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The relationship between sexual self-concept and contraception sexual behavior in 15 to 49 years old women covered by community health centers

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Abstract:

BACKGROUND: One of the most important goals of sexual intercourse is to arouse the psychological effects of intercourse and to increase sexual self-concept, which changes following sexual behaviors such as the use of contraception methods. This study was performed to investigate the relationship between sexual self-concept and contraception sexual behavior in 15–49-year-old women covered by community health centers.

MATERIALS AND METHODS: The present descriptive correlational study was performed on 297 married women referring to Isfahan community health centers in 2020 who were selected as cluster that randomly classified. The tools included demographic information and the Snell's Multidimensional Sexual Self-Concept Questionnaire, the data of which were analyzed via SPSS version 22 software by Mann–Whitney *U* test and Pearson correlation.

RESULTS: Among a total of 297 women, 5.4% of the samples used hormonal methods and 94.6% used non-hormonal methods, which was the most common intermittent method. The results also showed that the mean score of negative sexual self-concept in women using the hormonal level method was significantly higher ($P = 0.012$). Positive and positive sexual self-concept score was significantly higher in women using non-hormonal methods ($P = 0.048$ and $P = 0.002$). Therefore, there was a significant relationship between sexual self-concept and contraception method.

CONCLUSION: Due to the relationship between contraception and sexual self-concept, it is recommended to pay attention to the aspects of sexual self-concept and contraception during reproductive health counselling sessions so that if there is a disorder, useful advice can be provided or referred, if necessary.

Keywords:

Contraception Method, self-concept, sexual behavior

Introduction

Sexual and health rights in the field of sexual issues is one of the types of human rights, according to the World Health Organization, which if realized, will provide a solid foundation for the public welfare and health of individuals, couples, families, as well as economic and social development of communities and countries. Factors and conditions such as sexually transmitted infections (STIs), unwanted pregnancies, abortions or sexual dysfunction, etc., endanger a person's welfare and rights in sexual matters.[1] One of the most important goals of sexual intercourse is to arouse the psychological effects of the relationship and to raise the self-concept.[2] One type of self-concept is sexual self-concept. Sexual self-concept is a person's perception of their own desires and tendencies. It is one of the factors affecting people's perceptions and feelings about sexual intercourse and

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knowledge of sexual aspects of themselves. It also affects the sexual performance of couples.[3] In general, sexual self-concept has three aspects: positive, negative and situational. Positive aspect subscales include sexual self-efficacy, sexual awareness, motivation to avoid high-risk sexual relationships, internal control of sexual problems, sexual self-esteem, sexual optimism, self-blame in the case of sexual problems, sexual problem management, sexual problem prevention and sexual satisfaction. Negative aspect subscales include the sexual anxiety, fear of sex, sexual depression, and monitoring of sexual issues. Situational aspect subscales include sexual desire, sexual assertiveness, sexual motivation, and individual sexual patterns.[4] On the other hand, sexual self-concept has physical and psychological aspects, that is, it is affected not only by the physical condition of a person, but also by the mental and emotional state4] The mental state can lead to changes in the quality of sexual performance and behaviors.[5] Therefore, having the right sexual knowledge and having the right attitude and self-concept toward sexual issues are the requirements of healthy sexual behavior.[6] Sexual self-concept expresses the beliefs, feelings, and perceptions of individuals in sexual intercourse based on which women regulate their sexual behaviors, feelings, and perceptions.[5] On the other hand, it is possible that the change in sexual self-concept affects future sexual behaviors such as behavior choice as well as the time of occurrence of sexual behaviors.[7] Sexual self-concept as a moderating mediator plays an essential role in sexual relations and performance of humans. For example, a positive sexual self-concept promotes physical, emotional, and mental health.[8] Women with a positive sexual self-concept have a higher motivation and excitement for sexual issues than women with a negative sexual self-concept, and experience more romantic sex[9] and do not have a conservative or pessimistic view of sex[10] On the other hand, each of the subscales of sexual self-concept can be influenced by different events and factors; for example, sexual anxiety and negative attitudes toward sex reduce asexual self-esteem increases. Increasing sexual self-esteem creates a positive assessment that enhances the ability to experience sex in a healthy way, and provides satisfaction for the individual.[11] The World Health Organization does not equate sex between spouses with sexual intercourse and believes that its purpose is not just to experience or not to experience orgasm (orgasm), but that sexual behavior is a combination of concepts, attitudes, experiences, activities, feelings and thoughts. It can be affected by the individual, early relationships, family, community and culture, environmental complexity, sexual history of the spouse, past relationships, mental health status, recent medical problems, and hormonal status.[12] Sexual self-concept as an important indicator in sexual activity and predictor of sexual behavior is influenced by various factors. That is why paying attention to these factors and characteristics of each person can improve the sexual health of each woman.[13] If the level of sexual health is low, the quality of sexual life decreases. [14] On the other hand, if a person's sexual health improves, it affects women's sexual performance and increases the chances of having good sex.[15]

Therefore, affecting factors such as attitude and self-concept in sexual matters, and sexual behaviors such as the use of contraception methods are of particular importance in women's health.[5] According to the goals of the third millennium of the World Health Organization, public access to human reproductive health is considered as the fifth millennium development goal to promote women's health, some of which can be achieved through the proper use of contraception methods.[1] The World Health Organization believes that safe and voluntary access to the family planning program is a human right that is essential for promoting gender equality and women's autonomy.[16] The World Health Organization announced in 2019 that of the 1.9 billion women of childbearing age (15–49 years old) worldwide, 1.1 billion need to use contraception methods; Of these, 842 million use contraception methods and 270 million do not want to have children or want to have a minimum age of 2 years between their children, but do not use any contraception method.[1] During a study in the United States in 2015, it was indicated that 62%–75% of women of childbearing age used some form of contraception methods including oral contraceptives, tubectomy, and vasectomy, respectively.[17] The World Health Report in 2018 stated that unwanted, unplanned and inappropriate pregnancies are the most common cause of maternal deaths in developing countries.[1] Studies show that almost 95% of unwanted pregnancies happen in women who use inappropriate contraception or have no contraception method at all.[1] According to a study done in the US in 2014, the use of contraception in women reduced two million unwanted pregnancies.[18] According to the World Health Organization, the use of contraceptives in 2017 prevented about 308 million unwanted pregnancies.[1] Barriers to the use of contraception method include cultural and religious prejudices, limited access or choice of methods, side effects, and concerns of women about the effects of the method on their health.[19] In another study, issues such as cultural barriers, misconceptions, insufficient level of sexual knowledge and poor access to health services were mentioned as barriers to the use of contraception methods.[20] On the other hand, it should be noted that a woman's ability to successfully start and use each method of contraception correctly is influenced by many different factors such as access to community health care, cultural attitudes and attitudes toward oneself (self-concept).[3]

Findings from studies show that sexual self-concept allows a person to create their own sexual feelings and experiences and to recognize behaviors during sexual interactions such as the use of contraceptive methods[16,21] In this way, they affects their own sexual experiences.[22] In the study by Jaafarpour *et al*.,[23] it was indicated that women with positive sexual self-concept have better sexual performance and behavior. In a study in 1998, Winter showed the role of sexual self-concept in the use of contraception; he stated that sexual self-concept, which is the evaluation of a person's sexual feelings and behaviors, is an important predictor of contraceptive behaviors. Thus, sexual self-concept is related to the frequency of contraceptive use in recent intercourses and the score of sexual self-concept is strongly related to the method of selective contraception.[24] In a study on the relationship between sexual confidence and sexual behavior, and the use of contraception and romantic relationships in the United States, the findings showed that not using contraceptive methodsreduced sexual confidence in women. From this perspective, women who have a positive sexual self-concept and are likely to have a greater ability to prove themselves sexually are more likely to insist on using contraceptive methods. However, there was no difference between the types of contraceptive methods.[25] There are no other studies in this field and the relationship between the aspects of sexual self-concept and sexual behaviors. For this reason, this study was conducted to investigate the relationship between the aspects of sexual self-concept and the sexual behavior of contraception.

Materials and Methods

This research is descriptive, analytical, cross-sectional, single-stage, single-group and multivariate. It was done in July–September 2017 in selected centers of Isfahan Health Community. The statistical population of the study was all married women aged 15–49 yearswho used contraceptivemethods. Inclusion criteria included Iranian married women with at least primary education or literacy who were not prohibited from using contraceptive methods and who also did not have a history of sexual and mental disorders in the study units. The multi-stage method was used to select the sample size, obtaining an allowance from the officials of the School of Nursing and Midwifery and the province health center. A list of health centers number 1 and 2 was prepared. Then the research centers were selected from each cluster through simple random sampling. The center selected from center no. 1 was Nawab and Ibn Sina Comprehensive Health Center and the selected centers from center no. 2 were the Comprehensive Health Center of the Fourteen Infallibles, and Hazrat Sajjad. In each comprehensive health center, samples were taken in a regular random method. Thus, the names of the women covered by the center were listed based on the integrated health system called SIB, and determined based on the number of patients referred to the center, the sample size, and the coefficient K or the distances number between research samples. Number 3 was selected as the coefficient k; Sampling was performed by observing this coefficient and a sample number of 297 people was finally obtained. The selected individuals were contacted by telephone; he objectives and the method of research were explained, and if satisfied, they were invited to visit the center. The objectives of the study were informed. The questionnaires were completed by the participants in a quiet and secluded environment and a code was assigned to each questionnaire. The participants were assured that their personal information would remain confidential. Also, if any of the participants had a sexual self-concept disorder, she was referred to a counselor. If any of the participants did not want to continue to participate in the research at any stage of completing the questionnaire, she would be excluded from the study. The tool used was a questionnaire on reproductive and demographic information of the samples, which was given to five faculty members of the midwifery department and psychiatric specialists to evaluate the content of this questionnaire. Its reliability was assessed by ten clients over two weeks; t obtained a score of 0.9 through a re-test. The information of the questionnaire was collected through the participants' self-report using a checklist. To assess sexual self-concept, he Multidimensional Sexual Self-Concept Questionnaire (MSSCQ) was used. The MSSCQ was standardized by Ramezani in 2013 in Iran; he correlation of this questionnaire was reported to be 0.89 using Cronbach's alpha.[26] In order to determine the reliability (reproducibility), principal component analysis was used by the method (re-test), which was estimated to be 0.8[27] In this questionnaire, three aspects of positive, negative and situational sexual self-concept were measured as scores in 78 questions. Each of them were scored through the algebraic sum of scores obtained from the questions related to that aspect. Data were analyzed using Mann–Whitney *U* test and Pearson correlation via Statistical Package for the Social Sciences (SPSS) version 22 software.

Results

According to the results, the mean age of the studied women was 5.56 ± 32.80 years, the mean duration of marriage was 5–10 years, the mean number of pregnancies was 1.89, the mean age of the last child was 4.37 ± 4.50 years and the mean body mass index (BMI) was 3.68 ± 24.74 kg/m^2. 15.8% of the samples had an experience of unwanted pregnancy and had high school and higher education. Calculation of Pearson correlation coefficient showed a direct and significant relationship between women's age and

positive sexual self-concept (P = 0.030, r = 0.126) and negative sexual self-concept (P = 0.044, r = 0.117). It also showed a significant inverse relationship between age and situational self-concept (P = 0.007, r 0.155). Increasing the age of women, the score of positive and negative self-conceptincreased and the score of situational self-conceptdecreased. Calculation of Pearson correlation coefficient showed a significant inverse relationship between female marriage duration and negative sexual self-concept. With an ncrease inthe duration of married life, more sexual experiences were gained, and following the promotion of sexual self-concept, the role of negative aspects of sexual self-concept such as sexual anxiety decreased, more comfort was achieved during sex, and therefore the negative self-concept scores decreased.

Table 1 shows the frequency distribution of contraceptive methods. According to the table, 5.4% of the participants used hormonal methods and 94.6% used non-hormonal methods. 5.4% of the participants used oral contraceptives, 8.1% used the IUD, 46.5% used the intermittent method, 33.0% used a condom and 7.1% used a tubectomy or vasectomy.

Table 2 shows the mean sexual self-concept in users of contraceptive methods. The mean score of positive sexual self-concept in the range of 51–176 was 130.83 and the mean score of negative sexual self-concept in the range of 0–56 was 13.10. The mean score of situational sexual self-concept among women using contraceptive methods in the range of 10–71 was 41.47.

Table 3 shows the comparison of the mean score of positive sexual self-concept in users of hormonal and non-hormonal contraception methods. Comparing the positive sexual self-concept score, the results of the Mann–Whitney U test showed a significant difference between two groups of women using hormonal and non-hormonal contraceptivemethods (P = 0.048). Positive sexual self-concept score was significantly higher among women using non-hormonal contraceptivemethods.

Table 1: Frequency distribution of contraception methods

Variable	*n*	Percentage
Current contraceptive methods		
Pill	16	4.5
IUD	24	1.8
Intermittent	138	5.46
Condom	98	33
Tubectomy/Vasectomy	21	1.7
Type of contraceptive method		
Hormonal	16	4.5
Non-hormonal	281	6.94
Total	297	100

Table 4 shows the comparison of the mean score of negative sexual and situational self-concept in users of hormonal and non-hormonal contraceptive methods. Comparing the negative sexual self-concept score, the results of the Mann–Whitney U test showed a significant difference between two groups of women using hormonal and non-hormonal contraceptivemethods (P = 0.012). The mean score of negative sexual self-concept was significantly higher in women using hormonal methods. Comparing the scores of situational sexual self-concept, the results of the Mann–Whitney U test showed a significant difference between two groups of women using hormonal and non-hormonal contraceptive methods (P = 0.002). The score of situational sexual self-concept was significantly higher in women using non-hormonal methods. Therefore, the results showed that there was a significant relationship between positive, negative and situational sexual self-concept and contraceptive methods.

Discussion

The results of the study show that the most commonly used contraceptive methods were non-hormonal ones, of which the intermittent method and then the condom method had a higher percentage and vasectomy had a lower percentage. The contraceptive pill was the least used among the current contraceptive methods.

In a study by Shahvary *et al*.,[28] oral contraceptive pills and intermittent method were the most common contraceptive methods and injection ampules and vasectomy were the least used methods. In a study by Rahmani *et al*.,[29] the most used methods were condom and intermittent method, and the least used methods were vasectomy and tubectomy. In a study done in Isfahan entitled "Sexual Function of Women in The Use of Various Contraception Methods", the most common contraceptive methods used by women were intermittent methods, hormonal pills and condoms, of which intermittent method had the highest frequency and vasectomy had the lowest frequency.[30] Perhaps the differences in results of the present study with two mentioned studies can be attributed to the differences of sample size, cultural differences and differences in sexual self-concept of individuals. It seems that the intermittent method of contraception, as a commonly used method, has the highest frequency due to its availability and ineffectiveness on the body's hormonal system. On the other hand, as the tubectomy and vasectomy methods are permanent and not compatible with our culture, and because of the belief that the use of these methods causes incapacity of couples in sexual intercourse, they have a lower percentage among non-hormonal methods. Contraceptive pills are the least common hormonal contraceptive methods due to side effects such as

Table 2: Mean score of positive, negative and situational sexual self-concept in users of contraception methods

Variable	Minimum	Maximum	Mean	Standard deviation
Positive sexual self-concept				
Sexual self-efficacy	3.00	16.00	13.26	2.83
Sexual awareness	5.00	20.00	15.31	3.38
Motivation to avoid risky sex	5.00	20.00	18.11	2.82
Sexual optimism	4.00	16.00	12.55	2.97
Self-blame in sexual problems	0.00	16.00	7.15	4.11
Sexual issue management	0.00	12.00	8.87	2.66
Sexual self-esteem	1.00	16.00	11.17	3.57
Sexual satisfaction	0.00	20.00	14.11	4.92
Prevention of sexual problems	3.00	20.00	16.82	3.50
Internal control of sexual issues	0.00	20.00	13.47	4.09
Positive sexual self-concept	51.00	176.00	103.88	23.67
Negative sexual self-concept				
Sexual anxiety	0.00	20.00	3.55	4.04
Sexual monitoring	0.00	12.00	3.49	2.98
Fear of sex	0.00	20.00	3.33	3.85
Sexual depression	0.00	12.00	2.73	3.12
Negative sexual self-concept	0.00	56.00	13.10	62.10
Situational sexual self-concept				
Sexual desire	0.00	19.00	5.09	4.03
Sexual assertiveness	0.00	16.00	8.65	4.91
Sexual motivation	0.00	16.00	10.34	3.92
Individual sexual patterns	5.00	20.00	17.40	3.17
Situational sexual self-concept	10.00	71.00	41.47	11.30

Table 3: Comparison of the mean score of positive sexual self-concept in users of hormonal and non-hormonal contraceptive methods

Variable	Hormonal		Non-Hormonal		*U* Statistics	*P*
	Mean	Standard deviation	Mean	Standard deviation		
Sexual self-efficacy	13.06	2.74	13.27	2.84	2074.50	0.959
Sexual awareness	14.25	3.26	15.37	3.39	1841.00	0.221
Motivation to avoid risky sex	16.69	3.70	18.20	2.75	1690.50	0.067
Sexual optimism	11.13	2.78	12.63	2.97	1559.50	0.037
Self-blame in sexual problems	7.56	3.31	7.13	4.16	2061.00	0.575
Sexual issue management	7.69	3.14	8.93	2.62	1744.00	0.127
Sexual self-esteem	9.25	3.40	11.28	3.55	1520.50	0.029
Sexual satisfaction	11.13	5.68	14.28	4.83	1478.50	0.021
Prevention of sexual problems	15.50	4.47	16.90	3.43	1854.50	0.226
Internal control of sexual issues	12.25	5.87	13.54	3.97	2070.00	0.593
Positive sexual self-concept	118.50	26.42	131.53	23.37	1588.50	0.048

darkening of the skin and increased cervical secretions. It should also be noted that appropriate counseling should be provided in reproductive health counseling sessions. Given the importance of reproductive health counseling and its importance, it is recommended to train staff to promote awareness and to help couples gain access to reproductive health services with regard to factors affecting it including the choice of contraceptive methods.[31]

According to Table 2, the mean of positive sexual self-concept was 130.83, the mean score of negative sexual self-concept was 13.10 and the mean score of situational sexual self-concept was 41.47. In 1998, Winter studied the role of sexual self-concept in the use of contraception and stated that sexual self-concept, which is the evaluation of a person's sexual feelings and behaviors, is an important predictor of contraceptive behaviors. Thus, sexual self-concept is related to the frequency of contraception methods use in recent intercourses and the score of sexual self-concept is strongly related to the selective contraception method.[24]

According to the results of Table 3, women using non-hormonal contraceptives have a higher score in three aspects of positive sexual self-concept, namely sexual optimism, sexual self-esteem, and sexual satisfaction. According to a study at the 9th Congress

Table 4: Comparison of the mean score of negative and situational sexual self-concept in users of hormonal and non-hormonal contraceptive methods

Variable	Hormonal		Non-Hormonal		*U* Statistics	*P*
	Mean	Standard deviation	Mean	Standard deviation		
Negative sexual self-concept						
Sexual anxiety	6.38	5.66	3.38	3.38	1409.00	0.011
Sexual monitoring	4.00	2.71	3.46	3.00	1939.50	0.350
Fear of sex	5.13	4.35	3.32	3.80	1585.50	0.039
Sexual depression	4	3.52	2.64	3.08	1556.50	0.032
Negative sexual self-concept	19.88	12.21	12.71	10.42	1412.50	0.012
Situational sexual self-concept						
Sexual desire	4.87	4.54	5.14	3.95	1826.00	0.0204
Sexual assertiveness	6.98	4.24	8.91	4.96	1463.50	0.018
Sexual motivation	8.78	4.35	10.58	3.81	1300.00	0.004
Individual sexual patterns	16.93	3.45	17.47	3.12	1433.00	0.011
Situational sexual self-concept	37.45	10.74	42.10	11.28	1196.00	0.002

of Reproductive and Infertility Health in 2016, it was stated that people who choose the contraceptive method not to be infected with sexually transmitted diseases had the highest score in terms of positive sexual self-concept and, as a result, had positive feelings about their sex. Therefore, it is predicted that people achieve healthy sex by improving their sexual self-concept.[32] Since women using the non-hormonal contraception method can access this method easily and at the same obtain the consent of their husband during sex, have a positive assessment of their capacity for healthy sexual behaviors and satisfying sexual experiences, and therefore expect positive and pleasurable sexual aspects in the future. According to Table 4, women using the hormonal contraception method had higher negative sexual self-concept scores and the sexual anxiety, fear of sexual intercourse and sexual depression, the mean score of women using non-hormonal methods was significantly lower than women using hormonal methods. It seems that there is a negative background in the sexual self-concept in women with sexual anxiety or women who are sexually depressed and carry a disturbing and sad sexual experience, as well as women who are afraid of sex. To get rid of this kind of self-concept, they use hormonal methods to prove themselves as a hot woman to their husbands. On the other hand, in our culture, the choice and use of contraception method is more influenced by the husband, and it is the man who chooses to use hormonal or non-hormonal methods. Therefore, women do not play an effective role in this regard. According to the findings, there was no significant difference between women using hormonal and non-hormonal contraceptive methods in terms of sexual monitoring aspect. Snell concluded that negative aspects of sexual self-concept, such as depression and sexual anxiety, are associated with contraceptives that are less effective or less valid.[33] According to Table 4, the present results showed that the score of situational sexual self-concept was significantly higher in women using non-hormonal methods. In terms of sexual assertiveness, sexual motivation and individual sexual patterns, the mean score of women using non-hormonal methods was significantly higher than women using hormonal methods. In the present study, the most commonly used contraceptive method is the intermittent method, and it seems that this method is acceptable between couples who act together in decision-making due to the availability and low side-effects. Therefore, they gain higher score in three aspects: ssertiveness, motivation and individual sexual patterns. This means that women have enough sexual motivation for a relationship without concern and want to be sexually active, think freely about sexual issues, and share their desires with their husbands.

Limitations and recommendations

The most common method used by participants in the study was the intermittent method, which did not allow the general expansion of the results. Therefore, future research should be designed to expand the methods used by increasing the size of the sample.

Having a sexual partner is one of the effective criteria of sexual self-concept, but it was avoided due to ethics and religious norms, and it was hypothesized that the study units have a sexual partner. On the other hand, people's shame and modesty in answering sexual questions could interfere with the honest answer of clients, which was solved by explaining to the research units about the confidentiality of the information. It seems that these last two cases, due to the cultural context and prejudice in our country, will also limit future studies. The strength of this research was the standard tool with high validity and reliability, and the disadvantage of this study was the number of samples.

Conclusion

In this study, there was a correlation between some aspects of sexual self-concept and contraception methods. Thus, the mean score of negative sexual self-concept was significantly higher in women using hormonal methods, while the score of situational and positive sexual self-concept was significantly higher in women using non-hormonal methods. Regarding the relationship between contraception and sexual self-concept, it is recommended to consider the aspects of sexual self-concept and contraception in reproductive health counseling sessions to provide useful recommendations.

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Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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Conflicts of interest

Nil.

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