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Original article

The Effect of Sexual Health Education Program on Women Sexual Function in Iran

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ARTICLE INFORMATION

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ABSTRACT

Background: Sexual dysfunction is the most common disorder in women. According to the WHO, sexual education programs are considered as a need. Therefore, this study was designed to investigate the effect of educational program on sexual function in women with sexual dysfunction.

Methods: This randomized trial, was conducted in 2013 on 90 married women by convenient sampling in Qazvin, central Iran. The demographic, Female Sexual Function Index (FSFI), and Beck's Depression Inventory (BDI) questionnaires were completed during structured interviews. After completing the sample size, subjects were divided randomly into two groups by using the table of random numbers (educational and control groups), then respectively received an educational intervention in the four sessions with one week interval and routine program offered by the center and following-up was done with refilling questionnaires 8 weeks after intervention.

Results: Sexual function improved after sex educational programs in all dimensions (sexual desire (P=0.006), sexual exciting (P=0.006), vaginal moisture (P=0.002), sexual satisfaction (P=0.011), and total score of sexual function (P=0.001).

Conclusions: Considering the importance role of sexual function in family strength, health, and development, it can be claimed that educational sex programs can help practitioners to improve sexual function of married women with sexual dysfunction.

Introduction

All aspects of human life have taken the rapid and significant changes; also, sexual life is not excluded from these modifications. Sexuality plays an important role in modern day living [1]. Sexuality is defined as a series of the genetic, knowledge, experiences, attitudes, and behavior characteristics associated with being male or female. Human sexuality has been physical, psychological, and emotional aspects. Sexuality included communicating with another person, being receptive, and considering the desires and wishes of him [2].

Sexual dysfunction is defined as a disorder of desire, exciting, orgasm, and sexual pain [3]. This age-related complication is progressive and common disorder in women. It is estimated that 25%-63% of women suffer from these sexual dysfunctions [4, 5]. Extensive epidemiological study was conducted on women in the United States, showed women suffered from problems as follows: 35.6-37.8% in sexual desire, 26.1- 39.9% in the excitement, 20.5-27.3% in orgasm disorder, and 44% at least one sexual problem [6-8].

Different models have been proposed to explain the sexual response cycle. Kaplan and Sadocks described this cycle include the sexual desire, excite, and orgasm. While Basson Model cited, some women not only sexual desire, but also emotional closeness engaged to their partner in sexual activity. In the study of Sand and Fisher women equally showed these patterns. It can be suggested that women's sexual response is heterogeneous. The assessment of sexual dysfunction with the FSFI by Basson Model was associated with greater sexual dysfunction [10-12].

The effective factors in the incidence of sexual dysfunction included mental health, sexual relations, and function of partner also personality factors related to infertility, drugs, chronic diseases, gynecologic and malignant diseases, gestational diabetes, and the postpartum period [12-14].

Sexual education provided the opportunity to learn sexual issues. As well as sexual education gives required sexual information, awareness for a common goal, satisfy of needs, balance in personality, and social family [15]. According to

WHO, sex education programs are considered as a need [16]. Comprehensive sex education programs can prevent sexual dysfunction, create safe sexual behavior and mental health, increase positive health behaviors and sexual identity, and establish effective family health [17]. In addition, anyone believes giving permission to the patients to talk about their anxiety and negative feeling regarding their sexuality can address 70% of all their sexual problems [18]. Most of the time practitioners do not effectively address sexual wellbeing needs of the patients with an acquired disability or chronic disease [19]. Since the education, consulting, and guidance on sexual health have been one of the important tasks of midwives and referred to the high prevalence of sexual dysfunction[20]. We aimed to assess the effect of education on sexual dysfunction in the married women.

Methods

This study was a randomized trial (IRCT ID: 201211179463N7), conducted in 2013 on 90 women, after obtaining informed consent, were recruited who referring to four selected health care centers (chosen with cluster sampling method in the four points (north, south, east, and west of the city center). At first, lists of all health care centers that affiliated to Qazvin University of Medical Sciences were identified and randomly selected (Figure 1).
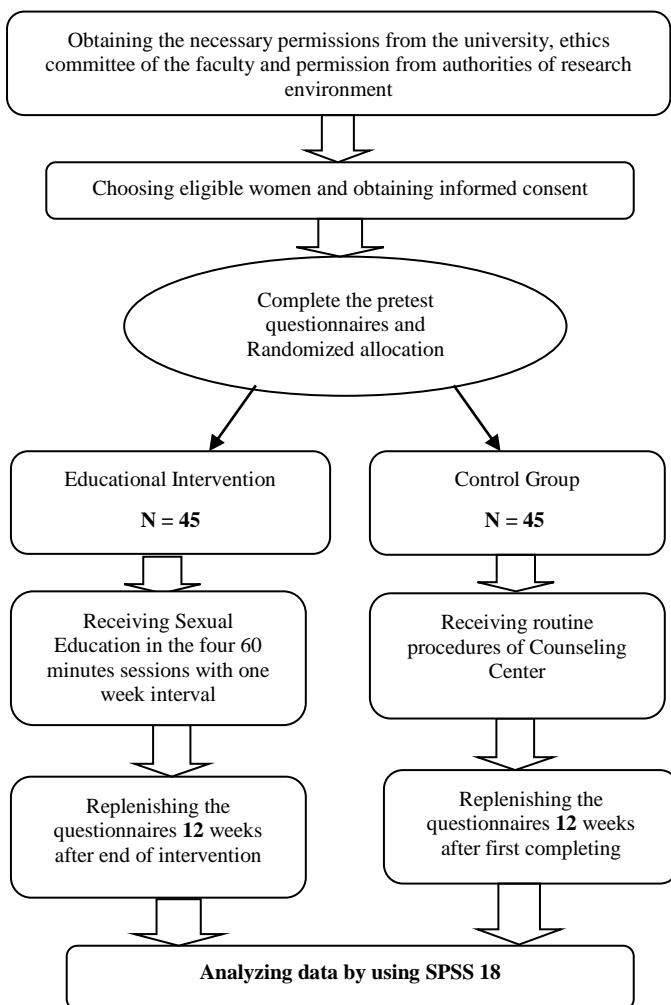

Figure 1: Design of the study method

Inclusion criteria included: Married women living with partner, 20-45 years old, presence of sexual dysfunction at least in the last two months, healthy women (no recognized physical and mental illness), lack of participation in educational classes with a focus on sexual education, not being pregnant, the absence of moderate and severe depression based on the BDI (patients who suffered from moderate and severe depression were referred to psychiatrist), and non-use of hormones or drugs that affected effective sexual function.

Research instruments included demographic characteristics, FSFI, and BDI questionnaires. The scale for evaluating of women's sexual function was the FSFI which is a validated 19-items self-reported measure and is widely used to evaluate 6 dimensions of FSFI including: desire, arousal, lubrication, orgasm, satisfaction, and pain. Psychometric properties of the Iranian version of FSFI were assessed and were well documented. Furthermore, cutoff points of FSFI and the 6 domains of Iranian version were found as follows: 28 (sensitivity = 83% and specificity = 82%), 3.3, 3.4, 3.7, 3.8, 3.4 and 3.8. So in this study, women who had FSFI score 28 and more entered in to study[2, 20, 21].

BDI-II was the measure of assessing depression level in this study. It is a 21-items self-reported questionnaire based on the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) and is widely used to evaluate the presence and intensity of depression. BDI is a standard questionnaire that the reliability and validity have been verified in several studies in Iran and its scores range from 0 to 63. Greater scores are related to severity of depression [22- 25].

participants completed the questionnaires, then the questionnaire reviewed and selected women who had sexual dysfunction (28 or more scores) and not had moderate and severe depression based on BDI After completing the sample size, subjects were divided randomly into two 45-person groups by using the table of random numbers (intervention and control groups).

Sex education programs in this study were conducted in the four 60 minute sessions with one week interval and presented in the form of lectures, questions and answers, group discussions, and booklets. The first week, the program was included the introducing of anatomy and physiology of female genital system and factors that effected on the sexual cycle. During the second week, the program was focused on the sexual disorders, helping women to try the lifestyle changes, and motivating. The third week, the program was based on the communication skills and negotiation for the solving conflicts. In the fourth week, the program was to summarize and review of the previous content. At the end of each session, we answered to the specific questions of participants. A post-test was conducted after 8 weeks from the last educational session. In case of any inquiries, a phone number was given to participants by researchers.

In this study, the control group received only routine program. Evaluating the impact of educational sessions done 8 weeks after the last educational session in the intervention group and 8 weeks after the initial completing of questionnaire in the control group, at the end of the twelve-week educational package was given to the control group. The data were analyzed using SPSS software version 18 (Chicago, IL, USA). The Findings were analyzed by Chi‑square, Independent t-test, and Paired t-test, presented in two tables.

Results

In this study, (FSFI) questionnaire and BDI questionnaire domains scores were compared before intervention in two groups (Control (CG) and Intervention groups (IG)) and showed no significant difference. In addition, as presented in Table 1, comparison of characteristic and socio-demographical data of the participants between two groups showed no significant difference. The mean age of subjects in the intervention and control groups was 33.9 (±6.12) and 33.2 (±6.1) years old, 48.8% in the intervention group and 40% in the control group had two deliveries (IG: 1.75 ± 0.93 and CG: 1.71 ±0.94). 47.7% in IG and 53.3% in CG had normal vaginal delivery. The highest percentage of the women in both groups had high school level and most of them were homemakers.

The mean age of the husbands in the IG and CG was respectively 39.3 (±7.51) and 38.4 (±6.97) years old, the greatest percentage of them had self-employed job in the intervention group and employees in the control group also, the highest percentage of husbands had a diploma education. More than half of the subjects in both groups had moderate income (based on the opinions of participants) and the mean years of marriage duration was 13.9 ±7.89 years in IG and 11.9 ± 6.79 years in CG.

According to Table 2 sexual function scores in sexual desire (P=0.006) and sexual exciting (P=0.006) vaginal moisture (P=0.002), sexual satisfaction (P=0.011), and total score of sexual function (P=0.001) showed significant difference previous and after intervention in two groups. Besides, all aspects of the sexual function had statistically significant difference in IG previous and after intervention (sexual desire (P=0.001) and sexual exciting (P=0.001) vaginal moisture (P=0.001), orgasms (P=0.001), sexual satisfaction (P=0.001), sexual pain (P=0.016), and total score of sexual function (P=0.001)), while the CG was significant different only in sexual pain (P=0.012).

Discussion

This study showed sexual health programs can improve sexual desire, excitement, vaginal moisture, sexual satisfaction, and total sexual function of women. As Bazarganipour et al showed the prevalence of female sexual dysfunction (FSD) was 16.6%. In particular patients indicated poorer sexual functioning for the desire (48.3%) and the arousal (44.7%) subscales. Furthermore, suggested patients with lower educational level (OR: 2.94; 95% CI: 1.46, 5.92) and irregular menstrual status (OR: 4.61; 95% CI: 1.93, 11.00) were more likely to report sexual dysfunction.[26]. The results of Zhang et al study showed that low education, average or poor health, lower frequency of sex, traditional views toward sex, and marital dissatisfaction were significant risk factors for different components of female sexual dysfunction, it also revealed that four domains of FSD (the exceptions being orgasm delay and physical pain during sex) have severe consequences for married women's life satisfaction and sexual satisfaction [27]. Results parallel to this study findings demonstrated women with no formal education were the most likely to report female sexual dysfunction.

Table 1: Demographic status of women

Groups	Control n=45 (%)	Intervention n=45 (%)	P value
Age (yr)			0.559
20-25	4 (8.8)	3 (6.7)	
25-30	15 (33.4)	12 (26.6)	
30-35	9 (20.0)	15 (33.4)	
35-39	10 (22.3)	6 (13.3)	
40-45	7 (15.5)	9 (20.0)	
Educational level			0.241
Primary school	7 (15.6)	2(4.4)	
Secondary school	11 (24.4)	11 (24.4)	
High school	17 (37.8)	24 (53.3)	
Academic	10 (22.2)	8 (17.3)	
Occupation			0. 535
Homey	38 (84.4)	40 (88.9)	
Employee	7 (15.6)	5 (11.1)	
Socioeconomically status			0. 081
Good	6 (13.3)	10 (22.5)	
Moderate	37 (82.5)	28 (62.5)	
Bad	2 (4.4)	7 (15.6)	
Parity			0.823
0	2 (4.4)	3 (6.7)	
1	18 (40)	14 (31.1)	
2	19 (42.2)	22 (48.8)	
≥3	6 (13.4)	6 (13.4)	
Husband's age (yr)			0.553
20-29	3 (6.6)	5 (11.1)	
30-39	24 (53.3)	19 (42.2)	
40-49	16 (35.5)	15 (3.3)	
≥50	2 (4.6)	6 (13.4)	
Husband's educational level			0.823
Primary school	6 (13.3)	4 (8.9)	
Secondary school	13 (28.9)	14 (31.1)	
High school	15 (33.3)	18 (40)	
Academic	11 (24.4)	9 (20)	
Husband's occupation			0.132
Unemployed	2 (4.4)	0 (0.0)	
Working	9 (20)	15 (33.3)	
Employee	34 (75.9)	8 (17.8)	
Type of delivery			0.825
No	2 (4.4)	3 (6.7)	
Normal vaginal delivery	24 (53.3)	21 (47.7)	
Cesarean section	16 (35.6)	16 (35.6)	
Normal vaginal delivery and cesarean section	3 (6.7)	5 (11.1)	
Number of children			0.905
0	2 (4.4)	3 (6.7)	
1	18 (40)	14 (31.1)	
2	19 (42.2)	22 (48.8)	
≥3	6 (13.4)	6 (13.4)	
Duration of Marriage (yr)			0.216
<5	4 (8.8)	1 (2.2)	
5-9	14 (31.1)	15 (33.3)	
≥10	27 (60.1)	29 (64.5)	

The results of Smith study demonstrated that participating in a group sexuality appointment improved the mean scores of sexual function and its dimensions and the highest change was the sexual desire, excitement, sexual satisfaction, vaginal moisture dimensions, and the lowest in the sexual pain and orgasm [28].

Table 2: Comparison of sexual function previous and two month after intervention in two groups.

Sexual Function	Groups	Before intervention Mean ±SD	After intervention Mean ±SD	Difference Mean ±SD	*P* value (within)	*P* value (between)
Sexual desire	Intervention	3.01 ±0.97	3.76 ±0.73	-0.74 ±0.99	0.001	0.006
	Control	2.86 ±1.00	3.06 ±1.08	-0.19 ±0.89	0.154	
Sexual exciting	Intervention	3.14 ±0.92	3.70 ±0.89	-0.56 ±0.89	0.001	0.033
	Control	3.19 ±0.85	3.84 ±1.02	-0.18 ±0.74	0.098	
Vaginal moisture	Intervention	3.84 ±1.11	4.54 ±0.96	-0.70 ±1.01	0.001	0.002
	Control	3.97 ±1.02	4.03 ±0.99	-0.05 ±0.94	0.695	
Orgasms	Intervention	3.65 ±1.10	4.11 ±1.05	-0.45 ±0.96	0.003	0.131
	Control	3.55 ±1.03	3.69 ±1.22	-0.13 ±1.02	0.371	
Sexual satisfaction	Intervention	4.16 ±0.90	4.78 ±0.75	-0.62 ±1.02	0.001	0.011
	Control	4.19 ±1.10	4.24 ±1.17	-0.05 ±1.07	0.751	
Sexual pain	Intervention	4.11 ±1.32	4.56 ±1.11	0.45 ±1.20	0.016	0.680
	Control	4.01 ±1.36	4.37 ±1.33	-0.36 ±0.91	0.012	
Total Score of Sexual Function	Intervention	21.92 ±3.67	25.45 ±3.67	-3.53 ±3.98	0.001	0.001
	Control	22.03 ±3.96	22.89 ±4.29	-0.86 ±3.47	0.104	

The results of this study showed significant changes in the intervention group except in two domains orgasm (*P*=0.131) and sexual pain (*P*=0.680). Perhaps, because of observing any changes in two domains, it should be mentioned that orgasm is a skill that has to be obtained over time and reached it, needed to practice, and taken a long time which is outside the scope of four session's educational programs. In the field of pain may also be due to medical issues, which cannot be examined in these programs.

The results of this study showed education improves the performance of women. In the quasi experimental study by Shams Mofarah and colleagues, the cognitive-behavioral training was performed on 30 people of 20-40 married women old years, showed a significant difference after cognitive-behavioral counseling in the knowledge, attitude, and sexual confidence in the experimental group in comparison to the pre-intervention and control group (*P*=0.001), which is consistent with our results [29].

This study similar to other studies had limitations, there were some cultural limitation and social barriers for the researchers to ask the participants partner participating in educational program sessions, for solving this problem we gave a booklet for women to give them to their husbands. In addition, according to the study by Crisp et al significant associations were noted, establishing personality might influence these adaptive behaviors and presented many remarkable relationships between sexual function, personality, and coping. In this reason, we did not evaluate personality role in sexual function [30]. Therefore, it is recommended to midwives, and other health care providers to be vigilant, note these disorders in women by the necessary educations and follow-up visits, and try to eliminate these disorders.

Finally, given that the important role of education in improving sexual performance, the results of this study suggest required education on a massive scale, the various instruments in the community more than before, and considered one of the community priorities.

Conclusions

After the comparison of the scores through evaluations, the study results showed the general differences in FSFI score and in all of its sub scales (orgasm and pain). Therefore, it can be claimed that exploit educational sex program can help practitioners to improve sexual function of married women with sexual dysfunction.

Acknowledgments

Conflict of interest statement

The authors declare that there is no conflict of interests.

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