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Comparing the effect of face-to-face education and using educational films on couples' sexual dysfunction during pregnancy

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Abstract:

BACKGROUND: Pregnancy is a special period in a woman's life during which physical, mental, social, and cultural changes would affect sexual desires during this period. The present study was conducted to compare the effect of face-to-face education and using educational films on the sexual dysfunction in couples.

MATERIALS AND METHODS: The present study was a semi-experimental research. Study population contained pregnant women and their husbands. Samples were selected randomly. Data were gathered using demographic characteristic questionnaire and sexual dysfunction in men and women questionnaire. Sample size was 96 couples (32 couples in the face-to-face group, 32 in the educational films group, and 32 in the control group). Data were analyzed using SPSS20 software.

RESULTS: The mean total score of preintervention sexual function in face-to-face education group was 46.72 ± 9.79, in educational film group 47.82 ± 13.07, and in control group 43.84 ± 12.76. In the case of postintervention, it was, respectively, 60.62 ± 9.72, 57.37 ± 14.74, and 43.61 ± 14.21. Face-to-face education led to the treatment of sexual dysfunction during pregnancy ($P < 0.001$). In the educational film group ($P = 0.40$), sexual dysfunction during pregnancy was not treated, but there was an improvement in sexual function ($P = 0.001$). In the control group, there was a significant difference regarding the decrease in the score of sexual function and untreated sexual dysfunction during pregnancy ($P = 0.001$). Furthermore, no improvement was observed in the sexual dysfunction during pregnancy ($P = 0.90$).

CONCLUSIONS: According to the results, face-to-face and film education are effective in sexual function during pregnancy, but face-to-face education in pregnancy is more effective in the treatment of sexual dysfunction, and so this causes promoting sexual health during this period.

Keywords:

Educational film, face-to-face education, pregnancy, sexual dysfunction, sexual health promotion

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Introduction

Sexual dysfunction has a high prevalence, and many patients are suffering from this disorder. Nearly 20%–30% of men and 30%–40% of women have problem in at least one of the stages of their sexual response.[1] Sexual dysfunctions, due to any reason, have many negative outcomes. In fact, a sexual insufficiency has a close relation with social problems such as crimes, sexual assaults, mental disgusts, and divorce.[2] One of the periods that has the potential for this type of disorder is pregnancy, because pregnancy is one of the effective factors on the status and quality of sexual relationships. Furthermore, pregnancy is a special period in a woman's life during which, physical and hormonal changes and mental, social, and cultural changes would affect sexual desires during

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this period and would overshadow the sexual health of the man and wife.[3,4]

International researches have shown that the rate of sexual dysfunction among nonpregnant women is 30%–46%, but this rate among pregnant women is 57%–75%.[5-7] During pregnancy, the sexual desire and sexual function of women and their husbands are unpredictable; they might rise, drop, or stay unchanged.[8] In a study that was conducted by Corbacioglu *et al*. in 2012, it was revealed that sexual function was decreased in women after realizing that they were pregnant.[9] Pregnancy could affect the sexual response of men during this period and could lead to sexual deterioration of women, occurrence or intensification of sexual disorders in men, and occurrence of significant disorders in the couples' relationship.[10] Regarding sexual performance during pregnancy, especially if there is a history of abortion, infertility, stillbirth, etc., there is an unconscious fear in both men and women that might make them believe that intercourse could be dangerous for the fetus or the mother; this could be an important factor in the occurrence of sexual dysfunction during pregnancy. On the other hand, studies have shown that, in some cases, sexual intercourse has endangered pregnancy, and this has especially been observed in the couples who do not have the knowledge about the right manners of intercourse and its complications during pregnancy.[11]

Lack of sufficient information about sexual intercourse during pregnancy and delivery and concerns about its complications are some of the factors that would lead to the decrease or avoidance of sexual relationships and sexual dysfunction.[12] Health-care providers are the most important educators and could eliminate multiple health problems of the couples. Results of the studies have also shown that patients suffering from sexual dysfunction, at the time of referral to health-care clinics, have shown interest in connecting with health-care providers and speak about their problem.[13] Unfortunately, nowadays, health-care providers are ignoring this important aspect of personal life, namely, issues related to sexual desire and satisfaction, and even they have the necessary skills, they mention excuses such as limited time, disinterest and inability, and disregard their role in diagnosing and evaluating sexual dysfunction; however, by explaining the complications effective on sexual desire and satisfaction and encouraging positive performance, they could be effective in this field.[14,15]

Health-care providers of the mother, when dealing with the couples, should discuss the changes during pregnancy and provide necessary guidance using the evidence-based studies.[3] Furthermore, considering the physiologic delivery preparations in the health centers, it provides an appropriate opportunity for more education about sexual relationships during pregnancy and after delivery. Couples, who participate in these classes, without wasting any time, could receive sexual educations besides other educations. Although sexual desires are instinctive and involuntary, sexual attitudes and behaviors are educable. Therefore, similar sexual behaviors could have different meanings for different people, and it could also change for the same person from time to time. Since social attitude toward sexual health has changes during the last decade, by increased awareness, the individual could be able to move toward more health in sexual issues and relationships.[16,17]

In a study that was conducted by Fentahun *et al*. in 2012 in Ethiopia, results indicated a positive attitude toward establishing a school for educating sexual issues.[18] Unfortunately, in Iran, few studies have been conducted about educating sexual issues which is an important part of the fertility health.[19]

In any situation, humans are willing to learn new knowledge and skills to fulfill their needs. Since the main goal of education is improving the level of health or changing or modifying the inappropriate and unfavorable behaviors of the client, one of the effective factors in the quality of education is the method of education.[20] Selecting the appropriate method is related to various factors and the most important ones are appropriateness of the method to the intended subject, content, materials, conditions, educator, and learner.[21] Therefore, selecting appropriate, low–cost, and effective educational method for the appropriate lifestyle and selecting the social place require study and research. There are various educational methods including face-to-face and educational films.[22] In a study that was conducted in Qazvin in 2019 by Mahnaz *et al*., results indicated that structures education in the form of speech based on an accurately scheduled plan, activity plan, determining the activities, and determining the educational content could improve sexual performance.[23]

Nowadays, learning assist tools, simple or complicated, are used as a tool for facilitating education and learning in the educational systems.[24] In a study that was conducted by Eybpoosh *et al*. in middle schools, educational films improve the level of awareness and created correct health behaviors.[25] Results of a study showed that educational films would improve awareness, attitude, and nutritional behaviors in pregnant women and considering the ease of application of this method; its application has been recommended in health centers.[26] One of the benefits of educational films is that, for sensitive subjects such as sexual educations, it could be useful when the learners feel ashamed. Improved knowledge and attitude through education could lead to changes in health behaviors, and

the number and continuity of educational courses are helpful in stability of health behaviors.[27]

In most of the educational countries, there are websites for educating sexual health, schools, and sexual clinics that are accessible for everyone, but considering the necessity of respecting ethical matters in the Islamic society of Iran, this type of content could not be normally be in the informational sources for everyone, and it is required that it would be developed as educational films in health centers and would be provided to the couples that require education. On the other hand, there are limited number of clinics that could be helpful in this field. Therefore, the need for educational films is totally perceptible. Scientific informational sources about sexual relationships during pregnancy and after delivery are very limited, and on the other hand, researcher's experiences in the field of pre- and post-natal cares and educations and physiologic delivery preparation classes as the maternal health-care provider midwife have also shown that limited studies would be provided in health centers regarding sexual performance or disorders during pregnancy, and only the questions of the clients would be answered, and sometimes incomplete and brief answers of the personnel would lead to the stress and anxiety of the mothers and their husbands. Furthermore, there are no CDs or educational pamphlets about sexual relationships during pregnancy and after delivery with scientific basis accessible for the couples that could be understood by everyone and this had led the individuals toward using websites without any scientific background or getting information from unaware individuals; this could cause more sexual dissatisfaction and conflicts in the couple's marital life. Furthermore, studies have shown that problems related to sexual issues and the time and age of education are different in developed countries compared to the developing countries. Therefore, the aim of the present study was to compare the effect of face-to-face education and educational films during pregnancy on the sexual health promotion of the couples who referred for physiologic delivery preparation classes.

Materials and Methods

Study design and setting

This pretest-posttest clinical trial was conducted from August 23, 2017, to December 16, 2018, in two university clinics (Baghaeipour and Khatam-ol-Anbia) in Yazd city, Iran that delivery preparation classes were regularly held there.

Study participants and sampling

Based on our inclusion criteria, the files of pregnant women were selected by convenience sampling method among the files available in the mentioned clinics. Then, during the telephone call with them, in case of consent to participate in the study, they were asked to refer to complete our pre-test questionnaire. In the next step, the questionnaires were reviewed and couples, at least one of whom had sexual dysfunction, were selected. The selected couples were then divided into three groups using the simple randomization method: the face-to-face group, the educational films group, the control group ($n = 32$/each). In this way, their file numbers were written on a piece of paper of the same size and poured into a container and the papers were taken out one by one. The first issue was assigned to the first group, the second issue to the second group, and the third issue to the third group, which was repeated until the end of the issues. Then, after obtaining written informed consent from the selected couples, they were invited to participate in the training sessions of this study.

Our inclusion criteria were being a Muslim Iranian couple, being able to work with the computer to use the CDs, being pregnant, age ≤ 40 years, gestational age ≥ 14 weeks, spouse age ≤ 50, not having any disabling diseases according to the statement of the couple themselves that would prevent them from participation in the study, not consuming drugs that intervene with sexual performance including psychotherapy drugs such as tricyclic antidepressants, clomipramine, amitriptyline, doxepin, imipramine, nortriptyline, desipramine, monoamine oxidase inhibitors such as isocarboxaside, metzelin, tranyl cypromine, fluoxetine, lithium carbonate, valproate, phenytoin, phenobarbital, antipsychotic drugs, and phenothiazines such as chlorine promazine, fluphenazine, perphenazine, thioridazine, also diuretics, antihypertension drugs such as methyldopa, beta blockers, alpha blockers, and anti-cancer drugs which would be determined by asking the couple, not being addicted to any kind of drugs based on the couple's statement, not having a history of sexual abuse at any time during their lifetime based on the couple's statement, not having any complications during pregnancy such as spotting, threat of abortion, placenta previa, and repeated history of abortion and premature delivery, etc., determined through reviewing their pregnancy medical file, not having severe stress during the past year for any of the spouses (such as the death of the child, spouse's cheating, severe disease, being sentenced to prison, etc.), which was determined by a score above 200 using Holmes–Rahe Stress Scale, not having severe marital conflicts during the past month based on the couple's statement, having normal and safe sexual relationship, having at least elementary education, and having access to computer or videocassette recorder and a private place for watching the educational films.

The exclusion criteria were experiencing spotting, the threat of abortion, and placenta previa during the study.

The educational film was produced by the researcher with the cooperation of the Yazd Computer Company, and its content was approved by a group of expert professors and specialists and also the religious counselor, to be in line with educational content for the intended goal. If the individuals were willing to participate in the study, sufficient and necessary explanations about the classes, the process of the study, and the manner of participation were provided to them.

To perform the study, participants were invited to the health center. After completing the consent form and being assured of the confidentiality of their information, the pretest was completed by the couples in a calm and private place which was provided for all the participants (with the coordination of the center's manager).

In the face-to-face group, the couples participated in a 2-hour educational session. First, the researcher (the first executor) tried to establish an appropriate relationship with the couples to achieve their trust. 10 min at the beginning of the class was assigned to introduction. To evaluate the informational level of the participants, initial assessment was performed by asking a few questions considering the educational goals. Educational content was provided to the participants as a 40-min speech. Then, question and answer was performed for 30 min, and eventually, the provided information was summed up, sexual relationships, the anatomy of the male and female reproductive systems, changes during pregnancy and their effect on sexual function, preparation before sexual intercourse (choosing an appropriate place, cleanliness, adornment, sexual arousal, and intercourse), sexual differences in men and women, positions, and important points during pregnancy. Then, the class was concluded. Posttest was performed 30–40 days later at the net visit for receiving routine cares. During the teaching, they were allowed to write down the contents, and finally, the educational booklet was given to the participants. The time for completing the posttest was 15–20 min.

An educational film was given to the educational films group. The couples were asked to watch the CD in a calm and private place. The researcher called the couples every other week to ask them watch the film and if they had any questions, it would be answered through a phone call or in person. Furthermore, if the CD was corrupted or could not be used for any reason, they would receive it again. Similar to the first group, the posttest was performed 30–40 days later and during the visit to receive the routine cares. The duration of time for completing the posttest was 15–20 min.

The controls attended the routine delivery preparation classes based on the approved curriculum by the mothers' educational committee of the Health Ministry and the researcher performed no intervention. Then, similar to the first and second groups, they were asked to complete the posttest 30–40 days later. After completing the posttest, they were referred to a specialist if they wanted to or in case of any sexual dysfunction.

Data collection tool and technique

Data were gathered using demographic characteristics questionnaire, Female Sexual Function Index (FSFI), and Brief Male Sexual Function Inventory (BSFI). Demographic characteristics questionnaire which was made by the researcher included the spouses' age, employment and educational level, duration of the marriage, number of pregnancies, and gestational age. BSFI which is a 5-point Likert scale has four parts. Individual's total score would be achieved by summing the score of each of the four parts. The minimum and maximum scores are, respectively, 0 and 44. FSFI which is a 5-point Likert scale has six parts. Individual's score for each part would be determined by summing the scores of the questions in each part and considering the ratio of each part. The minimum and maximum scores are, respectively, 2 and 36. The final score was achieved by summing the scores of the spouses. These questionnaires have already been validated in Iran. The reliability of the questionnaires in Iran has been approved with a Cronbach's α from 0.7 to 0.9 and scores below 28 are considered as sexual dysfunction.[28-30]

Pretest was completed by the couples in 15–20 min. Since the cutoff point for diagnosing sexual dysfunction in the present study was considered at 28, after evaluating the questionnaire, for couples who at least one of them had a score below 28 sexual dysfunction was considered for the couple. Then, using simple randomization, the couples were divided into three groups using table of random numbers.

Ethical consideration

The study proposal was approved by the ethics committee of the research deputy of the shahid sadoughi universityYazd, Iran and (Code: IR.SSU.RSI.REC.1394.25), and registered at the Iranian Registry of Clinical Trials (IRCT20180608040007N1). The purpose and method of the study were explained to all couples and then then a written informed consent was obtained from them to participate in the study. The couples were also assured that all their information would be kept confidential and would only be used for research purposes.

Statistical analysis

Data were analyzed using independent and paired *t*-tests, Kruskal–Wallis, Chi-square test, and variance analysis with SPSS software (version 19, SPSS Inc., Chicago, IL, USA).

Results

The results of statistical tests of mean, standard deviation, Chi-square, and Mann–Whitney showed that the three groups were not significantly different in terms of demographic characteristics and were identical in terms of the above variables [Table 1]. Paired *t*-test showed a significant difference between the mean score of sexual function before and after the intervention in the face-to-face education group ($P < 0.001$) and also in the educational film group ($P = 0.001$). However, there is no significant difference between the mean score of sexual function before and after the intervention in the control group ($P = 0.90$) [Table 2].

One-way analysis of variance test showed that, before education, there was no significant difference between the mean scores of sexual dysfunction between the three groups ($P = 0.393$), but after education, at least there was a significant difference between the two groups ($P < 0.001$). The results of the comparison test of the mean of an independent population showed that the mean score of sexual function after the intervention in the face-to-face education group increased significantly ($P = 0.012$), in other words,

Table 1: Frequency distribution, mean and standard deviation of demographic characteristics of couples

Variable	Mean±SD			Test result	
	Face to face education	Educational film	Control	*F*	*P*
Women's age	26.06±4.58	28.03±5.33	25.90±3.77	2.14	0.12
Men's age	30.40±4.96	32.62±4.62	30.81±3.34	2.33	0.10
Duration of marriage	25.84±5.47	26.15±5.97	27.93±5.51	1.27	0.28
Gestational age	5.15±3.75	6.51±4.77	4.16±2.88	1.63	0.20
Variable	***n* (%)**	***n* (%)**	***n* (%)**	χ^2	***P***
Men's education level					
Below diploma	2 (6.3)	1 (3.1)	2 (6.3)	0.12	12.66
Diploma and higher	30 (93.7)	31 (96.9)	30 (93.7)		
Total	32 (100)	32 (100)	32 (100)		
Women's education level					
Below diploma	5 (15.6)	2 (6.3)	-	0.09	13.64
Diploma and higher	27 (84.4)	30 (93.7)	32 (100)		
Total	32 (100)	32 (100)	32 (100)		
Men's occupation					
Employee	12 (37.5)	12 (37.5)	13 (40.6)	4.92	0.55
Labor	8 (25)	6 (18.8)	3 (9.4)		
Freelancer	12 (37.5)	14 (43.7)	16 (50)		
Total	32 (100)	32 (100)	32 (100)		
Women's occupation					
Housewife	27 (84.4)	22 (68.8)	24 (0.75)	9.72	0.04
Employee	5 (15.6)	10 (31.2)	8 (25)		
Total	32 (100)	32 (100)	32 (100)		

SD=Standard deviation

Table 2: Determining and comparing the mean score of sexual function of couples in the three groups before and after the intervention and comparison with the cut of point

Variable	Groups	Before	After	Paired sample *t*-test, *P*
Mean score of sexual function of the couples	Face to face education	46.72±9.79	60.62±9.72	<0.001
	P	<0.001*	0.012*	
	t	−5.36	2.69	
	Educational film	47.82±13.07	57.37±14.74	0.001
	P	0.001*	0.40*	
	t	−3.54	0.53	
	Control	43.84±12.76	43.61±14.21	0.90
	P	<0.001*	<0.001*	
	t	−5.39	−4.93	
	P	0.393**	<0.001**	
	Face to face education with control	Educational film with control	Face to face education with educational film	
	P<0.001***	*P*<0.001***	*P*=0.324***	

*Independent one sample mean test, **One-way variance analysis, ***LSD *post hoc* test. LSD=Least significant difference

sexual dysfunction was treated. The mean score of sexual function increased in the educational film group, but this increase was not significant ($P = 0.40$). There was a significant difference in the control group compared to the mean score of 56 (cutoff point) to reduce the mean score of sexual function ($P < 0.001$). Therefore, sexual dysfunction was not treated in the control group [Table 2].

Discussion

Comparing the demographic characteristics showed that the participants of the three groups were similar regarding the age of the couples, spouses' age difference, marriage duration, educational level of the spouses, and the gestational age [Table 1]. Therefore, the sampling method for the study has been appropriate and reliable.

Based on the results, both the educational methods of face to face and film have led to an increase in the mean score of sexual performance of couples during pregnancy.

Obviously, before the educational intervention, the mean score of sexual performance of the two groups of face to face and film is 46.72 and 47.82, respectively. The significant difference in the mean score of sexual function in the postintervention of two groups was, respectively, 60.62 and 47.82. However, in the control group, the mean score of sexual function before and after the intervention was 43.84 and 43.61, respectively, which was not significantly different [Table 2]. Although in most of the studies, the older gestational age is, the less the score of sexual function is,[31] in the present study, not only this score has not decreased, but also it has increased due to the provided education.

The study of Fernández-Sola *et al*. 2018 and Rahimi *et al*. 2020 stated the need of the couples for sexual education during pregnancy.[32,33] In a qualitative study that was conducted by Liu *et al*. about sexual function during pregnancy, results included three mains themes of negative aspects of sexual experiences, stress, and emotional reactions and changes in the sexual behaviors. For most women, their sexual function was ceased. Most of the women who participated in this study had gained their sexual information from other postpartum women and the Internet.[34] In the study of Alkaabi *et al*. (2015), which evaluated the knowledge and attitude of pregnant women in developing countries, results indicated that 56.6% of the women believed sexual activity during pregnancy is harmful for the fetus.[35] In the present study also, most of the participants gained their information from traditional conversations and the Internet. The existing superstitious and wrong beliefs were discussed. Wrong information was replaced with the correct scientific information. In the study of Dancet *et al*., which was about an educational program for pleasure and pregnancy through a website for couples, results showed that education has led to increased sexual arousal and pleasure for women and also increased arousal and higher level of orgasm for men. Furthermore, this educational program had improved the sexual relationship of the couples and eventually led to pregnancy in couples who had infertility with any definite reason.[36] In the present study also, sexual function was improved after the intervention.

In the present study, no significant difference was observed in the mean score of sexual function of the control group [Table 2]. In the study of Heidari *et al*., sexual education during pregnancy was provided to one group of pregnant women and one group of couples. Results revealed that the mean score of sexual function was increased in both groups, but no difference was observed in the control group, which is in line with the present study.[37] It must be noted that, in the present study, the control group received the routine intervention (participating in delivery preparation classes). Sexual education during pregnancy is one of the approved subjects of the physiologic delivery preparation classes which has been determined by the mothers' education committee of the Ministry of Health and would be educated to the mothers by the lecturer of the delivery preparation classes. However, it caused no significant difference in the mean score of the participants. In the study of Vieira *et al*. that was conducted in Brazil in 2017 to evaluate the effect of electronic education about sexual relationships for pregnant mothers by gynecology residents and midwives, results indicated that the most important cause of unsuccessfulness in educating sexual issues during pregnancy is insufficient sexual information and residents' lack of skill regarding sexual education during pregnancy and so, health-care providers require education in this field.[38] Therefore, establishing a sexual workshop for empowering the lecturers of the delivery classes and also conducting special sexual workshop for pregnancy period seems necessary, and higher educations have an important role in guaranteeing the success of these educations.

In the present study, the cutoff point for sexual dysfunction in women and men was set at 28, and since in this study, the spouses were considered together, the cutoff point was set at 56 which was the sum of the spouses' scores. This was in line with the study of Bahadoran *et al*. about summing the scores of the spouses.[27] Results of comparing the scores of sexual dysfunction of the couples showed that, in face-to-face education, the increase in the score sexual function led to treatment of sexual dysfunction, but in the educational film group, although the score of sexual function was

increased, it could not treat the sexual dysfunction. In the control group, sexual function was not improved, and therefore, no treatment was happened [Table 2].

In the study of Bahadoran *et al*. that was conducted in Isfahan on 64 couples during their pregnancy period, face-to-face education led to a significant increase in the scores of couples' sexual function[27] which is in line with the present study. In a semi-experimental study that was conducted by Mahnaz *et al*. in 2020, sexual counseling significantly increased the score of couples' sexual function and most of its aspects.[23]

In the study of Mohamadirizi *et al*., which compared the effect of electronic education and pamphlets on women's satisfaction with prenatal and postpartum cares, results indicated in increase in satisfaction and more effectiveness of electronic education.[39] In the study of Wallis *et al*., showing films regularly was effective in educating pregnant women about the symptoms of preeclampsia. Nearly 75% of the participants were able to recognize the symptoms of preeclampsia.[40] In the study of Elsayed *et al*., providing sexual education package during pregnancy improved sexual function during this period.[41] In the present study also, educational film was effective in the improvement of sexual function, but it did not lead to the treatment of sexual dysfunction [Table 2].

In the present study, some of the men considered themselves as sexual heroes (according to them) and tried to protect their wives and the fetus through cutting the sexual relationship during pregnancy, while their wives did not have the same opinion and stated the sense of sexual disability, unattractiveness, and rejection, which was in line with the study of Goshtasbi *et al*. (2008) and Naldoni *et al*. about the feelings of women during pregnancy.[1,13] In face-to-face education, speaking about sexual issues would aware the couples about their suppressed desires, which was more tangible in men who do not speak much. Therefore, they achieved a better understanding of each other's desires and it provided an opportunity for them to talk about their sexual beliefs. They also learned that they could talk about their sexual issues and needs to each other. By talking about the challenges they have faced in their marital lives and did not know about, the couples became aware and got help from educational tips to eliminate their problems and all of these led to the treatment of sexual dysfunction during pregnancy.

Hence, the educations should be presented in an appropriate manner by planning and the cooperation of experts in psychology, sociology, and health care through the media, in a way that they would not pass the red lines. There must be supervisions and planning that only the terms and conversations that would fulfill the educational needs of the people would be used so that they would not cause any ethical corruption in the society. In the present study, face-to-face education had a therapeutic role because the couples who were suffering from sexual dysfunction were treated after the education and stated improved sexual function. Therefore, educations during pregnancy for improving sexual function could be performed using face-to-face method. Furthermore, by providing educational films to the couples and recommending them to review it when they refer to receive prenatal cares, in cases who are not suffering from sexual dysfunction, sexual function could be improved. Therefore, strengthening the scientific and counseling power of the midwives, as the health-care providers for mothers who determine the health of the society and conducting retraining and scientific workshops in this field and creating an educational environment in the prenatal cares ward, are some of the recommended solutions for improving sexual health and strengthening the couple's relationship during pregnancy. Furthermore, it is recommended that educational films about sexual function would be provided to the couples who refer to the health centers, so that, due to the shame which exists around sexual issues and cause the individuals to avoid asking questions, they could find the necessary information. Moreover, eventually, these educations should be registered in the prenatal care list.

The major difference between the present study and the other mentioned studies was that the present study was in fact an education-oriented interventional program which was conducted for comparing the methods of face-to-face education and educational film with a control group and evaluated the effect of these educations on treating sexual dysfunction during pregnancy. In health-oriented educational interventions, applying the appropriate educational method is of great importance. Because an appropriate method would help better transmission of the content and would lead to higher efficiency of the interventionalprogram.[38]

Limitation and recommendation

One of the study limitations was the misconceptions among couples, originated from the family, which may have influenced the results. To change these attitudes and beliefs, more education is needed. For example, several couples believed that because of their female fetus, they should not have sex, and some said that by throwing a sheet on the pregnant woman's abdomen, this problem would be solved. Furthermore, lack of access to educational software about sexual relationships during pregnancy led to the use of similar educational software.

Therefore, it is suggested that the sexual educational needs of couples during pregnancy be examined from the

perspective of policymakers, specialists, and midwives, and the sexual health classes should be held exclusively during pregnancy. Also, sexual educational CDs in the pregnancy period should be provided for couples.

Conclusions

Results showed that both of the educational methods (face-to-face education and educational film) were effective in improving sexual function which emphasizes the need for education. However, only face-to-face educational method was effective in treating sexual dysfunction. However, there is a need for sexual education during pregnancy which could even lead to treatment of sexual dysfunction; it is considered as the strength of the present study over other studies.

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Conflicts of interest

There are no conflicts of interest.

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