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Raising middle-aged women awareness of uterine fibroid

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Abstract

Uterine fibroid (UF), also called uterine leiomyomas or myomas, are steroid hormone-responsive, benign tumours of the smooth muscle compartment (myometrium) of the uterus. the study aimed to raise middle-aged women awareness of uterine fibroid. A quasi-experimental research design was used in the study one group (pre-post) test. This study was carried out at the Obestatric and Gynecological Department at Fayoum University Hospital and EL Nabawy EL Mohandes (public hospital in Fayoum) at Fayoum City, Egypt. A Purposive sample included (50) of middle-aged women the previously mentioned settings**.** our tools were used for data collection; the first tool: was A structured interview questionnaire sheet consists of three parts: to assess characteristics of studied sample, obestatric history, gynecological history, second tool: was knowledge assessment sheet about uterine fibroid, the third tool: was Attitude assessment sheet about uterine fibroid, fourth tool: practice assessment sheet about uterine fibroid. Before the sessions, around two-thirds of middle-aged women had unsatisfactory knowledge, whereas following the sessions, most of them acquired satisfactory levels of knowledge. Furthermore, before the sessions, slightly fewer than one-third of the women held a positive attitude, which significantly increased to become most women exhibiting a positive attitude after the implementation of the sessions. Similarly, approximately one-third of the women demonstrated unsatisfactory practices concerning uterine fibroids before the sessions, but following the sessions, the majority of women showcased satisfactory practices regarding uterine fibroid. Awareness increases of middle-aged women regarding knowledge, attitude and practices about uterine fibroid after the implementation of instructional sessions than before. Providing pamphlets and booklets for women to get adequate information about up-dated about uterine fibroid.

Keywords: Awareness, Middle age, Uterine Fibroid**.**

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1. Introduction

Middle age is a period of human adulthood that immediately precedes the onset of old age. middle age is somewhat arbitrary, differing greatly from person to person, it is generally defined as being between the age 40-60, uterine fibroid is the most common type of tumor among women of reproductive age, and associated with heavy menstrual bleeding, abdominal discomfort, subfertility, and a reduced quality of life [1]. Gynecological diseases are disorders that affect the female reproductive system. Some of the common gynecological diseases include dysmenorrhea, endometriosis, uterine fibroids, polycystic ovary syndrome, and ovarian dysfunction. These diseases have raised social and public health concerns [2]. Awareness of uterine fibroid is low with half of women at the time of diagnosis being unaware of fibroid and what health issues are associated with them, the lack of awareness results in late women recognition of disease and delayed clinical diagnosis, reducing the success of non-surgical and minimally-invasive intervention approaches to lessen symptoms. [3].

A Uterine fibroid are the most common benign pelvic tumors in women of reproductive age. uterine fibroid affect 20–40% of those women but are found in 75% of hysterectomy specimens *[4]*. The symptoms of uterine fibroid can include: heavy periods, also known as menorrhagia, which can lead to anemia, painful periods, lower backache or leg pain, constipation, discomfort or a feeling of fullness in the lower abdomen, especially in the case of large fibroid, frequent urination, pain during sexual activity, also known as dyspareunia. Some people may have fertility problems associated with fibroid. Fibroid may cause problems during pregnancy and labor, and they increase the chance of needing a cesarean delivery *[5]*.

Complications of uterine fibroid can have a considerable negative impact on a women quality of life by causing significant morbidity and, very rarely, mortality. The possible thromboembolism (obstruction of a blood vessel by a blood clot), constipation (difficult bowel movements), female reproductive organs distortion (twisting or crushing the female organs), impaired blood flow which can lead to pregnancy complications and infertility *[6]*. The prevention of uterine fibroid intake of fresh produce including broccoli, arugula, cabbage, cauliflower, and turnips may minimize the risk. the veggies are rich in beta-carotene, foliate, fibre, vitamins C, E, and K, as well as other nutrients and minerals, uterine fibroid are less likely when regular exercise is accompanied with a stress-free lifestyle, supplements such as iron, and magnesium all aid in its prevention *[7]*.

The nursing management for uterine fibroid involves pain management, fluid replacement, and bleeding control; prevent associated clinical symptoms – acute anaemia, pain crisis, cardiac symptoms, dehydration and patient education. uterine fibroid can lead to gynecologic complications. The conditions that can also affect pregnancy are fibroid, endometriosis, ovarian cysts, cervical dysplasia and more *[8]*.

1.1 Significance of the study

According to the World Health Organization (WHO) (2020) report, fibroid affects between 20-25% of women, and close to 235 million women which represent 6.6% of the global women population are estimated to have been affected worldwide, in Egypt show the incidence of fibroid was 47.5% within the age group 30-35 years. Menorrhagia is the main complication of uterine fibroid and can result in anaemia *[9]*

1.2 Aim of the Study

The study aimed to raise middle age women awareness of uterine fibroid.

1.3 Research hypothesis

Middle-aged women awareness regarding uterine fibroid will be increased after the implementation of instructional sessions

1.4 Operational definition

Raising awareness means in the study increasing knowledge, attitude and practices. Middle age women are in the age range of the years halfway between childhood and old age. the exact range is subject to medical debate , but the term is commonly used to denote the age ranges from approximately 40-45 years and as far as 65.

1.5 Research design

A quasi experimental research design was used in the study. one group (pre-post test).

A quasi experimental design aims to establish acause – and effect relationship between an independent and dependant variable.

1.6 Settings

The study was conducted at the obestatric and gynecological department at EL Fayoum University Hospital and EL Nabawy EL Mohandes (public hospital) at EL Fayoum City.

1.7 Sample type

APurposive sample was used to collect the study subjects.

1.8 Sample size

(50) Middle age women in the previous setting who accept to participate in the study for six months.

1.9 Tools of data collection

Tools used for data collection in the present study are the following:

1.9.1 Tool I: Structure Interviewing questionnaire

Designed by the researchers after reviewing literature related to the aim of the study, the researchers translated the tool into Arabic language and consist of 3 parts as the following:

1.9.1.1 Part 1: personal data

This tool is concerned with data of women and consists of (9) questions such as (age, , level of education, occupation, residence, marital status, hight, weight, body mass index and source of information about uterine fibroid).

1.9.1.2 Part 2: Obstetric history

This tool is used to assess the obstetric history and consist of (10) questions such as (age at menarche, number of pregnancies, number of delivery, number of abortion, previous mode of delivery, menstrual interval, duration of menstruation, rhythm of menstruation, number of pads, type of contraceptive method and family history of uterine fibroid).

1.9.1.3 Part 3: gynecological history

This part assesses the gynecological history and consist of (2) questions include history of previous gynecological diseases as abnormal uterine bleeding, dysmenorrhea, urinary tract infection, infertility, endometriosis, polycystic ovary syndrome and previous surgical as diltation and curettage, ovarian cyst removal and hysteroscopy.

1.9.2 Tool II: Knowledge Assessment Sheet regarding Uterine Fibroid (Pre- Post) adapted from [10] and [11].

Used to assess middle age women awareness of uterine fibroid, It was written in arabic language and used to assess definition, causes, signs & symptoms, predisposing factor, types, complication and treatment. it composed of 16 questions. participants were asked to respond on a 2-points likert scale (correct and incorrect).

1.9.2.1 Scoring system

Scored correct "2", incorrect scored (1). The total score for the questionnaire was 32 grades. A score of less than 70% is considered unsatisfactory knowledge and a score equal to or more than 70% is considered satisfactory knowledge.

1.9.3 Tool III: Attitude Assessment Sheet **regarding** *Uterine Fibroid (Pre- Post): Adapted from [10]*

This tool modified by the researcher to assess middle age women attitude of uterine fibroid. it was written in arabic language and used to assess women attitude regarding the uterine fibroid about life style as (physical activity, diet, stress, smoking, and caffeine consumption), and risk factors as (age, race, obesity). It is composed of 16 questions. participants were asked to respond on a 3-point likert scale (agree, sometimes, disagree).

1.9.3.1 Scoring system

Scored agree "3", Sometimes scored "2", disagree scored (1). The total score for the questionnaire was (48) grades equal or more than 70% considered positive attitude and the score less than 70% considered negative attitude.

1.9.4 Tool IV: Practice Assessment Sheet about Uterine Fibroid (Pre- Post): Tool developed by researcher based on lectures review [10]

It is 3t5 included 13questions to assess women practice regarding the uterine fibroid as current sign & symptoms that the women suffering from, current signs & symptoms that the women suffering from low back pain, urinary frequency, abnormal uterine bleeding.

1.9.4.1 Scoring system

The scoring system is classified as follows; the done step was given a score of a "2" mark and the not done was given a score of (1). The total score for the practices was (26) grades. score less than 70% is considered an inadequate level of practice and a score equal to or more than 70% is considered an adequate level of practice.

1.9.5 Validity of tool

Tools submitted to a panel of three experts in the field of maternity and gynecology nursing department at Helwan University, to ensure application, comprehensiveness, understanding and ease of implementation of tools. the necessary modifications were be done such as (rephrasing, rearrangements sentences and add questions).

1.9.6 Reliability

The alpha Cronbach's model was used to measure the internal consistency of the tools used in this study reliability of the Knowledge Assessment Sheet (0.811) , attitude Assessment Sheet (0.805) and Practice Assessment Sheet (0.854) when alpha Cronbach was >0.5. the reliability was scaled as follows: <0-0.25 weak reliability, 0.25-0.75 moderate reliability, 0.75-< 1 strong reliability and 1 is optimum. the reliability of this questionnaire was 0.82.

1.10 Pilot Study

A pilot study was conducted on 5 middle age women of participation in the study. the results of the pilot indicated that the statements of the questionnaire were clear and relevant, and few words and items were modified. the pilot sample included in the study.

2. Field Work

- This study was carried out in the obestatric and gynecological department at Fayoum University Hospital and EL Nabawy EL Mohandes (public hospital in Fayoum) at Fayoum City. the process of data collection was carried out in the period from the beginning of december 2022 to the end of april 2023.
- The researcher attended EL Fayoum University Hospital two days per week and attended EL Nabawy EL Mohandes (public hospital in Fayoum) three days per week.
- The current study was achieved through three phases: assessment phase, implementation phase, evaluation phase.

2.1 Assessment phase (Pre-test)

- At the beginning,the researcher introduced herself and explained the purpose of the study to gain their confidence and trust to convince them to participate in the study then written consent was obtained from them.
- The researcher distributed an interviewing questionnaire sheet to the women participants in the study individually at the hospital to assess demographic characteristics, obstetric and menstruation history and gynecological history of the women participants in the study by using tool (I). this tool was fulfilled in about (10-15) minutes. and the researcher assisted women who couldn't read and write
- Then the researcher assessed women knowledge, attitude and practice about uterine fibroid by using tool II, tool III and tool IV (Pre-test). every tool was fulfilled in about (10-15) minutes.
- According to the results of the assessment of knowledge, practice and attitude, the researcher designed the awareness material.

Supportive material:

It was designed by the researcher based on literature review. It prepared in aform of borchour with using asimple and clear Arabic language supported with photo to support some information to the women.

2.2 Implementation phases

- The study was conducted from the beginning of December 2022 to the end of November 2023. At the beginning of the interview, the researcher greeted every woman, introduced her for them and explain the purpose of the current study, the researcher distributed identification women with uterine fibroid tool for all women and analyzed it to exclude women with any medical disorder.
- The researcher took the women included in the study who suffer from uterine fibroid in another session. oral approval of the women was obtained after explaining the purpose of the study.
- The total sample (50) was divided into small groups (6) each group containing 7-8 women. all women were given the theoretical and practical part.
- The theoretical part regarding the uterine fibroid was given through one sessions took 2 hours, one day per week. it contained (definition, causes, signs & symptoms, predisposing factor, types, complication and treatment).
- The practical part: this part was given through instructional sessions took 2hours; within another day

per week using borchor was distributed to each woman.

- After the final sessions, the post-test was conducted by using the same tool used in the pre –test. the researcher was reported the post-test immediately of the conduction the researcher has applied the follow-up after instructional sessions. the same field work steps were applied to all sup group.

2.3 Evaluation phases

- After Four weeks of implementation, the researchers used tools II, III, and IV for the second time after the awareness session to assess the level of knowledge, attitude and practice of the studied women.

2.4 Ethical Considerations

- Approval of research obtained from the ethical committee in the faculty of nursing at Helwan University before starting the study.
- The researcher clarified the objective and aim of the study to the women included in the study and informed consent was obtained.
- Participation in the study is voluntary and subjects will be given complete full information about the study and their role before signing the informed consent.
- Participation in the study has the right to withdraw from the study at any time without giving any reasons.
- The researchers assured maintaining anonymity and confidentiality of the subject data.
- Tools of data collection didn't touch religious, cultural or ethical issues among women and women's dignity was considered. tool of data collection didn't touch religious, cultural or ethical issues among students and students' dignity was considered.

2.5 Statistical Design

The collected data were organized, categorized, tabulated and statistically analyzed using the statistical package for social science (SPSS) version (20) to assess women's knowledge about uterine fibroid, attitude and practice. data were presented in tables. the statistical analysis included; percentage (%), the arithmetic mean ($\overline{X}$), standard deviation (SD) and chi-.

3. Results

Figure (1) illustrates that, 64% of the studied women were reported that, the knowledge regarding uterine fibroid were from medical health team. While (18%, 14% & 4%) respectively, of them their knowledge regarding uterine fibroid were from family, peers and mass media. Figure (2) shows that, more than one third (34%) of the studied women had satisfactory knowledge level during pretest which improved to become the majority (82%) of them had satisfactory knowledge level regarding uterine fibroid post sessions implementation. Figure (3) illustrates that, about one third (30%) of the studied women had positive attitude pretest which improved to become the majority (80%) of them had positive attitude post sessions implementation.

Table (1): reveals that, 44% of the studied women their age group was ≥ 50 years with a mean age 46.16±7.37 years, 60% of them from urban areas. moreover, 38% of the studied women were read and write, 92% of them housewife and. regarding height, weight & body mass index the mean height of the studied women was 158.72±7.38 cm, the mean weight of them was 76.06±14.48 and their mean body mass index was 30.33±6.02. While 54% of them were obese. Table (2): shows that the age at menarche of the studied women was 14.54±2.53 years, 90% of the studied women their menstrual interval from 21-27 days, 70% of them their duration of menstrual blood flow was 3-5 days, 60% of them used 2-3 pads daily during the period of menstruation and 84% of them had regular menstruation. while, 62% of the studied women were pregnant for >3 times, 54% of them were delivered for >3 times, 6% of them had no abortion and 58% of them had undergone a caesarean section before. moreover, 44% of the studied women used Implanon as a contraceptive method and 85% of them didn't have family history about uterine fibroid Table (3) : illustrates that, a statistically significant improvement in women knowledge regarding uterine fibroid post sessions implementation with (p-value < 0.005), and it was noticed that, 72% & 82% respectively, of the studied women had incorrect knowledge regarding middle age women with uterine fibroid feels with a problem during intercourse, common complications of uterine fibroid include menorrhagia and prolapse of a submucous fibroid and the potential cause of uterine fibroid is the ovarian hormones, that estrogen and progesterone are hypothesized to enhance fibroid growth during pretest which improved to become 76% & 82% respectively, post sessions implementation. Table (4) shows that there was a statistically significant improvement in women's attitude regarding uterine fibroid post sessions implementation with (p-value < 0.001), and it was noticed that, the minority (8% & 10%) of the studied women responded never about uterine fibroid affect sleep, like to drink caffeinated, affect work or normal daily activities outside the home and eating a lot of fatty food during the pretest, this response improved to become never (2%, 0% & 4%) respectively, post sessions implementation. Table (5) shows, a statistically significant improvement in women practices regarding low back pain, urinary frequency and abnormal uterine bleeding post sessions implementation with (p-value < 0.001), and it was noticed that 20%, 28% & 40% respectively, of the studied women were avoid lifting heavy things, eat fruits and avoid products that contain tomatoes, chocolate, artificial sweeteners, and spicy foods during pretest, which improved to become 92%, 80% & 82% respectively, post sessions implementation. Table (6) shows a statistically significant improvement in women's practices regarding all items of practice post sessions implementation with (p-value < 0.001), and it was noticed that less than one quarter (22%) & about one-third (30%) respectively, of the studied women had good practices regarding low back pain and using a hormonal contraceptive method during pretest, which improved to become the majority (80% & 90%) respectively, post sessions implementation. Table (7) illustrates that, there was strong positive correlation between total knowledge, attitude and practices pre and posttest.

Table 1: Part I: Distribution of sociodemographic data of the studied sample (n = 50):

Personal data	N	%
Age		
40	12	24
40- <50	16	32
50 or more	22	**44**
Mean±SD	46.16±7.37	
Residence		
Rural	20	40
Urban	30	**60**
Level of Education		
Cannot read and write	16	32
Read and Write	19	**38**
Secondary Education	11	22
University Education	4	8
Occupation		
Work	4	8
Housewife	46	**92**
Height	158.72±7.38	
Weight mean±SD	76.06±14.48	
Body Mass Index mean±SD	30.33±6.02	

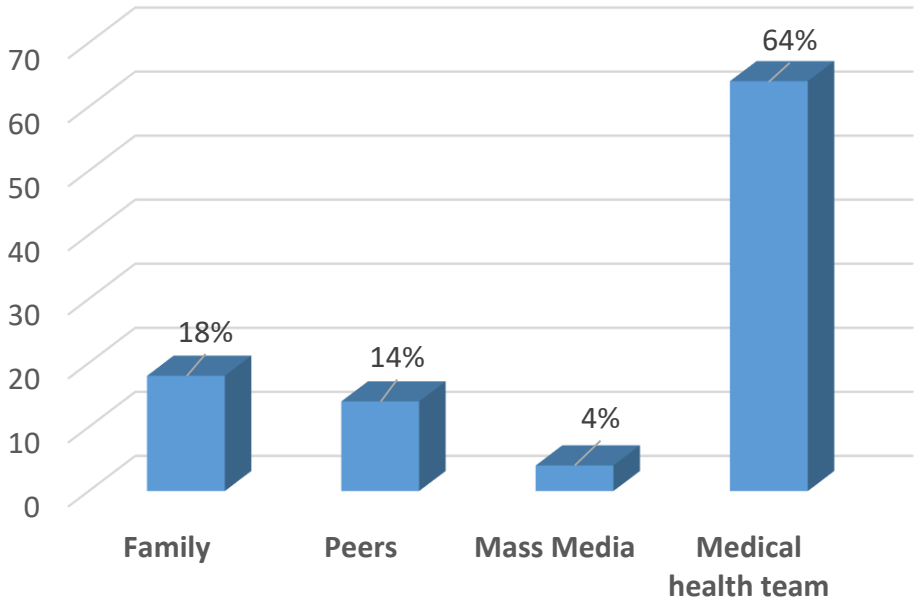
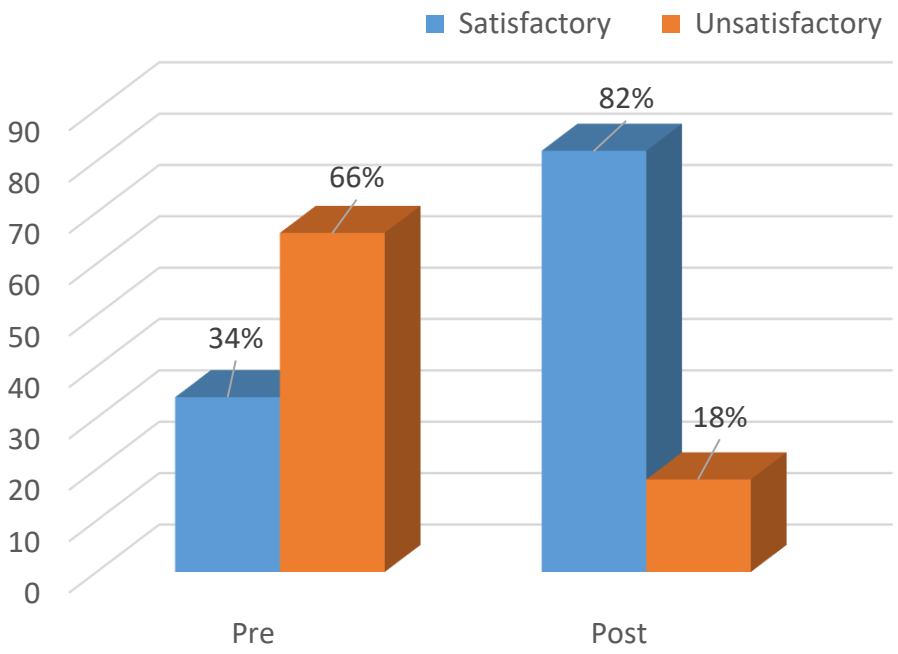


Figure 1: Distribution of studied sample according to source of information regarding uterine fibroid **(n = 50):**

Figure (1): illustrates that 64% of the studied women reported that, the knowledge regarding uterine fibroid from medical health team while, (18%, 14% & 4%) respectively, of their knowledge regarding uterine fibroid, from family, peers and mass media, respectively.



Total attitude of women with uterine fibroids pre, and post sessions implementation (N = 50

Figure (2): Distribution of studied women regarding Knowledge about uterine fibroid (N = 50)

Figure (2) shows that more than one-third (34%) of the studied women had satisfactory knowledge level during pretest which improved to become the majority (82%) of them had satisfactory knowledge level regarding uterine fibroid post-session implementation

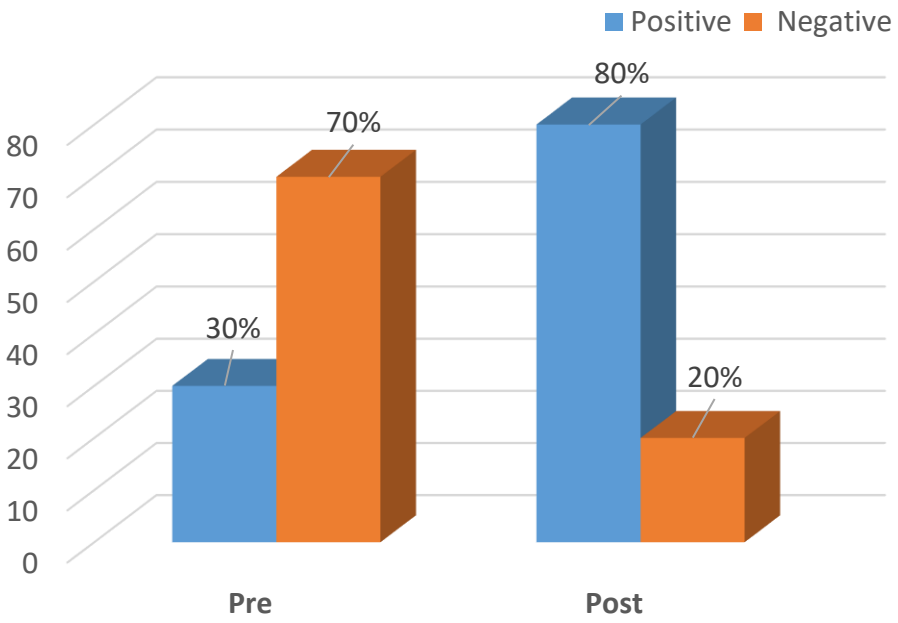


Figure (3): Distribution of total attitude of middle age women with uterine fibroid pre, and post session's implementation (N = 50).

Figure (3) illustrates that about one-third (30%) of the studied women had a positive attitude pretest improved to become the majority (80%) of them had a positive attitude post-session implementation

Table (2): Distribution of studied women regarding the Obstetric, Menstruation and family history **(n = 50):**

Items of Obstetric and Menstruation history	N	%
Age at menarche		
Range (Mean±SD)	13-19 (14.54±2.53)	
Menstrual interval		
21-27	45	**90**
28 -35	5	10
Duration of blood flow		
3-5	35	**70**
> 5-7	15	30
Number of pads/ day during menstrual bleeding		
One pad daily	9	18
2-3 pads daily	30	**60**
4 and more pads daily	11	22
Rhythm of menstruation		
Regular	42	**84**
Irregular	8	16
Gravida		
<3	19	38
>3	31	**62**
Para		
<3	27	**54**
>3	23	46
Abortion		
No	33	**66**
1	13	26
2	3	6
3	1	2
Mode of delivery		
Caesarean Section	21	42
Vaginal Delivery	29	**58**
Type of contraceptive methods		
Pills	18	36
Implanone	22	**44**
IUDs	2	4
Injection	8	16
Family history of uterine fibroid		
Yes	7	14
No	43	86

Table (3): Distribution of studied women regarding to the gynecological history **(n = 50)**

Items of women knowledge regarding the uterine fibroids	Pre				Post				Chi-square	
	Correct		Incorrect		Correct		Incorrect			
	N	%	N	%	N	%	N	%	X^2	P-value
General knowledge										
It is the most common of all pelvic tumours	18	36	12	24	44	88	6	12	8.430	0.004*
Its benign tumour	15	30	21	42	46	92	4	8	25.717	<0.001*
The incidence depends on age and race	10	20	32	64	42	84	8	16	33.651	<0.001*
Causes of uterine fibroid										
Ovarian hormones	9	18	41	**82**	41	**82**	32	64	17.915	<0.001*
Symptoms of uterine fibroid										
Abnormal uterine bleeding, pelvic pain and frequent urination	12	24	22	44	40	80	13	26	13.905	<0.001*
Problem during intercourse	14	28	36	**72**	38	**76**	6	12	32.254	<0.001*
The predisposing factor of uterine fibroid										
Obesity	17	34	30	60	43	86	24	48	8.692	0.003*
Nulliparity, and a positive family history	15	30	35	70	39	78	20	40	14.111	<0.001*
Risk factors of uterine fibroid										
Inappropriate lifestyle	22	44	28	56	40	80	19	38	6.249	0.012*
Pregnancy	24	48	28	56	42	84	13	26	10.321	<0.001*
Types of uterine fibroid										
Subserosal, pedunculated and submucosal fibroids	16	32	34	68	43	86	23	46	12.510	<0.001*
Complications of uterine fibroid										
Anaemia and miscarriages	13	26	17	34	45	90	19	38	6.292	0.012*
Menorrhagia and prolapse of a submucous fibroid	14	28	36	**72**	38	**76**	6	12	32.254	<0.001*
Treatment of uterine fibroid										
Medical treatment	20	40	17	34	39	78	6	12	10.701	<0.001*
The healthy food	17	34	18	36	40	80	11	22	8.280	0.004*
The plenty of fresh and cooked green vegetables, fresh fruit and fish	23	46	21	42	38	76	13	26	5.083	0.024*

statistically significance difference at P-value 0.004

Table (4): Distribution of studied women's attitudes regarding uterine fibroid (pre-post) (N=50)

Items of Attitude of women with uterine fibroid	Pre						Post						Chi-square	
	Always		Sometimes		Never		Always		Sometimes		Never			
	N	%	N	%	N	%	N	%	N	%	N	%	X^2	P-value
Affect physical activities	27	54	15	30	8	16	3	6	5	10	42	84	47.320	<0.001*
Affect household tasks	26	52	17	34	7	14	4	8	6	12	40	80	44.564	<0.001*
limit the social life.	27	54	14	28	9	18	3	6	8	16	39	78	39.586	<0.001*
Effect on women's relationship with husband.	30	60	12	24	8	16	3	6	7	14	40	80	44.740	<0.001*
Like to drink caffeinate.	36	72	9	18	5	**10**	0	**0**	12	24	38	76	61.754	<0.001*
Eating red meat	9	18	14	28	27	54	40	80	9	18	1	2	44.842	<0.001*
Uterine makes physical activity daily.	4	8	16	32	30	60	42	84	6	12	2	4	60.437	<0.001*
Emotional stress.	32	64	12	24	6	12	3	6	8	16	39	78	49.029	<0.001*
Drinking a lot of fluids daily.	3	6	10	20	37	74	40	80	9	18	1	2	65.995	<0.001*
Regular follow-up.	10	20	17	34	23	46	37	74	10	20	3	6	32.710	<0.001*
Affect your work or normal daily activities outside the home.	29	58	16	32	5	**10**	2	**4**	7	14	41	82	55.212	<0.001*
Affect on sleep.	32	64	14	28	4	**8**	1	**2**	11	22	38	76	57.005	<0.001*
Feeling with a fear from surgery treatment.	29	58	15	30	6	12	3	6	8	16	39	78	47.455	<0.001*
Eating a lot of fatty food.	34	68	11	22	5	**10**	0	**0**	10	20	40	80	61.270	<0.001*

***statistically significance difference at** P-value < 0.001* **X^2:** Chi-square

Table 5 a: Distribution of studied women regarding practice pre-, and post sessions implementation (N=50): (N = 50).

	Pre				**Post**				**Chi-square**	
	Done		Not done		Done		Not done			
	N	%	N	%	N	%	N	%	X^2	P-value
Low back pain										
Use pillows to support the abdomen	12	24	38	76	45	90	5	10	44.431	<0.001*
Avoid lifting heavy things	10	**20**	40	80	46	**92**	4	8	52.597	<0.001*
Taking frequent breaks and avoiding getting tired	11	22	39	78	47	94	3	6	53.202	<0.001*
Expose the body to sunlight	14	28	36	72	43	86	7	14	34.313	<0.001*
Eat dairy products	10	20	40	80	46	92	4	8	52.597	<0.001*
Urinary frequency										
Avoid drinking fluids before bedtime	21	42	29	58	42	84	8	16	18.919	<0.001*
Avoid products that contain tomatoes, chocolate, artificial sweeteners, and spicy foods	20	**40**	30	60	40	**80**	10	20	16.667	<0.001*
Limiting soft drinks and caffeine	23	46	27	54	46	92	4	8	24.731	<0.001*
Abnormal uterine bleeding										
Drinking plenty of water and fluid replacement	15	30	35	70	40	80	10	20	25.253	<0.001*
Eat foods rich in iron	19	38	31	62	42	84	8	16	22.236	<0.001*
Eat fruits	14	**28**	36	72	41	**82**	9	18	29.455	<0.001*
Sleeping enough time	16	32	34	68	46	92	4	8	38.200	<0.001*

statistically significance difference at P-value <0.001

Table 5 b: Distribution of studied women regarding practice pre-, and post sessions implementation (N=50):

Items of practice of women with uterine fibroids	Pre				Post				Chi-square	
	Done		Not done		Done		Not done			
	N	%	N	%	N	%	N	%	X^2	P-value
Constipation										
-Eat vegetables and grains	20	40	30	60	40	80	10	20	16.667	<0.001*
-Intake of fiber diet (e.g. legumes, beans, chickpeas, lentils and peas, etc.)	14	**28**	36	72	44	**88**	6	12	36.946	<0.001*
- Practice physical activity daily	23	46	27	54	42	84	8	16	15.868	<0.001*
- Drinking natural herbs (e.g. omega 3, chamomile, and parsley, etc.)	18	36	32	64	40	80	10	20	19.869	<0.001*
Obesity										
-Eat high sugar diet	19	38	31	62	40	80	10	20	18.231	<0.001*
-Eat fatty food	22	44	28	56	44	88	6	12	21.569	<0.001*
-Prefer salty food	18	**36**	32	64	42	**84**	8	16	24.000	<0.001*
-Maintain a healthy weight	21	42	29	58	41	82	9	18	16.978	<0.001*
using a hormonal contraceptive methods	15	**30**	35	70	40	**80**	10	20	25.253	<0.001*
Go to health care provider immediately if any symptoms of uterine fibroids occur	17	**34**	33	66	41	**82**	9	18	23.645	<0.001*

*statistically significance difference at P-value <0.001

Table 6: Distribution of studied women regarding the level of Practice pre, and post-awareness sessions (N = 50)

Items of practice of women with uterine fibroids	Pre	Post	Paired t-test	
	Mean±SD	Mean±SD	t	P-value
Low back pain	2.12±1.17	4.34±1.14	9.619	<0.001*
Urinary frequency	1.30±0.86	2.68±0.68	8.864	<0.001*
Abnormal uterine bleeding	1.46±0.99	3.48±1.11	9.581	<0.001*
Constipation	1.70±1.11	3.42±0.95	8.321	<0.001*
Obesity	1.68±1.15	2.92±1.35	4.937	<0.001*
Using a hormonal contraceptive methods	0.42±0.50	0.78±0.42	3.911	<0.001*
Go to health care provider immediately if any symptoms of uterine fibroids occur	0.26±0.44	0.76±0.43	5.717	<0.001*

>0.05 Non significant <0.05 significant <0.001* High significant*

statistically significance difference at P-value <0.001

Table (6) shows a statistically significant improvement in women's practices regarding all items of practice post sessions implementation with (p-value < 0.001), and it was noticed that less than one quarter (22%) & about one-third (30%) respectively, of the studied women had good practices regarding low back pain and using a hormonal contraceptive method during pretest, which improved to become the majority (80% & 90%) respectively, post sessions implementation.

Table 7: Correlation between knowledge, attitude and practice scores

Items knowledge and attitude	Total knowledge score		Total attitude score	
	R	P-value	R	P-value
Pre				
Total attitude score	0.404	<0.001*		
Total practice score	0.430	<0.001*	0.808	<0.001*
Post				
Total attitude score	0.807	<0.001*		
Total practice score	0.460	<0.001*	0.568	<0.001*

statistically significance difference at P-value<0.001

Table (7): illustrates that there was a strong positive correlation between total knowledge, attitude and practices pre and post-test.

Discussion:

Uterine fibroids are benign tumours that grow in the wall of the uterus. uterine fibroid is very common, especially among women in their 30s, 40s, and 50s. many women with fibroid do not experience any symptoms, but for some women, uterine fibroid causes heavy, painful periods, pelvic pain, frequent urination, and other discomfort. uterine fibroids, also known as uterine leiomyomas, are non-cancerous growths that develop in the muscular wall of the uterus. uterine fibroid can range in size from small, pea-sized growths to large, bulky masses that can distort the shape of the uterus [12]. Previous studies addressing maternal age and perinatal complications have compared outcomes among various maternal age groups. clinical experience has raised the question of whether complications are related to age or parity. the objective of the current study was to identify whether older primiparas have more complications than women who continue to deliver children into late reproductive age. older gravidas are at increased risk for obstetric and perinatal complications, such as stillbirth, IUGR, gestational diabetes, pre-eclampsia, and cesarean section. we found that pregnancy complications typical to older parous women are significantly more common among primiparas, indicating that not just older age, but having a first child relatively late in the reproductive period contributes to adverse pregnancy outcomes. in addition, multiparity appears to be protective from some of the complications attributed to older maternal age [13]. From this concept of the importance of improving awareness of women about uterine fibroid, the present study aimed to raise middle-aged women's awareness of uterine fibroid at Fayoum General Hospital and University Hospital according to the current study findings regarding the middle-aged women's marital status, the majority were married. The findings agree with *Elsaied et al., [14]* in Egypt, Assiut, who conducted a study under title" effect of uterine fibroid on women health-related quality of life and nursing management for women under the study about two-thirds of them were housewives. According to the current study findings regarding middle-aged women's obesity nearly more than half of the studied sample were obese and overweight, this may be particularly true for middle-aged women with low education levels. The findings agree with [13]*:* in Saudi Arabia who conducted the study under the title "association of health and lifestyle factors with uterine fibroid among Saudi women" and found that more than half the participants were obese. This may be due to a variety of factors, including poor diet, lack of physical activity, and hormonal imbalances. According to the current study findings regarding middle age women's awareness it was observed that sources of women discretionary information about medical team uterine fibroid from family less than one-fifth of middle age women than peers less than one fifth reported, mass media four hundred per cent than more than three-fifth reported medical team is the source of information. The findings disagree with *Akpenpuun et al., [16]* in Nigeria.who conducted study under tittle Awareness, knowledge and Perceived Attitude towards Women living with Fibroid in Benue state" found that a high percentage of respondents got information about fibroid from friends, family and electronic media with the majority and less than two-thirds of the respondents respectively . From the researcher's point of view, maybe due to, the family and friends don't have enough knowledge about uterine fibroid to provide the women with suitable information and the women don't have enough experience on the internet to get correct information about uterine fibroid, aren't following the medical provider regularly to get the best information about uterine fibroid so the researcher advice to arrange more scientific information through health care services, TV and social media to improve their knowledge

It is not uncommon for women with uterine fibroid to have a normal obstetric and menstrual history, while fibroid can cause a variety of symptoms, such as heavy menstrual bleeding, pelvic pain, and pressure on the bladder or rectum, but according to the current study findings less than half of the sample of the women with fibroid do not experience any symptoms at all except only more than one fifth have heavy bleeding during menstruation. The findings also agree with Abd El-Hakim, et al., [9] who conducted a study in Egypt on the "effect of instructional sessions on knowledge regarding leiomyomas among women in reproductive age" and found that most women (after education) were aware that heavy bleeding during menstruation.

This finding also disagrees with *Al-Talib et al. [17]* in Italy under the title "Assessment of women knowledge

regarding pathophysiology and possible iatrogenic causes of leiomyoma" who found that an abnormal menstrual cycle was present in a third of the study subjects. According to the current study findings regarding to gynecological history, the results of the present study revealed that slightly less than of the studied sample doesn't have gynecological half

From the researcher's point of view, uterine fibroids are a common type of non-cancerous growths that develop in the uterus of many women during their reproductive years, while fibroids can cause a variety of symptoms, such as heavy menstrual bleeding, pelvic pain, and pressure on the bladder or rectum, many women with fibroid do not experience any symptoms at all. The previous result agreed with *Rumun, [18]* in Nigeria who found that the majority of women were aware that some women with uterine fibroids may have no signs or symptoms. The mentioned result disagreed with *Millien, [19]:* in mirebalais haiti under the title of "assessing prevalence, complications, and risk factors of uterine fibroid and perceived impact on women lives in rural haiti," who found that most women were aware that several debilitating complications such as chronic pelvic pain and anaemia are complications of uterine fibroid. According to the current study findings regarding to knowledge about middle-aged women with uterine fibroid, it was observed that less than two-thirds of middle age women had unsatisfactory knowledge level pre sessions, this may be due to a lack of women's knowledge and health awareness regarding uterine fibroid and prevention so women education uterine fibroid, and increasing the number of educated individuals, will significantly increase early detection of uterine fibroid cases, this will lead to a significant decrease of morbidity and mortality rates. The majority of the study women of middle-aged women had satisfactory knowledge level post sessions; this improvement reflects the effect of the awareness sessions.

The findings agree with *Abd El-Hakim, et al [9]* who conducted a study in Egypt on the "effect of instructional sessions on knowledge regarding leiomyomas among women in reproductive age" and found that the majority of women had a poor level of knowledge about uterine fibroid before implementing the instructional sessions, while this level improved to a good level after implementing the instructional sessions. Also this study comes by *with* ***Abd El*** *Rahman, et al, [20]* in Egypt, under the title "effect of social media-based instructional sessions on knowledge and practice among women undergoing hysterectomy Egyptian. who found that the majority of the women had inadequate knowledge of fibroid uterus pre-education. While the majority of respondents had adequate to moderate knowledge of fibroid uterus following education. According to the current study findings regarding to gynecological history the results of the present study revealed that the majority of the studied sample doesn't have gynecological problem. The mentioned results are agreed with Rumun, [18] in Nigeria who found that the majority of women were aware that some women with uterine fibroid may have no signs or symptoms that was disagreed with Millien, [19] in Mirebalais ,Haiti under the title of "assessing prevalence, complications, and risk factors of uterine fibroid and perceived impact on women lives in rural Haiti," who found that most women were aware that several debilitating complications such as chronic pelvic pain and anemia are complications of uterine fibroid. According to the current study findings regarding to total attitude of middle-aged women with uterine fibroid it was observed that two-thirds of middle-aged women had negative attitude toward uterine fibroid pre-sessions while, more than four fifth of them had positive attitude level toward uterine fibroid post sessions. The findings agree with Sharif, et al., [21] "who found that, the majority of the study women have positive attitude towards treatment after counseling of fibroid According to the current study findings regarding to middle-aged women there was highly statistically significant between knowledge, practice and attitude of women with uterine fibroid pre, and post sessions implementation. It is possible that the sessions had a significant impact on the knowledge practice and attitude of women with fibroid, as measured by a pre- and post-sessions survey, the sessions provided women with information about the causes, symptoms, and treatment options for uterine fibroid. the information could have corrected any misconceptions or misunderstandings that the women may have had about fibroid and helped them to make more informed decisions about their health, which could lead to more positive attitudes towards their condition and their ability to manage it. The findings also disagree with *Abd El-Hakim, et al., ([9]* who conducted a study in Egypt on "effect of instructional sessions on knowledge regarding leiomyomas among women in reproductive age" who found that highly statistical significance differences between women knowledge level before and after implementing the instructional sessions. The study come in accordance with *Akpenpuun, et al., [16]* in Nigeria. who under tittle "awareness, knowledge and perceived attitude towards women living with fibroid in benue state" and found that there was a significant association between experience of fibroid and knowledge of the causes of fibroid. According to the current study finding regarding to middle-aged women there was highly statistically significant with positive correlation between knowledge, attitude and practice before and after implementing the sessions. According to the current study findings regarding to total attitude of middle-aged women with uterine fibroid it was observed that two third of middle age women had negative attitude toward uterine fibroids pre sessions while, more than four fifth of them had positive attitude level toward uterine fibroid post sessions. The findings agree with with *Sharif, et al., [21]* "who found that, the majority of the study women have positive attitude towards treatment after counseling of fibroid.Also in another study conducted by *Akpenpuun, et al., [16]* in Nigeria.who under tittle "awareness, knowledge and perceived attitude towards women living with fibroid in benue state" and found that the general attitude of the women living with fibroid is negative with about three quarter of the stated that women living with fibroid should not be treated. From researcher point of view the, women with lower levels of education may be less likely to have access to accurate information about uterine fibroid and their symptoms. the lack of information may lead to confusion, fear, and negative attitudes towards the condition. also although women living in urban areas may have better access to healthcare than those in rural areas, but access to quality healthcare can still be limited by factors such as cost, insurance coverage, or transportation. in

addition to women who have had negative experiences with healthcare providers may develop negative attitudes towards healthcare in general, including towards conditions such as uterine fibroid. From researcher point of view it is not surprising to see a positive correlation between knowledge and attitude before and after implementing a sessions because knowledge can often influence attitudes. in the case of uterine fibroid, a lack of knowledge about the condition can lead to misconceptions, fear, and stigma. however, when women are provided with accurate and reliable information about fibroid, it can lead to increased understanding, reduced fear, and more positive attitudes towards the condition. From researcher point of view it is not surprising to see a positive correlation between knowledge and attitude before and after implementing a sessions because knowledge can often influence attitudes. in the case of uterine fibroid, a lack of knowledge about the condition can lead to misconceptions, fear, and stigma. however, when women are provided with accurate and reliable information about fibroid, it can lead to increased understanding, reduced fear, and more positive attitudes towards the condition. Also, lack of knowledge about the condition can lead to a lack of understanding about available treatment options and self-care practices. however, when women are provided with accurate and reliable information about fibroid, it can lead to increased understanding, which in turn can lead to changes in attitude and practices. The findings also agree with *Rumun, [18]* in Nigeria in who found that, a weak but significant correlation between the women score on knowledge and attitude, and between attitudes and practice, no significant correlation was found between knowledge and practice, we used a cut-off of ≥6 to define a "sufficient" score on knowledge, ≥4 for attitude, and ≥4 for practice. according to the current study findings regarding middle-aged women, was highly statistically significant between practice pre and age, while was just statistically significant with level of education, occupation, and body mass index, also there was statistically significant between practice post with age. The findings also agree with *Sharif, et al [21]* and found that for body mass index, study have found an association between obesity and an increased incidence of uterine fibroid, this apparent association between obesity and fibroid. May be related to hormonal factors associated with obesity, but other pathologic pathways might also be involved. several relevant hormonal associations with obesity are known. also, the findings also disagree with *Abd- El Rahman, et al [9]* who found that, there was no significant association between the personal data of women and practice scores.

4. Conclusion:

The result concluded that less than two third of middle-aged women had unsatisfactory knowledge levels pre-sessions. while most middle-aged women had satisfactory knowledge level post sessions. Additionally, more than two-thirds of the studied women had a negative attitude toward uterine fibroid pre sessions while, the majority of women had a positive attitude level toward uterine fibroid post-sessions, while, two third of middle age women pre instructional sessions had an unsatisfactory level of practice while the majority of middle age women post instructional sessions have a satisfactory level of practice. also, highly statistically significant between knowledge, practice and attitude of women with uterine fibroid pre, and post-instructional sessions implementation. Improvement in the total level of middle-aged women's awareness regarding knowledge, attitude and practices about uterine fibroid after the implementation of instructional sessions than before. the results of the current study are supported by hypothesis.

Recommendations

Based on the results of the present study, the following recommendations are suggested

- Providing pamphlets and booklets for women to get adequate information about up-dated recommendations about uterine fibroid
- Providing programs, posters, and leaflets for mothers about the utrine fibroid.
- Screening programs with high coverage of the "at risk" group for reducing the number of new cases with fibroid and the decrease the mortality rate associated with it.
- Replication of the study on a larger probability sample from other geographical locations in Egypt to grantee the generalizability of the study.
- Counseling programs for women about uterine fibroid in the hospitals and medical centers very important for them to adopt with their aliments.

Further recommendations

Development educational programme for maternity nurses regarding uterine fibroid.

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