

Psychological problems, Concerns and Beliefs in Women Undergoing Hysterectomy

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Abstract: The lost of the uterus via hysterectomy carries significant negative psychological repercussions especially in the case of women from developing countries. High risks of adverse psychological reactions to hysterectomy have been reported by numerous writers .

This study aims to investigate the level of psychological problems in women before and after undergoing hysterectomy and identify their concerns and beliefs related to hysterectomy. The study followed a comparative design.

Setting:- Department of Gynecology at Tanta University .

Subjects of the study :- The target population of this study consisted of a convenient sampling of 50 of women who undergoing hysterectomy .

In the collection of data of this study, concerns and beliefs questionnaire sheet , Beck Depression Inventory (BDI) and State -Anxiety Scale have been used.

The findings of the present study demonstrated that there are psychological problems (anxiety and depression) among the studied subjects preoperatively and they had a tendency to be more depressed and experienced more anxiety after hysterectomy as well as the femininity and sexual attractiveness were the prime concerns and the belief of the uterus as important organ was reported by the most participants . The study **recommended** that A thorough psychological examination prior to hysterectomy should be done and a provision of support for the coping process after intervention is required to decrease the persistence of anxiety and depression .

Key words: Hysterectomy –Psychological problems - Anxiety – Depression- concerns – beliefs - women

Operational Definition: Psychological problems mean anxiety and depression.

I. Introduction

Hysterectomy (HT) , the surgical removal of the uterus, is one of the most common gynecological operations done through out the world . Hysterectomy derives meaning from the Greek hystera (womb). After cesarean section the hysterectomy is considered the second most common surgical procedure in women of reproductive age . This a common surgery is viewed as a highly situation by many women that generates strong emotions with well known negative effects on postoperative recovery .⁽¹⁻²⁾

The uterus is a meaningful organ, both to women and to society .The female reproductive organ like uterus represent sexuality , fertility and motherhood and is of a great importance in a woman's existence and environmental communication . Indeed , womanhood is believed to be strongly linked to procreation . Therefore , preservation of their womb is jealously guarded and the womb is usually believed to their symbol of identity⁽³⁻⁴⁾ .

As the uterus is a highly valued body part ,its loss via hysterectomy carries emotional repercussions and may result intense negative psychological problems especially in the case of women from developing countries^(1,5) .

Many women have fears that they will lose their sexual attractiveness as they will not be liked, they will be rejected and their sexual life will be ruined. Femininity has been proposed as a positively valued quality ,thus the perception of losing one's femininity is a serious and threaten event in a women life ,therefore hysterectomy may function as a stressor. Although hysterectomy does not create any visible organ loss, the psychological reflections of the anxieties regarding it are prominent^(4,6,7)

The surgical procedure like hysterectomy which has a symbolic significance is a emotionally stressful and a crucial factor in determining emotional response in women undergoing this procedure . It is a known fact that there are emotional sequels , including depression, anxiety and guilt to the removal of the uterus which can threaten women's self worth.^(1,8) High risks of adverse psychological reactions has to hysterectomy have been reported by numerous writers. These reactions have been described as depression , agitation, insomnia, non specific anxiety, reduced sexual functioning and psycho-somatic disorders.⁽⁷⁻⁸⁾ . In this respect **Cooper (2009)** reported that women referred to psychiatrists much more commonly after hysterectomy than any other operation and the most psychopathological reactions are depression and anxiety. Also , they added that anxiety and depression is common preoperatively and women having hysterectomies have higher rates of depression and anxiety preoperatively than the rest of the population .⁽⁹⁾ Furthermore **Sehlo& Ramadan (2010)** mentioned that hysterectomized women may exhibit anxiety and depression in the form of body complaints and decreased social wellbeing even 24 weeks post operative .⁽¹⁰⁾

The course of the post operative period and the return of women undergoing hysterectomy to full health are largely affected by examining their psychological state and concerns they experience .So the early investigation of affective disorders and a fast appropriate intervention can inhibit further symptoms elevation and persistence especially regarding the high level of anxiety and depression before and post hysterectomy period . Therefore ,the present study is carried out to investigate the levels of anxiety and depression among women undergoing hysterectomy as well as identify their concerns and beliefs regarding hysterectomy.

Aim of the study

This study aimed at :-

- 1- Investigate the levels of psychological problems among women before and after undergoing hysterectomy.
- 2- Identify concerns regarding hysterectomy and beliefs about the uterus among women before and after hysterectomy .

Research Questions

- 1-What are the levels of psychological problems among women before and after undergoing hysterectomy?.
- 3- What are the concerns regarding hysterectomy and beliefs about the uterus among women before and after hysterectomy ?

Design

The study followed the comparative design .

Setting

This study has carried out at Department of Gynaecology at Tanta University Hospital.

Subjects

A convenient sampling of 50 of women who undergoing hysterectomy

The inclusion criterion

The inclusion criterion were as follows:-

- Age was between 25-55years.
- Agree to participate in the study.
- Free from mental illness .

Exclusion criterion

- Patients with severe medical disorder (rather than that leads to hysterectomy or substance abuse).
- Patients doing hysterectomy due to cancer etiology as cancer itself can precipitate psychiatric symptoms/disorder.

Tools of the study

In the collection of data of this study, three tools were used.

Tool 1 :-Concerns and beliefs questionnaire sheet :-

It was developed by the researchers after review of related literature ,it divided into two parts :-

Part one :-Sociodemographic characteristics sheet :-

It consists of 7 closed questions to elicit participant's socio demographic data (age, level of education , occupation , residence , duration of marriage , level of husbands education, , and finally number of children.

Part two:- Concerns and beliefs questionnaire sheet :-

This questionnaire was designed to gather subjective information from participants about their concerns and beliefs toward hysterectomy . It consisted of two open questions , one about women's concerns regarding hysterectomy and the other about women's beliefs related to the meaning of uterus for them.

Tool II :- Beck Depression Inventory(BDI)

Beck Depression Scale, also called the Beck Scale of Depression or Beck Depression Inventory (BDI), was designed and named after it's creator, Aaron Beck.⁽¹¹⁾ The Becks Depression Inventory is a questionnaire created to determine level of depression in individuals suffering from this disorder.

BDI is a questionnaire consisting twenty-one questions that have been developed to discover and interpret the signs and symptoms of depression, that each have possible four answers to select from. Participants taking BDI have to choose one answer from the four choices rendered. Scores range from zero, which denotes the least degree of severity of symptoms, and a score of three, which describes the utmost severity.

Scoring system

The total score of the scale ranges from 0 to 63 and classified as following :-

- **Scores between 0 and 9 are indicative of people experiencing minimum symptoms of depression.
- **Scores between 10 and 16 are indicative of people experiencing mild symptoms of depression.
- **Scores between 17 and 29 are indicative of people experiencing moderate levels of symptoms of depression.
- **Scores between 30 and 63 are indicative of people experiencing major or severe form of depression.

III - State – Anxiety scale . (SAS)

This tool was developed by Spielbeger etal.,(1970) ⁽¹²⁾. This scale consists of 20 items . It used to measure the anxiety ' right now " at the moment . The scale asks twenty questions and is rated on a 4-point scale . The scale has anxiety absent and anxiety present questions. Anxiety absent questions represent the absence of anxiety in a statement like, "I feel secure. "meanwhile anxiety present questions represent the presence of anxiety in a statement like "I feel worried.". In responding to the S-Anxiety scale, the subjects choose the number that best describes the intensity of their feelings: (1) not at all, (2) somewhat, (3) moderately, (4) very much so. A rating of 4 indicates the presence of high levels of anxiety for anxiety present questions . Total score ranges from 20 to 80, with higher scores correlating with greater anxiety.

II. Method

- The tool II & III were translated by the researchers to Arabic language and was validated by a jury to ensure the content validity of the translated version by original one. The jury consisted of 5 experts in the psychiatric and obstetric and Gynecological nursing fields. The required correction and modifications were carried out accordingly.

- Tools of the study were tested for reliability. Test-retest reliability was applied on 10 studied subjects and reapplied after 2 weeks to ascertain the reliability ($r=0.84, 0.86, 0.85$ respectively).

- Before starting the study, an official letter was addressed from the dean of the faculty of nursing to administrator of the identified study setting to request the permission and cooperation to collect data in the selected setting.

- A pilot study was carried out. The purpose of the pilot study was to test the clarity, applicability, and feasibility of the tools. In addition, it served to estimate the approximate time required for interviewing the participants as well as to find out any problem or obstacle on collection data. The pilot study was conducted on 5 patients. These participants were excluded later from the actual study sample. The pilot study took nearly 10 days. After its implementation and according to its results, the necessary modifications were made.

- In actual study, tools of the study were administered to the participants individually. The questionnaires were handed out by the researcher and the participants were asked to fill in the questionnaires in the presence of the researcher while interviewing was used for illiterate patients (who can not read and write). Each participant was evaluated on tools of the study two times, first time during the pre-surgical phase (1-7 days prior to surgery) at inpatient ward and second time at 8 weeks after surgery at out patient according to outpatient clinic follow up cards.

Ethical consideration :-

- Participants were informed about the purpose of the study and that the nature of the study will not cause any harm or pain.

- Oral consent was obtained from each participant before enrolment into the study.

- Every participant was invited to participate in this study on a voluntary basis and she was informed by her right to withdraw from the study at any time if she wants.

- Completion of the questionnaires was anonymous and there was a guarantee of confidentiality.

Statistical Analysis

Method is used statistical chi-square for qualitative data also we used Pried T-test to compare between two quantitative related data (pre and Post) and also using the student t- test and one way ANOVA (analysis of variance) to study the relationship between demographic data and variable (scales) using SPSS V20.

III-Results

Table 1:- Sociodemographic Characteristics of Studied Subjects

| Sociodemographic characteristics | N=50 | % |
|-----------------------------------|---------------------|-------|
| Age | | |
| 25-30 | 11 | 22.00 |
| 30-40 | 9 | 18.00 |
| 40-50 | 13 | 26.00 |
| >50 | 17 | 34.00 |
| Range | 25-55 35.12±7.87 | |
| Level of Education | | |
| Illiterate | 5 | 10.00 |
| Primary school | 10 | 20.00 |
| Secondary school | 20 | 40.00 |
| University school | 15 | 30.00 |
| Occupation | | |
| Working | 17 | 34.00 |
| not working | 33 | 66.00 |
| Residence | | |
| Urban | 28 | 56.00 |
| Rural | 22 | 44.00 |
| Duration of marriage | | |
| 3-5. | 21 | 42.00 |
| 5-8. | 7 | 14.00 |
| 8-11. | 12 | 24.00 |
| >11 | 10 | 20.00 |
| Number of having children | | |
| 2 | 12 | 24.00 |
| 3 | 22 | 44.00 |
| <4 | 16 | 32.00 |
| Level of Husband education | | |
| Illiterate | 8 | 16.00 |
| Primary school | 12 | 24.00 |
| Secondary school | 11 | 22.00 |
| University school | 19 | 38.00 |

Figure 1 :- Anxiety Levels Among Studied Subjects According to State-Anxiety Scale 1-7 days prior to surgery and 8 Weeks After Hysterectomy

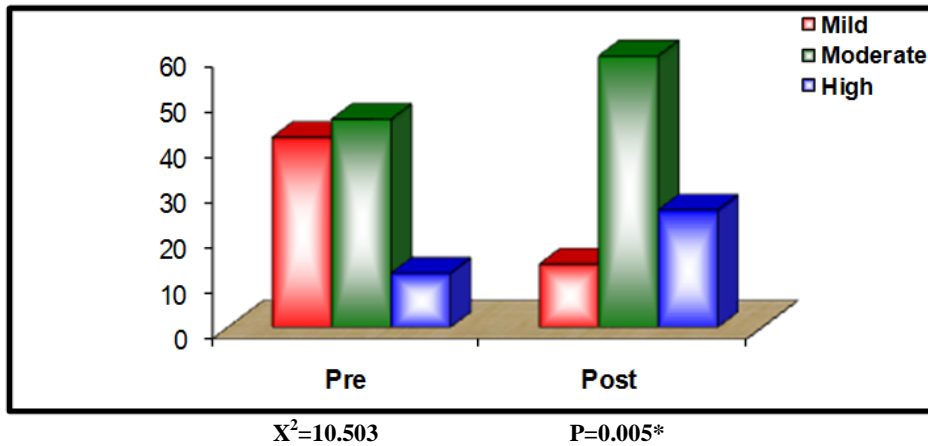


Table 2:- Mean and Standard Deviation of State-Anxiety Scale among the studied Subjects 1-7 days prior to surgery and 8 Weeks After Hysterectomy

| | State-Anxiety Scale | | | | Difference | | Paired t-test | |
|------|---------------------|-------|---|------|------------|------|---------------|---------|
| | Range | Mean | ± | SD | Mean | SD | t | P-value |
| Pre | 20 - 52 | 31.94 | ± | 7.88 | -19.16 | 3.03 | -44.67 | 0.00 |
| Post | 37 - 72 | 51.10 | ± | 9.69 | | | | |

Figure 2 :- Depression levels Among The Studied Subjects 1-7 days prior to surgery and 8 Weeks After Hysterectomy According Beck Depression Inventory

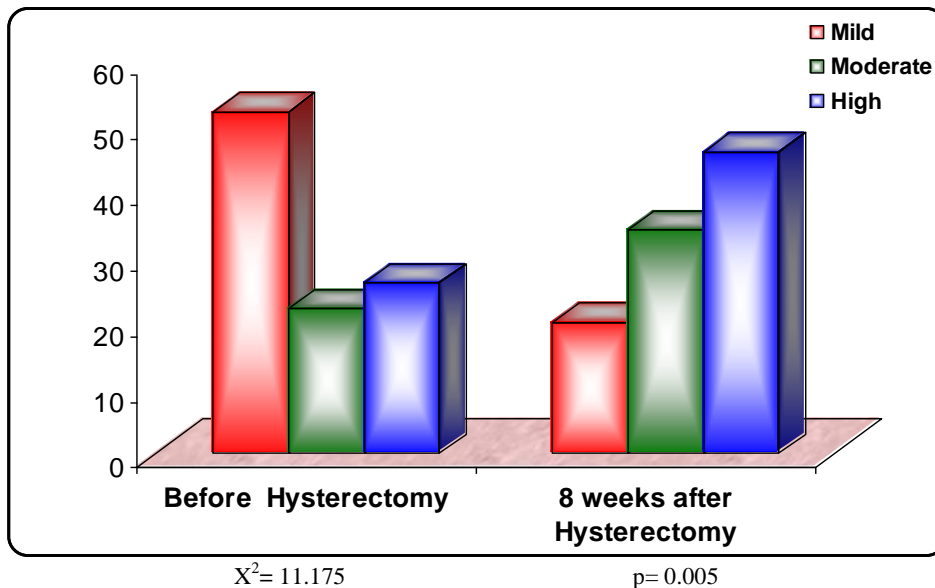
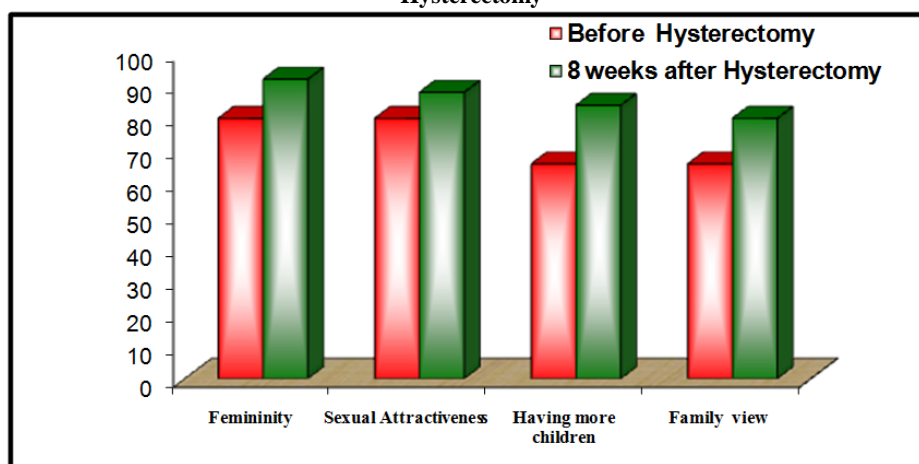


Table 3: Mean and Standard Deviation of Depression among the studied Subjects 1-7 days prior to surgery and 8 Weeks After Hysterectomy by Using Beck Depression Inventory

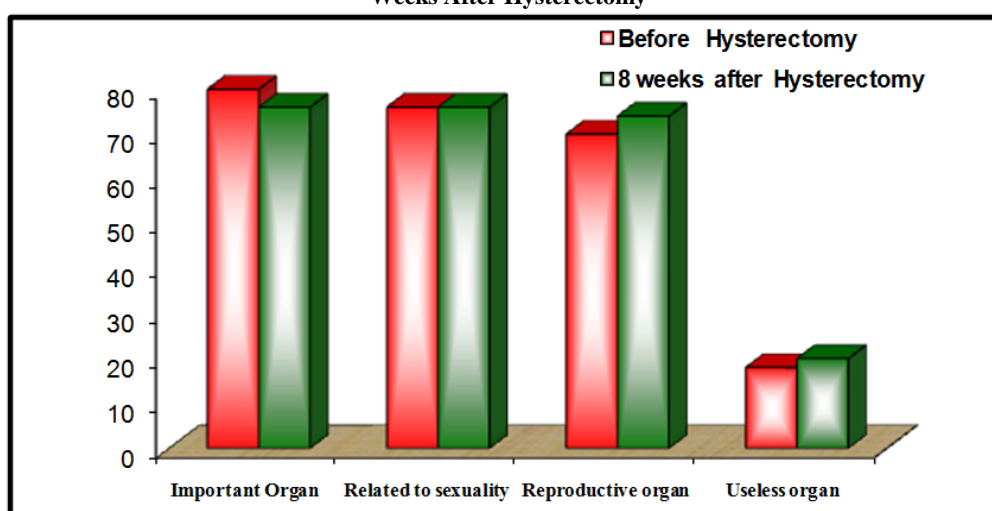
| | Beck depression inventory | | | | Difference | | Paired t-test | |
|------|---------------------------|-------|---|-------|------------|------|---------------|---------|
| | Range | Mean | ± | SD | Mean | SD | t | P-value |
| Pre | 10 - 46 | 22.30 | ± | 10.90 | -10.38 | 4.66 | -15.74 | 0.00 |
| Post | 11 - 58 | 32.68 | ± | 12.40 | | | | |

Figure 3 -Concerns of Studied Participants Regarding Hysterectomy 1-7 Days Prior to Surgery and 8 Weeks After Hysterectomy



Responses are not mutually exclusive

Figure 4 :- Beliefs of Studied Participants Regarding the importance of uterus 1-7 days prior to surgery and 8 Weeks After Hysterectomy



Responses are not mutually exclusive

Table 4- Relationship Between Sociodemographic Characteristics and Mean Scores of State -Anxiety Scale Among Studied Participants

| Sociodemographic Characteristics | | N=50 | State -Anxiety Scale | | | ANOVA or T-test | |
|----------------------------------|-------------------|------|----------------------|---|--------|-----------------|---------|
| | | | Mean | ± | SD | F or T | P-value |
| Age | 25-30 | 11 | 61.182 | ± | 6.897 | 9.262 | 0.000 |
| | 30-40 | 9 | 51.111 | ± | 9.103 | | |
| | 40-50 | 13 | 50.385 | ± | 9.233 | | |
| | >50 | 17 | 45.118 | ± | 6.651 | | |
| Level of Education | Illiterate | 5 | 54.100 | ± | 7.539 | 16.757 | 0.000 |
| | Primary school | 10 | 57.467 | ± | 8.467 | | |
| | Secondary school | 20 | 41.400 | ± | 3.209 | | |
| | University school | 15 | 40.400 | ± | 2.875 | | |
| Occupation | Working | 17 | 44.647 | ± | 7.079 | -4.157 | 0.000 |
| | not working | 33 | 54.424 | ± | 9.233 | | |
| Residence | Urban | 28 | 52.750 | ± | 10.182 | 1.395 | 0.170 |
| | Rural | 22 | 49.000 | ± | 8.810 | | |
| Duration of marriage | 3-5. | 21 | 60.190 | ± | 6.983 | 40.535 | 0.000 |
| | 5-8. | 7 | 50.286 | ± | 1.890 | | |
| | 8-11. | 12 | 43.917 | ± | 3.679 | | |
| | >11 | 10 | 41.200 | ± | 3.615 | | |
| Number of having children | 2 | 12 | 65.167 | ± | 4.914 | 64.122 | 0.000 |
| | 3 | 22 | 48.818 | ± | 5.369 | | |
| | <4 | 16 | 43.688 | ± | 4.922 | | |
| Level of Husband education | Illiterate | 8 | 67.750 | ± | 3.240 | 23.419 | 0.000 |
| | Primary school | 12 | 50.750 | ± | 9.928 | | |
| | Secondary school | 11 | 47.455 | ± | 4.719 | | |
| | University school | 19 | 46.421 | ± | 4.948 | | |

Table 5 :-Relationship Between Sociodemographic Characteristics and Mean Scores of Beck Depression Inventory Among Studied Participants

| Sociodemographic Characteristics | | N=50 | Beck depression inventory | | | ANOVA or T-test | |
|----------------------------------|-------------------|------|---------------------------|---|--------|-----------------|---------|
| | | | Mean | ± | SD | F or T | P-value |
| Age | 25-30 | 11 | 46.182 | ± | 8.530 | 9.792 | 0.000 |
| | 30-40 | 9 | 32.556 | ± | 10.501 | | |
| | 40-50 | 13 | 30.769 | ± | 11.069 | | |
| | >50 | 17 | 25.471 | ± | 9.741 | | |
| Level of Education | Illiterate | 5 | 36.700 | ± | 8.411 | 17.844 | 0.000 |
| | Primary school | 10 | 40.800 | ± | 11.277 | | |
| | Secondary school | 20 | 20.600 | ± | 5.595 | | |
| | University school | 15 | 18.500 | ± | 5.083 | | |
| Occupation | Working | 17 | 24.529 | ± | 11.040 | -3.755 | 0.000 |
| | not working | 33 | 36.879 | ± | 11.002 | | |
| Residence | Urban | 28 | 34.750 | ± | 12.709 | 1.342 | 0.186 |
| | Rural | 22 | 30.045 | ± | 11.753 | | |
| Duration of marriage | 3-5. | 21 | 44.810 | ± | 7.075 | 49.797 | 0.000 |
| | 5-8. | 7 | 30.143 | ± | 4.451 | | |
| | 8-11. | 12 | 23.583 | ± | 4.870 | | |
| | >11 | 10 | 19.900 | ± | 6.607 | | |
| Number of children | 2 | 12 | 49.500 | ± | 4.982 | 47.492 | 0.000 |
| | 3 | 22 | 30.682 | ± | 8.363 | | |
| | <4 | 16 | 22.813 | ± | 7.083 | | |
| Level of Husband education | Illiterate | 8 | 51.625 | ± | 4.658 | 14.796 | 0.000 |
| | Primary school | 12 | 33.167 | ± | 14.115 | | |
| | Secondary school | 11 | 27.545 | ± | 7.448 | | |
| | University school | 19 | 27.368 | ± | 7.213 | | |

Results :-

Table 1 presents the socio- demographic characteristics of the studied participants .The results revealed that the age of the participants ranged from 25-55years with the mean age of 35.12±7.87. In relation to patients' educational level,40% of the participants had secondary school while others had university school 30% and illiterate 10%. Regarding their state of work ,about two thirds of participants 66% were not working . Concerning residence of participants ,more than half of the participants 56% were living in the urban .Regarding duration of marriage , 42% of the studied participants had 3-4 years meanwhile 14% of them had 5-8 years and less than half of the participants had 3 children .As regards to level of husband education ,38% had university school and 16% were illiterate .

Figure 1 illustrated anxiety levels among the studied participants according to State –Anxiety scale1-7 days prior to surgery and 8 weeks after hysterectomy , one can notice that, there was statistically significant difference in the anxiety level among the studied participants 1-7 days prior to surgery and 8 weeks after hysterectomy whereas preoperative findings revealed that 42%of participants had mild anxiety which reduced to 14% post hysterectomy and 58% of the studied participants exhibiting anxiety symptoms (46% and 12% had moderate and severe anxiety respectively) preoperative which increased into 86% of participants exhibiting symptoms of anxiety (60% and 26 % had moderate and severe anxiety respectively)8 weeks post operatively.

Mean and standard deviation of anxiety among the studied subjects 1-7 days prior to surgery and 8 weeks after hysterectomy presented in **table 2**. The results showed that there was statistically significant difference in mean and standard deviation of anxiety among the studied subjects 1-7 days prior to surgery and 8 weeks after hysterectomy .Preoperatively , mean ±SD was 31.94± 7.88 which increased post operatively at 8weeks into 51.10±9.69 by difference change 3.03.

Figure 2 investigate depression levels among the studied subjects 1-7 days prior to surgery and 8 weeks after hysterectomy by using Beck depression inventory , the finding illustrated that before hysterectomy , 52% of the participants had mild depression that decreased to 20% 8 weeks after hysterectomy meanwhile there was increase in percentage of patients exhibiting moderate and severe depression 22% , 26% respectively before

hysterectomy to 34% and 46% respectively 8 weeks after hysterectomy. There was statistically significant difference in the depression level among the studied participants scale before and 8 weeks after hysterectomy

Table 3 described mean and standard deviation of depression among the studied subjects 1-7 days prior to surgery and 8 weeks after hysterectomy by using Beck Depression Inventory. Preoperatively, mean \pm SD was 22.30 ± 10.90 which increased into 32.68 ± 12.40 post operatively at 8 weeks by difference change 4.66. The results showed that there was statistically significant difference in mean and standard deviation of depression level among the studied subjects 1-7 days prior to surgery and 8 weeks after hysterectomy.

Concerns of studied participants regarding hysterectomy 1-7 days prior to surgery and 8 weeks after hysterectomy was presented in **figure 3**. The findings revealed that "Femininity" and "Sexual attractiveness" were the prime concerns for the women both 1-7 and 8 weeks after hysterectomy as presented by "(80.00%, 90.00%) & (80.00, 88.00) respectively.

Regarding beliefs of studied participants regarding the importance of the uterus 1-7 days prior to surgery and 8 weeks after hysterectomy. **Figure 4** illustrated that the belief of the uterus as "Important Organ" and "Related to sexuality" were reported by the most of the studied participants both before and 8 weeks after hysterectomy (80.00%, 76.00%) & (76.00%, 76.00%) respectively, meanwhile the belief of the uterus is "Useless organ" was reported by the minority of the studied participants both before and after 8 weeks after hysterectomy (16.00%, 20.00%) respectively.

Relationship between sociodemographic characteristics and Mean scores of State Anxiety Scale among studied participants was illustrated in **table 4**. One can notice that there were significant relationship between mean score of State -Anxiety Scale and items of sociodemographic characteristics except item of residence.

Table 5 described the relationship between sociodemographic characteristics and mean scores of Beck Depression Inventory among studied, the results revealed that there were significant relationship between mean score of State -Anxiety Scale and items of sociodemographic characteristics except item of residence.

IV. Discussion

Gynecologic operations have a strong impact on the health of women, negatively affecting their psychological states and restricting their daily activities. Hysterectomy increases the risk of depressive illness, anxiety, mood changes, and acute psychotic illness.^(5,7)

The present study was carried out to investigate the level of psychological problems in women before and after undergoing hysterectomy and identify their concerns and beliefs related to hysterectomy.

The results of the present study revealed that there are psychological problems (anxiety and depression) among the studied subjects preoperatively and they had a tendency to be more depressed and experienced more anxiety after hysterectomy as well as the femininity and sexual attractiveness were the prime concerns and the belief of the uterus as important organ was reported by the most participants. This results like in many other previous studies. **Khastger et al (2000)** stated that hysterectomy leads to psychiatric disorders.⁽⁸⁾ **Flory (2005)** stated that anxiety or depression may persist or develop post operatively in some patients doing hysterectomy and depression is the most common psychiatric risk after hysterectomy.⁽¹³⁾ Additionally **Shah et al (2007)** revealed that majority of women after hysterectomy can be permanently depressed and can also show symptoms of mixed anxiety and depressive disorder.⁽¹⁴⁾

In the same stream, **Okunlola et al (2009)** suggest that despite their motivation, many women undergoing surgery show negative psychological effects, such as anxiety and depression, after the loss of their reproductive organ.⁽¹⁵⁾ Additionally, it is noticeable that the result of the present is congruent with Egyptian study carried by **Helmy et al., (2008)**, they concluded that, women undergoing hysterectomy are at great risk of psychiatric morbidity before and after hysterectomy.⁽¹⁶⁾ Meanwhile the findings of the present study is in contrast with the study of **Goetsch (2005)** who revealed significant improvements in general well being and psychological measures and sexuality among women undergoing hysterectomy.⁽¹⁷⁾ The plausible reasons for the findings of the present study may be related to the women concerns related to femininity and sexuality. Sexuality for women is a taboo and is a symbolic of a femininity and for men sexuality is an important social issues and source of power for men. Previous studies in hysterectomy have highlighted women's concerns in relation to femininity, fear of sexual relationship and the importance of relationship with the woman's partner and their detrimental effect on the psychological state of hysterectomized women. Additionally, studying the participants' concerns in the present study revealed femininity and sexuality were the prime concerns among the participants before and after hysterectomy. The present result is in line with **Farooqi (2005)** who reported that hysterectomy has traditionally been regarded as having an adverse effect on psychological state of women

because it is thought to reduce their sense of femininity and the participants in her studying reported that they fear from their desire will inhibit after surgical and their partner may be repelled sexually.⁽¹⁸⁾

In this respect **Maravan et al., (2009)** stated that many women have complicated feelings after hysterectomy about the probability of not being seen as appealing by their spouse, as before the hysterectomy, that their attractiveness as a sexual partner would fade & their sexual life would be hampered.⁽¹⁹⁾ In the same stream, **Sehlo & Ramadani (2010)** stated that uterus has a special symbolic meaning for women, so that its loss leads to feeling of reduced femininity which in turn leads to psychiatric disorders.⁽¹⁰⁾ Additionally, **Keskin & Gumus 2011**, reported that cases with hysterectomy had depressive symptoms and concerns regarding sexual satisfaction.⁽²⁰⁾

The studying concerns of the participants in the present study still offer further explanations to psychological problems among participants, that the concern of loss of the ability to bear children may be considered another explanation to this result that the majority of the studied subjects have concern about the loss of the ability to bear children. In Egypt like society, a woman's status and role primarily revolves around her reproductive capacity and females are "perceived" as "reproduction machines". Culturally the role of women is directly connected with the ability to become pregnant and maternity is one of the most recognized and prized social aspects. As a result, woman who is unable to produce children is viewed as being incomplete and is assigned as a low status within the family as well as society. Additionally, loss of the ability to bear children may also result in increasing family pressures and at times, divorce or re-marriage of the husband. So patients who have undergone hysterectomy have to come to terms with their incapacity to bear children, which can threaten their self-worth.

Women have many different beliefs regarding the meaning of the uterus either as reproductive organ or as a sexual organ which have an impact on perception or feelings about having a hysterectomy. Along with this, the present study revealed that most of the participants have positive belief regarding the importance of the uterus as related to sexuality and reproductive organ. For instance, during collecting data some women from participants said that women can't be physically attractive, feminine or sexual without the presence of uterus. In the same stream, **Abasher (2004)** added that some women believe if they no longer have a uterus, they will not be attractive, resulting in negative body image and negative psychological state.⁽²¹⁾ In the study carried by **Darwish et al., (2014)**, it was found that women experienced anxiety because "uterus is a very important organ for them", "loosing their uterus will reduce their self-confidence", "their sexual lives would end", "their spouses would not be interested in them anymore" and "their relationships would come to an end"⁽²²⁾

Lack of information, erroneous information and lack of social support specially spousal support and health care provider support may be played a major role in psychological problems of hysterectomy. In this respect **Wade et al., (2000)** found that women who had undergone hysterectomy experienced intense anxiety because lack of information about operation and they found that giving information could decrease anxiety as well as post operative complication.⁽²³⁾ In addition, the non-availability of skilled professional such as clinical psychologists that could dispel any concerns could be one of contributory factors to psychological problems among participants.

Age factor plays a vital role in contribution to psychological problems among women undergoing hysterectomy. Along with this, the result of the present study comes which there was a significant negative correlation between age of patients doing hysterectomy and severity of depression and anxiety as depression and anxiety increased in severity with decrease in age. This finding is similar to the finding of **Shah et al (2007)**, **Seho & Ramadani (2010)**, **Cohen et al (2011)** and **Hashim (2012)**, who revealed that younger women are more at risk of psychiatric disorder and exhibited more anxiety and depression as they reported of sense of loss and overall disruption in different aspects of live.^(14,10,24,25) A potential explanation to this finding is may be that women who underwent a hysterectomy at younger ages have been to be more likely to report a desire to have another child and they lost the ability to have children. This means that their may be broken and they never marriage again. In this respect, **Vandyk et al., (2011)** mentioned that, as this surgical procedure results in the loss of reproductive capacity it is avoided in younger women even at the cost of their lives. Even for women who do not wish to have more children the uterus is not an organ to be discarded lightly.⁽²⁶⁾

Also number of children has negative correlation with depression & anxiety. This comes with consisted with **Seho & Ramadani (2010)**, who found that women with only one child were more depressed than in women with 2 or more child.⁽¹⁰⁾ It is noticeable that, **Helmy et al., 2008**, & **Hashim 2012** reported that depressive and anxiety symptoms were more common among nullipara whereas women with a high parity experienced least psychiatric morbidity.⁽¹⁶⁻²⁵⁾

The result of the present study indicated that there was no significant difference between mean score for both anxiety and depression and residence of participants. This findings may be explained as mentioned before to the nature of Egyptian society, Egypt like society, a woman's status and role primarily revolves around her reproductive capacity and females are "perceived" as "reproduction machines". Culturally the role of women either in rural or urban is directly connected with the ability to become pregnant and maternity is one of

the most recognized and prized social aspects. This findings in contrast with **Hashim 2012** who mentioned that psychological problems in urban area are more than rural .⁽²⁵⁾

Additionally , it is noticeable that the high rate of mean score of anxiety and depression was found in working women than not working . This finding was supported by **Leithner et al 2009** .This may be related to that working women are more engagement in the society as a result they may have more social network as strategy to help them cope such .⁽²⁷⁾

The significant relationship between mean score of depression and anxiety and level of education of participants and their husband was supported with **Helmy et al 2008 and Hashim 2012** who found that the high rate psychiatric morbidity in women who low levels of education.⁽¹⁶⁻²⁵⁾ This findings may be explained by they have inaccurate information about hysterectomy ,they are unable to read about it or they may have fewer strategies to help them cope than those with high level of education.

V. Conclusion

The present study concluded that there were psychological problems (anxiety and depression) among the studied subjects preoperatively and they had a tendency to be more depressed and experienced more anxiety after hysterectomy as well as the femininity and sexual attractiveness were the prime concerns among the participants and the belief of the uterus as important organ was reported by the most participants .

VI. Recommendation

The present study recommended that :-

- Women undergoing hysterectomy should undergo an examining by psychiatrist and should receive the appropriate psychiatric treatment.
- A thorough psychological examination prior to hysterectomy should be done.
- A provision of support network for women which should include the women's partner as well as medical and nursing staff for coping process is required to decrease the persistence of anxiety and depression. .
- Training courses in mental health for all medical health workers-especially nurses to improve mental .1 health among women undergoing hysterectomy .
- Sex counseling should be a routine part of the care for a hysterectomy patient which will have an .2 impact sexuality concern .

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