

Assessment of Maternity Nurses' Knowledge, Practices and Attitude regarding Uterine Fibroid

Hanan ELshahat Abass Tahoon, Amel Ahmed Hassan Omran, Elham Abozaid Ramadan and Mai Mahmoud Hassan

(1) B.Sc. Nursing, (2013), Faculty of Nursin Banha University, (2) Professor of Obstetrics and Gynecological Nursing, Faculty of Nursing, Benha University, (3) Assistant Professor of Obstetrics and Gynecological Nursing, Faculty of Nursing, Benha University and (4) Lecturer of Obstetrics and Gynecological Nursing, Faculty of Nursing, Benha University.

Abstract

Background: Uterine fibroid affect woman in reproductive age, increased hazard of premature delivery and blood loss at delivery. **Aim of the study:** To assess maternity nurses' knowledge, instructions and attitudes regarding uterine fibroid **Study design:** A descriptive design was utilized. **Setting:** The study was conducted at Obstetrics and Gynecological departments. Operating room and Obstetric outpatient in Benha University hospital. **Sample:** A convenient sample included 50 maternity nurses. **Tools of data collection:** Three tools were used for data collection, **tool(I):** Self-administered questionnaire to assess knowledge regarding uterine fibroid. **Tool (II):** Assessment sheet to assess nurses' instructions regarding uterine fibroid and **tool (III):** Modified likert scale to assess attitude regarding uterine fibroid. **Results:** More than half of the studied nurses had poor knowledge and negative attitude and also about three fifth of the studied nurses had unsatisfactory instructions regarding uterine fibroid. **Conclusion:** Less than half of studied nurses had good, average knowledge and positive attitude and about also two fifth of the studied nurses had satisfactory instructions regarding uterine fibroid. **Recommendation:** Developing a periodical training program for nurses working at Obstetrics and Gynecological departments to enhance and updated with the necessary knowledge, practices about the recent trends of uterine fibroid.

Keywords: Attitude, Knowledge, Maternity nurses, instructions, uterine fibroid.

Introduction

Uterine fibroid is the most common pelvic tumors among women of reproductive age, affecting more than seventy percent of women worldwide. Uterine fibroids are heterogeneous in composition, size and number among women. Uterine fibroid is considered a source of gynecologic and reproductive dysfunction, ranging from menorrhagia and pelvic pain to infertility and preterm labor (Mlodawska et al., 2022).

There are many types of uterine fibroids, which can be classified according to size, location and shape. Fibroids may be found outside the uterus in outer layer (subserosal)

or within its wall in muscle layer (intramural) and may be present in inner layer of the uterine (sub mucosal) (Hyvärinen et al., 2022).

Yang et al., (2022) who studies "Comprehensive Review of Uterine Fibroids: Developmental Origin, Pathogenesis, and Treatment" showed that association between parity and uterine fibroids, which suggest a protective effect, as nulliparous women are more commonly affected by uterine fibroids than multiparous women. Each subsequent child may lower the risk of this pathology, as steroid hormone exposure during pregnancy and dramatic remodeling of the uterine tissues

after each pregnancy may be attributable to a decrease in uterine fibroid formation.

The major cause of uterine fibroid is largely unknown, genetic determination in addition to hormonal factors estrogen, growth hormone and epidermal growth factor play important role in growth. Uterine fibroid is enlarging during pregnancy and frequently regress after menopause (**Elguero et al., 2022**).

Symptoms of uterine fibroids may have affected by size, number, and location of tumor, these symptoms are heavy or prolonged menstrual bleeding, Bulk symptoms (abdominal protrusion, bowel or bladder dysfunction, early satiety), Reproductive dysfunction (infertility or recurrent pregnancy loss) with or without painful menses (**Donnez & Dolmans., 2022**).

Many medications can be used for uterine fibroid depending on several factors, such as woman desire to become pregnant in the future, age of woman, and the severity of the fibroids through drug therapy. The fibroids regrow rapidly once medications are stopped. In this case myomectomy become the better option and the woman can conceive again after operation (**Datir and Bhake., 2022**).

Nurses should provide discharge instructions which are high-quality nursing intervention after laparoscopic myomectomy helps to reduce the negative emotions of woman and actively cooperate with follow-up treatment (**Abdul-Kareem et al., 2022**).

Comprehensive rehabilitation nursing is starting from basic nursing, psychological counseling, health education, and other aspects to help woman recover better and return to normal work and life soon. Benefit from comprehensive rehabilitation nursing can reduce the body stress state of patients with uterine fibroids after operation, improve patient satisfaction, reduce bad emotions, and promote rehabilitation (**Liu et al., 2022**).

Significance of the study

Uterine fibroids have a considerable impact on women's quality of life as well as productivity. World Health Organization (WHO) reported that, fibroids affect between 20-25% of women, and close to 235 million women who represent 6.6% of global women population are estimated to have been affected worldwide (**Elsaied et al 2020**).

Morhason-Bello et al (2022) Who studies "Epidemiology of uterine fibroid in black African women: a systematic scoping review" show that African American women are two to three times more likely to develop fibroids than white women. Women with a BMI (Body Mass Index) above the "normal" range" are more likely to develop fibroids, also women with early menarche (before 14) are at a higher risk of developing fibroid.

United States has shown that fibroids are detected by ultrasound in more than 80% of women of African ancestry and about 70% of white women by the age of 50(**Berman et al., 2022**).

In Egypt, the prevalence of uterine fibroids ranged from 9.8% to 17.8% in the age group of 40-49 year and about 25% of them underwent hysterectomy due to uterine fibroids (**Abd El-Hakim et al., 2022**).

There is no previous stud related to nursing care plan for uterine fibroid among maternity nurses in Banha university hospital.

Aim of the study:

The aim of this study was to assess maternity nurses' knowledge, practices, and attitude regarding uterine fibroid.

Research questions:

- What's the level of nurses' knowledge regarding uterine fibroid?
- What's the level of nurses' instructions regarding uterine fibroid?
- What's the level of nurses' attitude regarding uterine fibroid?

Assessment of Maternity Nurses' Knowledge, Practices and Attitude regarding Uterine Fibroid

-Is there correlation between nurses' knowledge, instructions and attitude regarding uterine fibroid?

Subject and methods:

Study design:

A descriptive study design was utilized to fulfill the aim of the current study. A descriptive study design is one in which primary goal is to assess a sample at one specific point in time without trying to make inferences or causal statements (Grosz et al., 2020).

Study Setting:

The study was conducted in obstetrics and Gynecological department, Operation room and Obstetrics and gynecological out patient clinics at Benha University hospital.

Sampling:

Sample type: A convenient sample

Sample size: All maternity nurses who were working in the Obstetrics and Gynecological departments at the time of data collection. The total numbers were (50) maternity nurses.

Tools of data collection:

Three tools were used for data collection:

First tool: Self-administered questionnaire sheet:

It was designed by the researchers after reviewing the related literature. Then written in a simple Arabic language and consists of two parts:

Part (I): General characteristic of the studied nurses: It consisted of 9 item such as (age, Marital status, residence, educational qualification, current job, years of experience, department, attending training courses about uterine fibroid, types of training courses).

Part (II): Maternity nurses' knowledge about uterine fibroid: It was adapted from (Abd El-Hakim et al., 2022) and used to assess the maternity nurses' knowledge about uterine fibroid and consist of 11 questions.

Scoring system of knowledge:

Each item of knowledge questionnaire was take a score (2) for the complete correct answer, (1) for the incomplete correct answer and (0) for I don't know. These scores were converted into percent score.

Total knowledge score was classified into:

- good knowledge ≥ 75
- average knowledge $60 < 75\%$
- poor knowledge $< 60\%$

Second tool: Assessment sheet: to assess nurses' instructions regarding uterine fibroid

This tool was adapted from (Glanick, M., and Myers, 2020) to assess maternity nurses' practices about uterine fibroid, it composed of (38) items include (5) subscales for forming nursing practices as (Assessment of nutrition (2 items), assessment of physical status (3 items), assessment of health responsibility (2 items), assessment of blood pressure (3 items) and manage common health problem (six items).

Instructions Scoring system:

Each item of Assessment sheet regarding application of nurses' instructions regarding uterine fibroid was assigned a score (2) if done and a score (1) if not done. The total score was calculated by the addition of the total score of all items of nursing instructions.

Total nurses' instructions were determined according to the following:

- Satisfactory instructions $\geq 60\%$
- Un Satisfactory instructions $< 60\%$

Third tool: Modified likert scale for nurses' attitude regarding uterine fibroid It was adapted from (Akpenpuun, et al., 2019) to assess nurses' attitudes related to uterine fibroid. It consisted of 16 statements.

Attitude Scoring system:

To obtain the outcome of attitude scale, each statement was scored as following: (2) if the

response was "agree", (1) if it was "sometimes" and (0) if it was "disagree". The total score was expressed as a percentage.

The total score of attitude was classified into:

-Positive attitude: $\geq 60\%$.

-Negative attitude: $< 60\%$.

Tools validity:

Tools of data collection was reviewed by a panel of three experts in Obstetrics Gynecology nursing Faculty of Benha University to test validity, clarity, relevance and applicability and little changes in sentence writing were required to give most appropriate meaning and the questionnaire was modified according to their valuable comments.

Reliability:

The reliability of the tools was done to check its internal consistency through using The Cronbach's alpha test. The internal consistency of knowledge assessment sheet was 0.89, the internal consistency of practice sheet was 0.82 and internal consistency of attitude sheet was 0.87.

Ethical consideration:

Approval to conduct the study was obtained from the Scientific Research Ethical Committee at Faculty of Nursing, Benha University. The aim of the study was explained to each nurse before applying the tools to gain their confidence and trust. The researcher took oral written from nurses to participate in the study. The study had no physical, social or psychological risks. Each nurse was informed about time throughout the study. Maintain confidentiality, self-esteem and dignity of nurses. Freedom to withdraw from participation in the study at any time.

Pilot study:

Pilot study was conducted on 10% of total sample (5 nurses) to test the clarity and applicability of the study tools. It was done to estimate the period required to fill in the

questionnaire, evaluate applicability & clarity of tools and assess feasibility of field work. Questionnaire weren't requiring modifications, so nurses in the pilot study were included in total sample of the study.

Field work:

- Data were collected from the beginning of May, 2022 till the end of October, 2022 covering six months.
- The study was carried out by visiting the Obstetrics and Gynecological departments, operation room and Obstetrics and Gynecological outpatient that affiliated to Benha university hospital three days per week (Sunday, Tuesday, and Thursday) from 9AM to 2PM to collect data from maternity nurses until sample size was completed.
- The researchers starts to develop tools of data collection after reviewing the related past, current, local and international literatures as well as book, articles, internal and magazines.
- At the beginning of interview, the researcher introduced herself, greeted each nurse and explained the aim of the study for obtaining the formal consent. Nurses were assured that information collected would be treated confidentially and it would be used only for purpose of research then the researcher interviewed each nurse and collect the baseline data: -
 - **Firstly**, the researcher distribute tool **self-administered questionnaire** to general characteristics and knowledge regarding uterine fibroid of all available nurses. This phase took
 - **Secondly**, the researchers used tool (II) **Assessment sheet: to assess nurses' instructions regarding uterine fibroid**
 - This phase took about 10-15 minute with each nurse.

Assessment of Maternity Nurses' Knowledge, Practices and Attitude regarding Uterine Fibroid

- **Finally**, the researcher used tool (III) **Modified likert scale** for assessing nurses' attitude regarding uterine fibroid to assess attitude of studied nurses regarding uterine fibroid. This phase took about 10-15 minute with each nurse.
- The average time required for completion of the questionnaire was around (40-45) minutes of study
- The average number of nurses that was observed was (1-2) nurses per day. In a few days, it was difficult to meet the nurses because they were busy.

Statistical analysis:

Data entry and statistical analysis were done using the Statistical Package for Social Science (SPSS version 22.0). Descriptive statistics included frequencies and percentages, means and standard deviations. Inferential statistics as (Chi-square test, Fisher Exact Test) and Pearson correlation coefficient were used. For all of the statistical tests done, $p\text{-value} > 0.05$ indicated no statistical significant difference, $p\text{-value} \leq 0.05$ indicated a statistical significant difference, and $p\text{-value} P \leq 0.001$ indicated a highly statistically significant difference

Limitation of study:

The researcher met some barriers to get responses from the nurses as some nurses couldn't participate in the study at the time of data collection as they were busy and had a lot of work, thus the researcher waits them until finishing their work and this took a lot of time.

Results:

Table (1): Shows that the studied nurses (44.0%) were in age group $30 < 40$ years old with the mean age of 37.97 ± 10.46 years. Most of the studied nurses (92.0%) were married. Regarding residence (68.0%) lived

in urban. Educational qualification (42.0%) was technical nurse. Concerning current job (82.0%) were nurses. Regarding training courses (70.0%) didn't attend training courses.

Table (2): Clarifies that, 58.0%, 54.0% and 50.0% of the studied nurses had complete correct answer regarding types of uterine fibroid, the meaning of uterine fibroid and complications of pregnancy associated with uterine fibroid respectively. Meanwhile, 100.0%, 92.0%, and 88.0% of the studied nurses had in complete correct answer regarding risk factors, methods of treatment and causes of uterine fibroid respectively.

Figure (1): Shows that, more than half (52.0%) of studied nurses had poor knowledge regarding uterine fibroid

Table (3): Shows that, more than one third of studied nurses (40.0%, 38.0% & 42.0%) had satisfactory regarding total nurses' instructions regarding nutrition, total nurses' instructions regarding physical status and total nurses' instructions regarding health responsibility respectively. While, less than half of studied nurses (46.0%, 46.0% & 48.0%) had satisfactory regarding total nurses' instructions regarding blood pressure, total nurses' instructions regarding abdominal and menstrual pain and total nurses' instructions regarding anemia respectively. And more than two thirds of studied nurses (62.0%) had satisfaction regarding total nurses' instructions regarding constipation.

Figure (2): Shows that, less than three fifth (58.0%) of the studied nurses had unsatisfactory instructions regarding uterine fibroid.

Table (4): Clarifies that, only 52.0% of the studied nurses agreed that uterine fibroid is a benign tumor. On the other hand, 80.0%, 78.0%, 70.0%, of the studied nurses reported fibroid affects the woman with insomnia,

stress and fatigue, uterine fibroid sometimes agreed that of the pain of uterine may affect a woman who has a family history and uterine fibroid affects sexual desire of the affected woman, while 18.0% of the studied nurses report disagree that black women the most common affected with uterine fibroids respectively.

Table (5): Illustrates that there was a highly statistically significant positive correlation between total knowledge, total instructions and total attitudes scores regarding uterine fibroid.

Table (1): General characteristics of studied nurses (n=50)

general characteristics	No	%
Age (years)		
20 < 30	6	12.0
30 < 40	22	44.0
40 < 50	13	26.0
≥ 50	9	18.0
Mean ±SD	37.97±10.46	
Marital Status		
Single	1	2.0
Married	46	92.0
Divorced	1	2.0
Widow	2	4.0
Residence		
Rural	16	32
Urban	34	68
Educational qualification		
Diploma nurse.	18	36.0
Technical nurse.	21	42.0
Bachelor nurse.	9	18.0
Post graduate studies	2	4.0
Current job?		
Nurse	41	82.0
Supervisor	7	14.0
Head nurse	2	4.0
Attending training courses about uterine fibroid		
yes	15	30.0
No	35	70.0
Types of training courses (n=15)		
Workshop	5	33.3
Scientific conference	2	13.3
Training course	8	53.4

Assessment of Maternity Nurses' Knowledge, Practices and Attitude regarding Uterine Fibroid

Table (2): Distribution of studied nurses' knowledge regarding uterine fibroid. (n=50)

Knowledge Items	Complete correct answer		Incomplete correct answer		I don't know	
	No	%	No	%	No	%
The meaning of uterine fibroid	27	54.0	23	46.0	0	0.0
Causes of uterine fibroid	6	12.0	44	88.0	0	0.0
Risk factor of uterine fibroid	0	0.0	50	100.0	0	0.0
Types of uterine fibroid	29	58.0	21	42.0	0	0.0
Symptoms of uterine fibroid	15	30.0	35	70.0	0	0.0
Methods of diagnosis of uterine fibroid	19	38.0	29	58.0	2	4.0
Methods of prevention of uterine fibroid	20	40.0	30	60.0	0	0.0
Method of treating uterine fibroid	3	6.0	46	92.0	1	2.0
Complications of uterine fibroid	14	28.0	36	72.0	0	0.0
Complications of pregnancy associated with uterine fibroid	25	50.0	20	40.0	5	10.0
Nurse role regarding uterine fibroid	24	48.0	26	52.0	0	0.0

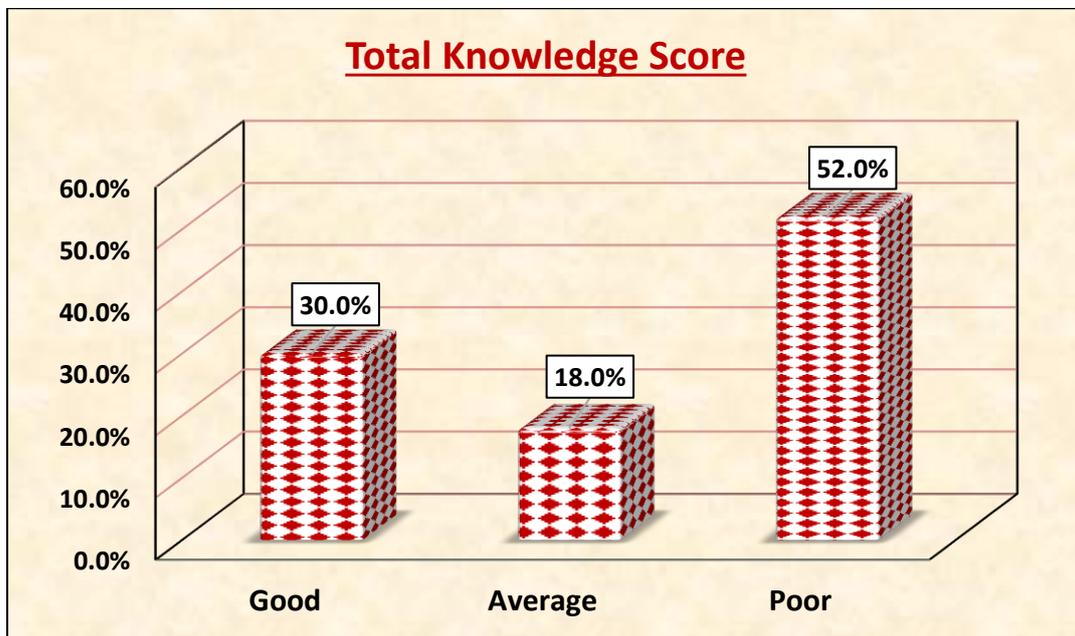


Figure (1): Percentage distribution of studied nurses regarding their total knowledge scores about uterine fibroid (n=50)

Table (3) Distribution of studied nurses' total instructions regarding uterine fibroid (n=50).

Variables	No	%
Nurses' instructions regarding nutrition		
Satisfactory	20	40.0
Unsatisfactory	30	60.0
Nurses' instructions regarding physical status		
Satisfactory	19	38.0
Unsatisfactory	31	62.0
Nurses' instructions regarding health responsibility		
Satisfactory	21	42.0
Unsatisfactory	28	56.0
Nurses' instructions regarding blood pressure		
Satisfactory	23	46.0
Unsatisfactory	27	54.0
Nurses' instructions regarding reducing stress		
Satisfactory	13	26.0
Unsatisfactory	37	74.0
Nurses' instructions regarding urinary incontinence		
Satisfactory	16	32.0
Unsatisfactory	34	68.0
Nurses' instructions regarding abdominal and menstrual pain		
Satisfactory	23	46.0
Unsatisfactory	27	54.0
Nurses' instructions regarding back pain		
Satisfactory	15	30.0
Unsatisfactory	35	70.0
Nurses' instructions regarding anemia		
Satisfactory	24	48.0
Unsatisfactory	26	52.0
Nurses' instructions regarding constipation		
Satisfactory	31	62.0
Unsatisfactory	19	38.0

Assessment of Maternity Nurses' Knowledge, Practices and Attitude regarding Uterine Fibroid

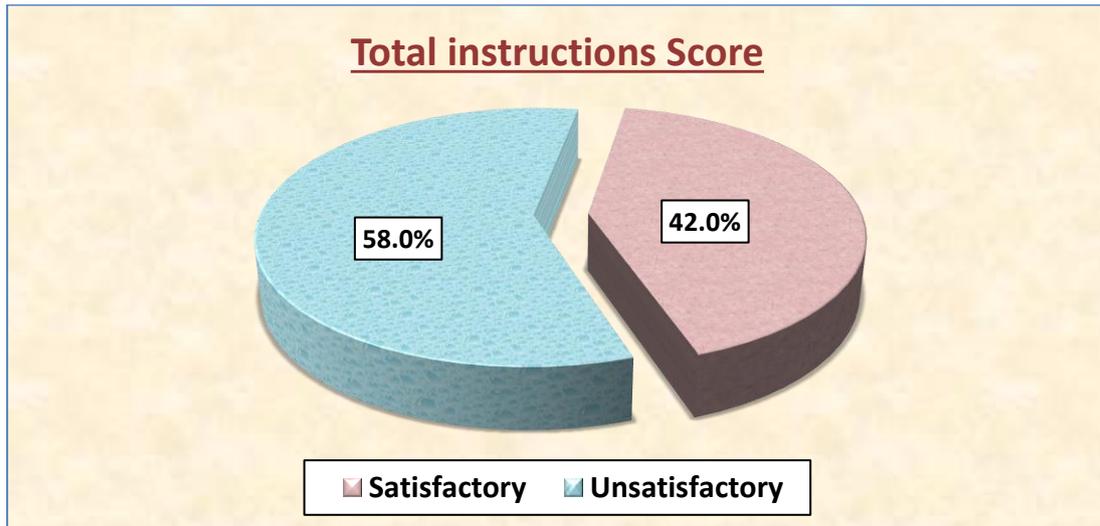


Figure (2): Percentage distribution of studied nurses' total instructions regarding uterine fibroid (n=50)

Table (4) Distribution of studied nurses' attitudes regarding uterine fibroid (n=50)

Attitude Items	Agree		Sometimes		Disagree	
	No	%	No	%	No	%
Uterine fibroid is a benign tumor	26	52.0	24	48.0	0	0.0
Uterine fibroid can be prevented	18	36.0	25	50.0	7	14.0
Uterine fibroid can be detected early with an ultrasound examination	5	10.0	40	80.0	5	10.0
Uterine fibroid may affect a woman who has a family history	11	22.0	39	78.0	0	0.0
Black women the most common affected with uterine fibroids	6	12.0	35	70.0	9	18.0
Uterine fibroid may lead to general weakness	16	32.0	34	68.0	0	0.0
Uterine fibroids can cause a sense of disorder and nervous weakness for women	13	26.0	30	60.0	7	14.0
Sensation of inability to have children due to tumor	15	30.0	31	62.0	4	8.0
The pain of uterine fibroid affects the woman with insomnia, stress and fatigue	8	16.0	40	80.0	2	4.0
Uterine fibroid may cause abortion to woman	20	40.0	30	60.0	0	0.0
Uterine fibroid negatively affect the woman	22	44.0	23	46.0	5	10.0
Uterine fibroid affects sexual desire of the affected woman	11	22.0	35	70.0	4	8.0
Uterine fibroid can be cured	13	26.0	37	74.0	0	0.0
Comprehensive examinations are necessary before the operation of removing uterine fibroids	12	24.0	33	66.0	5	10.0
Reducing weight in women is an important factor in the success of the operation	10	20.0	34	68.0	6	12.0
after removal of Uterine fibroids, it can be recurrent another time	12	24.0	33	66.0	5	10.0

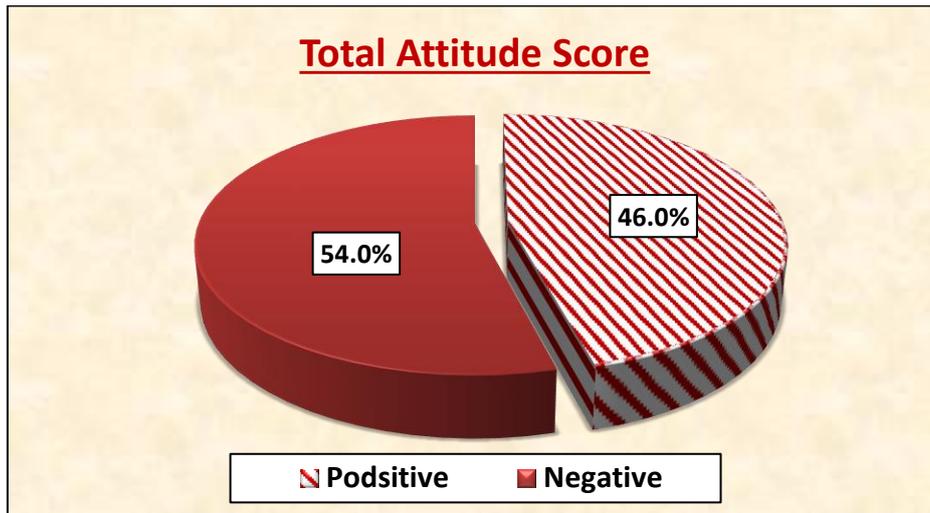


Figure (3): Percentage distribution of studied nurse's total attitude regarding uterine fibroid (n=50)

Table (5): Correlation between total knowledge score, total instructions score and total attitudes scores among studied nurses (n=50).

Variables	Total knowledge		Total instructions	
	r	P-value	r	P-value
Total instructions	0.750	0.000**		
Total attitude	0.743	0.000**	0.558	0.000**

Discussion

Uterine fibroids, also called uterine leiomyoma are steroid hormone-responsive, benign tumors of the smooth muscle compartment of the uterus. That is the most common neoplasm affecting women in reproductive age. UFs are one of the leading causes of hospitalizations for gynecological disorders and are the most frequent reason for hysterectomy (Abd El-Hakim et al., 2022).

Uterine fibroids can cause spontaneous abortions, painful red degeneration, abnormal fetal presentation, obstructed labour, and an increased likelihood of premature deliveries, whereas, in the non-pregnant women can be associated with irregular menstrual cycle, heavy menstrual bleeding, infertility, constipation, urinary

incontinence, and liposarcoma transformation (Mohammed et al., 2022).

Regarding general characteristics of studied nurses, the present study illustrated that more than two fifth of the studied nurses were in the age group 30 - <40 years old with the mean age of 37.97±10.46 years. From the researcher's point of view, it's fortunate that this is the age of most of nurses, because this indicates greater experience and a greater ability to develop themselves with modern information, and they also can deal with researchers more than the older or younger ones. These findings are in the same line with Abdul-Kareem& Kadhum, (2022) who studied "Determination the nurses' knowledge concerning discharge instruction for patients underwent uterine myomectomy

Assessment of Maternity Nurses' Knowledge, Practices and Attitude regarding Uterine Fibroid

at Babylon Province” and found that, two fifth of studied nurses were in the age group 30-39years.

In the contrary **Kaur, (2019)** whose study titled as “A Study to Assess the Knowledge of Staff Nurses Regarding Cervical Cancer and Its Prevention in View of Preparation of Informational Booklet at Primary Care Hospital, Amritsar in India” indicated that, the highest percentage of nurses among age group less than 30 years old.

The current study reported that, most of the studied nurses were married. **From the researcher's point of view**, it may be related to the most of studied nurses were female, and more than two thirds of the studied nurses were living in urban area. That may be related to the geographical location of the health institution in which they work, as it is near to their place of residence. While, more than two fifth of studied nurses were technical nurse.

These findings are in the same line with **Jasim AL-Tae & AlMukhtar, (2018)** who studied “Nurses' Knowledge and Practice Regarding Gynecological Laparoscopy in Maternity Teaching Hospital in Mosul City” and demonstrated, the most of nurses were married and three quarter of them were living in urban area and the majority of them was technical nurse.

On the other hand, **Kamilia et al., (2019)** who studied “Investigate Technical Institution Student Nurses' Knowledge and Attitude Concerning Uterine Malignancy” reported that, the majority of studied nurses were living in rural region.

Concerning current job, more than three quarters of studied sample were nurses. **From the researcher's point of view**, this result may be related to more than two fifth of studied nurses graduated from institute of nursing not faculty of nursing, and more than

two thirds of studied nurses didn't attend training courses about uterine fibroids. **From the researcher's point of view**, this result may be related to lack of continuous follow up of training courses in the government hospitals. This result agree with **Obol et al., (2021)** who studied “Knowledge, attitudes, and practice of cervical cancer prevention among health workers in rural health centres of Northern Uganda” and reported that, the majority of studied nurses didn't attend training courses about uterine fibroids.

Regarding to years of experiences of studied nurses, the present study revealed that, about one third of studied nurses had 10<15 years of experience. From the researcher's point of view, this may be related to more than two fifth of studied nurses were graduated from technical nurse at the age 19 years. According to their department of work, three fifty of studied nurses working at inpatient ward. From the researcher's point of view, this result may be related to the inpatient ward overcrowded of female cases and need large number of nurses to give nursing care accurately.

These findings are in the same line with **Mahmoud et al., (2021)** who studied “Effect of an Educational Program on gynecological nurses' performance pre and post hysterectomy surgery” and reported that one third of studied nurses had 10 :< 15 years of experience, while, the majority of studied nurses worked in maternal wards. In the contrary **Abdul-Kareem& Kadhum, (2022)** reported that, more than half of nurses had experience in hospitals less than 5 years.

Regarding knowledge of the studied nurses about uterine fibroid, the current study revealed that, more than half of the studied nurses had complete correct answer regarding meaning, types of uterine fibroids and complications of pregnancy associated

with uterine fibroid. From the researcher's point of view, this may be related to deal with cases of uterine fibroid in maternal department and increased years of experience. The study was in the same line with **Elsaied et al., (2020)** who studied "Effect of uterine fibroid on women's health related quality of life and nursing management for patients undergoing hysterectomy" and revealed that, more than half of studied nurses improved the knowledge of women about leiomyoma (Definition, types and complications).

The current study revealed more than two third most of studied nurses had in complete correct answer regarding causes, risk factors and methods of treatment of uterine fibroid. From the researcher's point of view, this may be related to lack of educational programs about uterine fibroid. These findings are in the same line with **Ali et al., (2019)** who studied "Surgical approach to hysterectomy for benign gynecological diseases" and found that, more than two thirds of respondents had low knowledge scores about uterine fibroids such as (Causes of uterine leiomyoma, Risk factors for uterine leiomyoma and Surgical treatment of uterine leiomyoma).

Regarding studied nurses' total knowledge scores about uterine fibroid: the current study illustrated that, more than half of studied nurses had poor knowledge about uterine fibroids. From the researcher's point of view, this might be related to the fact that the majority of the nurses are technical nurse in which the content was limited in their curriculum and did not receive any previous in-service training program regarding care of women undergoing uterine fibroids. In addition, reduction of nurses' knowledge could be due to lack of updating knowledge and overloaded area of working. These results also indicate the need to implement

educational programs and workshops for nurses regarding uterine fibroids.

In the contrary, **Senthilkumar & Girisha, (2020)** whose study was titled as "A Prospective Study on Knowledge, Attitude and Perception towards Uterine Fibroids" reported that, who found that the majority of the nurses had inadequate knowledge of fibroid uterus.

These results also partially agreed with **Fathy et al., (2019)** who studied "Total laparoscopic hysterectomy versus total abdominal hysterectomy in uterine tumors" and found that, two third of nurses poor Knowledge score about Leiomyoma.

Regarding studied nurses' instructions of uterine fibroid, These results were in congruent with who studied **Zimmermann et al., (2020)** "Prevalence, symptoms and management of uterine fibroids" and showed documented that, more than one third of nurses had satisfied regarding nurses' instructions about nutrition and total nurses' instructions regarding physical status, while, more than half of nurses had satisfied regarding constipation.

These results were not in the same line with the results **Puri et al., (2020)** who studied "Submucosal fibroids and the relation to heavy menstrual bleeding and anemia" reported that, who found that the majority of nurses had satisfied regarding total practice about abdominal and menstrual pain, anemia and physical status.

Regarding studied nurses' total instructions of uterine fibroid, the present study reported that, more than half of studied nurses had unsatisfactory practices regarding uterine fibroid. From the researcher's point of view, This result may be related to lack of training programs for nurses about uterine fibroids.

These study findings were agreed with **Kamilia et al., (2019)** who studied "Investigate Technical Institution Student

Assessment of Maternity Nurses' Knowledge, Practices and Attitude regarding Uterine Fibroid

Nurses' Knowledge and Attitude Concerning Uterine Malignancy” who illustrated that more than half of the student nurses had unsatisfactory practice regarding uterine fibroids during training period.

In the opposite side, **Thilagavathi & Rajeswari., (2022)** who studied “evaluate the effectiveness of preoperative teaching protocol on selected postoperative outcomes in terms of anxiety and depression status among women undergone hysterectomy” and demonstrated that slightly less than two thirds of the studied nurses had unsatisfactory level of practice related to uterine fibroids.

Regarding attitudes of the Studied Nurses about uterine fibroid: The present study revealed that, more than half of studied nurses agreed that uterine fibroid is a benign tumor and more than three quarters had uncertain attitude that the pain of uterine fibroid affects the woman with insomnia, stress and fatigue, uterine fibroid may affect a woman who has a family history and also, more than two thirds of studied nurses had uncertain attitude that Uterine fibroid affects sexual desire of the affected woman. Uncertain attitude of nurses may be due to their deficit knowledge which leads to lack of confidence in their responses. While, about one Fifth of studied nurses report disagree that Black women the most common affected with uterine fibroids.

From the researcher’s point of view, these results may be fibroid growth differs by race, especially as women approach menopause. Although some evidence links environmental factors such as diet and history of abuse to this increased risk, most of this information comes from studies such as the Black Women's Health Study and has linked vitamin D insufficiency with increased fibroid risk in black women.

These result are partially in the same line with a study which done by **Pang et al., (2019)** who studied “A study of knowledge and attitudes of registered nurses towards pain management after hysterectomy in an urban hospital of china” and demonstrated that, the most of nurses sometimes agree that of The pain of uterine fibroid affects quality of sleeping toward the woman, stress and fatigue, uterine fibroid had negative impact on sexual life and affect sexual desire of the affected woman and reduce quality of life of woman. Concerning studied nurse's total attitude regarding uterine fibroid, the present study reported that, more than half of studied nurses had negative attitude regarding uterine fibroid. From the researcher’s point of view, this result may be related to lack of educational program about nurse’s performance regarding uterine fibroids. This also may be due to level of education of studied nurses.

These findings are supported by **Senthilkumar & Sai Girisha, (2019)** who studied “A Prospective Study on Knowledge, Attitude and Perception towards Uterine Fibroids” and reported that, more than three quarters of nurses had negative attitude regarding uterine fibroid.

These results were not in the same line with the results of **Simms-Stewart & Fletcher., (2020)** who studied “Counseling Patients with Uterine Fibroids” and reported that, most of nurses have positive attitude regarding uterine fibroid after taking educational guidelines.

Regarding correlation coefficient between studied nurses' total knowledge, total instructions and total attitudes scores regarding uterine fibroid, These results were in the same line with the results of **Ghant et al., (2020)** who studied “An altered perception of normal: understanding causes

for treatment delay in women with symptomatic uterine fibroids” and showed that, there was statistically significant positive correlation between total knowledge, total instruction and total attitude scores regarding uterine fibroids.

Also, these results were in the same line with, **Guler et al., (2019)** who studied “Determining the knowledge of women and their attitudes regarding leiomyoma” and demonstrated that, there was statistically significant positive correlation between total knowledge, total instructions and total attitude scores regarding leiomyoma.

Conclusion:

More than half of the studied nurses had poor knowledge, about three fifth of the studied nurses had unsatisfactory instructions and more than half of the studied nurses had negative attitude regarding uterine fibroid. Additionally, there was a highly statistically significant positive correlation between total knowledge, total nurses’ instructions and total attitude scores regarding uterine fibroid. Hence, the aim of the study was achieved and the research questions were answered.

Recommendations:

- ✚ Developing periodical training programs for nurses working at Obstetrics and Gynecology departments to enhance updated with the necessary knowledge, practices about the recent trends of uterine fibroid.
- ✚ Booklet regarding uterine fibroid should be available in Obstetrics and Gynecological departments to be accessible to all nursing staff.
- ✚ Designing and implementing guidelines among nurse about attitudes of uterine fibroid for raising the awareness.

- ✚ Replication of present study on a large sample in different settings to generalize finding.

References:

- Abd El-Hakim, A., Moustafam, M., and Abd El-Rahim, A., (2022).** Effect of Educational Program on Knowledge Regarding Leiomyomas among Women in Reproductive Age, *Minia Scientific Nursing Journal*, 11 (1) Pp:210-220.
- Abdul-Kareem, M., and Kadhum, S., (2022).** Determination the nurses’ knowledge concerning discharge instruction for patients underwent uterine myomectomy at Babylon Province, *International Journal of Health Sciences*, 6(5), Pp:10193-10201.
- Akpenpuun, J. R., Bai-tachia, M., and Waroh, J. N., (2019).** Awareness, Knowledge and Perceived Attitude towards Women Living with Fibroid in Benue State, Nigeria, *Fuwukar international journal of sociology and develeopmt*, 1(1), Pp: 2714-2868.
- Ali, S., Farahat, M., and ElShafei, M., (2019).** Surgical approach to hysterectomy for benign gynecological diseases, *The Egyptian Journal of Hospital Medicine*, 77 (3), Pp: 5279-5286
- Berman, J. M., Bradley, L., Hawkins, S. M., & Levy, B., (2022).** Uterine Fibroids in Black Women: A Race-Stratified Subgroup Analysis of Treatment Outcomes after Laparoscopic Radiofrequency Ablation, *Journal of Women's Health*, 31(4), Pp: 593-599.
- Datir, S. G., & Bhake, A. (2022):** Management of uterine fibroids and its complications during pregnancy, A review of literature, *Cureus*, 14(11), Pp: 100-150
- Donnez, J., and Dolmans, M. M., (2022).** Uterine fibroid management from the present to the future, *Human Reproduction Update*, 22(6), Pp: 665-686.

Assessment of Maternity Nurses' Knowledge, Practices and Attitude regarding Uterine Fibroid

- Elguero, S., Patel, B., Jones, A. V., and Hurd, W. W., (2022).** Abnormal Uterine Bleeding, In *Clinical Reproductive Medicine and Surgery, A Practical Guide* Cham, Springer International Publishing, pp: 171-199.
- Elsaied, H., Nour Eldin, S., Gad, A., and Mohamed, H., (2020).** Effect of uterine fibroid on women's health related quality of life and nursing management for patients undergoing hysterectomy, *Assiut Scientific Nursing Journal*, 8 (20), Pp: 12-27.
- Fathy, M., Al-Azony, H., Hasanen, E., and Abd-Elhamid, N., (2019).** Total laparoscopic hysterectomy versus total abdominal hysterectomy in uterine tumors, *The Egyptian Journal of Hospital Medicine*, 72 (10), Pp: 27-32.
- Grosz, M. P., Rohrer, J. M., & Thoemmes, F. (2020).** The taboo against explicit causal inference in nonexperimental psychology. *Perspectives on Psychologic Science*, 15(5),1234-1255.
- Ghant, M. S., Sengoba, K. S., Vogelzang, R., Lawson, A, K, & Marsh, E. E., (2020).** An altered perception of normal: understanding causes for treatment delay in women with symptomatic uterine fibroids. *J Womens Health*, 25(8), Pp: 846–852.
- Glanick, M., and Myers, J. I., (2020).** *Nursing Care Plans E-Book, Nursing Diagnosis and intervention*, United States, 9th ed, P:589.
- Guler, H., Evcili, F., Demirel, G., and Duran, O., (2019).** Determining the knowledge of women and their attitudes regarding leiomyoma, *Asian Pacific Journal of Cancer Prevention*, 14 (4), Pp: 55-59.
- Hyvärinen, M., Huang, Y., David, E., & Hynynen, K., (2022).** Comparison of computer simulations and clinical treatment results of magnetic resonance guided focused ultrasound surgery (MRgFUS) of uterine fibroids, *Medical Physics*, 49(4), Pp:2101-2119.
- Jasim AL-Taee, R, M., and AlMukhtar, S, H., (2018).** Nurses' Knowledge and Practice Regarding Gynecological Laparoscopy in Maternity Teaching Hospital in Mosul City, *Mosul Journal of Nursing*, 3(2), Pp:73-80.
- Kamilia, Amal, M., R., Eman, M., and Amal, F., (2019).** Investigate Technical Institution Student Nurses' Knowledge and Attitude Concerning Uterine Malignancy, *Indian Journal of Forensic Medicine* ,3(9), Pp:50-70.
- Kaur, K. (2019):** A Study to Assess the Knowledge of Staff Nurses Regarding Cervical Cancer and Its Prevention in View of Preparation of Informational Booklet at Primary Care Hospital, Amritsar, *Int J Pregn & Chi Birth*,4(6), Pp:87-90.
- Liu, Z., Gao, Z., Li, F., Xu, L., and Liu, X., (2022).** Application Effect of Laparoscopic Myomectomy and Comprehensive Rehabilitation Nursing on Patients with Uterine Fibroids, *Computational & Mathematical Methods in Medicine*, 10 (5) P: 18.
- Mahmoud, A. N., El-Adham, A. F., and Hashem, S. M., (2021).** Effect of an Educational Program on Gynecological Nurses' Performance Pre and Post Hysterectomy Surgery, *Tanta Scientific Nursing Journal*, 20(1), 136-160.
- Mlodawska, O. W., Saini, P., Parker, J. B., Wei, J. J., Bulun, S. E., Simon, M. A., and Chakravarti, D., (2022).** Epigenomic and enhancer dysregulation in uterine leiomyomas, *Human Reproduction Update*, 28(4), Pp:518-547.
- Mohammed, H., Mohammad, S, S., and Abdul-Kareem, M., (2022).** A Study the Nurses Perceptions regarding Cooperation with Physicians at Emergency Departments in

Babylon Governorate, Academic Nurse, 8(5), Pp:19-23

Morhason-Bello, I. O., and Adebamowo, C. A., (2022). Epidemiology of uterine fibroid in black African women: a systematic scoping review, *BMJ open*, 12(8), Pp: 52-59

Obol, J, H., Lin, S., Obwolo, M, J., Harrison, R., and Richmond, R., (2021). Knowledge, attitudes, and practice of cervical cancer prevention among health workers in rural health centres of Northern Uganda, *BMC cancer*, 21(1) Pp:1-5.

Pang Y, H., L, R., Choy, Y., Z Jaafar, M., Cardoso, M., & Das, S., (2019). A study of knowledge and attitudes of registered nurses towards pain management after hysterectomy in an urban hospital. *La Clinica terapeutica*, 164 (3), Pp:215-219.

Puri, K.; Famuyide, A.O.; Erwin, P.J.; Stewart, E.A.; & Laughlin-Tommaso, S.K. (2020). Submucosal fibroids and the relation to heavy menstrual bleeding and anemia, *Am. J. Obstet. Gynecol*, 21(7), Pp:38–50.

Senthilkumar, S& Sai Girisha ,K.(2019). A Prospective Study on Knowledge, Attitude and Perception towards Uterine Fibroids , *Research J. Pharm*,10(11), Pp: 3748-3752.

Senthilkumar, S, and Girisha, K, S., (2020). A Prospective Study on Knowledge, Attitude and Perception towards Uterine Fibroids, *Research Journal of Pharmacy and Technology*, 10(11), Pp: 3748-3752.

Simms-Stewart, D., and Fletcher, H., (2020). Counseling Patients with Uterine Fibroids a Review of the Management and Complications *Obstetrics and Gynaecology, International Volume*, 20(12), P: 450.

Thilagavathi K.,& Rajeswari V. A.,(2022). pilot study to evaluate the effectiveness of preoperative teaching protocol on selected postoperative outcomes in terms of anxiety and depression status among women undergone hysterectomy, *Asian Journal of*

Nursing Education and Research; 4 (4), Pp:412-16.

Yang, Q., Ciebiera, M., Bariani, M. V., Ali, M., Elkafas, H., Boyer, T. G., & Al-Hendy, A., (2022). Comprehensive review of uterine fibroids: developmental origin, pathogenesis, and treatment. *Endocrine reviews*, 43(4), Pp:678-719.

Zimmermann, A., Bernuit, D., Gerlinger, C., Schaefers, M., & Geppert, K. (2020). Prevalence, symptoms and management of uterine fibroids: an international internet-based survey of 21,746 women. *BMC women's health*,12(6), P:400.

تقييم معلومات وممارسات واتجاهات ممرضات الامومه تجاه الورم الليفي الرحمي

حنان الشحات عباس - أمل احمد حسن عمران - الهام رمضان ابوزيد - مي محمود حسن

يعرف الورم الليفي الرحمي بأنه ورم عضلي أملس وحميد في الرحم. كما ان معظم السيدات لا تظهر عليهم أعراض ولكن عندما يكبر حجمه يسبب ألم شديد ونزيف أثناء الدورة الشهرية و ألم أثناء الجماع وكثره التبول. قد تؤثر بعض الأورام الليفية الرحمية علي الحمل على الرغم من ندره حدوثها. السبب الرئيسي للأورام الليفية الرحمية غير معروف. يمكن أن يكون الورم الليفي الرحمي واحد أو أكثر من واحد ويمكن أن يختلف في حجمه وشكله وموقعه. تم استخدام الدراسة الوصفية لتحقيق هدف الدراسة الحالية. أجريت هذه الدراسة في قسم النساء والتوليد وغرفة العمليات والعيادات الخارجيه للنساء والتوليد بمستشفى بنها الجامعي. العينة المتاحة (50) ممرضة حضرن في المكان المذكور سابقا في وقت جمع البيانات. واطهرت نتائج الدراسة الحالية ان أقل من نصف الممرضات الخاضعات للدراسة لديهن معلومات جيدة عن الورم الليفي الرحمي. حوالي خمسين من الممرضات الخاضعات للدراسة لديهن تعليمات مرضية تجاه الورم الليفي الرحمي. أقل من نصف الممرضات الخاضعات للدراسة لديهن موقف ايجابي تجاه الورم الليفي الرحمي . توجد علاقة ارتباط إيجابيه ذات دلالة إحصائية بين معلومات وتعليمات وإتجاهات الممرضات فيما يتعلق بالورم الليفي الرحمي. كما اوصت الدراسة بتطوير برامج تدريب دورية لممرضات الأمومه العاملين في قسم النساء والتوليد لتحسين وتحديث المعلومات والممارسات اللازمة حول الاتجاهات الحديثة للورم الليفي الرحمي.