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Effect of Psychosexual Counseling Program on Sexual Quality of Life among Post-Hysterectomy Women

Marwa Kamal Rehan[1], Inass Kassem Ali Kassem[2], Maaly Ebrahim El Malky[3], Samah Mohamed Elhomosy[4]

[1] BNSc. Faculty of Nursing - Menoufia University
[2] Professor of Maternal and Newborn Health Nursing, Faculty of Nursing - Menoufia University
[3]Professor of Psychiatric Health Nursing, Faculty of Nursing - Menoufia University
[4] Assistant Professor of Maternal and Newborn Health Nursing, Faculty of Nursing - Menoufia University

Abstract: Background: The effect of hysterectomy on sexual functioning differs from one woman to another. Although it is well known that hysterectomy may affect self-perceptions and self-esteem of women, it is emphasized that the sexual function of women who have to maintain their female identity, values, and sexuality is also affected. Sexual health is neglected by health professionals. **Purpose:** This study was conducted with the purpose of evaluating the effect of a psychosexual counseling program on sexual quality of life among post-hysterectomy women. **Methods: Research Design:** A quasi-experimental design (study and control groups) **Instruments:** a structured interviewing questionnaire, women's concerns questionnaire and Sexual Quality of Life-Female (SQOL-F) questionnaire. **Results:** A psychosexual counseling program improved the sexual quality of life among post-hysterectomy women in the study group on post- test where total means were 93.88.as compared to quality of life of women in the control group (89.98).**Conclusion:** Psychosexual counseling program improved sexual quality of life among post-hysterectomy women. **Recommendations:** Psychosexual counseling should become a part of routine nursing care beside postoperative care for women undergoing hysterectomy to improve women's sexual quality of life.

Key words: *Hysterectomy, Psychosexual Counseling Program, Sexual Quality of life*.

Introduction

Major surgical procedures like hysterectomy often result in serious physical and mental side effects. Health professionals frequently disregard the sexual function of women who must preserve their feminine identity, values, and sexuality following hysterectomy, despite the fact that it is widely accepted that hysterectomy may impair women's self-perceptions and self-esteem (Dominguez-Valentin et al., 2021)

Women who have hysterectomies report psychological distress in addition to physical illness. Therefore, hysterectomy patients also need to address their psychological requirements. There are three major categories of psychological symptoms: reactions related to views of feminity and low self-esteem, decreased libido, pain, dyspareunia, or anxiety concerning sexual activity, and anxiety and depression attributed to the operation. (Rahkola-Soisalo, et al., 2020; Uccella et al., 2020).In addition to decreased secretion and vaginal shortening, hysterectomy can alter vascularization and innervation, which may lead to dyspareunia (Dundar et al., 2019). Furthermore, it appears that the unsatisfactory aspect of sexual behaviour prior to the intervention seems to have an adverse effect on the postoperative outcomes (Dedden et al., 2020)

Every woman experiencing a hysterectomy has different complaints

related to sexual function. Loss of libido, decreased intercourse frequency, decreased sexual responsiveness, difficulty achieving orgasm, diminished vaginal sensation, dyspareunia (painful intercourse), vaginal shortening, loss of penile penetration, and loss of vaginal elasticity and lubrication are among the complaints following hysterectomy (Briedite, et al., 2018).

Women who had hysterectomy fear losing their sexual function, ability to reproduce, and femininity role, according to Gercek et al. (2016). In addition to these concerns, these women worry about the negative effects of menopause, losing their physical ability, and having a bad marriage. Women's information needs before and after hysterectomies are not successfully satisfied, and appropriate interventions (effective communication, social support, behavioral methods) are not followed, which is the main cause of these worries and fears (Sukgen & Kaya, 2018). After hysterectomy, woman is worried about how her resumed sex will go. Her husband might worry about hurting her in the same ways. Her partner might experience sexual dysfunction as well if anticipatory guidance is ignored and these feelings are not expressed. Chances for sexual adjustment are affected by nurses' advice of patients having hysterectomy. A woman should be advised to wait at least 6 weeks before engaging in sexual activity. By this period, tissue strength is sufficient, and full healing completely eliminates the risk of infection (Schmidt, et al., 2019). The socio-cultural construction has an impact on sexuality, which is expressed in gestures, words, behavior's, looks, attitudes, and even in one's own silence. It covers matters such as gender, identity, and sexual orientation, eroticism, pleasure, intimacy, and reproduction (Thakar, 2018)

Significance of the Study

Worldwide, hysterectomy is the second most common surgical procedure after caesarean section; about 300 out of every 100,000 women will undergo it. (Smith et al. 2017); WHO/ICO (2017); Also, about 20% of women who have hysterectomy post-operatively report a reduction in sexual function. According to Ibrahim and Mohammed (2020), 52.8% of Egyptians experience sexual dysfunction following hysterectomy. Because it incorporates psychological, genetic, and physical components, the etiology of sexual function is extremely complicated (Clayton et al., 2017). Any disease that affects the uterus, which is an element of a woman's sexual identity, may result in psychosexual disorders such as diminished desire and altered genital sensitivity (Dundar et al., 2019). Long-term sexual dysfunction, which can significantly lower a woman's quality of life despite not really being life-threatening, can occur when there is a chronic or repeated decline in sexual desire, arousal, orgasm, as well as the presence of pain (Schmidt et al., 2019). Patients' psychosexual well-being must also be taken into consideration during postoperative nursing, in addition to their physical concerns. Women must receive the proper psychosexual therapy in order to improve their sexual quality of life following hysterectomy.

Purpose of the Study

This study was conducted with the purpose of evaluating the effect of psychosexual counseling program on sexual quality of life among post-hysterectomy women.

Research Hypothesis

The women undergoing hysterectomy who receive psychosexual counseling

will have higher sexual quality of life and low sexual concerns than those who do not receive it.

Methods

Research Design:

A quasi –experimental design (study and control groups) was used to carry out the present study.

Setting

The obstetrics and gynecology departments of Menoufia University Hospital and Shebin El-Kom Teaching Hospital in the Menoufia governorate of Egypt were the sites of the study.

Sampling:

A purposive sample of eighty hysterectomy women, and they were divided into two equal groups. Each group consisted of 40 women; the study group received routine hospital care along with psychosexual counseling, whereas the control group received only routine hospital care. The inclusion criteria were women in childbearing years and the absence of a history of psychiatric disease.

Sample size

Based on the previous studies that examined the same outcomes Thakar, R. (2015) who studied "Is the Uterus a Sexual Organ? Sexual Function Following Hysterectomy. Sex" n= 124 and found significant differences, sample size was calculated using following equation: n= (Z2 *p* q)/D 2 at power 80%, confidence level 95% and margin of error 5% , the average sample Size (n) was (80 women undergo hysterectomy)divided into two equal groups 40 women for each group.

Instruments of data collection:

The researcher collected data using two instruments:

Instrument I: A structured interviewing questionnaire:-

The researcher used this questionnaire to gather comprehensive information on hysterectomy and women's post-hysterectomy concerns. The researcher used a review of recently published literature to develop this instrument. The instrument consisted of four parts that were revised by three professors at the Maternal and Newborn Health Nursing Department and then tested for validity and reliability.

It included two parts:

- **Part 1:** The study participants' demographic data, including their age, address, years of marriage, degree of education, location of residence, job, marital status, and income
- **Part 2:** Medical and surgical history is a concern (medical history, cause of hysterectomy, and previous surgical procedures).

Instrument II: a questionnaire on women's concerns following hysterectomy, and it is used as a measure for women's post-hysterectomy fears. After studying relevant and recent literature, the researcher adopted it and translated it into Arabic. It has seven questions with scores ranging from 1 to 3. A higher score denotes higher fears. Response scales are used to rate the issues related to women's concerns.
The responses are yes (1), to some extent (2), and no (3).

Scoring system

- No fears less than 4
- Mild fears 4:6
- Moderate fears 7:13
- Sever fears 14: 21

<u>Instrument (III):</u> Sexual Quality of Life-Female (SQOL-F) questionnaire:

It was designed by Symonds (2005) was used. The psychometric properties of the Iranian version of SQOL-F are well documented [Poggiogalle etal, 2014; Maasoumi etal, 2013]. It consists of 18 items and each item is rated on a six-point response category (completely agree to completely disagree). The scores on this scale range from 18 to 108 and a higher score indicates better sexual quality of life (Symonds, 2005). It included four subscales. Examples of items are provided in parentheses: Psychosexual Feelings (measuring anger, worry of partner's hurt or rejection), Sexual and Relationship Satisfaction (enjoy, good feeling about oneself), Self-worthlessness (feeling like less of a woman, feeling of guilt), and Sexual Repression (loss of pleasure, avoiding) (Symonds, 2005).

Validity of the study instruments:

The validity of the instrument was ascertained by three experts (two experts in Maternal and Newborn Health Nursing and one expert in Obstetrics & Gynecology) who judged the instrument for content and internal validity and modifications done.

Reliability of the study instruments:

Test-retest reliability had used by the researcher for testing the internal consistency of the instrument. It had done through the administration of the same instrument to the same participants under similar conditions. Study instruments revealed reliable at Cronbach's alpha 0.861 for instrument (1), 0.82 for instrument (2), and 851 for instrument (III).

Pilot Study

Pilot was conducted to ensure the applicability of the instruments, the feasibility of the study and estimate the time needed for collecting the data. It was conducted on 10% of the total sample (8).

Ethical Considerations

An approval from the research and ethical committee of the Faculty of Nursing, Menoufia University was obtained dated (15-5-2020). Approaches to ensure ethical issues were considered in the study. Confidentiality was achieved by the use of locked sheets with the name of participants replaced by numbers. All participants were informed that the information they provided during the study would be kept confidential and used only for statistical purpose and after finishing the study.

Field work

An extensive review related to the study area was done including electronic dissertations, available books and articles. Additionally, a review of the literature was conducted to develop a knowledge base related to the study area. The review of literature section was tested by plagiarism checker software and the result was "low probability of plagiarism in paper.

The current study was carried out through four phases: a preparatory phase, an\assessment phase, an implementation phase, and an evaluation phase

Phase (1):-the preparatory phase:

An extensive review was done to gather the collection of data relevant to the study area, involving an electronic dissertation, books that were available, and the preparation and testing of all instruments. Validity and reliability tests on instruments were conducted. An initial investigation was conducted, and the required modifications were implemented.

Phase (1I):- Assessment phase:

An individual interview was conducted by the researcher for each study participant to gather data using the study instruments following the recovery from a hysterectomy procedure (pre-test) in the obstetric department. The researcher remarked the women's answers in the data collection sheet due to their condition after surgery. To make communication easier, the addresses and phone numbers of the women under study were recorded.

Phase (1I):- The implementation phase: (for the study group only)

According to the planning phases developed by the researcher, this phase involved implementing a psychosexual counseling program on women having hysterectomy.

Data collection began on December 12, 2020, and was completed on April 28, 2022.

The first step: the researcher went to the obstetric department in MUH from 10–11 am and Shebin El-Kom Teaching Hospital from 11.30 am–1 pm four days a week (Sunday, Monday, Wednesday, and Tuesday). The researcher interviewed 6–8 women monthly.

The 2nd step: After recovery from hysterectomy surgery, the researcher introduced herself to the study participants and provided a verbal explanation about the study. Verbal agreement was obtained from all participants. The participants were informed that the study was voluntary and she could withdraw at any time, and the researcher took socio-demographic data from the participants.

The program was carried out in the form of sessions, which were planned for 1-2 hours each day, twice weekly (two sessions per week).

Sociodemographic data (name, age, address, phone number, years of marriage, occupation, level of education, and income of the couple), medical history (cause of hysterectomy and previous surgical procedures), and women's concerns after hysterectomy (complications, fears of incomplete femininity, lack of love and intimacy, marrying another, being unsupported, and husband's family calibrating) were all collected from the woman after she underwent a total hysterectomy.

- The researcher began the sessions a month after the surgery. During the first session, each woman was given the questionnaire, which she completed while the researcher observed. While the researcher wrote out the questionnaire responses for illiterate women, it took about 8 to 10 minutes to complete. Any woman can't come to any session for any reason. The researcher gave her the session by using her mobile phone.
- The 3rd step was session implementation.
- Focus of session 1: Introduction and hysterectomy orientation
- The researcher identified the women's concerns and knowledge regarding hysterectomy.
- The researcher initially evaluated the sexual quality of life domain questionnaire, and the concerns of women (pretest).then explained to the women the meaning of hysterectomy, the female reproductive system, causes, types of hysterectomy and let them to speak about their concerns

Session 2: Psychosexual counseling

The researcher gave women simple explanations of sexual therapy and strategies for reducing dyspareunia and postoperative pain. The researchers also offered advice on how to increase orgasm, raise the husband's satisfaction

with sexual arousal during intercourse, and use natural means reducing dyspareunia and postoperative pain. Due to their concerns, the interaction between the women throughout this session was very high.

The researcher concluded the session by advising the women to follow the instructional advice in order to reduce their pain symptoms and enhance their sexual well-being. Every woman received information regarding both the hysterectomy and sexual counseling.

- By the end of this session the researcher provided instructional guideline booklet to the women. This booklet included educational material about measures that improve sexuality and sexual quality of life

Phase (4):- Evaluation phase:

This phase aims to determine how a psychological counseling program affects the sexual quality of life for women having a hysterectomy.

The researcher allowed the women to talk and ask questions, after which she followed up on every session and provided any further information the women requested.

A post-test was done at the end of the psychosexual program; follow up the same pattern of interviewing after 3 months after posttest.

Statistical analysis

Data were collected, tabulated, statistically analyzed using an IBM personal computer with Statistical Package of Social Science (SPSS) version 20 (SPSS, Inc, Chicago, Illinois, USA). Chi-square test and student t-test were used to analyze the data.

Results

Table 1 shows the socio-demographic data of the study participants. There was no statistically significant difference between the study and control groups regarding socio-demographic characteristics. The majority of study participants were married, had a university education, had both types of sex children, and had a sufficient income. The majority of study participants age between (20-30 or 41-55).

Table 2 shows medical and surgical history among the studied participants. This table reveals that there is no statistically significant difference between the study and control groups regarding their medical and surgical history. The most common cause of hysterectomy among the study participants and control group was heavy or irregular bleeding. The most common type of hysterectomy among the study and control groups was subtotal hysterectomy from abdominal techniques.

Table 3 illustrates source of information regarding hysterectomy among the studied groups. More than three-quarters (77.5%) of the study group and about 62.5% of the control group have information regarding the hysterectomy. More than half of the study and control groups (54.8% and 52.0%, respectively) said their source of information regarding the surgery was from the doctor's parents and relatives, respectively.

Table 4 shows there were highly statistically significant differences between women's concerns before and after psychosexual counseling program and during follow up. The highest concerns before the counseling program were concerns about post-operative complications (90%) followed by fears of incomplete femininity, fears of a lack of love and intimacy from the husband (65%&65%). However, these concerns decreased after counseling and during follow up to (17.5%, 7.5%, and 12.5% respectively).

Figure 1 demonstrates women's concern about hysterectomy among the studied participants at post counseling program. the control group had a higher statistically significant increase regarding sexual concerns than the study group About 80% of control group had severe fears compared to 52.5% of study group and 20% of control group had severe fears compared to 47.5% of study group

Table 5 shows that the control group had a higher statistically significant increase than the study group regarding feel husband's dissatisfaction during intercourse, feel vaginal dryness during intercourse, feel lack of orgasm during intercourse, feel vaginal pain during intercourse, feel a lack of sexual arousal during intercourse . On the other hand, the study group had a higher statistically significant increase than the control group regarding having any information about artificial things which increase sexual arousal and orgasm during intercourse ($p<0.001$). There were no statistically significant differences between the study and control groups regarding feel unwilling to have intercourse ($p= 0.330$).

Table 6 reveals total sexual quality of life among the study and control groups (after counseling program). It revealed statistically significant differences for psychosexual feeling, sexual and relationship satisfaction and sexual repression. Psychosexual feeling and sexual repression was significantly greater among the study group than the control group ($p < 0.001$). Relationship satisfaction was significantly greater for the study group than the control group ($p=0.001$).

Table 7 illustrates correlation between sexual quality of life and women's concern about hysterectomy between the study and control groups. Before psychosexual program, there was no correlation between sexual quality of life and women's concern among the studied groups ($p= 0.073$). After psychosexual counseling program there was negative correlation between sexual quality of life and women's concern among the studied groups ($p= 0.001$). During follow up there was negative correlation between sexual quality of life and women's concern among the studied groups ($p= 0.001$). This meant as sexual quality of life increased women's concern deceased.

Table (1): Socio Demographic Characteristics of the Study and Control Groups (N=80)

Variables	Study group (N=40)		Control group (N= 40)		X2	P value
	No.	%	No.	%		
Age / years						
20 – 30	14	35.0	12	30.0		
31 – 40	12	30.0	16	40.0	0.879	0.644
41 – 55	14	35.0	12	30.0		
Marital status						
Single	1	2.50	2	5.00		
Married	34	85.0	32	80.0	0.537	0.911
Divorced	2	5.00	2	5.00		
Widow	3	7.50	4	10.0		
Duration of marriage	N=39		N=38			
5 – 9	21	53.8	16	42.1		
10 – 15	8	20.5	16	42.1	4.33	0.115
> 15	10	25.6	6	15.8		
Educational level						
Read and write	4	10.0	3	7.50		
Secondary	15	37.5	20	50.0	2.68	0.442
University	17	42.5	16	40.0		
Postgraduate	4	10.0	1	2.50		
Educational level of husband	N=39		N=38			
Illiterate	4	10.3	1	2.60		
Secondary	12	30.8	20	52.6	4.68	0.096
University	23	59.0	17	44.7		
Number of lived children						
No	3	7.50	4	10.0		
One	10	25.0	16	40.0	4.79	0.188
Two	11	27.5	4	10.0		
> two	16	40.0	16	40.0		
Sex of children						
Male	15	40.5	9	25.0		
Female	7	18.9	7	19.4	2.20	0.333
Both	15	40.5	20	55.6		
Woman occupation						
Employed	26	65.0	29	72.5	0.524	0.469
Unemployed	14	35.0	11	27.5		
Income						
Enough	27	67.5	23	57.5	0.853	0.356
Not enough	13	32.5	17	42.5		

Table (2): Medical and Surgical History among the Study and Control Groups (N=80):

Variables	Study group (N=40)		Control group (N= 40)		X2	P value
	No.	%	No.	%		
Having surgery before						
Yes	20	50.0	21	52.5	0.050	0.823
No	20	50.0	19	47.5		
Type of surgery	N=20		N=21			
Appendectomy	4	20.0	3	14.3		
Tonsillectomy	7	35.0	4	19.0	4.44	0.217
Cholecystectomy	2	10.0	8	38.1		
Gynecological surgery	7	35.0	6	28.6		
Causes of hysterectomy						
Cancer	2	5.00	1	2.50		
Uterine fibroids	9	22.5	5	12.5		
Endometriosis	0	0.00	3	7.50		
Hyperplasia	4	10.0	0	0.00	13.1	0.108
Heavy or irregular bleeding	14	35.0	19	47.5		
Delivery complication	7	17.5	6	15.0		
Placental causes	0	0.00	1	2.50		
Uterine prolapse	1	2.50	4	10.0		
Accidental	3	7.50	1	2.50		
Type of hysterectomy						
Total	6	15.0	8	20.0		
Subtotal	20	50.0	19	47.5	0.348	0.840
Hysterectomy with bilateral salpingo oophorectomy	14	35.0	13	32.5		
Surgical techniques for hysterectomy						
Vaginal	2	5.00	8	20.0	4.57	0.102
Abdominal	31	77.5	28	70.0		
Laparoscopic	7	17.5	4	10.0		

Table (3): Source of Information about Hysterectomy among the Study and Control Groups (N=80):

Variables	Study group (N=40)		Control group (N= 40)		X2	P value
	No.	%	No.	%		
Do you have any information regarding the hysterectomy						
Yes	31	77.5	25	62.5	2.14	0.143
No	9	22.5	15	37.5		
Source of information						
Parents and relatives	3	9.70	3	12.0		
Doctors	11	35.5	9	36.0	1.14	0.563
All of the above	17	54.8	13	52.0		

Table (4): Effect of Counseling Program on Women's sexual Concerns among the Study group

variables	Study group									P value
	Before program			After program			After followup			
	Yes	To some extent	No	Yes	To some extent	No	Yes	To some extent	No	
	N(%)	N(%)	N(%)	N(%)	N(%)	N(%)	N(%)	N(%)	N(%)	
1. Do you have concerns about complications of hysterectomy?	36 (90.0)	4 (10.0)	0 (0.00)	13 (32.5)	23 (57.5)	0 (0.00)	7 (17.5)	14 (35.0)	19 (47.5)	P1:0.001** P2:0.001** P3:0.001**
2. Do you have fears of incomplete femininity after hysterectomy?	26 (65.0)	11 (27.5)	3 (7.50)	9 (22.5)	19 (47.5)	12 (30.0)	3 (7.50)	8 (20.0)	29 (72.5)	P1:0.001** P2:0.001** P3:0.003**
3. Do you have fears of lack of love and intimacy from the husband after hysterectomy?	26 (65.0)	11 (27.5)	3 (7.50)	12 (30.0)	15 (37.5)	13 (32.5)	5 (12.5)	7 (17.5)	28 (70.0)	P1:0.001** P2:0.001** P3:0.003**
4. Do you have fears that the husband will marry another woman?	15 (37.5)	7 (17.5)	18 (45.0)	19 (47.5)	6 (15.0)	15 (37.5)	8 (20.0)	4 (10.0)	28 (70.0)	P1: 0.128 P2: 0.077 P3: 0.012*
5. Do you have fears that friends and family will not support you?	10 (25.0)	11 (27.5)	19 (47.5)	7 (17.5)	2 (5.00)	31 (77.5)	4 (10.0)	1 (2.50)	35 (87.5)	P1: 0.071 P2:0.001** P3: 0.498
6. Do you have concerns about the husband's family calibrating you?	11 (27.5)	14 (35.0)	15 (37.5)	12 (30.0)	10 (25.0)	18 (45.0)	12 (30.0)	10 (25.0)	18 (45.0)	P1: 0.522 P2: 0.241 P3: 0.924

*Significant ** High significant P1: Comparison between after operation and after 3 months

P2: Comparison between after operation and after 6 months P3: Comparison between after 3 months and after 6 months

Figure (1): Women's Sexual Concern after Hysterectomy among the Studied participants (Study and Control Groups) (post Counseling Program)

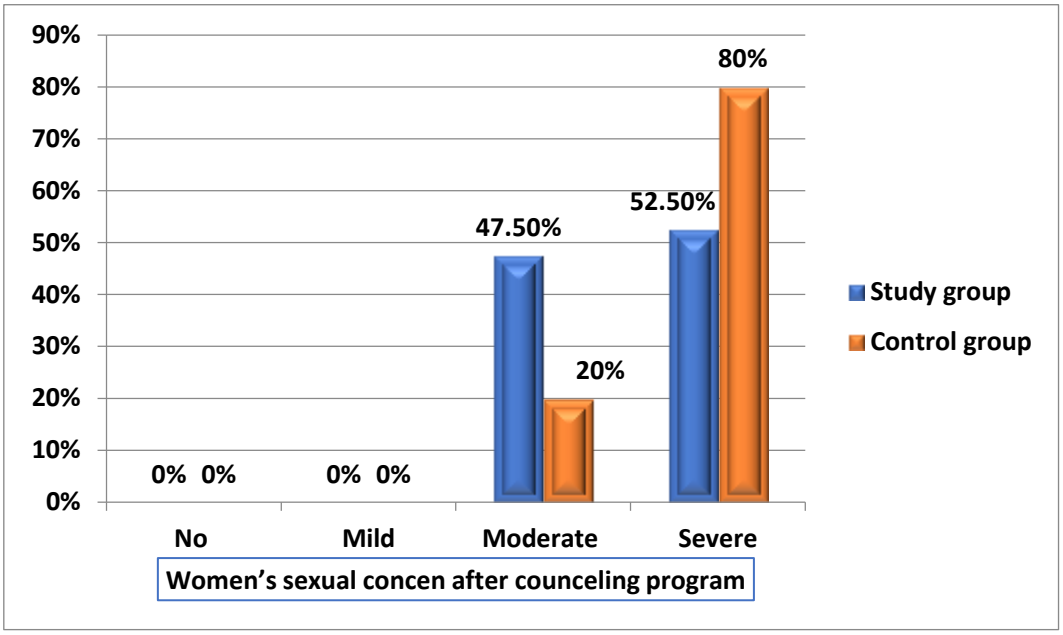

Table (5) Sexual Relationship Aspect of Quality of Life after Hysterectomy among the Studied Participants (Study and Control Groups post Counseling Program

Sexual relationship							
1. Do you feel unwilling to have intercourse?	7(20.6)	17(50.0)	10(29.4)	8(25.0)	17(53.1)	7(21.9)	0.536 0.765
2. Do you feel your husband's dissatisfaction during intercourse	0(0.00)	13(38.2)	21(61.8)	8(25.0)	24(75.0)	0(0.00)	32.2 0.001**
3. Do you feel vaginal dryness during intercourse after hysterectomy?	0(0.00)	23(67.6)	11(32.4)	16(50.0)	16(50.0	0(0.00)	28.2 0.001**
4. Do you feel lack of orgasm during intercourse after hysterectomy?	0(0.00)	17(50.0)	17(50.0)	16(50.0)	16(50.0	0(0.00)	33.0 0.001**
5. Do you feel vaginal pain during intercourse after hysterectomy?	0(0.00)	21(61.8)	13(38.2)	8(25.0)	16(50.0)	8(25.0)	9.81 0.007**
6. Do you feel a lack of sexual arousal during intercourse after hysterectomy?	0(0.00)	17(50.0)	17(50.0)	15(46.9)	17(53.1)	0(0.00)	31.9 0.001**
7. Do you had information about artificial things which increase sexual arousal and orgasm during intercourse?	27(79.4)	7(20.6)	0(0.00)	0(0.00)	16(50.0)	16(50.0)	46.5 0.001**

Table (6): Total Sexual quality of life among the Study and Control Groups (after Counseling Program)

Sexual quality of life item	Study group	Control group	P-Value
	Mean ± SD	Mean ± SD	
Psychosexual feelings	20.8 ±6.29	12.4 ±6.83	< 0.001
Sexual and relationship satisfaction	25.21 ±4.81	23.69 ±3.77	0.001
Self-worthlessness	16.27 ±2.56	16.18 ±2.10	0.71
Sexual repression	16.04 ±3.24	14.19 ±3.43	< 0.001
Total score	93.88 ±6.36	89.98 ±13.36	0.017

Table (7): Correlation between Sexual Quality of Life and women's Concern about hysterectomy between the Study and Control Groups

Concern	Sexual Quality of life			
	Study group (N=40)		Control group (N= 40)	
	r	P value	r	P value
Before psychosexual program	-0.312	0.073	-0.342	0.056
After psychosexual program	-0.804	0.001**	-0.476	0.004**
During follow up	-0.645	0.001**	-0.415	0.015*

*Significant **High significant

Discussion

The findings of the current study successfully test the research hypothesis. The findings are discussed in the following order: 1- Socio demographic characteristics of the study and control groups 2-Medical and surgical history among studied groups. 3-Source of Information regarding hysterectomy among the studied groups 4- Women's concerns before, after psychosexual counseling program and during follow-up 5- Sexual quality of life among the studied group

Socio demographic characteristics of the study and control groups

It is astounding that there is no significant difference between the study and control groups in terms of socio-demographic variables (age, parity, duration of marriage, education, employment, income, and type of sex child). The majority of the study participants were married, between the ages of 20 and 30 or 41 and 55, had children of both sexes, had a university education, and had a sufficient income. According to the researchers, these results indicate that both study groups

were homogeneous and comparable. The fact that both studies were conducted in the same town may help to explain this commonality.

This result comes in agreement with Zhang, et al (2018) who studied "Effects of psychological counseling program on quality of life, negative emotions, and psychological rehabilitation in post-hysterectomy women " in China and stated that there was no significant difference between the study and control groups regarding socio-demographic data as age, parity, duration of marriage, education, employment and income.

This finding is consistent with research conducted in China by Zhang, et al. (2018), who investigated the "Effects of psychological counselling programme on quality of life, negative emotions, and psychological rehabilitation in post-hysterectomy women" and found no statistically significant differences between the study and control groups in terms of sociodemographic factors like age, parity, length of marriage, education, employment, and income.

Ibrahim and Mohammed (2020), researchers at Ain Shams University, conducted a study titled "Effect of Nursing Instructional Guidelines on Women's Quality of Life after Hysterectomy." They added that all study participants were married and that the majority of participants were between the ages of 41 and 49.

These results also matched those of Krishnasamy and Vaidyanathan (2015), who in an Indian study titled "Does Quality of Life Improve in Women Following Hysterectomy?" reported that the majority of the study participants were married women between the ages of 41 and 45, who all had secondary education and had more than two children. This can be connected to the fact that the researcher used the same criteria to select the study sample.

However, Yakout et al. (2017), who conducted a study titled "Emotional Issues of Young Infertile Egyptian Females" in Egypt and reported an age group below 30 years, dispute this finding. According to Yakout et al. (2017) the paradox can be attributed to the sample of young females that was purposefully chosen.

Furthermore, in a study by Sardeshpande Nilangi (2015) titled "Hysterectomy among Premenopausal Women and its' Impact on their Life-Findings from a Study in Rural Parts of India," it was noted that the majority of the study participants were between the ages of 31 and 40 and had completed secondary education.

On the other hand, Abd el Gwad et al. (2020), who conducted research in Egypt on "Body Image, Self-Esteem, and Quality of Sexual Life among Women Following Hysterectomy," reported that the majority of the study's 55–65-year-old participants were housewives and that a third of them were illiterate.

The researchers point of view, this may be related to that the researcher selected the study sample from rural area and don't select reproductive age only.

Medical and surgical history among studied participants

The current study found no statistically significant difference between the study and control groups for the causes of hysterectomy despite the fact that half of the study and control groups had previously surgery such as cholecystectomy or appendectomy. Heavy or irregular bleeding was the most frequent reason for hysterectomy in both the study and the control groups, and subtotal hysterectomy using abdominal procedures was the most common procedure.

The findings corroborated those of Abd el Gwad et al. (2020), who reported that a quarter of individuals had undergone additional surgical procedures such as cholecystectomy and appendectomy. Additionally, according to Ibrahim & Mohammed (2020), there was no statistically significant difference between the study and control groups related causes of hysterectomy and type of hysterectomy where the most common cause of hysterectomy among the study and control groups were heavy or irregular bleeding.

According to a study by Zhang, et al. in India (2018), there was no statistically significant difference in the causes of hysterectomy between the study and control groups. Heavy or irregular bleeding was the most frequent reason for hysterectomy in both the study and control groups.

According to the study, this may be related to the fact that the first symptoms—heavy or irregular bleeding—appeared to the woman without the need for a doctor, while the remaining symptoms—which require a visit to the doctor—are experienced by the majority of women.

However, Ibrahim & Mohammed (2020) found that the majority of study participants underwent total hysterectomy and that fibroids were the most common reason for hysterectomy among the individuals. In addition, Banovcinova and Jandurova (2018) revealed that myoma was the most common reason for hysterectomy among the study participants in their study, "Subjective evaluations of life among women after hysterectomy."

According to the results of the current investigation, subtotal abdominal hysterectomy was the most popular hysterectomy technique. This was in agreement with Ibrahim and Mohammed (2020), who said that abdominal hysterectomy was one of the most common hysterectomy methods. According to Sardeshpande, Jandurova, and Banovcinova (2018), subtotal abdominal hysterectomy was the most popular method of hysterectomy.

The researcher's point of view, this may be due to abdominal hysterectomy is the safest technique of hysterectomy, having fewer complications, and total hysterectomy making women have early menopause. Also, it may be due to the cause of hysterectomy and the doctor's decision.

In contrast, Vilkins et al. (2020), who conducted a study in Michigan titled "Effects of Shared Decision Making on Opioid Prescribing Following Hysterectomy," found that total laparoscopic hysterectomy was the most popular kind of hysterectomy.

Source of information regarding the hysterectomy among the studied groups

Regarding information of hysterectomy, over three-quarters of the study group and almost two-thirds of the control group were aware of the hysterectomy. More than half of the study and control groups reported doctors, parents, and relatives as their primary sources of information about the procedure. This result was consistent with Erdogan et al. (2020) study in Turkey, "Effect of psychological care given to the women who underwent hysterectomy before and after the surgery on depressive symptoms, anxiety, and body image," which found that the majority of the study group had been taught about the procedure by the doctor's parents and relatives. This was expected. This was expected. This was expected, considering that the closest people are

the doctors, parents, and family members.

Contrarily, these results were in contrast with Vilkins et al. (2020), who stated that the majority of the study group had learned about hysterectomy from the internet and other patients.

Women concerns

The current study found no statistically significant differences between the study and control groups in terms of the overall number of women's concerns about hysterectomy after operation. Among the studied groups at 3 and 6 months after a hysterectomy, there were highly statistically significant differences in the concerns between the study and control groups. Whereas, at 3 and 6 months the concerns in the control group were significantly higher than in the study group. These concerns included worries about a woman's incomplete femininity, worries about the husband's lack of affection and closeness, and worries that the man would marry someone else. Contrarily, these results were in contrast with Vilkins et al. (2020), who stated that concerns that the husband won't cry, worries that friends and relatives won't console him, and worries that the spouse's family will criticize him.

This result was consistent with Mohammadi-Zarghan, Ahmadi's findings from their study "Marital Adjustment, Sexual Function, and Body Image after Hysterectomy," which was conducted in Iran in 2021. They found that while there was no statistically significant difference in marital adjustment between the study groups following surgery, there was a statistically significant difference in marital adjustment after surgery. After the counseling program, women's concerns were higher in the control group than in the study group. Sardeshpande and Nilangi (2015) also stated that while there were no statistically significant differences in the overall level of women's concerns about hysterectomy among the study groups following surgery, there were statistically significant differences and an improvement in concern following counseling.

Researcher point of view, these reductions in women's concerns in the study group compared to the control group demonstrated the program's impact on women's physical and psychological status, which was reflected in their concerns.

Sexual quality of life among the studied group

Concerning subscales of sexual quality of life among the studied groups, the current study revealed statistically significant differences between the study and control groups regarding psychosexual feeling, sexual and relationship satisfaction and sexual repression. Psychosexual feeling and sexual repression was significantly greater among the study group than the control group ($p < 0.001$). Relationship satisfaction was significantly greater for the study group than the control group ($p=0.001$).

This result was in agreement with Riazi etal., (2021) in his study conducted in Iran about "Sexual quality of life and sexual self-efficacy among women during reproductive-menopausal transition stages and post menopause: a comparative study" they stated that, Statistically significant differences were observed between the study and control groups in terms of subscales, including psychosexual feelings and self-worthlessness. Psychosexual feelings appear to be associated with feelings such as anxiety, depression, failure and fear of upsetting the sexual partner. Self-worthlessness also appears to be associated with low self-confidence

and self-doubt. Sexual repression is associated with avoiding sexual intercourse and can be affected by cultural factors and social norms.

The researcher point of view, psycho sexual therapy and adopting preventive measures had important role to reduce the number of complications and improve sexual satisfaction. In addition, teaching marital and sexual skills to women may be an effective step towards solving women's sexual problems, since improving sexuality problems related to hysterectomy.

As regard to correlation between sexual quality of life and concern among the studied group (before and after counseling program). After hysterectomy there was no correlation between sexual quality of life and fear among the studied groups. After counseling program, there was negative correlation between sexual quality of life and women's concerns among the studied groups. During follow-up there was negative correlation between sexual quality of life and women's concerns among the studied groups. As sexual quality of life increased women's fears deceased.

Conclusion

The current study findings succeeded in testing Research Hypothesis

The women undergoing hysterectomy who receive psychological counseling had higher sexual quality of life than those who do not receive it.

- There was no statistically significant difference between the study and control groups regarding sexual quality of life after hysterectomy before counseling program
- After counseling program the control group had a higher statistically significant increase regarding sexual concerns than the study group About 80% of control group had severe fears compared to 52.5% of study group and 20% of control group had severe fears compared to 47.5% of study group
- After counseling program, the control group had a higher statistically significant increase than the study group regarding feel husband's dissatisfaction during intercourse, feel vaginal dryness during intercourse, feel lack of orgasm during intercourse, feel vaginal pain during intercourse, feel a lack of sexual arousal during intercourse . On the other hand, the study group had a higher statistically significant increase than the control group regarding having any information about artificial things which increase sexual arousal and orgasm during intercourse

Recommendations

In the light of the current study findings the following can be recommended.

- Psychosexual counseling should become a part of routine nursing care beside postoperative care for women undergoing hysterectomy to improve women's sexual quality of life.
- Training programs for nurses regarding how to improve women's sexual quality of life after hysterectomy and sexuality life.
- Instructional booklet provided for woman's undergoing hysterectomy about pre-operative, post-operative care, and measures that women's sexual quality of life after hysterectomy and sexuality life.
- Replication of study to further setting using a larger sample.

References

Abd El Gwad N., Mahmoud A.,El-Sayad S., Abd El Fatah B.,Body image, Self-Esteem and quality of sexual life among women after hysterectomy. volume 7, issue 4, December 2020, page 227-242

Briedite I., Ancane G., Rogovska I., &Lietuviete N. (2018). Quality of Female Sexual Function After Conventional Abdominal Hysterectomy-Three Month' Observation. ActaChirurgicaLatviensis, 14: 26-31.

Clayton, A.H.; Valladares Juarez, E.M. Female Sexual Dysfunction. Psychiatr. Clin. N. Am. 2017, 40, 267–284. [CrossRef] [PubMed]

Dedden, S.J.; van Ditshuizen, M.A.E.; Theunissen, M.; Maas, J.W.M. Hysterectomy and Sexual (Dys)Function: An Analysis of

Dominguez-Valentin, M., Crosbie, E. J., Engel, C., Aretz, S., Macrae, F., Winship, I., & Møller, P. (2021). Risk-reducing hysterectomy and bilateral salpingo-oophorectomy in female heterozygotes of pathogenic mismatch repair variants: a Prospective Lynch Syndrome Database report. Genetics in Medicine, 23(4), 705-712.

Dundar, B.; Dincgez Cakmak, B.; Aykanat, Y.; Macunluoglu, A.C. Laparoscopic versus Vaginal Cuff Closure in Laparoscopic

Escola. Anna. Nery. 2019, 23. [CrossRef]

Gercek, E., Dal, N. A., Dag, H., & Senveli, S. (2016). The information requirements and self-perceptions of Turkish women undergoing hysterectomy. Pakistan journal of medical sciences, 32(1), 165.

Hysterectomy: Does It Affect Female Sexuality? Ginekol. Pol. 2019, 90, 365–454555555555555555542370. [CrossRef]

Erdoğan E, Demir S, Çalışkan B & Bayrak N. (2020) Effect of psychological care given to the women who underwent hysterectomy before and after the surgery on depressive symptoms, anxiety and the body image levels, Journal of Obstetrics and Gynaecology, 40:7, 981-987, DOI: 10.1080/01443615.2019.1678574

Ibrahim, W., & Mohammed, H., (2020) "Effect of Nursing Instructional Guideline on Women's Quality of Life after Hysterectomy". International Journal of Novel Research in Healthcare and Nursing Vol. 7, Issue 2, pp: (439-451), Month: May - August 2020, Available at: www.noveltyjournals.com

Lin, C.Y., Lee, T.Y., Sun, Z.J., Yang, Y.C., Wu, J.S., and Ou, H.T. (2017). Development of diabetes-specific quality of life module to be in conjunction with the World Health Organization quality of life scale brief version (WHOQOL-BREF). Health Qual Life Outcomes; 15: 167.

Lonnée-Hoffmann R. & Pinas I. (2014). Effects of hysterectomy on sexual function. Current sexual health reports, 6: 244-51.

Maasoumi R, Lamyian M, Montazeri A, Azin SA, Aguilar-Vafaie ME, Hajizadeh E. The sexual quality of life-female (SQOL-F) questionnaire: translation and psychometric properties of the Iranian version. Reprod Health. 2013;10:25. https://doi.org/10.1186/1742-4755-10-25

Mohammadi-Zarghan,s Ahmadi,k (2021) "Marital Adjustment, Sexual Function, and Body Image after Hysterectomy". Shiraz E-Med J. 2021; 22(9):e107565.

Poggiogalle E, Lazzaro LD, Pinto A, Migliaccio S, Lenzi A, Donini LM.
Health-related quality of life and quality of sexual life in obese subjects.
Int J Endocrinol. 2014;doi: https://doi.org/10.1155/2014/847871.

Rahkola-Soisalo, P., Brummer, T., Jalkanen, J., Sjöberg, J., Sintonen, H., Roine, R. P., & Härkki, P. (2020). Hysterectomy provides benefit in health-related quality of life: a 10-year follow-up study. Journal of Minimally Invasive Gynecology, 27(4), 868-874.

Riazi1H., Madankan1 F., Azin S., Nasiri M and Montazeri M (2021)Sexual quality of life and sexual self-efficacy among women during reproductive-menopausal transition stages and postmenopause: a comparative study. womens midlife health 7:8 https://doi.org/10.1186/s40695-021-00067-2

Sardeshpande& Nilangi N. 2015. Hysterectomy among Premenopausal Women and its' impact on their Life- Findings from a study in rural parts of India. International Research Journal of Social Sciences. ISSN 2319–3565

Schmidt, A.; Sehnem, G.; Cardoso, L.; Quadros, J.; Ribeiro, A.; Neves, E. Sexuality Experiences of Hysterectomized Women.Sexual Dysfunction after Hysterectomy and a Search for Predictive Factors. Eur. J. Obstet. Gynecol. Reprod. Biol. 2020, 247, 80–84.

Smith, L., Ramadan, M., Corley, B. ,Hablas, A. , Seifeldein, I. A., and Soliman, A. S. (2017). "Measuring the effect of improvement in methodological techniques on data collection in the Gharbiah population-based cancer registry in Egypt: implications for other low-and middle-income countries," Cancer Epidemiology, vol. 39, no. 6, pp. 1010–1014,.

Sukgen G, Kaya AE. Effect of laparoscopic hysterectomy on sexual function and quality of life: 12-month follow-up results. Cukurova Med J. 2018;43:11.

Symonds T, Boolell M, Quirk F. Development of a questionnaire on sexual quality of life in women. J Sex Marital Ther. 2005;31:385–97. https://doi.org/10.1080/00926230591006502

Thakar, R. Is the Uterus a Sexual Organ? Sexual Function Following Hysterectomy. Sex. Med. Rev. 2020, 3, 264–278. [CrossRef]

Uccella, S., Capozzi, V. A., Perrone, E., Zanello, M., Ferrari, S., Zorzato, P. C., ... & Scambia, G. (2020). Sexual function following laparoscopic versus transvaginal closure of the vaginal vault after laparoscopic hysterectomy: secondary analysis of a randomized trial by the Italian society of gynecological endoscopy using a validated questionnaire. Journal of Minimally Invasive Gynecology, 27(1), 186-194.

Vilkins AL, Sahara M, Till SR, Ceci C, Howard R, Griffith KC, Waljee JF, Lim CS, Skinner BD, Clauw DJ, Brummett CM, As-Sanie S. Effects of Shared Decision Making on Opioid Prescribing After Hysterectomy. Obstet Gynecol. 2019 Oct;134(4):823-833. doi: 10.1097/AOG.0000000000003468. PMID: 31503160; PMCID: PMC6945818

World Health Organization (WHO) / Institut Català d'Oncologia (ICO), Information Centre on HPV and Cervical Cancer (2019): Human Papillomavirus and Related Cancers in Egypt. Summary Report update 17 June 2019

Yacout, A., Osman, H, Abdeldaem, M, Hammouda, S.(2017): Effect of intravenous dexmedetomidine infusion on some proinflammatory cytokines, stress hormones and recovery profile in major abdominal surgery. Alexandria Journal of Medicine

Zhang, H., Jia, Y., Li, X., Feng, Y., Wang, X. (2018) . Effects of psychological intervention on quality of life, negative emotions, and psychological rehabilitation in post-hysterectomy women. Int J Clin Exp Med 2018;11(7):7304-7311 www.ijcem.com/ISSN:1940-5901/IJCEM0075302