

# Epidemiology, Risk Factors, and Postoperative Complications of Genital Prolapse in Women – A Cross-Sectional Study of 100 Cases

Dr. Mst. Meher Afroz<sup>1\*</sup>, Dr. Shamsun Nahar<sup>2</sup>, Dr. Mousumi Saha<sup>3</sup>, Dr. Rifat Sultana<sup>4</sup>, Dr. Fatema Begum<sup>5</sup>, Dr. Tahmina Begum<sup>6</sup>

<sup>1</sup>Senior Consultant, Department of Obstetrics and Gynaecology, Shaheed Suhrawardy Medical College Hospital, Dhaka, Bangladesh

<sup>2</sup>Assistant Professor, Department of Obstetrics and Gynaecology, Shaheed Suhrawardy Medical College Hospital, Dhaka, Bangladesh

<sup>3</sup>Assistant Professor, Department of Feto-Maternal Medicine, Shaheed Suhrawardy Medical College, Dhaka, Bangladesh

<sup>4</sup>Junior Consultant, Department of Obstetrics and Gynaecology, Shaheed Suhrawardy Medical College and Hospital, Dhaka, Bangladesh

<sup>5</sup>Junior Consultant, Department of Obstetrics and Gynaecology, Shaheed Suhrawardy Medical College Hospital, Dhaka, Bangladesh

<sup>6</sup>Junior Consultant, Department of Obstetrics and Gynaecology, Shaheed Suhrawardy Medical College Hospital, Dhaka, Bangladesh

DOI: <https://doi.org/10.36348/sijog.2025.v08i09.005>

| Received: 26.07.2025 | Accepted: 22.09.2025 | Published: 29.09.2025

\*Corresponding author: Dr. Mst. Meher Afroz

Senior Consultant, Department of Obstetrics and Gynaecology, Shaheed Suhrawardy Medical College Hospital, Dhaka, Bangladesh

## Abstract

**Background:** Genital prolapse is a common gynecological condition that significantly impacts the quality of life of women, particularly in low-resource settings. It is strongly linked to multiparity, traumatic or unattended home deliveries, and advancing age. This study aimed to evaluate the epidemiology, risk factors, treatment, and postoperative complications of genital prolapse among women attending a tertiary care hospital in Bangladesh. **Methods:** This prospective cross-sectional study was conducted in the Department of Obstetrics and Gynaecology, Dhaka Medical College Hospital, Dhaka, Bangladesh, from June 2007 to December 2007. A total of 100 women diagnosed with genital prolapse were enrolled. Data were collected on demographic characteristics, obstetric history, clinical features, management, and postoperative outcomes, and were analyzed using descriptive statistics. **Results:** The patients' ages ranged from 25 to 80 years (mean  $50.86 \pm 11.52$ ), with the highest proportion in the 51–60 years group (33%). Most women were from low socio-economic backgrounds (62%). Home delivery was predominant (89%), and the majority of deliveries were conducted by traditional birth attendants (81%). All patients reported the classical symptom of something coming down per vagina, with urinary complaints (62%) being the most common associated symptom. The vast majority underwent vaginal hysterectomy with pelvic floor repair (95%). Postoperative outcomes were favorable, with 96% experiencing no complications; minor complications included urinary tract infection (2%), per-vaginal bleeding (1%), and pyrexia (1%). **Conclusion:** Genital prolapse in Bangladesh is strongly associated with low socio-economic status and home deliveries by untrained attendants. Vaginal hysterectomy with pelvic floor repair remains the most effective treatment, with excellent postoperative outcomes. **Keywords:** Genital prolapse, risk factors, home delivery, vaginal hysterectomy, pelvic floor repair.

**Copyright © 2025 The Author(s):** This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC BY-NC 4.0) which permits unrestricted use, distribution, and reproduction in any medium for non-commercial use provided the original author and source are credited.

## INTRODUCTION

Prolapse of the genital organ causes the great deal of sufferings to women in Bangladesh. Genital Prolapse as a sequela of Obstetrical trauma is very frequent as 89% delivery is conducted by untrained birth attendance at home.[1] The literally meaning of prolapse derived from prolapsus, 'pro' means 'before' and 'labi' means 'to fall' falling or sinking of a part or viscous. It is not a disease but a disabling condition which is one of the common clinical conditions met in day-to-day gynecological practice, particularly among the parous

rural women [2].

I have reviewed about the risk factors to develop the genital prolapse among Bangladeshi women. Though the etiology is multi factorial but pregnancy related mismanagement and misconceptions pre-disposed to develop genital prolapse. Our patients usually present with the complaints that their womb has come down, while others have complaint of difficulty in micturition including frequency of micturition, in complete emptying of bladder and sometimes difficulty in emptying the bowel [2].

**Citation:** Mst. Meher Afroz, Shamsun Nahar, Mousumi Saha, Rifat Sultana, Fatema Begum, Tahmina Begum (2025). Epidemiology, Risk Factors, and Postoperative Complications of Genital Prolapse in Women – A Cross-Sectional Study of 100 Cases. *Sch Int J Obstet Gynec*, 8(9): 285-290.

The pelvic organ is supported by pelvic musculature, endopelvic fascia and its condensation, which are collectively known as pelvic floor. Downwards descend of the vaginal wall and/or uterus through the pelvic floor aperture is caused by weakness of pelvic floor as a result of progressive injury to the supportive ligaments due to child birth.[3] As in Bangladesh the patients present in their 3rd or 4th decade of life for advice but almost all of them have the history of marriage in early age and high parity at younger age. Usually, they come from low socio-economic background, mostly illiterate and history of sufferings for a long duration.[2]

About 89% of them have history of home delivery and had quick succession of pregnancy without routine anti natal checkup.[4-6] As the delivery conducted by untrained 'Thai', they have history of prolonged labour mismanaged first and second stage of labour, premature bearing down effort before full dilation of cervix, fundal pressure and traction on cord for delivery of the placenta before actual separation.[7,8] Injudicious instrumental delivery of fetus, inadequate rest and exercise in early puerperium all are the risk factors for developing prolapse as these are making the pelvic floor aperture weaker and sagging down the pelvic structures.[9]

Among the activating factors like chronic constipation occupation or household work involving heavy weight lifting also play important role.[2] Besides childbirth other determinants of genital prolapse are age, reduced estrogen level after menopause increased genetic constitutions.[10] Very rarely familial genital prolapse and iatrogenic vault prolapse are seen. Available data also suggest that elective cesarean delivery is only partly effective in preventing genital prolapse but cesarean delivery during active labor or vaginal delivery has similar effect on maternal pelvic support.[4] There is variety in age distribution usually the patients seeking medical advice are of 41-50 years of age group. Clinical presentation also varies from patient to patient or different age of the same patient. Some patient lives their whole life without any complains unless serious complication occurs.

Ideal treatment for genital prolapses is surgical one, which is satisfactory both for the patient and the surgeon but the type of surgery differs according to age, parity and natural prolapse. The aim surgery is to correction of relaxed or damaged supporting pelvic structure.<sup>5</sup> In my study I have reviewed the risk factors for developing genital prolapse among Bangladeshi women, which are acquired origin and mainly due to repeated child birth, mismanagement of labor and puerperium, which can be preventive somehow or all most cured by surgery. Better health education and

medical obstetrics and family planning services would reduce the risk for genital prolapse and reduces the disabling morbidity of our women.

## OBJECTIVE

The objective of this study was to evaluate the epidemiological profile, associated risk factors, clinical presentation, and postoperative complications of women with genital prolapse.

## METHODOLOGY & MATERIALS

This prospective cross-sectional study was conducted at the Department of Obstetrics and Gynaecology, Dhaka Medical College Hospital (DMCH), Dhaka, Bangladesh. The study was carried out over six months, from June 2007 to December 2007. A total of 100 women diagnosed with genital prolapse were included in the study population.

### Sample Selection

Participants were selected using a simple random sampling method.

### Inclusion criteria:

- Women admitted to the Department of Obstetrics and Gynaecology at DMCH with a diagnosis of genital prolapse.
- Willingness to provide informed consent.
- Age group: reproductive to post-reproductive.

### Exclusion criteria:

- Patients admitted with gynaecological complaints unrelated to genital prolapse.
- Women are unwilling to participate.
- Critically ill patients are unable to provide information or consent.

### Data Collection and Study Procedure

Ethical approval was obtained from institutional review board. Written informed consent was obtained from each participant after explaining the purpose and procedures of the study. Data were collected using a pre-designed, structured data sheet developed for this study. Information was obtained from clinical records, patient interviews, and direct examination. Variables included demographic details, reproductive history, antenatal care, mode and circumstances of delivery, obstetric complications, postpartum recovery, and associated medical disorders. Data were analyzed using SPSS (version 16.0). Descriptive statistics such as frequencies, percentages, means, and standard deviations were used to summarize findings. Trained researchers ensured systematic and accurate data entry. Confidentiality was maintained throughout the study process.

## RESULTS

**Table 1: Age distribution of the study patients of prolapse (N = 100)**

Age group (year)	Number of Patients	Percentage
21-30	4	4
31-40	23	23
41-50	27	27
51-60	33	33
61-70	12	12
70+	1	1
<b>Total</b>	<b>100</b>	<b>100</b>
Ave. age	50.86	
Std. deviation	11.52	
Minimum	25	
Maximum	80	

Table 1 shows the age distribution of women with genital prolapse included in the study. The majority of patients were within the age group of 51–60 years (33%), followed by 41–50 years (27%) and 31–40 years (23%). A smaller proportion was found in the age groups

of 61–70 years (12%) and 21–30 years (4%), while only 1% of cases occurred above 70 years. The mean age of the study population was  $50.86 \pm 11.52$  years, with ages ranging from 25 to 80 years.

**Table 2: Relationship of prolapse with socio-economic status**

Socio-economic status	Number of Patients	Percentage
low	62	62
middle	37	37
well	1	1
<b>Total</b>	<b>100</b>	<b>100</b>

Table 2 demonstrates the relationship of genital prolapse with socio-economic status. The majority of patients belonged to the low socio-economic group (62%), followed by middle class women (37%), while

only 1% of patients were from a well-off background. This indicates that genital prolapse was predominantly observed among women from lower socio-economic strata.

**Table 3: Circumstances of Delivery (N=100)**

Factor		Number of Patients	Percentage
Place of Delivery	Home	89	89.0
	Home and Hospital	9	9.0
	Hospital	2	2.0
Delivery Conductor	Traditional Birth Attendant (Dai)	81	81.0
	Doctor	11	11.0
	Relative	8	8.0

Table 3 describes the circumstances of delivery. Home delivery was predominant (89%), followed by combined home and hospital deliveries (9%), and only

2% exclusively in the hospital. Traditional birth attendants conducted most deliveries (81%), whereas doctors attended 11% and relatives 8%.

**Table 4: Associated Complications During and After Delivery (N=100)**

Complication	Number of Patients	Percentage
Delivered a stillborn baby due to malpresentation	19	19.0
Retained Placenta	3	3.0
Postpartum Haemorrhage (PPH)	3	3.0
Obstructed labour due to big baby/twin baby	2	2.0
Nil	73	73.0

Table 4 outlines associated complications during and after delivery. A total of 19% reported delivering a stillborn baby due to malpresentation, 3%

retained placenta, 3% postpartum haemorrhage, and 2% obstructed labour due to large or twin babies. However, 73% did not report any delivery-related complications.

**Table 5: To record the symptomatology with which the patient presents**

Symptomatology	Number of Patients	Percentage
Something coming down P/V	100	100
Urinary symptom	62	62
Defecation problem	23	23
Discharge per vagina	24	24
Others	10	10

Table 5 summarizes the presenting symptoms of women with genital prolapse. All patients (100%) reported the classical symptom of “something coming down per vagina.” Urinary symptoms were also very

common, affecting 62% of the women. Other associated complaints included vaginal discharge (24%), defecation problems (23%), and miscellaneous symptoms such as backache or lower abdominal discomfort (10%).

**Table 6: Evaluation of Treatment Given**

Treatment type	Number of Patients	Percentage
VH with pelvic floor repair	95	95
transvaginal vault suspension with enterocele repair	1	1
TAH with pelvic floor repair	1	1
Sacrocolpopexy	1	1
Fothergills operation	1	1
anterior and post repair	1	1
<b>Total</b>	<b>100</b>	<b>100</b>

Table 6 shows the distribution of treatment modalities given to the study population. The vast majority of patients underwent vaginal hysterectomy (VH) with pelvic floor repair (95%), which was the most common surgical approach. Other procedures were

performed infrequently, including transvaginal vault suspension with enterocele repair (1%), total abdominal hysterectomy (TAH) with pelvic floor repair (1%), sacrocolpopexy (1%), Fothergill's operation (1%), and anterior and posterior colporrhaphy (1%).

**Table 7: Postoperative Complications**

Postoperative complication	Number of Patients	Percentage
UTI	2	2
PV Bleeding	1	1
Postoperative pyrexia	1	1
Nil	96	96
<b>Total</b>	<b>100</b>	<b>100</b>

Table 7 outlines the postoperative complications observed among the study patients. The majority of women (96%) did not experience any complications following surgery. Among those affected, urinary tract infection (UTI) was reported in 2%, while per-vaginal bleeding and postoperative pyrexia occurred in 1% of cases each.

## DISCUSSION

Genital prolapse is one of the common clinical conditions. It is very common picture to see a middle aged or an elderly woman, presents with the complaints of something coming down per vaginally for prolonged duration, usually dated since her first or second delivery, many of them had suffered with this condition for more than 20 years. Most of the women are house wife; some are working as daily laborer, who has to do exertional work, lifting heavy weight. Most are multiparous, delivered at home by the untrained birth attendant and forced to do heavy manual work at early puerperium without having adequate rest and nutrition.

Although the study includes a small, self-selected sample of women I have focused to find the risk factors those are likely to be the forerunners for developing prolapse of the genital organs among our women.

Most of the patients (33%) are between 51to60 years of age group. The youngest one is 25 years old and eldest one is 80 yrs. It reflects that the process of developing genital prolapse begins at reproductive age, though the final result or outcome may reveal at menopause. Marriage in early age, high parity in younger age contributes to the development of genital prolapse. Partial loss of nerve supply to the pelvic organs is part of the normal aging process which is accelerated by pregnancy and child birth. While the 2005 study by Hamid *et al.* found the highest proportion of patients (35%) within the 41–50-year age range, the present 2007 series identified a slightly older demographic peak, with the majority of cases (33%) occurring in women aged 51-60 years.

The study shows 89% patients had delivered all their babies at home while only 2(2%) had hospital delivery and the remaining had delivered some babies at home and some, usually their first and last baby in hospital. Most (81%), of the delivery is conducted by untrained birth attendant or Dai. High incidence and severe degree of genital prolapse among them is caused by that the patients are made to bear down before the full dilatation of cervix when the bladder is not empty. Also prolonged second stage of labour causes undue stretching over the perineum as episiotomies are not applied by the Dais. Soon after the delivery many of them experienced minor degrees of prolapse. [11-13]

Most of the patients are of low-income group 62%. These groups are usually illiterate, they are not aware of the ill effect of early marriage, high parity at early age and at quick succession and poor puerperal rehabilitation without nutritional support, delay in seeking medical help, all are cofactors of poverty which has ended in the development of POP.[14]

In the present study, the commonest symptom with which the patient present is "something coming down per vagina", it was 100%; next to that the urinary symptoms like incomplete voiding, frequency, urgency or stress incontinence was 62%, 23% of them had complaints of constipation or difficulty in defecation, while 10% of them had pervaginal watery or bloodstained discharge as associated symptoms. While both the present 2007 series and the 2005 study by Hamid *et al.* found the sensation of "something coming down per vagina" to be the predominant symptom (100% and 97%, respectively), our study reported a notably higher prevalence of associated urinary symptoms (62% vs. 28%), defaecatory symptoms (23% vs. 20%), and other symptoms (24% vs. 5%).[6]

Many patients state that they had developed the symptoms of prolapse or they had perceived the sensation that their womb had descended downward soon after her first delivery, some mentioned she felt since her second delivery while some of them had been suffering since her last delivery.[15]

These women who had had these condition for many years stated that the degree of sufferings had been increasing over time and that it was becoming more and more difficult to live with it. As the incidence and severity of prolapse increases with advancing age these finding correlates with the state that the pelvic floor muscle being more vulnerable to age related denervation since damage to the pelvic floor muscle during child birth become evident when the age-related changes are superimposed. [16,17]

The present study shows that, most of the patients are treated by surgery. because most of them are of menopausal or about perimenopausal age and their

family is complete. About 95% of the patients underwent vaginal hysterectomy with/without pelvic floor repair.

Two patients are diagnosed as vault prolapse one of them had the H/O Vaginal hysterectomy 10-15 years ago, one of them underwent TAH 1 year ago. One patient treated by transvaginal vault suspension with enterocele repair and other is treated by abdominal sacrocolpopexy.

One patient was treated with TAH because this patient has H/O big fibroid uterus with large cystocele and rectocele. One patient treated with Fothergill's operation. One had only anterior colporrhaphy and posterior colpoperineorrhaphy because this patient had only large cystocele and rectocele and the patient wished to preserve her uterus.

To observe the post operative complications most of the patients had good recovery without any complaint only two patients had UTI (urinary tract infection). One had per vaginal bleeding and other had postoperative pyrexia, all of them were treated conservatively

### Limitations of the study

This was a single-center, cross-sectional study with a relatively small sample size, which may limit the generalizability of the findings. Recall bias from patients' obstetric history could not be completely excluded.

## CONCLUSION

Genital prolapse in Bangladeshi women is largely acquired, with obstetric trauma, home deliveries by untrained attendants, multiparity, early resumption of heavy manual work, and poor nutrition emerging as key contributors. Symptoms often begin soon after childbirth but become clinically significant years later, particularly around menopause. Most women present late, requiring surgery as the definitive treatment. To reduce this burden, community education is essential to discourage harmful delivery practices, promote institutional deliveries, ensure rest and pelvic floor exercises in the postpartum period, provide access to contraception, and improve availability of early medical care through outreach and local health camps.

**Financial support and sponsorship:** No funding sources.

**Conflicts of interest:** There are no conflicts of interest.

## REFERENCES

1. Sullivan SA, Davidson ER, Bretschneider CE, Liberty AL, Geller EJ. Patient characteristics associated with treatment choice for pelvic organ prolapse and urinary incontinence. *International urogynecology journal*. 2016 May;27(5):811-6.



2. Patel PD, Amrute KV, Badlani GH. Pathophysiology of pelvic organ prolapse and stress urinary incontinence. *Indian Journal of Urology*. 2006 Oct 1;22(4):310-6.
3. DeLANCEY JO. Anatomy and biomechanics of genital prolapse. *Clinical obstetrics and gynecology*. 1993 Dec 1;36(4):897-909.
4. Malhotra N, Malhotra J, Saxena R, Bora NM. *Jeffcoate's principles of gynaecology*. JP Medical Ltd; 2018 Aug 16.
5. Telinde RW. Prolapse of the uterus and allied conditions. *American Journal of Obstetrics and Gynecology*. 1966 Feb 1;94(3):444-63.
6. Hamid AN. Review of genital prolapse- study of 100 cases (FCPS dissertation) BSMMU 2005.
7. Hsu y, Summers A, BSe, HussainHK, Guire KE, DeLancy JOL, levator plate angle in women with pelvic organ prolapse compared to women with normal support using dynamic MR imaging. *Am J Obstet Gynaecol*. 2006 May194(5): 1427-1433.
8. Delancy JOL, Kearney R, Chou Q, Speights S. Appearance of Levator ani muscle abnormalities in MR images after vaginal delivery. *Am J obstet Gynaec*. 2003 Jan 101(1): 46-53.
9. Lien.KC, Mooney B, DeLancy JOL, Ashton-Miller JA, Levator Ani muscle stretch induced by Simulated vaginal Birth. *Obstet gynaecol*. 2004; 103(1):31-40.
10. Jabeen S. Tahera D. Editorial genital prolapse. *Bang. J. Obstet Gynaecol* 1992; 7:1-8.
11. Datta DC *Text Book of Gynaecology including contraception* 4th Ed, 2003 190-195.
12. Sze EHM, Sherard GB, Dolejal JM. Pregnancy, Labour, Delivery, and Prolapse. *Am J Obstet Gynaecol* 2005 Nov; 100(5) part 1
13. Haylen BT. The retroverted uterus: ignored to date but core to prolapse. *Int Urogyn J Pelvic Floor Dysfunct*. 2005 Dec 8;:1-4
14. Tegerstedt G, Miedel A, Maehle- Schmidt M, Nyren O, hammarstrm M Obstetric risk factors for symptomatic prolapse: a population-based approach. *Am j Obstet gynaecol* 2006Jan; 194(1): 75-81
15. Thkar R. Stanton S. Management of genital prolapse: *BMJ* 2002;423: 1285-62.
16. Davilia GW, Moore RD, Guidice TP. *Innovations in the Treatment of Vaginal Prolapse: a supplement to OBG Management*, 2006
17. Johnson M. Sacrocolpopexy & Sacral Hysteropexy, Available from RWH, <http://www.rwh.org.au/women info>.