

Impact of Nursing Intervention on Female Sexual Problems and Its effect on Husband Satisfaction

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Abstract: Background: Sexual problems or disorders are a sensitive subject that appears during any part of the sexual response cycle. Female sexual disorders when occur in early ages can spell trouble for their husband's life and create many psychological problems or relationship conflicts which may end with divorce. Therefore, this topic is important to be studied from both clinicians and nurses. The purpose of the study was to identify the different types of female sexual disorders, Study the effect of female sexual disorders on their husbands' psychological health, and study the impact of nursing intervention on managing physical and psychological problems of wives which affect on their sexual health and husband satisfaction.

Subjects & methods a quasi-experimental design was used. The study was conducted at the counseling center of youth health in the teaching hospital at Shebin El-Kom, Menoufia Governorate. The study sample consisted of 100 Married women had stable marital relationship for at least 2 years, having sexual problems. This study used a structured Interview questionnaire, female sexual function index (FSFI), and knowledge assessment tool.

Results: The study findings showed there were significant differences regarding knowledge between the women before and after nursing intervention. There was improvement in wives sexual problems. There was improvement in husband satisfaction

Conclusion: health teaching that is provided to the women was successful in increasing their awareness and knowledge about sexual problems and general, nutritional, and exercise management and also helped the women to manage her sexual problems.

Recommendation: Establishing of specialized centers and clinics with specialized nurses and doctors especially in dealing with this type of problems.

Keyword: Nursing intervention, female sexual problems, husband satisfaction.

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I. Introduction

Sexuality is a complex process, coordinated by the neurological, vascular and endocrine systems (Navneet et al, 2013).⁽¹⁾ In addition, sexuality accommodates family, social and spiritual beliefs, and is altered with aging, fitness popularity and private experience. In addition, sexual endeavor comprises interpersonal relationships which every associate bringing special attitudes, desires and responses into the coupling. A breakdown in any of these areas might also lead to sexual dysfunction (American Association for marriage and family therapy, 2006)⁽²⁾

Female sexual dysfunction refers to a sexual problem associated with personal distress. It takes different forms, including lack of sexual desire, impaired arousal, inability to achieve orgasm, or pain with sexual activity (American Psychiatric Association, 2013).⁽³⁾ Sexual dysfunction may be a problem since the start of sexual activity or may be acquired later in life after a period of normal sexual functioning. (Nivin, 2018).⁽⁴⁾ The traditional description of the sexual response cycle was divided into four phases: desire (libido), arousal (excitement), orgasm, and resolution (Navneet et al, 2013).⁽¹⁾ The classification system for sexual dysfunctions in the woman has evolved from a linear categorization of sexual desire, arousal, orgasm, and pain disorders to one that is more complex and overlapping (Erin et al, 2013).⁽⁵⁾

The presence of more than one dysfunction should be ascertained, because considerable interdependence may exist. For example, a patient complaining about decreased desire might have a primary orgasmic disorder from insufficient stimulation, with decreased desire developing secondarily as a result of unsatisfying sexual encounters (Yonah and Ethan ,2018).⁽⁶⁾ Thus, treating the orgasmic disorder would indirectly enhance desire; whereas, treating a desire disorder would be unsuccessful and perhaps add to patient frustration and perpetuate the cycle of dysfunction (Yonah and Ethan, 2018).⁽⁶⁾

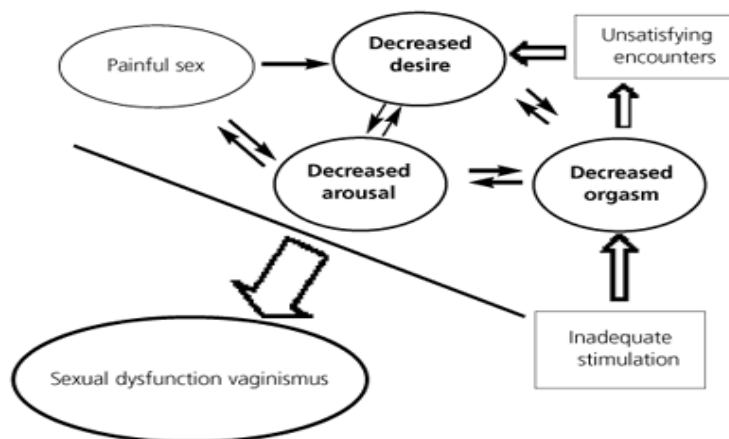


FIGURE 1.

Cycle of sexual dysfunction. Example showing how a patient can enter the cycle of sexual dysfunction in one area (i.e., decreased orgasm) and proceed to another area (i.e., decreased desire) so that the presenting complaint may not represent the problem that actually requires evaluation and treatment.

Adapted with permission from Phillips NA. The clinical evaluation of dyspareunia. *Int J Impot Res*;10(suppl 2):S117–20

Once female sexual problem has been established, it's important to the couples to understand the problem before course of management offered (Navneet et al,2013).⁽¹⁾ The most important way for the nurse to manage sexual problem is to listen carefully to the women, and understand woman level of knowledge about the body and sexuality. The nurse encourages the women to talk about the relationship with her husband. Past sexual history, history of trauma, possible symptom of depression and other stressor that may be interfering with the ability to respond sexually should be discussed with the woman. The nurse must be also aware with environmental consideration and psychological barriers to sexual functioning (Michetti., 2006).⁽⁷⁾

Treatment of female sexual disorders or problems depends on type, severity and duration of sexual dysfunction. There are recommended therapy for sexual dysfunction as psychotherapy or sex therapy, behavioral therapy, and drug therapy (Sarit, 2009).⁽⁸⁾ Sex therapy is a field of specialization within the psychological community that focuses on problems related to sex and relational issues. Many people are not fully educated about sex and their sexuality or what is normal versus abnormal. So that sex therapy is very effective for individuals and couples (Basson, 2007).⁽⁹⁾ Sex therapy includes many goals as establishing mutual responsibility for satisfaction, correcting myths and providing education about sex, ensuring a high level of physical and psychological stimulation, eliminating relationship problems and marital tension (Hatzichristou et al., 2010).⁽¹⁰⁾

Aerobic exercise is very important for improving sexual problems. Arousal depends a lot on good blood flow, especially to the genitals. Aerobic exercise promotes good blood flow that requires to strength the heart and blood vessels. (Stanton, 2018).⁽¹¹⁾ Beyond that, exercising goes hand in hand with the advantages of weight loss, and it additionally promotes improved sleep and brighter mood. Strength coaching can additionally have a hand in desirable sexual function, particularly if it improves muscle tone in the pelvis, abdomen, and top thighs (Stanton, 2018).⁽¹¹⁾ Kegel exercise has more than one uses for men and women. It is most commonly used to assist the bladder and bowel control issues, reduce the pain of menstrual cramps, and improve sexual enjoyment (Erin et al, 2013).⁽⁵⁾ These exercises actually strengthen the pelvic floor muscles which are a critical component to support the function of important organs in this region. the exercises are easy to do and can be completed anywhere at any time. This exercise should be practiced from 10-15 times a day. Regular kegel exercise can increase sexual pleasure for the woman and her male partner (Lohmiller, 2015).⁽¹²⁾

Using nutrition for improving sexual problems is discussed by (Marino, 2011)⁽¹³⁾ who stated that women need to eat balanced diet to avoid potential health problems. This means that women should have whole foods that provide concentrated source of nutrients to her reproductive system. These nutrients are Zink, vitamins A,D,E,C, minerals, and essential fatty acid. Calcium helps hormones biosyntheses influences the menstrual cycle. It supports steady and long sexual activity(Harrow, 2007)⁽¹⁴⁾. Iron is included in red blood corpuscles, transport oxygen lung to other parts of the body lack of iron causes anemia leading to chronic fatigue and loss of sexual life. (Rago, 2006)⁽¹⁵⁾ Frankel (2018)⁽¹⁶⁾ stated that Omega-3 fatty acids found in fish, which can improve cardiovascular health and lower triglycerides as well as possibly increase dopamine production and reduce the risk for depression, are all pluses for the libido.

Iodine determines the function of thyroid glands managing the metabolism. Thyroid gland defines the emotional status and emotional stresses influence the thyroid gland (Lauren, 2011).⁽¹⁷⁾ Magnesium helps relaxation of the body muscles to enjoy life. Lack of Magnesium causes loss the interest of the sexual life. it is reach in green vegetables, yolk, nuts and seed, pineapples and apples (Donna, 2010).⁽¹⁸⁾

Management of women physical and psychological problems can be achieved by quite simple intervention, information and reassurance. Management of back pain by rest and ice pack can help if the inflammation is present. Physical treatment as massage, controlled application of heat and individual exercise programs. Strengthening both abdominal and back muscles help to stabilize the spine, they can prevent further back pain. Proper lifting technique and maintaining good posture is very important (Lohmiller, 2015).⁽¹²⁾ Management of anxiety by eating well-balanced diet, avoid consumption of sugar and caffeine, exercise, and relaxation 20 minutes every day (Erin et al, 2013)⁽⁵⁾

II. Significant of the study

Female sexual dysfunction (FSD) is a multifaceted and badly understood condition that affects females of all ages. It is estimated 30–50% of female worldwide and 25–76% in the USA. (Moore, 2010).⁽¹⁹⁾ In Egypt, a study carried out in Lower Egypt stated an occurrence of FSD of 46% (Gamal et al, 2014)⁽²⁰⁾. Sexual function is an important aspect of quality of life, sparingly investigated in women compared with other quality-of-life areas. A growing interest in female sexuality, mediators and cellular mechanisms is affecting the female sexual response (Sarit et al, 2009).⁽⁸⁾

All sexual problems may be complicated as a result of waiting for years before seeking therapy for sexual concern. Waiting magnify and exacerbate the negative consequences of sexual problem which may lead to marriage breakup and violence. (Lauren, 2011).⁽¹⁷⁾ On the other hand Open discussion of sexual problems in Egyptian society has for long been kept private. Yet there is some try to find a way to open up and find solutions. (Elnashar, et al, 2007)⁽²¹⁾ Management and solutions rely on the reason of sexual dysfunction. Mild dysfunction that is associated to stress, worry or anxiousness frequently can be effectively handled with counseling, education, and improved conversation between couples (Jaspers et al, 2016).⁽²²⁾

Alternative solutions can be useful in the treatment of sexual dysfunction. Psychotherapy is highly recommended to address any emotional and mental disorders. Nutritional supplementation can help resolve biochemical causes. Relaxation eases and relieves anxiety about dysfunction. Yoga provides mental and physical relaxation. Massage is effective in reducing stress (Faizal et al, 2017).⁽²³⁾ The nurse plays an important role in this type of problem. This role focuses on counseling that helps the woman to find solution s to their physical and psychological problems which reflect on their husbands' psychology and satisfaction. (Tomas et al, 2007).⁽²⁴⁾

Nurse works in collaboration with a sex therapist. During each therapy session the nurse selects a topic on which to focus then design a series learning exercise to the couple. Cognitive therapy as communications, exercises, and relaxation training is an important part in nursing management (Donna, 2010).⁽¹⁸⁾ Finally, this study is trying to focus the light on an important part of the women's life in Egypt. The Egyptian women who suffer from any sexual problems don't try to complain or talk to any person. Also this study tries to draw the light of an important part in the woman's right, the right of the women to live in good sexual health, physically and psychologically. So this problem deserves to be studied from clinician and researchers.

Aim of the study: The current study aimed to,

- 1- Identify the different types of female sexual disorders among the study group.
- 2- Study the effect of female sexual disorders on their husbands psychological health.
- 3- Study the impact of nursing intervention on managing physical and psychological problems of wives which affect on their sexual health and husband satisfaction.

Research Question

- 1- What are the common different types of female sexual disorders?
- 2- What is the impact of female sexual disorders on their husbands psychological health
- 3- What is the impact of nursing intervention on improving physical and psychological, and sexual problems for wives?
- 4- What is the impact of nursing intervention on husband satisfaction?

III. Subject and Methods

Subject

Research design: quasi-experimental design was used to achieve the aim of this study.

Setting: The study was conducted at the counseling center of youth health and family planning clinic in the teaching hospital at Shebin El-Kom, Menoufiya Governorate. The counseling center of youth health center was opened in June, 8th 2006 it has on director, three male and female physician one of whom is urologist, two male and female secretaries. The flow rate of cases to the center was 295 per year. Working days in the center is six days per week from 1 pm to 3 pm. The center specifies 3 days for male and 3 days for female

Sample: Non-probability sample (purposive sampling) was used. The researcher handpicks subjects to participate in the study based on identified variable under consideration.

Inclusion criteria

- Married women with stable marital relationship for at least 2 years, having a sexual problems, free from any disease

Exclusion criteria

- Women with chronic disease or psychological disease
- Women suffer from genital prolapse, cancer or type 2or 3 circumcisions.

Tools of the study: Tools *were used for data collection:*

Tools I : A structured interview questionnaire. It was developed by the researchers and consisted of three parts.

- **part one** has consisted of social characteristics as age, residence, level of education, type of occupation, years of marriage, crowding index, and family income.
- The socioeconomic level was calculated by an equation and the yield degree was classified into 3 categories according to **Al- shakhs** (1995)⁽²⁵⁾ as follow
- Low socioeconomic level: from 48 to< 96 degree.
- Moderate socioeconomic level: from 97 to<144 degree
- High socioeconomic level: more than 145 degree
- **Part Two** was used to collect data about factors that can lead to female sexual problems (physical) as back pain, pelvic pain, premenstrual pain, gastrointestinal disturbance, and headache. Psychological factors as Fear, Irritability, Nervousness Depression, Fatigue and stress from work, Poor partner performance and technique. Socio-economic factors as Extended family, Little room in the house, and Low income
- **Part three** was used to collect data about Psychological Problems of the Husband as a Reflection of Wife Sexual Disorders as Psychological problems, Confusion, Irritability, Nervousness, Depression, Distrust of each other, Emotional detachment, Desire to marry another woman

Tool II: female sexual function index (FSFI) adopted from **(Ruan, et al 2016)**⁽²⁶⁾ consisted of 19 questions for assessing sexual function in women. Two questions for desire domains. Four questions for each one arousal and lubrication. A higher score indicates and three questions for each one orgasm, satisfaction and pain.

I.4.Scoring system

Score for each domain ranged from 0(no sexual activity), 1(inactive or dysfunction) to 5 (suggestive or normal sexual activity). Total individual domain scores are obtained by adding the scores of individual questions that comprise the domain and multiplying the sum by the domain factor provided in the FSFI for each domain. the full-scale scores were obtained by adding the six domain score.

Item	Total score	This means that
Desire domain	Less than 4.28	Participants had difficulties in this domain
Arousal domain	Less than 5.08	Participants had difficulties in this domain
Lubrication domain	Less than 5.45	Participants had difficulties in this domain
Orgasm domain	Less than 5.05	Participants had difficulties in this domain
Satisfaction domain	Less than 5.04	Participants had difficulties in this domain
Pain domain	Less than 5.51	Participants had difficulties in this domain

Tool III: Knowledge assessment tool. This tool added to collect data about the women’s knowledge toward physical and psychological problems. Also, this tool concerned with general, nutritional, and exercise management.

Scoring: the knowledge assessment tool score ranged from 0 (all answer no) to 100 (all answer yes). The total score was categorized into 3 main categories (**prem and mann, 2004**)⁽²⁷⁾

- 1- Good knowledge (>75)
- 2- Fair knowledge(50-75)

3- Poor knowledge(less than 50)

Reliability: All tools used in this study were tested for its reliability using test-retest reliability and all tools proved to be strongly reliable. Test-retest technique and the Pearson Coefficient factor was 90.8%. The degree of Spearman's rank correlation coefficient test was 0.82.

The validity of the tools: All the tools for data collection were tested for its content validity by a panel of experts in medical and obstetric health nursing specialty to ascertain to its relevance and completeness and required modification was carried out accordingly.

Method

Written Permission

Official permission to carry out the study was obtained from the directors of the center of youth health in the teaching hospital at Shebin El-Kom, after submitting an official letter from the Dean of the Faculty of Nursing, El-Menoufia University explaining the purpose of the study. Meetings were conducted first with the director, doctors, and nurses to obtain permission for conducting the study and explaining the aim and expected outcome. Then, meetings were conducted with the women to explain the purpose of the study and discuss their expectation, obtain their cooperation and check their availability of participation in the study. Also, to clarify the items of the scale used in data collection.

For the Protection of human rights

The women were informed about the privacy of their information and it will be used for scientific research only, the study was voluntary, harmless, and anonymous and confidentiality of responses would be respected. Women had the full right to refuse to participate in the study at any time. Formal consent was obtained.

3. Tools development

Tools were developed by the researchers for data collection after a review of past and current, local and international literature related to female sexual disorders, risk factors, its effect on the husband, and nursing role by using books, articles, periodicals and magazines to get acquainted with the various aspects of the research problem.

A pilot study

It was carried out on "10 %" of the subjects to test the clarity, feasibility, simplicity of the study tools, and time needed for data collection. The subjects of the pilot study were excluded from the total sample to assure the stability of the results.

Procedures

This study was carried out on 3 phases (preparatory, implementation and evaluation phases)

1. Preparatory phase:

The researchers reviewed past and current literature covering the various aspect of the problem. This was done by using books, articles, magazines, and network about studies related to female sexual problems and its impact on husband satisfaction and nursing intervention of wives sexual problems.

2. Implementation phase:

Data was collected over a period of nine months starting from October 2017 to July 2018. Data collection was conducted four days a week. Two days in the family planning clinic and the other two days in counseling center of youth. In the beginning, the researcher introduced herself and explained the purpose of the study to the women. The address and telephone number of each participant was taken for communication and follow up. A complete physical examination, including a focused pelvic examination, was done by the physician at first, to exclude any pathology that could be related to sexual dysfunction. Then reassure and inform the woman that there is no any pelvic pathology. Or if there is pelvic pathology as infection, vulvar dermatomes, inflammation should be treated at first.Each woman was individually interviewed from 30-40 minutes. The researcher collected the data from the women by using 2 methods according to the level of education. The first method if the women are educated she fills the questionnaire by her self. The second method was used if the women were illiterate; the researcher would fill the questionnaire by herself. During the time of questionnaire, the researcher identified each woman's problems.The researcher started intervention and management according to the woman's problems. Intervention included health education (as normal anatomy, sexual function, sexual response cycle, good preparation for intercourse, good technique for intercourse, and management of physical

problems that cause sexual problems as pain), exercise (as breathing exercise, relaxation, kegal and pelvic floor exercise to improve sexuality) and nutritional substance that help in sexual and physical problems. The program implementation was done for each woman and implemented through three sessions, the time taken during health teaching session for each woman was about 15-30 minutes. At the end of the first interview, the researcher gave each woman a booklet to help her to manage her problems and remind her of nursing intervention. After 3 months the researcher mad contacts with the women to determine feedback and improvement through knowledge of assessment sheet. If the woman didn't come in the time of follow up the researcher follow up these cases through home visits.

3- Evaluation phase:

Evaluation of implemented intervention was accomplished by using oral question and fill knowledge assessment sheet to assess improvement of women sexual health status. Follow up was done after 3 months of applying health teaching.

Limitation of the study

- Each woman considers her problems as a sensitive issue, so the researcher applied the counseling to every woman individually according to her problems or complaints.
- Most women didn't attend the center in a reasonable time after 3 months to complete follow up, so the researcher met the cases through home visits that cost time and effort.
- Refusal rate from illiterate women as the women's find empirics to talk about such sensitive area in face to face.

IV. Results

Data Analysis Data entry, coding, and analysis were conducted using SPSS (20). Quantitative data were expressed in Mean (\bar{x}), Standard Deviation (SD), while qualitative data were expressed in frequency (number), and percent (%). Level of significance of our statistics was 95%, so, P value < 0.05 was considered a statistically significant difference.

Table (1) shows the mean age of the female was 27.47 ± 3.36 and the mean age of the male was 32.53 ± 3.62 . Regarding the mean years of marriage was 6.48 ± 3.43 . The number of rooms was 2.54 ± 0.70 . The table also shows that 30% of the studied females and 25% of the studied males had a secondary education while 46% of the studied females and 54% of the studied males had a university education. Concerning occupation 56% of females were a worker and 75% of males were worker and employer. In addition to about half of the studied sample (45%) had low income and 55% of the studied sample was living in an extended family.

Table 2 illustrates female sexual problems. The highest problems were Desire disorder (61%) then pain (42 %) and followed by satisfaction disorders (32%) and orgasm disorders (30 %)

Table 3 presents the physical, psychological, and socio-economic problems of the women that can lead to sexual disorders. Regarding physical problems, more than two-thirds of women were suffered from a backache and pelvic pain (77% & 72% respectively) and 66% of them suffered from premenstrual pain. This followed by a headache and Gastrointestinal disturbance (35% & 33% respectively). Concerning psychological problems about two-thirds of women suffered from fear while nearly half of women complain from irritability, nervousness, depression, fatigue and stress from work. In relation to socio-economic problems 50% of women had low income, 47% had little room in a house, and 55 lived in the extended family.

Table 4 indicates the psychological problems of the husband as a reflection of wife sexual disorders. More than two-thirds of the husband (70 % & 66%) had emotional detachment, and desire to marry another woman, 60% had nervousness, 56% were confused, and about half of them had irritability, depression, and Distrust of each other.

Table 5 reveals that there was statistically significant difference before and after intervention regarding general management, nutritional management, and exercise. As the table clarifies more than two-thirds of women became more oriented with different methods that used to overcome back pain, pelvic pain, gastrointestinal disturbance, and psychological disturbance after the intervention. Regarding nutritional management more than two-thirds of women were oriented with nutritional substances that used to overcomes sexual and physical problems after the intervention compared to 18% before the intervention. In relation to exercise management more than two-thirds of women were known and performed exercises that used to manage sexual problems compared to 8% before the intervention

Table 6 illustrates that 81% of women in the sample had poor knowledge regarding female sexual problems and its related management before the intervention, compared to 3% of the women had poor knowledge after the intervention. on the other hand, less than ten women in the sample (9%) had fair knowledge before management and 12% of the women still have fair knowledge after the intervention. In addition to 10%

of the women had good knowledge before intervention compared to 85% of the women had good knowledge after intervention

Figure (1): clarifies that 61% of the women in the total sample was sexually improved and 51% socially improved. Regarding physical improvement about half of the women in the studied sample was improved physically while 43% of the women were psychologically improved.

Figure (2) reveals that there was a statistically significant difference regarding husband sexual satisfaction at before and after intervention where the majority of husbands (85%) were unsatisfied with their sexual relationship from the wives point of view at pre-intervention compared to 65% of husbands were satisfied at post-intervention.

Table (1): socio-Demographic Characteristics of the Studied Women

Socio-demographic characteristics	Studied group(No=100)	
	Mean ±SD	
Female age	27.47± 3.36	
Male age	32.53± 3.62	
Years of marriage	6.48 ± 3.43	
No of children	2.51± 1.07	
No of rooms in the house	2.51± 1.07	
	No	%
Female education		
Illiterate	7	7.0
Basic	17	17.0
Secondary	30	30.0
University	46	46.0
Female occupation		
Worker	56	38.0
Housewife	44	62.0
Male education		
Illiterate	4	4.0
Basic	7	7.0
Secondary	25	25.0
University	54	54.0
Male occupation		
Farmer	25	25.0
Worker	26	26.0
Employee	49	49.0
Income		
Enough	55	55.0
Not enough	45	45.0
Home		
Extended	55	55.0
Nuclear	45	45.0

Table (2): Different Type of Female Sexual Disorders Among Women in the Studied Group (No=100)

Sexual problems	No	%
Desire disorder		
Present	61	39.0
Absent	39	61.0
Desire Score	4.1 ± 2.3	
Arousal disorder		
Present	31	31.0
Absent	69	69.0
Arousal Score	4.5 ± 2.3	
Lubrication disorder		
Present	4	4.0
Absent	96	96.0
Lubrication Score	15.3 ± 4.6	
Orgasm disorder		
Present	30	30.0
Absent	70	70.0
Orgasm Score	4.3 ± 3.7	
Satisfaction disorder		
Present	32	32.0
Absent	68	68.0
Satisfaction Score	4.8 ± 2.1	
Pain		
Present	42	42.0
Absent	58	38.0
Pain Score	3.8 ± 3.7	

Table 3: Physical, Psychological, and Socio-Economic Risk Factors for Sexual Disorders in the Studied Women.

Physical factors	No	%
Backache	77	77.0
Pelvic pain	72	72.0
Premenstrual pain	66	66.0
A headache	35	35.0
Gastrointestinal disturbance	33	33.0
Psychological factors		
Fear	66	48.0
Irritability	48	66.0
Nervousness	45	45.0
Depression	41	41.0
Fatigue and stress from work	50	50.0
Poor partner performance and technique	45	50.0
Socio-economic factors		
Extended family	55	41.0
Little room in the house	47	47.0
Low income	50	50.0

NB: Percentage may add to more than 100% because a mother may complain from more than one problem

Table (4) Psychological Problems of the Husband as a Reflection of Wife Sexual Disorders (from the wives point of view)

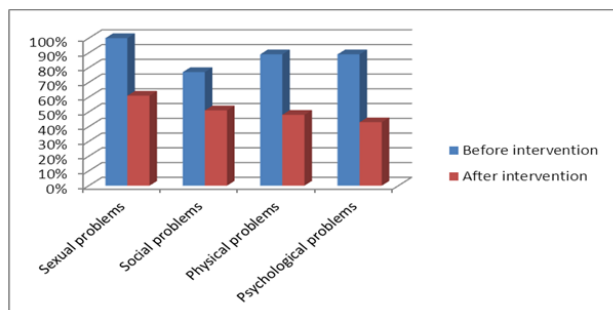
Psychological Problems	No	%
Confusion	56	56.0
Irritability	50	50.0
Nervousness	60	60.0
Depression	50	50.0
Distrust of each other	48	48.0
Emotional detachment	70	70.0
The desire to marry another women	66	66.0

Table (5): Pre and Post Counseling Knowledge of the Women Regarding General and Nutritional Management and Exercise Practicing:

Variable	Before intervention (No=100)		After intervention (No=100)		χ^2	p-value
General management						
Number of women that oriented with different methods of back pain relieving	53	53.0	77	77.0	12.66	<0.001
Number of women that oriented with different methods of pelvic pain relieving	14	14.0	79	79.0	48.92	<0.001
Number of women that oriented with different methods to overcome Gastrointestinal disturbance	38	38.0	81	81.0	38.36	<0.001
Number of women that oriented with different methods to overcome psychological disturbance	46	46.0	83	83.0	29.89	<0.001
Nutritional management						
Number of wives who know that nutritional methods used to overcome sexual and physical problems	21	21.0	81	81.0	72.03	<0.001
Number of wives who know these nutritional substances	18	18.0	79	79.0	74.49	<0.001
Exercise						
Number of Wives who know that exercises used to manage sexual problems	16	16.0	74	74.0	96.51	<0.001
Number of Wives who know how to perform these exercises	13	13.0	75	75.0	74.89	<0.001
Number of Wives who Do these exercises	8	8.0	77	77.0	97.41	<0.001

Table 6: Knowledge of the Wives Regarding Female Sexual Problems and Its Related Management before and after Intervention

Knowledge	Before intervention (No=100)		After intervention (No=100)		p-value
	No	%	No	%	
Good (>75%)	10	10.0	85	85.0	X ² =132.07 p <0.001
Fair (50-75%)	9	9.0	12	12.0	
Poor (less than 50 %)	81	81.0	3	3.0	



Figure(1) Impact of Nursing Intervention on Improving Wives Problems

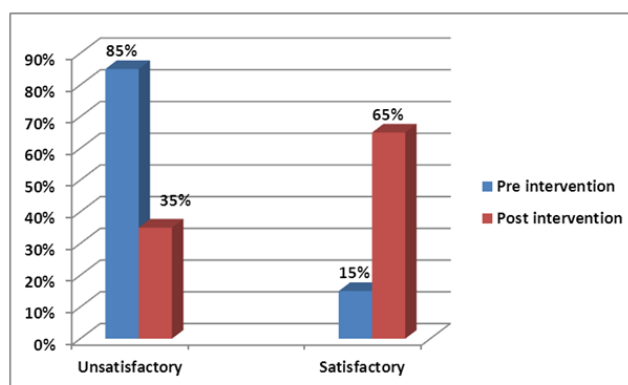


Figure (2) Husbands Sexual Satisfaction Before and After Intervention (from the wives point of view)

V. Discussion

Sexual dysfunction is a very common problem that appears during any phase of the sexual response cycle and prevents the couples from experiencing satisfaction from the sexual activity.

The results of the current study answered the research questions. This clarified in the table of the study.

Regarding age, the findings of the current study revealed that the mean age the women were 27.47 ± 3.36 . This finding comes in agreement **Ruan,et al 2016** ⁽²⁶⁾ they study prevalence and risk factors for sexual dysfunction in young chine’s women and stated that mean age in his study was 25.1 ± 4.5 and explain this finding as sexual problems occur in adults of all ages. The age is most strongly correlated with female sexual dysfunction. On other hands (**Erin et al, 2013**)⁽⁵⁾ mentioned that sexual dysfunction can appear in the early adult years with the majority of the couple seeking care for such conditions during their late twenties through thirties. This may be due to reflecting cultural factors, such as shyness and embarrassment. This result was not confirmed by (**Megan et al., 2016**) ⁽²⁸⁾ who reported that older women near to menopause had low sexual interest due to physiological changes related with the aging process. This means that the prevalence of female sexual problems are common among older women. The opinion of the researcher toward the result of the present study may be due to the effect of many factors such as the pressure of fast speed modern life, socioeconomic status, and relationship conflict. In addition, In addition, the mass media play a vital function in society and convey huge changes in the social norms.

As regards mean years of marriage of the women was 6.48 ± 3.43 . This means that sexual problems can occur in the early years of marriage. This result is **supported by Mustafa(2007)** ⁽²⁹⁾ who mentioned that sexual problems that can tend to start in the first years of marriage will usually persist until that part of the relationship has died.

Concerning female education, the present study revealed that, nearly half of women graduated from university and suffered from sexual problems. This result comes in agreement with (**El-Tahlawi, 2018**) ⁽³⁰⁾ who

cited that there was a statistically significant difference related to FSFI score in different training degree of women and their husbands with high rating amongst quite educated couples. Also, (Mohktar et al, 2013)⁽³¹⁾ observed that the degree of sexual feature used to be determined to be higher in women with secondary school education than in women with primary school and lower education and in women with the college and greater education. In the other hand, this result was not consistent with (American Psychiatric Association, 2013).⁽³⁾ mentioned that sexual problems are greater likely to accomplice with low academic level, the better-educated people are more healthy and have lifestyles that physically and emotionally much less stressful. This discrepancy in findings can be explained by the interaction of other factors such as age, working status, and duration of the marriage, with the educational level. In our study, this can be defined as a higher academic degree may additionally also be related with an increase in the women's capability freely to express their dissatisfaction, which assists the woman to resolve this problem.

The present study indicated that more than half of the women in the studied sample live in an extended family (large family) with a little number of rooms. This result is supported by (Elnashar et al, 2007)⁽²¹⁾ who referred to that the most common aggravating factors for woman sexual disorders had been Husbands' desire of unsuitable time for sexual intercourse, adverse socio-economic situations such as lack of sufficient privateness at home and low income. Also, Ruan et al 2016⁽²⁶⁾ stated that sexual problems are more common in large and crowded families with a little number of rooms where sexual dysfunction is generally associated with poor quality of life. In addition to comfortable sexual intercourse is important in most heterosexual relationships in providing pleasure and sustaining intimacy among women.

As regards socioeconomic status, the present study showed that about half of couples hadn't enough income. This result agrees with studies performed in Turkey by Özerdoğan et al. in 2009⁽³²⁾ as they found a close association between income levels with sexual functions where low socioeconomic status represent an important factor in creating conflict in the marital relationship.

The finding of the present study indicated that female sexual disorders were caused by physical, psychological and social factors. Sexual dysfunction is a term used to describe various sexual problems with overlapping biological, psychological, and interpersonal etiologies (Mamdouh, 2017).⁽³³⁾ Therefore, it is important to determine any underlying disorders or contributing biopsychosocial factors when evaluating a patient with sexual problems. Sexual dysfunction may actually be a symptom or side effect rather than a primary pathology (Erin, 2013)⁽⁵⁾.

Generally, the present study revealed that all women in the studied sample suffered from one or more sexual disorders. A difficulty with sexual desire is the most common disorders, followed by sexual pain, and satisfaction. This in accordance with Johnson (2014)⁽³⁴⁾ cited that "greater female (43%) than men (31%) mentioned sexual problems. Of women who document any kind of sexual difficulty, the challenge with sexual desire is the most frequent (mean 64%) followed by means of a problem with orgasm (mean 35%), the problem with arousal (mean 31%), and sexual ache (mean 26%). Many females are affected by greater than one kind of sexual difficulty. This variation may be due to differences in the population studied and substantial inconsistencies in the ways female sexual dysfunctions have been measured, overall estimates of sexual dysfunctions may be unreliable"

In the present, about half of women suffered from pain during or after intercourse. This result was supported by (Ibrahim et al., 2010)⁽³⁵⁾ who mentioned that sexual pain is a term used to describe pain associated with sexual intercourse and also known as dyspareunia. Pelvic and sexual pain can be caused by physical or psychological problems. Also, sexual pain can affect desire and satisfaction.

In the current study, more than one-third of the women had desire disorder. This comes in agreement with (Ibrahim et al., 2010)⁽³⁵⁾ "who observed that hypoactive sexual desire disease was mentioned in 49.6% of women, with solely 3.6% reporting elevated desire. This finding correspond with different research such as that via Johnson⁽³⁴⁾ who confirmed that more than 40% of women in the USA mentioned rare desire or enjoyment of intercourse and the study by (Basson, 2007)⁽⁹⁾ who mentioned that 45% of Swedish women had diminished desire. Other research mentioned higher rates of diminished libido, ranging from 52 to 87%, while (Elnashar et al, 2007)⁽²¹⁾ stated a decreasing rate of inhibited desire (15%). This difference in occurrence rate might also be explained by the variations in definition, methodology and population studied. In the current study, many participants explained their decrease sexual desire to be due to the fact of circumcision and socio-economic situations such as economic stressors and improved family duties.

<http://www.aafp.org/afp/2000/0701/p127.html>

This result comes in agreement with (Mamdouh, et al., 2017)⁽³³⁾ who stated that there are many factors predisposing to sexual dysfunction as fatigue, stress at work, anxiety, relationship conflict, low mood or depression, etc.....

The present study indicated that nearly half of women suffered from Poor partner performance and technique as a risk factor for female sexual disorders. This was in line with (El-Tahlawi, 2018).⁽³⁰⁾ who reported

a significant impact of male partner's sexual functioning on female sexual dysfunction and it was the main predictor for female sexual dysfunction after controlling other variables

Also, this agrees with a Canadian study by (Riley 2012)⁽³⁶⁾ in this study, the majority of the study population linked their cause of sexual disorders to partner sexual dysfunction and poor partner performance and technique. This was also noted by (Donna, 2010)⁽¹⁸⁾ who stated that little foreplay before sexual intercourse was a significant factor to the most common sexual difficulties among their sample of women. So that, counseling and sex education to wives and husbands was very important to solve this problem.

The finding of the current study indicated that female sexual disorders had a psychological impact on their husband. While More than two-thirds of husbands had emotional detachment, and desire to marry another woman, and about half of them had irritability, depression, and Distrust of each other. This result comes in accordance with Irwin and Golstein,(2017)⁽³⁷⁾ who mentioned that female sexual dysfunctions threaten the husband psychological health. In the form of depression, anxiety and may end with divorce

Concerning husband satisfaction in sexual life before and after intervention, the present study there was statistically significant difference regarding husband sexual satisfaction at before and after intervention where the majority of husbands unsatisfied with their sexual relationship from the wives point of view at pre-intervention compared to two thirds of husbands were satisfied with their sexual life at post-intervention. This clarifies the effectiveness of the nursing intervention. This was in accordance with(El-Tahlawi, 2018).⁽³⁰⁾ mentioned when evaluating emotional contracts, the health professional will look at what is important for the couple to feel good emotionally, i.e. what is needed and what they do to feel happy. Western philosophy and psychology generally agree that happiness is appropriate for human beings and distress is bad, that people are looking for happiness, and that it is less difficult to be pleased when others are completely happy as well. To achieve such conditions, it is beneficial to strive to maximize pleasant thoughts over the long term. Openness to emotion is also recognized as being important, because it permits emotional information to be recognized and coped with, thereby promoting conditions that foster happiness.

As regards to nutrition and exercises, more than two-thirds of women in the studied sample become oriented and used nutrition as a natural method to overcome their problems. Also, more than two-thirds used the exercise. This result comes in agreement with **stamfer (2006)**⁽³⁸⁾ who said that the healthy diet and regular exercises help the women to improve the mood and relieve insomnia. Healthy diets improve reproductive function which affects the qualitative characteristics of the reproductive system.

The current study revealed that two-thirds of women improved after nursing intervention sexually and nearly half of the women were improved physically, psychologically, and socially. This result is in accordance with (Donna, 2010)⁽¹⁸⁾ who mentioned that the prognosis of sexual disorders may be good for functional sexual problems which result from relationship problems or psychological factors and also mild dysfunction associated with temporary stress.

VI. Conclusion

- Majority of studied women suffered from a different type of female sexual disorders and problems.
- More than two third of husband suffered from a different type of psychological problem as a reflection of female sexual problems
- Health teaching that is provided to the women was successful in increasing their awareness and knowledge about sexual problems and general, nutritional, exercise management that helped the women to manage her sexual problems and increase their husband satisfaction.

VII. Recommendations

- Establishing specialized centers and clinics with specialized nurses and doctors especially in dealing with this type of problems.
- Health team in these centers should consist of a sex therapist, physician, and nurses. All work together and provide help to couples.
- There should be specialized nurses to guide and teach the couple about the importance of open communication especially in dealing with sexual problems

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