The Relationship between Sexual Self-Efficacy and Sexual Function in Married Women

Mahboubeh Kafaei Atrian (PhD)¹, Zahra Mohebbi Dehnavi (MSc)², Zahra Kamali (MSc)³

¹ Assistant Professor, Trauma Nursing Research Center, Kashan University of Medical Sciences, Kashan, Iran
² Lecturer, Department of Midwifery, Faculty of Nursing and Midwifery, Isfahan University of Medical Sciences, Isfahan, Iran
³ MSc Student in Midwifery, Faculty of Nursing and Midwifery, Mashhad University of Medical Sciences, Mashhad, Iran

ABSTRACT

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Background & aim: Sexual self-efficacy refers to the belief of each individual about his/her ability to be sexually active, his/her desirability for sexual partner, and assessment of the ability and self-efficacy in sexual behavior. Sexual relationship is one of the key pillars of a successful family; accordingly, functionality in this domain largely affects marital satisfaction. The aim of this study was to determine the relationship between sexual self-efficacy and sexual function among married women.

Methods: This descriptive-correlational study was conducted on 201 married women referring to the clinic of Lenjan Hospital, Isfahan in 2017. The study population was selected through convenience sampling. The women scoring below 40 in the Beck Depression Inventory were entered into the study and filled out the questionnaires of sexual self-efficacy and sexual function. The data were analyzed in SPSS software (version 22) using descriptive statistics and Spearman’s rank correlation coefficient.

Results: The mean age of participants was 32±6.70 years, and their mean menarche age was 12±36.1 years. The mean scores of sexual function and sexual self-efficacy were obtained as 26.17±1.44, 21.54±2.70, respectively. The results revealed a positive correlation between sexual self-efficacy and sexual function (r=0.205, P=0.001). Also, sexual self-efficacy showed a significant relationship with some subscales of sexual function, including libido, orgasm, lubrication, and sexual arousal (P≤0.05).

Conclusion: Sexual self-efficacy had a positive relationship with some of the subscales of sexual function. Therefore, sexual function in women can be strengthened by the enhancement of their sexual self-efficacy.

Introduction

Recognition and investigation of human sexual tendencies and behaviors are among the most important public health issues, especially mental health (1). One of the biggest parameters affecting personal and social life is sexuality, which is regarded as an important pillar of a successful family (2). Attitudes, fears, or memories of individuals are the underlying causes of sexual problems. The individuals with sexual problems usually have low self-esteem, anxiety, depression, and unpleasant experiences (3).

Sexual function is part of life and human behavior and denotes sexual health (4). Sexual function in women is affected by physical, psychological, medical, interpersonal, and social factors (5). In a study, the overall prevalence of sexual dysfunction among the Iranian women was reported as 43.9% based on inverse random variance using a randomized model (4). Sexual dysfunction may be associated with
personality, as well as sociocultural and family factors (6).

There is a consensus among the experts working on sexual health treatment that the examination of sexual history, sexuality development and maturity, sexual self-efficacy, and extramarital pleasure, have a crucial role in the assessment of sexual problem and determination of its nature. The physiological, anatomical, psychological, and sociocultural factors affect the sexual tendency, performance, and behavior of human. Developmental experiences from childhood to adulthood, interactions with others, and personality formation stages play an important role in the integration of sexual identity and sexual orientation (6).

Sexual function is one of the factors that greatly influences marital satisfaction. In a healthy marriage, the existence of a desirable sexual relationship that can provide satisfaction for both parties has a crucial role in the success and sustainability of the family (7). Many sexual issues, such as the lack of sexuality, sexual dysfunction, early ejaculation, are kept secret and not expressed due to fear, anxiety, and embarrassment or feeling inferior and sinful. This may be associated with symptoms and other complications, such as physical illness, depression, dissatisfaction with marital life, severe family disputes, and divorce.

According to the literature, the timely diagnosis of sexual problems would facilitate the adoption of effective preventive and therapeutic approaches. Therefore, the education of sexual relationships to couples and sensitivity of the healthcare team to the recognition of sexual dysfunctions and their timely diagnosis can be the basis for the treatment and prevention of the associated complications (8).

Healthy sexual relation is one of the most important causes of happiness in marital life. If a couple fail to achieve full satisfaction in sexual relationships, their psychological balance will be disturbed (9). Sexual dysfunction is associated with several factors and may cause such problems as anger and violence. Sexual dysfunction also causes separation, divorce, and depression (4) because of creating tension. This state can be caused by mental and psychological problems, and also can itself contribute to these problems (9).

Self-efficacy plays an important role in facilitating psychological adjustment, dealing with psychological problems, improving physical health, and changing behavior strategies (10). Accordingly, sexual self-efficacy is essential for having a proper and desirable sexual function (11-12). Sexual function is also associated with a higher understanding of sexual self-efficacy, which leads to a better social and mental performance (13).

Sexual self-efficacy is a multidimensional structure, including the belief of each individual about his/her ability to be sexually efficient, favorability for the sexual partner, and assessment of the ability and self-efficacy in sexual behavior (10-16). The people's self-efficacy affects their judgment and beliefs in their ability to mobilize motives, cognitive resources, and control over a certain incident. This belief also influences the manner in which an individual faces barriers and challenges (17).

It is one of the most important components of a successful relationship, and is associated with health status and the integrity of cognition and performance (10). The theory of self-efficacy refers to one's belief in the ability to deal with special situations since it affects human cognitive, behavioral, and emotional patterns at different levels of personal experience (12). The judgment about self-efficacy affects one's thinking about the ability or inability to perform his or her work (18).

In a study performed by Alireza et al., entitled "Comparison of sexual self-efficacy and sexual function in fertile and infertile women referring to public health centers in Mashhad, in 2013", showed that infertility is associated with undesirable sexual self-efficacy (19). In another study conducted by Akbari, sexual function and its components showed a significant correlation with marital adjustment among women (20). However, Lemieux et al. (2013) observed no significant correlation between partner's sexual self-efficacy and female's sexual function and satisfaction (21).

These findings confirm the role of sexual self-efficacy as a main and hidden variable in sexual function. Investigation of sexual function and self-efficacy contributes to the promotion of health status in the society. Despite the
The importance of successful sexual functioning in the continuation of marital life, this issue has been mostly neglected in health education programs. Considering the role of counseling in raising the awareness and health of women and families, the results of this study can be used to plan educational and promotional interventions to strengthen family relationships.

To the best of our knowledge, there is no study directly examining sexual self-efficacy and sexual function in Iran. With this background in mind, this study was conducted to determine the correlation between sexual self-efficacy and sexual function in the women referring to the clinic of Lenjan Hospital in Isfahan, Iran, in 2017.

Materials and Methods

The present descriptive correlational study was conducted on women of reproductive age (i.e., 15-59 years) referring to the clinic of Lenjan Hospital in Isfahan for receiving routine care during October-December 2017. The study population was selected using convenience sampling method. The inclusion criteria were: 1) married status, 2) ability to understand and speak Persian, 3) a minimum literacy level, and 4) no physical or mental health problems (identified by obtaining a score of below 40 in the Beck Depression Inventory). On the other hand, the exclusion criteria were: 1) menopausal state, 2) addiction to drugs or alcohol, 3) physical illness (e.g., blood pressure, diabetes, epilepsy, and cardiovascular disease), 4) infertility, and 5) use of drugs affecting sexual function.

Based on a study performed by Vaziri et al. (24), the sample size was calculated as 200 cases with a confidence level of 1.96 and a precision of 1.5 using the following formula considering 25% probability of sample loss:

$$n = \left(\frac{Z_{\alpha/2} + Z_{1-\beta}}{E}\right)^2$$

The instrument used in the current study was a questionnaire set up in three sections. The first part consisted of 13 demographic and midwifery-related questions (i.e., demographic characteristics, pregnancy, delivery, income level, and socioeconomic status), the second part of the questionnaire was related to sexual self-efficacy, and the third part was pertained to female sexual function.

Sexual self-efficacy questionnaire was developed by Vaziri et al. (24) based on the general self-efficacy questionnaire designed by Schwartz. This instrument consists of 10 items rated on a four-point Likert scale (ranging from 0 to 3). The minimum and maximum scores of the questionnaire are 0 and 30, respectively. In this regard, the score ranges of 0-10, 11-20, and 21-30 are indicative of low, moderate, and high levels of self-efficacy, respectively (10).

The reliability of this questionnaire was obtained by using Cronbach’s alpha (r=0.86), Spearman-Brown multiplication (r=0.811), and Gutman’s method (r=0.811). Furthermore, the validity of this instrument has been confirmed in Iran using the content validity method (10). In the present study, the reliability of this questionnaire was confirmed by using the test-retest method on 20 participants with a one-week interval (r=0.82).

In addition, female sexual function index developed by Rosen et al. (2000) was used to measure the sexual function of women over the past 4 weeks. This scale was validated in a group of women with impaired sexual arousal. The questionnaire entails 19 items in 6 subscales, including libido (items 1-2), sexual arousal (items 3-6), lubrication (items 7-10), orgasm (items 11-13), satisfaction (items 14-16), and pain (items 17-19). The validity and reliability of this questionnaire in Iran have been confirmed by Pakpour et al. and Mohammadi et al. (19, 22).

This questionnaire is rated on a six-point Likert scale (ranging from 0 to 5) for items 3-14, and 17-19. Furthermore, items 1, 2, 15, and 16 are rated on a range of 1-5. The total score is obtained by summing up the individual scores of each subscale and multiplying it in the factor specified for each subscale (i.e., libido=0.6, sexual arousal and lubrication=0.3, orgasm, satisfaction, and pain=0.4). This instrument has a score range of 2-36. A score of less than 65% (<3.9) per subscale is indicative of a performance impairment in that subscale. In this regard, a higher score signifies higher sexual function (22). In the present study, the reliability of this questionnaire was confirmed (79%) by using the test-retest method on 20 participants within one-week interval.
The Beck Depression Inventory contains 21 sentences, some of which include four or five sections, which are scored on a five-point Likert scale ranging from 0 to 4. In this inventory, the score ranges of 0-9, 10-14, 15-20, 21-30, 31-40, and 41-63 represent no, borderline, mild, moderate, severe, and very severe depression, respectively. Individuals with a depression score of under 40 were entered into the study. The validity and reliability of this questionnaire have been confirmed previously (23).

After obtaining the research approval from the Research Committee of Kashan University of Medical Sciences, Kashan, Iran, the researcher referred to Lenjan Hospital and invited all interested people to participate in the study. Then, in the presence of the respondents, the research objectives were explained. After obtaining written informed consent from all eligible subjects, the Beck Depression Inventory was filled out by all participants. Individuals who received Beck Depression Inventory score of < 40 were included in the study, and then asked to complete the three sections of the questionnaire (i.e., demographic and midwifery-related part, sexual function, and sexual self-efficacy).

The participants were assured that their information would remain confidential and that they can be informed about the research results. At the beginning of the study, 201 people were enrolled in the study. All subjects completed the research questionnaire, and there was no sample loss.

**Statistical analysis**

The data were analyzed in SPSS software (version 22) using descriptive statistics and Spearman’s rank order correlation coefficient (according to the normalization of the data based on the Kolmogorov-Smirnov test at a significance level of <0.001 for both questionnaires). P-value less than 0.05 was considered statistically significant.

**Results**

According to the results, the mean age of the participants was 32±6.70 years, and the mean menarche age was 12±1.36 years. Most of the participants (n=151, 75.1%) were housewives and had diploma and post-diploma education (n=134, 66.6%). The subjects had the mean gravida of 2±1.30, and their mean number of live children was 2±1.5. The mean last delivery time was 4±2.08 years, and the mean last breastfeeding period was 3±1.5 years. Table 1 tabulates some of the demographic characteristics of the participants.

Based on the results, the mean scores of sexual function and self-efficacy were 26.17±1.44 and 21.54±2.70, respectively. Sexual function had the minimum and maximum scores of 24 and 28, respectively. Furthermore, the minimum and maximum sexual self-efficacy scores were obtained as 29 and 14, respectively (Table 2).

The results of the Spearman’s rank correlation coefficient showed a positive correlation between sexual self-efficacy and sexual function (r=0.242, P=0.001). Furthermore, the results of the examination of sexual self-efficacy subscales with sexual self-efficacy showed that libido, lubrication, sexual arousal, and orgasm had a significant relationship with sexual self-efficacy (P≤0.05) (Table 3).

**Table 1. Frequency of demographic characteristics of research participants**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Occupation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Housewife</td>
<td>151</td>
<td>75.1</td>
</tr>
<tr>
<td>Manual worker</td>
<td>30</td>
<td>14.9</td>
</tr>
<tr>
<td>Employee</td>
<td>20</td>
<td>9.09</td>
</tr>
<tr>
<td>Total</td>
<td>201</td>
<td>100</td>
</tr>
<tr>
<td>Education level</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Under diploma</td>
<td>110</td>
<td>54.7</td>
</tr>
<tr>
<td>Diploma</td>
<td>24</td>
<td>11.9</td>
</tr>
<tr>
<td>Applied and Bachelor</td>
<td>44</td>
<td>21.9</td>
</tr>
<tr>
<td>Master and higher</td>
<td>23</td>
<td>11.4</td>
</tr>
<tr>
<td>Total</td>
<td>201</td>
<td>100</td>
</tr>
</tbody>
</table>

**Table 2. Descriptive statistics of sexual self-efficacy, sexual function, and subscales of sexual function**

<table>
<thead>
<tr>
<th>Subscales</th>
<th>Indices</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sexual function</td>
<td>Mean±SD</td>
</tr>
<tr>
<td></td>
<td>1.44±26.17</td>
</tr>
</tbody>
</table>
**Table 3.** Correlation of sexual self-efficacy with sexual function and its components in married women referring to the clinic of Lenjan Hospital in Isfahan, Iran, in 2017

<table>
<thead>
<tr>
<th>Sexual function</th>
<th>P-value</th>
<th>Sexual self-efficacy</th>
<th>r</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total score of sexual function</td>
<td>0.001</td>
<td>0.242</td>
<td></td>
</tr>
<tr>
<td>Libido</td>
<td>0.001</td>
<td>0.242</td>
<td></td>
</tr>
<tr>
<td>Sexual arousal</td>
<td>0.041</td>
<td>0.058</td>
<td></td>
</tr>
<tr>
<td>Lubrication</td>
<td>0.018</td>
<td>0.167</td>
<td></td>
</tr>
<tr>
<td>Orgasm</td>
<td>0.001</td>
<td>0.260</td>
<td></td>
</tr>
<tr>
<td>Sexual satisfaction</td>
<td>0.13</td>
<td>0.107</td>
<td></td>
</tr>
<tr>
<td>Pain</td>
<td>0.38</td>
<td>0.0161</td>
<td></td>
</tr>
</tbody>
</table>

**Discussion**

In the current study, the mean sexual function score of the women was 26.17±1.44 (range: 24-28). In a study performed by Ali Akbari Dehkordi et al. (2010) investigating the relationship between sexual function and marital adjustment in women referring to Tehran Psychiatric Institute, Iran, the mean sexual function was reported as 20.25±5.5 with a range of 17.6-35.2 (20). Rosen et al. (2000) investigating normal women and women with arousal problems reported sexual self-efficacy mean scores of 30.5±5.29 and 19.2±6.33, respectively (24). The value obtained in this study was higher than that reported by Ali Akbari Dehkordi, but lower than that estimated for women without sexual dysfunction by Rosen et al. It should be noted that the results obtained by Ali Akbari Dehkordi should be cautiously generalized with those of the present study given the difference in study population.

In terms of sexual function subscales, libido and sexual arousal obtained the lowest and highest mean scores, respectively. In the study by Ali Akbari Dehkordi et al. (2010), the lowest mean was related to libido and orgasm, whereas the highest mean pertained to sexual arousal and satisfaction (20). In addition, in the study conducted by Rosen et al., regarding the normal group, lubrication and sexual arousal had the highest mean score, and satisfaction obtained the lowest mean score. Furthermore, in the group with sexual dysfunction, the lowest mean was related to arousal, libido, and orgasm, and the highest mean was assigned to lubrication (24). These discrepancies can be due to cultural differences and differences in study population.

Furthermore, the results showed a positive relationship between sexual self-efficacy and sexual function. In line with our results, in a study carried out by Reissling et al. (2005), examining the sexual compatibility, gender role, sexual self-education, sexual attitude, and body attitude among 84 women aged 18-29 years, showed that according to the regression test there is a linear relationship between sexual self-efficacy and sexual function. They also reported that the enhancement of sexual self-efficacy can resolve the underlying sexual problems of women. In this regard, as sexual self-efficacy increases, sexual function also improves (25).

Rostosky et al. (2008) reported that self-confidence in sexual relationships is predictive of sexual self-efficacy. Therefore, they underscored the necessity of the enhancement of sexual self-efficacy and sexual self-confidence (26).

Powwattana and Ramasoota (2008) investigated the predictive difference between 262 sexually active teenagers and 319 sexually inactive people in Bangkok, Thailand, as a crowded metropolis. They reported a significant relationship between sexual self-efficacy and improved sexual function. In this respect, the enhancement of self-efficacy in dealing with sexual issues was accompanied with the...
improvement of ability to resolve sexual problems in individuals.

Furthermore, they suggested to establish a relationship between sexual self-efficacy and cognitive strategies to create a program for sexual activity. In addition, they recommended to examine the consequences of behavioral changes in alcohol users and power among sexually inactive individuals (27). The mentioned study was conducted on only sexually active individuals, and none of the participants were alcoholic or drug abusers. However, some of the results obtained by Powwattana and Ramasoota are consistent with our findings.

According to Rowland (2015), the positive dimensions of sexual self-awareness, including sexual self-esteem, sexual satisfaction, and sexual self-efficacy, have a strong correlation with sexual function (28). In a study performed by Hensel et al. (2011), sexual self-efficacy and sexual function were reported to mutually affect each other. Moreover, in the mentioned study, positive sexual self-concept was indicated to play an important role in improving sexual behavior (29).

However, in a study carried out by Ziaee et al. (2017), there was no significant positive correlation between sexual self-efficacy and sexual function (30). Ziaee et al. investigated 79 married women with the mean age of 75.5±31.94 years and used only four questions to assess sexual self-efficacy among the participants. However, the present study was conducted on 201 married women with the mean age of 32±6.70 years using 10 sexual self-efficacy questions. The discrepancy between our results and those of Ziaee et al. could be due to the difference in sample size and type of questionnaire.

In a study performed by Lemieux et al. (2013), no relationship was observed between sexual partners’ self-efficacy and females’ sexual self-efficacy and satisfaction (21). The study by Lemieux et al. was performed on 179 women suffering from dyspareunia with the mean age of 30±10 years. However, in the present study, the women had no sexual disorders.

Alireza’i et al. (2013) comparing 170 fertile and 85 infertile women referring to the public health centers of Mashhad, Iran, in terms of sexual self-efficacy and sexual function showed that fertile women had significantly higher levels of sexual self-efficacy and sexual function, compared to the infertile women (19). The differences between our findings and those of other studies can be ascribed to the difference in the studied population, society, and culture. Sex education is different depending on the type of culture and individual’s self-efficacy and sexual function.

Nicholson showed that knowledge about sexuality and orgasm in women is very diverse and sometimes contradictory both in terms of physiological foundations and people’s beliefs. They also reported that many women do not have enough certainty about the experience of orgasm. Sensation of the penis inside the vagina and the penetration can cause pleasurable sexual, orgasmic, and satisfactory feelings in women; however, it is not the only cause of an orgasm experience (32). The acquisition of conflict resolution skills in all spheres of marriage can help improve sexual satisfaction (33).

According to the World Health Organization definition, sexual function is a major part of women’s sexual health. Accordingly, the promotion, enhancement, and maintenance of sexual function are among the issues that should be taken into account in the health centers providing sexual health services (19).

It is recommended to perform further studies in different societies using the same questionnaire. Future studies are also suggested to examine the impact of educational and counseling interventions on sexual self-efficacy and its relationship with sexual function. This study was carried out only in a specific area with a similar culture, and it is recommended that other studies be conducted considering this point as one of the factors affecting sexual function and sexual self-efficacy. It seems that the implementation of a study on a larger sample size would provide more accurate information.

The importance of this research lies in the application of its findings in promoting the health of the family and society. In addition, the results of this research can be used in the development and execution of awareness promotion programs for couples. The findings of this study can also help organizations and health
centers to achieve their goals toward the improvement of health status.

Conclusion
As the findings of this study showed, sexual self-efficacy had a significant positive relationship with sexual function and some of its subscales. Therefore, women’s sexual function can be enhanced by increasing their sexual self-efficacy.

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Conflicts of interest
There are no conflicts of interest.

References