

The Quality of Life among Women after Laparoscopic Versus Abdominal Hysterectomy

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Abstract

Background: Quality of life (QOL) is a vital component in assessing women's health. laparoscopic hysterectomy generally offers advantages over abdominal hysterectomy in terms of faster recovery, less pain, smaller scars, and shorter hospital stays. **Aim:** To assess the quality of Life among women after laparoscopic versus abdominal hysterectomy. **Design:** A descriptive comparative design was used in the study. **Setting:** The study was conducted in the gynecologic department of Badr Hospital at Helwan University. **Sample:** A purposive sample of 90 women, which divided into two groups 40 women for laparoscopic and 50 women after abdominal hysterectomy. **Tools:** Two Tools were used for data collection. Tool 1 Structured Interviewing Questionnaire and Tool 2 Women QOL assessment questionnaire. **Result:** there are highly statistically significant difference regarding quality of life among women after laparoscopic versus abdominal hysterectomy which, women undergoing laparoscopic reported high quality of life while women undergoing abdominal hysterectomy had moderate quality of life. **Conclusion:** the current study concluded that women who underwent laparoscopic hysterectomy reported a better quality of life compared with abdominal hysterectomy. **Recommendations:** Conducting different health education sessions for women with hysterectomy regarding the healthy lifestyle programs including healthy nutrition, keeping healthy body mass index, and physical exercising.

Keywords--- Abdominal hysterectomy, Hysterectomy, Laparoscopy, Quality of Life

Introduction:

Hysterectomy is the most common performed gynecological operation for women worldwide, and most are performed on women between ages of 45 and 55 years; also entail the removal of the cervix, ovaries, fallopian tubes, and other ancillary tissues (oophorectomy, salpingectomy). A hysterectomy, also referred to as a "full" procedure, is typically conducted by a gynecologist and can be total removal of the uterus' body, fundus, and cervix) or partial (removal of the uterine body while leaving the cervix intact; also called "supracervical" (1,2).

The hysterectomy is typically only advised when alternative treatment options are unavailable or have failed because removal of the uterus (as well as the ovaries and fallopian tubes) prevents the patient from being able to produce children and has both short- and long-term consequences. In the United States, after a caesarean delivery, the second-most frequent gynecological surgical treatment. Hysterectomy can be performed using abdominal, vaginal, or laparoscopic methods. The specific aspects of hysterectomy, the quality of life assessed in any study will vary depending on the particular health condition and research subject under investigation. Quality of life is a necessary outcome variable in medical research and in surgery for benign gynecological conditions (3,4). In comparison to abdominal surgery, laparoscopic surgery is said to be less likely to cause surgical blood loss or wound infection, facilitate a shorter hospital stay, and hasten the return to normal life.

These findings, however, are based on transient perioperative research, raising the question of whether laparoscopy is actually less invasive than open surgery (5).

The most common method is abdominal hysterectomy, although current clinical practice dictates that, where appropriate, vaginal surgery should be used instead of abdominal surgery because the former is linked to better outcomes and reduced complication rates. Furthermore, total laparoscopic hysterectomy (TLH) offers a speedier return to normal activities, shorter hospital stays, reduced intraoperative bleeding, and fewer wound infections when compared to abdominal hysterectomy; hence, that should be used when vaginal hysterectomy is not possible or not indicated (6).

Although laparoscopy definitely results in fewer surface incisions, we thought that it might be better categorized as a minimal access method rather than a minimally invasive procedure given that the amount of intra-abdominal maneuvering is comparable to that needed for open surgery (7). Laparoscopic hysterectomies require longer operating times and have a higher risk of urinary system injury. The number of patients receiving hysterectomies with a history of caesarean sections (CSs) has increased due to the steadily rising rates of CSs over the past 20 years. An abdominal hysterectomy may be preferable for these patients; according to a recent review paper that showed previously conducted CSs to be a significant risk factor for lower urinary tract damage (8).

Before and after the surgery, women who have a hysterectomy experience a wide range of medical, psychological, functional, social, and spiritual issues. The main causes of these issues are a lack of appropriate knowledge, a lack of assistance and counseling, and anxieties and misgivings brought on by inaccurate information. Therefore, it is critical to assign certified community health nurses to work with hysterectomy patients and their families. By reducing the issues faced by women who have had hysterectomy, such interaction should strive to ensure that the woman copes better with the procedure and the post-hysterectomy scenario (9).

In the healthcare system, "quality of life" (QOL) is a significant result. The World Health Organization (WHO) defines the quality of life as "individuals' view of their place in life in relation to their goals, aspirations, standards, and concerns in the context of the culture and value systems in which they live." Physical health, mental health, social interactions, environment, and religious and/or spiritual status are the five dimensions that make up WHO-QOL. Five components of a woman's quality of life may be directly impacted after a hysterectomy (10, 11).

Significance of the study:

The annual incidence of hysterectomy in Egypt has been approximated at 165,107 across diverse governorates, indicating a considerable impact on women in the Egyptian community. Throughout the period from 2010 to 2017, a range of techniques were employed for hysterectomy, with the predominant ones including abdominal (65%), vaginal (20%), traditional laparoscopic (13%), robotic (0.9%), and radical (1.2%) approaches. (11).

The postoperative recovery and overall well-being, both physical and psychological, of women after hysterectomy depend on the method used. Therefore, it is important to assess the quality of life among women who undergo laparoscopic hysterectomy compared to those who undergo abdominal hysterectomy. By evaluating and comparing the outcomes of these two approaches, researchers can gain insights into the potential differences in postoperative recovery and overall well-being experienced by women after different types of hysterectomy procedures.

Aim of study:

The aim of this study is to assess the quality of Life among women after laparoscopic versus abdominal hysterectomy.

Research question:

What are the effects of laparoscopic and abdominal hysterectomy on women's quality of Life?

Research design:

Descriptive comparative design used in the present study.

Setting:

The study was conducted in the gynecologic department of Badr Hospital at Helwan University.

Sampling: A purposive sample of 90 woman, comprising two groups of subjects was selected for this study. One group consisted of women who had undergone laparoscopic hysterectomy (40 participants), while the other group comprised women who had undergone abdominal hysterectomy (50 participants). The selection criteria encompassed women aged between 18 and 45 years, sexually active individuals , can read and write while women were operated malignant indications were excluded .

Tools for data collection:

Tool I: Structured Interviewing Questionnaire:

It was developed by the researcher based on literature review and presented in an Arabic language and consisted of two parts:

Part 1: Demographic characteristics:

To assess women data such as, age, residence, educational level, and occupation.

Part 2: Obstetrical and Gynecological history :

To assess age of first menarche, regularity of menstruation, number of normal and caesarean section deliveries, previous abortions, medical history of the related cause of hysterectomy and any history of gynecological disease

Tool II: Women QOL assessment questionnaire :

This tool was adopted by the WHO (2017) to assess the quality of life (QOL) of women through five domains, the quality of life assessment contained (38) items for all the domains; the physical (QOL) domain, which contains nine items; the psychological (QOL) domain, which contains six items; the social (QOL) domain, which contains twelve items; the functional (QOL) domain, which contains seven items; and the spiritual (QOL) domain, which contains four items. So that (yes = 3 marks), (sometimes = 2 marks), and (no = 1 mark). The scoring system was followed to the total of the women's responses. Total responses were 38 marks equal to 100% and according to woman's responses, the quality-of-life assessment was categorized as high quality of life from 100% for more than 70%, moderate quality of life for 50% - 70%, and low quality of life for less than 50% of the total responses (11 , 12).

Total scoring system:

- High (QOL) → (>70% -100%)
- Moderate (QOL) → (50 % - 70 %)
- Low (QOL) (< 50%)

Domains	High (QOL)	Moderate (QOL)	Low (QOL)
Physical	27 - ≥18,9 marks	18,9 - >9,45 marks	< 9,45 marks
Psychological	18 - ≥12,6 marks	12,6 - > 6,3 marks	< 6,3 marks
Social	36- ≥ 25,2marks	25,2- > 12,6 marks	< 12,6 marks
Functional	21-≥14,7marks	14,7->7,35 marks	< 7,35 marks
Spiritual	12-≥8,4 marks	8,4->4,2 marks	<4,2 marks

Validity:

Revision of the tools for clarity, relevance, comprehensiveness, understanding, and applicability was done by a panel of experts composed of 5 professors of 2 obstetrics and gynecological nursing, 2 medical-surgical nursing, and 1 community health nursing to measure the content validity of the tools, and the necessary modifications were made accordingly.

Reliability:

Test-retest reliability was applied by the researcher to evaluate the internal consistency of the tool. It refers to the administration of the same tool to the same subjects under similar conditions on two or more occasions.

Ethical considerations:

Official permission to conduct the proposed study was obtained from the Ethical Research Committee, Faculty of Nursing Helwan University Cairo, Egypt. Participation in the study was voluntary, and subjects were given complete information about the study and their role before signing the informed consent. Ethical considerations included explaining the purpose and nature of the study, stating the possibility to withdraw at any time, and maintaining confidentiality of the information where it was not accessed by any other party without the participants' ethics, values, culture, and beliefs.

Preparatory phase:

The researcher reviewed the current, local, and international related literature on various aspects of the study using books, periodicals, journals, magazines, and the internet, with the aim of acquiring in-depth knowledge about the study. Then tools were designed and evaluated for validity and reliability.

Pilot study:

The pilot study was conducted by 10% (9) of the women under the study to evaluate the applicability, clarity, and efficiency of the tools. Women in the pilot study were chosen randomly and then included in the study sample later.

Field work:

- After attaining approval to conduct the study, the sample was collected from Badr Hospital at Helwan University. The data collection process spanned three months, which started in May 2023 and ended in August 2023, two days a week (Monday and Wednesday), from 9:00 a.m. to 2:00 p.m.
- The researcher met the women at the outpatient clinics of Badr Hospital in the follow-up room. Selection of the study sample for laparoscopic women was at first follow-up after 2 weeks, while for abdominal hysterectomy it was after 1 month.
- At the beginning, the researcher interviewed each woman individually after explaining the purpose of the study and oral consent was obtained to gain their confidence and trust and convince them to participate in the study.
- The researcher interviewed each woman individually in an outpatient clinic to fill tool (I) which consisted of two parts. 1st part includes questions related to women's demographic data; 2nd part includes questions used to assess obstetric and Gynecological history. The time taken to complete this data was 5-10 minutes.
- Then the researcher used tool (II) their questions used to assess the level of quality of life (QOL) of women through five domains, the physical (QOL) domain, which contains nine items; the psychological (QOL) domain, which contains six items; the social (QOL) domain, which contains twelve items; the functional (QOL) domain, which contains seven items; and the spiritual (QOL) domain, which contains four items.
- The researcher's role in completing the questionnaire was to facilitate the understanding of any confusing or difficult questions for the women.
- The time needed for completing one questionnaire was about 10–15 minutes.
- The samples were divided into two groups, women who underwent total abdominal hysterectomy group (N.= 50) and total laparoscopic hysterectomy group (N.=40)

- After completing the questionnaire, the researcher expressed gratitude to the participants and analyzed the data.

Administrative Design:

An official letter from the responsible authorities at the Faculty of Nursing, Helwan University was directed to the Dean of Badr Hospital in Helwan University., Cairo, Egypt to obtain an official approval to conduct the study after explanation of the aim of the study. The permission was obtained before the initiation of the data collection.

Statistical Design:

Recorded data were analyzed using the statistical package for social sciences, version 22.0 (SPSS Inc., Chicago, Illinois, USA). Quantitative data were expressed as mean± standard deviation (SD). Qualitative data were expressed as frequency and percentage.

Results:

Table (1) The findings indicate that a considerable percentage of women undergoing laparoscopic hysterectomy, notably 77.5%, were in the age range of 40 to 45 years. Similarly, 88% of those undergoing abdominal hysterectomy belonged to this age bracket. Importantly, there was no statistically significant difference observed between the two groups in terms of age distribution. Additionally, 87.5% and 68% of laparoscopic and abdominal hysterectomy women, respectively, were married. The majority (90%) of laparoscopic hysterectomy cases were from urban areas, and 45.0% of these women had a high level of education, while for abdominal hysterectomy, more than half (62.0%) were highly educated. Furthermore, 60.0% of laparoscopic hysterectomy women were unemployed, while 72.0% of those undergoing abdominal hysterectomy were also unemployed. In terms of income, 65% of laparoscopic hysterectomy women and 62% of abdominal hysterectomy women reported having sufficient income.

Figure (1): illustrate that the high total quality of life was 37.5% in laparoscopic hysterectomy women compared to 20% in abdominal hysterectomy. While low total quality of life decreased from (14%) in abdominal hysterectomy women to (10%) in laparoscopic hysterectomy women.

Table (2): shows that more than half (67.5%) of laparoscopic women had no genital tract infections, and more than three quarters (76.0%) of abdominal hysterectomy women had no genital tract infections. Also, near to three quarters (70%) of laparoscopic women had fibroma and pelvic pain, while more than three quarters (78%) of abdominal hysterectomy women had fibroma and pelvic pain. While (82.5%) and (66%) respectively, of laparoscopic and abdominal hysterectomy women had episodes of abnormal uterine bleeding.

Table (3): Laparoscopic hysterectomy resulted in a significantly greater improvement in physical health for women compared to those undergoing abdominal hysterectomy ($p \leq 0.01$). The enhancement in physical health-related quality of life saw a notable increase from 12% in abdominal hysterectomy to 25% in laparoscopic hysterectomy women. Concurrently, the proportion of women experiencing low quality of life decreased from 66% in abdominal hysterectomy to 45% in laparoscopic hysterectomy.

Table (4): shows that laparoscopic hysterectomy women had high significant improvement in psychological and mental health than abdominal hysterectomy women with ($p \leq 0.01$). The high quality of life regarding psychological and mental health increased from 20% in abdominal hysterectomy to 32.5% in laparoscopic hysterectomy women. While the low quality of life decreased from 56% in abdominal hysterectomy to 37.5% in laparoscopic hysterectomy women.

Table (5): Research findings indicate that women who underwent laparoscopic hysterectomy experienced a notably greater enhancement in social well-being compared to those who underwent abdominal hysterectomy ($p \leq 0.01$). Specifically, the proportion of laparoscopic hysterectomy patients reporting high-quality social health was 22.5%, whereas it was 12% among those who had abdominal hysterectomy. Furthermore, for those with moderate quality of life, 75% of laparoscopic hysterectomy women compared to 70% of abdominal hysterectomy women reported such levels.

Table (6): shows that laparoscopic hysterectomy women had high significant improvement in spiritual health than abdominal hysterectomy women with ($p \leq 0.01$). The high quality of life regarding spiritual health increased

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 from 20% in abdominal hysterectomy to 37.5% in laparoscopic hysterectomy women. While low quality of life decreased from (14%) in abdominal hysterectomy to (10%) in laparoscopic hysterectomy women.

Table (7): shows that laparoscopic hysterectomy women had high significant improvement in work performance than abdominal hysterectomy women with ($p \leq 0.01$). The high quality of life regarding work performance increased from 18% in abdominal hysterectomy to 37.5% in laparoscopic hysterectomy women. While low quality of life decreased from (68%) in abdominal hysterectomy to (50%) in laparoscopic hysterectomy women.

Table (8): shows the comparison between laparoscopic versus abdominal hysterectomy and domains of quality of life and revealed that there are a high significant improvement in total quality of life after laparoscopic hysterectomy than abdominal hysterectomy operations for studied women, with ($p < 0.01$)

Table (9): Demonstrates a highly statistically significant correlation between the quality of life of women undergoing total laparoscopic hysterectomy and factors such as the regularity of menstruation, number of gravida, and previous obstetrical operations ($p < 0.01$). Additionally, a statistically significant relationship was observed concerning the number of parity and abortion ($p < 0.05$), whereas no significant associations were found regarding the age of the first menarche and mode of delivery ($p > 0.05$). Conversely, among women undergoing total abdominal hysterectomy, a highly significant relationship was observed between their quality of life and the regularity of menstruation, as well as the number of gravida ($p < 0.01$). A statistically significant correlation was also found regarding the number of parities ($p < 0.05$), while no significant associations were identified concerning the remaining characteristics ($p > 0.05$).

Table (1): Distribution of Demographic data of the laparoscopic hysterectomy group and abdominal hysterectomy group (n=90).

Demographic data	Laparoscopic hysterectomy (n=40)		Abdominal hysterectomy (n=50)		Chi-square test	
	No.	%	No.	%	x ²	p-value
Age (years)						
36- <40	9	22.5	6	12.0	1.089	0.296
40 - 45	31	77.5	44	88.0		
Place of Residence						
Rural	4	10.0	5	10.0	0.125	0.723
Urban	36	90.0	45	90.0		
Level of education						
Primary	7	17.5	5	10.0	2.740	0.254
Moderate education	15	37.5	14	28.0		
High education	18	45.0	31	62.0		
Occupation						
Worker	16	40.0	14	28.0	0.951	0.329
Housewife	24	60.0	36	72.0		
Average monthly income						
Sufficient	26	65.0	31	62.0	0.872	0.646
Not sufficient	12	30.0	18	36.0		
Sufficient and save	2	5.0	1	2.0		

Using: Chi-square test (p-value >0.05 NS; *p-value <0.05 S; **p-value <0.01 HS)

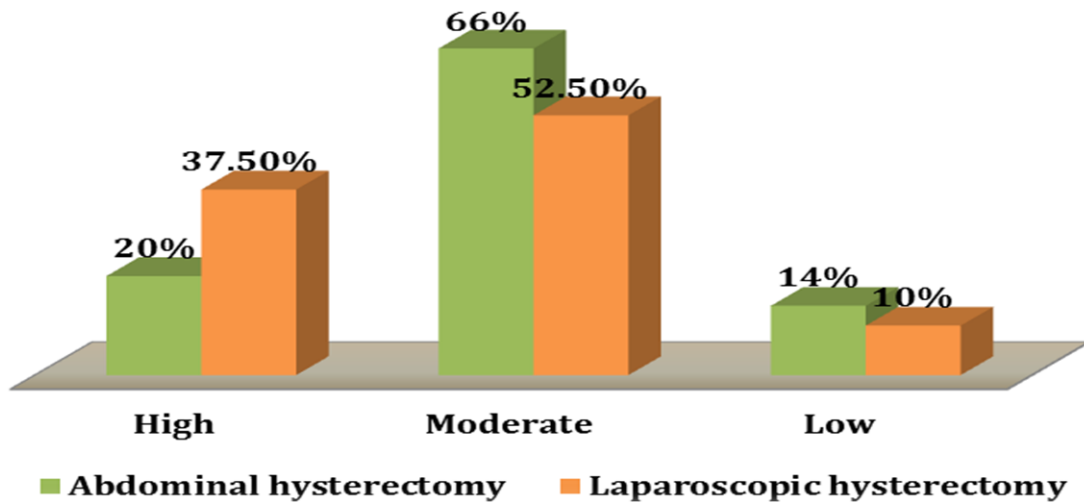


Figure (1) : percentage distribution of the laparoscopic hysterectomy versus abdominal hysterectomy group regarding total score of their quality of life (n=90).

Table (2): Distribution of the studied women regarding their medical history (n=90).

Medical history	Laparoscopic hysterectomy (n=40)		Abdominal hysterectomy (n=50)		Chi-square test	
	No.	%	No.	%	x ²	p-value
Genital tract infections						
Yes	13	32.5	12	24.0	0.433	0.511
No	27	67.5	38	76.0		
Fibroma and pelvic pain						
Yes	28	70.0	39	78.0	0.386	0.534
No	12	30.0	11	22.0		
Abnormal uterine bleeding :						
Yes	33	82.5	33	66.0	2.308	0.129
No	7	17.5	17	34.0		

Using: Chi-square test (p-value >0.05 NS; *p-value <0.05 S; **p-value <0.01 HS)

Table (3): Comparison between laparoscopic versus abdominal hysterectomy according to their quality of life regarding physical health and severity of pain (N=90).

Physical health and severity of pain	Type of hysterectomy				Chi-square test	
	Laparoscopic (n=40)		Abdominal (n=50)		x ²	p-value
	No.	%	No.	%		
Low QoL	18	45.0	33	66.0	1 2.868	<0. 001**
Moderate QoL	12	30.0	11	22.0		
High QoL	10	25.0	6	12.0		

Using: Chi-square test (p-value >0.05 NS; *p-value <0.05 S; **p-value <0.01 HS)

Table (4): Comparison between laparoscopic versus abdominal hysterectomy according to their quality of life regarding psychological and mental health (N=90).

Psychological and mental health	Type of hysterectomy				Chi-square test	
	Laparoscopic (n=40)		Abdominal (n=50)			
	No.	%	No.	%	x2	p-value
Low QoL	15	37.5	28	56.0	8.276	0.007*
Moderate QoL	12	30.0	12	24.0		
High QoL	13	32.5	10	20.0		

Using: Chi-square test (p-value >0.05 NS; *p-value <0.05 S; **p-value <0.01 HS)

Table (5): Comparison between laparoscopic versus abdominal hysterectomy women according to their quality of life regarding social health (N=90).

Social Health	Type of hysterectomy				Chi-square test	
	Laparoscopic (n=40)		Abdominal (n=50)			
	No.	%	No.	%	x2	p-value
• Low QoL	1	2.5	9	18.0	5.387	0.012*
• Moderate QoL	30	75.0	35	70.0		
• High QoL	9	22.5	6	12.0		

Using: Chi-square test (p-value >0.05 NS; *p-value <0.05 S; **p-value <0.01 HS)

Table (6): Comparison between laparoscopic versus abdominal hysterectomy according to their quality of life regarding spiritual health (N=90).

Spiritual Health	Type of hysterectomy				Chi-square test	
	Laparoscopic (n=40)		Abdominal (n=50)			
	No.	%	No.	%	x2	p-value
Low QoL	4	10.0	7	14.0	9.755	0.008*
Moderate QoL	21	52.5	33	66.0		
High QoL	15	37.5	10	20.0		

Using: Chi-square test (p-value >0.05 NS; *p-value <0.05 S; **p-value <0.01 HS)

Table (7): Comparison between laparoscopic versus abdominal hysterectomy regarding to their quality-of-life related functional needs (work performance) (N=90).

Functional needs (work performance)	Type of hysterectomy				Chi-square test	
	Laparoscopic (n=40)		Abdominal (n=50)			
	No.	%	No.	%	x2	p-value
Low QoL	20	50.0	34	68.0	12.338	0.002**

Moderate QoL	5	12.5	7	14.0		
High QoL	15	37.5	9	18.0		

Using: Chi-square test (p-value >0.05 NS; *p-value <0.05 S; **p-value <0.01 HS)

Table (8): Relation between laparoscopic versus abdominal hysterectomy according to their percentage of score domains of quality of life after hysterectomy (N=90).

Domains of QoL	Type of hysterectomy				t-test	
	Laparoscopic		Abdominal		t	p-value
	Mean	±SD	Mean	±SD		
Physical health and severity of pain	78.62	22.43	49.27	23.85	3.918	0.001**
Psychological and mental health	79.73	22.71	53.74	25.34	3.288	0.002**
Social Health	79.53	15.07	69.26	12.85	2.453	0.024*
Functional needs	81.65	28.14	48.63	24.32	4.175	0.001**
Spiritual Health	76.40	14.98	60.76	15.42	3.216	0.003**
Quality of life	79.53	15.36	57.63	17.20	4.083	0.001**

Using: t-Independent Sample t-test (p-value >0.05 NS; *p-value <0.05 S; **p-value <0.01 HS)

Table (9) : Relation between level of quality of life after hysterectomy regarding to their obstetrical and gynecological history (N=90).

Obstetrical and Gynecological History	Laparoscopic hysterectomy(QoL)						Chi-square test		Abdominal hysterectomy (QoL)						Chi-square test	
	Low (n=4)		Moderate (n=21)		High (n=15)				Low (n=7)		Moderate (n=33)		High (n=10)			
	No.	%	No.	%	No.	%	x2	p-value	No.	%	No.	%	No.	%	x2	P-value
Age of menarche (year)																
11 to 12	2	50.0	9	42.8	9	60.0	5.160	0.271	2	28.6	19	57.6	4	40.0	4.572	0.334
13 to 14	1	25.0	11	52.4	6	40.0			3	42.8	7	21.2	5	50.0		
>14	1	25.0	1	4.8	0	0.0			2	28.6	7	21.2	1	10.0		
Regularity of menses																
Regular	1	25	1	4.8	8	53.3	11.010	0.004**	1	14.3	1	3	8	80.0	28.58	0.001*
Irregular	3	75	20	95.2	7	46.7			6	85.7	32	97	2	20.0		
Number of Gravida																
1 to 2	1	25.0	5	23.8	11	73.4	21.788	0.001**	2	28.6	6	18.2	8	80.0	26.63	0.001*
3 to 4	1	25.0	16	76.2	2	13.3			3	42.8	27	81.8	2	20.0		
5 to 6	2	50.0	0	0.0	2	13.3			2	28.6	0	0.0	0	0.0		
Number of parities																
1 to 2	1	25.0	12	57.1	9	60.0	11.902	0.018*	1	14.3	16	48.5	7	70.0	15.83	0.003*
3 to 4	1	25.0	8	38.1	6	40.0			4	57.1	17	51.5	3	30.0		
5 to 6	2	50.0	1	4.8	0	0.0			2	28.6	0	0.0	0	0.0		
Mode of delivery																
Normal	2	50.0	9	42.9	4	26.7	1.275	0.529	3	42.9	16	48.5	6	60.0	0.573	0.751
Caesarean section	2	50.0	12	57.1	11	73.3			4	57.1	17	51.5	4	40.0		
Previous abortions																
Yes	3	75.0	3	14.3	5	33.3	6.622	0.037*	2	28.6	4	12.1	4	40.0	4.102	0.129
No	1	25.0	18	85.7	10	66.7			5	71.4	29	87.9	6	60.0		
Previous obstetrics operations																
Yes	3	75.0	0	0.0	3	20.0	15.294	<0.001*	1	14.3	1	3.0	1	10.0	1.652	0.438
No	1	25.0	21	100.0	12	80.0			6	85.7	32	97.0	9	90.0		

Using: Chi-square test p-value >0.05 NS; *p-value <0.05 S; **p-value <0.001 HS

Discussion:

Regarding demographic characteristics ,the findings current study indicate that a considerable percentage of women undergoing laparoscopic hysterectomy, notably 77.5%, were in the age range of 40 to 45 years. Similarly, 88% of those undergoing abdominal hysterectomy belonged to this age bracket. Importantly, there was no statistically significant difference observed between the two groups in terms of age distribution. The outcomes align with **Bartels (2020)**, whose research focused on "Quality of life following minimally invasive hysterectomy compared to abdominal hysterectomy" in Europe. Bartels noted that the majority of women examined were 45 years old for both laparoscopic and abdominal hysterectomy procedures. From the researcher's point of view, the

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mean age of studied women was more than three quarters 40- 45 years old for laparoscopic hysterectomy due to the gynecological diseases and disorders common in this aged because the hormonal disturbance. . (13)

Regarding quality of life after hysterectomy about physical health and severity of pain the current study showed that shows that laparoscopic hysterectomy women had high significant improvement in physical health than abdominal hysterectomy women. This result agreed with **Kurt, (2022)**, who studied "Comparison of health-related quality of life of women undergoing robotic surgery, laparoscopic surgery or laparotomy for gynecologic conditions: A cross-sectional study, turkey" who reported significant differences for pain score and the physical components among the women who had undergone robotic gynecologic surgery and laparoscopy compared with those who had undergone laparotomy. (15)

Also, this result disagreed with **Kotani, (2021)** who studied "Quality of life after laparoscopic hysterectomy versus abdominal hysterectomy", Japan, conducted a randomized controlled trial comparing abdominal surgery versus laparoscopic surgery for health-related quality of life (QOL). who reported significantly higher scores in bodily pain and social functioning after laparoscopic surgery more than abdominal surgery. (15) . In addition, **Wallace, (2020)** who stated, "Comparative effectiveness of hysterectomy versus myomectomy on one-year health-related quality of life in women with uterine fibroids , USA " suggested that the learning curve in performing laparoscopic surgery may be a limiting factor; thus, operative time is likely to decrease as the surgeon's years of experience increase. In this study, most of the cases were performed by physicians who were in their 10th year of practice for both laparoscopic and abdominal hysterectomy. (16)

Regarding quality of life after hysterectomy about Psychological and mental health the current study shows that laparoscopic hysterectomy women had high significant improvement in psychological and mental health than abdominal hysterectomy women with ($p \leq 0.01$). The high quality of life regarding psychological and mental health increased from one quarter in abdominal hysterectomy to one third in laparoscopic hysterectomy women.

These results were in the same line with **Ali Mahmoud et al. (2019)** who studied "Quality of Life for Women after Hysterectomy" Egypt, the psychological domain of quality of life of the studied women after hysterectomy that less than two thirds of them had poor psychological domain, more than one fifth of them had an average psychological domain, and less than one tenth of them reported good psychologically domain after hysterectomy. (17) In addition, **Xie, (2022)** who stated, "Effect of Psychological Intervention on Pelvic Floor Function and Psychological Outcomes after Hysterectomy " China, that psychosocial stress of patients after surgery and its treatment is often overlooked by

physicians. However, it would severely impact patient's quality of life in both abdominal and laparoscopic hysterectomy women. (18)

Regarding to **Abdelbaseer (2022)** ,who stated "Effect of Psycho-Educational Program on Depressive Symptoms, Post-traumatic Stress Response, and Quality of Life among Women with Hysterectomy" Egypt, that mood symptoms and psychological life continue to improve after hysterectomy for all women, and women who undergo a hysterectomy with or without bilateral oophorectomy in midlife do not experience more negative mood symptoms in the years after surgery. (19) .Also these results were in the same line with **Rehan, (2023)** who stated "Effect of Psychosexual Counseling Program on Sexual Quality of Life among Post-Hysterectomy Women" *Egypt*, that less than one quarter of the study women expressed that since their strength and ability to work has reduced after hysterectomy, the family is getting affected and partners also disapproved that the wife is not working as much as they expected because women were not allowed to lift heavy weights after hysterectomy and some of women reported conflicts between them and the mothers in law when they could not work, which indicated negatively affected social life of these women. (20) . These results, although in the same line as **Fortin, (2019)** who stated, "Impact of laparoscopic hysterectomy on quality of life," USA that quality of life for women after hysterectomy described that more than two thirds of the studied women had poor social domain, more than one quarter of them had an average social domain, and less than one tenth of them had good social domain after

hysterectomy, laparoscopic hysterectomy reported a better quality of life compared with abdominal hysterectomy. (21)

Regarding quality of life after hysterectomy about functional needs (work performance) shows that laparoscopic hysterectomy women had high significant improvement in work performance than abdominal hysterectomy women with ($p \leq 0.01$). The high quality of life regarding work performance increased from less than one quarter in abdominal hysterectomy to more than one third in laparoscopic hysterectomy women. While low quality of life decreased from two third in abdominal hysterectomy to half in laparoscopic hysterectomy women.

These results were in the same line with **Körpe (2022)** who stated " Quality of life and sexual function after abdominal versus laparoscopic hysterectomy" Europe , that in the total laparoscopic hysterectomy group, the individual improvements of the overall quality of life health physical, psychological and work performance health domains were statistically higher than the total abdominal hysterectomy group. (22)

Regarding quality of life after hysterectomy about spiritual health the current study results shows that laparoscopic hysterectomy women had significant improvement in social health than abdominal hysterectomy women with ($p \leq 0.01$). These results were disagreement with **Collins, (2020)** who stated, "Bridging different realities-a qualitative study on patients' Sweden, experiences of preoperative care for benign hysterectomy and opportunistic salpingectomy in Sweden ", presented the negative effects of sedentary behavior after hysterectomy concluded that excessive sedentary behavior after hysterectomy, even in women that engage in regular exercise, is detrimental. In particular to the physical activity and spiritual needs of women after hysterectomy most of the women did not do any type of physical exercises or spiritual activates after hysterectomy. (23) .

Concerning to relation between level of quality of life after hysterectomy regarding to their obstetrical and gynecological history present study illustrates that there were a highly statistically significant relation between total laparoscopic hysterectomy women's quality of life and their regularity of menarche, number of gravida and previous obstetrical operation with p-value ($p < 0.01$). These results

were in the same line as **Thapet, (2020)** Who studied "Laparoscopic Hysterectomy versus Abdominal Hysterectomy for Obese Women with Benign Diseases " Egypt , who said that low parity and low cesarean deliveries were significantly increased in the laparoscopic group (25) .

Conclusion:

The finding revealed notable distinctions between women undergoing abdominal hysterectomy and laparoscopic hysterectomy. Specifically, women undergoing laparoscopic surgery exhibited a higher quality of life, whereas those opting for abdominal hysterectomy demonstrated a moderate quality of life. These outcomes provide robust support for the research question, elucidating the effects of laparoscopic and abdominal hysterectomy on women's quality of life.

Recommendation:

Based on the results of this study, the following recommendations were proposed:

- 1- Increasing women's awareness about the different choices for hysterectomy alternatives, as laparoscopic hysterectomy .
- 2- Health education sessions for nurses to women with hysterectomy regarding the healthy lifestyle programs, including healthy nutrition, maintaining a healthy body mass index, and physical exercise.
- 3- Women experiencing hysterectomy need emotional and social support to increase feeling of security.

4- Further recommendation on:

- Implementing nursing instructional guideline for improving women quality of life after hysterectomy.
- Research is needed both in rural and urban areas on this topic to get broader perspective of women's quality of life.

- Replication of study to further setting using a larger sample .

References:

1. **Feng, L. F., Yan, P. J., Chu, X. J., Zhang, N., Li, J. Y., Li, J. W., ... & Yang, K. H. (2021):**A scientometric study of the top 100 most-cited publications based on web-of-science regarding robotic versus laparoscopic surgery. *Asian Journal of Surgery*, 44(2), 440-451.
2. **Palacios-Jaraquemada, J. M., Fiorillo, A., Hamer, J., Martínez, M., & Bruno, C. (2022):** Placenta accreta spectrum: a hysterectomy can be prevented in almost 80% of cases using a respective-reconstructive technique. *The Journal of Maternal-Fetal & Neonatal Medicine*, 35(2), 275-282, Argentine
3. **Rodriguez, M. G. H., Mehra, D., Saroop, S., & Srivastav, A. (2020):** Abdominal Supracervical Hysterectomy with Bilateral Salpingo-Oophorectomy as the Surgical Approach for a 22-Week Uterus with Incidental Endometrial Polyp Focal Atypia. *Cureus*, 12(9)
4. **Uppal, S., Gehrig, P. A., Peng, K., Bixel, K. L., Matsuo, K., Vetter, M. H & Rose, S. L. (2020):** Recurrence rates in patients with cervical cancer treated with abdominal versus minimally invasive radical hysterectomy: a multi-institutional retrospective review study. *Journal of Clinical Oncology*, 38(10), 1030-1040.
5. **Chiva, L., Zanagnolo, V., Querleu, D., Martin-Calvo, N., Arévalo-Serrano, J., Căpîlna, M. E., ... & Alcazar, J. L. (2020):**SUCCOR study: an international European cohort observational study comparing minimally invasive surgery versus open abdominal radical hysterectomy in patients with stage IB1 cervical cancer. *International Journal of Gynecologic Cancer*, 30(9).
6. **Buzzaccarini, G., Stabile, G., Török, P., Petousis, S., Mikuš, M., Della Corte, L., & Laganà, A. S. (2022):** Surgical approach for enlarged uteri: further tailoring of v NOTES hysterectomy. *Journal of Investigative Surgery*, 35(4), 924-925 Italy
7. **Alletti, S. G., Restaino, S., Finelli, A., Ronsini, C., Lucidi, A., Scambia, G., & Fanfani, F. (2020):** Step by step total laparoscopic hysterectomy with uterine arteries ligation at the origin. *Minimally Invasive Gynecology*, 27(1), 22-23.Italy
8. **Sentilhes, L., Seco, A., Azria, E., Beucher, G., Bonnet, M. P., Branger, B., & Schwanka, J. (2022):** Conservative management or cesarean hysterectomy for placenta accreta spectrum: the PACCRETA prospective study. *American journal of obstetrics and gynecology*, 226(6), 839-e1
9. **Topcu, E. G., McClenahan, P., Pule, K., Khattak, H., Karsli, S. E., Cukelj, M., & Fogarty, P. (2023):** FIGO best practice guidance in surgical consent. *International Journal of Gynecology & Obstetrics*
10. **Humes JC, Weir L, Keyser EA, Molina MM, The Dying Art of Vaginal Hysterectomy: 2019 Dec 12** A Novel Simulation, *Cureus* [PubMed PMID: 31938645]
11. **Ibrahim, W., & Mohammed, H. (2020):** Effect of Nursing Instructional Guideline on Women's Quality of Life after Hysterectomy. *International Journal of Novel Research in Healthcare and Nursing*, 7(2), 439-451, Egypt
12. **World Health Organization WHO (2017):** WHO Quality of Life-BREF (WHOQOL-BREF) [Online] Available from: http://www.who.int/substance_abuse/research_tools/whoqolbref/en/ [Accessed 17-2-2019, 10: 20 p.m.].
13. **Bartels, H. C., Rogers, A. C., Janda, M., Obermair, A., & Brennan, D. J. (2020):** Quality of life following minimally invasive hysterectomy compared to abdominal hysterectomy: A metanalysis. *European Journal of Obstetrics & Gynecology and Reproductive Biology*, 252, 206-212.
14. **Kurt, G., Guvenc, G., Dede, M., Yenen, M. C., & Akyuz, A. (2022).** Comparison of health-related quality of life of women undergoing robotic surgery, laparoscopic surgery, or

Vol. 3, Issue 5, Month: March 2024, Available at: <https://hijnrp.journals.ekb.eg/>

laparotomy for gynecologic conditions: A cross-sectional study. *International Journal of Gynecology & Obstetrics*, 159(2), 583-591.

15. **Kotani, Y., Murakami, K., Fujishima, R., Kanto, A., Takaya, H., Shimaoka, M., ... & Matsumura, N. (2021):**Quality of life after laparoscopic hysterectomy versus abdominal hysterectomy. *BMC women's health*, 21(1), 219 **Osaka**, 589-8511, **Japan**
16. **Wallace, K., Zhang, S., Thomas, L., Stewart, E. A., Nicholson, W. K., Wegienka, G. R., ... & Myers, E. R. (2020):** Comparative effectiveness of hysterectomy versus myomectomy on one-year health-related quality of life in women with uterine fibroids. *Fertility and sterility*, 113(3), 618-626.
17. **Ali Mahmoud Mohammad, E., Mohamed Mohamed, H., & Khalil Ibrahim, W. (2019):** Quality of Life for Women after Hysterectomy. *Egyptian Journal of Health Care*, 10(1), 240-252.
18. **Xie, M., Huang, X., Zhao, S., Chen, Y., & Zeng, X. (2022):** Effect of Psychological Intervention on Pelvic Floor Function and Psychological Outcomes after Hysterectomy, *Frontiers in Medicine*,
19. **Abdelbaseer Mahmoud, D., Fathi Elatar, N., & Ahmed Mostafa, H. (2022):** Effect of Psycho-educational Program on Depressive Symptoms, Post-traumatic Stress Response and Quality of Life among Women with Hysterectomy. *Journal of Nursing Science Benha University*, 3(2), 1165-1187, Egypt
20. **Rehan, M. K., Qasem, E. A., El Malky, M. E., & Elhomosy, S. M. (2023):** Effect of Psychosexual Counseling Program on Sexual Quality of Life among Post-Hysterectomy Women. *Menoufia Nursing Journal*, 8(1), 61-79 Egypt.
21. **Fortin, C., Hur, C., & Falcone, T. (2019):** Impact of laparoscopic hysterectomy on quality of life. *Journal of Minimally Invasive Gynecology*, 26(2), 219-232
22. **Körpe, B., & Yorganci, A. (2022):** Quality of life and sexual function after abdominal versus laparoscopic hysterectomy: a prospective study. *Minerva Obstetrics and Gynecology*, 74(2), 137-145, Minerva, Europe
23. **Collins, E., Lindqvist, M., Mogren, I., & Idahl, A. (2020):** Bridging different realities-a qualitative study on patients' experiences of preoperative care for benign hysterectomy and opportunistic salpingectomy in Sweden. *BMC women's health*, 20(1),
24. **Entesar Fatouh Abed Elmoneim , Gehan E.Ghonemy , Nagia Ibrahim (2017) :** Effect of Roy Adaptation Model on Sexual Function and Spousal Support among Women after Total Hysterectomy. *IOSR Journal of Nursing and Health Science (IOSR-JNHS e-ISSN: 2320-1959.p-ISSN: 2320-1940 Volume 6, Issue 2 Ver. V, PP 130-140 www.iosrjournals.org DOI: 10.9790/1959-060205130140 www.iosrjournals.org 130*
25. **Thapet, M. E., Farouk Midan, M., Rady, M. S. M., & Abdou, H. A. (2020):** Laparoscopic Hysterectomy versus Abdominal Hysterectomy for Obese Women with Benign Diseases. *International Journal of Medical Arts*, 2(2), 365-372.Egypt.

