

## Relationship between Post-menopausal women's knowledge about pelvic organ prolapse and their autonomy preference

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### Abstract

**Background:** Pelvic organ prolapse (POP) is one of the two most common manifestations of pelvic floor dysfunction among postmenopausal women worldwide. The prevalence of POP increases with age, with a peak incidence in women aged 60–69 years. It has a negative effect on postmenopausal women's quality of life (QoL). Management of pelvic organ prolapse is challenging, it requires skillful health care providers and well-informed elder women. Person-centeredness is a crucial element and an indicator of the quality of care. It is advocated in healthcare policies worldwide. Yet, despite of its importance in person-centered care for prolapse, little is known about the extent to which health services are responsive to women's needs and their perceived experiences when using the health services for management of prolapse. **Aim of the study:** The present study aimed to explore the relationship between Post-menopausal women's knowledge about pelvic organ prolapse and their autonomy preference. **Methods** A descriptive correlational research design was utilized in this study. This study was conducted at the outpatient gynecology clinic on El Shatby Maternity University Hospital in Alexandria governorate, Egypt. A convenient sample of 142 post-menopausal women were recruited. Three tools were used for data collection; (1) socio-demographic and clinical data structured interview schedule, (2) Prolapse and Incontinence Knowledge Questionnaire (PIKQ), (3) modified version of autonomy preference index (API). **Results** More than three quarters (78.0%) of the studied women had lack of proficient knowledge about POP, whereas 22.0% had a proficient knowledge (50% and more correct) and although the studied women were highly preferred to participate in decision making concerning their health condition (62.4%±5.9), they had slightly lack of preference for information seeking (45.3±5.1%). The post-menopausal women's knowledge about Pelvic Organ Prolapse was significantly correlated with their autonomy preference ( $r=.213$ ,  $p=.011$ ), as the score of knowledge increased the total autonomy preference score increase. **Conclusion** the post-menopausal women's knowledge about Pelvic Organ Prolapse was significantly correlated with their autonomy preference. Encourage the healthcare professionals to inform the postmenopausal women about the available treatment options and motivate them to participate actively in making management decisions is recommended.

**Key Word:** Pelvic organ prolapse, Autonomy preference, Post-menopausal women.

### Introduction

Pelvic floor dysfunctions (PFD) are widespread diagnosis occur more often in postmenopausal women worldwide. Pelvic organ prolapse and

urinary incontinence are the two most common manifestations of pelvic floor dysfunction. The incidence and prevalence of POP is estimated that nearly 50% of women develop some form of prolapse and only 10–20% of them

seek medical assistance. This prevalence increases with age, with a peak incidence in women aged 60–69 (**Kristmanson et al., 2015; Giannini et al., 2018**).

Pelvic Organ Prolapse (POP) refers to the downward descent of the pelvic organs towards the vaginal opening. Typically, one or more of the following are the prolapsing organs: the urinary bladder, urethra, rectum, small intestines, vagina, or uterus. Women with prolapse may be asymptomatic or may have various symptoms in relation to bladder, bowel, and sexual function. They often present with symptoms such as pelvic heaviness, sensation of a bulge, lump or protrusion from the vagina, difficulty in emptying their bladder, defecation problems and/or sexual dysfunction. Urinary retention or inability to evacuate the rectum can occur in women with advanced stages of POP. In addition to POP annoying physical symptoms, Post-menopausal women with POP experience severe emotional distress, including depressed mood, loss of self-esteem and social isolation (**Addis, 2008; Akmel & Segni, 2012; Mandimika, 2014**).

Normal physiological changes in the lower genitourinary tract of postmenopausal women make them more susceptible to the development of prolapse and incontinence. The lack of estrogen during menopause thins the support structures and tissue that hold pelvic organs in place, causing them to fall. In addition to aging, high parity, obesity, vaginal delivery, constipation, chronic cough, early age at first delivery, forceps delivery, prolonged second stage of labor, and prolonged heavy lifting are the main known risk factors that can lead to POP (**Schweitzer et al., 2005; Gedefaw & Demis, 2020**).

Previous Studies have shown that Pelvic organ prolapse have a negative effect on quality of life (QoL) of postmenopausal women regardless the stage of POP. The symptoms of POP can be debilitating, resulting in reduced function, social isolation, sexual dysfunction, withdrawal from leisure activities, and loss of independence. POP not just affect the elder women alone, but their families, caregivers, and society at large. Urinary incontinence (UI) and fecal impaction (FI) that usually accompanies the prolapse are among the main motivating factors for family members to place the elder women in nursing homes. For all these reasons, POP currently is, and will continue to be, one of the major health concerns among older female population (**Hunnskaar et al., 2005; Kristmanson et al., 2015; Pizarro-Berdichevsky et al., 2015**).

Treatment of POP includes conservative management (lifestyle modifications and physical therapies), surgery or pessaries. The choice approach must consider woman's preference as well as her ability to comply with conservative therapy and to tolerate surgery. Treatment of POP in older women should be reserved for symptomatic women and tailored to the individual woman's symptoms. While treatment of an asymptomatic prolapse with a surgical intervention should be discouraged (**Giannini et al., 2018**).

Elder women may consider POP is a normal consequence of aging and may ignore or delay seeking treatment because of their sensitivity to be vaginally examined until symptoms reach a high degree of severity and the only possible correction would be the surgery. Enhancing knowledge about health problems has proven effective in promoting behavioral change, reducing levels of disease symptoms and

improving compliance with treatments in other chronic diseases, and may play a critical role in reducing morbidity from POP (Adams, 2010; Rashad et al., 2019).

In addition to being an obstacle to effective care, lack of information about POP can undermine decision-making and the informed consent process. Person-centeredness is a main element and predictor of the quality of care and is advocated in healthcare policies worldwide. Shared decision-making as an integral aspect of patient-centered care facilitates the active participation of patient in the discussion of a care plan. This approach may be especially applicable in clinical situations such as POP and special population as elder women where quality not quantity of life is at stake. In these cases, effective counseling and decision-making support are essential for the development of an acceptable treatment plan (Kristmanson et al., 2015; Abhyankar et al., 2019).

More recently, the American College of Obstetricians and Gynecologists has also acknowledged the benefits of shared medical decision making and has encouraged physicians to actively involve patients in their care in obstetrics and gynecology. Shared medical decision making is particularly applicable to decision situations that are non-emergent with different treatment and tradeoff considerations for individual patients. Such decisions are common in women seeking care for POP. These treatments are aimed to improve a woman's symptoms, functioning, quality of life and are primarily based on a woman's personal goals and values (Sung et al., 2010).

With a higher proportion of elderly people being women, POP prolapse is a significant and growing burden on health services, yet despite of

that, this health problem has not received a sufficient attention. Women's reproductive health is in need to have much more care from the beginning of motherhood until menopause to prevent the impending complications (Radl et al., 2012; Giannini et al., 2018).

Nurses are the primary health care provider of the patients, to help them to express their needs, explain the importance of appropriate preventive measures and treatment in early stage. Determining baseline levels of POP knowledge, as well as understanding women's preferences to be autonomous in decision making are necessary prerequisites for shaping public health policies and prioritizing resource allocation and provide quality care for this group. So, this study aimed to; assess knowledge proficiency of post-menopausal women with POP, measure the post-menopausal women's preferences for decision making and acquisition of information. In addition to explore the relationship between Post-menopausal women's knowledge of pelvic organ prolapse and their autonomy preference.

#### **Aim of the study:**

##### **This study aimed to:**

- 1- Assess knowledge proficiency of post-menopausal women with POP.
- 2- Measure the post-menopausal women's preferences for decision making and acquisition of information.
- 3- Explore the relationship between Post-menopausal women's knowledge of pelvic organ prolapse and their autonomy preference.

##### **Research Questions:**

1- What is the level of knowledge proficiency of post-menopausal women with POP?

2- To what extent the post-menopausal women with POP prefer to be autonomous in decision making?

3- Is there a relationship between Post-menopausal women's knowledge of pelvic organ prolapse and their autonomy preference?

## Materials and Method

### Research design

A descriptive correlational research design was utilized in this study.

### Setting

This study was conducted at the outpatient gynecology clinic of El Shatby Maternity University Hospital in Alexandria governorate, Egypt.

### Subjects.

A convenient sample of 142 post-menopausal geriatric women aged 60 years and above, diagnosed with POP, able to communicate effectively, and willing to participate in the study were recruited. EPI info 0.7 program was used to estimate the sample size using the following statistical parameters; population size = 180 over 6 months, expected frequency 50%, acceptable error 10%, confidence coefficient 99%, the program revealed a minimum sample size of 142 postmenopausal women.

### Tools of data collection:

To achieve the aim of the study three tools were used.

### Tool I: Socio-Demographic and Clinical Data Structured Interview Schedule:

This tool was developed by the researchers based on the review of related literature, and used to elicit basic data about the subjects as follows:

1.Socio-demographic characteristics such as age, marital status, level of education, and occupation prior to retirement.

2.Clinical data such as previous abdominal surgery and the type of this abdominal surgery.

3.Reproductive history including gravidity, parity, type of previous delivery.

4.post-menopausal women's experience of pelvic organ prolapse, as duration of having the symptoms of prolapse, previous experiences with prolapse, and previous management and follow-up for POP.

### Tool II: Prolapse and Incontinence Knowledge Questionnaire (PIKQ).

Participants' knowledge about POP was assessed by the previously validated PIKQ. This questionnaire was developed by **Shah et al. (2008)**, and consists of two parts; part one assessing patient knowledge about urinary incontinence through twelve items, and part two included another twelve items assessing knowledge related to POP. Part two includes questions about pathogenesis, diagnosis, and treatment of POP. Each question had three possible responses: "yes", "no", and "I don't know". 1 point was given for each correct response and no points were given for incorrect responses, blank responses and

for the response “I don’t know. Primary endpoints were the total number of correct responses on the POP scales. Accordingly, a score of more than 50% correct response indicates proficient level of knowledge and less than 50% correct response indicates lack of knowledge.

#### **Tool (III): A modified version of autonomy preference index (API).**

It was originally developed by **Ende et al. (1989)** and then revised by **Sung et al., (2010)**. It was used to measure information-seeking and decision-making preferences. It consisted of two scales: an eight-item scale on information seeking and 14-item scale on decision making. The decision-making scale included six general items and eight items related to one of three clinical vignettes representing increasing disease severity to assess if symptom severity plays a role in patient autonomy preferences. Total scores were linearly adjusted to range from 0 to 100, where 0 corresponded to complete lack of desire for decision making or information seeking and 100 corresponded to the strongest possible desire. Total scores for each vignette were adjusted to range from 0 to 100 so that the lowest score (0) corresponded to a desire for the doctor to take complete control; the mid-range score (50), to a desire for decision making that is shared equally between doctor and patient; and highest score (100), to a desire on the part of the patient to take complete control.

#### **Method**

1. Permission to carry out the study from the Faculty of Nursing, Alexandria University was obtained.

2. Permission from head of the study setting was obtained, who were

informed about the purpose of the study, the date and time of data collection.

3. Socio-Demographic and Clinical Data Structured Interview Schedule (Tool I) was developed by the researcher based on in-depth review of relevant literature.

4. Tool II (Prolapse and Incontinence Knowledge Questionnaire (PIKQ)) and tool III (A modified version of autonomy preference index (API)) was translated to Arabic language by the researchers in order to suit the Egyptian culture.

5. Tool I, II, and III were submitted to six academic nursing experts in the gerontological and obstetric nursing field (3 experts in each field) to test the face and content validity of this tools and the necessary modifications were carried out accordingly.

6. Reliability of tool II and III were tested for internal consistency using Alpha Cronbach test and the result was ( $r=0.78$  and  $0.81$ ) respectively which indicates an accepted reliability of the tools.

7. A pilot study was done on thirteen post-menopausal women with POP who were selected from the study setting to assess the study tools for their applicability and clarity and those not included in the study sample. The necessary modifications were done accordingly.

8. Two days per week were specified for data collection and the researchers used to attend to the outpatient clinics at 08.00 Am in these days.

9. Each post-menopausal woman who fulfilled the inclusion criteria was interviewed individually by the

researchers in the waiting area of the outpatient clinics while sitting comfortably.

10. The researchers used to explain the purpose of the study for each patient in order to gain her cooperation, then all of the study tools (tool I, II, and III) were filled by the researchers through face-to-face interview with each study subject.

11. The duration of each interview was ranged between 30-45 minutes depending on the level of co-operation of the elder woman and presence of quite environment. An average of 6 to 8 interviews was performed per day.

12. The data collection was completed over a period of six months, started from the beginning of May till the end of October 2019.

#### **Ethical consideration:**

An informed written consent from each older woman was obtained to participate in this study after appropriate explanation of the study purpose. Anonymity and privacy of the study subjects and confidentiality of the collected data were maintained. Participants were also informed about their rights to refuse to participate or withdraw from the research at any time.

#### **Statistical analysis:**

All data analyses were performed using Statistical Package for the Social Sciences (SPSS) software, version 25. Descriptive statistical methods were used to summarize data. Data were summarized as frequencies (n) and percentages (%) for categorical variables. Different tests were used. ANOVA or analysis of variance was used to allow a comparison of more than two groups at the same time to determine whether a

relationship exists between them. Pearson's correlation was used for investigating the relationship between two quantitative, continuous variables. A value of  $P \leq 0.05$  was considered statistically significant. Cronbach's alpha method is used to test the reliability.

#### **Result**

**Table 1** shows the sociodemographic characteristics of the studied postmenopausal women. The age of more than half (52.8%) of the study subjects ranged between 60 to less than 65 years and those who were 65-70 years old constituted 39.4% of the study sample. The mean age of the studied postmenopausal women was  $64.3 \pm 3.1$  years. Almost all (93.0%) the subjects were Muslims, 71.9% were married, 36.6% were illiterate, and three quarters (75.0%) were housewives. The pension was reported as the main source of income for 58.5% of the studied participants, and they lived in either urban 51.4% or rural area 48.6%.

**Table 2** illustrates that, slightly more than three quarters (76.1%) of the studied participants had previous abdominal surgery either hysterectomy 64.8% or cesarean section 35.2%. The majority (90.1%) of women had previous pregnancy and their age at the first pregnancy ranged from 18-31 years with a mean of  $23.3 \pm 3.2$  years. More than one third (33.6%) of women had one or two pregnancies, and about two thirds (66.4%) had 3 or more ones. Concerning type of previous delivery 70.3% had normal delivery and 29.7% had cesarian section delivery.

**Table 3** shows the distribution of the studied women according to their experience with the pelvic organ prolapse. More than two thirds (69.0%) of them reported that they have the prolapse for 6

months to less than 3 years and 57.0% were diagnosed with second stage prolapse and 81.0% of them reported that they have pelvic organ prolapse for the first time throughout their life.

As for the follow-up visits, about two fifth (40.1%) of them had a previous follow-up visit for one time and more than half (59.9%) had no previous follow-up visits. This table also shows that more than two thirds (64.8%) of the participants did not receive any form of treatment for their prolapse, and Pelvic organ prolapse was affected the marital relation of the most (83.8%) of the studied women.

Regarding the reported manifestations of the prolapse, vaginal bulge was leading the list (98.6%), followed by difficult setting, difficult standing, backache with walking, lower abdominal pain, menorrhagia, and dysuria (98.6%, 82.4%, 54.9%, 52.8%, 13.4%, 9.9%, 7.7%) respectively. most of the studied postmenopausal women (94.4%) were having urinary incontinence either stress (77.6%) or urge incontinence (22.4%). The table also revealed that, avoid going outdoor was the main feeling reported because of prolapse (71.8%), followed by depressed mood 26.8%. More than half (58.5%) of the studied subjects received health education regarding the prolapse through the health care team members (84.7%).

**Figure 1:** demonstrates the postmenopausal women's Knowledge about Pelvic Organ Prolapse. More than three quarters (78.0%) of the studied women had lack of proficient knowledge about POP (less than 50% correct), whereas 22.0 % had a proficient knowledge (50% and more correct).

**Table (4)** This table shows that the least mean percent score of women's

knowledge about POP was reported in the treatment domain, followed by etiology domain, and the diagnosis (10.9%±1.4, 23.0%±1.9, and 40.8%±0.3) respectively.

**The tables (5)** illustrates that most (93%) of the studied women had strong preference to participate in decision making with a mean score (62.4%±5.9) and more than three quarters (79.6%) of them had weak preference for information seeking with a mean 45.3±5.1%. This indicates that although the studied women had a weak preference to seek information about their condition, they had a strong preference to participate in decision making. The table also shows that more than half (56.3%) of the studied women reported that, they preferred to have the upper control to take the decision with increasing illness severity with a mean of (52.8%±5.4).

**Table (6):** This table indicates the presence of a difference between the mean score of total autonomy preference index based on the mean score of knowledge about pelvic organ prolapse. Where post-menopausal women with higher mean score of knowledge had a higher mean score of autonomy preference (53.9%±3.1) and the difference was statistically significant (P=0.012).The table also indicates that postmenopausal women with a higher level of knowledge had a higher preference for seeking information (47.0%±6.4) and the difference was statistically significant(P=0.040). Another statistically significant difference (P=0.008) was documented between the mean score of the desire of women to have the upper control to take the decision with increasing illness severity based on the mean score of knowledge about pelvic organ prolapse. Whereas the more knowledgeable postmenopausal women had a higher preference to have

the upper control to take the decision with increasing illness severity (55.2%±5.3).

Table (7) illustrates presence of a positive significant correlation between the score of knowledge about Pelvic

Organ Prolapse and the autonomy preference index score ( $r=.213$ \* $p=.011$ ), which means that as the score of the studied women's knowledge increased their total autonomy preference score increase.

**Table (1) Distribution of the Studied postmenopausal women according to their Sociodemographic Data**

Sociodemographic data		No. (142)	%
Age (Years)	60 to less than 65	75	52.8
	65 to less than 70	56	39.4
	70 and more	11	7.7
	Mean ± SD	64.3±3.1	
Religion	Muslim	132	93.0
	Christian	10	7.0
	Married	102	71.9
Marital status	Single	14	12.7
	Divorced	12	8.4
	Widow	10	7.0
	Illiterate	52	36.6
Level of education	Read and write	42	29.6
	Basic	16	11.3
	Secondary	20	14.0
	University	12	8.4
Occupation before retirement	Housewife	107	75.4
	Employee	31	21.8
	Skilled manual worker	4	2.8
	Pension	83	58.5
Source of income	Family	34	23.9
	Social affairs	25	17.6
Place of residence	Urban	73	51.4
	Rural	69	48.6

**Table (2) Distribution of the Studied postmenopausal women according to their Gynecological History**

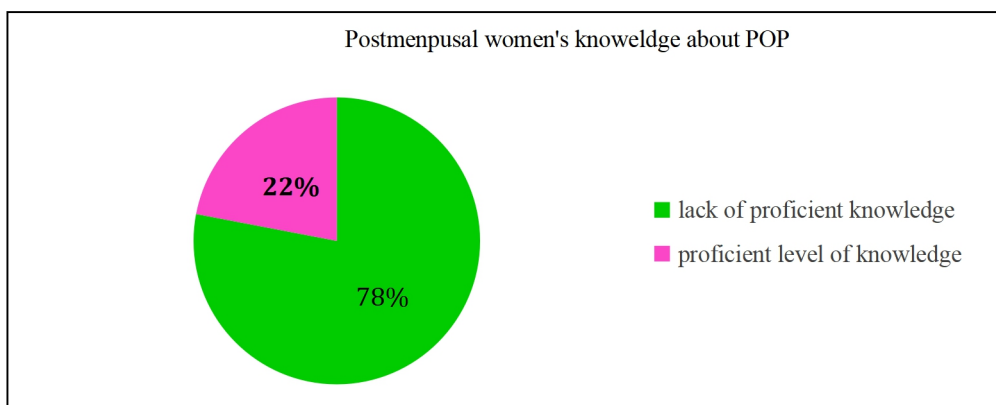
		No. (142)	%
<b>Previous abdominal surgery</b>			
-	Yes	108	76.1
-	No	34	23.9
<b>Types of abdominal surgery</b>		n.(108)	
-	Hysterectomy	70	64.8
-	Cesarean section	38	35.2
<b>Previous pregnancy</b>			
-	Yes	128	90.1
-	No	14	9.9
<b>Age at first pregnancy (Years)</b>		n.(128)	
-	Less than 20	20	15.6
-	20 to less than 25	60	46.9
-	25 to less than 30	44	34.4
-	30 and more	4	3.1
Min-Max	18-31		
Mean±SD	23.3±3.2		
<b>Gravida</b>		n.(128)	
-	Two	43	33.6
-	Three and more	85	66.4
<b>Types of delivery</b>		n.(128)	
-	Normal	90	70.3
-	Cesarean section	38	29.7



Table (3) Distribution of The Studied Subjects According to their Prolapse Experience.

Items	No. (142)	%
<b>Duration of having prolapse</b>		
- Less than 6 months	25	17.6
- Six months to less than 3 years	98	69.0
- Three years and more	19	13.4
<b>Stages of prolapse</b>		
- First	21	14.8
- Second	81	57.0
- Third	14	9.9
- Fourth	26	18.3
<b>Previous experience with prolapse</b>		
- No	115	81.0
- Yes	27	19.0
<b>Number of pervious follow-up for pelvic organ prolapse</b>		
- No	85	59.9
- Once	57	40.1
<b>Previous management</b>		
- No	92	64.8
- Yes	50	35.2
<b>Types of previous management for pelvic organ prolapse</b>	n.50	
Conservative	50	100.0
<b>Affection of marital relation due to pelvic organ prolapse</b>		
- No	23	16.2
- Yes	119	83.8
<b>Prolapse related vaginal manifestations #</b>		
- Vaginal bulge	140	98.6
- Difficult setting	117	82.4
- Difficult standing	78	54.9
- Backache with walking	75	52.8
- Lower abdominal pain	19	13.4
- Menorrhagia	14	9.9
- Dysuria	11	7.7
<b>History of urinary Incontinence</b>		
- No	8	5.6
- Yes	134	94.4
<b>Types of urinary Incontinence</b>	n.134	
- Stress incontinence	104	77.6
- Urge incontinence	30	22.4
<b>Patient's feeling regarding the problem#</b>		
- Avoid going outdoor	102	71.8
- Depressed mood	38	26.8
- avoid setting with other	6	4.2
- Frustrated	6	4.2
- Worry about that the problem may aggravating with age	4	2.8
<b>Received health education regarding prolapse</b>		
- Yes	59	41.5
- No	83	58.5
<b>Source of health education regarding prolapse</b>	n.59	
- Health team	50	84.7
- Pharmacist	9	15.3

# Multiple response



**Figure 1: Postmenopausal women's Knowledge of Pelvic Organ Prolapse**

**Table (4) Distribution of the Studied Subjects according to their knowledge of Pelvic Organ Prolapse (n=142)**

Dimensions of PIKQ	Items of the PIKQ Pelvic Organ Prolapse Scale	Incorrect/ do not know		Correct		Mean%±SD
		No.	%	No.	%	
<b>Diagnosis</b>	1- Pelvic organ prolapse is more common in young women than in old woman. agree	63	44.4	79	55.6	40.8±0.3
	2- Giving birth many times may lead to pelvic organ prolapse.	133	93.7	9	6.3	
	3- Pelvic organ prolapse can happen at any age.	138	97.2	4	2.8	
	5- Symptoms of pelvic organ prolapse may include heaviness and/or pressure	124	87.3	18	12.7	
	8- Heavy lifting daily can lead to pelvic organ prolapse.	131	92.3	11	7.7	
	12- People who are obese are likely to get pelvic organ prolapse_	99	69.7	43	30.3	
<b>Etiology</b>	6- A good way for a doctor to diagnose pelvic organ prolapse is by examining the patient	90	63.4	52	36.6	23.0±1.9
	10- Doctors can run a blood test to diagnose pelvic organ prolapse.	78	54.9	64	45.1	
	4- Certain exercises can help to stop pelvic organ prolapse from getting worse	137	96.5	5	3.5	
<b>Treatment</b>	7- Once a patient has pelvic organ prolapse, not much can be done to help her_	112	78.9	30	21.1	10.9±1.4
	9- Surgery is possible treatment for pelvic organ prolapse.	135	95.1	7	4.9	
	11- A rubber ring called a pessary can be used to treat symptoms of pelvic organ prolapse	122	85.9	20	14.1	



## Discussion

Pelvic organ prolapse (POP) is highly prevalent bothersome disorder among elderly women. It can significantly affect their quality of life in various ways, including physical activity limitations, impairment of participation in social activities and social isolation, psychological distress and sexual function. Moreover, POP and its consequences have higher economic burden to both the geriatric patients as well to the country. Country (Pizarro-Berdichevsky et al., 2015; Chen et al., 2019; Gedefaw & Demis, 2020). Lack of knowledge of pelvic floor disorders can make patients reluctant to seek professional care so that they remain dissatisfied (Wieslander et al., 2015; Lyatoshinskaya et al., 2016). Enabling patients to be effective advocates for their health requires that they have adequate information and understanding about their health conditions (Lewis & Pignone, 2009). Therefore, the present study aimed to identify post-menopausal women's knowledge of pelvic organ prolapse and their autonomy preference.

The result of the present study revealed a considerable lack of knowledge about POP among the studied women, and this lack of knowledge included all of the three dimensions of the scale (diagnosis, etiology, and treatment). Knowledge deficits amongst the majority of the studied women may be due to misconceptions about the condition itself, women perceive it as normal and believe that it is a natural part of childbirth and aging. Additional reasons include embarrassment related to discussing the problem with care providers and worries about social stigma preventing them from initiating discussion about this problem among friends and family, being unaware

that POP is a medical condition that needs treatment and options are available.

This finding is similar to the finding of Fante et al., (2019), who reported that most women have a gap in the knowledge of pelvic floor muscle dysfunctions, they do not understand their treatment options, and are not able to identify risk factors for these disorders. On the same line, a study done by Good et al., (2013), reported that Prolapse-related knowledge is low in women seeking care for prolapse symptoms. Also, the study of Elsayed et al. (2016) in Egypt, indicated that the majority of their studied women had poor level of knowledge regarding all items of uterine prolapse.

Again, the present study revealed that, women's knowledge regarding treatment of POP achieved the lowest score followed by women's knowledge regarding etiology then regarding the diagnosis. These study findings were partially in agreement with the findings of Mandimika et al. (2014) they found that for POP, the lowest scores were related to etiology followed by treatment then diagnosis.

Every person is a unique individual with different values and preferences, and these values and preferences are important factors in making decisions in every aspect of life, including medical decisions. Regarding the autonomy preference of the studied women, the majority of them had strong preference to participate in decision making. This result supports the popularity of the shared decision-making approach and this is in harmony with what reported by Cullati et al. (2011), he reported that the majority of their participants were in strong agreement of active involvement in the management

plan. Also, this finding is in line with that of **Kenealy et al. (2011)** who reported that personal factors have been associated with patient preference for autonomy include being female. The current result is also consistent with the study of **Abhyankar et al. (2019)** about women's experiences of receiving care for pelvic organ prolapse: a qualitative study, they found that women's involvement in treatment decision making was desired and they need for more person-centered care.

Conversely, a study done by **Lyatoshinskaya et al. (2016)** stated that not all of his subjects want to be involved in medical decision making and that unnecessarily detailed information can motivate patients' emotional stress. The current finding is not also in harmony with a study done by **Sung et al. (2010)** about "treatment decision-making and information-seeking preferences in women with pelvic floor disorder" in which women may be neutral in their desire to participate in decision making, with most women preferring a collaborative role and not all patients want to play an active or completely autonomous role, while they have strong preferences for being well informed when considering their treatment options.

Although the studied women had a strong preference to participate in decision making, they had a weak preference to seek information about their condition. They may be attributed to the fact that more than one third of them were illiterate and this result is in congruence with a study done by **Sung et al. (2010)** who reported that higher education levels were associated with a stronger desire for seeking medical information. Moreover, we did not find an association between preferences for either information seeking or decision making and disease severity, measured by the API-clinical vignettes of

disease severity. This finding is also consistent with other studies done by **(Kremer et al., 2007; Sung et al., 2010)**.

Empowering patients to be effective advocates for their health requires that they have adequate information and understanding about their health conditions. Results of the present study revealed that there was a positive significant relation between the score of knowledge about Pelvic Organ Prolapse and the autonomy preference index score, which mean that as the score of the studied women's knowledge increased their total autonomy preference score increase. The cause may be that providing information to patients is the first critical step towards achieving informed decision-making. Furthermore, patients should be aware of the choices and treatments for their medical care, the potential outcomes of these choices and treatments, and have their personal values considered in decisions about their medical care.

The present study result is in accordance with study done by **Lukas (2010)** who stated that It is assumed that specific knowledge increases the self-diagnosis competence and self-care productivity as dimensions of autonomy. Also, the current finding agrees with the aforementioned study of **Abhyankar et al. (2019)**, where they found that women often delayed seeking information and help for their symptoms due to lack of awareness about the problem.

It is common for health personnel and close relatives to underestimate the ability of older people to make independent decisions about their health and well-being, and this is considered one of the main challenges in involving older people in autonomous decision-making process (**Sánchez-García et al., 2019**). Autonomy plays an important role in

active aging, as it is strongly associated with longevity, good self-assessed health, and prevention of depression and cognitive decline among the elderly (Kishimoto et al., 2013; Minagawa & Saito, 2015; Tomioka et al., 2017). In this respect our results indicate that any intervention aimed at improving the autonomy of older persons needs to incorporate improvements in their health knowledge.

### **Conclusion**

The studied postmenopausal women had lack of proficient knowledge about POP and although they were highly preferred to participate in decision making concerning their health condition, they had slightly lack of preference for information seeking. The postmenopausal women's knowledge about Pelvic Organ Prolapse was significantly correlated with their autonomy preference which means that as the score of knowledge increased the total autonomy preference score increase. This study identified several areas which could be addressed by health professionals and services enhance the health care of prolapse to be more person-centered. Postmenopausal women presenting with pelvic organ prolapse need to be listened to by the nurse, offered better information about treatment choices, and supported to make a decision that is right for them.

### **Recommendations**

Based on the finding of this study, the following recommendation are suggested:

- Encourage the healthcare professionals to inform the postmenopausal women about the available treatment options and motivate them to participate actively in making management decisions.

- Health care providers should assess patients' actual understanding of the disease, especially among older women and those with lower educational level to reduce any possible misconceptions.

- Strategies for improving public awareness and education related to POP should be developed and implemented emphasizing that POP is not a normal part of aging or/ and childbirth. These include disseminating information about POP through media and offer special educational programs in the community health services.

### **Further research**

- Further studies identifying effective community-centric outreach strategies that effectively educate older women about POP symptomology and treatment options are needed to improve their awareness of this prevalent pelvic floor disorder.

### **Conflict of interest**

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