

## **Original Article**

# The Effect of Sexual Health Counselling on the Sexual Function and Satisfaction of Breastfeeding Women in the Form of Group Consultation and Telephone Consultancy

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#### **ABSTRACT**

Introduction: Postpartum remaining changes can have a significant effect on the satisfaction and sexual function of an individual. Thus, the current study has been conducted to investigate the effectiveness of sexual health counseling on the satisfaction and sexual function of breastfeeding women. Methodology: The current research was a parallel randomized controlled clinical trial. The studied sample consisted of 79 breastfeeding women passing 3-6 months since their delivery. The samples were divided randomly into three groups, two intervention groups (group counseling and telephone counseling) and a control group. The counseling group received 5 consecutive 90-120-minute counseling sessions once a week, and the telephone counseling group received 5 weekly 20-45-minute phone calls and the control group remained without intervention until the completion of the follow-up. To collect the data, demographic and midwifery information questionnaires, Women's Sexual Function Questionnaire and Larsson's Sexual Satisfaction Questionnaire were used. The participants' sexual satisfaction and sexual function were weighed in the three stages of before, immediately after the intervention and one month after the intervention. The results were analyzed by the means of parametric and non-parametric tests through SPSS software (ver. 16) having the significance level less than 0.05. Findings: The mean sexual satisfaction score immediately and one month after the intervention in both intervention groups had a significant difference. The mean score of sexual function immediately and one month after intervention in both interventional groups had a significant difference. Conclusion: Regarding the results of the current research, sexual health counseling by the means of group counseling and telephone counseling methods improved the satisfaction and sexual function of breastfeeding women. Consequently, it is suggested that a midwifery advisor leading in the field of sexual health could serve women during postpartum and breastfeeding periods.

Keywords: Sexual health, Group counseling, Telephone counseling, Sexual satisfaction, Sexual function

## Introduction

Access this article online	
Website: www.japer.in	<b>E-ISSN:</b> 2249-3379

**How to cite this article:** Mahshid Bokaie, Samira Hajimaghsoudi, Ali Dehghani, Fatemeh Hosseini. The Effect of Sexual Health Counselling on the Sexual Function and Satisfaction of Breastfeeding Women in the Form of Group Consultation and Telephone Consultancy. J Adv Pharm Edu Res 2019;9(S2):191-198.

Source of Support: Nil, Conflict of Interest: None declared.

Sexuality is a phenomenon that its significance is realistic and it is impossible to ignore it. Since, like all other instinctive desires of a human being, it has existed from the beginning of the child's birth which develops and flourishes according to his growth [1]. Healthy sexual relationships are of the most important causes of happiness in marital life, and if couples do not achieve full satisfaction in sexual relations, their mental and emotional balance would be disturbed [2]. Sexual satisfaction is significant for most couples which is considered as an individual issue. It is one of the major factors in marital satisfaction that is effective on couples' health and life quality [3]. If the sexual relationship between couples wouldn't be convincing, it may lead to failure,

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deprivation, lack of security and reduced mental health, which would eventually reduce couples' marital satisfaction and the disintegration of the family [4]. Sexual satisfaction is really important in the fields related to family and matrimonial issues, and numerous studies have mentioned the effect of sexual satisfaction on marital satisfaction. Studies have shown that proper sex in a way that can afford the satisfaction of couples has a very important role in the stability of the family [5]. So, in families with no satisfactory sexual activity, varieties of sexual problems occur [6]. Sexual function is part of a woman's health [7] and is a mixed process that engages different parts and requires coordination between nervous, vascular and endocrine systems. It is an ability to achieve sexual arousal, lubrication, orgasm, and satisfaction that leads to well-being and reaching a level of health along with good quality of life [8]. Sexual function is a multidimensional phenomenon that can affect many factors such as emotional problems, marital status, lifestyle, aging, pregnancy, childbirth, lactation, and others [9]. The chronic sexual disturbance is a chain of psycho-sexual problem and hard experience of an individual and a couple that manifests itself as a disorder of sexual desire, sexual arousal, orgasm and pain when having sexual relationship [10].

Pregnancy and childbirth is a specific period of a woman's life that causes hormonal and physical changes in a person and has significant effects on maternal health and their life quality [11]. Typically, sexual function declines during pregnancy and remains low in many women during the postpartum period [12]. These changes are reported up to six months after childbirth [13]. Understanding sexual problems during the postpartum period, awareness of the indirect or direct impact of these disorders on couples' family relationships and the progression of knowledge about sexual issues during the postpartum period is essential. Since, it highlights the importance of investigating and consulting women in relation to their sexuality during the postpartum period [14]. Sexual counseling is a process in which people obtain the essential information and knowledge for sexuality. The development of this information improves the individuals' sexual function, [15] treats sexual problems, and thus improves and promotes effective communication in sexual matters [16]. Moreover, it increases the quality of marital affairs, and increases the depth of couples views and insights toward their problems [17]. The postpartum period is accompanied by specific physical and psychological changes that leads to other changes in desire and sexual activity, and gives rise to concerns and anxieties in women [18]. Hence, counseling mothers on sexual issues would help them to match couples in this period. Investigating Iranian conducted studies in the field of sexual health counseling during postpartum and breastfeeding period, studies on investigating the effect of counseling of female sexual function after childbirth [19], the effect of PLISSIT model on the sexual function of breastfeeding women 6 months after childbirth with one intervention session have been published [20].

Taghizadeh et al. (2017), in a paper, have reviewed the sexual dysfunction of women during the postpartum period. Among the

numerous factors affecting the sexual tendencies, function, and of humans, the physiological, psychological, socio-cultural, economic-political factors, and others can be mentioned. [21]. Navidian et al. (2016) issued a study entitled "The impact of group sexual advice on awareness and attitudes of Iranian pregnant women". Investigations have shown that counseling was effective in changing the pregnant women's attitudes about sex (p=0.0001) and the integration of these training in pregnancy was also suggested [22]. Giussy et al. (2016) published an article entitled "The impact of mode of delivery on female postpartum sexual functioning: spontaneous vaginal delivery and operative vaginal delivery vs. cesarean section". Based on the findings, the type of delivery did not have a significant effect on the resumption of sex. Accordingly, breastfeeding women, compared with non- breastfeeding women, had less lubrication, more dyspareunia and needed a longer time to resume the sexual relationship [23].

## Methodology

The current research was an interventional study of parallel clinical trial with a control group. This research had three stages (pre-test, the first posttest and follow-up one month later test). Sampling was performed based on inclusion and exclusion criteria and random allocation, so that, the researcher referred to Yazd Azad Shahr health center, and after introducing herself and her study to the responsible officer in the center by the means of SIB software, achieved the telephone number of breastfeeding women who had normal delivery during the past 3 to 6 months. Through telephone callings, she explained the general characteristics of the plan, the purpose and method of the research, and the right to freely participate or not participate in the research for all women. The participants who had the inclusion criteria and satisfied to participate in the research were invited to attend the clinic personally. Out of 465 breastfeeding women, 90 women were selected as the final samples and based on random allocation software they were divided into three groups (group counseling=30), (telephone counseling=30) and (control group=30). Attendance time after obtaining informed consent to participate in the study from the participant and her husband, the demographic and midwifery questionnaire, sexual function and satisfaction questionnaire was distributed among the research units. The questionnaire was completed in the presence of the researcher.

Group counseling sessions were held up for 5 sessions, once a week, for 90-120 minutes on the lower floor of the clinic. The participants in the telephone counseling group at their leisure time, by prior arrangement, received 20 to 45 minutes of telephone counseling for 5 weeks and once a week , most of which were held in the morning. The control group did not receive any interventions in the field of education and counseling. The content of the sessions is presented in Table 1.

Session	Content	Home practice
Session 1	Introducing yourself and getting acquainted with the participants, the importance of sex in consolidating family relationships, genital anatomy, and physiology of the sexual cycle, female sexual organ and erogenous zones, answering questions.	Writing the list of problems that have had a negative effect on couples' relationships during lactation.
Session 2	A summary of the contents of the previous session, differences between men and women in sexual matters, changes in the postpartum period and lactation in terms of physiology and sexual function, answering questions	The solutions suggested by the participants for solving the problem which are recommended by the researcher
Session 3	A summary of the contents of the previous session, offering a solution to solve the disorder in each stage of the sexual cycle (considering the problem of individuals), examining the sexual schemas and women's concerns and solving them, examining their sexual expectations, teaching sexual skills, sensory exercises, the necessary preparations for the relationship, giving tasks to women such as a joint massage, answering questions	Investigating couples' sexual expectations during this period and recording cases in two separate papers
Session 4	A summary of the contents of the previous session, reviewing the tasks of the previous session, reducing concerns by advising contraceptive methods, being familiar with Kegel exercises and other factors affecting sexual function (nutrition, focusing on the moments of enjoying sex, etc.), answering questions	Performing sensory exercises, Kegel exercises
Session 5	A summary of the contents of the previous session, developing and strengthening communication skills, managing negative excitement (anger and excitement), teaching relaxation, answering questions	Perform relaxation technique and negative excitement

The inclusion criteria for the participants in the study were: informed consent, married Iranian Muslim women being their first marriage and the only wife of their spouses, who lived together and had at least 18 years of age and it was their first and wanted pregnancy. These women had to be able of breastfeeding, their children must be healthy, singleton, term, giving birth naturally, minimum reading and writing skills and having telephone access. The exclusion criteria were instrumental vaginal delivery, fourth-degree laceration during delivery, macrosomic baby, infant death, infant abnormality and postpartum health problems, the symptoms of postpartum depression, diseases or medication that affected the sexual function of the couples, addiction of each of the couples according to the patient, the growth of couples in single-parent families, the history of any sexual dysfunction and sexual abuse in the period before pregnancy, and using hormonal contraceptive methods and severe family disputes, according to breastfeeding woman. The criteria to be dropped out of the study included the reluctance to continue the attended counseling sessions, lack of attendance at more than one group counseling session, failure to answer more than 2 phone calls and the emergence of major stresses and unexpected events at each stage of the plan.

In the personal information questionnaire, there were questions such as the participants' age, spouse's age, the method of contraception, the participants' level of education, the spouse's level of education, the participants' job, the spouse's job, the amount of family income, and the consent of the spouse. The Rozen's et al. (2000) female sexual function index (FSFI) included 19 questions about women's sexual function regarding 6 independent areas of desire, subjective arousal, lubrication, orgasm, satisfaction, and pain [24]. The validity of each domain and total scale was 0.7. Validity and reliability of this instrument had been confirmed by Mohammadi et al. in Iranian women's society. The appropriate cut-off point of the whole scale was determined

as 28 for the diagnosis of sexual dysfunction. The maximum score for each field was 6 and for the whole scale, it was 36. Scores more than the cut-off point represented a desirable sexual function [25]. In line with the way of scoring, according to questionnaire designer's guidelines, the scores of each area were achieved through the summation of scores of questions in each field and their multiplication in the factor number. The Larsson Sexual Satisfaction Questionnaire (LSSQ) consisted of 25 5option questions, based on the Likert scale and had questions that were reversely coded [26]. In Shams Mofareh's study, the validity and reliability of the Larsson Sexual Satisfaction Questionnaire were reported as 0.90 and 0.86 [27]. Moreover, through the study of Bahrami (2007) entitled "Comparing the depression and sexual satisfaction in fertile and infertile couples" by the means of Cronbach's alpha coefficient, the reliability of this questionnaire for Fertile group was calculated as 0.93 and for the infertile group, it was 0.89 [28]. The obtained data were entered into SPSS software version 16 and were analyzed accordingly.

## **Research Findings**

This study was performed on 90 breastfeeding women who had their first natural delivery during the past 3 to 6 months. According to the table of random numbers, the samples were randomly assigned to 3 groups with 30 participants. After eliminating the samples of counseling group due to the reluctance to continue studying, absenteeism because of child illness, death of one of the relatives, as well as the elimination of telephone counseling group: unwillingness to participate in the study and failure to answer phone calls, and in the control group due to the reluctance to continue cooperation, 79 women remained in the study. Out of these participants, 25 women were investigated in counseling groups, 27 members were in telephone counseling group and 27 women were in the control group. The personal characteristics of the research units and their spouses in the

intervention and control groups are presented in Table 2. According to the results of Table 2, there was no significant difference between the three groups in terms of demographic variables (p-value> 0.05). There was no significant difference

between the demographic variables of the spouses of the subjects in the three groups (p-value> 0.05). All participants in the study declared their income level as adequate, their delivery was normal, and they had no history of abortion and they had a child.

Table 2. Frequency distribution of demographic variables of the studied women and their spouses in intervention and control groups

Persons	Group	Variable	Control		Intervention (telephone counseling)		Intervention (group counseling)		P- —Value*
		variable	Count	%	Count	%	Count	%	— value
		Under the diploma	4	14.8	1	3.7	2	8	0.35
	Education	Diploma	11	40.7	7	25.9	8	32	
		Academic	12	44.5	19	70.4	15	60	
	Job	Housewife	26	96.3	21	77.8	23	92	0.08
	Job	Employed	1	3.7	6	22.2	2	8	0.00
		15-20	6	22.2	7	25.9	3	12	
	Age group								0.42
S. 1 1: .		21-25	14	51.9	9	33.3	14	56	
Study subjects		26 >	7	25.9	11	40.7	8	32	
	Baby gender	Girl	14	51.9	13	48.1	12	48	0.95
		Boy	13	48.1	14	50.9	13	52	
	Overall	Average	3	11.1	4	14.8	0	0	
	satisfaction of the spouse	Good	24	88.9	23	85.2	25	100	0.15
	Prevention method	Condom	9	37.5	12	46.2	8	32	0.26
		Normal	15	62.5	11	42.3	16	64	
		IUD	-	-	3	11.5	1	4	
	Education	Under the diploma	1	3.8	3	11.1	1	4	0.79
		Diploma	13	48.1	11	40.8	12	48	
		Academic	13	48.1	13	48.1	12	48	
Spouses of study	Job	Unemployed	1	3.7	-	-	0	0	0.37
subjects		Employed	26	96.3	27	100	25	100	0.37
		21-25	7	26.9	6	23.1	4	16	
	Age group	26-30	12	46.2	14	53.8	17	68	0.63
		31-35	7	26.9	6	23.1	4	16	

<sup>\*</sup> Chi-Square Test

By the means of Kolmogorov-Smirnov test, the sexual satisfaction and sexual function scores in the pre-intervention, immediately after intervention and one month after intervention periods were evaluated in terms of normality. The sexual satisfaction data had an abnormal distribution. As a result, nonparametric tests were used to analyze the data. Table 3 shows the average and mean score of sexual satisfaction at the time before and immediately after the intervention in three groups. The results obtained from the Wilcoxon signed-rank test revealed that the median of sexual satisfaction score in the counseling group and telephone counseling group in the immediately after the intervention stage was significantly higher than the before intervention stage (p=0.001). In contrast, the sexual satisfaction score median of the control group was not

statistically significant (p>0.05). According to the results of Table 3, the median sexual satisfaction score was not significantly different between the three groups before and immediately after the intervention (p>0.05). Moreover, the median score of sexual satisfaction in group counseling and telephone counseling was significantly increased in the stage before and one month after the intervention (p<0.05) in the pre and post intervention periods (p<0.05). Additionally, in the control group, the median score for sexual satisfaction was reduced and this reduction was significant (p=0.02). The median score of sexual satisfaction was not significantly different in the one month after the intervention in the three groups (group counseling, telephone counseling, and control group) (p<0.05).

Table 3: Comparing the mean and median score of sexual satisfaction and its variations before , immediately and also before and one month after the end of the intervention in three groups of control, group counselling and telephone counseling

	Before intervent	tion	Immediately after the intervention		D	
Group	Standard deviation	(Interquartile range)	Standard	(Interquartile range)	– r- Value	
	± mean	median	deviation $\pm$ mean	median	v arue	
Control	99.07±11.29	101 (16)	98.48±11.79	100 (16)	0.08	

Before and	Telephone counseling	97.4±10.08		102 (16)	100.92±8.37	102 (12)	<0.001
immediately after the intervention	Group counseling	99.5±8.83		101 (11)	101.16±9.05	103 (12.5)	0.002
the intervention	P-Value**		0.85		0.	63	
- 0	Control	99.07±11.29		101 (16)	98.81±11.58	101 (16)	0.02
Before and one month after the	Telephone counseling	97.4±10.08		102 (16)	102.77±8.67	104 (13)	0.002
end of the	Group counseling	99.5±8.83		101 (11)	103.16±8.98	105 (12)	< 0.001
intervention	P-Value**		0.85		0.	17	

<sup>\*</sup>Wilcoxon

<sup>\*\*</sup>Kruskal-Wallis

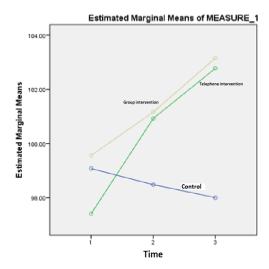


Chart 1. The variations trend in the sexual satisfaction score mean in the three groups studied at before, immediately and one month after intervention time periods

According to the results of Table 4, the mean of sexual function score in the before intervention stage was not statistically significant in the control and group counseling groups (p=0.13). Three groups were similar in this regard. On the contrary, immediately after intervention, variations were significant between the three groups (p=0.005). Tukey's test results revealed that immediately after the intervention, there was a significant difference between the control group (p=0.009),

telephone counseling and control (p=0.01), and the mean of sexual function in the counseling group increased more than before. Also, there was a significant difference between the two intervention groups and the control group (p=0.005). Moreover, t-test results showed that in the group counseling and telephone counseling, the mean of sexual performance before and after the intervention had significantly increased ( $p \le 0.001$ ). In contrast, the increase in the mean of sexual function score in the control group was not significant (p=0.41). Likewise, statistical analysis of variance indicated that the mean score of sexual function in the groups before the intervention was not statistically significant (p=0.13) and the three groups were similar in this regard. One month after the intervention, the mean variations were different among the three groups. Tukey's test results indicated that one month after the end of the intervention, there was a significant difference between the counseling group and control group (p=0.03), telephone counseling group and control group (p=0.108), and the mean sexual performance score in the telephone counseling group was increased more than other groups. Also, there was a significant difference between the two intervention groups and the control group ( $p \le 0.001$ ). Moreover, t-test results showed that in the group counseling and telephone counseling groups, the mean of sexual performance before and immediately after the intervention was significantly increased ( $p \le 0.001$ ), in contrary, the mean increase in the control group was not significant (p=0.11).

Table 4: Comparing the mean of sexual performance score and its variations before, immediately and also before and one month after the end of intervention in three groups, telephone counseling, and control groups

Group -		Before intervention	Immediately after the intervention	The average	P-Value*
Grot	ip —	Standard deviation $\pm$ mean	Standard deviation $\pm$ mean	difference	P-value
	Control	21.84±3.97	22.27±3.03	$0.42\pm2.7$	0.41
Before and immediately	Telephone counseling	22.49±4.28	24.65±3.47	2.16±1.69	< 0.001
after the intervention	Group counseling	23.93±2.93	24.94±2.93	1.01±1.03	< 0.001
	P-Value**	0.13	0.005		
Before and one month	Control	21.84±3.97	23.13±3.25	2.16±1.69	0.11
after the end of the	Telephone counseling	22.49±4.28	26.7±2.6	4.21±2.62	< 0.001
intervention	Group counseling	23.93±2.93	26.18±3.38	2.24±2.06	< 0.001
incer vention	P-Value**	0.13	<0.001		

<sup>\*</sup>Paired T-Test

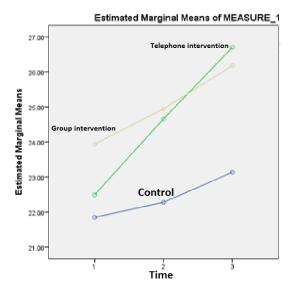


Chart 2. The variations trend of mean sexual performance score in the three groups at the time before the intervention, immediately after the intervention and one month after the intervention

### **Discussion and Final Conclusion**

The current study was a clinical trial with the aim of investigating the effectiveness of sexual health counseling on sexual satisfaction and sexual function in breastfeeding women referred to Yazd Azad Shahr Health Center (79 women). The results indicated that the two groups were similar in terms of demographic characteristics and the underlying factors such as age, education, job, spouse's age, spouse's education, inTome, the degree of consent of the spouse, contraceptive method and infant gender. There was no significant difference between them. Roughly twothirds of women experience sexual dysfunction, and threequarters of them experience sexual dissatisfaction in the first year after childbirth [29]. Glazener in his study concluded that despite the fact that most women complain about sexual problems during the postpartum period, only 13.7% of them asked for help from a doctor or midwife [30]. Jahanfar believes that through offering suitable sexual counseling in line with sexual relations, the problems of couples' could be gradually eliminated, and unknowingness can be replaced by complete knowledge and awareness [31].

The data analysis results of the current study indicated a significant difference in the sexual satisfaction scores of the intervention and control groups during the plan and follow-up periods. This designated that group counseling and telephone counseling had a significant effect on the sexual satisfaction of the intervention group. The Zargar Shoushtari's et al. (2014) randomized clinical trial in Ahwaz showed that telephone counseling and face-to-face counseling were effective in the sexual satisfaction of women during their reproductive age, and

telephone counseling was more satisfying than face-to-face counseling in women [32] which was in line with the current study. Telephone counseling enables participants to make phone calls during their leisure time and describe their issues in more detail. In a clinical trial conducted in Arak by Mohammadi et al. (2017), entitled "The effectiveness of group counseling based on reality therapy on sexual satisfaction in women", the results indicated that counseling has been effective in improving female sexual satisfaction, and can help couples to become familiar with genital anatomy and physiology, misconceptions about sexual issues and principles of choice theory, and may establish a healthy and enjoyable sexual relationship. Also, counseling can decrease the psychological, sexual and emotional distances between couples and ultimately increase the sexual satisfaction and recover the marital quality of couples [33]. The results of Mofid's et al. (2015) research revealed that cognitive-behavioral and solution-based counseling were effective on women's sexual satisfaction (p < 0.01) and counseling was effective in preventing and improving the women's sexual problems in educational, counseling and treatment centers [34]. Shams Mofaraheh et al. (2010) in a semi-experimental study in Shiraz investigated the effect of marital counseling on the couples' sexual satisfaction. The findings disclosed a statistically significant difference between the sexual satisfaction of women and men between two groups of test and control (p=0.002). According to the obtained results, marital counseling was effective in the quality of sexual relationships and increased the couples' sexual satisfaction. Through preventing sexual dysfunctions and sexual illness, marital counseling is one of the most operational methods of health education which helps people and couples [27]. Baron et al. (2004) in their research indicated that sexual education or marital counseling played a significant role in family health, reducing sexual violence in the family, preventing sexually transmitted diseases, positive attitude towards sexual relations, sexual pleasure, reducing family incompatibility and gaining sexual pleasure experiences and as a result, couples' sexual satisfaction

Data analysis indicated a significant difference in the sexual performance scores of the intervention and control group during the course and the follow-up period, demonstrating that group counseling and telephone counseling had a significant effect on the sexual function of the intervention group. Based on the studies, women had insufficient awareness of the type of delivery and the proper sex function, and, of course, identifying their sexual function after delivery and it's probably related factors, such as individual characteristics and relationships between couples, and counseling and necessary training in this regard could help the staff of health centers to develop healthy sexual performance and strengthen emotional and physical relationships between couples [36]. In this regard, Hezbiiyan et al. (2016), in a controlled semi-experimental study, investigated the effect of counseling on postpartum female sexual function [37]. The results indicated a positive effect of counseling on women's sexual

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function, which was in line with the results of the current study. Torkzahrani et al. (2016) examined the impact of counseling based on the PLISSIT model on the sexual function of 90 breastfeeding women in their first delivery, 6 months after delivery <sup>[20]</sup>. Based on the obtained results of this research, sexual counseling improved the sexual performance of breastfeeding women, which was in line with the findings present study. Nejati et al. (2017), in a clinical trial study, examined the effect of sexual counseling based on the PLISSIT model on the sexual performance of eighty 24-26weeks pregnant women who had at least confirmed the sexual problem by a psychiatrist. After regulating the effect before the intervention, there was a significant difference between the mean of sexual function score and all its fields in the case and control groups at the 4th week after the intervention (p<0.005) <sup>[38]</sup>.

No similar study was found in line with comparing the effect of group counseling and telephone counseling on sexual health. However, researchers have investigated the effect of telephone counseling on other postpartum aspects, which have confirmed the positive impact of telephone counseling on the intervention group and it was consistent with the current study. Peighambardoust et al. (2013) conducted a randomized, semiexperimental study composed of two groups with the aim of determining the effect of postpartum telephone support on women's depression during the period of 2013 in Razi Hospital in Marand. The results disclosed that there was a significant difference between the mean depression scores based on the EPDS scale in the intervention and control groups ( $p \le 0.0001$ ). According to the obtained results, it seems that telephone support by the midwife reduced women's postpartum depression during the puerperium period [39]. The results of the mentioned study in line with the effectiveness of telephone counseling were in line with the results of the current study.

Therefore, the results of the present study indicated that counseling in both sexual satisfaction and sexual function was effective in group and telephone counseling.

Therefore, the results of the present study disclosed that the group and telephone counseling were effective in both sexual satisfaction and performance; consequently, counseling is an important factor in improving sexual satisfaction and sexual performance, which can eventually lead to improved female sexual health. Because they do not take their troubles seriously or are involved with children's affairs and everyday life, or because of shame and cultural and religious issues, most of the women do not talk about their problems with health care workers. In contrast, the number of low-health counseling centers and staff information health is also imperfect in this regard. This study was among the limited researches that investigated the impact of sexual health counseling on both sexual satisfaction and sexual function in a post-partum period. Contrary to popular perception that physical presence is an essential and inevitable factor in the counseling process, the results indicated that, if telephone counseling was applied structurally and with a purpose and pattern, it would be very effective and a considerable savings would be done in the cost and time of clients, consultants, and psychotherapists. Thus, people

would mention their problems more easily and in a more detail than group counseling. So, with regard to the important role of full-time midwife during pregnancy and postpartum, by the means of suitable policies and establishing sexual counseling centers, while providing midwifery services, sexual counseling is provided individually, in group and through telephone. As a result, effective steps in the field of women's sexual health and improving their health and family satisfaction have been taken.

#### References

- 1. Rebecca N BA. Hazel Heath. Older people and mental health nursing. Philadelphia. Black-well. 2006:124.
- Mazinani R AM, Kaskian A ,Kashanian M. Evaluation of Prevalence of sexual dysfunctions and its related factors in women. Razi Journa of Medical Sciences. 2013;19(105):59-66.
- Movahed M AT. A study on the relationship between the sexual satisfaction of women in a married life and conflicts between spouses, among married women in Shiraz. 2011.
- Mirghaforvand M AS, Asghari M, Tavananezhad N, Karkhaneh M. Individual-Social predictor of marital satisfaction in women of reproductive age in Tabriz. Iranian J Obstet Gynecol Infert. 2013;16(72):1-12.
- Aliakbari Dehkordi M. Relationship between women sexual function and marital adjustment. International Journal of Behavioral Sciences. 2010 Nov 1;4(3):199-206.
- Shahsiyah M BF, Etemadi O, Mohebi S. Effect of sex education on improving couples martial satisfaction in Isfehan. J Health Sys Res. 2010;6(4):69-97.
- Berek JS EA. Berek & Novaks Gynocology 15th ed. Philadelphia: Lippincott, Williams And Winlkinson. 2012:270-304.
- 8. Tork Zahrani S BM, Ozgoli G, Azad M. Investigation of the postpartum female sexual dysfunction in breastfeeding women referring to healthcare centers of Bandar Abbas. Iranian J Obstet Gynecol Infert. 2016;19(35):1-12.
- Laumann EO PA, Rosen RC. Sexual dysfunction in the United States: prevalence and predictors. JAMA 1999;281(6):537-44.
- Sadocs K. Synopsis Of Psychiatry: Behavior Sciences/Clinical Psychaitry. 10th Ed. Philadelphia: Lippincott 'Williams And Winlkinson. 2007: 274-92.
- 11. Yeniel AO PE. Pregnancy, childbirth, and sexual function: perceptions and facts. Int Urogynecol J. 2014;25:5-14.
- 12. Rowland M FL, Hopman WM, Patel R. Breastfeeding and sexuality immediately post partum. Can Fam Physician. 2005;51:1366-7.
- 13. SA P. The importance of the sexual health history in the primary care setting J Obstet Gynecol Neonatal Nurs. 2001;30(3):269-74.
- 14. Shirpak KR CM, Maticka-Tyndale E, Ardebili HE, Pourreza A, Ramenzankhani A. A qualitative assessment of the sex education needs of married Iranian women. Sex Cult 2008;12(3):133-50.

- Karimi A DS, Afiat M, Rahimi N. The Effect of Sexual Health Education on Couples' Sexual Satisfaction. Iran J Obestet Gynecol Infertil. 2013;15(42):23-30.
- Tabrizi M. Beck and the effectiveness of couples therapy, cognitive therapy and family therapy book compilation on increasing marital satisfaction [dissertation]. Tehran: Allameh Tabatabai University. 2003.
- 17. I P. genograms in counseling practice. counselling psychology quaterly. 2001;15(2):139-45.
- Hasanzadehbeshtian M. Effective factors on woman's sexuality. Iran J Obstet Gynecol Inferti. 2006;9(1):86-91.
- 19. Masoomi S Z NB, Mortazavi A, Parsa P, Karami M. Investigating the effects of sexual consultation on marital satisfaction among the pregnant women coming to the health centers in the city of Malayer in the year 1394. Scientific Journal of Hamadan Nursing & Midwifery Faculty.256-63:(4)24;2016
- Torkzahrani S bM, Ozgoli G, Azad M, Mahmoudikohani
  F. The Effectiveness Of Consultation Based On Plissit Model On Sexual Function Of Lactating Women. J Urmia Nurs Midwifery Fac. 2016;14(7):639-47.
- Taghizadeh Z ZA, Asghari M. A review of women's sexual dysfunction during postpartum. JSSU. 2018;25(12):940-50.
- Navidian A NRS, Soltani P. Effects of group sexual counseling on the traditional perceptions and attitudes of Iranian pregnant women. Int J Womens Health. 2016;8:203-11.
- 23. Giussy Barbara PP, Federica Facchin, Ivan Cortinovis, Dhohua Dridi, Camilla Ronchetti, Luca Calzolari, and Paolo Vercellini. Impact of Mode of Delivery on Female Postpartum Sexual Functioning: Spontaneous Vaginal Delivery and Operative Vaginal Delivery vs Cesarean Section. J Sex Med. 2016;13:393-401.
- 24. Rosen, C. Brown, J. Heiman, S. Leiblum, C. Meston, R. Shabsigh, D. Ferguson, R. D'Agostino R. The Female Sexual Function Index (FSFI): a multidimensional self-report instrument for the assessment of female sexual function. Journal of sex & marital therapy. 2000 Apr 1;26(2):191-208.
- 25. Mohhammadi Kh HM, Faghihzadeh S. The Female Sexual Function Index (FSFI): Validation Of The Iranian Version. Payesh journal. 2008;7(3):269-78.
- 26. Larson JH AS, Holman TB, Niemann BK. A longitudinal study of the effectsof premarital communication, relationship stability, and self-esteem on sexual satisfaction in the first year of marriage. J Sex Marital Ther. 1998;24(3):193-206.
- Shams MZ SM, Mohebi S, Tabaraee Y. The effect of marital counseling on sexual satisfaction of couples in Shiraz city. J Health Sys Res. 2010;6(3):417-24.
- Bahrami N SN, Ranjbar Koochaksariie F, Ghojazadeh M. Comparing depression and sexual satisfaction in fertile and infertile couples. J Reprod Infertil. 2007;8(1):52-9.

- Khajehei M DM, P.J. Matt Tilley, Sauer K. Prevalence and Risk Factors of Sexual Dysfunction in Postpartum Australian Women. J Sex Med. 2015;12:1414-26.
- Glazener CM. Sexual function after childbirth: women's experiences, persistent morbidity and lack of professional recognition. BJOG: An International Journal of Obstetrics & Gynaecology. 1997 Mar;104(3):330-5.
- 31. Jahanfar S MM. [Textbook of sexual disorders] Tehran: Bijeh. 2001.
- 32. Zargar Shoushtari Sh AP, Abedi P, Tabesh H. The Effect of Face-to-Face With Telephone-Based Counseling on Sexual Satisfaction Among Reproductive Aged Women in Iran. Journal of Sex & Marital Therapy361-:(4)41;2015.
- Mohammadi M ATN, Mehrabi Rezveh F Effectiveness of Group Counseling Based on Reality Therapy on Sexual Satisfaction in Women. J Mazandaran Univ Med Sci. 2017;27(155):27-36.
- 34. Mofid V FM, Ahmadi A, Etemadi O. Effectiveness of the Combination of Solution-Focused Therapy and Narrative Therapy in Marital Adjustment among Incompatible Iranian Wome. Knowledge & Research in Applied Psychology. 2015;17(3):73-80.
- 35. Baron RA BD, Branscombe NR. Social psychology,14th ed. Boston, MA: Pearson/Allyn & Bacon. 2004.
- 36. Broumandfar K FZ, Hoseini H, Ghaed Rahmati M. Reviewing Sexual Function After Delivery and Its Association with Some of the Demographic Marital Satisfaction Factors. aumj. 2012;1(2):93-9.
- Hezbiiyan Z KB, Parsa P, Faradmal M J. The effect of postnatal counseling on sexual function in women referred to health centers in Hamedan in 1392. Sci J Hamadan Nurs Midwifery Fac. 2016;24(4):272-80.
- 38. Nejati B KF, Masoumi Z, Parsa P, Karami M, Mortazavi A. Efficacy of Sexual Consultation Based on PLISSIT Model (Permission, Limited Information, Specific Suggestions, Intensive Therapy) on Sexual Function among Pregnant Women: A Randomized Controlled Clinical Trial GIMS. 2017:739-48.
- Peighambardoust R, Sodaey H, Khakbazan Z, Fadaei Z. Telephone support on the postpartum depression after normal vaginal delivery. The Journal of Urmia Nursing and Midwifery Faculty. 2013;11(5):335-42.