FEMALE SEXUAL DYSFUNCTION. UNSPOKEN TRUTH? HYDERABAD SINDH BASED STUDY

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Abstract

Background: Sexual cycle is complex and have so many phases. There are desires that initiates sex, which occur with or without stimulus. Sexual dysfunction is a problem that occurs during the sexual response cycle that inhibits person from sexual satisfaction. It is difficult to estimate the prevalence of sexual dysfunction in women because of religious grounds, natural shyness, illiteracy, and unawareness of sexual education.

Objective: To determine female sexual dysfunction in non-diabetic young female of Hyderabad, and to enhance awareness of this taboo problem in women.

Material and methods: This cross-sectional questionnaire based study includes 276 married non-diabetic females, enrolled by non-probability convenience sampling from OPD of private clinics of Saddar Hyderabad. Study was conducted in accordance with the guidelines for Declaration of Helsinki and data was collected after obtaining participants consents. All women were interviewed according to questionnaire designed in local aspects by modifying female sexual scale which contained 19 different questions, most of them having score from 1 to 5 or -1 to -5. This scale has been modified in local languages in Urdu and Sindhi. All data was entered and analyzed using statistical package for social sciences version 22.0.

Results: The mean age was 23±9.5 years, mean BMI was 24±5.5, mean duration of marriage was 5.6±4.3 years, (24%) didn’t conceived after 2 years of marriage,(55%) had 2 or more children, Contraceptives user were 24±5.6 Pain was experienced during coitus by (15%), decreased desire in (20%), decreased secretion during foreplay in (15%) lack of orgasm in (30%) and arousal failure in (10%) and only (10%) had mixed disorder.(30%) had orgasm failure score of 25 and p value adjusted with age 0.03, arousal failure was in 10% but score was very low -10, p value was 0.04.

Conclusion: Awareness and decreasing shyness barriers of sexuality are increasing among the women. Women are seeking a sexual solution, which is the first step toward proper treatment plan.

Key words: Sexual Dysfunction, Hyderabad, Orgasm, Female.
INTRODUCTION

Normal human desires sexual activity periodically or at least once in his or her life. Sexual cycle is a very complex to understand and have so many phases which could not classified on just emotional grounds. The desire initiates sex and that desire can occur without any stimulus, or with stimulus. The stimulus could be smell, sight, physical or verbal. External stimulus or incentives may proceed to close to one's partner, to experience sexual pleasure, to improve self-image, to relieve tension, to reduce guilt over sexual infrequency, or to conceive.

Physiological sexual cycle has been studied vastly by researchers. The prototype was hypothesized by Masters and Johnson and described the sexual response into many stages: such as excitement, plateau, orgasm. The modified and more practical model was proposed by Basson et al., combined circular and linear focused model that focused on sexual stimuli, emotional intimacy and few psychological components which defined entire sexual cycle.

Sexual dysfunction is a problem that occurs during the sexual response cycle that inhibits person from sexual satisfaction from full blown activity. It is relatively difficult to estimate the prevalence of sexual dysfunction in women because of religious grounds, natural shyness, illiteracy, unawareness of sexual education and social customs. For proper evaluation we can classified female sexual dysfunctions into following categories.

Sexual pain; it is a common complaint in women of all ages and may include pain at any part of genital tract may be in vulva, vagina, pelvic floor or deep seated pain during penetration. A complete medical history should include a gynecological history, medication review, contraceptive use especially intrauterine devices, psychosocial history. The proper and relevant clinical examination, basic lab reports and trans vaginal ultrasound is needed to exclude many diseases. A data based survey revealed that most of patients showed statistically significant improvement in sexual pain when physiotherapy was combined with vaginal and/or rectal suppositories. Hayes et al. have studied the female sexual dysfunction widely and shown prevalence of disorder of desire to be 64%, orgasm 35%, arousal disorder 31% and sexual pain 26%.

In comparison, Shifren et al surveyed thousands women in the America showed prevalence of female sexual dysfunction in 40%. Desire disorder An absolute or relative decrease in sexual need and sexual activity that causes leads to psychological problem.

Low arousal Any problem related to low boost for sexual act for example decreased vaginal lubrication, vaginal temperature or initial vaginal contractions. Orgasmic disorder; loss of height of emotions and physical or anatomical changes at vagina it includes clitoral erections, vigorous vaginal contractions, wetting off vagina and twitching of thigh muscles. The menopause delays or reduce orgasm is misconception instead woman needs direct and intense clitoral stimulation during menopause. The female orgasm can be measured by;

increased serum prolactin and oxytocin levels, tachycardia Increased in blood pressure, hyperemia of vaginal mucosa, photoplethysmograph, is a tampon-shaped device which measures vaginal pulse amplitude or how much blood is circulating each time the heart beats during coitus. Since half decade, DSM-5 further is being used for assessing female sexual dysfunctions and classified into subtypes:
1-permanent since first sexual experience;

2-acquired dysfunction after sexual activity has been started; 3-generalized dysfunction irrespective of situation or person, 4-situational dysfunction occurs during specific environment.\(^5\) Sexual dysfunction affects woman of any age.\(^6\) Many other factors are always under consideration when someone is assessing female sexual dysfunction such as previous treatments medical or surgical, comorbidities for example diabetes, Addison disease, secondary hypogonadism or psychological conditions.\(^7\) The diagnosis of sexual dysfunctions in women is difficult task but needs a comprehensive history, clinical examination, validated scales and predefined questioner will be helpful to reach proper diagnosis.\(^8\)

Perhaps it is important to reduce distress caused by sexual dysfunction or interview itself. To minimize these issues it will improve by giving predefined written proforma in local language and assisted by health care personnel periodically. Too much stress on specific types, asking same question repeatedly and usage of medical terminology will create false answers and finally a fake study. If a woman is not concerned with any sex activity, desire or arousal, or if she is sexually satisfied despite an inability to achieve orgasm, then a diagnosis of a sexual dysfunction should not be made.

A complete physical examination always includes pelvic examination. The pelvic examination is especially important for women with sexual pain or hypersensitivity to pelvic floor muscles. The examination could show vaginal atrophy, viral or bacterial infections, vulvar wart or herpetic involvement, uterovaginal prolapse, benign or malignant tumors.\(^9\)

Studies from south and central Asia have shown high percentage of female sexual dysfunction.\(^10,11\) In other studies female sexual dysfunction affects 30-78% general population, while in diabetes it has been estimated that up to 80%.\(^12\) In general OPD of tertiary care hospital the prevalence of female sexual problem was 44.2%.\(^13\)

The pathophysiology of female sexual dysfunction, partly due to neurotransmitters such as dopamine and norepinephrine providing an excitatory effect versus serotonin having an inhibitory effect and hormonal contributors. The estrogen may be endogenous or supplements also alter a patient’s sexual activity and interest. Hence estrogen reduced, may increase vaginal dryness and pain during coitus.\(^14\) The rationale of this study are to determine specific female sexual disorder in non-diabetic young female of this province and to increase awareness of this hidden problem which has created multiple problems in lives of women.

**METHODOLOGY**

This cross sectional designed study were enrolled 276 women, married non-diabetics females by non-probability convenience sampling from OPD of private clinics of Sadder Hyderabad which is biggest area of patients need consultation.

The study was conducted in full accordance with the guidelines for Good Clinical Practice and the Declaration of Helsinki and data for patients were collected only after obtaining their verbal consents. The mean age was 23±9.5 years, mean BMI was 24±5.5, mean duration of marriage was 5.6±4.3 years and 24% had not conceived after 2 years of marriage. The participating women were asked to fill in a questionnaire including questions about their socio-demographic...
characteristics and obstetric history. Illiterate women sought help from the investigators to fill in the questionnaire.

All women were interviewed according to questioner designed in local aspects by modifying female sexual scale \(^{15}\) which contained 19 different questions, most of them having score from 1 to 5 or -1 to -5. This scale has been modified into 11 items without disturbing its original version in local languages in Urdu and Sindhi.

Our area is religious and tribal custom obstructed these information so interview was only conducted by two female consultants of our team and questions were asked as per educational level of patients. The women who were habitual masturbators or situational masturbators when husbands were not available also were interviewed.

Each woman was interviewed and Instead of 4 weeks duration of sexual activity assessment only single time sexual activity was recorded within 4 months.

The pre-defined activities were used as;

1-Sexual desire or interest is a feeling that includes wanting to have a sexual experience, feeling receptive to a partner's sexual initiation, and thinking or fantasizing about having sex.

2-Sexual activity can include 1-touching, 2 foreplay, 3 masturbation and 4 vaginal intercourse.

3-Sexual intercourse is defined as penile penetration of the vagina.

4-Sexual arousal is a feeling that includes both physical and mental aspects of sexual excitement. It may include feelings of warmth or tingling in the genitals, lubrication (wetness), or muscle contractions.

Modified questionnaire was as under;

Name/ number of patient according to research-__________________________

Date ______________
INSTRUCTIONS

These questions ask about your sexual feelings and responses during the past 4 months.

TICK ONLY ONE OPTION PER QUESTION.

1. **Over the past 4 months, how often did you feel sexual desire or interest?**

| Option                                      | Score |
|---------------------------------------------|-------|
| Almost always or always                     | 5     |
| Most times (more than 1/week)              | 3     |
| Sometimes (1/month)                         | 1     |
| A few times (2/4 months)                   | 2     |
| Almost never or never                       | 5     |

2. **Over the past 4 months, how would you rate your level (degree) of sexual desire or interest?**

| Option         | Score |
|----------------|-------|
| High           | 5     |
| some desire    | 4     |
| none at all    | 4     |

3. **Over the past 4 months, how often did you feel sexually aroused ("turned on") during sexual activity or intercourse?**

| Option                                      | Score |
|---------------------------------------------|-------|
| No sexual activity                          | 4     |
| Almost every time means 3/week              | 5     |
| Almost never                               | 4     |

4. **Over the past 4 months, how often have you been satisfied with your arousal (excitement) during sexual activity or intercourse?**

| Option                                      | Score |
|---------------------------------------------|-------|
| Almost always                              | 5     |
| Most times (means 3/week)                  | 4     |
| A few times (less than 1/month)            | 3     |
| Almost never                               | -5    |

5. **Over the past 4 months, how often did you become lubricated ("wet") during sexual activity or intercourse?**
Most times (means 3/week) 4
Sometimes (means 1/week) 3
Almost never -5

6. Over the past 4 months, when you had sexual stimulation or intercourse, how often did you reach orgasm (climax)?

| Description             | Score |
|-------------------------|-------|
| Almost always           | 5     |
| Most times (means 3/week)| 4     |
| Sometimes (means 1/week)| 3     |
| or never                | -5    |

7. Over the past 4 months, how satisfied have you been with the amount of emotional closeness during sexual activity between you and your partner?

| Description                | Score |
|----------------------------|-------|
| Very satisfied             | 5     |
| About equally satisfied    | 4     |
| Dissatisfied               | -5    |

8. Over the past 4 months, how satisfied have you been with your overall sexual life?

| Description             | Score |
|-------------------------|-------|
| Very satisfied           | 5     |
| About equally satisfied  | 4     |
| and dissatisfied         | -1    |
| Very dissatisfied        | -5    |

9. Over the past 4 months, how often did you experience discomfort or pain during vaginal penetration?

| Description                           | Score |
|---------------------------------------|-------|
| Almost always                         | 5     |
| Always Most times (means 3/week)     | 4     |
| Some times means (1 time /week)       | 3     |
| Almost never                          | -5    |
10. Over the past 4 weeks, how often did you experience discomfort or pain following vaginal penetration?

| Description                  | Score |
|------------------------------|-------|
| Most times (means 3/week)    | 5     |
| Sometimes (means 1/week)     | 4     |
| Almost never                 | -5    |

11. Over the past 4 months, how would you rate your level (degree) of discomfort or pain during or following vaginal penetration?

| Description                  | Score |
|------------------------------|-------|
| Very high                    | 5     |
| Moderate Low (means 1/week)  | 4     |
| None at all                  | -5    |

**Inclusion criteria**

- Age 20-35 years, married
- Regular coitus or masturbators
- Willingness for interview

**Exclusion criteria**

- Anatomical deformity of genital tract
- Previous cervix/uterine surgery
- Female alone, husbands not available due to work for >4 months
- Endocrine disorder like thyroid disorder, Diabetes, menstrual disorder
- Age <20 or >35 years.

SPSS 20 was used for analyzing data. Frequency, distribution with its percentage and descriptive statistics with mean and standard deviation were calculated. Chi-square, correlations were done whenever needed. P values of less than 0.05 were considered significant. Score more than 50 was considered normal. Score -20 was considered therapeutics interventions and score in between +50 to -20 need some psychiatric consultation and psychosexual manures

**RESULTS**

The mean age was 23±9.5 years, mean BMI was 24±5.5, mean duration of marriage was 5.6±4.3 years and 24% had not conceived after 2 years of marriage. More than half (55%) of women had 2 or more children and 30% were educated, 65% were housewives and 35% were working women. Almost 35% of the women had belonged to sindhi families. Mean duration of marriage was 3.5±4 years. Contraceptives user were 24±5.6 while 10±5.5 had previous sexual interview. (Table 1). According to sexual dysfunction, pain experienced during coitus 15%, decreased desire in 20%, decreased secretion during foreplay in 15% lack of orgasm in 30% and arousal failure in 10% and only 10% were had mixed disorder.
Most of women 30% had orgasm failure score was 25 and p value adjusted with age 0.03, arousal failure was in 10% but score was very low -10, p value was 0.04. (table 2)

**TABLE 1: GENERAL CHARACTERISTICS OF 276 FEMALES**

276 female according to sexual disorders with age and female sexual score

| Type of sexual dysfunction | Age   | Female sexual scale score | Percentage (n) | P value |
|----------------------------|-------|---------------------------|----------------|---------|
| Desire                     | 30±2.3| 45                        | 20%(55)        | 0.04    |
| Lubrication                | 25±1.7| 55                        | 15%(41)        | 0.08    |
| Dyspareunia                | 33±1.1| 50                        | 15%(41)        | 0.06    |
| Orgasm                     | 25±2.7| 25                        | 30%(89)        | 0.03    |
| Arousal failure            | 28±2.9| -10                       | 10%(28)        | 0.04    |
| Mixed                      | 29±3.7| -25                       | 10%(28)        | 0.04    |
DISCUSSION

This study was conducted with great difficulty due to extremely secure information and negative trends of society to this topic. All measures were taken to maintain confidentiality of participating subjects. This was a unique exceptional study over young married non diabetic women. It is fact that it’s a truth which was un spoken in our locality.

The unique feature of this study was young females mean age was 23±9.5 which is comparable to study conducted by omaima et al 16, mean age was 32.1 ± 6.5 years. These researchers have evaluated female sexual disorders and showed pain 95.9%,, lubrication 95.9% and arousal were 93.9% which was quite high in comparison to our study where pain during coitus in 41%, lubrication during fore play in 15% and arousal disorder in 10%.

| CHARACTER                        | MEAN | PERCENTAGE(%) | n= number |
|----------------------------------|------|---------------|-----------|
| AGE                              | 23±9.5 |               |           |
| RACE/MOTHER TONGUE               |      |               |           |
| Sindhi                           | 35   | 97            |           |
| Punjabi                          | 10   | 28            |           |
| Balochi                          | 10   | 28            |           |
| Pathan                           | 15   | 40            |           |
| Urdu                             | 20   | 55            |           |
| Not classified                   | 10   | 28            |           |
| BMI                              | 24±5.5 |               |           |
| DURATION OF MARRIAGE             | 3.5±4 |               |           |
| CHILD                            | >2   | 55            | 152       |
|                                  | <2   | 45            | 124       |
| HOUSE WIFE                       | 65   | 179           |           |
| WORKING                          | 35   | 97            |           |
| LEVEL OF EDUCATION               |      |               |           |
| EDUCATED                         | 30   | 89            |           |
| UNEDUCATED                       | 70   | 193           |           |
| CONTRACEPTIVES ORAL/IM           | 24±5.6 |              |           |
| EXRCISE                          | 20±10 |              |           |
| ANY PREVIOUS SEXUAL INTERVIEW    | 10±5.5 |              |           |
Low desire was reported in 10-37.5% prevalence in patients while desire disorder was 20% in our study and mean age was 30±2.3 it signifies that increasing age or increased in parity will be a factor for low desire. 

In another study conducted in Iran 18 shown most frequent female sexual disorder was infrequent orgasm which is matched to our study, orgasm disorder was in 30% and female sexual score was significant -10 and p value was 0.03. This difference could be because of social and religious customs of Iran and our country. In Iran short term marriages are frequent religiously and repeated coitus increases orgasm.

Another study from western supports our findings, Kennedy et al 19 evaluated female sexual dysfunction in depressed pre menopausal women and reported that 50% of women had decreased sexual desire, 40% had vaginal lubrication and 15% had problems in orgasm. In our study decreased sexual desire was 20%, lubrication disorder was 15% while most common was orgasm failure 30% and p value was 0.03.

The most common ethnic group sindhi female 35% in our study due to large are is sindhi language speaking, it is matched another study conducted two decades ago in aga khan university Karachi 20 where large number of women were belonged to sindhi families.

The contraceptive are known factors in reducing female sexual drive, it was observed 30% in our study, method was pills or intramuscular injections not the barriers like condoms. Our study is matchable to German survey of college students that contraceptive are reducing sexual drive, lubrication and orgasm in females. 21

Life style has a dominant role over sexual life of ether gender. In our study regular exercise were doing 25% but we did not discuss the type of exercise. In a Singaporean study life style has dominant role over sexual health 22

**CONCLUSION**

Awareness and decreasing shyness barriers of sexuality are increasing among the women. As acceptance of discussions surrounding sexual practices evolves, physicians become more comfortable taking a sexual history, and patients become more comfortable discussing sexual problems at their office visits, the incidence of diagnosed sexual problems is likely to increase.

Women are seeking a sexual solution, which is the first step toward arriving at proper treatment plan. Women want their sexual lives back and there is no bar of age, but should be pain free and pleasant.
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