Advances in Nursing and Midwifery Original Article
Fall 2019, Volume 28, Issue 3 (15-21)

Effective Factors on Sexual Quality of Life in Iranian Women: A Path Model

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DOI: 10.29252/anm-280303

Submitted: 21-05-2018
Accepted: 03-06-2019
Online-Published: 20-10-2019

Keywords:
Sex Offenses
Stress
Women
Iran

Ozgoli1G, Sheikhan Z, Zahiroddin A, Khodakarami N, Nasiri M, et al. Effective Factors on Sexual Quality of Life in Iranian Women: A Path Model. Adv Nurs Midwifery. 2019;28(3):15-21.

Abstract

Introduction: Sexual affairs are one of the physiological needs affecting human health. Sexual function disorders can reduce individual's capabilities and creativities. Sexual relations are in the center of women's quality of life. This study aimed to investigate the correlation of sexual violence, perceived stress , demographic characteristic of women and high risk behavior spouse with womens' Sexual quality of life by using Path model in Iranian women who referred to health centers affiliated to Shahid Beheshti University of Medical Sciences Tehran, Iran in 2015.

Methods: This was a cross-sectional study conducted on 800 women who were selected through multistage sampling method. Data were collected through distinct questionnaires demographic characteristics, sexual quality life of female (SQOL-F), sexual violence, perceived stress and high risk behavior spouse that completed by interview. Descriptive statistics, Pearson's test were performed by SPSS V.16 and LISREL8.80 used for analysis of data.

Results: The results revealed that among direct pathways, sexual violence (β = -0.40) was the most effective predictor of sexual quality of life–female. The age (β=-0.03) had an inverse association with Sexual quality of life through direct effect of sexual violence (β=0.33). Moreover, education (β=0.03) had a direct association with Sexual quality of life through inverse association of sexual violence (β=-0.10). Perceived stress (β=-0.24) and high risk behavior spouse (β=-0.30) indirectly, affects on Sexual quality of life.

Conclusions: Many Factors affect on quality of life women but it needs further studies in this context.

INTRODUCTION

Human have always wished to improve their quality of life, which means living a happy life. The quality of life depends on many factors. These include physical and mental health, environmental, cultural, socio - Economical status, gender, age, disease and sexuality [1]. One aspect of quality life women's is sexuality that

is defined as adaptation, satisfaction, happiness, integrity, and commitment in sexual relationships [2]. Sexual quality of life is one of the key issues in the field of sexual and reproductive health [3], totally subjective and based on individual's perception of one's sexual affairs [4]. The loss of or decrease in sexual satisfaction can lead to separation and divorce [5]. The Sexual quality of life is a measure for marital success and functioning that predicts the continuity and stability of the marriage and is one of the main issues involved in sexual and reproductive health [6]. Marital conflicts are common prerequisites to violence. This phenomenon leads to nearly two million injuries and 1300 deaths per year in the USA. A study by WHO in ten countries showed that 15% to 71% of married women are subjected to physical or sexual violence or both, which results in physical and psychological harm [7]. Studies reported 16% to 36% of newly married men and 24% to 44% of newly married women are subjected to physical aggression [8, 9], and more than 90% of newly married couples were reported psychological aggression in the past year [10]. The prevalence of sexual violence is more than 50% [11]. According to some results of researchers, forcing women to have sex, reduces their marital satisfaction [12], but others have not found such a relationship in their studies [13]. Perhaps, one of the reasons for this is men's greater libido compared to women's [14]. Sexual violence has been a major public health problem as well as a serious human rights abuse [15]. Many papers have documented the connection between sexual violence and reproductive and sexual health risks, For example, transmission of HIV and other sexually transmitted infections (STIs), unwanted pregnancy, vaginal bleeding or infection, fibroids, decreased sexual desire, genital irritation, pain during intercourse, chronic pelvic pain, and urinary tract infections [16]. Sexual violence can lead to stress and psychological changes indirectly [17]. In fact, aggressive response of spouses results from negative events that create chronic stress in them [17]. In contrast, aggression causing chronic stress in women is strongly associated with marital satisfaction [18]. Marital conflicts increase depression symptoms and personal dysfunction [19, 20]. Experiences of depressed people indicate stressful interactions with their spouses that can be caused by depression [21]. Chronic stresses due to marital conflicts can cause heart diseases, diabetes, and cancers [18]. The Sexual quality of life predicts the onset of psychological disorders and anxiety [22, 23], and may even be a risk factor for suicide [24]. People who are addicted to substances typically, which can have negative impacts on their marital satisfaction and sexual self-efficacy [25]. Addiction destroys normal functions, which can adversely affect physical and marital health and private life. Identifying factors associated with marital satisfaction that enhance the quality of life are essential to family stability [26]. This study aimed to establish a model for the relationship between Sexual quality of life and four variables, namely demographic characteristics of women, sexual violence, high risk behavior of spouse and perceived stress in Iranian women in 2015 using statistical causal modeling including the Path analysis.

METHODS

This cross-sectional study was conducted on 800 women from January to May 2015. The statistical population of the study included all women admitted to health centers affiliated to Shahid Beheshti University of Medical Sciences in Tehran, Iran, who met the inclusion criteria. The study sample was selected through multistage sampling. The regions where the healthcare centers located, were divided into four geographical zones, i.e., North, South, West, and East. Then, two centers were randomly selected from each region, and the subjects were selected through convenience sampling. To determine the sample size, the literature review and research variables were studied [27]. The sample size was calculated, using the following formula:

$$n \geq [\frac{(z_{1-\alpha/2} + z_{1-\beta})}{0.5 * \ln[\frac{1+r}{1-r}]}]^2 + 3 = 785$$

That 800 women was considered (α= 0.05, β=0.2, r=0.1).

This study was approved by Ethics Committee of the Deputy for Research of Shahid Beheshti University of Medical Sciences (Code Number: 3139, Dated 2014/12/26). Sampling began after obtaining the necessary permissions from authorities of the university and selected centers, and training the research team. Qualified women were familiarized with the objectives and methods of the research and if willing, they and her spouse signed the informed written consent form. They were also reassured of the information confidentiality. They were informed that they could withdraw at any time, and their privacy was respected by researchers. Women were interviewed in private settings. The inclusion criteria were being Iranian, with 15-49 years, no oophorectomy, hysterectomy or mastectomy, no known psychological disorders in women or their partners, no use of antidepressants by women or their partners and they had intercourse. 834 samples were eligible in study. In total, 800 women participated (n=15 using antidepressant, n=11 with age 50-56, n=8 women who did not have any intercourse were excluded). The applied questionnaire consisted of five parts. The first part comprised of 37 demographic questions of women, the second part, the sexual quality of life-female (SQOL-F) consists 18 items and each item is rated on a six-point response (completely agree to completely disagree). The response categories could be scored either 1 to 6 or 0 to 5 giving a total score of 18-108 or 0-90. Higher score indicates better female Sexual quality of life. The validity and reliability of (SQOL-F) questionnaire was done by Maasoumi et al. (2013) [28]. In present study, the

(SQOL-F) was validated through content validity. For internal consistency of the (SQOL-F), Cronbach's alpha coefficient for the total scale was 0.84 and its reliability was measured by test-retest with a 10-day interval (r= 0.77). The third part was the sexual violence questionnaire with 11 questions, which Cronbach's alpha coefficient and reliability were estimated respectively [29]. The questionnaire was designed in Likert scale (always, often, sometimes, seldom, never), and it was validated through content validity by three psychiatrists, two psychologists and five researchers, who had studied domestic violence. To ensure the internal consistency of the sexual violence questionnaire, Cronbach's alpha was used (α = 0.78), and its reliability was measured by test re-test with a 10 day interval (r = 0.81).The forth part was the perceived stress questionnaire with 14 questions that prepared by Cohen et al. in 2004 [30]. Scoring was done using the 5 point Likert scale beginning with (never=0 to very often=4). The lowest score was 0 and the highest 56. Higher scores show greater perceived stress. In study, Cronbach's alpha coefficient for the total scale was 0.80 and its reliability was measured by test-retest with a 10-day interval (r= 0.81). The last questionnaire consists of three questions (smoking, drinking alcohol and addicted to substances) in spouse. To analyze the data, descriptive statistics were calculated. Normality of data was assessed using one-sample Kolmogorov-Smirnov test. Path analysis method is a generalization of normal regression, which in addition to expressing direct effect, shows indirect effect as well as effects of each parameter on dependent parameters, and using these results, a rational explanation of the observed relationships and correlations can be provided. In this study, fitness of the conceptual model was examined in order to determine the concurrent association of sexual violence, perceived stress, high risk behavior spouse and demographic characteristics of women with (SQOL-F).Data analysis was performed in SPSS V.16 (SPSS Inc., Chicago, IL, USA) and LISREL 8.80 through the path model. P value less than 0.05 were considered statistically significant.

RESULTS

The demographic characteristics of the women and their spouse are shown in Table 1. First, the normal distribution (by Kolmogorov Smirnov test), homoscedasticity and liner relationship were checked to perform the pathway analysis. The correlation among variables was measured using the Pearson correlation test (Table2). The goodness of fit for the research conceptual was measured using path analysis (Fig 1). Fitness indices showed that the conceptual model of the study had a good fitness, and the hypothesis of causal association of sexual violence, perceived stress , age, education and high risk behavior spouse with sexual quality of life in women was approved. Indices of GFI (goodness of fit index), CFI (comparative fit index), NFI (normed fit index) and IFI (incremental fit index) of the model and that the associations between variables were logical according to theoretical framework of the study (Table 3). The effect of age, education, sexual violence, perceived stress and high risk behavior spouse on sexual quality of life women was studied (Fig 2). According to the diagram, sexual violence among the direct and inversely pathways (β = -0.40) had the highest effect on sexual quality of life in women. Education had a direct (β=0.03) and age direct and inversely (β=-0.03) association with SQOL-F. Perceived stress had through the inverse and indirectly effect on SQOL-F. In addition, high risk behavior spouse had indirect (β = -0.3) and inversely effect on SQOL-F (Table 4).

Table1: Distribution of Women and Her Spouse by Their Characteristics

Variables	Values
Age at Marriage(Y)	19.4 ± 1.7
Duration of Marriage(Y)	6.7 ± 4.4
Age of Monarch(Y)	13.6 ± 0.77
Age of First Pregnancy(Y)	20.4 ± 2.3
Number of Pregnancies	1.6 ± 0.6
Having Private Bedroom	
Yes	584 (73)
No	216 (27)
Smoking Spouse	
Yes	141 (17.6)
No	659 (82.4)
Addicted Spouse	
Yes	1 (0.1)
No	799 (99.9)
Drinking alcohol	
Yes	18 (2.3)
No	782 (97.7)

Data presented as Mean ± SD or No. (%)

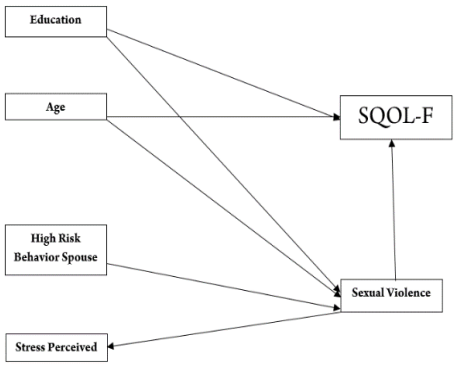

Figure1: Theoretical Path Model for Variables Predicting SQOL-F

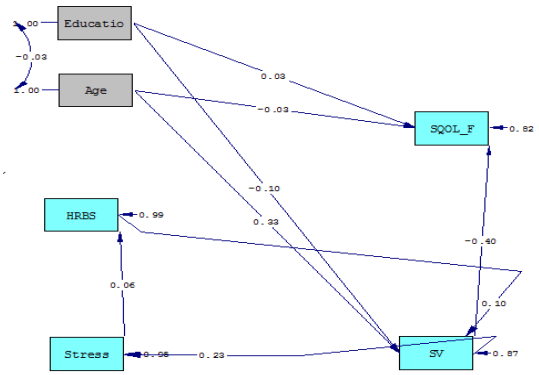

Figure2: Full Empirical Model (Empirical Path Model for Effects of Education, Age, High Risk Behavior Spouse (HRBS), Perceived Stress (Stress), Sexual Violence (SV) on Sexual Quality of Life Women (SQOL_F).

DISCUSSION

In this study, attempts were made to create a strong relationship between theoretical and applied issues of research using path analysis. Accordingly, the results of the model indicated that sexual violence, age and education had the most effect on SQOL-F. This shows that the better sexual quality of life, the lower level of stress. High risk behavior of spouse cause to rise sexual violence that effect on SQOL-F. Based on the results of this study, education of women had the direct effect on SQOL-F that was in agreement with study of Chedraui et al. (2011) [31]. Basson (2006) argue, the quality of marital life can be enhanced through increased knowledge [32].

In the current study, higher SQOL-F related to lower age of women that was consistent with other study [33, 34]. Behavioral changes that come about with women's aging can affect quality and stability of marital life [35]. Basson (2010) believed, hormonal changes that occur with aging in women cannot affect the quality of sexual life if they have intimate relations with their spouse and pleasant past sexual experiences [36]. Accordingly, the results of the model indicated that sexual violence had the most direct and inverse effect on SQOL-F that was in agreement with previous studies [37-39]. Marital dissatisfaction increases violence and reproach. Violence causes negative attitude and reduces affection and attachment toward the spouse [40].

Table2: Correlations among Sexual Quality of Life, Age, Education, Sexual Violence, Perceived Stress, High Risk Behavior Spouse in Women

Variables	Sexual Quality Life	Age	Education	Sexual Violence	Perceived Stress	High Risk Behavior Spouse
Sexual Quality Life	1					
Age	-0.201	1				
Education	0.114	0.038	1			
Sexual Violence	-0.502	0.323	-0.132	1		
Perceived Stress	-0.228	0.122	-0.056	-0.316	1	
High Risk Behavior Spouse	0.007	0.71	-0.058	0.149	0.057	1

Table3: Goodness of Fit Indices for the Model

	χ^2	df	(Root Mean Square Error of Approximation) RMSEA	Comparative Fit Index (CFI)	(Normed Fit Index) NFI	(Goodness of Fit Index) GFI
Model Index	18.95	6	0.052	0.96	0.95	0.99

Table4: Path Coefficients for Prediction Variables of SQOL-F

Predictor Variable	Effect			T Value	R2
	Total	Direct	Indirect		0.18
Age	0.10	-0.03	-0.07	-0.95	
Education	-0.47	0.03	-0.50	1.07	
Sexual Violence	-0.40	-0.40	-	-11.78	
Perceived stress	-0.24	-	-0.24	6.58	
High Risk Behavior Spouse	-0.3	-	-0.3	2.87	

Balanced emotion is a key factor in the quality of marital life [41]. Robles & Carroll (2011) argue, Women victims of violence respond in two stages: In the first stage (protest), women react with strong warnings and emotions such as fear, or severe sadness. In the second stage, women fluctuate between pretending that nothing has happened and feelings and thoughts about the painful experience of violence. Women show no interest in important life activities and have problems in showing interest and love toward others, and are unable to show their real feelings [42]. In study, perceived stress in women was associated with SQOL-F indirectly. In fact, the women who had higher sexual violence, experienced higher perceived stress that is in agreement with other studies [43-45]. Marital incompatibility following violence is a strong stressor in women, and reduces their self-esteem, life satisfaction and health [21]. Marital conflicts predict the onset of psychological disorders such as mood swings, anxiety, and behavioral disorders [46]. Couples lack skills needed for expressing their feelings [47]. Psychological disorders can provoke stressful relations between couples [21], and thus repeat this vicious cycle. The effect of stress in marital conflicts can raise blood pressure, pulse rate, secretion of catecholamine, and weaken the immune system, which pave the way for onset of further conflicts [48] Violence can lead couples to high-risk behaviors that is one of the results of the present study and agreement with studies [46, 49, 50].Many studies show, spouses of addicts have high levels of anxiety and depression [51, 52], which activates vicious cycle of stress and violence. Opioids reduce user's ability to understand and integrate information processing. Substance use disturbs thinking and exacerbates possibility of misunderstanding female's behavior as aggressive and rejecting, and thus affects marital satisfaction and sexual self-efficacy [53].

Addictive substances disrupt normal sexual functions [26]. Salmani et al. (2010) found, sexual satisfaction had significant associations with the orgasm disorders in spouses [54]. Anvar Abnavi et al. (2016) reported, the frequency of hypoactive sexual desire disorder and sexual aversion disorder in the women, whose husbands were opioid dependent was significantly higher than that of the females whose husbands were not opioid dependent [55]. Couples seeking to treat spouse's addiction have reported better quality of marital life [56]. The most important factor affecting the quality of marital life is probably attention to and satisfaction with sex. Higgins et al. (2011) argue Sexual satisfaction should be regarded as a sexual right for women [57]. The key point about the term "satisfaction" is that satisfaction is realized through personal assessment and norms, and results from one's inner judgment. Therefore, a sexual relationship or marriage that is satisfactory with its all characteristics for one person is not necessarily satisfying to others [58]. In fact, in married life, sex is influenced by or influences other general aspects of the relationship. Therefore, satisfaction with sex is an appropriate measure of marital quality of life and health [59].

CONCLUSIONS

Marital satisfaction affects quality and level of general health and satisfaction with life.In Iran, lack of early and adequate training about sexual matters is a major concern for women and girls of any age.

Study Limitations

In this study, sexual dysfunction was not investigated in the partners. Also, the subjects' embarrassment in expressing their sexual issues and lack of knowledge about the spouse's sexual disorders were other limitations of this study. This study was conducted in Tehran province, so may not reflect the general population of Iran. Against this strengthen, we presented a model for the relationship between sexual quality life of women and other variables. A satisfactory sexual function has an important role in health and improving the quality of women's life. Sexual dysfunction is the main source of communicative conflicts which can lead to doubts about couple's enthusiasm to each other and concern about sustainability of the relationship. Although various factors affect the quality of sexual life, increased sexual knowledge, avoiding sexual violence, stress and high-risk behaviors lead to enhanced quality of sexual life. It seems, Biological factors do not act independently of environmental factors.

Ethical Consideration

The ratification for the study was obtained from the Ethical Review Committee of the Research Deputy Shahid Beheshti University of Medical Sciences, Tehran, Iran.

Acknowledgements

The authors appreciate the cooperation of Research Deputy of Shahid Beheshti University of Medical Sciences, Tehran, Iran and all women who participated in this research.

Conflict of Interests

The authors declared no conflicts of interest, no funding was received for this study.

Funding

The Research Deputy Shahid Beheshti University of Medical Sciences supported this study.

Authors' Contribution

All authors participated in the study design, literature review, data collection,analysis, and editing of the manuscript.

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