Original Article

SOCIO-DEMOGRAPHIC DETERMINANTS OF GENITOURINARY PROLAPSE

Riffat Zaman[1], Iffat Zaman[2], A.B. M. Aminoor Rashid[3]

ABSTRACT

Background: Genitourinary prolapse is a common gynecological problem, especially in developing country. Causes and risk factors for uterine prolapse are complex and deeply embedded in the cultural, economic and social conditions of women. Prevalence of depression is higher among women with advanced stages of prolapse. Hence this study aimed to assess the socio-demographic factors among patients with genitourinary prolapse.

Methods: A cross-sectional study was conducted from January to December, 2013 among 120 women with genital prolapse who attended at Gynae wards of Dhaka Medical College Hospital, Shaheed Suhrawardy Medical College Hospital, and Mitford Hospital in Dhaka. Women who were admitted with complaints of protruding mass per vagina and diagnosed as case of uterine prolapse were assessed and staged accordingly. A semi-structured questionnaire was used to obtain socio-demographic data and prolapse related data by face to face interview. After collection, data were compiled, summarized, and analyzed using SPSS software.

Results: In this study, out of 120 genitourinary prolapsed patients, 31.7% were 40-45 years age group, majority of 79.2 % were illiterate and almost two third had no monthly income. Among all respondents, 64.2 % had more than four children, maximum 96.7% had history of home delivery, and 91.7% history of heavy work during pregnancy or just after delivery.

Conclusion: Genitourinary prolapsed patients were illiterate, multipara, economic insolvency, heavy work during pregnancy and home delivery. A holistic management approach is recommended for women having prolapse.

_____
1. *Lieutenant Colonel, Commanding Officer, 15 Fd Ambulance, Shaheed Salahuddin Cantonment, Ghatail*
2. *Senior Consultant, Department of Obstetrics and Gynaecology Shaheed Suhrawardy Medical College Hospital, Dhaka*
3. *Lieutenant Colonel, Graded Medical Specialist, Combined Military Hospital, Saidpur Cantonment.*

Correspondence: Riffat Zaman, Lieutenant Colonel, Commanding Officer, 15 Field Ambulance, Shaheed Salahuddin Cantonment, Ghatail, Email: riffatzaman72@gmail.com

INTRODUCTION

The word 'prolapse' is literally derived from 'prolapsus', which means falling down or sinking that her womb has come down or something coming out through the vagina, along with backache, frequency of micturition, loss of bladder control, difficulty in emptying bowel [1]. Genitourinary prolapse occurs when there is descent of one or more of the pelvic organs including the uterus, bladder, rectum, small or large bowel, or vaginal vault. The anterior and/or posterior vaginal walls, the uterus and the vaginal vault can all be affected by this descent. There is resulting protrusion of the vaginal walls and/or the uterus. It is usually accompanied by urinary, bowel, sexual, or local pelvic symptoms [2]. According to

'WHO' estimation, the reproductive ill health accounts for 33% of the total disease burden in the woman globally. The global prevalence of uterine prolapse is 2-20% [3]. Pelvic organ prolapse (POP) is a common gynecological condition that can affect quality of life (QOL). The risk factors for POP include pregnancy, childbirth, weakness of the pelvic floor, aging and menopause. In developed countries, the prevalence of POP is high among postmenopausal women whereas in developing countries, the condition is also common in women of reproductive age [4]. In developing countries, the extent and effects of morbidity associated with pelvic organ prolapse are seldom acknowledged, because of patients' embarrassment. However, studies have begun to identify the suffering

of women with this disorder. The social consequences of prolapse are substantial and include physical and emotional isolation, abandonment, divorce, ridicule, low self-esteem, abuse, lack of economic support, and domestic violence [5]. Causes and risk factors for uterine prolapse are complex and deeply embedded in the cultural, economic, and social conditions of women. They range from early marriage and childbirth to malnutrition, work overload, and lack of rest in the pre and postnatal period [6]. Many women with pelvic floor disorders do not seek medical advice and this makes determining the incidence of gynecological conditions like prolapse and urinary incontinence very difficult. Difficulties arise when studying gynecological morbidities because of the sensitive and hidden nature of complaints regarding of the genital area [7]. In areas where access to health care is often limited, women usually have to live with the consequences of fistula or prolapse for the rest of their lives which can be a challenge, both physically and emotionally, as the symptoms can disrupt the woman's day-to-day life [8]. Failure to control sphincters or having the uterus outside the vagina, swinging in between thighs, can severely affect a woman's quality of life by limiting her physical, social and sexual functions and may cause a great deal of discomfort [9].

Genital prolapse is a very common gynecological disorder in Bangladesh. But women do not admit the problem due to shame, ignorance, social taboo and insolvency. It interferes with quality of life as the patient feels discomfort during walking or sitting and faces limitations [10]. The most commonly perceived causes of prolapse was reported by gynecologist is lifting heavy weight, including the postpartum period. Most reports describe heavy household and physical working during pregnancy as well as pre and post-delivery is the main causes and risk factors for this problem in Bangladesh. Similarly lack of access to skilled attendant during delivery, frequent conceiving, giving birth too many children and lack of nutritious food are also responsible [11]. In safe motherhood programming in the developing world, insufficient attention has been given to maternal morbidity, which can extend well beyond childbirth. For every woman who dies of pregnancy-related causes, an estimated 20 women experience acute or chronic morbidity. Maternal morbidity adversely affects families, communities and societies [12]. Uterine prolapse is a reproductive health condition that has not received sufficient attention despite its high prevalence. Furthermore, it seems that uterine prolapse not only affects older women but is also very common among younger women. When uterine prolapse occurs in women of reproductive age, it is typically a product of

poverty, entrenched gender discrimination and inadequate health care services. In developing countries like Bangladesh still maximum deliveries are conducted at home and only 18 percent of births are assisted by medically trained providers. Lack of access to essential obstetric care required by pregnant women with pregnancy complications can result in both short- and long-term morbidities and mortality. Long-term consequences from conditions such as obstetric fistula, uterine prolapse and urinary stress incontinence can have devastating effects on women, leading to marital desolation, social isolation and poverty. As a result, their productivity and availability to carry out routine household chores may be affected, causing them to be viewed as a burden to the family and affecting their social status and also individual health condition will be deteriorated further more. This study will provide some baseline data and information regarding the factors related to genitourinary prolapse among the patients. This study will suggest more attention to prevent the occurrence of prolapse and promote appropriate utilization of timely treatment for physical consequences associated with this condition.

METHODS

Study design and setting: This study was a descriptive type of cross-sectional study, carried out on a group of patients suffering from genitourinary prolapse with the objective to assess their socio-demographic determinants. The study was carried out from 1st January 2013 to 31st December 2013 in Dhaka Medical College and Hospital, Shaheed Suhrawardy Medical College Hospital and Mitford Hospital.

Study population: The study was conducted among the women with genitourinary prolapse admitted in Gynae department of above mentioned hospital and women who were willing to participate in the study. Women of extreme age and who had already undergone operation were excluded.

Sample size and sampling: Sampling was selected purposively from all the prolapsed women attended these hospitals for treatment during data collection period. Sample size of this study was 120.

Data collection: Data were collected by face-to-face interview with the help of a pre-tested semi structured questionnaire. A brief introduction was given verbally to each respondent. At the beginning of the interview the purpose and importance of the study was explained to each respondent. The Questionnaire was filled up by the researcher during interview. A Semi structured interview questionnaire was developed in both English and Bengali. But the Bengali questionnaire was used.

No medical examination or test was done. After collection of data, questionnaire was checked to see whether it was filled up correctly or not. Then the data were stored after giving appropriate identification number. The data were entered computer by using of software statistical package of social science (SPSS). After frequency run, data were cleaned and frequency distribution was checked for normal distribution or not. Some data were categorized for analysis. After thorough cleaning and editing of data, an analysis plan was developed keeping in view of the objectives of the study.

Data analysis: All data were checked and edited after collection, verified for consistency. Then the data were entered into computer and statistically analysis of the results were obtained by using window-based computer software SPSS. The results were presented in tables and then analyzed in the line of objectives of the study. Significant tests were done by chi-square tests.

Ethical consideration: The ethical approval was obtained from the Institutional Review Board (IRB) of NIPSOM. Informed consent was obtained from each participant. Privacy of the participants and confidentiality of data were maintained strictly.

RESULTS

Valuable information regarding socio-demographic of the respondents such as age, religion, education, occupation, personal income, family income, number of family members, were collected, analyzed and the results were presented in the following tables and graphs. The table 1 shows that among 120 respondents, 31.7% belonged to age group 40-45 years followed by 20.8% were aged >60 years, 18.3% were in 56-60 years' age group, 16.7% were in 46-50 years' age group and 12.5% were in 51-55 years' age group. The mean±sd age of the respondents was 54.58±10.4 years.

Table 1. Distribution of the respondents by age

Age group (Years)	Frequency	Percent
40-45	38	31.7
46-50	20	16.7
51-55	15	12.5
56-60	22	18.3
>60	25	20.8
Total	120	100.0

The table 2 shows that out of 120 respondents, majority of 79.2% were illiterate, 16.7% were only can sign and the least number 4.2 percent were up to primary level.

Table 2. Distribution of respondents by educational qualification

Educational qualification	Frequency	Percent
Illiterate	95	79.2
Only can sign	20	16.7
primary level	5	4.2
Total	120	100.0

The table 3 reveals that majority of the respondents (63.3%) were housewives followed by 17.5% who worked in others house, and 15% were day laborer and the least number 3.3% and 0.8% percent were in non-govt. services and engaged in agriculture work respectively.

Table 3. Distribution of the respondents by occupation

Educational qualification	Frequency	Percent
House wife	76	63.3
Agriculture	1	0.8
Non-Govt. Services	4	3.3
Day labour	18	15.0
Works in others house	21	17.5
Total	120	100.0

Mean±SD = 1147.50; (SD = ± 1558.44)

The table 4 shows that out of 120 genitourinary prolapsed patients, 38.3% had monthly family income of Taka 5001-10000, followed by 36.7% had monthly family income of Taka $\leq$ 5000, 16.7% had monthly family income of Taka 10001-15000 and the least 8.3% had highest monthly family income of Taka >15000.

**Table 4. Distribution of the respondent by monthly family income**

Monthly family income	Frequency	Percent
Taka $\leq$ 5000	44	36.7
Taka 5001-10000	46	38.3
Taka 10001-15000	20	16.7

Taka > 15000	10	8.3
Total	120	100.0

Mean = 8904.17(± 4096.68)

Figure1 shows that Most (73.3%) of the respondents were in nuclear family, 25.8% were in joint family and only 0.8 % were in extended family.

Fig. 1. Distribution of the respondent by type of family
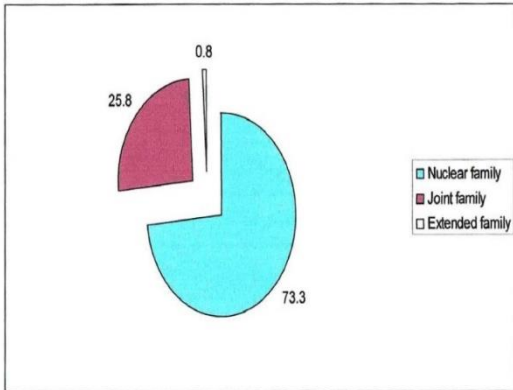
Information related to prolapse

The respondents were asked this set of questions to get the information related to prolapse, to find out the possible causative factors. These include age at first marriage, age at first child birth, number of children, mode of delivery, place of delivery, complication during or after delivery, history of heavy weight lifting, history of menopause. Figure 2 shows among the respondents 44.2% age at marriage were in the age of 13-14 years, 27.5% were in the age of 11-12 years, 16.7% were in the age of 15-16 years and 11.7% were >20 years.

Fig. 2. Distribution of the respondent by age at marriage
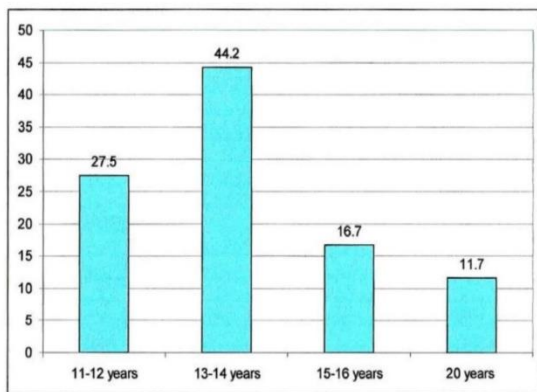

Table 5 shows that about half (49.2%) of the respondents gave birth their 1st child at age <15 years, 39.2% between 16-18 years, and only 11.7% above 18 years. Mean age of age at first marriage was 16.13(±1.9) years.

Table 5. Distribution of the respondent by age at birth of 1st child

Age at birth of 1st child (Years)	Frequency	Percent
<15	59	49.2
16-18	47	39.2
>18	14	11.7
Total	12	100.0

Mean (±SD) = 16.13(±1.9)

Table 6 reveals that among the respondents, majority (62.2%) had 2-4 alive children, while 31.9% had more than 4 alive children and only 5.9% had one child.

Table 6. Distribution of the respondents by no of children

No of alive children	Frequency	Percent
1	7	5.9
2-4	74	62.2
>4	38	31.9
Total	120	100.0

Table 7 reveals that out of 116 genitourinary patients with history of home delivery, most of 88.8% gave history of delivery without presence of any midwife or medical person; only 11.2% had history of delivery conducted by midwife or medical person at home.

Table 7. Distribution of the respondents by delivery conducted by midwife or medical person at home

Delivery conducted at home by midwife or medical person	Frequency	Percent
Yes	13	11.2
No	103	88.8
Total	116	100.0

Table 8 reveals that Table 9 reveals that 30% faced different problems during or after delivery. Among them, 47.5% had history of prolonged labour, 11.1% had history of retained placenta, 8.3 % of perineal tear and 2.8% with convulsion.

Table 8: Distribution of the respondents by type of problem facing during or after delivery

Type of problem	Frequency	Percent
Having problem	36	30.0
Types of problem		
Prolonged labour	17	47.2
Retained placenta	4	11.1
Convulsion	1	2.8
Perineal tear	3	8.3
Prolonged labour & Perineal tear	11	30.6
Total	36	100.0

Table 9 shows that out of 116 genitourinary prolapsed patients of them (94.8 percent) had the history of home delivery while only 5.2 percent had history of hospital delivery. Majority (99.1%) of the respondents gave birth their child by caesarian section.

Table 9: Distribution of the respondents by mode and place of delivery

Mode of delivery	Frequency	Percent
Normal	01	0.9
LUCS	115	99.1
Place of delivery	**Frequency**	**Percent**
Home	110	94.8
Hospital	6	5.2
Total	116	100.0

Table10 reveals that among 120 respondents, majority of 91.7 percent had history of heavy work during pregnancy or just after delivery; only 8.3 percent had history of no heavy work during pregnancy or after delivery.

Table 10: Distribution of the respondents by history of heavy work during pregnancy or just after delivery

Frequency	Percent
110	91.7
10	8.3
120	100.0

DISCUSSION

Out of 120 genitourinary prolapsed patients 31.7% were 40-45 years of age group, followed by 20.8% more than 60 years then 18 20% within 61.65 years followed by 16.7% within 46-50 years and then 12.5% within 51-55 years. The mean age was 54.58(±10.4) years. In S Begum' study shows maximum (36.11%) was belonged to 51-60 years. Out of all patients in this study, majority of 79.2% were illiterate, 16.7 % were only can sign and least number 4.2% were up to primary level. The result was almost similar to the findings of Kishwara and Tanira (2010), where 78.5% had no education. In this study, it was found that most of the respondents (68.8%) had no income. 12.5% had monthly income of taka <2000, 10.0% had taka 2001-3000, 13.3% had monthly income of Taka 3001- 4000, only 3.3% had income more than taka4000. The mean income was Taka 1147.50 (±1558.439). Among the respondents, maximum 64.2 percent had more than 4 children, 33.3 percent had 2-4 and only the least 2.5 percent had one child. Out of 120 respondents, 96.7 percent had history of home delivery only 3.3 percent had history of hospital delivery. Majority of 88.8 percent respondents said that there was no midwife or medical person present during their delivery and midwife or medical person was present during delivery in only 11.2 percent cases. 30 percent of all respondents had history of complication during delivery and majority of them (77.6 percent) had history of prolonged labour & perennial tear and 11.1 percent had retained placenta.

CONCLUSION

Women are the important part of society but their health and illness still rank low among family priorities particularly when condition is not life threatening like genital prolapse. Based on result and subsequent discussion with other relevant literature, it can be concluded that the findings of the present study may be useful basis for future research.

REFERENCES

1. Dutta Dc; Displacement of uterus; Text book of Gynecology including contraception; 511' edition; kolkhata; New central book Agency; 2009; 193-2151

2. Wright M. Genitourinary Prolapse; viewed on 6 May 2013. file///G/Genitourinary ProIapse_Doctor Patient Co.uk.htm.

3. Tailor HJ, Bhagat VM, Patel PR, Patel A, Italiya SL. Pap smear findings in uterine prolapse: a coincidence or indicator for impending malignancy. International Journal of Medical Science and Public Health. 2016 Apr 1;5(04):819.

4. Dhital R, Otsuka K, Poudel KC, Yasuoka J, Dangal G, Jimba M. Improved quality of life after surgery for pelvic organ prolapse in Nepalese women. BMC women's health. 2013 Dec;13(1):1-9.

5. Gunasekera P, Sazaki J, Walker G. Pelvic organ prolapse: don't forget developing countries. The Lancet. 2007 May 26;369(9575):1789-90.

6. Radl CM, Rajwar R, Aro AR. Uterine prolapse prevention in Eastern Nepal: the perspectives of women and health care professionals. International journal of women's health. 2012; 4:373.

7. Walker GJ, Gunasekera P. Pelvic organ prolapse and incontinence in developing countries: review of prevalence and risk factors. International urogynecology journal. 2011 Feb;22(2):127-35.

8. Ahmed S, Holtz SA. Social and economic consequences of obstetric fistula: life changed forever? International Journal of Gynecology & Obstetrics. 2007 Nov;99: S10-5.

9. Ghetti C, Lowder JL, Ellison R, Krohn MA, Moalli P. Depressive symptoms in women seeking surgery for pelvic organ prolapse. International urogynecology journal. 2010 Jul;21(7):855-60.

10. Kishwara S, Tanira S, Omar E, Begum K. Genital prolapse in women of reproductive age group in a rural community of Bangladesh. Journal of Dhaka Medical College. 2010;19(2):118-21.

11. Begum S, Sharmin S, Sultana P, Chowdhury AN, Nabi S, Uddin MN, Hasan MM. Clinical profile and management of uterovaginal prolapse with lower urinary tract symptom (LUTS). Bangladesh journal of urology. 2011;14(1):26-30.

12. Abdullah MS. Antenatal and postnatal health care seeking behavior of indigenous women: A study of the patro community in Sylhet (Doctoral dissertation, East West University).