**Original article** 

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# Prevalence Of Depressive Symptoms Among Women With Hysterectomy

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## Abstract

**Background:** Depression is the most common psychological problem suffered by women after hysterectomy and is linked to postoperative complications, negative perceptions about body image, femininity, sexual desire, youth, level of energy, and activity, as well as the inability to have children.

**Methods:** A descriptive (Cross-Sectional) design is used in the present study to assess the level of depression among women's after hysterectomy. A Non-probability (purposive) sample consists of sixty women's. The current study was conducted at the Obstetrics and Gynecology Consultant Unit at Al-Zahra Teaching Hospital within Al-Najaf Al-Ashraf Health Directorate in Iraq.

**Results:** Most women after hysterectomy have mild levels of depression (47%).

**Conclusion:**The study found that most women after hysterectomy have depression.

**Recommendations:** Enhancing the psychological and emotional condition of women after hysterectomy by nursing professionals Additionally, coordination between the consultant in obstetrics and Gynecology and the hospital's Department of Psychiatry is needed to reduce depression. And providing an effective discharge plan for women with hysterectomy, including a follow-up visit schedule, the required examinations, and referral numbers for each type of expected complaint after hysterectomy, especially psychological complaints.

Keywords: Depression, Hysterectomy.

#### **INTRODUCTION**

Depression, a common mental illness, is characterized by sense sadness. a of worthlessness, and hopelessness; a loss of interest or pleasure; and difficulty concentrating(1). Depression is generally common in patients before or after different operations, and it might result from loss of an

important and vital organs, immune system suppression, postoperative pain, pos-operative infection, and decreased social activities(2).

The uterus is a particularly important organ for many women because, in addition to serving reproductive purposes, it also has

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associations with femininity, identity, and sexuality(3). Uterine removal has particular implications for women and has a significant impact on cultures, beliefs, and attitudes(4). Therefore, psychological issues that are associated with surgery in general can also arise after gynecologic surgeries. However, because gynecological surgery can directly impact female reproductive functions, it can also produce significant psychological issues. Gynecologic surgeries, including bilateral salpingo-oophorectomy (BSO), hysterectomy, vulvectomy, and pelvic exenteration, all have distinct psychological repercussions(5).

Hysterectomy is one of the most common gynecological operations for the treatment of uterine fibroids (such as leiomyomas), heavy or irregular menstrual bleeding, endometriosis, pelvic inflammatory disease, and uterine prolapse(6). Hysterectomies have been linked to depression and mental illnesses since the 1940s. In 1974, Richards coined the phrase "post-hysterectomy syndrome" to characterize the vast range of symptoms that women experienced after a hysterectomy, including depression(7).

Depression is a rising health concern nowadays. According to the World Health Organization (WHO), unipolar major depression was the fifth most important health issue in the world in 1990, and it is predicted that by 2020, it will overtake ischemic heart disease as the second most serious issue(8).

A 20%–78% increased incidence of depression was discovered following a hysterectomy for any benign disease among women who had undergone hysterectomy, which was linked to higher rates of identified mental health outcomes(9). The quality of life for these individuals might be improved by reducing and preventing the disabilities that result from their disabilities, which would be made possible by a greater understanding of the elements that contribute to depression and its reduction(10).

#### **METHODS AND MATERIALS:**

#### **Study Design:**

A descriptive (Cross-Sectional) design is used in the present study to assess the levels on women's depression after hysterectomy.

## **Ethical Considerations and Administrative Agreements:**

The researcher obtains permission from the faculty of medicine at the University of Kufa to conduct the study. In addition, in order to implement the study questionnaire included in the current study, official permission must be obtained from the Ministry of Planning or the Central Statistical Organization. Another approval was received from the Al-Najaf Al-Ashraf Health Directorate, as well as a fourth from the Al-Zahra Teaching Hospital, consultat Obstetrics and Gynecology. Lastly, the subject agreement was also obtained from women with hysterectomy after the researcher explained the purpose of the study to them and the community, and the researcher offered to respect the confidentiality of the participants as well as make participation voluntary to answer the questionnaire items.

#### Sitting of the Study:

The current study was conducted at the Consultant Obstetrics and Gynecology Unit at Al-Zahra Teaching Hospital within Al-Najaf Al-Ashraf Health Directorate in Iraq. This department was selected due to the women's availability, in addition to women reviewing this department after hysterectomy.

#### **Criteria for Including the Sample:**

The women with hysterectomy were selected according to the following criteria:

- Women who are at least 18 years old; because hysterectomy most commonly occurs in adult women compared to young.

- Women who had hysterectomy at least two weeks after doing hysterectomy.

- Women with no psychiatric disorders, women with no past history of psychiatric illness.

- Women who are willing to engage, as their participation is voluntary.

#### **Excluding Criteria of the Sample:**

The study excluded the following:

- Women who have previously been provided with guiding advice to reduce or deal with symptoms of depression after a hysterectomy, whether in the hospital or their review to a psychiatrist's clinic.

- Women doing hysterectomy due to malignancy etiology as malignancy itself can precipitate psychiatric symptoms/disorders.

- Unwilling to participate, because women's participation is voluntary.

**The Study Insrument:** This tool consists of two parts:

#### Part 1: Socio-Demographic-Clinical Data:

## **A-** Personal Information:

There are six items in a sociodemographic datasheet, which include: age, residency, occupational status, level of education, martial status, and number of children. In order to prepare for data analysis, these variables are coded.

#### **B-** Clinical Data:

This questionnaire consists of three items, which include the duration of the causes of hysterectomy, the reasons for performing hysterectomy, and the type of operation. In order to prepare for data analysis, these variables are coded.

#### Part 2: Beck Depression Inventory (BDI):

The Beck depression inventory (BDI) original scale is adopted from Beck et al. (1961) to assess the severity of depression in women after hysterectomy. It consists of 21 questions with a value of 0–3 for each answer that contain various features of depression such as mood, pessimism, sense of failure, lack of satisfaction. feeling, guilty sense of punishment, self-hatred, self-accusations, selfpunitive wishes, crying spells, irritability, social withdrawal, indecisiveness, body image, work inhibition, sleep disturbance, fatigability, loss of appetite, weight loss, somatic preoccupation, and loss of libido, which were comprehensively scored as the level of depression ranging from (0-63).

## **Score Interpretation of Study Instruments:**

Four scores are used for rating the levels of depression in women after hysterectomy in terms of no depression, mild depression, moderate depression, and severe depression. The maximum total scores of the women's answers are 63, and the depression levels are scored as (0–9) for no depression, (10–18) for mild depression, (19–29) for moderate depression, and (30–63) for severe depression, according to Beck et al. (1961).

#### **Reliability of the Study Instrument:**

Although the BDI scale used in the current study has a global validity and reliability scale, the researcher calculated the reliability due to the Arabic language being utilized to collect the data rather than English. By using the Cronbach's Alpha coefficient test in a pilot study, the reliability of the current questionnaire was assessed. With a Cronbach's alpha value of (0.79) for the Beck Depression Inventory (BDI) scale, the test's results showed that the reliability is satisfactory.

#### **Data collection:**

**Results:** 

Self-report using a developed (Arabic version) questionnaire was used to collect data in the current study. Information about the participants was obtained through self-reports between January 11, 2022, and March 13, 2023. After obtaining permission from hospital officials, the researcher met with 60 women to discuss the aims of the study and obtain their verbal consent to participate in the study, with the right to refuse or withdraw from participation as well as retain the confidentiality of the information provided by the women. Each woman was given a copy of the questionnaire, and it was confirmed and recommended by the researcher to each woman to ensure that the questionnaire was filled out completely before handing it over to the researcher.

#### **Statistical Data Analysis:**

It has been emphasized that there is no lost data and then the data was transformed into calculated data and arranged in the Microsoft Office Excel 2010 program, and for statistical analysis transfer them to the Statistical Package of Social Sciences program (SPSS) version 26. Besides , to move the tables to the final results and presented for study, transforming the data to Microsoft Office Word 2010.

## **Descriptive Data Analysis Approach:**

The statistician used Bar Chart as Statistical figures, statistical mean: a measurement of central tendency, Standard deviation: this statistic characterized how the values vary around the mean of the distribution.

		Women		
Socio-Demographic Data	Rating And Interval	Participants		
		Freq.	%	
	26 <= 34	7	11.6	
	35 - 43	21	35.0	
Age/years	44 - 52	19	31.7	
	53 - 61	7	11.7	
	62 - 70	6	10.0	
	Mean		44.85	
	SD		9.644	
Residency Area	Rural	23	38.3	
Kishuchey Area	Urban	37	61.7	
	Read and Write	12	20.0	
	Primary School Graduated	11	18.3	
Level of Education	Intermediated School Graduated	9	15.0	
	High School Graduated	12	20.0	
	Institute/University Graduated	13	21.7	
	Post-Graduated	3	5.0	
	Housewife	25	41.7	
Occupational status	Free works	17	28.3	
	Employee	18	30.0	

Table (1): Distribution of Women According to their Socio-demographic Characteristics

	Single	2	3.3
Marital Status	Married	46	76.7
	Divorced	6	10.0
	Widowed	4	6.7
	Separated	2	3.3
Number of children	<= 2	13	21.7
	3-4	22	36.7
	5-6	16	26.6
	7+	9	15.0

According to this table, the majority of women participants (35.0%) are between the ages of 35 and 43, urban residents (61.7%), those who are housewives (41.7%), (76.7%) are married women, number of children (36.7%) are within (3 - 4) and (21.7%) have graduated from an institute or college.

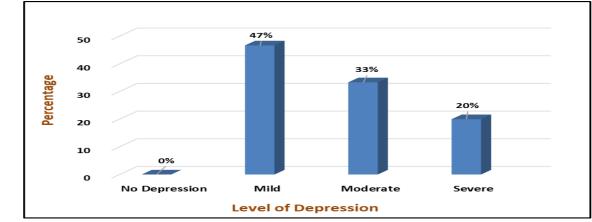


Figure (1) Levels of Depression among Women with Hysterectomy

Figure (1) shows levels of depression among women with hysterectomy. It reveals that (0%) of the participants have no depression; (47%) have mild depression; (33%) have moderate depression and only (20%) have severe depression.

Items	Resp.	Freq. No. = 60	%	MS	Assessment
	I do not feel sad I feel blue or sad	7 28	11.9 47.5		
Mood	Iam blue or sad all the time and I can't snap out of it	20	33.9	1.24	Moderate
	Iam so sad or unhappy that I can't stand it	5	6.8		
Pressimism	Iam not particularly discouraged about	16	26.7	1.06	Moderate

	the future				
	I feel discouraged about the future	30	50.0		
	I feel I have nothing to look forward to	11	18.3		
	I feel I the future is hopeless and that things cannot improve	3	5.0		
	I do not feel like a failure	24	40.0		
Sense of	I feel I have failed more than the average person	20	33.3	1.24	Moderate
Failure	As I look back on my life, all I can see is a lot of failures	11	18.3		
	I feel Iam a complete failure as a person	5	8.3		
	I am not particularly dissatisfied	17	28.3		
Lack of Satisfaction	I don't enjoy things the way I used to	30	50.0	1.24	
	I don't get satisfaction out of anything anymore	12	20.0		Moderate
	I am dissatisfied with everything	1	1.7		
	I don't feel particularly guilty	19	32.2		
Guilty	I feel guilty a good part of the time	16	27.1	1.47	Moderate
Feeling	I feel quite guilty most of the time	14	23.7		Woderate
	I feel guilty all of the time	11	16.9		
	I don't feel I am being punished	39	65.0		
Sense of	I feel I may be punished	15	25.0	0.65	Good
Punishment	I expect to be punished	5	8.3	0.05	0000
	I feel I am being punished	1	1.7		
	I don't feel disappointed in myself	16	26.7		
Self Hate	I am disappointed in myself	35	58.3	1.12	Moderate
	I am disgusted with myself	8	13.3	1.12	moderate
	I hate myself	1	1.7	1	

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			1		
	I don't feel I am any worse than anybody else	23	38.3		
Self Accusations	I am critical of myself for my weaknesses or mistakes	19	31.7	1.24	Moderate
1 iccusations	I blame myself all the time for my faults	13	21.7		
	I blame myself for everything bad that happens	5	8.3		
	I don't have any thoughts of killing myself	51	85.0		
Self-Punitive Wishes	I have thoughts of killing myself, but I would not carry them out	9	15.0	0.18	Good
	I have definite plans about committing suicide	0	0.0		
	I would kill myself if I could	0	0.0		
	I don't cry any more than usual	17	28.3		
Crying Seizures	I cry more now than I used to	26	43.3	]	
	I cry all the time now	15	25.0	1.06	Moderate
	I used to be able to cry, but now I can't cry even though I want to			1.00	Moderate
		2	3.3		
	I am no more irritated now than I ever am	2	3.3		
Irritability	I get annoyed or irritated more easily than I used to	23	38.3	1.47	Moderate
	I feel irritated all the time	34	56.7		
	I don't get irritated at all at the things that used to irritate me	1	1.7		
Social	I have not lost interest in other people	15	25.0		
Withdrawal	I am less interested in other people than I used to be	26	43.3	1.35	Moderate

	I have lost most of my interest in other people	11	18.3		
	I have lost all of my interest in other people	8	13.3		
	I make decisions about as well as I ever could	24	40.0		
Indecisivene ss	I put off making decisions more than I used to	29	48.3	0.76	Good
	I have greater difficulty in making decisions more than I used to	6	10.0		
	I can't make decisions at all anymore	1	1.7		
	I don't feel that I look any worse than I used to	14	23.3		
Body image	I am worried that I am looking old or unattractive	26	43.3	1.00	Moderate
	I feel there are permanent changes in my appearance that make me look unattractive	17	28.3		
	I believe that I look ugly	3	5.0		
	I can work about as well as before	10	16.7		
Work Inhibition	It takes an extra effort to get started at doing something	33	55.0	1.18	Moderate
	I have to push myself very hard to do anything	16	26.7		
	I can't do any work at all	1	1.7		
	I can sleep as well as usual	9	15.0		
Sleep Disturbance	I wake up more tired in the morning than I used to	24	40.0		
	I wake up 1-2 hours earlier than usual and find it hard to get back to sleep	24	40.0	1.29	Moderate
	I wake up early every day and can't get more than five hours sleep	3	5.0		

FatigabilityI get tired more easily than I used to3456.70.82GoodI get tired from doing almost anything1423.31423.41423.4I am too tired to do anything23.33.5141423.4Loss AppetiteMy appetite is no worse than usual1220.0143355.01.06ModerateMy appetite is not as good as it used to be3355.055.01.061.06ModerateMy appetite is much worse now1525.01.061.061.061.061.06Weight lossI haven't lost much weight , if any, lately4575.01.476oodI have lost more than 10 pounds58.30.476oodI have lost more than 15 pounds11.71.06ModerateI am no more concerned about physical problems and it's hard to think of much else3050.01.061.06I am so concerned about physical problems and it's hard to think of much else2135.01.06Moderate		I don't get more tired than usual	10	16.7		
I get tired from doing almost anything1423.3I am too tired to do anything23.3My appetite is no worse than usual1220.0My appetite is not as good as it used to be3355.0My appetite is much worse now1525.0I have no appetite at all anymore00.0I have no appetite at all anymore00.0I have no appetite at all anymore00.0I have not lost much weight , if any, lately4575.0I have lost more than 10 pounds58.3I have lost more than 15 pounds11.7Somatic PreoccupatioI am no more concerned about my health than usual813.3I am concerned about physical problems like aches,pain, upset stomach, or constipation3050.0I am so concerned about physical problems and it's hard to think of much else2135.0	Fatigability	I get tired more easily than I used to	34	56.7	0.82	Good
Loss AppetiteMy appetite is not as good as it used to be1220.01.06ModerateMy appetite is not as good as it used to be3355.01.061.06ModerateMy appetite is much worse now1525.01.061.06ModerateI have no appetite at all anymore00.00.00.00.0Weight lossI haven't lost much weight , if any, lately4575.00.47GoodI have lost more than 5 pounds915.00.47GoodI have lost more than 10 pounds58.31.31.7I nave lost more than 15 pounds11.71.06ModerateI nave lost more than 15 pounds11.71.06ModerateI nam no more concerned about my health than usual813.31.06ModerateI am oconcerned about physical problems like aches,pain, upset stomach, or constipation3050.01.06ModerateI am very concerned about physical problems and it's hard to think of much else35.01.06Moderate		I get tired from doing almost anything	14	23.3	0.02	0000
Loss AppetiteMy appetite is not as good as it used to be3355.01.06ModerateMy appetite is much worse now1525.01.06ModerateI have no appetite at all anymore00.00.00.0Weight lossI haven't lost much weight , if any, lately4575.00.47I have lost more than 5 pounds915.00.47GoodI have lost more than 10 pounds58.30.47GoodI have lost more than 15 pounds11.7I.06ModerateI nave lost more than 15 pounds11.70.47GoodI nave lost more than 15 pounds58.31.06ModerateI nave lost more than 15 pounds11.71.06ModerateI am no more concerned about my health than usual813.31.06ModerateI am concerned about physical problems like aches,pain, upset stomach, or constipation3050.01.06ModerateI am very concerned about physical problems and it's hard to think of much else35.01.06Moderate		I am too tired to do anything	2	3.3		
Loss Appetiteof beof Mof M3355.0 25.01.06ModerateMy appetite is much worse now1525.00.00.00.0I have no appetite at all anymore00.00.00.0Weight lossI haven't lost much weight , if any, lately4575.00.47GoodI have lost more than 5 pounds915.00.47GoodI have lost more than 10 pounds58.31.331.33I am no more concerned about physical peating ike aches,pain, upset stomach, or constipation3050.01.06ModerateSomatic Preoccupatio nI am very concerned about physical problems and it's hard to think of much else3355.01.06Moderate		My appetite is no worse than usual	12	20.0		
My appetite is much worse now1525.0I have no appetite at all anymore00.0I haven't lost much weight , if any, lately4575.0I have lost more than 5 pounds915.0I have lost more than 10 pounds58.3I have lost more than 15 pounds11.7I have lost more than 15 pounds11.7I nave lost more than 15 pounds11.7I nave lost more than 15 pounds11.7I am no more concerned about my health than usual813.3I am concerned about physical problems like aches,pain, upset stomach, or constipation3050.0I am very concerned about physical problems and it's hard to think of much else35.01.06		• • • • •	33	55.0	1.06	Moderate
Weight lossI haven't lost much weight , if any, lately4575.060.47GoodI have lost more than 5 pounds915.00.47GoodI have lost more than 10 pounds58.311.7I have lost more than 15 pounds11.71.7I am no more concerned about my health than usual813.313.3I am concerned about physical problems like aches,pain, upset stomach, or constipation3050.01.06I am very concerned about physical problems and it's hard to think of much else2135.01.06		My appetite is much worse now	15	25.0		
Weight losslately4575.0		I have no appetite at all anymore	0	0.0		
Weight lossI are lost in the lost in the lost in the lost more than 10 pounds58.36.47GoodI have lost more than 15 pounds11.7I am no more concerned about my health than usual813.313.3I am concerned about physical problems like aches,pain, upset stomach, or constipation3050.01.06I am very concerned about physical problems and it's hard to think of much else2135.01.06			45	75.0		
Image: Some transformed base of the second	Weight loss	I have lost more than 5 pounds	9	15.0	0.47	Good
Somatic nI am no more concerned about my health than usual813.3I am concerned about physical problems like aches,pain, upset stomach, or constipation3050.0I am very concerned about physical problems and it's hard to think of much else3050.0I am so concerned about my physical roblems and it's hard to think of much else2135.0		I have lost more than 10 pounds	5	8.3		
Nomatic Preoccupationhealth than usual813.3I am concerned about physical problems like aches,pain, upset stomach, or constipation3050.0I am very concerned about physical problems and it's hard to think of much else35.01.06I am so concerned about my physical35.01.06		I have lost more than 15 pounds	1	1.7		
Somatic Preoccupationlike aches,pain, upset stomach, or constipation3050.0ModerateI am very concerned about physical problems and it's hard to think of much else2135.01.06Moderate			8	13.3		
n problems and it's hard to think of much else 21 35.0 I am so concerned about my physical	Preoccupatio	like aches, pain, upset stomach, or	30	50.0	1.0.0	
		problems and it's hard to think of much	21	35.0	1.06	Moderate
else 1 1.7		problems that I cannot think of anything	1	1.7		
I have not noticed any recent change in my interest in sex 27 45.0			27	45.0		
Loss of Libido I am less interested in sex than I used to be 31 51.7 0.59 Good			31	51.7	0.59	Good
I have almost no interest in sex 2 3.3		I have almost no interest in sex	2	3.3		
I have lost interest in sex completely 0 0.0		I have lost interest in sex completely	0	0.0		

MS : Mean of Scores ; Good : MS = 0-0.99; Moderate : MS=1-1.99 Fail : MS≥2

Table (2) reveals descriptive statistics and assessment of Beck depression scale, it explains that the assessment of most items is (moderate), except for the items numbered (6,9,13,17,19,21) in which the assessment is (Good).

This assessment is based on the statistical scoring system that indicated total mean of scores between (0-0.99) as (Good), while those with scores between (1.0-1.99) as (moderate) and those with mean of scores equal or more than (2) as (poor).

Table (3) Assessment and mean of scores of depression among women with hysterectomy

Participants	Mean	Std. Deviation	Assessment	ssessment of the over participa				
	0.98	0.43			l	Moderate		

No Depression : MS= 0-0.49; Mild: MS=0.50.99; Moderate : MS=1.0-1.49; Severe : MS≥1.50

Table (3) reveals that the mean of score of depression among women with hysterectomy is  $(0.98\pm0.43)$  which indicates a (moderate) level of depression in the assessment of the overall women.

#### Discussion

The study's findings show that depression in women who have undergone hysterectomy was assessed using the Beck Depression Inventory (BDI) scale. The results show that 47% of the study's sample felt mild depression level, sadness, pessimism, loss of pleasure, and something changed in their bodies, which affected their sleep and appetite and may cause a significant disturbance in women's quality of life. This finding could be due to their negative perceptions of body image, energy, and femininity, as well as the loss of the ability to have children, are a major cause of depression in post-hysterectomy women. This result concordant with Helmy et al., 2008 their results showed that Symptoms of depression appeared in women (64.4%) after hysterectomy.

The findings of the current study showed that the majority of the participants (35.0%) were between 35 and 43 years old. This finding might be due to several studies reporting that prevalence of uterine fibrosis is higher in this age range. This result was congruent with an Egyptian study that was done by Abdelbaseer Mahmoud et al., 2022, who studied the "Effect of Psycho-educational Program on Depressive Symptoms, Post- traumatic Stress Response and Quality of Life among Women with Hysterectomy." Their results showed that 45 % of them are between the ages of 35 and 45, with an average age of  $34.55\pm7.65$  years.

Regarding residency, the results of the current study revealed that most of the participants live in urban areas (61.7%). This finding could be explained by the fact that more people live in urban than rural regions in Al-Najaf. Consequently, the researcher encounters more patients from urban residential areas rather than rural areas. In addition, an Egyptian study done by Eidfarrag et al., 2018, "Effect of an Educational Supportive Program on Self-Esteem and Marital Relation Among Women Undergoing Hysterectomy," found that nearly two -thirds (63.3%) of women that were studied come from urban areas, and urban is the dominant residential area for patients who were included in this study.

Regarding the level of education among participants, the researcher states that most of the participants are graduates of an institute (21.7%), followed by the those who graduated from high school (20.0%). This result is likely caused by the fact that the majority of the sample was drawn from urban regions, where a higher priority was placed on completing high education. This study consistent

with Gercek et al., 2016, who studied "The information requirements and self-perceptions of Turkish women undergoing hysterectomy." The results confirm that the majority of the study sample has a high level of education(29.7%).

Concerning occupational status, the findings of the current study showed that almost fifty percent of those participants (41.7%) are housewives. From the perspective of our culture, moms are responsible for the household and child care, while fathers spend the majority of their time working and serving as the provider. Therefore, mothers devote their entire day to caring for their children. This finding is supported by Eidfarrag et al. (2018), who found that more than half of samples were housewives.

In regards of marital status, the majority of the studied participants are married women. This result is probably due to social and religious norms or might be due to the fact that fewer than 50% of the women in this study were in the 35-43 age range, which is the appropriate age for marriage. This finding is consistent with Abdelbaseer Mahmoud et al., 2022, who found that more than half of the participants are married women(76.7%).

In terms of the subjects' number of children. The findings indicate that the majority of the study sample has 3 - 4 children. In the point of view this result may be due to do not apply family plan or might be related to that hysterectomy multigravida parous women. This result comes along with Gercek et al., 2016, whose results confirm that the majority of the study sample has three or more children.

## Conclusion

The study found that most women after hysterectomy have depression.

#### Recommendation

- Enhancing the psychological and emotional condition of women after hysterectomy by nursing professionals Additionally, coordination between the consultant in obstetrics and Gynecology and the hospital's Department of Psychiatry is needed to reduce depression.
- Providing an effective discharge plan for women with hysterectomy, including a follow-up visit schedule, the required examinations, and referral numbers for each type of expected complaint after hysterectomy, especially psychological complaints.
- Conducting identical research on a nationwide scale with the largest sample to evaluate depression of women after hysterectomy.

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