Original Research Article

Uterovaginal prolapse: the sociodemographic profile and reproductive health service uptake in a low resource setting, Calabar, Nigeria

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ABSTRACT

Background: Uterovaginal prolapse is a common gynaecological condition in low resource countries because of high prevalence of grand multiparity, low skilled attendant at delivery and low contraceptive usage. Objective of this study was to determine the prevalence, sociodemographic profiles, utilization of reproductive health services and delay in seeking medical care of patient with uterovaginal prolapse in Calabar, Nigeria.
Methods: This was a retrospective study of women who presented with uterovaginal prolapse at University of Calabar Teaching Hospital, Calabar, Nigeria between 1st May 2009 and 1st June 2019. Patients case records were retrieved and analyzed. Statistical analysis was done using SPSS version 22.
Results: The prevalence of genital prolapse was 0.3%. The mean age and parity were 60.19±8.71 years and 6.31±2.80, respectively. The mean duration of symptoms before presentation was 3.19±2.16 years. Genital prolapse was commonest among age group 60-79 years (52.8%), parity 5-9 (66.7%), post-menopausal (97.2%), primary education (55.6%) and farmers (47.2%). Grade 3 uterovaginal prolapse was the commonest grade (58.3%). Most patients (86.1%) had symptoms of genital prolapse for less than 5 years before seeking medical treatment. The majority of patients had no antenatal care during their pregnancies (80.6%), no skilled attendant at deliveries (86.1%) and no contraceptive use during their reproductive years (77.8%). Participants with lower parity (1-4) (p=0.03), higher educational level (p<0.001) and teachers/civil servants (p=0.043) presented earlier (less than 1 year) to the hospital.
Conclusions: There is poor utilization of reproductive health services among women who develop uterovaginal prolapse in study environment. Women with higher social status sought for help earlier. Increasing awareness of this condition and providing antenatal care, skilled birth attendants and contraceptive services will reduce the burden of this condition.

Keywords: Delayed presentation, Reproductive health services, Uterovaginal prolapse

INTRODUCTION

Uterovaginal prolapse is a common gynaecological condition particularly in the grandmultipara.[1-3] It is of importance to gynaecologist in the developing and low resource countries as women in these environments are predispose to genital prolapse due to repeated child birth, low skilled attendant at delivery and low contraceptive usage.[1-4] It has a prevalence of 41-50% in women over the age of 40 years, with a lifetime risk of 7%.[5] However,

the prevalence is difficult to determine in low resource environment as most of the women do not seek medical attention unless symptoms are pronounced and disturbing.[6]

The female genital organs are maintained in their normal anatomical position by a number of fascial condensations (endopelvic fascia) such as the transverse cervical (cardinal) and uterosacral ligaments.[6] Genital prolapse occur as a result of weakness of these supportive

structures. Risk factors for genital prolapse include repeated deliveries, difficult vaginal deliveries, increase intra-abdominal pressure, and estrogen withdrawal as in post-menopausal women.[7-9]

Three degrees of uterovaginal prolapse are described and the level of the cervix (the lowest and dependent part) is assessed while the patient is straining. First degree prolapse is when the descent is still within the vagina; second degree when it has reached the introitus and third degree when it has gone beyond the introitus. The third degree, termed procidentia, is usually accompanied by cystourethrocele and rectocoele.[2]

Previous surveys have studied the prevalence, risk factors and management of uterovaginal prolapse; however, there is paucity of information on utilization of reproductive health services and health seeking behaviour of patients with genital prolapse.[1-4,10,11] This information is important, especially in low resource environment, as it gives insight on underlying factors that may predispose patients to this condition and behaviour that promote it. This will form basis for formulation of preventive strategies. Therefore, this study was designed to determine the prevalence, sociodemographic characteristics, utilization of reproductive health services and health seeking attitude of patients with uterovaginal prolapse in University of Calabar Teaching Hospital, south-south, Nigeria.

METHODS

This was a retrospective descriptive study of women who presented with genital prolapse in University of Calabar Teaching Hospital over a 10-year period from 1st May 2009 to 1st June 2019. Data of patient diagnosed with genital prolapse within this period were collected from registers in the gynecological clinic, gynecological ward, gynecological theatre, and from patients' case records in the medical record department. Data obtained included age, parity, menopausal status, occupation, marital status, grade of prolapse, duration of prolapse before presentation, history of antenatal care, history of skilled attendant at previous deliveries and history of contraceptive use.

Statistical analysis

SPSS statistics (IBM Corp. version 22) program was used for data analysis.

RESULTS

During the period studied, of the 15,543 new gynaecological clinic attendees 45 patients were diagnosed with genital prolapse, giving a prevalence of 0.3%. However, 39 case record were retrieved of which 36 had adequate information for analysis. The mean age and parity were 60.19±8.71 years and 6.31±2.80, respectively. The mean duration of symptoms before

presentation was 3.19±2.16 years. Socio-demographic features of patients is shown in Table 1. Genital prolapse was commonest among age group 60-79 years (52.8%), followed by 40-59 years (44.4%). The modal parity was 5-9 (66.7%). Majority (97.2%) of the patients were post-menopausal, 55.6% had primary education, 47.2% were farmers and 94.4% were married. Grade 3 uterovaginal prolapse was the commonest grade (58.3%) and grade 2 was the second commonest (38.9%) while grade 1 was the least (2.8%) as shown in Figure 1.

Table 1: Socio-demographic features of participants.

| Variables	Frequency	Percentage
Age		
40-59 years	16	44.4%
60-79 years	19	52.8%
Above 80 years	1	2.8%
Parity		
1-4	9	25.0%
5-9	24	66.7%
Above 10	3	8.3%
Menopausal status		
Post-menopause	35	97.2%
Pre-menopause	1	2.8%
Education level		
No formal education	9	25.0%
Primary	20	55.6%
Secondary	4	11.1%
Tertiary	3	8.3%
Occupation		
Farmer	17	47.2%
Trader	11	30.6%
Housewife	4	11.1%
Teacher	3	8.3%
Civil servant	1	2.8%
Marital status		
Married	34	94.4%
Single	2	5.6%
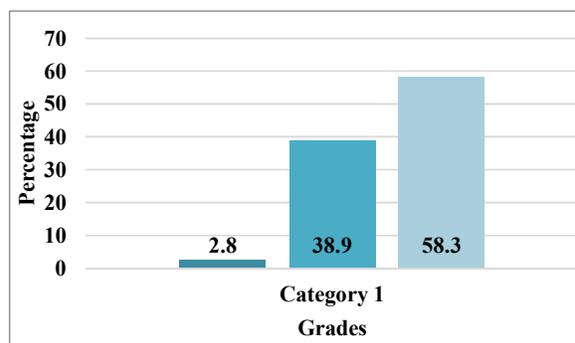
Figure 1: Grades of genital prolapse among participants.

Table 2 shows the duration of symptoms before seeking care and usage of reproductive health services of patients.

The commonest duration of symptoms before seeking medical treatment was 2 years and below (44.4%), followed by 3-4 years (36.1%) and the least was 7 years and above (8.3%). The majority of patient had no antenatal care during their pregnancies (80.6%), no skilled attendants at deliveries (86.1%) and did not use contraceptive during their reproductive years (77.8%). The relationship between delay in seeking medical care and sociodemographic characteristics of patients is shown in the Table 3. Higher proportion (66.7%) of participants with lower parity (1-4) presented earlier (less than 1 year) compared to participants with higher parity and the difference is statistically significant (p=0.03). Participant with tertiary and secondary education (66.7%) and (100%), respectively presented earlier (less than 1 year) than those with lower educational level (p<0.001). Teachers and civil servants (100%) and (66.7%), respectively sought help earlier (less than 1 year) than farmers, traders and house-wives (p=0.043).

Table 2: Reproductive health seeking behaviour of participants.

Variables	Frequency	Percentage
Duration of symptom before presentation		
≤ 2 years	16	44.4%
3-4 years	13	36.1%
5-6 years	4	11.1%
≥ 7 years	3	8.3%
Antenatal care in previous deliveries		
Yes	7	19.4%
No	29	80.6%
Skilled attendant at deliveries		
Yes	5	13.9%
No	31	86.1%
History of contraceptive use		
Yes	8	22.2%
No	28	77.8%

Table 3: Relationship of delay in seeking medical treatment and socio-demographic characteristics of participants.

	Variables	Total	Duration of symptom		p value
			1 years and below (%)	Above 1 years (%)	
Age	40 - 59 years	16	7 (43.8%)	9 (56.2%)	X^2 = 5.456
	60 - 79 years	19	2 (10.5%)	7 (89.5%)	Df = 2
	above 80 years	1	0 (0.0%)	1 (100.0%)	p value = 0.065
Parity	1-4	9	6 (66.7%)	3 (33.3%)	X^2 = 11.333
	5-9	24	3 (12.5%)	21 (87.5%)	Df = 2
	Above 10	3	0 (0.0%)	3 (100.0%)	p value = 0.03*
Education level	No formal education	9	0 (0.0%)	9 (100.0%)	X^2 = 18.844
	Primary	20	3 (15.0%)	17 (85.0%)	Df = 3
	Secondary	4	4 (100.0%)	0 (0.0%)	p value <0.001*
	Tertiary	3	2 (66.7%)	1 (33.3%)	
Occupation	Farmer	17	1 (5.9%)	16 (94.1%)	
	Trader	11	4 (36.4%)	7 (63.6%)	X^2 = 9.849
	Housewife	4	1 (25.0%)	3 (75.0%)	Df = 4
	Teacher	3	2 (66.7%)	1 (33.3%)	p value = 0.043*
	Civil servant	1	1 (100.0%)	0 (0.0%)	

DISCUSSION

The prevalence of uterovaginal prolapse among gynecological clinic attendees in this study was 0.3%. This was comparable to 0.8% of in gynecological clinic attendees south-south Nigeria, but lower than 3.9% of gynecological admissions in south-east Nigeria and 1.4% of gynecological admissions in northern Nigeria.[1,2,4]

The prevalence of genital prolapse in this study may not be the true representation of the burden of the condition as this is a hospital-based study. Moreover, social and economic barriers that may preclude hospital presentation are highly prevalent in our environment. There is need for community-based study in order to ascertain the actual burden of genital prolapse in this environment. This will help to plan effective preventive strategies.

The mean age for genital prolapses in this study was 60.19±8.71 years, with the modal age being 60-79 years. Similar findings were reported from previous studies.[1-3] The mean parity was 6.31±2.80, with uterovaginal prolapse being commonest among grand multiparous women. Similarly, in other studies, genital prolapse was commonest among grand multiparous women.[1,2,10] The present study agrees with previous surveys that uterovaginal prolapse is most prevalent among post-menopausal women.[1,2,11] Majority of women with genital prolapse in this study were farmers. This agrees with findings from other African studies.[1,12] Grand multiparity, postmenopausal status and farming can be explained as

risk factors for uterovaginal prolapse as repeated childbirth leads to disruption of the myofascial fibres that supports the pelvic organs, oestrogen withdrawal weakens the integrity of the pelvic support and the physical activities involved in farming increases the intra-abdominal pressure, leading to genital prolapse.

Third degree uterovaginal prolapse was the commonest type in this study. This was similar to findings reported by Oraekwe et al, in south-east Nigeria.[1] Studies in Enugu, south-east Nigeria and port-harcourt, south-south Nigeria showed contrasting findings, with second degree uterovaginal prolapse being the most prevalent type.[10,11] The disparity may be explained by difference in level of awareness and care seeking attitude of patients in the different study settings.

In the present study, majority of women with genital prolapse did not have antenatal care during their pregnancies, there were no skilled attendants during their labors and deliveries, and they did not receive contraceptive services during their reproductive years. These findings underscore the importance of reproductive health services in preventing development of genital prolapse. Antenatal care services and presence of skilled personnel during labour and delivery can prevent conditions such as prolonged labour, obstructed labour, traumatic deliveries and perineal lacerations. These obstetric conditions are known to predispose to genital prolapse.[5,9] The use of contraceptives enable women to space pregnancies and limit pregnancies to desired number. This prevents high parity which is a known predisposing factor of genital prolapse.[1,2,10]

Majority of women in the present study with lower parity, higher educational level and skilled occupation such as teachers and civil servants presented earlier (less than 1 year) to the hospital. These findings suggest that women with higher socio-economic status may be better informed of this condition and were able to overcome socio-economic barriers against accessing medical treatment. These challenges include depending on husband or other relatives for permission and finance to seek medical treatment, and cultural and religious beliefs against orthodox medical treatments.[13]

There is need for increase awareness, especially among women of lower socio-economic status in order to improve health seeking behaviour of women with genital prolapse. There should also be a scale-up education on the importance of reproductive health services such as antenatal care services, skilled personnel and services in labour and delivery and family planning services, as preventive tools for genital prolapse. These reproductive health services should be made available and accessible to women to reduce genital prolapse and its antecedent distressful morbidities.

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