

Aim of the study: Women health is one of the key issues in developing countries including Pakistan. To improve the women's quality of life, awareness about health is necessary. The objective of this study is to evaluate the patient's perception regarding ovarian cyst and the awareness of the patients about the symptoms and health management in ovarian cyst.

Material and methods: A qualitative approach was used to conduct this study. An interview guide was prepared for the data collection. The interview guide had 29 questions which were asked from the patients. The duration of each interview was about 15–20 minutes and conducted in native language (Urdu) which was then translated to English language for the purpose of documentation. Snowball technique was adopted and the sample size was estimated from the point of saturation.

Results: All the interviews were conducted in the Gynecology ward of Hayatabad Medical Complex (HMC), Peshawar, Pakistan. Results were thematically analyzed. Thematic content analysis yielded 5 major themes: 1) Irregular menstrual cycle, 2) nausea and vomiting, 3) difficulty in emptying urinary bladder completely, 4) emergency due to severe pain, and 5) Physical works.

Conclusions: There is a need of time that patients should be counseled at the time of discharge of the patient from the hospital. This is the right of the patient that they know about their disease and benefits of the successful treatment outcomes. Compliance can only be achieved through the counseling of the patients, resulting good quality of life and less economic burden over the patients.

Key words: ovarian cysts, menstrual cycle, awareness, perception.

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Perception and awareness of patients regarding ovarian cysts in Peshawar, Pakistan: a qualitative approach

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Introduction

Women health is one of the key factors in reducing inequalities. It can only be achieved by given them social empowerment through education, participation in political representation which will ultimately result in improving the health outcomes [1]. Women health is one of the key issues in developing countries including Pakistan. Population of our country is estimated to be about 180.44 million people, which is an increase of about 2.1% from the last record of the population [2]. It extends from the mountain valley of Himalayas down the Arabian Sea bordering India, China, Afghanistan and Iran. It is strategically located along the ancient trade route between Asia and Europe [3]. The economy of Pakistan during the last five years grew on average at the rate of 2.9 percent per [4]. As far as health system of Pakistan is concerned, Ministry of Health is responsible for all the matters concerning National Planning and coordination in the field of health [5]. Under the Pakistani constitution, federal government is responsible for planning and formulating national health policies and provincial governments for its implementation. More than half of the population focuses towards the private sector for health care, however the government sector has more health facilities from basic health units (BHUs) to tertiary referral centers [6].

Ovaries may contain a number of neoplastic and non-neoplastic lesions. Usually, these lesions are found in women who may or may not have any symptoms. This issue is common in child-bearing age and is also observed after the menopause. Physiologic cysts are most frequent and minimal treatment is required to resolve it. Surgery may be requisite if the patient has painful, large and persistent cysts [8, 9]. Most commonly functional cysts like follicular cysts and corpus luteal cysts are common in premenopausal women. Some cysts are pathologic that include endometriosis, dermoid cyst and polycystic ovaries. Surgical interventions of unnecessary nature can be avoided if proper preoperative diagnosis is made which is a guide to the determination of appropriate treatment plan and aspiration of cyst through ultrasound [10]. Benign cysts are diagnosed commonly in all age groups [11]. Functional ovarian cysts, endometriosis and PCOS are among the factors that contribute to the infertility of the women [12]. On pathological examination, clinically or intraoperative, some non-cancerous lesions may be confused with cancerous [13]. Histological findings help in the differentiation between different cystic abnormalities with the non-cancerous components. It ultimately aids in the selection of proper treatment [14]. Intrinsic imaging trend of ultrasonography and high accuracy of MRI has been used to identify ovarian cysts [15]. To determine the nature and to differentiate between suspicious malignant

cysts from non-malignant, the best imaging technique of endovaginal ultrasonography with Doppler enhancement is used [16]. Same prevalence of ovarian cysts has been shown in married and unmarried females. The prevalence of ovarian cyst in USA is about 30% in women having regular menstrual cycle, 6% in post-menopausal women and in women having irregular cycle has prevalence of 50%. About 6.6% and 7% women have ovarian cysts in their child bearing age and presents gynecological problems [17]. Gynecological malignancies and ovarian cancer (which is the 5th most usual cause of cancer associated death) are the preceding reasons of death in western world [18–20]. Most ovarian cancers when discovered first cannot be removed surgically. Due to this problem, the 5 year survival is only about 30–40% [14].

At present, there is no clear long-term vision for human resource in Pakistan; health information system is fragmented. There is no organized system of disease surveillance and there is limited information for decision making due to lack of research system in the country [7]. To constitute future policies regarding women health, current paper is focused on the perception and awareness of Pakistani women regarding ovarian cysts.

Material and methods

Qualitative data was collected from the gynecology ward of Hayatabad Medical Complex (HMC), Peshawar. This hospital is the latest and helpful health care organization. People from different regions of Khyber Pakhtunkhwa, FATA and adjacent regions of Afghanistan come to HMC where they are provided with acute hospital and

specialist services. Certain inclusion and exclusion characteristics were defined for the patients in this study. The patients admitted to Gynecology ward with a final diagnosis of ovarian cyst, any age group and both single and married patients were included while patients unwilling to participate, having differential diagnosis of ovarian cyst, language barrier and pregnant females having ovarian cyst were excluded from this study. Prior to the start of study, an ethical approval was granted by the ethical committee of university of Peshawar, Pakistan. Before the commencement of the interviews, we strictly adhered to the written consent of the participants and were assured that their personal information would be kept confidential. An interview guide was prepared for the data collection. The interview guide had 29 questions which were asked from the patients. The duration of each interview was about 15–20 minutes and conducted in native language (Urdu) which was then translated to English language for the purpose of documentation. Snowball technique was adopted and the sample size was estimated from the point of saturation.

Results

About 14 patients were interviewed. Out of which, 5 patients were single and 9 were married. About 9 patients had no education at all, while one patient each had primary, secondary and higher secondary school education, respectively, 2 were having graduate education. 5 patients belonged to the age group of 10–20 years, 7 to 21–30 years and 2 to 31–40 years. The most common ovarian cyst was follicular cyst.

All the interviews were conducted in the Gynecology ward of HMC. Thematic content analysis yielded 5 major themes: 1) Irregular menstrual cycle, 2) nausea and vomiting, 3) difficulty in emptying urinary bladder completely, 4) emergency due to severe pain, and 5) physical works.

Themes

Theme 1: Irregular menstrual cycle

Most of the patients when asked about their menstrual cycle, their answer was consistent that they had irregular cycle because of the ovarian cyst.

“Yes, my menstrual cycle is irregular, like they remain for 3 days or less and there is only spotting” (Pt. 2)

“Yes my menstrual cycle is irregular, the duration is also very short and the bleeding is heavy” (Pt. 7)

“Yes they are irregular, usually comes after 2 or 3 months and the flow is very less” (Pt. 13)

Theme 2: Nausea and vomiting

Nausea and vomiting was observed in many patients and also due to this the pelvic pain became worst in ovarian cysts.

“Yes nausea and vomiting is very frequent, also I can't eat anything because I have no appetite” (Pt. 2)

“I feel severe nausea and heavy abdomen due to which I can't eat anything, and even, if I try to eat, I used to vomit” (Pt. 9)

Table 1. Socio-demographics of the patients (n = 14)

Characteristics	Frequency (n)	Percentage
Total population of study	14	100.0
Age		
10–20 years	5	35.7
21–30 years	7	50.0
31–40 years	2	14.2
Level of education		
Illiterate	9	64.2
Primary	1	15.9
Secondary	1	7.14
higher secondary	1	7.14
Graduate	2	14.2
Marital status		
Single	5	35.7
Married	9	64.2
Types of ovarian cyst		
Follicular Cyst	8	57.1
Hemorrhagic Cyst	1	7.14
Chocolate Cyst	3	21.4
Dermoid Cyst	1	7.14
Ca-Ovary	1	7.14

"Oh, whenever I have a pelvic pain there is severe nausea and vomiting, due to which the pain gets worst" (Pt. 10)

Theme 3: Difficulty in emptying urinary bladder completely

As the size of the cyst increases the pressure over the urinary bladder increases due to which there is an urge to urinate but there is difficulty in emptying bladder completely.

"No, I didn't feel pressure on my rectum or bladder, and never did I feel to urinate frequently but there was difficulty in emptying bladder completely, as there was an urge to urinate more" (Pt. 1)

"Yes I urinate frequently and there is difficulty in emptying bladder completely, I also feel burning while I am urinating" (Pt. 7)

"Hmm yes I feel pressure on my bladder that's why I can't urinate completely" (Pt. 10)

Theme 4: Emergency due to severe pain

There is dominant pelvic pain in ovarian cyst, but usually this pain is so severe that the patients constantly feel nausea and due to the feeling of fullness they often start vomiting.

"Oh! Yes, I did go to seek medical attention several times. I used to faint from sudden, severe pelvic pain, for which I was taken to the emergency department several times, but the pain was treated as usual dysmenorrhea and no proper diagnosis was made" (Pt. 1)

"Yes I went for immediate medical attention several times. During first days of periods there was severe unbearable pelvic pain, so, I was taken to the emergency department of local health unit" (Pt. 2)

"Yes I went for immediate medical attention when I had a severe pain, usually to the emergency department where drips were prescribed with Injunctables" (Pt. 3)

Theme 5: Physical work

While the patient is having pelvic pain, moving around home becomes difficult. They feel difficulty in walking and doing any physical work.

"Hmmm, no not anything specifically but with physical activity, the pain gets worst" (Pt. 3)

"Yes my symptoms get worst due to heavy work at home" (Pt. 5)

"Yes with household work the symptoms get worst" (Pt. 12)

Discussion

The current study aimed to evaluate the perception and awareness of patients regarding ovarian cyst, by adopting qualitative methodology. At present, qualitative study is the leading study in the world. Majority of the patients were illiterate (61.9%) which is the possible barrier in getting awareness regarding the ovarian cyst as compared to the other study of US where most of the women had acquired education of more than 12 years [21]. The analysis of

interviews from 14 patients had shown that the age group of 21–30 years is the most common age group for the occurrence of ovarian cyst. The most common functional/physiologic cyst is the follicular cyst and the most common pathologic cyst is the chocolate cyst. This finding is consistent with another study [22]. Menstrual cycle irregularities were the most common among the patients of ovarian cyst but the patients were unaware of the cause, irregularities may be observed with the duration of menstrual cycle and the flow patterns of menstruation. The finding is consistent with the study where majority of the patients were illiterate (61.9%) which is the possible barrier in getting awareness regarding the ovarian cyst as compared to the other study of US where most of the women had acquired education of more than 12 years of high school [23]. Education among females is most important especially when the matter is about the awareness of their health and treatment outcomes. About 2/3rd of the patients were married and 1/3rd were single patients which shows the prevalence of ovarian cyst is more in the married women than the single as compared to the study where it was shown that the chances of ovarian cyst are same in that of single and married women [24]. Nausea and vomiting is also commonly observed and it was noted that the reasons behind the nausea and vomiting was the severe dysmenorrhea which triggered vomiting [8]. As the mass and volume of the ovarian cyst increases it puts pressure on the urinary bladder which makes the patient feel an urge to urinate but due to the pressure the patient feel difficulty in emptying bladder completely. Some patients also feel burning in urination [25]. Most of the females mistakenly consider the pain of ovarian cyst as simple dysmenorrhea [17] but actually the pain of ovarian cyst is so severe that the females may faint and becomes unconscious due to which they are taken for treatment to the emergency department of the hospital. Patients of ovarian cyst experience pain of different intensities i.e. mild, moderate, severe and very severe. This finding is consistent with a previous study [25], according to which the patients feels difficulty in walking around home and doing their daily works; their movement is restricted due to physical work. As the education level of the patients was low, that's why most of them got awareness about the ovarian cyst from the physicians and still there were patients who visited physician but still they did not have knowledge about the cyst. Physicians/gynecologists are at the key position to play their role in the awareness of the patients as they are the primary source of information. So, overall the patients seem to be aware but actually they do not know more than that they had a "water filled" balloon or tumor and the same was their perception about the ovarian cyst.

In conclusion, it is concluded that patients are aware of their disease but the only source of awareness is physician who told them regarding their condition. But this information is not enough as it was observed that patients, despite of the previous treatment, were again admitted. Ovarian cyst patients, even after surgery, are on hormonal medications which need compliance of the patients. Lack of education, poor understanding of the patients regarding their disease and non-compliance with medication are

common factors contributing to the recurrence of disease. It is recommended that awareness programs should be conducted regarding the disease so that quality of life of the patient can be improved. At the time of discharge from the hospital patients should be counseled about their disease and benefits of the successful treatment outcomes. Counseling of the patients may result in compliance with the therapy, good quality of life and less economic burden on the patients. Comparative study should be conducted between the in-patients and out-patients, which can give better insight towards the knowledge of the patients regarding ovarian cysts.

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