

DETERMINING THE TREND OF EPIDEMIOLOGICAL DISORDERS OF SEXUAL FUNCTION AND ITS INFLUENCING FACTORS IN YOUNG GIRLS IN QAZVIN

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ABSTRACT

Background: One of the important and indispensable instincts of humans is sexual desire, and that is an important part of their lives. The instinct and the problems caused by it are very important. According to studies, sexual concerns in each country have a particular dispersion but the common point of the majority of studies is to increase the sexual disorders of young girls in teenage period. Today, the research suggests that sexual disorders occur in all times of a woman's life, and that is why this study has focused on sexual concerns at young ages. **Materials and methods:** This study is a cross-sectional study and statistical population of this research is young girls referring to health centers in Qazvin. The sampling method is a two - step cluster. In the districts 1, 2 and 3 Qazvin, we first consider each health center as a cluster and randomly select a few centers, then select 1240 people from among the selected centers by simple random sampling. The method of data collection was questionnaire (epidemiological, sexual health, questionnaires such as demographic characteristics, sexual awareness, sexual literacy and sexual disorders based on DSM-IV). **Findings:** Research units believe that excessive sexual activity is harmful; %44.8 of married people had sexual activity once a week and %51.6of them had sexual activity once or twice a week. %43.9 of young girls had normal sexual function, %31.4 had mild disorder and prevalence of severe disorder was %18.8. The severity of the disorder is significantly associated with age under 18 years ($P=0.001$); as severe disorder was more common between the ages of 12 and 16. In general, the score of sexual health at this age decreases as aging and education, so that the most common sexual dysfunction is observed under 18 years of age. Therefore, further investigations are recommended to find the exact pattern of sexual changes in this period as well as the recognition of epidemiology. **Conclusion:** According to the results of this study, it can be said that the main causes of sexual dysfunction in young girls are pain, vaginal dryness, and lack of orgasm and lack of orgasm in young married girls.

KEYWORDS: Sexual function, epidemiological disorders, young girls.

INTRODUCTION

Sexual function is a multi - dimensional phenomenon affected by many biological, psychological and social factors. The importance of sexual desire is realistic as sexual problems can affect other aspects of individual and social life so that some of the psychological disturbances, conflicts and failures of marital life.^[1,2] Human sexual function is a process involving a combination of different organs and involves coordination between neurologic, vascular and endocrine systems. Young girl's sexual function is a state of ability to reach sexual excitation, lubrication, orgasm and satisfaction, which results in health and achieving a level of health coupled with good quality of life. There is a lot

of evidence to support the importance of sexual health and its impact on the quality of life nowadays.^[4] Sexual dysfunction is a major public health problem that affects young girls more than men. The dysfunction of young girls is broadly defined in libido, excitation, orgasm, and sexual pain, which causes an injury in individual and interpersonal problems.^[3]

Age plays an important role in the sexual function and behavior of young girls.^[4] Multiple biological, functional, psychological and social changes occur after menstruation that may affect sexual function.^[6] Although 86 % to 100 % of young women continue sexual activity since the ages of 15, the majority of young girls show a

reduction in sexual exposure and sexual desire, especially during intense pain during sexual activity. The problems of sex performance in young girls are reported frequently.^[4] The prevalence of sexual craving after pregnancy was reported 57 % to 75 %. Opinions on the variables that are definitely associated with sexual dysfunction are controversial. Some reports suggest that the incidence of sex increases with increasing the age of the mother, while other researchers have not found such a connection. The results in the case of parity, the initiation age of sexual activity and physical mass index are still ambiguous.^[6]

Therefore, with regard to differing opinions and suspicions about the sexual function of young girls and its disorder and on the other hand, the importance of this issue is on the level of health and quality of young girl's lives, more researches is needed. Since sexual function is highly influenced by cultural, religious, social and educational factors,^[3] different studies in cultures and societies have to be conducted regarding their cultural and social and religious conditions. Therefore, the present study attempts to take into account the ambiguities involved in sexual function and also with respect to the above subject aimed at determining the trend of epidemiological disorders of sexual function and its influencing factors.

MATERIALS AND METHODS

The descriptive - analytic study conducted in 2020 and over the 1240 of female sexual health care facilities to the midwifery units of Qazvin health centers. The number of samples was determined based on the statistical test and sampling of individuals with cluster method and from each cluster was done with simple random sampling. The inclusion criteria for the study include young girls aged between 12 and 26, who are not classified as high - risk women according to midwifery definitions and exclusion criteria include young girls who have difficulty by any reason and dissatisfaction with the continuation of the questionnaire. After acquiring informed consent and observance of the ethical principles of the research, young girls participating in the study of age were first studied at three categories and then impact factors were studied. Individual and midwifery characteristics of young girls were recorded through questionnaire completion by them in the questionnaire. The sexual function of young girls was investigated using a standard questionnaire of the Young Girls sexual function Index (FSFI). The questionnaire has a high reliability and content structure; its reliability is reported with $r = 0.79-0.86$ and Cronbach's alpha agreement coefficient = 0.82.^[6] Since the questionnaire was in the main language, it was returned to Persia and used, but to examine the questionnaire's reliability in a guide study, the questionnaire was first completed for 15 qualified women which is based on the results the 0.85's alpha coefficient was approved for the reliability of the questionnaire. The young girl's sexual function

questionnaire includes questions in six areas of sexual desire (2 questions), sexual excitation (4 questions), lubrication (4 questions), orgasm (3questions), satisfaction (3questions) and pain (3 questions). The minimum score for the sum of scores from response to questions is 2 pts. And its maximum score is 36 pts. The following criteria were considered for sexual dysfunction: severe dysfunction ≤ 10 , moderate dysfunction 11-17, mild disorder 18-23, and no disorder ≥ 23 . The score was also considered less than 65 % of the total score for each area as a function disturbance in that field.^[7] Completed questionnaires were collected and after removal of the incomplete questionnaires by statistical software, SPSS version 22, they were analyzed using descriptive (mean, affluence, variance) and analysis (Chi Squared, t test and linear regression) statistics tests, at a significant level of $P < 0.05$.

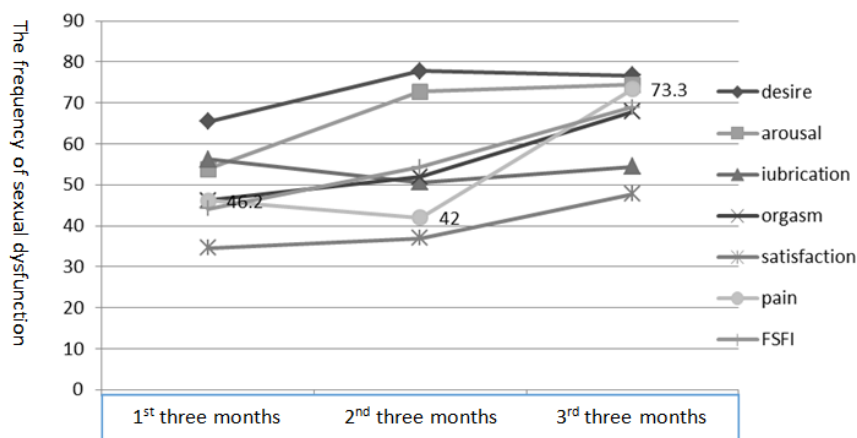
FINDINGS

The average age of young girls participating in the study was 18.42 ± 5.43 and the average age of their sexual activity was 14.51 ± 11.28 . In terms of education, about 7.45 % were students before their diploma and in terms of the profession about 80 % were students. 60.1 % of the young girls participating in the study said they had not experienced an orgasm at their first sexual activity. Although 44.8 % said that they experienced excitation and orgasm in several sexual activities; all young girls participating in the study expressed a tendency to sexual activity after their first sexual experience. Also 51.6 % said they had been engaged in sexual activity twice a week. 52.9 % of young girls were in normal sexual function, and 28.4 % had mild sexual dysfunction. The prevalence of severe sexual dysfunction was 26.8 % (Table 1). Overall, sexual dysfunction was studied in more than half (57.8 %) of young girls.

The frequency of sexual dysfunction in different age groups was significantly different ($p = 0 / 001$); in a way that severe dysfunction was more common in the ages of 22 to 26. The trend of changes of sexual dysfunction is shown in Figure 1. The pain and dryness of the vagina are one of the most common sexual disorders. In examining the relationship between various factors with sexual dysfunction, age, profession, education, menstrual condition (in terms of Dysmenorrhea and menstrual regular order), the method of contraception and tendency of person to partners was significantly related to sexual dysfunction, as well as the multiplicity of sexual activity, sexual literacy, weight and use of the Internet. Also, marital status is significantly related to sexual dysfunction ($p = 0.005$, $p = 0.001$).

Table 1: The prevalence of sexual dysfunction in young girls in different age groups.

Sexual Function \ Three months Pregnancy	12-16 YO Ct.(Pct.)	16-22 YO Ct.(Pct.)	22-26 YO Ct.(Pct.)	Total Ct.(Pct.)
Severe	7(13.5)	116(9.9)	372(30)	223(18.8)
Moderate	6(11.5)	37(3.7)	49(4.4)	74(5.8)
Mild	10(19.2)	483(39.5)	384(31.1)	384(31.4)
Natural	29(55.8)	570(46.9)	421(34.4)	533(43.9)



DISCUSSION

Sexual dysfunction is one of the most common and serious problems in young girls who have an important influence on marital relations, interpersonal relationships, and the quality of woman and family life. Pregnancy and the effects that this physiological issue has on a woman's body and the changes that occur with pregnancy in the body can provide conditions for disrupting women's sexual cycle and consequently on sexual functional.

Although most of the participants in this study (%45.7) had literacy rates (students), In this study, a relationship was found between education level and sexual dysfunction during pregnancy, Lucian was found in his study.^[10] Also in two separate studies, Abdo and Luhmann explain that low levels of education were directly related to sexual dysfunction in young non-pregnant girls in North America and in a group of young Brazilian non-pregnant girls.^[15,16] This relationship can be explained by the fact that this group of people has more stressful life, emotionally and physically and also these people have a lower level of health.^[16]

In this study, although 44.8% of study participants stated that they did not experience orgasm during their first sexual activity; however, all young girls participating in the study continued their sexual activity, and 51.6% of them stated that they had sexual activity once or twice a week, in a study conducted by Mahdiah Shoja et al. In Iran, reported that the frequency of sexual intercourse has decreased during pregnancy.^[17]

Considering that sexual dysfunction can vary according to ethnicity and physical and mental health,^[11] in this study more than half of the young girls studied have some degrees of sexual dysfunction (%57.8) much higher than the prevalence of sexual dysfunction (%31.5). This difference can be attributed to the level of knowledge of the new generation of young and adolescent relations,^[5,9] Other studies in this field are consistent with these findings; these include a study by Lucian MV et al. that estimated the prevalence of sexual dysfunction in Brazil at 61%.^[10] and in other studies conducted in different countries by Fook Chan Yin, Riding, and Different Styles. A high percentage of sexual dysfunction has also been reported.^[12,13,14]

In Masters and Johnson's study, the pattern of sexual response during sexual activity was explained so that the FSFI score reduced slightly at the age of 16, the pattern of sexual function varied between the ages of 16 and 22, and severe reduction after the age of 22.^[18] And in this study, a significant relationship was seen between age and sexual dysfunction, so that the prevalence of sexual dysfunction over the age of 22 (who were mostly married) was much higher than the prevalence of younger people. These findings are also stated by Lucian; he argued that sexual function in age groups decreases linearly from early age,^[10] other studies have also supported this finding.^[21,22,23]

In studies that have examined sexual function in adolescence, it has also been found that sexual problems are greater early in onset of activity,^[7,19,20] and then decrease. The studies cited reason for this finding may be

back pain, anxiety, exhaustion, sleep disorders, depression and painful sex.^[7] But given that there is an increase in sexual complications in the early age, sexual dysfunction is likely to start from pregnancy, there's an increase in sexual complications. It's important to see a reduction in married couples which can be for reasons such as family economic difficulties, dissatisfaction wife, stressful lives and professions that affect the family economy is the major reason cited.

CONCLUSION

Further study to find out the exact pattern of sexual function in youth and it is also essential to devise strategies for diagnostic, therapeutic and preventative strategies and due to the fact that sexual function is different in different cultures, it's recommended to study in different ethnicities.

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REFERENCES

1. Bispham A. Sex after babies. *Fam Med J.*, 1997; 1(2): 25-7.
2. Sajedi J. [Loathing sex]. Tehran:Danesh Publications, 2000; 58. [In persian].
3. Zakia Mahdy Ibrahim. Magdy Refaat Ahmed. Waleed Ali Sayed Ahmed. Prevalence and risk factors for female sexual dysfunction among Egyptian women. *Arch Gynecol Obstet* DOI 10.1007/s00404-012-2677-8.
4. Alessandra Plácido et al. Prevalence of sexual dysfunction during pregnancy. *Rev Assoc Med Bras*, 2009; 55(5): 563-8.
5. Markus Wallwiener et al. Effects of sex hormones in oral contraceptives on the female sexual function score: a study in German female medical students. *Contraception*, 2010; 82: 155-159.
6. Rosen R et al. The Female Sexual Function Index (FSFI): a multidimensional self-report instrument for the assessment of female sexual function. *J Sex Marital Ther.*, 2000 Apr-Jun; 26(2): 191-208.
7. Ahmad Shirvani M, Bagheri Nesami M. Sexual Dysfunction and Related Factors among Breast Feeding Women. *The Iranian Journal of Obstetrics, Gynecology and Infertility*, December 2011; 14(5): 36-42.
8. Safarinejad MR. Female sexual dysfunction in a population- based study in Iran: prevalence and associated risk factors. *Int J Impot Res.*, 2006 Jul-Aug; 18(4): 382-95.
9. Rachel N. Pauls, John A. Occhino, Vicki Dryfhout, Mickey M. Karram. Effects of pregnancy on pelvic floor dysfunction and body image; a prospective study. *Int Urogynecol J.*, 2008; 19: 1495-1501.
10. LUCIANE M. V. NALDONI, MARIA A. V. PAZMINO, PATRICIA A. O. PEZZAN, SIMONE B. PEREIRA, GERALDO DUARTE, CRISTINE H. J. FERREIRA. Evaluation of Sexual Function in Brazilian Pregnant Women. *Journal of Sex & Marital Therapy*, 2011; 37: 116-129.
11. Castelo-Branco C, Cancelo MJ, Chedraui P. Female sexual dysfunction in postmenopausal women. *Expert Opin Ther Pat*, 2007; 17: 639-647.
12. Fok, W. Y., Chan, S. Y., & Yuen, P. M. Sexual behavior and activity in Chinese pregnant women. *Acta Obstetrica et Gynecologica Scandinavica*, 2005; 84: 934-938.
13. Ryding, E. Sexuality during and after pregnancy. *Acta Obstetrica Gynecologica Scandinavica*, 1984; 63: 679-682.
14. Sayle, A. E., Savitz, D. A., Thorp, J. M., Mertz-Picciotto, I., & Wilcox, A. J. Sexual activity during late pregnancy and risk of preterm delivery. *Obstetrics and Gynecology*, 2001; 97: 283-289.
15. Abdo, C. H. N., Oliveira, W. M., Moreira, E. D., & Fittipaldi, J. A. S. Prevalence of sexual dysfunctions and correlated conditions in a sample of Brazilian women: Results of the Brazilian study on sexual behavior (BSSB). *International Journal of Impotence Research*, 2004; 16: 160-166.
16. Laumann, E. O., Paik, A., & Rosen, R. C. Sexual dysfunction in the United States. *The Journal of the American Medical Association*, 1999; 281: 537-544.
17. Mahdieh Shojaa Leila Jouybari Akram Sanagoo. The sexual activity during pregnancy among a group of Iranian Women. *Arch Gynecol Obstet*, 2009; 279: 353-356.
18. Masters WH, Johnson VE. *A resposta sexual humana*. Roca: São Paulo, 1984.
19. Xu XY, Yao ZW, Wang HY, Zhou Q, Zhang LW. [Women's postpartum sexuality and delivery types][Article in Chinese]. *Zhonghua Fu Chan Ke Za Zhi.*, 2003 Apr; 38(4): 219-22.
20. Saurel-Combizolles MJ, Romito P, Lelong N, Ancel PY. Women's health after childbirth: a longitudinal study in France and Italy. *BJOG*, 2000 Oct; 107(10): 1202-9.
21. Haines, C. J., Shan, Y. O., Kuen, C. L., Leung, D. H. Y., Chung, T. K. H., & Chin, R. Sexual behavior in pregnancy among Hong Kong Chinese women. *Journal of Psychosomatic Research*, 1996; 40: 299-304.
22. Pongthai, S., Chaturachinda, K., & Sugeethorn, S. Sexual desire, coital frequency and orgasm during pregnancy: Comparing between primigravida and multigravida. *Journal of the Medical Association of Thailand*, 1998; 71: 124-130.
23. Senkumwong, N., Chaovisitsaree, S., Ruggpao, S., Chandrawongse, W., & Yanunto, S. The changes of sexuality in Thai women during pregnancy. *Journal of the Medical Association of Thailand*, 2006; 89: 124-129.