

## Health-Related Quality of Life Among Women with Ovarian Cysts

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**Citation:** Gonid, A. S., Mohamed, S. L., Elmonem, M. M. A., Lofty, M. (2023). Health-Related Quality of Life Among Women with Ovarian Cysts. *J Nur Healthcare*, 8(3), 242-248.**Abstract****Background:** Ovarian cysts are a common finding in women of the reproductive age group.**Aim:** To evaluate the relationship between ovarian cysts and quality of life among women of reproductive age.**Patients and Methods:** A descriptive study was conducted at gynecological outpatient clinic and endoscopic unit in Zagazig university hospital.**Sampling:** A convenient sample was selected from 200 women with ovarian cysts. Data collection tools: 1) Socio-demographic Questionnaire. Quality of life was assessed with the 36-Item Short Form Health Survey; 2) Physical and biological assessment; 3) Numeric pain scales and 4) Quality of life in women with ovarian cyst. Results: The results of the study revealed that the majority of women in the age group 17-50 years. Most of them complained of abdominal heaviness and fullness and loss of appetite, respectively. Moreover, most of them had moderate and severe pelvic pain, respectively. Also, more than half of them had severe pain that interfered with their normal physical activities. Moreover, most of women had average level regarding psychological and physical health.**Conclusion:** Health Related Quality of Life was significantly decreased in women with ovarian cyst. Thus, women with suspected or diagnosed ovarian cysts should seek immediate medical help because early diagnosis and treatment are beneficial in improving their quality of life.**Keywords:** Health Related Quality of Life, Ovarian Cyst, Awareness.**1. Introduction**

An ovarian cyst is a larger fluid-filled sac or follicle or corpus luteum (more than 3cm in diameter) persists and continue growing on or in an ovary. A cyst can vary in size from a few centimeters to the size of a large melon. Ovarian cysts may be thin walled and only contain fluid (known as a simple cyst) or they may be more complex, containing thick fluid, blood or solid [1].

Ovarian cysts, incidence of 20% of women developing at least one pelvic mass in their lifetime [2]. Age incidence in patients with ovarian cysts is commonly seen in age group between 30 and 39 years the prevalence for simple ovarian cyst is 48 percent out of 100 patients, unilocular simple ovarian cysts are functional ovarian cysts and resolve spontaneously with therapy by 3 to 6 months oral contraceptive [3]. Cystic lesions of the ovary are a common gynecological finding. They are very common and mostly benign during adolescence. Many ovarian cysts are asymptomatic and found incidentally on routine pelvic examination [4].

The exact cause of the ovarian cysts is not known, but among the reasons that help in the occurrence of ovarian cysts are genetic factors, increase the androgens, body resistance to insulin, the presence of infections and obesity [5]. In the normal case, the ovaries produce hormones that control the functions of the body which are estrogen and androgen, and in women with cystic conditions, the androgen hormone is higher than estrogen [6].

Among the complications of ovarian cysts are weight gain, type 2 diabetes, cardiovascular disease high cholesterol, uterine cancer and infertility [7]. Health-related quality of life (HRQoL) was defined the World Health Organization (WHO) as people's perceptions of their status in life [8].

QoL comprises four dimensions: physical and motor skills, mental state, social and economic conditions, and somatic perception (e.g., symptoms, especially pain). Importantly, the concept draws attention to the need to distinguish between an objective state of health (as determined by observed symptoms) and the subjective

experience of the patient (i.e., HRQoL) concerning that state using objective and subjective methods of assessment (3)

Advanced practice nurse can facilitate quality of care and manage treatments effectively to improve quality of life, reduce pain, and prevent further progression of the disease. Practice recommendations include timely diagnosis, pain management, infertility counseling, patient education, and support for quality of life issues (fealy et al., 2018)

### 1.1. Aim of Study

The study aimed to assess health-related quality of life among women with ovarian cysts.

## 2. Patients and Method

**2.1. Study Design:** A descriptive study design was used.

**2.2. Study Setting:** The study was conducted at gynecological outpatient clinic and endoscopic unit in Zagazig university hospital within six months of data collection during the period of 22th march 2022 to 22 the September 2022.

**2.3. Study Sample:** A convenient sample was used for this study. All women (200) who were diagnosed with ovarian cyst at any age group during six months.

## 3. Tools for Data Collection:

**3.1. Tool (1): Structured Interview Questionnaire:** developed by the researcher to collect the following data:

**A: Sociodemographic characteristics:** the first part of the questionnaire which was concerned with personal data of the study subjects as age, residence education level, occupation and marital of status

**B: Physical and Biological Assessment:** it was concerned with any complaint in women with ovarian cyst as: severity of pelvic pain, heaviness and fullness in abdomen, nausea and vomiting, breast pain and tenderness, dysmenorrhea, faintness, burning in urination appetite decrease and backache.

## 9. Results

**4. TOOL (II): Numeric pain rate scales {pelvic pain} :(McCaffery & Beebe,1989):** Pain scoring system: 0= No pain 1-3= Mild pain 4-6=Moderate 7-10= Severe

**5. TOOL (III): Quality of life in women with ovarian cyst:** it was adopted of Salvia et al., (2016) to assess the quality of life for women with ovarian cyst. The questionnaire consisted of 14 items:

**a. Psychological Health:** The patients would answer with never, Sometimes or Always on 4questions about: Reaction when diagnosing of ovarian cyst, feeling of frustration with ovarian cyst, feeling sad and worry about disease, difficulty to adapt with ovarian cyst and feeling to isolated

**b. Physical Health:** The patients would answer with never, Sometimes or Always on 5 questions about: The extent of your ability to carry out daily activities during the normal day, inability to travel, feeling sickness and fatigue, effect on sexual desire and effect of pharmacotherapy on health condition

**c. The social Health:** The patients would answer with never, Sometimes or Always on 3 questions about: Effect of disease on family relationship, effects of disease on their relationship with others and establish a new relationship and need support from family and friends

## 6. Quality of Life Scoring System:

It scored as follows: if the response was never (0), if it was sometimes (1) and if it was always (2).

**7. Administrative Design:** An official permission letter was obtained from the Ethical Committee of faculty of nursing at Zagazig University to the administrator of gynecological outpatient clinic and endoscopic unit in Zagazig university hospital.

The aim of the study was explained to them to obtain their cooperation.

## 8. Statistical Analysis:

Data were checked, entered and analyzed using SPSS version 23 for data processing. Data were expressed as number and percentage for qualitative variables and mean + standard deviation (SD) for quantitative one.

| Variables              | No          | %    |
|------------------------|-------------|------|
| <b>Age (years)</b>     |             |      |
| ≤20                    | 22          | 11.0 |
| 21 – 30                | 109         | 54.5 |
| >30                    | 69          | 34.5 |
| Range                  | 17-50       |      |
| Mean±S.D.              | 28.94±6.637 |      |
| <b>Residence</b>       |             |      |
| Urban                  | 37          | 18.5 |
| Rural                  | 163         | 81.5 |
| <b>Education level</b> |             |      |
| Illiterate             | 28          | 14.0 |

|                               |             |      |
|-------------------------------|-------------|------|
| Read and write                | 30          | 15.0 |
| Primary or preparatory school | 4           | 2.0  |
| Secondary school              | 99          | 49.5 |
| University                    | 39          | 19.5 |
| <b>Occupation</b>             |             |      |
| Housewives                    | 157         | 78.5 |
| Working                       | 40          | 20.0 |
| Student                       | 3           | 1.5  |
| <b>Marital status</b>         |             |      |
| Single                        | 38          | 19.0 |
| Married                       | 137         | 68.5 |
| Divorced                      | 25          | 12.5 |
| <b>Duration of married</b>    |             |      |
| Range                         | 1-27        |      |
| Mean±S.D.                     | 10.31±6.182 |      |

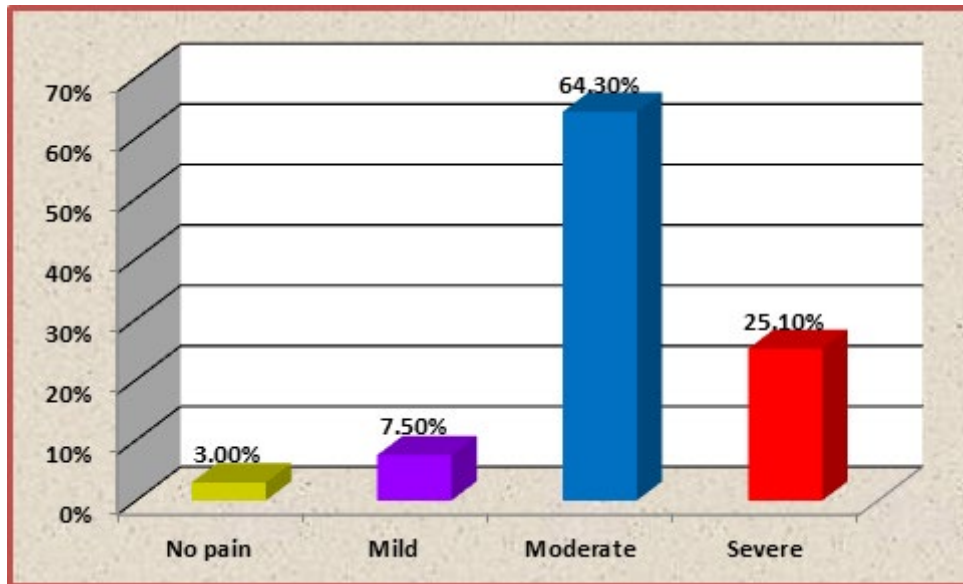
**Table [1]: Distribution of studied women according to their demographic data (n = 200)**

Table (1) shows 54% of women in the age group 17-50 years, with an average age of  $28.94 \pm 6.637$  years. Moreover, 81.5% and 49.5% were rural and had a secondary education. Also, 78.5% of them are housewives.

| <b>Manifestations</b>               | <b>No</b> | <b>%</b> |
|-------------------------------------|-----------|----------|
| Heaviness & Fullness in the abdomen | 82        | 41.0     |
| Nausea and vomiting                 | 44        | 22.0     |
| Breast pain and tenderness          | 27        | 13.5     |
| Dysmenorrhea                        | 31        | 15.5     |
| Faintness                           | 38        | 19.0     |
| Burning in urination                | 74        | 37.0     |
| Headache                            | 24        | 12.0     |
| Loss of Appetite                    | 104       | 52.0     |
| Backache                            | 22        | 11.0     |

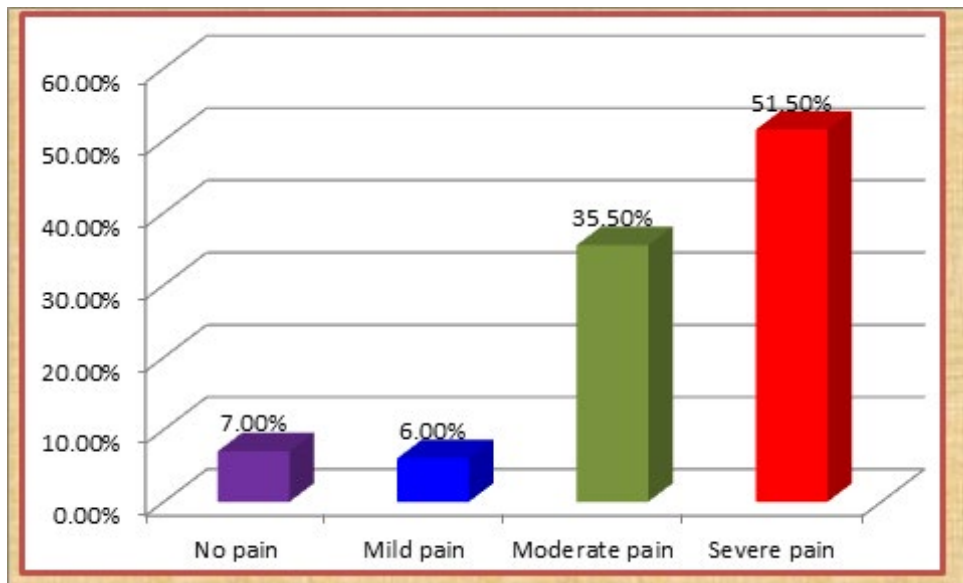
**Table [2]: Distribution of the studied women according to their manifestation (n=200).**

Table 2 shows that 41% and 52.0% of the women complained of abdominal heaviness and fullness and loss of appetite, respectively. Additionally, women complained of burning with urination (37%), nausea and vomiting (22%), dysmenorrhea (15.5%), breast pain and tenderness (13.5%), and back pain (11%), respectively.



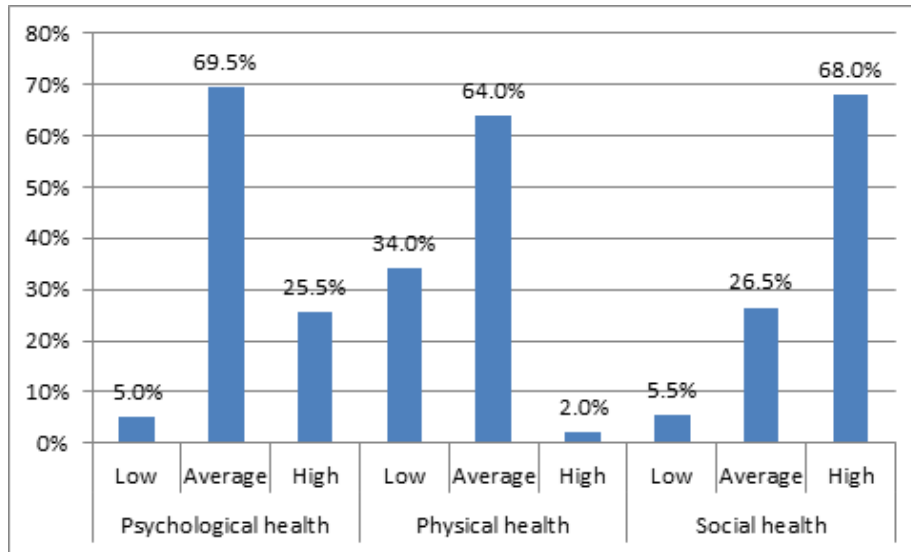
**Figure 1:** Distribution of the studied women according to their level of pelvic pain (n=200).

Figure 1 shows that 64.3% and 25.1% of the women had moderate and severe pelvic pain, respectively. While 7.5% and 3.0% of them had mild and no pelvic pain.



**Figure 2:** Distribution of the studied women according to their intensity of pain that interferes with normal physical activities (n=200).

Figure 2 shows that more than half of the women (51.5%) had severe pain that interfered with their normal physical activities. While a third of them (35.5%) were experienced moderate pain that interfered with their normal physical activities.



**Figure 3:** Distribution of the studied women according to the level of quality of life domains (n=200).

Figure (3) illustrates that 69.5% & 64.0% of women had average level regarding psychological and physical health. While, 68.0% of them had good level regarding social health.

| QoL domains          |         | No pain |       | Mild Pain |       | Moderate pain |       | Severe pain |        | X <sup>2</sup> | P value |
|----------------------|---------|---------|-------|-----------|-------|---------------|-------|-------------|--------|----------------|---------|
|                      |         | No      | %     | No        | %     | No            | %     | No          | %      |                |         |
| Psychological health | Low     | 4       | 30.8% | 0         | 0.0%  | 0             | 0.0%  | 0           | 0.0%   | 82.027         | .000*   |
|                      | Average | 5       | 38.5% | 7         | 35.0% | 116           | 80.6% | 1           | 25.0%  |                |         |
|                      | High    | 4       | 30.8% | 13        | 65.0% | 28            | 19.4% | 3           | 75.0%  |                |         |
| Physical health      | Low     | 10      | 76.9% | 8         | 40.0% | 40            | 27.4% | 0           | 0.0%   | 63.118         | .000*   |
|                      | Average | 3       | 23.1% | 11        | 55.0% | 105           | 71.9% | 2           | 50.0%  |                |         |
|                      | High    | 0       | 0.0%  | 1         | 5.0%  | 1             | 0.7%  | 2           | 50.0%  |                |         |
| Social health        | Low     | 4       | 30.8% | 2         | 10.0% | 1             | 0.7%  | 0           | 0.0%   | 37.786         | .000*   |
|                      | Average | 4       | 30.8% | 5         | 25.0% | 39            | 26.7% | 0           | 0.0%   |                |         |
|                      | High    | 5       | 38.5% | 13        | 65.0% | 106           | 72.6% | 4           | 100.0% |                |         |

**Table [3]:** Distribution of the studied women according to the relationship between pain and level of QoL domains (n=200).

Table (3) shows that there is a significant relationship between moderate pain and average of psychological health domain (P < 0.000). Also, there is a significant relationship between low pain and physical health as well as high level of social health with severe pain.

|             |          | QoL        |     |                 |      |             |      | X <sup>2</sup> | P value  |
|-------------|----------|------------|-----|-----------------|------|-------------|------|----------------|----------|
|             |          | Poor (n=6) |     | Average (n=117) |      | Good (n=77) |      |                |          |
|             |          | No         | %   | No              | %    | No          | %    |                |          |
| Pelvic Pain | No pain  | 0          | 0   | 0               | 0    | 6           | 7.8  | 78.492         | < 0.001* |
|             | Mild     | 0          | 0   | 0               | 0    | 15          | 19.5 |                |          |
|             | Moderate | 0          | 0   | 73              | 62.4 | 56          | 72.7 |                |          |
|             | Severe   | 6          | 100 | 44              | 37.6 | 0           | 0    |                |          |

\* P < 0.05 (significant)

**Table [4]:** Distribution of the studied women according to the relationship between Pelvic Pain and level of QoL (n=200).

Table (3) shows that there is a significant relationship between severe pelvic poor quality of life ( $P < 0.001$ ). Also, there is a significant relationship between moderate pain and good quality of life.

## 10. Discussion

Ovarian cysts can be caused by many reasons. Ovarian cysts arising due to endocrine disorders are mostly benign and usually do not require any surgical intervention unless they present with acute features like torsion, hemorrhage, or rupture [12]. Malignant transformation of an ovarian cyst is very rare with [13]. Ovarian cysts can occur at any age but are more common in reproductive years and increase in menarche females due to endogenous hormone production [14].

In the current study, age ranged from 17-50 years with a mean value of  $28.94 \pm 6.637$  years. This result was matched with **Zahra et al.**, study which revealed that the age of ovarian cysts patients ranged between 16 to 58 years with a mean value of  $33.44 \pm 9.300$  years [13]. In **Almas et al.**, study, the age ranged from 10 to 40 years with the majority of the patients ranged from 21 to 30 years [15]. Mean age in **Lee et al.**, study was  $26.2 \pm 5.9$  [16]. Simple cyst detection slightly more common for women ages 55–59 (16%) than for women in older age groups (13%) in Greenlee et al., study [17].

Regarding education level in the present study, higher number of the patients 99(49.5%) finished secondary school. In agreement to our result, Greenlee et al., study stated that higher number among ovarian cyst patients completed secondary school [17]. In contrary to our results, majority of the patients were illiterate 9 (64.2%) in **Almas et al.**, study [15].

Regarding occupation in the current study, 157(78.5%) were housewives, 40(20.0%) were working, and 3(1.5%) were student. Similarly, **Trudel-Fitzgerald et al.**, did not observe clear associations between work characteristics and ovarian cancer incidence or mortality [18].

However, **Park et al.**, reported a case of ovarian cancer had been exposed to asbestos significantly, so they determined that ovarian cancer in the patient is highly correlated with the occupational exposure of asbestos and environmental exposure is a possible cause as well [19].

Regarding marital status in the present study (19.0%) were single, (68.5%) were married and (12.5%) were divorced. Duration of married was ranged from 1- 27 years with a mean value of  $10.31 \pm 6.182$  years.

Our result agreed with **Abduljabbar et al.**, study which showed that 165 were married (67.4%) out of 244 patients diagnosed with ovarian cysts. Similar results reported in **Almas et al.**, study where 64.2% were married [20, 15].

**Trudel-Fitzgerald et al.**, results suggested higher ovarian cancer

risk among socially isolated and widowed women, particularly when such psychosocial stressors were experienced a decade before diagnosis or were sustained over time [18]. In agreement to our study, dysmenorrhea was in 4 (4.9%) in **Zahra et al** [13]. Nausea and vomiting were observed in many patients and also due to this the pelvic pain became worst in ovarian cysts in **Almas et al.**, [15]. The signs and symptoms of ovarian cysts may include pelvic pain, dysmenorrhea, and dyspareunia. Other symptoms are nausea, vomiting, or breast tenderness, fullness and heaviness in the abdomen and frequency and difficulty emptying of the bladder [23]. When ovarian cysts are large, they may cause abdominal discomfort. If pressing on the bladder it may also cause frequency of urination [24].

The present study showed that majority had moderate physical pain during the past four weeks which had slight discrepancy with normal physical activities. Likewise, **Zahra et al** study reported that the most common presenting complaint was lower abdominal pain in 51 (63%) women. Similar results reported in **Abduljabbar et al.**, study where the most common clinical presentation was abdominal pain in 142 patients (58.2%) cysts [13, 20].

**11. Conclusion:** Health Related Quality of Life was significantly decreased in women with ovarian cyst. Thus, women with suspected or diagnosed ovarian cysts should seek immediate medical help because early diagnosis and treatment are beneficial in improving their quality of life.

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