



## **Effect of Nursing Educational Program on Sexual Function and Stress Level among Women with Residual Ovarian Syndrome**

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### **ABSTRACT**

**Background:** Residual Ovarian Syndrome is a well-known gynecological complication that can negatively impact woman's life. **The aim of this study was** to examine the effect of nursing educational programs on sexual function and stress levels among women with residual ovarian syndrome. **Method:** A quasi-experimental design (one group pre/post test) was adopted to test the proposed hypotheses. A purposive sample of 30 women was recruited. **This study was conducted at** Obstetrics and Gynecology Outpatient Clinic at Menoufia University Hospital, Shebinelkom, Menoufia Governorate, Egypt. **Three tools were used:** I. Structured interview schedule; II. 6-items female sexual function index (FSFI-6); and III. Perceived stress scale (PSS). **Results:** There was a highly statistically significant difference in the mean sexual function index score between pre-intervention and post-intervention within women ( $p < 0.001$ ). Concerning stress level, 53.3% of women disclosed high stress at pre-intervention this was significantly decreased to 13.3% at post-intervention ( $p < 0.001$ ). The study finding revealed that, there was a highly statistically significant correlation between Sexual function and perceived stress at post-intervention ( $p < 0.001$ ). **Conclusion:** Women who participated in the nursing educational program experience an improvement in sexual function and a lower stress level. **Recommendation:** Women with residual ovarian syndrome should be provided with adequate health knowledge and practice in order to reduce their suffering through conducting nursing educational program.

**Keywords:** *Nursing educational program, sexual function, stress level, residual ovarian syndrome*

### **Introduction**

The ovary is the female gonad. It is an oval endocrine organ located in the lower left and right quadrants of the abdominal region. The ovaries play a fundamental role in reproduction as well as

the production of hormones (Murray & McKinney, 2019). The most frequent major surgery for women during reproductive age that is not connected to pregnancy is a hysterectomy. Some gynecologists remove or keep ovaries during

this surgical treatment depending on several factors. The rate of ovarian conservation is excising especially among women less than fifty years old (**Niolaetal., 2023; Gould et al., 2020**).

Residual Ovarian Syndrome (ROS) is another name for ovarian remnant syndrome (ORS) is a complication after hysterectomy in which one or both ovaries have been preserved. Residual ovarian syndrome occurs in up to 5% (one in 20) of women with a history of hysterectomy with conservation of single or both ovaries. The syndrome is characterized by pelvic mass, recurrent pelvic pain, and dyspareunia. Pelvic pain can be categorized as pressure-like or dull to intense, severe, or sharp pain. This pain can be evident as either chronic or cyclic. Additionally, women may have painful sexual activity (dyspareunia), painful bowel movements, and painful urination. These symptoms typically appear within the 1<sup>st</sup> five years following a hysterectomy (**Niola et al., 2023**).

Predisposing factors for ROS have raised vascularity, which causes, endometriosis, pelvic adhesions, pelvic inflammatory disease, altered anatomy, and hemostats causing problems similar to those observed with endometriosis and neoplasms. The most popular preexisting conditions for this complication include previous abdominal surgery and endometriosis. ROS is commonly encased in pelvic adhesions due to the preexisting status and previous surgeries. Compression of the adjacent structures and pain are caused by functional alterations to the ovarian remnant tissues that result in an excessed ovarian

volume within a specific distance (**Niolaet al., 2023**).

On the basis of the symptoms and hormone levels, residual ovarian syndrome is clinically diagnosed. Additionally, the physician might also suggest that the affected women have an ultrasound, computed tomography scan, or magnetic resonance imaging. Follow-up should be done for women who exhibit clinical indications or symptoms that point to ROS, particularly in premenopausal women with breast cancer who receive aromatase inhibitor treatment after bilateral salpingo-oophorectomy or women who have pathogenic mutations in BRCA1 or BRCA2 who undergo BSO in order to decrease their risk of ovarian cancer (**Wei et al., 2019**).

Based on the women's symptoms, ROS management is determined. Surgery is the mainstay of the management to remove any remaining ovarian tissue. For women who are not candidates for surgery or who refuse surgery, hormonal therapy to delimit ovarian function is the alternate management. Sometimes hormone therapy may not do actively on these ovarian remains. In these situations, laparoscopic surgery helps in the elimination of ovarian fragments. Although the scar tissues from prior operations make this procedure difficult, the elimination of the leftovers is made easier by laparoscopy's better accessibility and visibility (**Cyrille et al., 2023; Shrestha et al., 2020**). Additionally, weight loss, psychological measures, hormonal contraception, and lifestyle guidance such as healthy food and exercises are examples of conservative approaches

that are beneficial in lowering the overall lifetime risk of ROS (Asfour et al., 2022)

The level of a person's contentment with their sexual activity and their ability to produce reciprocal pleasure is referred to as sexual satisfaction (Afzali et al., 2020). The strength of marital relationships is put at risk by unsatisfactory sexual interactions (Park et al., 2021). One of the most significant happinesses that people experience during their life is sexual pleasures. Couples benefit from this pleasure as they navigate life's challenges and interpersonal issues. The level of sexual satisfaction has a profound effect on everyone's quality of life. Couples' sexual life is impacted by medical problems and illnesses like cancer since it might be challenging for those with refractory diseases to find sexual fulfillment (Kizilay et al., 2017).

Kegel exercises, another name for pelvic floor exercises, are one way to strengthen the PFMs. It is suggested that PFM exercise may enhance blood flow to the pelvic floor muscles, which is associated with an increase in women's sexual self-efficacy, and may also contribute to women's involuntary contractions during sexual activity (Lolowang et al., 2019; Pourkhiz et al., 2017). Because they are in charge of the vaginal sensation during sexual activity and the pelvic floor muscles' spontaneous contractions that occur regularly during orgasm, which has been determined to be crucial for the sexual process (Zaherian et al., 2020; Sobhgol et al., 2019).

Benson relaxation technique has a crucial physiological and psychological role in reducing stress and calming anxiety, restlessness, and mood. Furthermore, it completely relaxes all body muscles. To achieve a genuine effect, this technique needs to be used in a realistic setting, in a peaceful, relaxed state, with mental focus, and with a positive attitude (Abd Elgwad et al., 2021; Fatemeh et al., 2019).

### Significance

Residual ovarian syndrome is a well-known gynecological complication that can negatively impact woman's life. The American Nurses Association states that as sexuality is an essential aspect of nursing care, identifying and addressing women's sexual needs and concerns is a part of the duty of women's health nurses. In order to provide nursing education programs that reduce stress and enhance sexual function in women with ROS. Kegel exercises, which can enhance sexual function, should be taught to the women by the nurse (Khosravi et al., 2022; A Shahin et al., 2021; Nazarpour et al., 2017). To reduce their stress levels, the nurse should also teach them Benson's Relaxation technique (Abu Maloh et al., 2023).

Women's health nurses should be able to help women with ROS enhance their quality of life by lowering stress levels and enhancing sexual function through understanding, educating, and offering preventative measures. Unfortunately, few scattered nursing researches were conducted to examine the effect of nursing educational

programs on sexual function and stress level among women with residual ovarian syndrome. Therefore, the researchers were interested to conduct the current study in order to add to the body of nursing knowledge and fill the knowledge gap related to this understudied research problem.

### **Aim of the study:**

The aim of this study was to examine the effect of nursing educational program on sexual function and stress level among women with residual ovarian syndrome

### **Research hypotheses**

H1: Women with residual ovarian syndrome will experience an improvement in sexual function after implementation of nursing educational program than before

H2: Women with residual ovarian syndrome will experience a lower stress level after implementation of nursing educational program than before

### **Subjects and Method:**

#### **Research design**

To test the research hypotheses, a quasi-experimental design (one group pre/post-test) was utilized. The baseline measurements of the dependent variables are carried out for all participants. The suggested intervention is then given to the participants. Following that, all participants are post-tested to gauge the extent of the dependent variables' change (**LoBiondo-Wood & Haber, 2018**).

### **Setting**

The study was carried out at Obstetrics and Gynecology Outpatient Clinic at Menofia University Hospital, Shebinelkom, Menofia Governorate, Egypt. The clinic is situated on the first floor of the hospital and entails two rooms. The first room is deliberated for history taking, diagnosis, and ultrasound examination. While the second room is designed for gynecological and obstetrical clinical examination. The clinic provides health serves for approximately 6830 women annually.

### **Sample**

A purposive sample of 30 women with residual ovarian syndrome was recruited according to the following inclusion criteria: age range 30-45 years, married, disorder duration of at least 4 months. While, exclusion criteria include: women with chronic medical diseases such as diabetes, hypertension, liver disease, and renal disease. As well as, women with psychological disorders such as depression and anxiety are excluded from the study.

### **Sample size calculation**

With a power of 80% and a level of significance of 5% based on data from the literature (**Shrestha et al., 2020**), the sample size was computed using the following formula:

$$n = \frac{2(Z\alpha/2 + Z\beta)^2 \times p(1-p)}{(d)^2}$$

where, p = pooled proportion obtained from previous study; d = expected difference in

proportion of events;  $Z_{\alpha/2} = 1.96$  (for 5% level of significance) and  $Z_{\beta} = 0.84$  (for 80% power of study). Therefore,

$$n = \frac{2(1.96 + 0.84)^2 \times 0.53(1-0.53)}{(0.36)^2} = 30.1$$

Accordingly, the required sample size is 30.

### Data collection tools:

Three instruments were utilized in the collection of study-relevant data: I. A structured interview schedule; II. A six-item female sexual function index (FSFI-6); and III. A perceived stress scale (PSS).

#### 1. Structured interview schedule

The researchers constructing this tool after a thorough review of relevant literature. It involves two parts: *a) Demographic data:* This part contained data related to woman's age, education, place of residence, and occupation; *b) History of current disease:* This part included data related to type, causes of hysterectomy, duration of disorder, type of treatment (hormonal or non-hormonal), and the reason for current medical consultation.

#### 2. 6-item female sexual function index (FSFI-6) (Isidori et al., 2010)

It is a short, self-administered instrument consisting of six items that assesses female sexual function developed and validated by **Isidori et al. (2010)**. It is adapted from the original 19-item FSFI. Each of the six questions addresses a different domain from the original set: lubrication, desire, arousal, orgasm, satisfaction, and pain. A 5-

point Likert scale is used to rate items pertaining to desire and satisfaction; 1 represents "poor function" and 5 represents "optimal function." A 6-point Likert scale is utilized to rate the items pertaining to pain, lubrication, excitement, and orgasm with 0 represents "no sexual activity in the past month" and 5 represents "optimal function." For every question, a score ranging from 0 to 5 can be obtained. The scores of all questions are then added together to provide an overall FSFI-6 score, which varies from 2 to 30. Higher FSFI-6 scores are indicative of better sexual functioning. A cut-off score of 19 or less has been proposed by **Isidori et al. (2010)** to identify women who may be at risk for sexual dysfunction.

#### 3. Perceived stress scale (PSS) (Cohen et al., 1983)

Perceived stress scale is a widespread psychological tool that was created by **Cohen et al. (1983)** to measure how much stress is perceived. It entails ten questions regarding thoughts and feelings during the previous month. A 5-points Likert scale is used to rate each question ranging from 0 for "never," 1 for "nearly never," 2 for "occasionally," 3 for "fairly often," and 4 for "very often". The total score on the PSS varied from 0 to 40 with higher scores imply higher perceived stress. The overall score was divided into three levels: low stress, which is defined as scores between 0 and 13; moderate stress, which is defined as scores between 14 and 26; and high perceived stress, which is defined as scores between 27 and 40.

**Tools validity:**

Five scholarly nursing specialists in the fields of women's health and midwifery nursing were given the structured interview schedule that was created by the researchers in order to assess its face as well as, content validity. The tools' contents were validated for completeness, relevancy, and clarity. The necessary modifications were made in accordance with the experts' recommendations.

**Tools reliability:**

The Cronbach's alpha coefficient test was used to measure the reliability of the data collection instruments. Cronbach's alpha of 0.896 for the structured interview schedule indicated a strong, positive correlation between the items in the instrument. The FSFI-6 demonstrated a high reliability, with a Cronbach  $\alpha$  of 0.84. As well, PSS alpha scale dependability was calculated at 0.90.

**Ethical Considerations:**

The Scientific Research Ethics Committee of Menoufia University's Faculty of Nursing granted ethical permission for this study (Research N0: 957/ 2023). Women who agreed to participate in the study provided written informed consent after being informed of the purpose and importance of the research. The researchers stressed that participation in the study is completely optional, and women were also informed that they can leave the study at any moment without having to provide a rationale. The data was coded to ensure anonymity and confidentiality.

**Pilot Study**

Three women, who fulfilled the selection criteria, making up 10% of the pre-determined sample size, were included in the pilot study. The pilot study was conducted to evaluate the feasibility of the research process and to confirm the study instruments' relevancy, clarity, and applicability. It is also done to figure out how long it will take to finish the tools. According to findings of the pilot study, no issues that impede the data gathering process were discovered, and no modifications were needed to be performed in the research instruments. The pilot study participants were not included in the main study sample.

**Procedure**

Data was collected within five months from the beginning of July 2023 to the end of November 2023. The researchers attended the predetermined setting four days a week from 10:00 am to 2:00 pm. The study was conducted through five phases: preparation, recruitment, assessment, implementation, and evaluation phase.

**Preparation phase:** Official approval from the authorities in the aforementioned setting was obtained to carry out the study. In order to construct the educational program and the data collecting tools, a review of relevant literature has been done. Also, during this phase, preparation of teaching materials, i.e., Arabic booklet and power-point presentation were carried out.

**Recruitment phase:** Woman who met the selection criteria was interviewed by the researchers in a quiet, private room in the health

care facility. Women were introduced to the researchers during the interview, and they were informed about the nature, scope, goals, and timetable of the study. Women who agreed to take part in the study were then asked to provide informed written consent.

**Assessment phase:** Following recruitment, each woman was interviewed individually by the researchers to collect baseline information on demographic data and history of current illness using the structured interview schedule. After that, FSFI-6 was used to assess female sexual function and PSS was used to gauge the level of perceived stress. This assessment took about 20-30 minutes for each individual woman.

**Implementation phase:** Every woman attended two sessions, each lasting approximately 30-45 minutes. To attain the aim of each session, a variety of teaching strategies were employed including discussion, and demonstrations. The program contents were made clearer with the usage of a PowerPoint presentation as a visual teaching material. Following the completion of the program sessions, woman received an Arabic booklet comprising summaries of the topics covered during the sessions.

**First session:** This session's aim was to assist women in managing problems pertaining to their sexual function. The researchers inform women about the different phases of the sexual response cycle, encouraging them in assuming various

positions during sexual relation, promote various sexual stimulation to enhance vaginal blood flow and, in turn, vaginal lubrication, and stress the importance of applying water-soluble lubricants during sexual relation in order to reduce irritation and dyspareunia. In order to strengthen the pelvic floor and vaginal muscles, women were also taught how to conduct Kegel exercises.

**Second session:** The aim of this session was to impart stress-reduction skills to women. The researchers highlight the advantages of Benson's Relaxation Response in lowering stress, demonstrate steps of the technique, and then have each woman re-demonstrate it to ensure she is using it correctly.

**Evaluation phase:** An evaluation of the two main outcomes—sexual function and stress level—was carried out one month after the completion of the program sessions. The same data collecting tools utilized for assessing the baseline data were also employed to evaluate the two primary outcomes.

### Statistical analysis

Collected data was organized, coded, tabulated, and checked for errors. Then, data was statistically analyzed using the Statistical Package for the Social Science program, version 26.0 (SPSS, Chicago, IL). Continuous data were normally distributed and were expressed as mean  $\pm$  standard deviation (SD). Categorical data were expressed as frequency and percentage. Chi-square

test (or Fisher's exact test when applicable) was used for comparison of variables with categorical data. Student's t-test was used to determine the significance of the difference between two means. P-value less than 0.05 was considered significant, and less than 0.001 was considered highly significant.

## Results

Table (1) shows that, the age ranges between 30–45 years with a mean of  $39.9 \pm 4.7$ . In relation to place of residence, more than half (56.7%) of the women living in urban areas. Concerning level of education, 40% of women had secondary education. Regarding occupation, more than half (60%) of the women were working.

Table (2) displays that, 70% of the women had a total hysterectomy. Regarding duration of hysterectomy, 26.7% of women get hysterectomies between 6–8 months ago. Concerning causes of hysterectomy, 33.3% of women had combined causes of hysterectomy and 13.3% of women had uterine fibroids. In terms of type of treatment, the findings showed that 73.3% of the women received non-hormonal treatment. The table also reveals that, 63.3% of women reported followed up is the cause of their current medical consultation.

Table, (3) illustrates that the mean total sexual function index score was increased from  $17.9 \pm 1.9$  at pre-intervention to  $23.9 \pm 1.8$  at post-intervention and the difference between them was highly statistically significant ( $p < 0.001$ ). Moreover, figure (1) reveals that 73.3% of women had sexual dysfunction at pre-intervention as compared to only 13.3% of them had sexual dysfunction at post-intervention. The figure also shows that there was a highly statistically significant difference that could be discerned between the Sexual Index levels with  $X^2 = 21.991$  at  $p < 0.001$ .

Concerning stress level, the present study findings reveal that, 53.3% of women disclosed high stress level, and 13.3% reported low stress at pre-intervention. While at post-intervention, 56.7% of women reported low stress level and 13.3% of them registered high stress level. Furthermore, there was a highly statistically significant difference between the stress levels where  $X^2 = 15.300$  at  $p < 0.001$  (table, 4).

The study finding declared that, there was a highly statistically significant relation between female sexual function and perceived stress level at post-intervention where  $X^2 = 15.817$  at  $p < 0.001$  (table, 5 & figure, 2).



**Table (1): Distribution of women according to their demographic data (N=30)**

	Freq.	%
<b>Age (Years)</b>		
30 – 35	5	16.7
36 – 40	8	26.7
41 – 45	17	56.7
<b>Mean ±SD</b>	<b>39.9 ±4.7</b>	
<b>Residence</b>		
Rural	13	43.3
Urban	17	56.7
<b>Educational Level</b>		
Illiterate	2	6.7
Read and write	3	10.0
Primary education	3	10.0
Preparatory education	4	13.3
Secondary education	12	40.0
Higher education	6	20.0
<b>Occupation</b>		
Housewife	12	40.0
Working	18	60.0

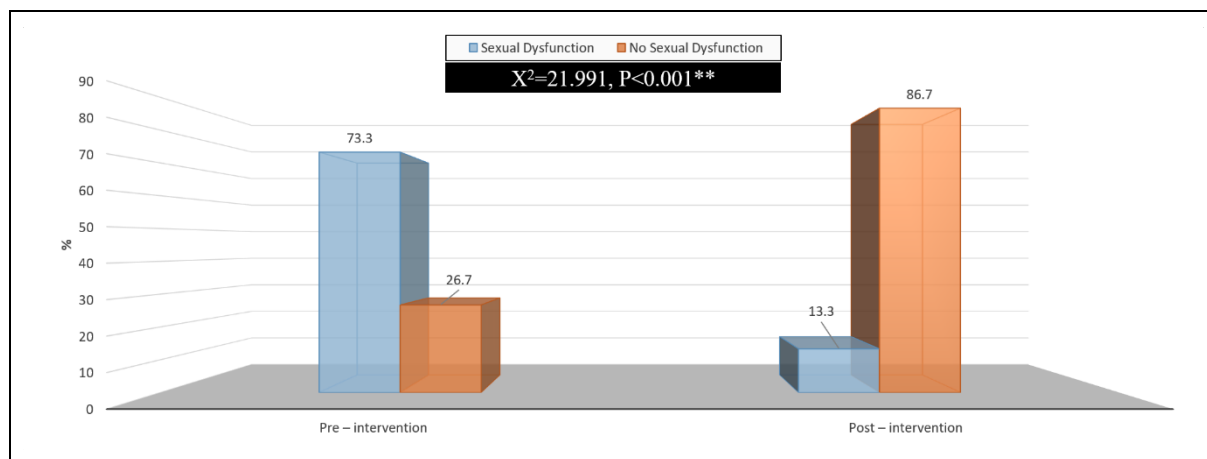
**Table (2): Distribution of the women according to history of current disease (N=30)**

Variables	Freq.	%
<b>Type of Hysterectomy</b>		
Subtotal Hysterectomy	9	30.0
Total Hysterectomy	21	70.0
<b>Duration of Hysterectomy (Months)</b>		
4 – <6	9	30.0
6 – <8	8	26.7
8 – < 10	7	23.3
>10	6	20.0
<b>Causes of Hysterectomy</b>		
Uterine Fibroids	5	16.7
Gynecological Cancer	3	10.0
Complicated Uterine Prolapse	3	10.0
Abnormal Bleeding	3	10.0
Adenomyosis	4	13.3
Couvellaire uterus	2	6.7
Combined causes	10	33.3
<b>Type of treatment*</b>		
Hormonal	18	60.0
Non – Hormonal	22	73.3
Surgical Treatment	20	66.7
<b>The cause of current medical consultation</b>		
Follow up	19	63.3
Complications management	11	36.7

\*Responses are not mutually exclusive

**Table (3): Comparison of the female sexual function between pre- and post-intervention (N=30)**

Sexual Domains	Pre – intervention	Post – intervention	Student's T – Test	
	Mean $\pm$ SD	Mean $\pm$ SD	T	P
Desire	2.8 $\pm$ 0.8	3.2 $\pm$ 0.5	2.322	0.023*
Arousal	3.2 $\pm$ 0.9	3.6 $\pm$ 0.4	2.224	0.030*
Lubrication	2.4 $\pm$ 1.0	4.8 $\pm$ 1.0	9.110	<0.001**
Orgasm	2.1 $\pm$ 0.5	4.5 $\pm$ 0.6	15.449	<0.001**
Satisfaction	3.0 $\pm$ 0.9	5.3 $\pm$ 0.5	12.347	<0.001**
Pain	4.4 $\pm$ 1.3	2.5 $\pm$ 0.7	7.022	<0.001**
<b>Total Female Sexual Function Index</b>	<b>17.9 <math>\pm</math>1.9</b>	<b>23.9 <math>\pm</math>1.8</b>	<b>12.556</b>	<b>&lt;0.001**</b>

**Figure (1): Comparison of the female Sexual dysfunction at pre- and post-intervention (N=30)****Table (4): Comparison of stress levels among women at pre- and post-intervention (N=30)**

Perceived Stress levels	Pre-intervention		Post-intervention		Chi-square	
	Freq.	%	Freq.	%	X <sup>2</sup>	P
Low Stress	4	13.3	17	56.7		
Moderate Stress	10	33.3	9	30.0	15.300	<0.001**
High Stress	16	53.3	4	13.3		

Table (5): Correlation between sexual dysfunction and perceived stress at post – intervention

Perceived stress levels	Sexual Dysfunction (n=4)		No Sexual Dysfunction (n=26)		Fisher's exact test	
	Freq.	%	Freq.	%	X <sup>2</sup>	P
Low stress	0	0.0	17	65.4		
Moderate stress	1	25.0	8	30.8	15.817	<0.001
High stress	3	75.0	1	3.8		

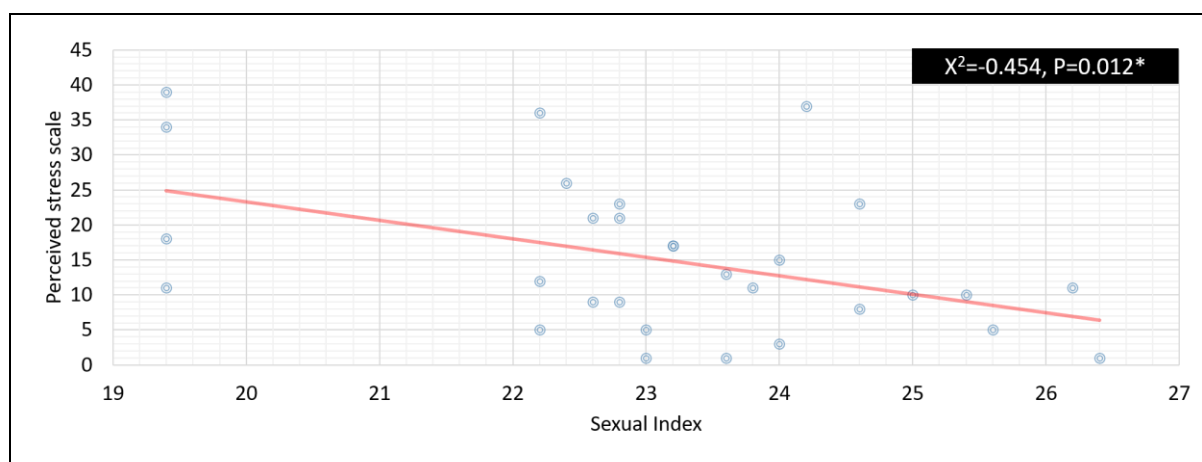


Figure 2. Correlation between sexual dysfunction and perceived stress at post – intervention

## Discussion

Residual Ovarian Syndrome is a condition occurring in women who have undergone unilateral or bilateral salpingo-oophorectomy with or without hysterectomy, resulting from the persistence of ovarian tissue left unintentionally after easy or difficult ovarian resection and which becomes functional and/or dystrophic (Fu & Su, 2018). Therefore, the purpose of current study was to examine the effect of nursing educational program on sexual function and stress levels among women with residual ovarian syndrome. Discussion of the study findings will be in the following frame related to two hypotheses of the study.

The current study findings support the first research hypothesis: Women with residual ovarian syndrome will experience an improvement in sexual function after implementation of nursing educational program than before. In relation to female sexual function, the present study revealed that there was a significant improvement in the mean sexual index score within women post-intervention compared to pre-intervention. This result was consistent with **Kamal et al. (2021)** who reported that women had higher score in the total scores of sexual function index at post intervention compared to pre intervention with statistically significant difference.

Also, this finding was in the same line with **Boberet et al. (2018)** who found that the total scores of Female Sexual Function Index (FSFI) improved significantly from Baseline to 2-months and 6-months after intervention. Women experienced significant changes in sexual function over time, before and after the intervention in the FSFI total score and FSFI subscale scores, including arousal, orgasm, lubrication and satisfaction. This indicated that educational program proved to have a positive effect on knowledge and sexual function of women with residual ovarian syndrome.

Concerning sexual index level pre- and post-intervention, the current study illustrated that the majority of women had no sexual dysfunction post-intervention compared to pre-intervention with a highly statistically significant difference. This result was congruent with **Kamal et al. (2021)** who found that about half of women had sexual functioning at post-intervention compared to no women had sexual functioning at pre-intervention with statistically significant difference. This may be due to continuous education and support among women about sexual concerns that provided a great support and encouraging women to decrease embarrassment about talking in their sexual problems.

The study findings also support the second research hypotheses: Women with residual ovarian syndrome will experience a lower stress level after implementation of nursing educational program than before. Regarding stress level, the present

study revealed that more than half of women disclosed high stress level at pre-intervention as compared to low stress level at post-intervention with a highly statistically significant difference. This finding was in accordance with **Cowan et al.(2023)** who reported that the majority of intervention group showed reduced stress, depression and anxiety symptoms, and increased life satisfaction compared to no intervention group with statistically significant difference. This could be related to the positive impact of stress management program and commitment of women to improve their quality of life.

Moreover, this result was aligned with **Salajegheh et al. (2023)** who found that the mean score of stress and anxiety symptoms in the intervention group was significantly reduced after the intervention in comparison with the control group. This indicated that stress-reducing effects are due to improvements in preservative cognition and emotion regulation that improve the mental health of women.

For correlation between of sexual function and perceived stress level at post-intervention, the current study showed that there was a highly statistically significant correlation between sexual function and perceived stress level whereas sexual dysfunction was decreased with low stress among women. This finding was agreed with **Kogure et al. (2019)** who reported that there were significant negative correlations between anxiety and stress scores with the sexual function index total score whereas increased sexual function index correlated with low stress score among women with residual

ovarian syndrome. This illustrated that the importance of adherence to stress reduction methods to improve physical and emotional health and subsequently improve sexual function of women.

### Conclusion:

The study's findings declared that, the nursing educational program assisted women with residual ovarian syndrome enhance their sexual function and experience less stress.

### Recommendation:

In the light of the study's findings, the following are recommended:

- Apply a nursing educational program on sexual function and stress levels among women with residual ovarian syndrome to improve sexual function and decrease stress levels.
- Provide women with residual ovarian syndrome with adequate evidence based knowledge about strategies that improve the sexual function and decrease stress levels.
- Suggest including a nursing educational program among women with residual ovarian syndrome in the nursing curriculum.
- Future research could be replicated the current study in a different setting to allow for generalization.

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