Research Article

Knowledge and Associated Factors of Pelvic Organ Prolapse among Women in Ebonyi State, Nigeria

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Abstract

Introduction: Despite high prevalence of pelvic organ prolapse in low-resource settings and its negative effect on the quality of life of women affected by the condition, women in resource-constrained settings often have limited knowledge about the condition which limits their ability to seek medical treatment.

Aim: To assess the knowledge and associated factors of pelvic organ prolapse among women in Ebonyi State, Nigeria.

Materials and Methods: This was an interviewer-administered questionnaire-based cross-sectional study conducted among 302 women from 13th to 17th January, 2020 in Abakaliki, Ebonyi State. The participants were randomly selected and Pelvic organ prolapse knowledge questionnaire and incontinence knowledge questionnaire (PIKQ) was used to

collect the data. SPSS version 22 was used for data processing and analysis. Descriptive statistics were calculated for most variables. Multivariable logistic regression was used to identify the associated factors. A variable was considered significant at p-value<0.05.

Results: A total of 302 women participated in this study with a mean age of 56.5 ± 9.8 years. Of these participants, 286 (94.7%) had awareness of pelvic organ prolapse and 47 (19.7%) had good knowledge of the condition. Age between 46 and 50 years (AOR = 7.165, 95%CI = 1.749 - 29.357, *P* = 0.006), occupation such as farming (AOR = 16.812, 95%CI = 9.749 - 55.620, *P* < 0.0001) and civil service (AOR = 18.691, 95%CI = 6.825 - 86.094, *P* < 0.0001), having primary education (AOR = 8.098, 95%CI = 7.773 - 8.907, *P* < 0.0001) or secondary education (AOR = 12.34, 95%CI = 1.654 - 6.342, *P* = 0.01) were associated with good knowledge of pelvic organ prolapse.

Conclusion: The level of knowledge regarding pelvic organ prolapse was low among study participants which indicates a need for health education intervention. Being in middle age group, educational status and occupation were the factors associated with good knowledge of participants about pelvic organ prolapse.

Keywords: Knowledge; Associated factors; Pelvic organ prolapse; Postmenopausal women

1. Introduction

Pelvic Organ Prolapse is the descent of the pelvic organs from their normal position in the pelvis into the vagina, accompanied by urinary, bowel, sexual or local symptoms [1]. It is a very common gynaecological condition especially in multiparous and postmenopausal women [2]. It is due to defects in the support structures of the uterus and vagina namely the uterosacral ligaments, the cardinal ligaments complex and connective tissue of the urogenital membrane [2]. The true incidence of this disorder is not known because many of the cases are asymptomatic and many women feel shy to complain of pelvic organ prolapse [1, 3]. The global prevalence of uterine prolapse was estimated to be 2-20% [2]. The incidence of prolapse in African society is difficult to determine with accuracy as most of the women do not seek medical attention unless symptoms are pronounced and disturbing [3]. This is even more so in the rural areas. In Nigeria, majority of studies on prevalence of uterovaginal prolapse are institutional and none were carried out in the community [3]. A rural community survey revealed a prevalence of uterovaginal prolapse of 14% in Gambia, West Africa [4].

The development of pelvic organ prolapse is multifactorial [5]. The leading process for the uterovaginal prolapse is the childbirth trauma, which causes weakness of the ligaments, muscular and fascial structures, which were entrusted with the maintenance of anatomical support of pelvic organs [6]. It is commonly due to unsupervised and quick succession of child birth which gives rise to trauma to these vital supports [7], and in due course of time it gets worsen with the setting of menopause [8]. Some of the additional causes are poor socioeconomic status, malnutrition, early marriage, multiparity, and lack of puerperal rehabilitation [9]. This is further complicated by chronic illness like chronic obstructive pulmonary disease, chest tuberculosis, and obesity [9].

In Nigeria, uterine prolapse appeared to be widespread, but little or no published evidence exists to know the level of

knowledge of uterovaginal prolapse among women [10]; hence the need for this study. Pelvic organ prolapse is a reproductive health condition that has not received sufficient attention despite its high prevalence in Nigeria [11]. Uterovaginal prolapse has been unsatisfactorily addressed and is a sensitive topic among women, families, and communities. Most women hide the condition due to embarrassment, leading to personal problems such as domestic violence [10, 11]. Lack of knowledge of pelvic floor disorders can make patients reluctant to seek professional care so that they remain dissatisfied [12]. Patients may not discuss their problems with a physician because of lack of understanding and a belief that pelvic floor disorders are a normal consequence of age [13]. Studies had found that a low level of knowledge of pelvic floor disorders is associated with a high prevalence of pelvic floor dysfunction, and that health education is associated with an increase in quality of life and a decrease in pelvic floor symptoms [14]. Some authors have suggested that the level of knowledge and patient perception of pelvic organ prolapse are important predictors of treatment seeking or nonseeking behavior [15]. Therefore, this study aimed to assess the level of knowledge and the associated factors of uterovaginal prolapse among women in Ebonyi State. Findings of this study could be useful in the development of strategic health promotion programs for the prevention of pelvic organ prolapse that target the general population of women and encourage women with the condition to seek medical care.

2. Materials and Methods

2.1 Study design, period and area

This is a cross-sectional study that was conducted among rural women that gathered at the National Obstetric Fistula Centre (NOFIC), Abakaliki from 13th to 17th January, 2020. Each year, Ebonyi state government conducts sensitization exercise to educate rural women on the prevention of obstetric fistula. The women were drawn from the 13 local government area of Ebonyi state and were gathered at the NOFIC for the sensitization program. Ebonyi state is one of the five states in the South-east geopolitical zone of Nigeria. Abakaliki is a semi-urban area and the capital of Ebonyi State, Nigeria. The population comprises mainly of subsistence farmers and petty traders. Christianity forms their major religion and the inhabitants are predominantly Igbo speaking. There are several government owned institutions in the town including Alex Ekwueme Federal University Teaching Hospital and National Obstetric Fistula Centre.

2.2 Study population

All consenting women who participated at the obstetric fistula sensitization program at the National Obstetric Fistula Centre, Abakaliki.

2.3 Study criteria

All women who gave informed consent to participate in the study were included in the study. Participants who had a verbal communication problem and complete loss of hearing were excluded.

2.4 Sample size determination

The sample size was calculated by taking variability of proportion from a similar study which was 14% for knowledge of uterovaginal prolapse [15]. Taking 480 women who participated in the sensitization program as source population and using Open Epi software package for the determination of sample size, the final minimum sample size was calculated as

260. After considering 10% non-response rate for any unpredictable events and design effect of 1.5, the final required sample size was 286. However, 302 women were recruited for the study.

2.5 Sampling technique

The study participants were selected by using simple random sampling method and the first participant was selected by using lottery method.

2.6 Study variables

The study variables were divided into three areas: 1) knowledge about UV prolapse (i.e., ever heard about UV prolapse, multiple variables regarding symptoms and preventive measures of UV prolapse, proportion of the number of variables on knowledge assessment questions, and average or more knowledge about UV prolapse); 2) media exposure to access information about UV prolapse; and 3) sociodemographic characteristics (i.e., age, ethnic group, parity, marital status, occupation, level of education, and husband's level of education). The variables used to assess the knowledge on UV prolapse for symptoms of UV prolapse were 1) difficulty lifting loads, 2) experiencing lower abdominal pain, 3) having a sagging uterus, 4) feeling pain during sexual activity, 5) difficulty controlling urine and to take preventive measures for UV prolapse, 6) not lifting heavy loads during the post-natal period, 7) eating nutritious foods during pregnancy and the post-natal period, 8) taking adequate rest during the post-natal period, 9) practicing family planning and birth spacing, 10) avoiding early pregnancy, 11) using institutional delivery, and 12) using safe abortion services.

2.7 Operational definition

2.7.1 Good knowledge: Participants who scored ≥ 60% (score 21 - 34) of Pelvic organ Prolapse knowledge (POPK) questionnaire.

2.7.2 Poor knowledge: Women who scored < 60% (score up to 20) on POPK questionnaire.

2.7.3 Awareness: Participants were classified as being aware of pelvic organ prolapse if a positive response ('Yes') is obtained to the question 'have you ever heard of pelvic organ prolapse?'

2.7.4 Data collection tools and procedures: A structured interviewer-administered Pelvic organ prolapse knowledge questionnaire (POPKQ), a 17-item scale was used to assess patient knowledge of POP. The questionnaire was derived from the knowledge of pelvic organ prolapse part of Prolapse and incontinence knowledge questionnaire (PIKQ) [12]. The questionnaire was modified to include socio-demographic characteristics of the participants. The scoring system of women's knowledge of uterovaginal prolapse was either 2 (for correct answer) or 0 (for incorrect answer). The minimum score was 0 whereas the maximum score was 34. Previous study was used for the classification of study participants' knowledge level [16].

The reliability of the questionnaire was checked by conducting a pretest among women in Abakaliki town, by taking 5% of the sample size. From the pretest, understandability, clarity, and organization of the questionnaire were checked. From

the reliability test of knowledge questions, 0.896 Cronbach's alpha value was found. The questionnaire was prepared in English language and then translated to Igbo (local language in Abakaliki) that was used for data collection and re-translated back to English to check its consistencies. The questionnaire was then refined accordingly for final use. Five trained house officers participated in data collection. The data collectors were trained for 2 days on the techniques of data collections. The training also included the importance of disclosing the possible benefit and purpose of the study to the study participants before the start of data collection.

2.7.5 Data quality control and analysis: The principal researcher checked completeness and consistency of questionnaires filled by the data collectors to ensure the quality of data. The collected data were entered and analyzed using SPSS version 22 (IBM Corp. Amork, New York, U.S.A). Proportions, rates and summary statistics such as mean, the standard deviation were calculated for most variables. Chi-square test or Fisher's exact test was used for comparison of categorical variables where appropriate. Independent samples t-test was used for comparison of continuous variables. Multivariable logistic regression was used to determine the factors associated with knowledge of pelvic organ prolapse by entering selected independent variables into the model. The variables with a p-value of less than 0.05 were considered statistically significant.

2.7.6 Ethical considerations: This study was approved by the Research and Ethics Review Committee (RERC) of the National Obstetric Fistula Centre, Abakaliki. Informed consent was taken from the study participants after informing the study subjects on study objectives, expected outcomes, and benefits associated with it. Confidentiality of responses was maintained throughout the study.

3. Results

A total of 302 women took part in the study. About 5.3% (16) were not aware of uterovaginal prolapse. Therefore, the analysis was done for the remaining 94.7% (286) of participants who were aware of uterovaginal prolapse. The mean age of the study participants was 56.5 ± 9.8 years with a range of 35 to 75 years. Most of the participants were married (68.9%), grandmultiparous (60.5%), farmers (52.1%) and belong to Igbo tribe (95.1%). Ninety-five participants (33.2%) and their husbands had no formal education (Table 1).

Variables	**Total (n=286) n (%)**	**Knowledge of UV polapse**		***p* value**
		Good (n=47) n (%)	**Poor(n=239) n (%)**	
Age (years)				
35-40	16 (5.6)	6 (12.8)	10 (4.2)	< 0.0001
41-45	22 (7.7)	7 (14.9)	15 (6.3)	
46-50	57 (19.9)	4 (8.5)	53 (22.2)	
51-55	46 (16.1)	16 (34.0)	30 (12.6)	
56-75	145 (50.7)	14 (29.8)	131 (54.7)	

Mean age ± SD	56.5 ± 9.8	53.9 ± 12.6	56.9 ± 9.2	0.06
Parity				
0	8 (2.8)	3 (6.4)	5 (2.2)	< 0.0001
1	16 (5.6)	9 (19.1)	7 (2.9)	
2-4	89 (31.1)	15 (31.9)	74 (30.9)	
≥ 5	173 (60.5)	20 (42.6)	153 (64.0)	
Marital status				
Married	197 (68.9)	36 (76.6)	161 (67.4)	< 0.0001
Single	9 (3.1)	6 (12.8)	3 (1.3)	
Divorced	40 (14.0)	4 (8.5)	36 (15.1)	
Widowed	40 (14.0)	1 (2.1)	39 (16.2)	
Tribe				
Igbo	272 (95.1)	46 (97.9)	226 (94.6)	0.96
Hausa	4 (1.4)	0 (0)	4 (1.7)	
Others	10 (3.5)	1 (2.1)	9 (3.7)	
Occupation				
Farming	149 (52.1)	12 (25.5)	137 (57.3)	0.871
Artisan	16 (5.6)	3 (6.4)	13 (5.4)	
Trading	88 (30.8)	14 (29.8)	74 (30.9)	
Civil servant	25 (8.7)	16 (34.0)	9 (3.8)	
Unemployed	8 (2.8)	2 (4.3)	6 (2.6)	
Level of education				
No formal education	95 (33.2)	4 (8.5)	91 (38.1)	< 0.0001
Primary	79 (27.6)	12 (25.5)	67 (28.0)	
Secondary	73 (25.5)	12 (25.5)	61 (25.5)	
Tertiary	39 (13.7)	19 (40.5)	20 (8.4)	
Husband's level of education				
No formal education	95 (33.2)	5 (10.6)	90 (37.7)	< 0.0001
Primary	53 (18.5)	10 (21.2)	43 (17.9)	
Secondary	87 (30.4)	14 (29.8)	73 (30.5)	
Tertiary	51 (17.9)	18 (38.4)	33 (13.9)	

Table 1: Sociodemographic characteristics of the study participants.

Figure 1 shows the depth of knowledge of uterovaginal prolapse among the participants. Majority (80.3%) of the participants had poor knowledge of uterovaginal prolapse and only 47 (19.7%) women were classified as having good knowledge of the condition.

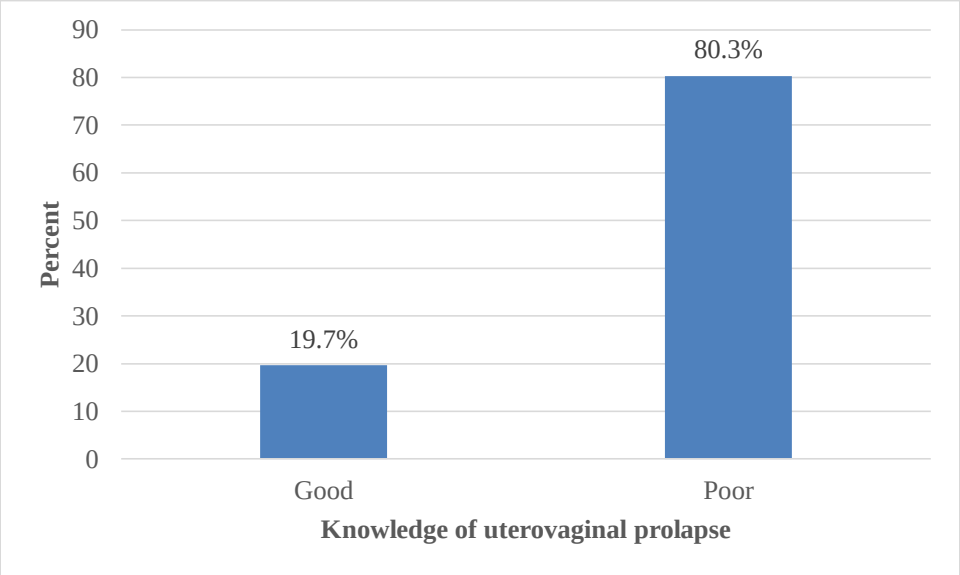

Figure 1: Chart shows the depth of knowledge of uterovaginal prolapse among the participants.

The sources of information on uterovaginal prolapse for the study participants are shown in Figure 2. The commonest source of information for the participants was the health workers (83%), followed by female community health volunteers (8.5%).

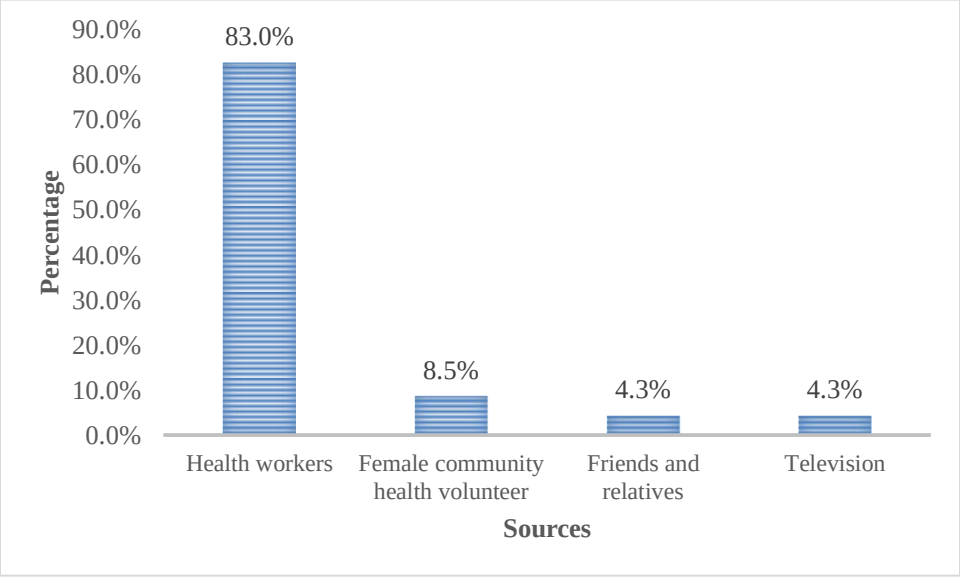

Figure 2: Figure shows the sources of information on uterovaginal prolapse.

Table 2 shows the knowledge of risk factors and symptoms of uterovaginal prolapse. Majority (78%) of the participants reported that menopause increases the risk of uterovaginal prolapse. Other common risk factors reported by the participants were carrying heavy load (19.6%), home delivery (17.1%), chronic cough (14%), and increasing number of vaginal deliveries (45.5%). On symptoms of uterovaginal prolapse, 22.4% of participants mentioned difficulty controlling urine as a symptom of uterovaginal prolapse. Other symptoms known by the participants were dragging sensation (11.1%) and lower abdominal pain (6.9%).

Variables	**Total (n=286) n (%)**	**Knowledge of UV prolapse**		***p* value**
		Good (n=47) n (%)	**Poor (n=239) n (%)**	
Risk factor				
Menopausal	223 (78.0)	30 (63.8)	190 (79.5)	< 0.0001
Tobacco use	14 (4.9)	9 (19.1)	5 (2.1)	
Mean age at first pregnancy ± SD	19.0 ± 2.9	22.5 ± 3.4	18.4 ± 2.3	< 0.0001
Number of vaginal deliveries				
≤ 3	30 (10.5)	4 (8.5)	26 (10.9)	0.001
4-6	114 (39.9)	24 (51.1)	90 (37.7)	
7-9	130 (45.5)	12 (25.5)	118 (49.4)	
≥ 10	12 (4.1)	7 (14.9)	5 (2.0)	
Mean birth spacing interval ± SD	1.2 ± 0.5	1.5 ± 0.5	1.2 ± 0.5	0.0002
Home delivery	49 (17.1)	7(14.9)	42 (17.6)	0.014
Carry heavy load	56 (19.6)	6 (12.7)	50 (20.9)	
History of chronic cough	40 (14.0)	6 (12.7)	34 (14.2)	
History of fibroid	24 (8.4)	6 (12.7)	18 (7.5)	
History of abortion	19 (6.6)	4 (8.5)	15 (6.3)	
Experienced malnutrition	22 (7.7)	0 (0)	22 (9.2)	
Pelvic/abdominal surgery	16 (5.6)	8 (17.0)	8 (3.3)	
Symptoms				
Difficulty lifting loads	4 (1.4)	4 (8.5)	0 (0)	< 0.0001
Lower abdominal pain	20 (6.9)	18 (38.3)	2 (0.8)	
Dragging sensation	32 (11.1)	22 (46.8)	10 (4.2)	
Pain during intercourse	4 (1.4)	2 (4.3)	2 (0.8)	
Difficulty controlling urine	64 (22.4)	14 (29.8)	50 (20.9)	

Table 2: Knowledge of risk factors and symptoms of uterovaginal prolapse of the study participants.

Knowledge of preventive measures and treatment modalities of uterovaginal prolapse by the study participants are shown in Table 3. Most (60.1%) study participants knew that family planning and birth spacing is a preventive method for the condition. Avoiding early pregnancy (14.3%) and adequate rest during postnatal period (13.3%) were common method of prevention known by the participants. Knowledge of other preventive measures was low. Two hundred and two (70.6%) participants were aware that conservative treatment could be a modality of treatment of uterovaginal prolapse whereas 29.4% of the cohorts mentioned surgery as a form of treatment for the condition.

Variable	**Total (n=286) n (%)**	**Knowledge of UV prolapse**		***p* value**
		Good (n=47%) n (%)	**Poor (n=239) n (%)**	
Preventive measure				
Not lifting heavy loads	2 (0.7)	1 (2.1)	1 (0.4)	0.67
Eating balanced diet	2 (0.7)	0 (0)	2 (0.8)	
Adequate rest during postnatal period	38 (13.3)	21 (44.6)	17 (7.1)	
Family planning and birth spacing	172 (60.1)	35 (74.4)	137 (57.3)	
Avoiding early pregnancy	41 (14.3)	29 (61.7)	12 (5.0)	
Hospital delivery	8 (2.8)	2 (4.3)	5 (2.1)	
Safe abortion practices	4 (1.4)	2 (4.3)	2 (0.8)	
Adequate treatment of medical conditions (e.g. Chronic cough, uterine fibroid)	21 (7.3)	13 (27.7)	8 (3.3)	
Method of treatment				
Surgery	84 (29.4)	35 (74.4)	49 (20.5)	0.0001
Conservative	202 (70.6)	40 (85.1)	162 (67.8)	

Table 3: Knowledge of preventive measures and treatment modalities of uterovaginal prolapse among participants (n=286).

Multivariable logistic regression analysis showing predictors of knowledge of uterovaginal prolapse among the study cohorts are shown in table 4. Among the socio demographic variables assessed, age group 46 - 50 years (AOR = 7.165, 95%CI = 1.749 - 29.357, $P = 0.006$), occupation such farming (AOR = 16.812, 95%CI = 9.749 - 55.620, $P < 0.0001$) and civil servant (AOR = 18.691, 95%CI = 6.825 - 86.094, $P < 0.0001$), having primary education (AOR = 8.098, 95%CI = 7.773 - 8.907, $P < 0.0001$) or secondary education (AOR = 12.34, 95%CI = 1.654 - 6.342, $P = 0.01$) were associated with good knowledge of uterovaginal prolapse among the study participants.

Variable	Coefficient(B)	Std. error	*p* value	AOR	95% CI
Age (years)					
35 - 40	0..518	1.643	0.752	1.679	0.067 - 42.002
41 - 45	16.125	8.760	0.995	6.903	0.876 - 12.320
46 - 50	1.969	0.720	0.006	7.165	1.749 - 29.357
51 - 55	-0.236	0.657	0.719	0.790	0.218 - 2.862
56 - 75	-	-	-	1.00	-
Marital status					
Married	17.714	5.920	0.998	0.749	0.546 - 4.980
Widowed	-0.569	0.902	0.528	0.566	0.097 - 3.316
Single	-	-	-	1.00	-
Occupation					
Farming	16.979	1.195	< 0.0001	16.812	9.749 - 55.620
Trading	33.029	6.106	0..984	8.030	0.876 - 6.991
Civil servant	18.085	0.988	< 0.0001	18.691	6.825 - 86.094
Unemployed	-	-	-	1.00	-
Level of education					
No formal education	-2.576	2.368	0.998	0.076	1.118 - 3.196
Primary	-19.426	0.605	< 0.0001	8.098	7.773 - 8.907
Secondary	-18.673	0.901	0.01	12.340	1.654 - 6.342
Tertiary	-	-	-	1.00	-
Husband's education level					
No formal education	4.174	1.324	0.872	4.946	0.850 - 6.743
Primary	2.359	1.070	0.527	1.578	0.332 - 8.081
Secondary	2.770	0.977	0.605	5.951	0.352 - 8.173
Tertiary	-	-	-	1.00	-
Number of vaginal deliveries					
≥ 10	1.126	9.878	0.542	3.082	0.435 - 1.210
7 - 9	0.597	6.091	0.096	1.817	0.786 - 0.564
4 - 6	1.878	5.564	0.199	6.540	0.619 - 1.578
≤ 3	-	-	-	1.00	-

1.00 = Reference category, AOR = Adjusted odd ratio

Table 4: Multivariable logistic regression showing predictors of knowledge of uterovaginal prolapse.

4. Discussion

This study revealed that the proportion of study participants having adequate knowledge of uterovaginal prolapse was 19.7%, which is almost similar with the findings in Egypt (20%) [13] and Nepal (26.8%) [14]. Differently, this finding is lower than the studies in Central Nepal (55%) [15], Moscow (66.7%) [16], Vienna (63.9%) [16] and Connecticut (51.9%) [17]. On the other hand, knowledge of the study participants in this study is slightly higher compared with studies in India (11.1%) [18]. These might be due to variation in the nature of the study settings as some of the studies were hospital-based.

Regarding source of information related to uterovaginal prolapse, 83% of the participants had health workers as the major source of information about the condition. Friends and relatives, and television accounted for 4.3% of information source for the participants. This result is similar to the findings in Moscow and Vienna where participants got information about pelvic organ prolapse from medical specialists (72% and 82%, respectively; $p > 0.05$), followed by friends and family for patients in Vienna (25%), and the internet for patients in Moscow (23%) [16]. Of the patients in Vienna and Moscow, 21% and 14%, respectively, were informed about pelvic organ prolapse by their general practitioner ($p > 0.05$). Radio and television did not provide enough information in either country (6% and 6% respectively; $p>0.05$) [16]. In contrast to the findings of this study, a study done in Nepal showed that majority of the participants source of information was radio (53.3%) and television (47.2%), and health workers accounted for 19.5% of information source for the study cohorts [18]. These studies show differences in media preference and availability. These differences may be due to unsatisfactory or nonexistent strategic health communication programs in the media. In addition, most of the study participants in this study resides in the villages which limit their access to media on pelvic organ prolapse-related health information. Therefore, participants in this study preferred to obtain their information from healthcare providers given that the women rated health workers' opinion as one of the most important factors in making a shared decision about the therapy.

From this study, the knowledge of risk factors and symptoms of uterovaginal prolapse was poor as less than half of the participants had adequate knowledge regarding each risk factors and symptoms of the condition. This finding was similar to the findings of Elsayed in Egypt which showed that majority of the participants had poor knowledge of the risk factors and symptoms of uterine prolapse [19]. In addition, a cross sectional descriptive study conducted by Singh et al., in Nepal revealed that more than half of the studied women had inadequate knowledge on the risk factors and symptoms of uterine prolapse [20]. The similarity in the findings of these studies, regardless of the socio demographic and cultural differences may be because pelvic organ prolapse is a health problem that does not receive sufficient attention in most countries of the world.

The present study also revealed that knowledge of preventive measures of uterine prolapse was inadequate apart from knowledge of family planning and birth spacing (60%) as preventive measure. Also, less than one-third of the study participants were not aware that surgery was a treatment modality for uterine prolapse. These findings differ from findings of a study in Moscow and Vienna [16]. This difference could be due to the fact that women in developing countries do not consider uterovaginal prolapse symptoms as pathologic symptoms but they consider aging process the main etiology for appearance of such symptoms so, they may not seek for the prevention or treatment of the condition.

Among the socio demographic factors, farmers, and civil servants who had formal education (primary or secondary) and are between the ages of 46 and 50 years had good knowledge of uterovaginal prolapse. These findings were different from the findings of a study by Mandimika, et al. in Connecticut, U.S.A which showed that the advanced age, and high education were significantly associated with poor knowledge of pelvic organ prolapse [17]. This difference may be due to education is a major indicator for women's knowledge in developing countries, but because uterine prolapse is a neglected issue in maternity care, even in developed countries with high education there is lack of knowledge regarding this issue. Strengths of this study include the community based approach as the participants were drawn from 13 local government areas of Ebonyi State, Nigeria and the use of validated questionnaire to assess the knowledge of the condition among the participants. Also, there is no published study on the knowledge of women in pelvic organ prolapse in Nigeria. The limitation of the study is that the participants were mainly of Igbo ethnic group from Ebonyi state. Therefore, the monoethnic nature of the study limits the generalization of the study findings to the diverse ethnic groups in Nigeria.

In conclusion, the knowledge of pelvic organ prolapse among the study participants was poor. Therefore, there is need to develop pelvic organ prolapse guidelines aiming at improving women's knowledge and implementation of educational programs/ medical campaigns by health care providers regarding pelvic organ prolapse. This educational program should target women at all places especially in the rural communities for early detection, diagnosis and treatment of the condition. This would encourage women with the condition to seek medical care and help improve their quality of life.

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