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Sexual Dysfunctions and Some Related Factors in Northeast Part of Iran

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Original Article

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Abstract

Background: Sexual dysfunction is common in women and causes serious problems in their lives through affecting their physical and mental health, self-esteem and quality of life. The aim of this study was to determine the frequency of sexual dysfunction in women referred to health centers in north east of Iran in 2016.

Methods: The study was cross-sectional. The statistical population consisted of all married women referring to Shahroud health centers in 2016. A total of 478 married women were selected through multi-stage sampling and data extraction methods. Interviews and the (FSFI) questionnaire were used for data collection. Demographic information was also collected. Statistical analysis was performed by Chi-square and independent t-test.

Results: The frequency of sexual dysfunction was 48.5% (232/478), which was obtained for each domain as follows: sexual pain disorder 49.8% (238/478), orgasm disorder 51.0% (244/478), lubrication disorder 51.0% (244/478), sexual desire disorder 23.2% (111/478), and stimulation disorder 11.3% (54/478), respectively. In this study, sexual dysfunction was significantly associated with age ($P \le /0/003$) and education ($P \leq 0/001$), but and there was no significant relationship with contraceptive methods or number of children ($P \leq \frac{0}{32}$). Conclusions: According to research findings, the frequency of sexual dysfunction is relatively high in the community. It is suggested that counseling centers and sex education centers be established in health centers.

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Sexual function is a part of human life and behavior and according to the World Sexology Association, it is so intertwined with individual's personality which is impossible to be considered as an independent phenomenon.^{1,2} It is also a multi-dimensional phenomenon affected by different biological, psychological, and social factors. As sexual problems can have multiple effects on other aspects of individual and social life, it can cause psychological disorders, incompatibilities, and failures in marital life.^{3,4} Sexual function includes desire, stimulation, orgasm, and suppression. On the other hand, sexual dysfunction is a set of mental disorders defined as problems in desire, stimulation, orgasm and sexual pain.5,6

These disorders are common in women and occur at every age and under any cultural, social and economic conditions. They affect the quality of life, self-confidence, mood and relationship with the spouse.^{7,8} Various demographic studies have estimated their prevalence as 25-50%, with about 40-45% of women suffer these disorders.9,10

In Iran, the Sexual Dysfunction Index questionnaire showed that 31.5% of women have at least one sexual dysfunction, including 35% of libido disorder, 30% of arousal disorder, 33.7% of lubrication disorder, 37% of organs disorder, 26.7% of the pain disorders and 31.5% of the satisfactory disorder. Many different factors may cause sexual disorders such as mental health, sexual intercourse, sexual performance of the partner, factors associated with personality, infertility, medications, chronic diseases, pelvic surgery in women, gynecological and malignant diseases, diabetes, pregnancy and post-delivery period.11-17

Sexual dysfunction, caused by whatever reason, leads to lower quality of life and dissatisfaction. Dissatisfaction with sexual relationship may cause problems such as depression, where neglecting the importance of sexual problems in marital life has greatly damaged relationships between husbands and wives and may result in their divorce and separation.^{18,19}

Regarding the negative effects of sexual dysfunction in women and its complications on the family and society, its prevention and treatment is part of the duties of the members of the health team, especially physicians and midwives. They should be aware of the prevalence of this problem in the society in order to take appropriate measures to eliminate or reduce the problems of women families in this area. Thus, this study aimed to determine the prevalence of sexual dysfunction and its related factors in women of Shahroud.

Materials and Methods

The study was approved by the ethics committee of Shahroud University of Medical Sciences, with No IR. SHMU, REC.2016.36. This cross-sectional (descriptive-analytical) study was conducted on 478 women referring to health centers in Shahroud for periodic examinations or other services. The samples were selected randomly using multi-stage sampling. Regarding the 50.7% prevalence of sexual dysfunction, the number of samples in this research was 450 cases (extracted from the study of Mehrabi in Hamedan), which practically reached 478 cases.²⁰ In the first stage, 2 centers of 8 health centers and 1 base of the 5 urban bases (clusters) were randomly selected and then the samples were selected based on the number of visits using convenience method.

The inclusion criteria were married women with reading and writing skills, Iranian nationality, living with spouse, at least one year of marriage, and no history of abortion or delivery during the last two months, no physical and psychological disorders or gynecologic diseases. Exclusion criteria included women who were not willing to participate in the research. Two questionnaires were used in this study. The first part was a demographic questionnaire which captured age, occupational status and average income, level of education, parity, contraception use, and number of children. In order to determine the validity of the demographic questionnaire, content validity method or revisory opinion of 10 university professors were used; its reliability was measured through the re-test method.

The second part of the questionnaire was filled by the interviewer and researcher. The Persian translation of FSFI questionnaire was used to evaluate FSD. The FSFI⁸ is a brief, 19-item self-report measure of FSD which provides scores on six domains of sexual function as well as a total score. The domains assessed in the questionnaire include the following: desire (2 items), arousal (4 items), lubrication (4 items), orgasm (3 items), satisfaction (3 items) and pain (3 items). Each question had 5 scores, then multiplied by the factor of that area; the final score was obtained by summing up the scores of all six areas. The minimum score was 2.40 while the maximum score was 32.20 with the average being 22.57.⁸

Scores above 22 were considered as no sexual dysfunction while scores less than 22 were classified as having sexual dysfunction. Averages were also calculated for each sexual stage. The questionnaire assessed sexual function or disorders which had occurred during the past 4 weeks. Therefore, sexual dysfunction for each domain was considered when the desire score was ≤ 3.91 (range 1.2–6), arousal score was ≤ 3 (range 0– 4.5), lubrication score was ≤ 3 (range 0–4.5), orgasm score was \leq 4 (range 0–6), satisfaction score was \leq 4 (range 0–6) and pain score was ≤ 4 (range 1.2–6). The total score was obtained by adding the six domain scores; the total score ranged from 2.40 to 32.20. Sexual dysfunction was considered when the total score was < 22. Interviewers (Researcher and the questioner) matched respondents on various social attributes in an interview averaging 35 minutes. The validity and reliability of the questionnaire were confirmed by Hasani et al. and Mohammadi et al, in 2006 across the Iranian population.^{2,4,21}

The collected data were tabulated and analyzed by SPSS software using Chi-square test, Fisher's exact test, independent T-test and Mann-Whitney test. The significance level was considered 0.05. The obtained information was presented in absolute and relative abundance distribution tables. All the data collected in this study were completely confidential and anonymous. This research was approved in the Ethics Committee of Shahroud University of Medical Sciences under the code IR.SHMU.REC.2016.36.

Results

A total of 478 women from Shahroud were recruited in this study with a mean age of 30.22 ± 8.82 years. Their highest level of education (39.7%) was diploma and 80% were housewives. The contraceptive method in most of the samples (32.8%) was condom. The mean number of children was 1.7 ± 0.99 .

Overall, the prevalence of using contraceptives in this study was 68.4% (327), while the rest were prevented pregnancy through natural ways; some of them had no special preventive method, or the women were in menopause (3% (15 cases) of the women were in their menopause). Based on the results, 232 cases (48.5%) had sexual dysfunction with including lubrication disorder (51.0%), orgasmic disorder (51.0%), sexual pain disorder (49.8%), libido disorder (23.2%) and stimulation disorder (11.3%) (table 1).

The findings showed that there is a significant relationship between sexual function and age as well as education according to Pearson correlation coefficient and based on the statistical test (P < 0.01); sexual activity decreased by age, while increasing with higher levels of education (table 2). There was no significant relationship between sexual function and the number of children or the contraceptive method (table 3).

Discussion

According to the results of the present study on 478 participants, the frequency of sexual dysfunction was 48.5%, whose components were as follows: pain disorder 49.8%, orgasm disorder 51%, lubrication disorder 51%, libido disorder 23.2% and stimulation disorder 11.3%. The results of Hosseini et al. research in Mazandaran showed that the prevalence of sexual dysfunction was 45.2%, with its variables including pain disorder 47.2%, orgasm disorder 42.7%, lubrication disorder 39.8%, libido disorder 39.6% and stimulation disorder 35.5%.8 The results of a study in Jordan showed 64.7% prevalence of sexual dysfunction whose components were as follows: orgasm disorder 39.57%, libido disorder 49.4%, stimulation disorder 31.9%, lubrication disorder 39.2%, and pain disorder 19.2%. In the Jordanian society, as with any other Arabic society, talking about sexual disorders is a sensitive issue and may lead to misjudgments.²² The results of Jafarpour et al. study in Ilam showed that the prevalence of sexual dysfunction was 46.2%, which increased by increase in age, where it rose from 22% in age groups below 20 to 75.7% within the age range of 40-50. They also found a reverse correlation between sexual dysfunction and education level. Further, its variables included pain disorder 42.5%, orgasm disorder 42.0%, and lubrication disorder 41.2%, libido disorder 45.3%, and stimulation disorder 37.5%.23

Table 1. Distribution of frequency of sexual dysfunction based on components of sexual function in women referred to health centers in Shahroud

| Sexual function components | Dysfunction sexual | Libido or desire n(%) | Stimulation or arousal n(%) | Lubrication n(%) | Orgasmic n(%) | Sexual pain n(%) |
|----------------------------|--------------------|-----------------------|-----------------------------|------------------|---------------|------------------|
| Yes | | 111 (23.2) | 54 (11.3) | 244 (51.0) | 244 (51.0) | 238 (49.8) |
| No | | 367 (76.8) | 424 (88.7) | 234 (49.0) | 234 (49.0) | 240 (50.2) |
| Total | | 478 (100) | 478 (100) | 478 (100) | 478 (100) | 478 (100) |

| Table 2. Correlation coefficient between sexual function, education |
|---|
| and age in women referred to health centers in Shahroud |

| Sexual function | | Correlation | Pvalue | | |
|-------------------|----------|-------------|---------|--|--|
| | Variable | coefficient | i value | | |
| Age | | - 0.135** | 0.003 | | |
| Education | | 0.151** | 0.001 | | |
| Age - 0.135** 0.0 | 003 | | | | |

Education 0 151** 0 001

| Table 3. | Distribution | of | absolute | and | relative | frequency | of | sexual |
|-----------|----------------|-----|------------|------|-----------|-----------|----|--------|
| dysfuncti | on in research | sar | nples base | d on | studied v | ariables | | |

| Sexual dysfunction | Yes | No | Pvalue | |
|--|-------------------------|------------|--------|--|
| Variable | n(%) | n(%) | | |
| Number of children | | | | |
| 0 | 23 (51.1) | 22 (48.9) | 0.32 | |
| 1 | 90 (56.96) | 68 (43.04) | | |
| 2 | 104 (53.61) | 90 (46.39) | | |
| 3 | 34 (53.12) | 33 (49.25) | | |
| ≥4 | 8 (57.14) | 6 (42.86) | | |
| Contraceptive method | | | | |
| Withdrawal | 55 (59.10) | 38 (40.90) | 0.51 | |
| Contraceptive pill | 20 (52.63) | 18 (47.37) | | |
| Condom | 85 (54.14) | 72 (45.85) | | |
| Tubal ligation in women | 33 (47.82) | 36 (52.17) | | |
| Vasectomy (TL man) | 3 (60.00) | 2 (40.00) | | |
| Intramuscular injection method of contraception | 12 (34.28) | 23 (65.71) | | |
| IUD | 13 (56.52) | 10 (43.48) | | |
| No contraceptive methods | 35 (60.34) | 23 (39.66) | | |
| | Correlation coefficient | | Pvalue | |
| Age | - 0.1 | 0.003 | | |
| Education | 0.1 | 0.001 | | |

The results of two studies in China showed that the prevalence of sexual dysfunction was 63.3% and 60.2%, which had a direct correlation with age and education level.^{24,25} The result of a review study and meta-analysis on the overall prevalence of sexual dysfunction in women in Iran showed that it was 43.9% and its variables included sexual desire 42.6%, psychological stimulation 38.5%, lubrication 31.6%, orgasm 29.2%, sexual satisfaction 21.6% and sexual pain 41.1%.²⁶ As indicated above, sexual dysfunction is high in women in different societies, and it requires more serious attention since its persistence is associated with serious physical and mental health risks in the family.

In the present study, sexual dysfunction had a significant relationship with age and education. The findings of Goshtasbi et al. study also found the same significant relationship and were consistent with the present study. We found no significant relationship between sexual function and contraceptives; consistent with this finding, the Urology Association of the University of Mersin, Turkey and Asghari Roodsari, found no significant relationship between these two variables either. This can be due to the fact that using contraceptive methods can cause more relief from becoming pregnant thereby increasing the sexual satisfaction.^{27,28}

According to the results of the present study, sexual dysfunction is a common and progressive disease in women in different societies, which is very common in Iran, as we found the prevalence of sexual dysfunction in Shahroud was about 48.5%. Also, its variables including orgasm and lubrication disorders were the most common causes of sexual dysfunction, and age was the most important risk factor for sexual dysfunction, where the prevalence of sexual dysfunction increased by age. It was more prevalent in women with lower

levels of education and the most commonly reported disorders in this study were orgasmic disorder, lubrication disorder, sexual pain disorder, libido disorder, stimulation disorder and lack of satisfaction with sexual activity. Thus, it is important to pay more attention to this issue as its persistence can endanger the family life with serious physical-psychological problems. Therefore, it is suggested to consider sexual counseling and education as one of the healthcare processes for women for allowing couples to refer to such centers before starting a marital life. Further, more research should be conducted on this issue to measure FSD levels and to confirm its association with different risk factors, using larger and more comprehensive samples.

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Conflict of Interest

The authors declare that they have no conflict of interest.

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