

# Study Quality of Life of Women with Ovarian Tumors in Vietnam

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## Abstract

**Objectives:** The purpose of this study was to study quality of life of women with ovarian tumors in vietnam

**Methods:** Women after surgery for ovarian tumors were recruited from Hue Central Hospital and Hue University of Medicine and Pharmacy from January 2019 to December 2020 by a descriptive cross-sectional study. Women have a preoperative diagnosis as ovarian tumors, but postoperative diagnosis was not physical injury in the ovaries. Patients with a history of ovarian or primary peritoneal cancer or any associated cancer. Patients did not agree to join the study. Patients with mental illness.

**Result:** The average level of occupational quality of life in benign tumor group and malignant tumor one comprises 51.8% and 38.7%, respectively; and the low one in benign tumor group is 36.8% and malignant tumor group is 45.2%. The difference between the occupational quality of life in two groups is statistically significant ( $p < 0.05$ ). The high level of health quality of life in benign group for 29.4% while two groups share a percentage of 26.2. The health quality of life at average level in benign tumors is 61.9% contrast to 28.6% of malignant tumors. The low level of health quality of life in benign tumor and malignant tumor is 9.4% and 70.9% respectively. The very low level of health quality of life in benign tumor is 14.3%.

Emotional quality of life at high level in benign tumors is 0.0%. The emotional quality of life at low level is 29.8% in benign and 61.3% in malignant tumor. The very low level of emotional quality of life is at 22.5%. The sexual quality of life at very high level in ovarian tumor patients is 0%. The sexual quality of life at very low level in malignant tumor is 29.1% and the whole group is 3.5% ( $p < 0.05$ ). The very low level of total quality of life in ovarian tumor group accounts for 4.9%, including 45.1% in malignant group and 0% in benign group ( $p < 0.05$ ). The low level of total quality of life in ovarian tumor group consists of 29.7%, specifically the malignant group is 29% and the benign one makes up 29.8%. The average level of total quality of life in ovarian tumor group comprises 68.9% the high total quality of life in the ovarian tumor group is 11.1% consisting of 0% in malignant group and 3.9% in benign one. ( $p < 0.05$ ).

**Conclusion:** The quality of life in terms of health, emotion and sex at very low level and low level in malignant group have a higher rate than the benign one.

**Keywords:** *Echography, Doppler, Ovarian cyst, qualite of life.*

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## Introduction

Primary health care is identified as an indispensable stage in the socio-economic development strategy, which is a basic factor to enhance people's quality of life. In fact, the quality of life of Vietnamese in recent years has made remarkable progress, the living conditions of

people have gradually improved.

Ovarian tumor is a common disease, which can be benign or malignant. When ovarian tumor is malignant, it is one of the ten most common cancers in women, with the highest mortality rate in gynecological cancer<sup>(1-3)</sup>. Worldwide, there were an estimated 295,414 ovarian cancer cases discovered and 184,799 deaths in 2018, with the highest incidence in developed countries.

Ovarian cancer mortality rate have not changed over the past 30 years and quality of life in ovarian tumor patients, especially malignant tumors, has also changed a lot<sup>(4-6)</sup>. As being diagnosed ovarian cyst, it will make an impact on the patient's emotions including anxiety, reduction or loss of sexual arousal and psychological fear, especially in the malignant group. Some studies show that quality of life in the diseased group decreases due to anxiety disorder. Ovarian tumor makes patients worried when being diagnosed, and after undergoing oophorectomy, some women go through menopause early, which can be seen at a quite young age.

Menopause can occur spontaneously or it is the aftermath of neoplastic disease and oophorectomy affecting patient's postoperative quality of life<sup>(7,8)</sup>.

Having realized that it is essential to conduct a research assessing cohabitation and psychological disorders as well as effects in terms of health, work and sexuality due to ovarian tumor disease so we proceeded to do a research project: "Study of quality of life of women with ovarian tumors in Hue Central Hospital in Vietnam", whose the goal is surveying the quality of life in women with ovarian tumors in Vietnam

## Methods

A descriptive cross-sectional study, 286 women with ovarian tumors underwent oophorectomy at Hue Central Hospital and Hue University of Medicine and Pharmacy from January 2019 to December 2020.

**Inclusion criteria:** Ovarian tumor are indicated as surgery. There are postoperative pathological results. The period after oophorectomy is 1 year. Being sexually active. Agreeing to participate in research. Utian quality of life scale

**Exclusion Criteria:** Women have a preoperative diagnosis as ovarian tumors, but postoperative diagnosis was not physical injury in the ovaries (such as pseudocysts, hydrosalpinx, paraovarian cysts, subserosal uterine fibroids...). Patients with a history of ovarian or primary peritoneal cancer or any associated cancer. Patients did not agree to join the study. Patients with mental illness.

## Research method according to cross-sectional descriptive method.

**Measures:** Patients will be assessed on the general condition, medical history, gynecological examination, rectal examination (for unmarried women). General condition: Fatigue, loss of appetite, weight loss, anemia, ... Symptoms: Abdominal pain, back pain, pelvic pain, enlarged lower abdomen, menstrual cycle disorders, abnormal uterine bleeding, digestive disorders, urinary disorders. Abdominal examination: abdominal tenderness, ascites, palpation of tumor and evaluation of tumor characteristics: location, size, mobile or not, boundary (clear or unclear), density (soft, firm), surface (smooth, rough).

Using standard ultrasound views to examine pelvic organs, genital organs, describe the features of ovarian tumor: location (unilateral/ bilateral), largest diameter of the lesion (mm), solid component (yes/no), multilocular cysts (yes/no), abdominal fluid (yes/no), papillary projections (yes/no), tumor cortex (thick/thin), high Doppler blood flow (yes/no).

## Utian Quality of Life (UQOL) scale in women with ovarian tumor: <sup>(9)</sup>

The women, after counseling, were explained and invited to participate in the study and guidance to complete the Utian questionnaire, circling the answer that closest to the mood they were feeling. Avoid discussing the answers with others. Mothers should complete this scale unless they have limited reading comprehension. Utian Quality of Life Scale (UQOL) Scoring Summary

**Statistical Methods:** Each of the four subscales of the UQOL is represented by a unique color, as shown below. Sum the circled responses by color and enter the sum in the scoring summary section at the bottom of the page.

1.	I am able to control things in my life that are important to me.	1	2	3	4	5
2.	I feel challenged by my work.	1	2	3	4	5
3.	I believe my work benefits society.	1	2	3	4	5
4.	I am not content with my sexual life.	5	4	3	2	1
5.	I am content with my romantic life.	1	2	3	4	5
6.	I have gotten a lot of personal recognition in my community or at my job.	1	2	3	4	5
7.	I am unhappy with my appearance.	5	4	3	2	1
8.	My diet is not nutritionally sound.	5	4	3	2	1
9.	I feel in control of my eating behavior.	1	2	3	4	5
10.	Routinely, I engage in active exercise three or more times each week.	1	2	3	4	5
11.	My mood is generally depressed.	5	4	3	2	1
12.	I frequently experience anxiety.	5	4	3	2	1
13.	Most things that happen to me are out of my control.	5	4	3	2	1
14.	I am content with the frequency of my sexual interactions with a partner.	1	2	3	4	5
15.	I currently experience physical discomfort or pain during sexual activity.	5	4	3	2	1
16.	I believe I have no control over my physical health.	5	4	3	2	1
17.	I am proud of my occupational accomplishments.	1	2	3	4	5
18.	I consider my life stimulating.	1	2	3	4	5
19.	I continue to set new personal goals for myself.	1	2	3	4	5
20.	I expect that good things will happen in my life.	1	2	3	4	5
21.	I feel physically well.	1	2	3	4	5
22.	I feel physically fit.	1	2	3	4	5
23.	I continue to set new professional goals for myself.	1	2	3	4	5

## Scoring Summary

	Lower QoL				Higher QoL
	-2SD	-1SD	Mean	+1SD	+2SD
Occupational QoL	13	19	25	31	35
Health QoL	11	16	21	26	31
Emotional QoL	12	16	20	24	28
Sexual QoL	0	4	8	12	15
Total QoL	48	61	74	87	100

**Instructions:** Means for each factor, along with standard deviations above and below the mean, are shown above. After summing each factor, mark with an “X” roughly where the patient’s score falls along each continuum. These marks will provide a graphic summary of the patient’s QOL score on each factor and for the scale as a whole.

Processing data according to the method of medical statistics, Excel 2007.

## Results

**Table 1. Social demographic characteristics of participant**

		n(286)	(%)
Age (years)	<20	27	9.4
	20 - 29	76	26.6
	30 - 39	93	32.5
	40-49	52	18.2
	>50	28	9.79
Educational level	Primary school	5	1.8
	Secondary school	23	8.0
	High school	114	39.9
	University and above	144	50.3
Pathology	cancer	31	12.8
	Benign	255	89.2

The rate of group aged from 30 to 39 is 32.5% and group aged 20 – 29 comprises 26.6%. In terms of pathology, benign tumor is 12.8% and ovarian cancer is 12.8%.

**Table 2. Symptoms of ovarian tumor**

Group Symptoms	Cancer group		Benign group		p
	n(31)	%	n(255)	%	
Abdominal pain	26	83.9	189	74.1	<b>&lt;0,05</b>
Metromenorrhea	7	22.6	87	34.1	
Abdominal bloating	12	38.7	25	9.8	
Asymptomatic	8	25.8	42	16.8	
Palpation of the tumor	21	67.7	31	12.2	
Tumors with little or no mobility account	16	51.6	123	47.1	

Functional symptoms of benign ovarian tumor consist of abdominal pain which accounts for 74.5%, asymptomatic is 16.8%. Symptoms of ovarian cancer include palpation of the tumor (67.7%), abdominal pain (83.9%), and abdominal bloating (38.7%). Tumors with little or no mobility account for 51.6%, asymptomatic accounts for 25.8% (p <0.05).

**Table 3. Characteristics**

Characteristics		Cancer group		Benign group		p
		n(31)	%	n(255)	%	
Size (mm)	≤ 50	3	9.7	54	21.9	<b>&lt; 0,05</b>
	51 – 100	16	51.6	157	61.6	
	101 – 150	8	25.8	29	11.4	
	> 150	4	12.9	15	5.9	
	X±SD	101±54		65.2±34.7		
Echo	Hyperechoic	4	12.9	25	9.8	<b>&lt; 0,05</b>
	Hétérogène (solido-kystique)	17	54.8	84	32.9	
	hypoechoic	9	29.0	101	39.6	
	poor echo	1	3.2	45	17.7	
Position	Unilateral ovarian	25	80.6	231	90.6	<b>&lt; 0,05</b>
	bilateral	6	19.4	24	9.4	
Vegetations	Yes	21	67.7	35	13.7	
Ascites	Yes	6	19.4	0	0.0	

Mixed echo malignant tumors comprise 54.8%, benign tumors are hypoechoic, and poor echo accounts for 39.6%. Unilateral ovarian tumors make up 80.6% in the cancer group and 90.6% in the benign group.

**Table 4. The Index of Occupational quality of life**

Group QoL		Benign group		cancer group		Total		p
		n	%	n	%	n	%	
Occupational QoL	Lower QoL	0	0,00	5	16.1	5	1.8	<0,05
	Low QoL	94	36.8	14	45.2	108	37.8	
	Mean	132	51.8	12	38.7	144	50.3	
	High QoL	29	11.4	0	0,00	29	10.1	
	Higher QoL	0	0.0	0	0.0	0.0	0.0	

The low level of occupational quality of life at patients having ovarian tumors accounts for 37.8% and the average one is 50.3%. The average level of occupational quality of life in benign tumor group and malignant tumor one comprises 51.8% and 38.7%, respectively; and the low one in benign tumor group is 36.8% and malignant tumor group is 45.2%. The difference between the occupational quality of life in two groups is statistically significant ( $p < 0.05$ )

**Table 5. The Index of healthquality of life**

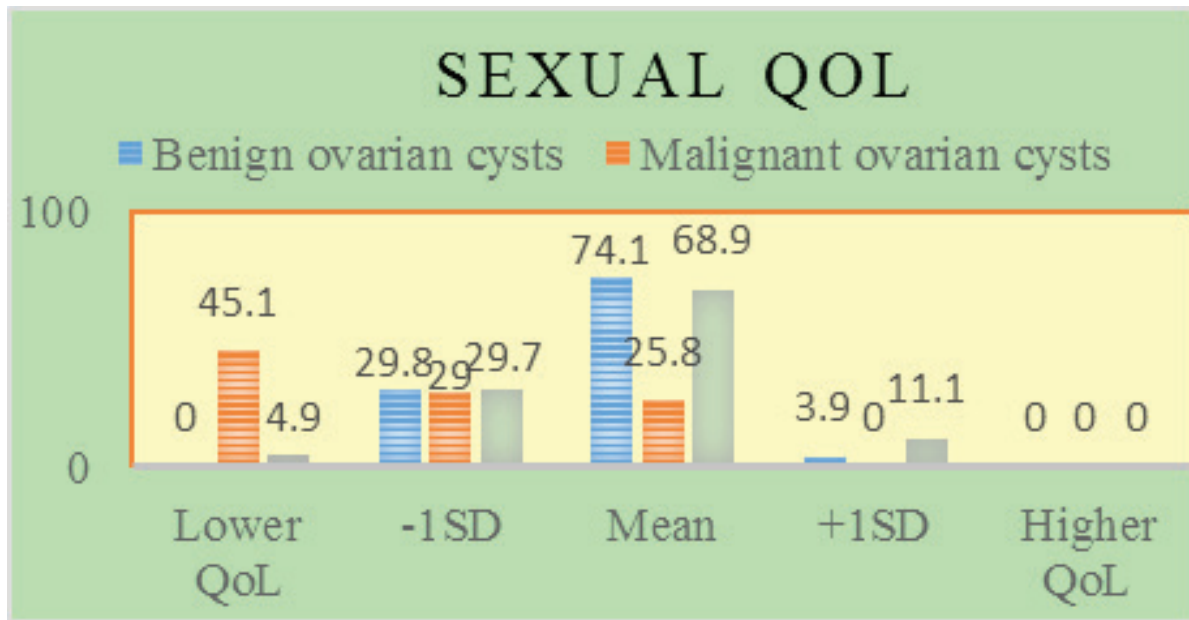
Group QoL		Benign group		cancer group		Total		P
		n	%	n	%	n	%	
Health QoL	Lower QoL	0	0.00	3	14.3	3	1.1	<0,05
	Low QoL	24	9.4	22	70.9	46	16.1	
	Mean	156	61.9	6	28.6	162	56.6	
	High QoL	75	29.4	0	0.00	75	26.2	
	Higher QoL	0	0.00	0	0.00	0	0.0	

The high level of health quality of life in benign group for 29.4% while two groups share a percentage of 26.2. The health quality of life at average level in benign tumors is 61.9% contrast to 28.6% of malignant tumors. The low level of health quality of life in benign tumor and malignant tumor is 9.4% and 70.9% respectively. The very low level of health quality of life in benign tumor is 14.3.

**Table 6. The Index of emotional quality of life**

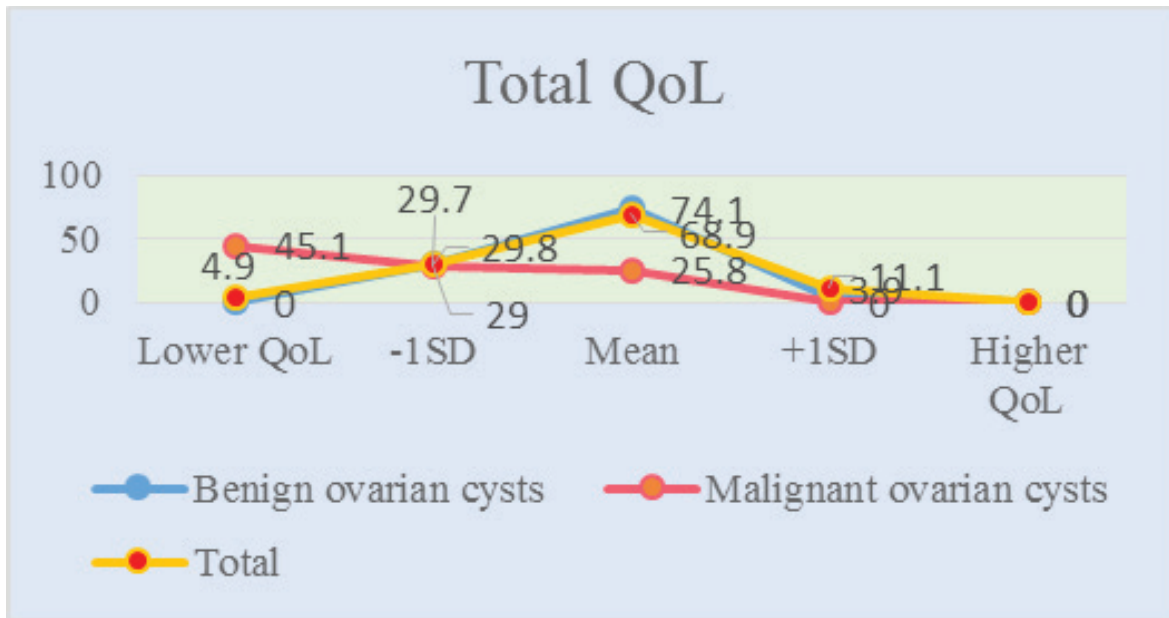
Group QoL		Benign group		cancer group		Total		P
		n	%	n	%	n	%	
Emotional QoL	Lower QoL	0	0,00	7	22.5	7	2.4	<0,05
	Low QoL	76	29.8	19	61.3	95	33.3	
	Mean	134	52.5	5	16.2	139	48.6	
	High QoL	45	17.7	0	0,00	45	15.7	
	Higher QoL	0	0.00	0	0.00	0	0.0	

Emotional quality of life at high level in benign tumors is 0.0%. The average level of emotional quality of life in benign tumor is 52.2% while malignant tumor accounts for 16.2%. The emotional quality of life at low level is 29.8% in benign tumor and 61.3% in malignant tumor. The very low level of emotional quality of life is at 22.5%.



**Figure 1. The Index of sexual quality of life**

The sexual quality of life at very high level in ovarian tumor patients is 0%. The sexual quality of life at very low level in malignant tumor is 29.1% and the whole group is 3.5%. The difference is statistically significant (p <0.05).



**Figure 2. The Index of total quality of life**

The very low level of total quality of life in ovarian tumor group accounts for 4.9%, including 45.1% in malignant group and 0% in benign group ( $p < 0.05$ ). The low level of total quality of life in ovarian tumor group consists of 29.7%, specifically the malignant group is 29% and the benign one makes up 29.8%. The average level of total quality of life in ovarian tumor group comprises 68.9% meanwhile the high total quality of life in the ovarian tumor group is 11.1% consisting of 0% in malignant group and 3.9% in benign one. ( $p < 0.05$ ).

### Discussion

The rate of group aged from 30 to 39 is 32.5% and group aged 20 – 29 comprises 26.6%. In terms of pathology, benign tumor is 12.8% and ovarian cancer is 12.8%. Functional symptoms of benign ovarian tumor consist of abdominal pain which accounts for 74.5%. This was also the most common reason why the patients came to the hospital, may be hypogastric dull pain, intermittent pain, unclear pain, variable intensity of pain. Our result was consistent with other studies. Besides that, asymptomatic group was 16.8%. Our research results also show. Mixed echo malignant tumors comprise 54.8%, benign tumors are hypoechoic, and poor echo accounts for 39.6%. Unilateral ovarian tumors make up 80.6% in the cancer group and 90.6% in the benign group. An ovarian tumor tend to malignant when it progress

rapidly with solid density, limited mobility and bilateral lesions<sup>(10)</sup>. However, it depends on the tumor size, clinical skills and experiences of the gynecologist to detect the above characteristics. According to Vu Ho et al. (2010), 61.54% had gradually abdominal enlargement, palpable tumors were 52.14%, common in malignancies<sup>(3,11)</sup>

A good quality of life prolongs longevity and positively impacts social development. They can complete daily works well, love the job and do not feel bored with the profession. The low level of occupational quality of life at patients having ovarian tumors accounts for 37.8% and the average one is 50.3%. The average level of occupational quality of life in benign tumor group and malignant tumor one comprises 51.8% and 38.7%, respectively; and the low one in benign tumor group is 36.8% and malignant tumor group is 45.2%. The difference between the occupational quality of life in two groups is statistically significant ( $p < 0.05$ ). The high level of health quality of life in benign cancer accounts for 29.4% while two groups share a percentage of 26.2%. The health quality of life at average level in benign tumors is 61.9% contrast to 28.6% of malignant tumors. The low level of health quality of life in benign tumor and malignant tumor is 9.4% and 70.9% respectively. The very low level of health quality of life in benign tumor is 14.3%.



This study used a documented Utian questionnaire: Emotional quality of life at high level in benign tumors is 0.0%. The average level of emotional quality of life in benign tumor is 52.2% while malignant tumor accounts for 16.2%. The emotional quality of life at low level is 29.8% in benign tumor and 61.3% in malignant tumor. The very low level of emotional quality of life is at 22.5%. There was a study that found a clear relation between patients with ovarian tumors and depression or anxiety. Quality of life is generally not accurately determined by measurement. Health in relation to quality of life identified with the indirect tools for measuring quality of life is important. The sexual quality of life at very high level in ovarian tumor patients is 0%. The sexual quality of life at very low level in malignant tumor is 29.1% and the whole group is 3.5% The difference is statistically significant ( $p < 0.05$ ). The study used questionnaires and was provided with more information about quality of life than laboratory tests, to obtain cost-effective results, but valuable in analysis, and to obtain proposed plan of early interventions in women's health care.<sup>(10,11)</sup>

The very low level of total quality of life in ovarian tumor group accounts for 4.9%, including 45.1% in malignant group and 0% in benign group ( $p < 0.05$ ). The low level of total quality of life in ovarian tumor group consists of 29.7%, specifically the malignant group is 29% and the benign one makes up 29.8%. The average level of total quality of life in ovarian tumor group comprises 68.9% meanwhile the high total quality of life in the ovarian tumor group is 11.1% consisting of 0% in malignant group and 3.9% in benign one. ( $p < 0.05$ ). Although there was many limitations due to the study focusing only on the patient group in one central province of Vietnam, the study has released data that determine the quality of life of ovarian tumor patients mainly by degree medium and low, no very high degree.

### Conclusion

The rate of group aged from 30 to 39 is 32.5% and group aged 20 – 29 comprises 26.6%. In terms of pathology, benign tumor is 12.8% and ovarian cancer is 12.8%. Functional symptoms of benign ovarian tumor consist of abdominal pain which accounts for 74.5%, asymptomatic is 16.8%. Symptoms of ovarian cancer include palpation of the tumor (67.7%), abdominal pain (83.9%), and abdominal bloating (38.7%). Tumors with

little or no mobility account for 51.6%, asymptomatic accounts for 25.8% ( $p < 0.05$ ). Mixed echo malignant tumors comprise 54.8%, benign tumors are hypoechoic, and poor echo accounts for 39.6%. Unilateral ovarian tumors make up 80.6% in the cancer group and 90.6% in the benign group.

The low level of occupational quality of life at patients having ovarian tumors accounts for 37.8% and the average one is 50.3%. The average level of occupational quality of life in benign tumor group and malignant tumor one comprises 51.8% and 38.7%, respectively; and the low one in benign tumor group is 36.8% and malignant tumor group is 45.2%. The difference between the occupational quality of life in two groups is statistically significant ( $p < 0.05$ ).

The high level of health quality of life in benign group for 29.4% while two groups share a percentage of 26.2. The health quality of life at average level in benign tumors is 61.9% contrast to 28.6% of malignant tumors. The low level of health quality of life in benign tumor and malignant tumor is 9.4% and 70.9% respectively. The very low level of health quality of life in benign tumor is 14.3%. Emotional quality of life at high level in benign tumors is 0.0%. The average level of emotional quality of life in benign tumor 52.2% while malignant tumor accounts for 16.2%. The emotional quality of life at low level is 29.8% in benign tumor and 61.3% in malignant tumor. The very low level of emotional quality of life is at 22.5%.

The sexual quality of life at very high level in ovarian tumor patients is 0%. The sexual quality of life at very low level in malignant tumor is 29.1% and the whole group is 3.5% The difference is statistically significant ( $p < 0.05$ ). The very low level of total quality of life in ovarian tumor group accounts for 4.9%, including 45.1% in malignant group and 0% in benign group ( $p < 0.05$ ). The low level of total quality of life in ovarian tumor group consists of 29.7%, specifically the malignant group is 29% and the benign one makes up 29.8%. The average level of total quality of life in ovarian tumor group comprises 68.9% meanwhile the high total quality of life in the ovarian tumor group is 11.1% consisting of 0% in malignant group and 3.9% in benign one. ( $p < 0.05$ ).

The quality of life in terms of health, emotion and sex at very low level and low level in malignant group have a higher rate than the benign one.

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