Women Awareness and Preventive Measures Practice Regarding Pelvic Organs Prolapse

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Abstract

Background: Pelvic organs prolapse is considered one of the most common causes of reproductive health problem which influences the women's quality of life. **Aim of the study:** Was to assess women awareness and preventive measures practice regarding pelvic organs prolapse. **Research design:** A descriptive research design was carried out in this study. **Setting:** The study was conducted at antenatal care unit in Al-Nahal medical center which affiliated to the Ministry of Health and population in Zagazig city. **Subjects:** Purposive sample of 450 pregnant women who attended the selected setting. **Tools of data collection:** Four tools were applied in the current study; structured interviewing questionnaire, pelvic organs prolapse awareness questionnaire, assessment of POP preventive measures practices utilization by studied women and assessment of women attitude regarding Kegal exercise. **Results:** The majority of studied women had low level of total awareness regarding pelvic organ prolapse and had unsatisfactory preventive measures practices. **Conclusion:** There was highly significant positive correlation between total women's awareness, preventive measures practices and their attitude regarding pelvic organs prolapse. **Recommendation:** Implementation of educational nursing program with a learning booklet for pregnant women should be conducted in order to increase their level of awareness and preventive measures practice regarding pelvic organs prolapse.

Key words: Awareness, Preventive Measures, Pelvic Organs Prolapse.

Introduction:

Women's pelvic floor problems caused Pelvic organ prolapse (POP) which is a downward displacement of the uterus, vaginal vault and anterior or posterior vaginal walls into or through the vagina [1]. The most prominent risk factor causing pelvic organ prolapse is pregnancy as it induces normal physiological changes as weakness in pelvic floor musculature and connective tissue [2]. Women awareness regarding pelvic organ prolapse is low despite its high prevalence [3].

Globally, the prevalence of POP ranged from 3.0 % to 50.0 % [4]. In Egypt the prevalence of POP was 56.0% while the global prevalence of uterine prolapse was 2.0-20.0% in women under age 20 [5]. Prolapse affects 3.3 million women in 2010 and it will reach 4.9 million in 2050 [6]. Uterine prolapse represent 11.4% in the United States, 5.5% in Italy and 53.6% in Iran. Globally, surgery for uterine prolapse accounts 16.2% of prolapse-related hospital admissions according to the Oxford Family Planning Association UK [7].

All circumstances cause weakness of the connective tissue of the pelvic floor as pregnancy and birth might result in POP through the vaginal walls and pelvic floor [8]. Other factors for POP includes aging and factors which increase intra-abdominal pressure (obesity, chronic cough and chronic constipation) , race, gender, genetic factors, family history, smoking, infection, and neuropathy [9].

Pelvic organ prolapse can be classified as anterior segment prolapse, which is a prolapse of the anterior vaginal wall frequently linked to the descent of the bladder (also known as a cystocele), urethra (commonly known as an urethrocele), or both (called cystourethrocyle). Decline of the rectum is linked to posterior vaginal wall prolapse (or rectocele). The apex of the vagina descended into the lower vagina, which is referred to as apical compartment

prolapse (uterine prolapse, vaginal vault prolapse). The uterus and cervix, the cervix alone, or the vaginal vault can serve as the apex. Through the vaginal introitus, the prolapse might involve all three compartments, as in procidentia [10].

Pelvic organ prolapse is also categorized according to its severity into four levels, from low to severe [11]. Women who experience minor cases may not even be aware that something has changed until their gynecologist notices it during a normal pelvic check [12]. POP symptoms can include gastrointestinal, urinary, and vaginal issues. Dyspareunia and a pressure-like sensation, as well as a bulge that may be seen or felt, are examples of vaginal symptoms. Urinary symptoms include incontinence, frequency, and insufficient bladder emptying. Bowel symptoms include straining while urinating, incontinence of flatus or faeces, and a sense of incomplete emptying [12].

There are many treatment options for prolapse depending on its severity. For mild to moderate prolapse, conservative techniques like electrical stimulation, pelvic floor muscle training and biofeedback are typically used. Different kinds of surgery used for more severe prolapse. Various interventions in repairing prolapse evaluated by reduction of POP symptoms prolapse recurrence rate, and enhancement of quality of life [12].

Adequate knowledge regarding POP is very essential for women to seek medical help. Feeling of shame and thinking that POP is natural condition or there is no treatment for it are the cause for not seeking help [11]. The nurse has a crucial role in both prevention and detection of prolapse. For the best understanding and care, close communication with the women, gynecologist and nurse is crucial. The nurse should counsel the women to avoid heavy lifting and prolonged standing, conduct frequent pelvic floor exercises, and maintain a healthy weight [13].

Significance of the study:

Pelvic organ prolapse is a significant health problem around the world. It affects women physically, psychologically, sexually and can affect their ability to work and interact with others. It is not regarded to be a life-threatening disorder, but it can still have an impact on these aspects of their lives. Infections of the urinary tract and the reproductive system are also at increased risk. In Egypt, 25.75% of 2000 females from various governorates had pelvic organ prolapse in the first year after giving birth [14]. A crucial role in POP detection, prevention and treatment is performed by maternity nurses. Therefore it is important to assess women awareness and preventive measures practices regarding POP.

Aim of the study:

Was to assess women awareness and preventive measures practice regarding pelvic organs prolapse.

Research Questions:

- What was the women awareness regarding pelvic organs prolapse?

- What were the preventive measures utilized by women regarding pelvic organs prolapse?

Subjects and Methods:
Research design:

To conduct this study, a descriptive research design was used.

Study setting:

The current study was carried out at antenatal care unit in Al-Nahal medical center which serves the people of Zagazig city and is affiliated with the Ministry of Health and population in Zagazig city.

Study Subjects and Sample type:

Purposive sample of pregnant women who attended the above selected setting for a period of 6 months "from the first of February 2022 to the first of august 2022 was used in this study. They were 450 and fulfilling the following **inclusion criteria:**

- Women who had previous repeated normal vaginal delivery.

- Women who were free from any psychological, gynecological problems and any previous pelvic surgery.

Tools of data collection:

The researchers created four tools based on the relevant literature to fulfill the current study's objectives:

Tool I: A structured Interviewing questionnaire: It consisted of two parts which includes;

Part (I): Demographic characteristics as age, residence, level of education...etc.

Part (II): Women's history as medical, obstetric and family history.

Tool II: Pelvic organs prolapse awareness questionnaire: It was adapted from **Lyatoshinskaya et al** [15]. It translated into Arabic to assess women awareness regarding pelvic organs prolapse. It included 62 questions about women's awareness regarding the eight main items of pelvic organ prolapse as definition, stages, risk factors, symptoms, types, diagnosis, prevention and treatment.

Scoring system of Tool II:

The tool included 62 questions yielded in a total of 62 grades, with the correct response receiving one point and the incorrect response receiving zero point. These results were added up to create a percent score. It was put under 3 categories:

- **High level of awareness** if score > 75.0%.
- **Moderate level of awareness** if score from 50.0% -75.0%.
- **Low level of awareness** if score < 50.0%.

Tool III: Assessment of POP preventive measures practices : It was adapted from **Abd El Aziz and Elsayed** [16] and modified by the researchers to assess preventive measures practices regarding pelvic organ prolapse. It included 15 questions about three main preventive measures practices:

1. **Dietary management:** It included 5 questions related to diet as drinking lots of water throughout the day, eating plenty of fruits as apples…etc.
2. **Kegel exercise:** It included 7 questions as finding the right muscles and getting comfortable.
3. **Daily activities modification:** It included 3 questions as avoiding lifting heavy things, avoiding hard work…..etc.

Scoring system for tool III:

The scale contained 15 items, each item was evaluated as "Comply" which took two score, "Sometimes" took one score and "Not comply" took zero score, the total scores of the scale were 30 grades. These results were totaled and transformed into a percent score. It was divided into two groups:

- **Satisfactory practices** if the score was higher than 70.0%.
- **Unsatisfactory practices** if the score was below 70.0%.

Tool IV: Assessment of women attitude regarding Kegal exercise: It was adapted from **Hasan et al** [17] and modified by the researchers. The scale contained 15 items, each item was evaluated by "Agree" which took two score, "Unsure" took one score and "Disagree" took zero score. The total scores of the scale were 30 grades. These scores were totaled and transformed into a percent score. It was divided into two groups:

- **Positive attitude** if score ≥ 60.0%.
- **Negative attitude** if score <60.0%.

Content Validity and Reliability:

A jury of five experts in the fields of obstetrics and gynecologic nursing and obstetric and gynecologic medicine examined the tools' content validity for comprehensiveness, appropriateness, and intelligibility. The panel evaluated the tools' face and content authenticity. Minor but necessary changes were mostly made by rephrasing a few words and modifying a few things.

Tools were tested for their reliability using Cronbach's alpha. The values were revealed as follow: pelvic organs prolapse awareness questionnaire (0.869). Assessment of POP preventive measures practice (0.837). Assessment of women attitude regarding kegal exercise was (0.917).

Field work:

The researchers used textbooks, journals, and scientific publications to examine relevant material from recent studies, both domestically and internationally. Then, the tools were ready and the researchers started the pilot study. Data collection lasted for a period of 6 months "from the first of February 2022 to the first of august 2022. They were 450 pregnant women in this period. The formerly mentioned setting was visited by the researchers 3days per a week (Sunday, Tuesday and Wednesday) from 9 a.m. to12 p.m. because these were the days in which

women attended for antenatal care. The researchers initially introduced themselves and gave pregnant women a brief explanation of the study's goal.

The researchers met pregnant women and obtained their verbal agreement to participate. At the interview the researchers welcomed the women, introduced themselves to all women included in the study and distributed the questionnaire to them and answered any explanation needed. Each interview took about 10-15minutes. The average numbers of pregnant women met by the researchers per day was 6 women. After data collection finished, the researchers analyzed it.

Pilot study:

It was conducted on the 10.0% (45 pregnant women) of the sample who were not included. The main goals of the pilot study were to evaluate the forms' readability, viability, applicability, item arrangements, and item counts, as well as to calculate how long each form would take to complete.

Administration and Ethical consideration:

The appropriate authorities for the research setting received formal permission to collect data through an official letter sent by the Faculty of Nursing at Zagazig University. The study has been approved by Zagazig University, faculty of nursing Ethical committee by ethical code **(M.D.ZU.NU.R/155/12/10/2021)**. All ethical issues were taken into account throughout the entire study; the researchers upheld the subjects' confidentiality and anonymity. Before pregnant women participation in the study, the researchers introduced themselves to the pregnant women and gave each one a brief explanation of the nature and purpose of the study. After the oral agreement process, the pregnant women were voluntarily recruited. Additionally, pregnant women were aware that all information acquired for the study was confidential and would only be utilized for research. They also had the option to leave the study at any time.

Statistical analysis:

Microsoft Excel Program and the Statistical Package for Social Science (SPSS) version 25 were used to conduct the statistical analysis of the data descriptive statistics was used to present data, for categorical data, frequencies and percentages were used, while for quantitative data, the arithmetic mean (X) and standard deviation (SD) were used. Chi square test (X) 2 was used to compare qualitative variables and see whether there was a correlation between the two. P-value > 0.05 was considered not significant (NS), P-value ≤ 0.05 was considered significant (S) and P-value ≤ 0.01 was considered highly significant (HS).

Results:

The demographic details of the women who participated in the study are shown in **Table I.** It makes clear that 38.2% of the women in the study were between the ages of 30 and 35, with a mean age of 25.61 3.96 years and a standard deviation of 3.96 year. In addition, 44.7% of the women in the study had completed their secondary school. 17.8% and 13.3% of them had preparatory and primary education, respectively. Also, 56.9% of them were residing in urban areas. Moreover, 20.9% of the studied women were employees, 61.7% of them work hard. Furthermore, 61.3% of the studied women, their income only meet their life expenses.

Table 2 shows the obstetric history of the studied women. It reveals that 50.7% and 52.9% of the studied women have two gravida and one para respectively. Furthermore, the mean gestational age of the women in the study was 24.73 ± 9.003 weeks, and it was greater than 24 weeks for 61.3% of the women. Also, 75.1% of them had an interval of 2-5 years between births. Moreover 84.4% and 78.2% of the studied women have child by head during previous labor and had normal vaginal delivery, respectively.

Table 3 shows that, 90.2%, 89.6%, 87.8, 86.2%, and 80.9 % of the studied women don't know stages, treatment, risk factors, prevention and the definition of pelvic organ prolapse, respectively. Additionally, 87.8% of them are unaware of the urinary symptoms of POP Moreover, 92.9% of them don't know anterior vaginal wall prolapses.

Figure 1 demonstrates that 75.6% of the women in the study had low level of overall awareness of POP. While 15.5% of them had moderate level. Also 8.9% of them had high level.

Table 4 illustrate that 68.2% and 69.3% of the studied women don't eat plenty of fruits and veggies and don't avoid foods that are low in fiber in case of constipation, respectively. Also 63.3% of them don't avoid foods which increase weight, constipation, gas and bloating.

Table 5 shows that 87.6% and 88.2% of the studied women don't find the right muscles and doesn't resting though their forearms and knees especially if their wrists are sore with carpel tunnel problems, respectively. Also 85.1% & 89.8% of them don't relax the muscles and count 3 to 5 seconds and don't perform Kegal exercise 10 times, 3 times a day (morning, afternoon, and night) respectively.

Table 6 display that 47.3% of the studied women sometimes avoid lifting heavy things. Also, 45.5% of them sometimes avoid hard work.

Figure 2 shows that 76.0% and 71.1% of the studied women had unsatisfactory practices regarding dietary management and daily activities modification, respectively. Also 95.6% of them had unsatisfactory practices regarding Kegal exercise.

Figure3 shows that, 83.1% of the studied women had unsatisfactory preventive measures practices regarding pelvic organs prolapse While 16.9% of them had satisfactory practices.

Table 7 shows that 72.2% and 65.8% of the studied women unsure that Kegal exercise should be performed by all women, particularly pregnant and postpartum women, regardless of whether they have PFMD or whether Kegal exercise causes abortion. Also, 58.4% and 65.8% of them unsure that, Kegal exercise is hard work and labor will be very easy if they practice Kegal exercise, respectively. Moreover 51.3% and 52.2% of them unsure that Kegal exercise decrease postpartum complication and occurrence of pelvic organ prolapse during and after pregnancy respectively.

Figure 4 shows that, 67.8% of the studied women had negative attitude regarding Kegal exercise. While 32.3% of them had positive attitude.

Highly significant positive correlation was presented in **Table 8** between total women's awareness, preventive measures practices and their attitude regarding pelvic organ prolapse.

Discussion:

Women's reproductive health needs to receive significantly greater attention from the start of pregnancy until menopause to avoid potential difficulties. POP is the common gynecological condition especially in multiparous and postmenopausal women. Women who are unaware of Pelvic floor problems possibly hesitant to look for expert help, leading to their continued dissatisfaction. Despite its significant incidence, POP is a reproductive health issue that has not gotten enough attention **Gjerde** [18].

The most important healthcare providers for women are nurses, who should be adequately aware of genital prolapse in order to assist patients in communicating their needs and emphasizing the value of early detection and treatment **Rashad** [15].

Regarding the study women's demographics, the results of the current study showed that, on average, more than one-third of them were between the ages of 30 and less than 35 with mean 25.61 ± 3.96 years. This result was in line with research done by **Liu et al.** [20] in Singapore who discovered that the mean age of the women in the study was 30.6 years old. Additionally, according to a study done by **Deoraoji Taksande et al.** [21] 43.3% of women are between the ages of 33 and 40

Regarding residence, the current study indicated that more than half of the women in the study were residing in urban areas. This result was in accordance with a study in Egypt conducted by **Saad et al.** [22] who found that 52.0% of the women were living in urban area. In contrast, a study carried out by **Muche** [23] who found that 61.9% of respondents were rural residents.

Related to occupation, the current study declared that about one fifth of the women in the study were employees and less than two thirds of them worked hard. Similarly, a study conducted by **Belayneh** [24] who reported that 11.7% of the studied women are working and 51.1% of them worked hard and carrying a heavy objects.

According to the present study's findings about their educational status, less than half of them had secondary education. Also less than one fifth of them had preparatory and primary education. These findings were in line

with a study carried out by **Parajuli and Lawot** [25] who reported that 81.41% of the studied women were literate. Conversely, **Dheresa et al.** [26] who reported that 79.0 % of the women had not attended school. This discrepancy might be due to the variations in the study population's characteristics.

Regarding women's obstetric history in this study, more than half of them have two gravida and one para. In the same line, a study conducted by **Farrag et al.** [7] who asserted that 72.5% of the women's gravity and parity were between 1-3. In contrast, **Anozie Okechukwu et al.** [27] declared that 60.5% of the studied women were grand multiparous. Moreover, the present study clarified that about three quarters of the studied women had an interval of 2-5 years between births. This result matched with **Beketie et al.** [28].

In terms of the studied women's awareness regarding POP, the present study illustrated that more than four fifth of the studied women don't aware about definition, stages, risk factors, symptoms, types, diagnosis, prevention and treatment of pelvic organ prolapse. This may be related to inadequate antenatal care and counseling which is associated with poor awareness and knowledge about pelvic organ prolapse.

This result was supported by **Liu et al.** [20] who stated that the knowledge score for pelvic organ prolapse was the lowest (35.3%) among the studied women. **Toprak Celenay et al.** [3] *added* that awareness was low among most of women in all trimesters. In the same line, **Mckay et al.** [29] who studied "Knowledge of pelvic floor disorders in obstetrics" declared that most of the studied women showed a lack of knowledge proficiency about pelvic organ prolapse symptoms (70.6%).

Concerning the studied women's awareness regarding diagnosis, prevention and treatment of pelvic organ prolapse, the current study portrayed that most of them didn't aware them. This finding matched with **Liu et al** [20] who reported that most of women (78.0%) had poor knowledge regarding diagnosis of pelvic organ prolapse.

It was interesting to find in the present study result that slightly more than three quarters of the studied women had low level of total awareness regarding pelvic organ prolapse, while less than one fifth of them had moderate level. Also, less than one tenth of them had high level. This may be related to poor education of the pregnant women and ineffective counseling during pregnancy. As well, lower level of education, lack of exposure to social media or they may be ignorant about women's health issues. Fear of humiliation inhibits women's care-seeking behavior about private problems.

This result was in accordance with **Khanal** [30] who conducted a study in Daulichaur VDC of Bajhang district. They studied found that majority (73.5%) of the re-spondents had low knowledge level, while very few of them (3.5%) had high knowledge level about and 23.0% of them had moderate knowledge level regarding uterine prolapse.

In relation to the studied women's practices regarding dietary management, the present study demonstrated that more than two thirds of them didn't eat plenty of fruits and veggies and didn't avoid foods that are low in fiber in case of constipation. Also, nearly two thirds of them didn't avoid foods which increase weight, constipation, gas and bloating. This may be due to inadequate level of awareness of the pregnant women regarding dietary management. These findings were against **Rajan** [31] who declared that 76.0 % of respondents knew that constipation which can cause prolapse can be prevented by consuming fiber-rich diet.

Regarding the studied women's practices towards Kegal exercise, the current study clarified that most of them didn't find the right muscles and didn't resting though their forearms and knees especially if their wrists are sore with carpel tunnel problems. Also, most of them didn't relax the muscles and count 3 to 5 seconds and didn't repeat Kegal exercise 10 times, 3 times a day. This finding was partially similar with **Goodridge** [32] who mentioned that only 42.6% of participants having ever performed kegal exercise and 58.0% of them had been taught how to perform kegal exercise. Of those who reported performing Kegal exercise, when asked how frequently they did so, the majority responded "when I remember" (50.9%).

Concerning the studied women's practices regarding daily activities modification, the present study indicated that nearly half of them sometimes avoid lifting heavy things and sometimes avoid hard work. This result was in a harmony with a study carried out by **Shrestha** [33] who reported that 37.0% of the studied women had comprehensive knowledge of uterine prolapse preventive measures.

Moreover, the present study highlighted that about three quarters of the studied women had unsatisfactory practices regarding dietary management and daily activities modification. Also, the majority of them had unsatisfactory practices regarding kegal exercise. These findings were consistent with **Snyder** [34] who stated that 70.0% of women had unsatisfactory practices regarding pelvic organ prolapse preventive measures.

Regarding of the studied women's total preventive measures practices regarding pelvic organs prolapse, the current study revealed that most of them had unsatisfactory preventive measures practices, while less than one fifth of them had satisfactory practices. This may be related to lack of awareness and inadequate counseling. Likewise, **Okeke et al.** [35] found that only 38.37% practiced the preventive measures.

According to the studied women's attitude towards kegal exercise, the present study illustrated that nearly three quarters and almost two thirds them were unsure that kegal exercise should be done by all women especially pregnant and postnatal women whether or not they have PFMD and Kegal exercise lead to abortion, respectively. This result was partially in agreement with **Temtanakitpaisan et al.** [36] who reported that half of the pregnant women recognized pelvic floor muscle training (PFMT). However, only 27.9% were perceptive, indicating that they lack the relevant detailed information about PFMT.

In addition, the current study displayed that more than half and almost two thirds of the studied women were unsure that, kegal exercise is hard work and labor will be very easy if they practice kegal exercise, respectively. Somewhat parallel to these findings, a study conducted by **Ashok and Mohamed** [37] who stated that 52.0% of

participants had a positive attitude towards postnatal exercise. Also, the present study showed that more than half of the studied women unsure that, kegal exercise decrease postpartum complication and occurrence of pelvic organ prolapse during and after pregnancy. These findings were contradicted to **Majeed et al.** [38] who declared that 74.2% of the study population believed that uterine prolapse can be prevented through PNE. 99.2% of them agreed that PNE is necessary. This discrepancy may be due to differences between the study samples characteristics and level of knowledge.

Concerning, the studied women's total attitude regarding Kegal exercise, the present study portrayed that more than two thirds of them had negative attitude, while nearly one third of them had positive attitude regarding Kegal exercise. This result was congruent with **Hasan et al** [17] who mentioned that 87.2% of the females had a negative attitude towards kegal exercise. This may be related to inadequate awareness regarding kegal exercise.

Finally, the present study highlighted that there was highly significant positive correlation between total women' awareness, preventive measures practices and their attitude regarding pelvic organ prolapse. This can be interpreted as a decision of the practice of preventive measures depends on women's awareness of its benefits. In addition, it was found that women's knowledge and attitudes were the crucial factors in determining whether to perform preventive measures. These results were in a harmony with a study conducted by **Chen et al.** [39] who clarified that respondents' pelvic floor disorder related practice were affected not only by their knowledge and attitude (P < 0.001). **Majeed et al.** [38] .added that there was association between knowledge, attitude and practice shows that there was significant correlation between knowledge and practice (0.478), attitude and practice (0.220) and between attitude and knowledge (0.083).

Conclusion:

The finding of the study concludes that three-quarters of the women in the study had low level of total awareness regarding pelvic organ prolapse. Most of the women who participated in the study had unsatisfactory preventive measures practice for pelvic organs prolapse.More than two-thirds of the women in the study had negative attitude regarding Kegal exercise. There was highly significant positive correlation between total women' awareness, preventive measures practices and their attitude regarding pelvic organs prolapse.

Recommendations:

The researchers made the following suggestions based on the findings of the study:

- An educational nursing program with a learning booklet should be implemented to pregnant woman to raise her level of awareness and practice of preventive measures related pelvic organ prolapse.
- More research can be performed using a bigger sample size to popularize the results.

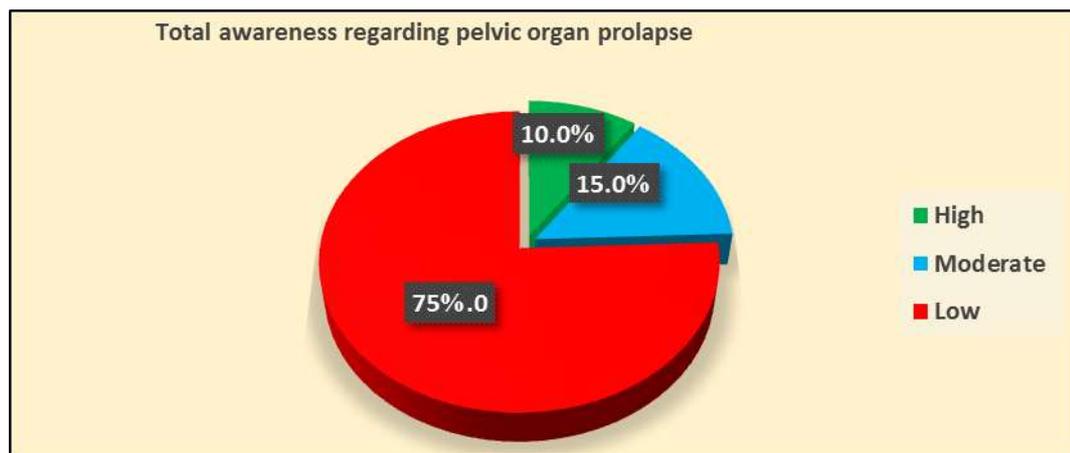**Table (1): Distribution of the studied women according to their demographic characteristics (n=450):**

Variables	No.	%
	(n=450)	
Age (Years)		
18- < 25	96	21.3
25- <30	152	33.8
30- <35	172	38.2
≥ 35	30	6.7
Mean ± SD	25.61 ± 3.96	
Educational level		
Illiterate	30	6.7
Read and write	42	9.3
Primary education	60	13.3
Preparatory education	80	17.8
Secondary education	201	44.7
High education	37	8.2
Residence		
Rural	194	43.1
Urban	256	56.9
Income		
Sufficient	85	18.9
Just meet their life expenses	276	61.3
Insufficient	89	19.8
Occupation		
Housewife	356	79.1
Employed	94	20.9
Nature of work (n=94)		
Hard work	58	61.7
Office work	36	38.3

Table (2):   Distribution of the studied women according to their obstetric history (n=450).

Variables	No.	%
Gravida		
Two	228	50.7
Three	144	32.0
More than three	78	17.3
Para		
One	238	52.9
Two	148	32.9
Three	45	10.0
More than three	19	4.2
Gestational age of the current pregnancy (weeks)		
4-12	56	12.5
13-24	118	26.2
>24	276	61.3
Mean ± SD= 24.73 ± 9.003		
Duration of last vaginal delivery		
< 3 hrs.	28	6.2
3- 24 hrs.	400	88.9
>24 hrs.	22	4.9
Birth spacing of child (years)		
< 2	94	20.9
2 – 5	338	75.1
>5	18	4.0

Table (3):   Distribution of the studied women according to their awareness regarding pelvic organ prolapse (n=450).

Variables	Aware		Un aware	
	No.	%	No.	%
Definition	86	19.1	364	80.9
Stages	44	9.8	406	90.2
Risk factors	55	12.2	395	87.8
Symptoms				
• Vaginal symptoms	70	15.6	380	84.4
• Urinary symptoms	55	12.2	395	87.8
• Bowel symptoms	66	14.7	384	85.3
• Sexual symptoms	76	16.9	374	83.1
Types				
• Anterior vaginal wall prolapses	32	7.1	418	92.9
• Posterior vaginal wall prolapse	40	8.9	410	91.1
• Apical vaginal prolapse	52	11.6	398	88.4
Diagnosis	74	16.4	376	83.6
Prevention	62	13.8	388	86.2
Treatment	47	10.4	403	89.6
Awareness score	**60**	**13.3**	**390**	**86.7**

Figure (1): Percentage distribution of the studied women according to their total awareness regarding pelvic organ prolapse (n = 450).

Table (4):   Distribution of the studied women according to their practices regarding dietary management (n=450).

Variables	Comply		Sometimes		Not comply	
	No.	%	No.	%	No.	%
Drink lots of water throughout the day	63	14.0	108	24.0	279	62.0
Eat plenty of fruits and veggies	45	10.0	98	21.8	307	68.2
Eat high-fiber foods	91	20.2	221	49.1	138	30.7
Avoid foods that are low in fiber in case of constipation.	41	9.1	97	21.6	312	69.3
Avoid foods which increase weight, gas and bloating	57	12.7	108	24.0	285	63.3

Table (5):   Distribution of the studied women according to their practices regarding Kegal exercise (n=450).

Variables	Comply		Sometimes		Not comply	
	No.	%	No.	%	No.	%
Find the right muscles.	20	4.4	36	8.0	**394**	**87.6**
Get comfortable.						
▪ Kneeling on all fours.	26	5.8	40	8.9	384	85.3
▪ Resting though the forearms and knees.	15	3.3	38	8.5	**397**	**88.2**
▪ Side lying with a pillow supporting the abdomen.	32	7.1	62	13.8	356	79.1
▪ Tighten pelvic floor muscles. Hold tight and count 3 to 5 seconds.	17	3.8	53	11.8	380	84.4
▪ Relax the muscles and count 3 to 5 seconds.	17	3.8	50	11.1	**383**	**85.1**
▪ Repeat 10 times, 3 times a day (morning, afternoon, and night).	10	2.2	36	8.0	**404**	**89.8**

Table (6):   Distribution of the studied women according to their practices regarding daily activities modification (n=450).

Variables	Comply		Sometimes		Not comply	
	No.	%	No.	%	No.	%
Avoid lifting heavy things	107	23.8	**213**	**47.3**	130	28.9
Avoid hard work	102	22.7	**205**	**45.5**	143	31.8
Avoid straining and standing for a long period of time	98	21.8	196	43.5	156	34.7

Figure (2): Percentage distribution of the studied women according to preventive measures practices regarding pelvic organs prolapse (n = 450).
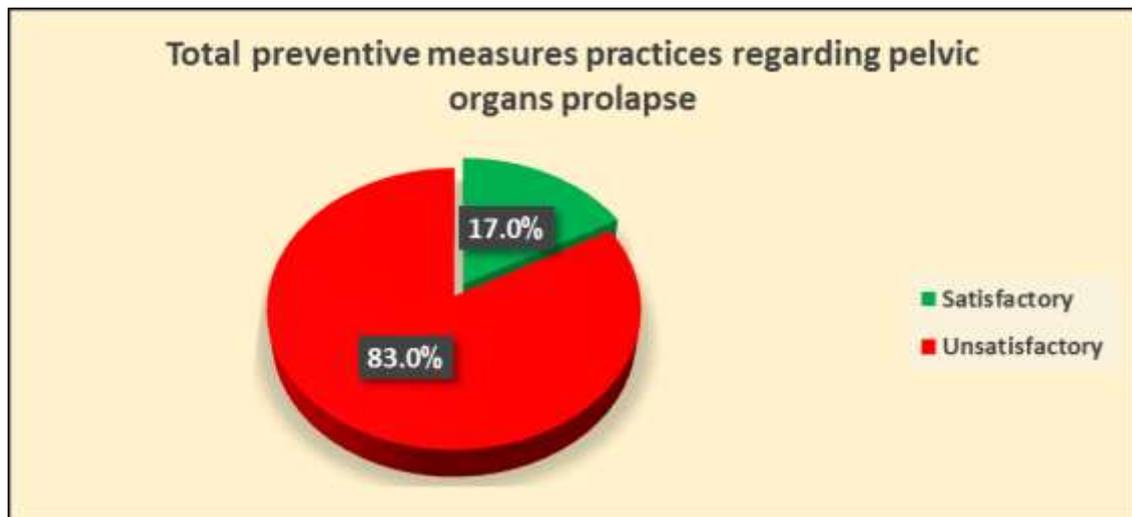
Figure (3): Percentage distribution of the studied women according to their total preventive measures practices regarding pelvic organs prolapse (n = 450).

Table (7): Distribution of the studied women according to attitude regarding Kegal exercise (n=450).

| Items	Agree		Unsure		Disagree	
	No.	%	No.	%	No.	%
Kegal exercise help to prevent POP	66	14.7	173	38.4	211	46.9
Kegal exercise help to prevent or treat UI	74	16.5	181	40.2	195	43.3
Kegal exercise is boring	95	21.1	253	56.2	102	22.7
Kegal exercise should be done by all women	32	7.1	**325**	**72.2**	93	20.7
Kegal exercise lead to abortion	85	18.9	**296**	**65.8**	69	15.3
Kegal exercise decrease postpartum complication	95	21.1	231	51.3	124	27.6
Kegal exercise can increase sexual satisfaction	76	16.9	211	46.9	163	36.2
It's a good idea to support those who want to perform kegal exercise.	125	27.8	200	44.4	125	27.8
Kegal exercise Information should be found.	108	24.0	199	44.2	143	31.8
Kegal exercise is hard work	85	18.9	**263**	**58.4**	102	22.7
Feeling pelvic floor muscles is difficult.	196	43.5	125	27.8	129	28.7
Kegal exercise will make labor incredibly simple for women	68	15.1	**296**	**65.8**	86	19.1
Kegal exercise decrease postpartum complication	95	21.1	**231**	**51.3**	124	27.6
Kegal exercise decrease occurrence of POP during and after pregnancy	90	20.0	**235**	**52.2**	125	27.8
Kegal exercise will increase chance of normal labor	86	19.1	200	44.4	164	36.5
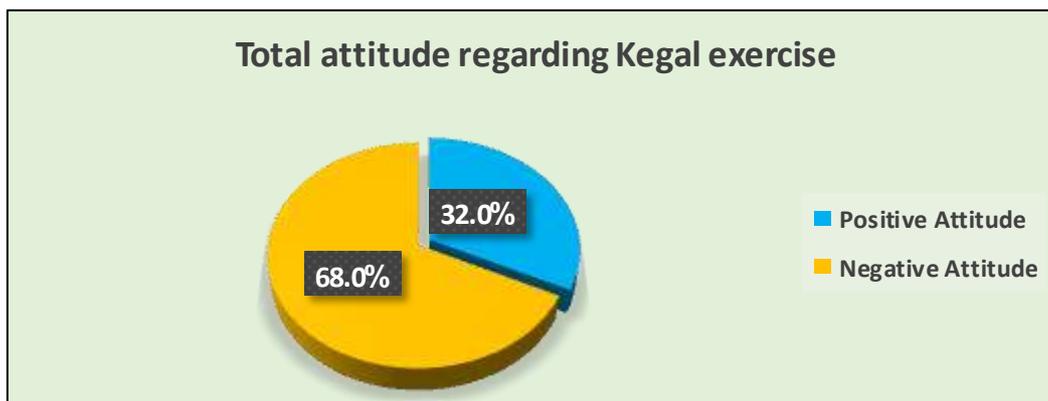
Figure (4): Percentage distribution of the studied women according to their total attitude regarding Kegal exercise **(n=450).**

Table (8): Correlation between the studied women's awareness, preventive measures practices and attitude regarding pelvic organ prolapse (n=450).

Variables	Total awareness		Total attitude	
	r	p-value	r	p-value
Total awareness			0.501	0.000**
Total preventive measures practices	0.542	0.000**	0.508	0.000**

r= correlation coefficient test.   **P= p-value**   ****highly significant at p ‹ 0.001.**

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