± 8.09 years). Three women had type 1 diabetes, while the rest had type 2 diabetes. The duration of diabetes ranged from 1 year to 20 years. 18 subjects (18%) were on insulin.

60 subjects (60%) hailed from urban background while 40 were of rural origin (40%). All had at least 10 years of education, and 45 (45%) had a graduate degree or diploma.

All subjects had been married for at least 1 year. (54.24%) women reported a frequency of sexual intercourse at least 2-3 times a week, while 17/100 (17%) enjoyed intercourse less than or once a month. 61% of non diabetic women reported frequent intercourse.

3.38% respondents volunteered a history of premarital or extramarital contact. This figure was similar for non-diabetic controls (4.00%).

158/177 (89.26%) respondents were concerned about their sexual health, and felt it was an important determinant of general health.

79/ 177 (44.63%) felt that diabetes lowered their self esteem while 126/177 (71.18%) thought that it reduced their physical attractiveness. 100/177 (56.49%) answered that diabetes affected their sexuality, while 29/177(16.38%) complained that their less illness reduced their ‘desirability’ in their spouses eyes'.

Only 7/177 (3.95%) said that sexuality had been discussed with them by an earlier health care provider, a gynaecologist. However 147/177 (83.59%) subjects said they would appreciate sexual counseling as a part of their routine diabetes care. 2/177 (1.21%) were willing to initiate a discussion on sexual health with their diabetes care provider, while 175/177 (98.87%) expected their health worker to explore the topic.

All patients (100%) expected complete privacy and confidentiality.

The diabetes care team in the hospital where this study was conducted consists of a male endocrinologist, a female gynaecologist / reproductive endocrinologist, female nurse educator, female clinical psychologist, female dietician, and a male as well as a female physiotherapist and multi purpose...
diabetes workers. 127/177 (71.75%) preferred to receive sexual counseling from a gynaecologist, 18/177 (10.16%) from the nurse educator, 18/177(10.16%) from the clinical psychologist, and 14/177(7.9%) from female multi purpose diabetes workers.

170/177 (96.1%) expected a successful sexual counselor to be married, 177/177 (100%) felt that she should be able to speak the local dialect fluently and 177/177 (100%) felt that she should be female. None of the respondents felt comfortable with a younger sexual counselor. 100/177 (56.49%) wanted interaction with a counselor of the same age while 77/177 (43.5%) preferred an older counselor.

Only 16/177 (9%) patients were aware of the term ‘G spot’. 28/177 (15.81%) knew what the clitoris was, and 120/177 (67.79%) understood the terms ‘orgasm’ and ‘arousal’. The chief source of knowledge about sexuality was print media (24/177; 13.55%), television (32/177; 18.1%) friends (39/177; 22.1%) and female relatives (73/177; 41.24%). Only 3/177 (1.69%) mentioned a health care provider/doctor as the chief source of knowledge.

Women were asked specifically about the incidence of specific sexual disorders ‘most of the time’ in the preceding one month. 80/177 (45.19%) complained of desire disorder, 111/177 (62.71%) of arousal disorder, and 177 (84.75%) of orgasmic disorder. 36/177 (20.38%) experienced pain disorder. The incidence of all types of disorder was higher in women aged > 40 years as compared to those aged < than 40 years.

All disorders except desire disorders were more common in patients with diabetes than in the control group. Pain (dyspareunia, vaganismus, post coital pain) was experienced ‘most of the time’ or ‘always’ by 20.38 % of women with diabetes, and by 4.00% of non-diabetic female subjects. The incidence of both vulval pruritis and foul smelling discharge was 10.17% in the diabetic group and 5.00% in the non diabetic respondents.

Arousal disorder was reported by 62.71% of the diabetes cohort but only 26.00% of the non-diabetic group. 15.25% of the patients experienced orgasm most or all of the time while 44.07% had never experienced it. The corresponding figures for controls were 32.00% and 36.00%.

Results were analyzed with respect to duration of diabetes, insulin treatment, and rural/urban background, graduate/under – graduate educational status, absence/presence of neuropathy and glycemic control. No significant difference was noted in any of the domains studied.

**DISCUSSION**

Sexual function is complex and poorly understood aspect of human life, especially so in females. The incidence of sexual dysfunction is high in women, but the issue is an under researched and neglected one.

This is true for women with diabetes, who face medical and psychological insult in the form of sensory neuropathy, increased risk of infection, depression, lowered self – system and other complications.

Diabetes is associated with a significantly higher incidence of parasympathetic and sympathetic damage. The effects of these nervous systems on arousal and orgasm are well known. This may contribute to the high prevalence of arousal and orgasm disorder in this patient population. Diabetics are associated with a high prevalence of vaginal infections and pruritis vulvae. The subject population exhibited similar characteristics to those described by earlier authors.

This study has some shortcomings. The incidence of arousal or orgasmic dysfunction was assessed by self - reporting, not by objective measurements. No history regarding the spouse’s sexual ability, interest or desirability was sought. History regarding non-sexual relationship with the spouse or marital harmony was not elicited.

Inspire of these limitations, this work has produced some firm conclusions.

Sexual disorders, especially arousal, orgasm and pain disorders are common in premenopausal women with diabetes. Desire disorder is common in women > 40 years of age. The incidence of all sexual disorders is higher in women aged >40 years.

The present status of sexual counselling services for women with diabetes leaves a lot to be desired. Psychological aspects of sexual health are less well looked after than the medical aspects. Endocrinologists and diabetes counsellors are unable to initiate discussion regarding sexual health with their clients.

Female patients of diabetes welcome sexual counseling as an integral part of diabetes care services. They are clear as to the type of health care providers they would appreciate.

Female diabetes care providers should be trained and sensitized to fulfill this unmet health need of patients with
diabetes. Sexual counselling should be introduced as an essential component of diabetes management.

**References**

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