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Investigating the Effect of Premarital Sexual and Reproductive Health Education Iin Therapeutic Environment on Couples' Marital Satisfaction

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Abstract

Purpose: This study aimed to investigate the effect of premarital sexual and reproductive health education in treatment Environment on couples' marital satisfaction.
Method: The present study is a semi-experimental, pre-test-post-test study with two groups selected, including a control group and an experimental group. The statistical population of the study consisted of nurses in medical centers on the verge of marriage in Tehran, and the sample size was selected using simple random sampling method, including 40 nurses (20 people in the experimental group and 20 in the control group). Enrich Marital Satisfaction Questionnaire was used as a data collection tool for the research. Covariance analysis and multivariate analysis of variance methods were used to analyze the data.
Results: The research findings show that premarital sexual and reproductive health education significantly reduced marital satisfaction disorders in couples in the post-test phase.
Conclusion: Designing and implementing structured educational programs in therapeutic and counseling environments can increase the stability of marital relationships, reduce conflicts, and improve family mental health.

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Introduction

Marriage, as one of the most important stages of human life, is considered the foundation of family formation and the core of society. Success in marital life not only leads to meeting the emotional and psychological needs of couples, but also has a direct impact on the individual's personal, social, and even professional health (1). In today's societies where psychological and social pressures are increasing, attention to various aspects of life together, including sexual and reproductive health, has become very important (2). Couples who have sufficient knowledge of sexual issues, interpersonal relationships, and psychological differences between men and women usually experience more intimate and stable relationships. On the other hand, ignorance or incorrect understanding of these concepts can lead to conflict, dissatisfaction, and ultimately the collapse of a marriage (3).

One of the most important factors in the formation and maintenance of marital satisfaction is sexual and reproductive health. Sexual health means a state of complete physical, mental, and social well-being in all aspects related to sexuality, and not merely the absence of disease or infirmity. This concept includes understanding and accepting the body, the ability to establish healthy relationships, mutual respect, and a sense of satisfaction with the sexual experience (4, 5).

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Reproductive health also refers to the ability of individuals to have a safe, responsible, and satisfying sexual life, which allows them to make informed decisions about the number, timing, and spacing of children. These two concepts are closely related to each other, and any deficiency in knowledge or skills related to them can have direct effects on the quality of marital relationships and the level of satisfaction of couples (6).

In recent years, premarital sexual and reproductive health education has been considered a social and health necessity in many countries. These trainings not only provide awareness on sexual function, prevention of sexually transmitted diseases, and family planning, but also include communication, emotional, and conflict resolution skills (7). In fact, premarital education provides an opportunity for couples to gain a deeper understanding of themselves and their life partners and to be able to act with greater wisdom and skill in facing the challenges of living together (8). This training is especially important in healthcare environments, where people are exposed to various types of stress and job pressures.

Marital satisfaction, as one of the important indicators of family health, is a multidimensional concept that includes satisfaction with the emotional, communication, conflict resolution, and sexual aspects of cohabitation. When couples feel satisfied with their sexual relationships, they experience greater intimacy, trust, and mutual support in other aspects of life (4). Various studies have shown that the lack of proper education in the field of sexual health leads to disorders such as sexual anxiety, coldness in relationships, communication conflicts, and ultimately a decrease in marital satisfaction (9). Therefore, premarital education not only has an informative aspect, but also plays a preventive and therapeutic role and can help improve the quality of married life. Given the importance of the subject, the present study aimed to investigate the effect of premarital sexual and reproductive health education in therapeutic environments on couples' marital satisfaction.

Izadi et al. (2024) conducted a study to develop a sexual health education package and its effectiveness on the sexual performance of newly married working couples. The results of multivariate covariance analysis showed that the sexual health education intervention had a significant effect on the sexual performance of newly married couples. Therefore, it can be concluded that the sexual health education package can be used in premarital counseling and family counseling by psychologists and counselors to enrich the lives of couples (10).

In their research, Bak'an and Safarzadeh (2023) examined the effectiveness of emotion-based marital enrichment education during pregnancy on love, selfless behaviors, and sexual health literacy of young couples. The results of the study showed that emotion-based marital relationship enrichment training in the experimental group improved love, selfless behaviors, and increased sexual health literacy in young couples compared to the control group. Therefore, by using emotion-based marital enrichment training during pregnancy, the level of quality and marital satisfaction of young couples can be increased at this specific time (11).

Seyed Hasan Tehrani et al. (2021) presented a study titled "Developing a four-facet model of "aware" premarital counseling from a local and cultural perspective, and examining its effectiveness on couples' awareness, acceptance, responsibility, and marital compatibility." The experimental group used the developed counseling method and the control group used other counseling methods. To collect data, a structured interview method was used before counseling (pre-test), after counseling (post-test), and after at least 4 months after marriage (follow-up). The statistical method of analysis of variance and t-test was used to analyze the results. In the effectiveness section, the results show that people who have used this premarital counseling model have significantly ($P \leq 0.001$) better levels in the relevant indicators (12).

Alomair et al. (2020) systematically examined factors affecting sexual and reproductive health in Muslim women. In Islamic societies, issues related to sexual and reproductive health (SRH) are rarely discussed and are considered sensitive topics. This survey aimed to identify any personal, religious, cultural or structural barriers to sexual and reproductive health services and education among Muslim women in the worldwide. The findings show that there are varying levels of factors that affect the reproductive and sexual health of Muslim women. Poor reproductive and sexual health knowledge and practices among Muslim women are a complex issue influenced by personal, social, cultural, religious, and existing policies and regulations. All of these factors overlap and influence each other. There is an urgent need for interventions to address modifiable barriers to sexual and reproductive health education and services to improve knowledge, informed choice, and access to services, and facilitate better sexual and reproductive well-being for Muslim women (13).

Ahn & Kim (2020) studied the attitudes, practices, and educational needs of nurses and physicians regarding sexual health care (SHC) of cancer patients. Demographic characteristics, including gender, marital status, and age, were associated with SHC attitudes and practice. There was a significant difference in the level of attitudes of nurses and physicians towards SHC. Compared with nurses, physicians had more positive attitudes towards SHC. Nurses performed significantly more reproductive care-related interventions than

physicians after controlling for demographic variables. Participants' educational needs regarding SHC included changes in sexual function, safe sex during treatment, reproductive health, and sexual counseling approaches. Equipping nurses and oncologists with the necessary knowledge to expand their roles by managing sexual function, psychosocial problems, and reproductive care of cancer patients would be effective (14).

The Method of Research

This research is a semi-experimental, pre-test-post-test study with two groups selected, including a control group and an experimental group. The statistical population of the study consists of nurses in medical centers on the eve of marriage in Tehran. In this study, the sample size included 40 nurses from the aforementioned community (20 people in the experimental group and 20 in the control group), and simple random sampling was used to select them. The data collection tools used in the study are:

- Enrich Marital Satisfaction Questionnaire: The Enrich Marital Satisfaction Questionnaire, whose 47-question form was prepared by Olson, Fornero, and Druckmann (1987) (15) and includes 12 components, is designed as a five-option instrument (which is essentially a Likert-type attitude scale): Strongly agree, agree, neither agree nor disagree, disagree, strongly disagree), each given a score of one to five. The alpha coefficient of the "Enrich Questionnaire" in the report of Olson et al., for the subscales of ideal distortion, marital satisfaction, personality issues, communication, conflict resolution, financial management, leisure activities, sex, children and parenting, family and friends, and egalitarian roles, respectively, is 0.90, 0.81, 0.73, 0.68, 0.75, 0.74, 0.76, 0.48, 0.77, and 0.72. The alpha coefficient of Enrich subscales in several studies has varied from 0.68 (for egalitarian roles) to 0.86 (for marital satisfaction) with an average of 0.79. In Iran, Soleimanian (1994) first calculated and reported the internal correlation of the test as 0.93 for the long form and 0.95 for the short form (16). In this study, disorders in the communication, conflict resolution, and sexual relationship subscales were examined.

In this study, the experimental group underwent 8 sessions of sexual and reproductive health education before marriage. The level of marital satisfaction of the couples was measured before the treatment sessions and after the treatment, which was a few months after marriage; while the control group did not receive any intervention. Descriptive statistics, analysis of covariance, and multivariate analysis of variance were used to analyze the data.

Results

In Table 1, the descriptive results of the study are presented.

Table 1. Mean and standard deviation of marital satisfaction scores of nursing couples in the pre-test and post-test stages

Variable	Stage	Statistical index / Group	Mean	Standard deviation	Number
Disturbance in the marital satisfaction of couples	Pre-test	Experimental	40.33	11.59	20
		Control	38.53	14.66	20
	Post-test	Experimental	30.78	12.74	20
		Control	37.28	14.64	20
Communication disorder	Pre-test	Experimental	25.78	5.75	20
		Control	24.29	5.96	20
	Post-test	Experimental	19.62	6.57	20
		Control	22.79	6.23	20
Conflict resolution disorder	Pre-test	Experimental	6.83	3.25	20
		Control	6.23	4.56	20
	Post-test	Experimental	4.48	3.59	20
		Control	6.32	4.51	20
Sexual Disorder	Pre-test	Experimental	5.78	3.37	20
		Control	5.69	4.54	20
	Post-test	Experimental	3.98	2.87	20
		Control	5.99	4.31	20

As can be seen, in the pre-test there is not much difference in the average scores of the control and experimental groups, while in the post-test, there is a difference between the average scores of the two groups. In the examination of the variable components, a significant difference is observed in the average post-test scores of the control group and the experimental group.

As can be seen, sexual and reproductive health education before marriage is effective on the disruption

of nurses' marital satisfaction. The comparison of mean scores shows that the disturbance in marital satisfaction has decreased significantly in the experimental group.

Table 2. Results of one-way analysis of covariance (ANCOVA) on the average post-test scores of the two groups of subjects with pre-test control

Source of changes	sum of squares	degree of freedom	mean square	F	The significant level of p	Eta squared	Statistical power
pre-test	7109.58	1	7109.58	307.55	0.001<	0.78	1.00
group	485.04	1	485.04	20.95	0.001<	0.39	0.987
error	829.00	36	22.39				

Table 3. The results of multivariate analysis of variance (MANCOVA) on the average post-test scores of the components of marital satisfaction disorder of test and control groups, with pre-test control.

Name of the test	Value	The DF of Hypothesis	The DF of Error	F	Significance Level (P)	Eta Square	Statistical Power
Efficacy test	0.463	3	33	9.09	0.001<	0.47	0.99
Wilks Lambda test	0.557	3	33	9.09	0.001<	0.47	0.99
Hotelling effect test	0.835	3	33	9.09	0.001<	0.47	0.99
Roy's Largest Root test	0.838S	3	33	9.09	0.001<	0.47	0.99

As can be seen in Table 3, by controlling for the pre-test, the significance levels of all tests indicate that there is a significant difference between the nurses in the experimental and control groups in terms of at least one of the dependent variables (components of marital satisfaction disorders in couples). Therefore, the second hypothesis of the present study is also confirmed. The effectiveness or difference is 0.47, meaning that 47 percent of the individual differences in couples' marital satisfaction post-test scores are related to the effectiveness of premarital sexual and reproductive health education. The statistical power is 0.99, meaning that if this study is repeated 100 times, the null hypothesis could be falsely confirmed only once.

As can be seen in Table 4, there is a significant difference between the nurses in the experimental and control groups in terms of communication disorders after controlling for the pre-test ($F=9.72$ and $p<0.003$). Therefore, Hypothesis 2 is confirmed. The effectiveness or difference is 0.24, meaning that 24 percent of the individual differences in the post-test scores of the relationship disorder are related to the effectiveness of premarital sexual and reproductive health education. The statistical power is 0.87, meaning that if this study is repeated 100 times, only 13 times the null hypothesis could be falsely confirmed.

Also, with the pre-test control, there is a significant difference between the nurses of the experimental and control groups in terms of conflict resolution disorder ($F=13.42$ and $p<0.001$). As a result, hypothesis 2 is confirmed. The effectiveness rate is 0.32, meaning that 32 percent of the individual differences in post-test scores of conflict resolution disorder are related to the effectiveness of premarital sexual and reproductive health education. The statistical power is 0.97, meaning that if this study is repeated 100 times, only 3 times the null hypothesis may be falsely confirmed.

With the pre-test control, a significant difference is observed between the nurses of the experimental and control groups in terms of sexual dysfunction ($= 19.32$ and $p < 0.001$). Therefore, hypothesis 2 is confirmed. The effectiveness rate is 0.38, meaning that 38 percent of the individual differences in the post-test scores of sexual dysfunction are related to the effectiveness of premarital sexual and reproductive health education. The statistical power is 0.99, meaning that if this study is repeated 100 times, the null hypothesis may be falsely confirmed only once.

Discussion

The purpose of the present study was to investigate the effect of premarital sexual and reproductive health education in a therapeutic environment on couples' marital satisfaction. The findings of the study are presented as follows:

Based on the results, premarital sexual and reproductive health education reduces marital satisfaction disorders in nursing couples. Comparison of mean scores indicates that marital satisfaction disorders in the experimental group have decreased significantly. Therefore, the first hypothesis of the study is confirmed.

By controlling for the pre-test, the significant levels of all tests indicate that there is a significant difference between the nurses in the experimental and control groups in terms of at least one of the dependent

variables (components of marital satisfaction disorders in couples). Therefore, the second hypothesis of the present study is also confirmed. So that 24 percent of the individual differences in the post-test scores of relationship disorders are related to the effectiveness of pre-marital sexual and reproductive health education. Also, 32% of individual differences in post-test scores for conflict resolution disorder are related to the effectiveness of premarital sexual and reproductive health education. 38% of individual differences in post-test scores for sexual relationship disorder are related to the effectiveness of premarital sexual and reproductive health education.

Table 4. Results of one-way analysis of covariance (MANCOVA) on the post-test mean scores of components of marital satisfaction disorders of couples in the experimental and control groups, with pre-test control.

Variable	Source of variation	Sum of squares	Degrees of freedom	Mean of squares	F	P-level of significance	Eta square	Statistical power
Communication Disorder	Pre-test	1042.02	1	1042.02	83.34	0.001<	0.72	1.00
	Group	119.13	1	119.13	9.72	0.001<	0.24	0.87
	Error	448.03	34	11.57		0.001<		
Conflict Resolution Disorder	Pre-test	363.20	1	363.20	209.87	0.001<	0.87	1.00
	Group	25.36	1	25.36	13.42	0.001<	0.32	0.97
	Error	60.66	34	1.85		0.001<		
Sexual Disorder	Pre-test	389.64	1	389.64	199.46	0.001<	0.87	1.00
	Group	38.34	1	38.34	19.32	0.001<	0.38	0.99
	Error	69.60	34	1.96				

Conclusion

The results of the present study clearly show that premarital sexual and reproductive health education can play a decisive role in improving the quality of marital relationships and reducing disruption in marital satisfaction of couples, especially among nurses. Findings indicate that couples who received this type of training in therapeutic settings experienced significantly higher levels of marital satisfaction compared to the control group. This suggests that improving sexual and reproductive awareness and communication skills before marriage can lead to a better understanding of each other's needs, increased intimacy, and reduced marital conflict (4). The significant reduction in marital satisfaction in the experimental group also shows that targeted and scientific education in the field of sexual health not only prevents future problems in married life but also contributes to the emotional and psychological stability of couples.

In addition, the reported percentages of explained variance of 24% in communication, 32% in conflict resolution, and 38% in sexual relations indicate the significant impact of these trainings on various components of marital satisfaction. These results emphasize that sexual and reproductive health education should not be considered as a subsidiary part of premarital education but should be included as an essential component in couples empowerment programs. Based on this, it can be concluded that designing and implementing structured educational programs in therapeutic and counseling environments, especially for high-stress occupational groups such as nurses, can increase the stability of marital relationships, reduce conflicts, and improve family mental health.

In order to conduct future research, it is suggested that premarital sexual and reproductive health education be compared with another intervention approach in reducing marital satisfaction disorders in couples. Among the limitations of the study, we can mention the problems of cooperation with the statistical population. Also, the limited statistical population to nurses in Tehran's medical centers makes generalization of the results cautious. Accordingly, it is suggested that a similar study be conducted in other communities to ensure generalization of the results.

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Authors Contributions:

The author conceptualized the study objectives and design.

Ethical Consideration:

The research data and literature have not been copied from any worksauthor upon reasonable request.

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