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The Effect of Counseling Based on Sexual Health Model on Sexual Compatibility of Women at Risk of Emotional Divorce

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ARTICLE INFO	ABSTRACT
<i>Article type:</i> Original article	Background & aim: Low sexual compatibility is one of the reasons for emotional divorce. This study aimed to investigate the effect of counseling based on Sexual Health Model on sexual compatibility of women at risk of emotional divorce.
<i>Article History:</i> Received: 03-Apr-2022 Accepted: 28-May-2022	<i>Methods:</i> In this two-group quasi-experimental study, 72 women at risk of emotional divorce were assigned to intervention and control groups. For women in the intervention group, one individual interview session along with her spouse and four weekly sessions of 90-minutes group counseling based on the Sexual Health
<i>Key words:</i> Counseling Emotional Divorce Sexual Compatibility Sexual Health Model Women	 Model, focusing on sexual compatibility, were held. An educational package was prepared for the spouses of the intervention group. The research tools included the demographic and fertility characteristics questionnaire, the standard Guttman Emotional Divorce Questionnaire, Sexual Compatibility with Spouse (SCS) questionnaire and Depression-Anxiety-Stress Scale (DASS-21). The questionnaires were completed before, immediately, and one month after the intervention. <i>Results:</i> The two groups were homogeneous in terms of demographic data and fertility characteristics (P> 0.05). There was no significant difference between the mean total sexual compatibility scores of women at risk of emotional divorce in the two groups of intervention and control before counseling. But the mean of total score of sexual compatibility in the intervention group was significantly higher than the control group immediately and one month after the counseling intervention compared to pre intervention (P <0.001). <i>Conclusion:</i> Counseling based on the Sexual Health Model is effective in increasing the sexual compatibility of women at risk of emotional divorce.

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Introduction

Divorce is one of the most important social damages that its direct and indirect consequences not only affect the psychological balance of couples, children, relatives and friends but also influence the economic system, the quality and quantity of the population as well as the cultural value system (1). In recent years, the divorce rate in the country has been increasing and the divorce-to-marriage ratio has increased from 15.4% in 2010 to 33% in 2018 (2-3). But official divorce statistics do not fully reflect the level of failure of spouses in marital life, and emotional divorce is estimated to be two to three times higher than formal divorces (4).

Emotional divorce is not an event, but a process that occurs over time (5). Emotional divorce describes a relationship in which

* *Corresponding author*; Maryam Moradi, Assistant Professor, Nursing and Midwifery Care Research Center, Mashhad University of Medical Sciences, Mashhad, Iran. Tel: 00989126170450; Email: maryam.moradi.fu@gmail.com spouses appear good and intimate in social settings but are unable to tolerate each other in private (1). 90% of divorce applicants are women (6). Women, as mothers, play a key role in raising their children, who are the future makers of society. Certainly, every situation that arises for women is associated with consequences (7). Weakness in the emotional relationship between husband and wife leads to coldness in all relationships, including sexual relationships (4).

Emotional divorce causes problems in sexual intercourse and poor quality sexual intercourse leads to emotional divorce (8). Sexual disorders of couples, especially women, cause many problems in the family, including marital conflict and incompatibility (9). Since most relationship problems overlap with sexual problems, sexual dysfunction can be both the cause and effect of sexual incompatibility, leading to relationship incompatibility. Thus, sexual incompatibility leads to adverse consequences at the individual, family and social levels, such as divorce (10). Increasing sexual compatibility with spouse can lead to increased sexual satisfaction and marital relationship satisfaction, increased happiness and quality of life, and sexual incompatibility may lead couples to the brink of divorce (11).

compatibility Sexual is the sexual companionship of couples, which means sharing in meeting each other's sexual needs and solving problems arising from sexual differences based on sexual perception, agreement and interest in continuing sexual relations with aim of mutual sexual satisfaction and includes four subscales of "sexual compatibility requirements", "sexual "contextual agreement", obstacles' and "outcomes of sexual compatibility". Sexual compatibility does not necessarily mean similarity, and some couples have had sexual differences, but they have been able to reinforce their similarities, manage their differences, and successfully achieve high levels of sexual compatibility and satisfaction (11).

No intervention has been performed so far on sexual compatibility, and previous studies have worked on marital compatibility. The interventions performed on marital compatibility included the interventions based on reality therapy (12), group therapy through reciprocal behavior analysis (13) and the effect of marital counseling according to Guttman (14). In order to reduce and prevent divorce due to undesirable sexual performance in marital life, it is necessary to take measures to identify these people and provide training courses and counseling services to improve their performance (15). Sexual counseling is a process by which individuals acquire the necessary information and knowledge about sexual issues and form their own attitudes, beliefs and values (16).

Counseling seeks to equip the clients with tools that they can use throughout their life to meet the challenges and barriers to growth and development. Therefore, counseling has educational and preventive nature and facilitates the growth of behavior change (17). Sexual counseling help to healthy sexual development, marital health, interpersonal relationships, emotional enhancement, marital intimacy, body image, and gender roles (16). Unawareness and lack of proper understanding of sexual issues and the existence of social and cultural barriers to train the sexual concepts lead to low level of quantity and quality of services related to sexual health education and its existence is associated with increasing sexual knowledge, satisfaction and function in women (18).

Counseling based on the Sexual Health Model is performed in a theoretical framework consisted of ten components: 1-Talking about sex, 2-Culture and sexual identity, 3-Sexual anatomy and functioning, 4- Sexual health care and safer sex, 5- Challenges: Overcoming barriers to sexual health, 6-body image, 7-Fantasy, 8- Positive sexuality, 9- Intimacy and relationships, and 10-spirituality (19). The Sexual Health Model is a culture-based, holistic and flexible model for promoting sexual health of individuals (20).

Since sexual compatibility is a novel and lessknown concept and due to the role of low sexual compatibility in emotional divorce, conducting further studies regarding sexual compatibility seems necessary. Considering that sexual incompatibility due to emotional divorce leads to adverse consequences at the individual, family and social levels, designing preventive interventions and counseling programs would be beneficial. For this reason, the present study was designed to determine the effect of

Materials and Methods

This was a quasi-experimental study with a pre-test post-test control group design, which was performed on women referring to health centers in Mashhad, Iran in 2021. At first, two health centers that were almost similar in terms of population and culture were selected and one center was randomly assigned as intervention and one as control center. Convenience sampling was done from women referring to receive routine services of comprehensive health service centers (such as continuous midwifery care including: family planning, sexual health, child monitoring, vaccination of infant and child). The samples included 72 women at risk of emotional divorce who were assigned to intervention and control groups (36 in each group). They were eligible to participate in the study and had written consent to participate in the study. The questionnaires were completed before the intervention, immediately and one month after the last counseling session by the intervention and control groups (Figure 1).

To the best of our knowledge, at the time of designing this study, there was no similar study that could estimate the therapeutic effect of the intervention on sexual compatibility that could be used to determine sample size. Therefore, the sample size was determined based on the effect size formula and considering the error of 5% and the test power of 80% and the effect size of 0.7 and a possible drop of 10%. The sample size was calculated as 32 people in each group; but considering possible dropout rate of 10%, 36 participants were included in each group.

n =
$$\frac{2(z_{1-\frac{\alpha}{2}} + z_{1-\beta})}{f^2} = \frac{2(1.96 + 0.84)^2}{0.7^2} = 32$$

Inclusion criteria were: literacy of reading and writing, first marriage of wife and husband, being the only spouse of her husband, living together for at least one year, being sexually active (having sex at least once a week), not having a severe stressful event (including death of a loved one or economic bankruptcy) in the past 6 months for the wife and husband, no physical diseases (no sexual dysfunction, no

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sexually transmitted diseases, no medical diseases) or major mental illness in the wife and husband, no consumption of special medication in the wife and husband, no alcohol or drug abuse in the wife and husband, no acute marital conflict (marital Judicial complaints, betrayal of wife or husband), being at the risk of emotional divorce based on a score of 8-16 (moderate probability of divirce) according to Guttman Emotional Divorce Questionnaire (1995), poor and moderate sexual compatibility (score 35-104) according to Sexual Compatibility with Spouse Questionnaire (SCS) (2020), not attending similar sex counseling courses in one year before the study and not suffering from severe depression, anxiety and stress (scoring less than 60 for the total score based on DASS-21 scale). Exclusion criteria were: unwillingness to continue the study, absence of more than one session in counseling sessions, incomplete completion of questionnaires (answering less than 10% of the questionnaires) and participation in a training-counseling program or other sexual therapy during the intervention period.

Data collection tools included: demographic and fertility characteristics questionnaire, Guttman Emotional Divorce Questionnaire (1995) (21), Sexual Compatibility with Spouse Questionnaire (SCS) (2020) (22), and DASS-21 scale (23).Demographic and fertility characteristics form was prepared according to the objectives of research and the study of the latest related sources and articles and consultation with supervisors and consultants. Its validity was approved by obtaining the opinion of 7 faculty members and completed by research units with the help of the researcher.

The Emotional Divorce Questionnaire was edited by Guttman (1995) and translated by Jazayeri (2008). This scale contains 24 questions. The score 1 is assigned to answer yes and score 0 to answer no. The minimum and maximum scores of the individual on the whole scale are 0 and 24, respectively (score 0-8: poor probability of divorce, score 8-16: moderate probability of divorce and score 16-24: high probability of divorce) (Gutman, 1995) (21). In the study of Pourhossein and Bidast (2014), content and face validity was evaluated and approved by five experienced professors in this

field (24). In the study of Mami and Askari (2014), Cronbach's alpha for the reliability of the emotional divorce questionnaire has been reported as 0.83 (25). In the present study, the reliability of the above questionnaire was confirmed using the internal consistency test method and Cronbach's alpha=0.878.

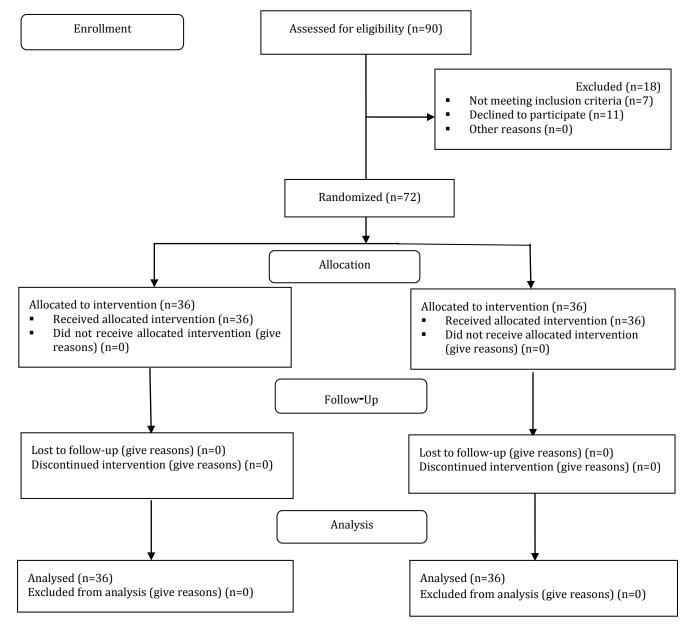
The Sexual Compatibility with Spouse Questionnaire (SCS) (2020) was designed by Nekoolaltak et al. in 2020 and includes 35 items in four subscales of sexual compatibility prerequisites, agreement on how to have sex, sexual compatibility inhibitors, consequences of sexual compatibility, and its items was set based on a 4-point Likert scale. Questionnaire's scores were converted to percentages and are classified in three levels of poor compatibility (25%-49%) with the raw score of the questionnaire 35-69, moderate compatibility (50%-74%) with the raw score of the questionnaire 70-104 and optimal compatibility (75%-100%) with the raw score of the questionnaire 105-140 (22). In the study of Nekoolaltak et al. (2020), face validity was measured and confirmed qualitatively and quantitatively (22). In the study of Nekoolaltak et al. (2020), the reliability of the questionnaire was measured by internal consistency and testretest methods. Cronbach's alpha coefficient of the whole questionnaire was r=0.90 and Cronbach's alpha coefficient was obtained r=0.91 after retest (11). In the present study, the reliability of the above questionnaire was confirmed using the internal consistency test method and Cronbach's α =0.901. Cronbach's alpha for domains of sexual compatibility prerequisites, agreement on how to have sex, inhibitors of sexual compatibility and consequences of sexual compatibility were α =0.814, α =0.788, α =0.903 and α =0.833, respectively.

The Depression-Anxiety-Stress Scale was developed by Lovibond and Lovibond in 1995 to measure stress-anxiety-depression and has 21 questions. DASS-21 Questionnaire consists of 3 components and each component consists of 7 questions, the final score of each is obtained through the sum of the scores of the related questions. Its scoring method is considered from zero (does not apply to me at all) to 3 (absolutely applies to me) (23). In the study of Samani et al. (2007), the validity of the Depression, Anxiety and Stress Scale (DASS-21) was measured and confirmed (23). In the study of Samani et al. (2007), the internal consistency of the scale of alpha validity coefficient of stress, depression and anxiety were r=0.87, r=0.85 and r=0.75, respectively (23). In the present study, the reliability of the above questionnaire was confirmed using the internal consistency test method and Cronbach's α =0.893. Cronbach's alpha for domains of depression, anxiety and stress were α =0.769, α =0.765 and α =0.779, respectively.

Data collection was performed after obtaining the approval of the ethics committee and the necessary permission. Written informed consent was obtained from the participants. The control group did not receive any intervention and only received routine care from comprehensive health care centers. The intervention group in addition to the routine care of comprehensive health service centers, received counseling intervention in the form of one individual interview along with the spouse (20 minutes for couple and 15 minutes for each individual) in order to get acquainted with individual mental characteristics, beliefs, husband's familiarity with group rules, general conditions and chief complain of couples, especially in sexual field and emotional divorce and their cognitive distortions in order to consider these problems in preparing and completing the content of educational booklets and counseling sessions and then weekly four 90-minute group counseling sessions based on Sexual Health Model being focused on sexual compatibility of women in groups of 6 to 8 members.

first session included The group acquaintance, discussing the barriers to sexual health, sexual anatomy and physiology and presenting homework. The second session included reviewing homework, talking about sexual issues, sexual culture and identity, sexual fantasies and body image, and presenting homework. Third session focused on reviewing homework review, positive sexual behaviors, sexual relationships and intimacy, spirituality and presenting homework. Fourth session concentrated on reviewing homework, talking about the dimensions of sexual compatibility,

and removing ambiguities. At the beginning of the women's group sessions, the husbands of the intervention group were given a training package prepared by the researcher, which included a summary of the sessions, such as the dimensions of the Sexual Health Model and sexual compatibility. In the present study, the findings of the qualitative study of Nekoolaltak (11) were used to design counseling on sexual compatibility. In order to observe ethics, at the end of the study, an educational package was given to the control group. Ethical codes such as maintaining confidential information,





participants' right to withdraw the study without influencing their required services were observed.

Data were collected and analyzed in two descriptive and analytical formats. In the descriptive part, the demographic and background characteristics of the sample were compared and tested in the two groups, and the homogeneity of these variables in the intervention and control groups was examined. First, the normality of data distribution of quantitative variables was evaluated using Shapiro-Wilk test.

Independent t-test was used to compare the two groups in terms of quantitative variables

with normal distribution and Mann-Whitney test was used for ordinal but not normally distributed variables. Nominal variables were compared and tested in two groups using Chisquare and Fisher's exact tests.

Repeated measures analysis of variance and Friedman tests were used for intragroup comparison. Data were analyzed using SPSS software (version 26). P<0.05 was considered statistically significant.

Results

The mean age of women in the intervention

Intervention	Control	P-Value	
Mean±SD	Mean±SD		
3.3 ±7.32 4.5 ±7.36	52+635	P=0.086	
	5.2 -0.55	Independent t	
	4.7 ±7.38	P=0.209	
		Independent t	
1.9 ± 6.11	9.2 ±7.13	P=0.648	
Group		Mann-Whitney	
		P-Value	
		i value	
	(/0)		
6 (16.7)	3 (8.3)	P=0.478	
30 (83.3)	33 (91.7)	Exact fisher	
36 (100.0)	36 (100.0)		
9 (25.0)	6 (16.7)	P=0.384	
27 (75.0)	30 (83.3)	Exact fisher	
36 (100.0)	36 (100.0)		
		P=0.338	
30 (83.3)	27 (75.0)	Exact fisher	
2 (5.6)	6 (16.7)	Exact Holler	
36 (100.0)	36 (100.0)		
		P=0.733	
	• •	Exact fisher	
4 (11.1)	2 (5.6)	Exact HSHEI	
36 (100.0)	36 (100.0)		
5 (13.9)			
- ()			
12 (33.3) 12 (33.3)	· · ·	D 0 (0)	
		P=0.636	
		Chi-square	
7 (19.4)			
36 (100 0)			
	$\begin{tabular}{ c c c c c } \hline Mean \pm SD \\ \hline 3.3 \pm 7.32 \\ \hline 4.5 \pm 7.36 \\ \hline 1.9 \pm 6.11 \\ \hline \hline Gro \\ \hline Intervention \\ \hline N (\%) \\ \hline 6 (16.7) \\ 30 (83.3) \\ 36 (100.0) \\ \hline 9 (25.0) \\ 27 (75.0) \\ 36 (100.0) \\ \hline 9 (25.0) \\ 27 (75.0) \\ 36 (100.0) \\ \hline 4 (11.1) \\ 30 (83.3) \\ 2 (5.6) \\ 36 (100.0) \\ \hline 18 (50.0) \\ 14 (38.9) \\ 4 (11.1) \\ 36 (100.0) \\ \hline 18 (50.0) \\ 14 (38.9) \\ 4 (11.1) \\ 36 (100.0) \\ \hline 5 (13.9) \\ 12 (33.3) \\ 12 (33.3) \\ \hline 12 (33.3) \\ \hline 12 (33.3) \\ \hline \end{tabular}$	$\begin{tabular}{ c c c c c } \hline Mean\pmSD & Mean\pmSD \\ \hline 3.3 \pm 7.32 & 5.2 \pm 6.35 \\ \hline 4.5 \pm 7.36 & 4.7 \pm 7.38 \\ \hline 1.9 \pm 6.11 & 9.2 \pm 7.13 \\ \hline \hline Group & \\ \hline Intervention & Control \\ \hline N (\%) & N (\%) \\ \hline 6 (16.7) & 3 (8.3) \\ 30 (83.3) & 33 (91.7) \\ 36 (100.0) & 36 (100.0) \\ \hline 9 (25.0) & 6 (16.7) \\ 27 (75.0) & 30 (83.3) \\ 36 (100.0) & 36 (100.0) \\ \hline 9 (25.0) & 6 (16.7) \\ 27 (75.0) & 30 (83.3) \\ 36 (100.0) & 36 (100.0) \\ \hline 4 (11.1) & 3 (8.3) \\ 30 (83.3) & 27 (75.0) \\ 2 (5.6) & 6 (16.7) \\ 36 (100.0) & 36 (100.0) \\ \hline 18 (50.0) & 18 (50.0) \\ 14 (38.9) & 16 (44.4) \\ 4 (11.1) & 2 (5.6) \\ 36 (100.0) & 36 (100.0) \\ \hline 18 (50.0) & 18 (50.0) \\ 14 (38.9) & 16 (44.4) \\ 4 (11.1) & 2 (5.6) \\ 36 (100.0) & 36 (100.0) \\ \hline 5 (13.9) & 7 (19.4) \\ 7 (19.0) \\ 12 (33.3) & 36 (100.0) \\ \hline 12 (33.3) & 36 (100.0) \\ \hline 7 (19.4) & 36 (100.0) \\ \hline \end{tabular}$	

Table 1. Demographic and fertility characteristics of women in intervention and control group

group was 32.3 ± 7.3 and in the control group was 35.2 ± 6.5 years and the two groups were homogeneous (P=0.086). Most women and their husbands had educational level of diploma or higher. Demographic and fertility variables of women were compared in the intervention and control groups, it was observed that the two groups were homogeneous in terms of

demographic and fertility variables including age, husband's age, length of marriage, level of education of wife and husband, monthly income, housing status and number of children (Table 1).

Also, the two groups were homogeneous in terms of history of infertility (P=0.710), current pregnancy (P=0.151) and current lactation (P>0.999).

Table 2. Mean of the total score of sexual compatibility in different phases of study in intervention and control group

	Group		
Total score of sexual compatibility	Intervention Mean±SD	Control	P-Value
		Mean±SD	
Pre intervention	11.5±87	90.1 ± 12.3	*P=0.199
Immediately post intervention	105.3 ± 10.8	89.8 ± 11.9	*P<0.001
One month post intervention	99.9 ± 8.2	89.3 ± 11.5	**P<0.001
The difference between pre and immediately post intervention	18.3 ± 10.1	-0.3 ± 4.6	**P<0.001
The difference between pre and one month after intervention	12.9 ± 10.5	-0.7 ± 7.9	**P<0.001
The difference between immediate and one month post intervention	$\textbf{-5.4} \pm \textbf{7.0}$	$\textbf{-0.5}\pm6.8$	**P=0.004
	F=73.1		
	P<0.001	Chi2=0.7	
Intergroup test result	Variance analysis	P=0.697	
	with repeated	Friedman test	
	measures		

*Mann-Whitney

**Independent t-test

Mann-Whitney test showed no significant difference between the mean total score of sexual compatibility of women at risk of emotional divorce in the two groups of intervention and control before counseling (P=0.199). However, the total score of sexual compatibility increased in the intervention group immediately and one month after the counseling intervention compared to before the intervention and decreased in the control group; the independent t-test showed these differences were significant (P<0.001).

Also, in the intergroup comparison in the intervention group, the analysis of variance test with repeated measures showed that the difference between the stages was significant (P<0.001). Bonferroni post hoc test showed a significant difference after the intervention with before the intervention (P<0.001), a significant difference one month after the intervention with before the intervention (P<0.001) and a

significant difference one month after the intervention with after the intervention (P<0.001).

In the intergroup comparison in the control group, Friedman test showed that the difference between the stages was not significant (P=0.697). In other words, the mean total score of sexual compatibility of women at risk of emotional divorce had not changed before and after counseling intervention in the control group but had significantly increased in the intervention group (Table 2).

In the subscales of sexual compatibility, "sexual compatibility requirements", "sexual agreement", "contextual obstacles" and "outcomes of sexual compatibility", the results were significant immediately and one month after the counseling intervention (P <0.001), but in the subscale of sexual intercourse inhibitors, the results were not significant one month after the intervention (P = 0.151) (Table 3).

Table 3. Mean of the subscale scores of sexual compatibility in different phases of study in intervention and control group

	Group		
Variable	Intervention	Control	P-Value
	Mean±SD	Mean±SD	
Sexual compatibility requirements			
Pre intervention	42.2±6.4	44.8 ± 7.4	*P=0.066
Immediately post intervention	52.2±6.1	44.2 ± 7.1	*P<0.001
One month post intervention	51.5±4.6	44.1 ± 5.9	**P<0.001
The difference between pre and immediately post	$10.2{\pm}6.0$	-0.7±2.3	**P<0.001
intervention	10.2±0.0		
The difference between pre and one month after	9.3±5.5	-0.7±3.2	*P<0.001
intervention			
Sexual agreement			
Pre intervention	17.7 ± 4.0	18.1 ± 3.9	**P=0.697
Immediately post intervention	21.4±3.3	18.2 ± 3.3	**P<0.001
One month post intervention	21.6±2.8	18.6 ± 3.7	**P<0.001
The difference between pre and immediately post	3.7±2.9	0.2±1.8	*P<0.001
intervention			
The difference between pre and one month after	3.9±2.8	0.6±1.7	*P<0.001
intervention			
Contextual obstacles			
Pre intervention	13.1±3.4	13.0 ± 3.1	**P=0.971
Immediately post intervention	14.9 ± 2.3	13.2 ± 3.0	**P=0.010
One month post intervention	10.2±2.3	0.1 ± 3.12	*P=0.007
The difference between pre and immediately post	1.9±2.4	6.2±1.0	*P<0.001
intervention	1.9±2.4	0.2 ± 1.0	·P<0.001
The difference between pre and one month after	-2.9±5.4	$0.9{\pm}6.0$	**P=0.151
intervention	-2.9±3.4	0.9±6.0	··P=0.151
Outcomes of sexual compatibility			
Pre intervention	14.0 ± 2.5	7.1 ± 2.14	*P=0.066
Immediately post intervention	16.5±2.6	1.1 ± 3.14	*P=0.001
One month post intervention	16.6±2.3	5.9 ± 4.14	*P=0.002
The difference between pre and immediately post		0.0+1.2	*D <0.001
intervention	2.5 ± 1.6	-0.0 ± 1.2	*P<0.001
The difference between pre and one month after	2.6±1.4	0.3±1.5	*P<0.001
intervention			
*Mann Whitney **Independent + test			

*Mann-Whitney **Independent t-test

Discussion

This study was performed to investigate the effect of counseling based on Sexual Health Model on sexual compatibility in women at risk of emotional divorce. According to the results, the total score of sexual compatibility and "sexual compatibility subscales of requirements", "sexual agreement", "contextual obstacles" and "outcomes of sexual compatibility" significantly increased immediately and one month after the counseling the intervention compared to before intervention in the intervention group compared to the control group. The area of inhibitors sexual intercourse increased immediately after the intervention compared to before the intervention in the intervention group, but decreased in the intervention group one month after the intervention compared to before the intervention and was not significant compared to the control group. Also, in the intergroup comparison, the mean total score of sexual compatibility of women at risk of emotional divorce did not change in the control group before and after the counseling intervention, but significantly increased in the intervention group.

Considering that the sexual compatibility tool (22) used in the present study was designed in 2020 and according to the review, no report of an interventional study on sexual compatibility

variable was found, therefore for discussion section, we used the interventional studies on the consequences of marital compatibility and its components and the qualitative and descriptive studies on sexual compatibility.

Deldadeh et al. (2016) conducted a quasiexperimental study with the practical purpose of determining the effectiveness of reality therapy-based interventions on improving marital compatibility among 30 couples with emotional divorce referred to counseling centers in Tehran. The dyadic adjustment scale (DAS) (Spanier, 1989) was used, which was different from the present study. They concluded that reality therapy training has a significant effect on the components of marital compatibility among couples (P<0.05) (12), which was consistent with the present study. Their study was performed on couples suffering from emotional divorce, while the present study considered women at risk of emotional divorce.

Consistent with the present study, Akbari et al. (2012) in their quasi-experimental research aimed to determine the effectiveness of group therapy by analyzing mutual behavior on increasing satisfaction, marital compatibility, positive feelings of couple and intimacy of couples experiencing emotional divorce used the dyadic adjustment scale (Spanier, 1976). The results of analysis of covariance showed that therapeutic intervention had an effect on couple compatibility and the difference between the scores of the groups in post-test was significant (13). Their study was performed as group that is similar to the present study. Also, the target group in their study was similar to the present study. But the questionnaire used in their study was different from the present study. Their study was also performed on couples while the present study was performed on women.

Padash et al. (2021) in a quasi-experimental study examined the effect of Guttman methodbased marital counseling on marital satisfaction and compatibility of 30 married women willing to divorce. Guttman method-based marital counseling (Guttman 2000) was performed in 10 sessions of 90 minutes and dyadic adjustment scale (Spanier, 1976) was used. The findings showed that Guttman method-based marital counseling can increase marital compatibility in women willing to divorce (P<0.001) (14). The results of their study were consistent with the present study; however, the questionnaire and the type of intervention used in their study were different from the present study. The results of the present study in terms of positive effect of the intervention on the areas of sexual compatibility are in line with the study of Padash et al. (2021), Deldadeh et al. (2020) and Akbari et al. (2012) which evaluated marital compatibility and its components (satisfaction, agreement, expressing love and solidarity). The scores of marital compatibility dimensions increased after the intervention in these studies (12-14).

Nekoolaltak et al. (2017) conducted a qualitative mixed method study with aim to determine sexual compatibility among Iranian couples in Tehran on 36 couples through semistructured interviews. Data analysis showed that compatible couples face situations based on understanding, agreement and love. Active participation in sexual relations, forgiveness and attention, lack of ridicule, mutual respect, flexibility and sexual dialogue with the spouse were prominent features of sexually compatible couples (11).

Tan Sun et al. (2020) conducted a crosssectional quantitative study to determine sexual and marital compatibility among married couples in Malaysia with a mediating role of sexual satisfaction. They used Hurlbert Index of Sexual Compatibility (HISC) (1993). Their results showed a positive and significant relationship between marital satisfaction, sexual compatibility (r=0.686) and sexual satisfaction (r=0.711). The sexually compatible married couples were more satisfied with their sexuality, which led to greater marital satisfaction. Marital dissatisfaction is an important determinant of marital separation, divorce and physical or mental problems (26).

Emotional divorce can be considered as one of the most important and effective factors in the disintegration of the structure of the most fundamental part of society, namely family (27). Many Iranian couples suffer from sexual dissatisfaction which leads to sexual incompatibility and causes more conflicts (26, 28). Couples' sexual awareness and knowledge is associated with pleasure and improvement of

the marital and emotional relationship. Despite the relatively high level of literacy in Iran, which paves the way for educational and counseling programs, the issue of sexual counseling and skills training has not been sufficiently addressed and there are gaps in this regard in the primary health care system and the health system which indicates the urgent and growing need for such training and counseling; sexual counseling can improve sexual health (29-32). Group counseling based on Sexual Health Model can be cost-effective and effective for sexual problems (33). According to the results of the present study, women's sexual compatibility increased by sexual counseling program based on Sexual Health Model in counseling and educational programs of health centers.

One of the strengths of this research is the use of a new questionnaire that has been specifically worked on the sexual compatibility of Iranian couples. One of the limitations of this study is the difficulty of holding face-to-face meetings for men due to cultural issues because of conducting the study with a female researcher. Of course, the first session of individual face-to-face interview was held with researcher along with spouse under the supervision of a psychologist. The training package of the topics discussed in the group counseling sessions was given to the men in the intervention group and the participants were asked to transfer the necessary materials to their spouses. It is suggested for future studies to investigate the impact of other related models on sexual compatibility or to the effect of Sexual Health Model be compared with other model on sexual compatibility of women at emotional divorce.

Conclusion

The results of the present study showed that counseling based on Sexual Health Model is effective in increasing sexual compatibility of women at risk of emotional divorce. Therefore, the use of this counseling program is recommended in comprehensive health centers in order to promote sexual health and improve the quality of marital relationships of women at risk of emotional divorce.

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Conflicts of interest

Authors declared no conflicts of interest.

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