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The Effect of Consulting Based On PLISSIT Model on Marital Satisfaction of Women during Pregnancy

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ABSTRACT

Background & aim: Pregnancy is a critical period in the women's life which causes great changes in their feelings, sexual desire, satisfaction and sexual compatibility and the number of sexual intercourses. This study was carried out to determine the effect of counseling based on the PLISSIT model on marital satisfaction of women during pregnancy.

Methods: This was an interventional study and conducted on 128 pregnant women with gestational age of 13 to 33 weeks, who were randomly assigned to the experimental and control groups. The experimental group received sexual counselling based on the PLISSIT model and control group received routine care. The marital satisfaction score was measured 2 and 4 weeks after the intervention. The results were analyzed using descriptive statistics, independent t-test and paired t-test.

Results: Comparing the mean score of marital satisfaction among pregnant women in the two groups showed no statistically significant difference between groups before intervention (P=0.524). However, the mean score of marital satisfaction in the second and fourth weeks after intervention was higher in the intervention than control group (p <0.001). Also, the results of paired t-test showed that the mean score of marital satisfaction in the intervention group was significantly increased after intervention (p <0.05), whereas in the control group, no significant difference in the marital satisfaction score was seen over time.

Conclusion: Sexual counseling based on PLISSIT model can improve marital satisfaction in pregnant women. It is, therefore, recommended to incorporate sexual counseling in the prenatal care of pregnant wome, particularly those with sexual dissatisfaction.

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Introduction

Sexual issues are among the most important subjects in marital life; adaptation in sexual relations is one of the most important factors in happiness and good quality of life. The process of individuals' sexual life changes over time due to the events; pregnancy, childbirth and postpartum period are among the events which affect sexual behaviors and interactions (1,2). Pregnancy is a critical period in a woman's life (3,4) that causes many changes in emotions, sexual desire, number of sexual intercourses, and sexual satisfaction and adjustment (5). Researches showed that during pregnancy and even months after childbirth, the desire for sexual relations decreases and the rate of sexual dysfunction increases compared to before pregnancy; this can lead to significant disorders in the relationship between spouses (6). More than 50% of couples suffer from various problems in their relationships due to lack of necessary information and knowledge about sexual activity during pregnancy and also their

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lack of awareness about the natural changes during pregnancy (4).

Marital satisfaction is actually a situation in which couples feel satisfied of being with each other (7). Marital satisfaction is one of the most important factors affecting women's health and also one of the most important indicators of life satisfaction. High levels of marital satisfaction lead to improved mental health, increased self-esteem, strengthened sense of cooperation and increased life satisfaction in couples (8,9). Marital satisfaction is also known as an effective factor in the proper growth and development of the fetus during pregnancy (10). Although the feeling of marital satisfaction is different and important in different periods of life, but during pregnancy is undoubtedly one of the most important factors in the success of pregnancy for every pregnant woman (11). The results of a meta-analysis of 59 studies by Von Sydow showed that enjoyed sexual activity during pregnancy leads to better communication, tenderness and gentleness 4 months after childbirth and even 3 years later, and the relationships between couples will be more stable and strong and are less affected by stresses (12).

Since in our country due to cultural and religious reasons, expressing the sexual problems is not easy, these disorders occur latently in people's daily behaviors in the form of family conflicts and unnecessary angers (13). In Iran, despite the effective and efficient primary health care system, the sexual health education is not completely evaluated and there are gaps in this regard (14). The effectiveness of health educational and consulting programs significantly depends to the correct application of the health models and theories (15, 16). PLISSIT model is one of the methods of counseling about sexual relations used by health care providers (17). This model, which is used exclusively for sexual counseling, has 4 levels: 1- Permission, 2- Limited information, 3- Specific suggestion, 4- Intensive therapy and referral (18).

Addressing sexual issues and importance of this issue and trying to raise awareness about this important health priority caused a motivation to perform this study with aim to determine the effect of consulting based on PLISSIT model on marital satisfaction of women during pregnancy.

Materials and Methods

The present study was an interventional study conducted in 2016 on 128 pregnant women (64 in the experimental group and 64 in the control group) who referred to receive health services in the health centers of Daneshamouz (No. 1) and Kargaran (No. 5) in Mashhad. The study was approved by the ethics committee of Mashhad University of Medical Sciences under code No. IR.MUMS.NURSE.REC.1395.64. Inclusion criteria were: gestational age of 13-33 weeks, wanted and singleton pregnancy, no chronic mental and physical illness, being available within the next one month, no narcotic use and no severe marital conflicts. Exclusion criteria were: the occurrence of unfortunate and stressful events (death of loved ones, serious illness of themselves or their spouse, etc.), hospitalization for pregnancy-related reasons, pain or bleeding.

Data collection tool included a two-part self-administered questionnaire, the first part was related to personal and midwifery characteristics (including maternal age, gestational age, mode of delivery and history of delivery) and the second part was Marital Happiness Scale (MHS). The modified Marital Happiness Scale questionnaire consisted of 12 questions; the scoring of this scale is from 1 (completely dissatisfied) to 10 (completely satisfied). The lowest score is 12 and the highest score is 120. The validity and reliability of the form was confirmed by Heidari (1996) in Iran. The internal consistency of the tool was obtained by calculating the Cronbach's alpha coefficient of 70%. After obtaining a license from the ethics committee with code No. 941078, obtaining an introduction letter from the School of Nursing and Midwifery and presenting it to the health center of province, and then the director of the Daneshamouz and Kargaran health centers, the researcher referred to these centers and performed sampling by improbable and easy method.

The days of the researcher's refer to the centers were selected by lot. The researcher referred to the selected health centers and among pregnant women referring for prenatal care identified the eligible mothers with

gestational age of 13-33 weeks who had sexual problem during pregnancy according to their report. Then, the researcher introduced the research team and explained the objectives of the research and assured them that the collected information is confidential and the results are publicly announced, and obtained the informed consent of the mothers to participate in the research project and completed a written consent form. The research units were selected (inclusion and exclusion criteria) based on the questions from the mother and information recorded in the mother's file. Then, by random allocation through software, the subjects were assigned in the two groups of intervention and control.

Before completing the questionnaire, the women's' phone numbers were taken and reminded them to refer to the centers for completing the next questionnaires. All questionnaires in both groups were completed in the presence of the researcher. So that, all the questions were explained by the researcher to the research units in order to no ambiguity would remain. A quiet room away from noise was provided for consultation in both centers. Individual and face-to-face counseling sessions for each member of the experimental group were conducted based on the PLISSIT model in two sessions of 60 to 90 minutes with one week interval by the researcher midwife.

1-Permission: The therapist or counselor by providing a safe, calm, trustworthy, and non-judgmental environment, allows the patient to talk freely about her sexual behaviors, sexual problems, and sexual concerns. Some patients do not speak easily in this regard; in these cases, the counselor helps the client to speak more easily by asking an open question.

2-Limited information: At this level, the therapist provides limited information to the clients about their sexual concerns. The counselor should provide information about the normal sexual function (sexual cycle) and sexual problem which is created for the patient and should respond to the patient's sexual concerns.

3-Specific Suggestions: Guide and provide information and solutions unique to a person's sexual problems, which improve and facilitate sexual function, eliminate unreasonable and unrealistic expectations of sexual function and assure the patient of her success of treatment, also reduce the patient's fear of treatment failure.

4-Intensive Therapy: The patients' problems are generally treated by implementing step by step and correctly in the first three levels of the model. If physical or psychological challenges are diagnosed in the patient or her sexual partner, they will refer to the relevant specialist. In all samples (test and control), they were called 2 weeks and 4 weeks after the consultation to refer to the health center to complete the questionnaire.

After collecting the data, the forms were coded and entered into the data analysis software. After ensuring the accuracy of data entry, analysis of data was performed by SPSS software version 16 and the following statistical tests were used. First, the Kolmogorov-Smironov test was used to determine the normal distribution of the quantitative variables. Considering to the normality of the variables, paired t-test and independent t-test were used. In all statistical tests, $P<0.05$ was considered significant.

Results

Maternal age: The mean age of mothers in the intervention and control groups was 28.27±5.00 and 26.78±4.42 years, respectively. The results of independent t-test showed that the two groups had no statistically significant difference (p= 0.077, df= 126, t= 1.780); the two groups were homogeneous in terms of this variable.

Gestational age

The mean gestational age of women in the intervention and control groups was 19.88±5.05 and 20.25±5.25 weeks, respectively. The results of independent t-test showed that the two groups had no statistically significant difference (p= 0.681, df= 126, t= -0.412); the two groups were homogeneous in terms of this variable.

History of delivery

Most of the subjects (66.4%) had no history of delivery, which was 70.3% in the intervention group and 62.5% in the control group. The results of Chi-square test showed that there was no statistically significant difference between the two groups in terms of delivery history (p= 0.454); the two groups were homogeneous in terms of this variable.

Mode of delivery

The percentage of normal delivery was slightly more than cesarean delivery in both intervention and control groups. The results of Chi-square test showed that there was no statistically significant difference between the two groups in mode of delivery (p= 0.246); the two groups were homogeneous in terms of this variable.

Comparison of the mean scores of marital satisfaction in the two groups with independent t-test showed that there was no statistically significant difference between the two groups in terms of mean scores before training (p= 0.524). The results of the same test in the second and fourth weeks after the intervention showed that the mean scores of marital satisfaction was higher in the intervention group than the control group; the difference was statistically significant (p <0.05). Comparison of the mean scores of marital satisfaction in the intervention group (intragroup comparison) by paired t-test showed that educational intervention over time significantly increased the mean scores in this group (P <0.05). The results of the same test in the control group showed no statistically significant difference between any of the time stages (p> 0.05) (Table 1).

Table 1. Mean and standard deviation of "Marital satisfaction of pregnant women" scores at baseline, 2 and 4 weeks after the study in the intervention and control groups

Variable		Group				Test's result Independent t
		Intervention		Control		
		Mean±SD	N	Mean±SD	N	
Marital satisfaction of pregnant women	Baseline	80.94±19.22	64	82.26±12.88	64	P=0.524
	2 weeks after the study Results of paired-t test	86.31±14.30 p<0.001	64	79.37±11.70 P=0.998	64	P=0.022
	4 weeks after the study Results of paired-t test	90.77 ±13.57 p<0.001	64	79.06±10.77 p=0.999	64	P<0.001
	Changes in mean scores (at baseline and 2 weeks later)	5.37 ±10.41	64	-2.89± 9.89	64	P<0.001
	Changes in mean scores (at baseline and 4 weeks later)	9.82 ±16.46	64	-3.20 ±11.42	64	P<0.001

Discussion

Based on the results of the present study, the score of marital satisfaction in the experimental group increased from 80.19±15.54 before the consultation to 83.98±13.58 two weeks and 86.77±12.75 four weeks after the intervention; there was a significant difference in this group (p <0.05). Changes in the mean scores of the intervention group at the beginning of the study and 4 weeks later was 9.82±16.46 and in the control group was 3.20±11.42 (P<0.001). It can be claimed that sexual counseling based on PLISSIT model has been effective in increasing marital satisfaction of pregnant women. The study of Mangeli et al. (2009) also showed that awareness of changes in pregnancy leads to a decrease in women's anxiety about the disorders and was effective on increasing marital satisfaction of pregnant women (19).

The result of the present study is consistent with the study Shakarami and colleagues (2013) on the effectiveness of short-term solution-based group couples therapy on improving the quality of marital relationships in Bojnourd. The results of Shakarami's study showed that short-term solution-based couple therapy improved the quality of marital relationship (P <0.01). Their results were different with the findings of this study in terms of training content; however, sexual training increased women's sexual satisfaction during pregnancy, which is consistent with our study (20). Also, the results of the study by Schulz et al. (2006) on marital satisfaction showed that sexual education program increased the marital satisfaction of pregnant women (21). Their results are consistent with the present study, which can indicate the effect of sexual counseling on sexual function and sexual satisfaction and its positive effect on sexual problems. Byers (2005) in his research sought a cause-and-effect relationship between sexual relations and marital

relationship; he concluded that there is a bilateral relationship between sexual satisfaction and marital satisfaction (22) that is consistent with the results of the above study. Sexual relations form a part of a couple's perceptions of each other that leads to the continuation of marriage. Therefore, marital satisfaction can depend on the couple's compliance or adaptation to their sexual relationship.

Chun (2011) conducted a study with aim to determine the effect of counseling based on the PLISSIT model on the sexual function of women with gynecological cancers. This clinical trial was performed on 61 women at a training hospital in Seoul. The overall results of the study showed that there was a significant difference between the two groups after the intervention in 5 areas of sexual function (libido, arousal, vaginal moisture, orgasm and satisfaction) (P <0.001), but there was no significant difference between the two groups in terms of intercourse pain. Chun suggested using another strategy with this model to reduce intercourse pain for more effectiveness. Also, in order to investigate the lasting effects of the educational program based on the PLISSIT model, he recommended re-measuring sexual function at longer intervals. One of the reasons for the failure of counseling on the intercourse pain is the way in which counseling was provided in groups and in the form of lectures and group discussions, and also the effect of cancer, which has a negative effect on a person's mental image of herself and sexual relations (22), while in the present study, counseling was done individually on pregnant women who did not have any specific diseases.

The importance of the present study is that its findings be used to raise the awareness of pregnant women and increase sexual satisfaction during pregnancy. The study was accompanied by some limitations, including participants' mental health reporting by them. Given the importance of the role of education and counseling in improving the beliefs, attitudes and quality of women's marital relationship, the need for counseling on a large scale with various tools is felt more and more in the society and is considered a health priority.

Also, according to the prevalence and importance of sexual problems and the lack of adequate education, it is suggested that sexual health counseling and education programs be integrated into the pregnancy health care programs.

Conclusion

Sexual counseling based on PLISSIT model can improve marital satisfaction in pregnant women.

Therefore, by providing consultation about couples' sexual issues, it is possible to prepare them to face the changes during pregnancy and adapt to them, and thus prevent the occurrence of tensions and disputes between couples during pregnancy.

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Conflicts of interest

Authors declared no conflicts of interest.

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