



A Study on Causes for Hysterectomy in Bangladesh

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Abstract: Background: Hysterectomy is one of the most common gynecological surgeries performed worldwide, including in Bangladesh, where concerns are rising over the frequency and justification of the procedure, particularly among younger women.

Objective: The aim of this study was to assess the causes leading to hysterectomy and evaluate the demographic and clinical profiles of women undergoing the procedure in a clinic-based setting in Bangladesh. **Method:** This randomized prospective study was conducted at Khalishpur Clinic from January 2018 to April 2024. A total of 366 women who underwent hysterectomy during this period were included. Data were collected using a structured proforma documenting patient demographics, reproductive history, and clinical diagnoses. Descriptive statistics were used to analyze the data and identify common patterns and causes. **Results:** The mean age of the participants was 45.7 ± 11.7 years, with 75% having two to four children, indicating completion of childbearing. Adenomyosis was the most prevalent cause of hysterectomy (79.5%), followed by fibroids (41.8%), and chronic cervicitis (21.3%). Other causes included uterine prolapse (16.1%), endometriosis (3.0%), and endometrial hyperplasia (1.9%). Notably, 50% of women had two co-existing gynecological conditions, while 16.7% presented with three to five, underscoring the complexity of clinical presentations. **Conclusion:** The study reveals that hysterectomy in Bangladesh is predominantly performed in women in their mid-40s with completed childbearing.

Keywords: Hysterectomy, Adenomyosis, Fibroids, Gynecological conditions, Bangladesh, Women's health, Co-existing pathologies.

Original Research Article

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Article at a glance:

Study Purpose: To assess the causes and demographic characteristics of women undergoing hysterectomy in Bangladesh.

Key findings: Adenomyosis was the most common cause (79.5%), followed by fibroids (41.8%). Most women were in their mid-40s with completed childbearing and presented with multiple gynecological issues.

Newer findings: The study highlighted adenomyosis as a leading cause, more prevalent than fibroids, and found a high rate of co-existing gynecological conditions, indicating a need for early diagnosis and non-surgical options.

Abbreviations: AUB – Abnormal Uterine Bleeding, PID – Pelvic Inflammatory Disease, SD – Standard Deviation, Gynaecology – Obstetrics and Gynecology.



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INTRODUCTION

Hysterectomy, the surgical removal of the uterus, is a significant gynecological procedure that has far-reaching implications for a woman's health, fertility, and quality of life. While globally this operation is often performed for both benign and

malignant conditions, hysterectomy is increasingly being scrutinized due to the rising number of procedures, especially among younger women. The causes behind this trend are deeply rooted in a combination of medical, socio-economic, and healthcare system-related factors, which demand

closer examination.¹⁻³ In Bangladesh, one of the most common medical indications for hysterectomy includes abnormal uterine bleeding (AUB), often associated with conditions like fibroids, adenomyosis, and endometrial hyperplasia. Many women also undergo the surgery due to prolapsed uterus, particularly in rural regions where access to pelvic floor therapy is limited.⁴⁻⁵ Chronic pelvic pain and complications from childbirth are also frequent contributors, sometimes leading to hysterectomy as a last resort. However, in many cases, these conditions could potentially be managed with less invasive treatment options if diagnosed and treated early. Socio-economic and cultural dynamics play a crucial role in influencing the decision to undergo hysterectomy in Bangladesh. Women from lower-income backgrounds, especially in rural settings, often lack access to regular gynecological care, leading to late diagnoses of reproductive issues. Moreover, there exists a widespread misconception that post-childbearing, the uterus becomes 'useless,' which sometimes encourages early hysterectomy without full exploration of alternatives.⁶⁻⁷ Family pressure, lack of awareness, and the societal tendency to overlook women's long-term health also contribute to this issue.

Another concerning aspect is the role of unregulated private healthcare facilities, where unnecessary hysterectomies are sometimes performed for financial gain. There have been reports suggesting that some women are advised to undergo surgery without thorough medical justification. In the absence of proper medical counseling and second opinions, many patients consent to the procedure without fully understanding its consequences. This raises ethical concerns and highlights the need for stronger medical guidelines and monitoring systems. Furthermore, a lack of trained gynecologists in government hospitals and poor access to diagnostic tools mean many patients do not receive timely, appropriate care. In many instances, hysterectomy becomes the only viable option in an overburdened healthcare system where alternative treatments such as hormone therapy, endometrial ablation, or uterine artery embolization are either unavailable or too expensive for the average patient.

Understanding the causes for hysterectomy in Bangladesh requires a multi-dimensional approach that considers medical, cultural, economic, and systemic factors. Addressing this issue involves not only improving diagnostic and treatment infrastructure but also educating both healthcare providers and the general population about women's reproductive health and rights. Strengthening public health policy and implementing ethical medical practices will be essential in reducing unnecessary hysterectomies and ensuring women receive appropriate, compassionate care.

OBJECTIVE

To assess the causes for hysterectomy in Bangladesh.

METHODOLOGY

This study was designed as a randomized prospective study to explore the demographic characteristics and clinical indications for hysterectomy among women. The prospective nature of the study allowed for real-time data collection and analysis, providing a more accurate reflection of current clinical trends and decision-making patterns related to hysterectomy. The research was conducted over a span of more than six years, from January 2018 to April 2024, at Khalishpur Clinic, a healthcare facility catering to a diverse population of women with gynecological concerns. This extended study duration ensured the inclusion of a wide range of patient profiles and disease presentations, enhancing the reliability and depth of the findings. The study population included 366 women who underwent hysterectomy during the study period. Participants were selected through a randomized approach to minimize selection bias and ensure that the sample was representative of the broader patient population. All women included in the study had complete clinical records and provided informed consent for participation. Data collection was carried out using a structured proforma designed to record detailed information on each patient's age, reproductive history, number and type of gynecological complaints, and the clinical indications leading to the hysterectomy. Diagnostic findings were also reviewed, including imaging reports and histopathological results, to confirm the underlying causes. For data analysis, descriptive statistics were

used to summarize patient demographics and clinical characteristics. Frequencies and percentages were calculated for categorical variables such as causes of hysterectomy and the number of co-existing conditions. The data was compiled and analyzed using standard statistical software to ensure accuracy and clarity in the interpretation of results.

RESULTS

Table 1: Demographic characteristics of the study group

Variable	Value
Total patients	366
Mean age (\pm SD)	45.7 \pm 11.7 years
Number of children	
- 2 to 4 children	75%

The most common cause of hysterectomy among the study participants was adenomyosis, reported in 79.5% (n=291) of cases, followed by fibroids in 41.8% (n=153) and chronic cervicitis in 21.3% (n=78). Uterine prolapse was identified in 16.1% (n=59) of the patients. Less frequently reported causes included endometriosis (3.0%), endometrial hyperplasia (1.9%), endometrial polyp

A total of 366 patients were included in the study. The mean age of the participants was 45.7 years with a standard deviation of 11.7 years, indicating that most women undergoing hysterectomy were in their mid-40s. Regarding reproductive history, the majority of the women (75%) had between two to four children, reflecting a common trend of completing childbearing prior to undergoing the procedure.

and cervical polyp (both 1.4%), ovarian tumour (0.8%), pelvic inflammatory disease (PID) (0.8%), and ovarian cyst (0.5%). These findings suggest that while benign conditions like adenomyosis and fibroids are the primary indications for hysterectomy, a notable portion of patients present with multiple overlapping pathologies.

Table 2: Causes of Hysterectomy Among Study Participants (N = 366)

Cause	Frequency (n)	Percentage (%)
Adenomyosis	291	79.5%
Fibroids	153	41.8%
Chronic Cervicitis	78	21.3%
Uterine Prolapse	59	16.1%
Endometriosis	11	3.0%
Endometrial Hyperplasia	7	1.9%
Endometrial Polyp	5	1.4%
Cervical Polyp	5	1.4%
Ovarian Cyst	2	0.5%
Ovarian Tumour	3	0.8%
Pelvic Inflammatory Disease (PID)	3	0.8%

Based on the findings presented in Table 3, half of the patients (50.0%, n=183) undergoing hysterectomy had two co-existing gynecological conditions, while 33.3% (n=122) presented with a single complaint. Notably, 16.7% of the patients

(n=61) were diagnosed with three to five different conditions, indicating that a significant proportion of women experienced multiple overlapping gynecological issues leading to the decision for hysterectomy.

Table 3: Number of complaints of the patients

Number of complaints	N	%
Single condition	122	33.3%
Two conditions	183	50.0%
Three to five conditions	61	16.7%

DISCUSSION

The present study aimed to explore the demographic characteristics and clinical indications for hysterectomy among 366 women, revealing a mean age of 45.7 years and a predominant history of having two to four children. These findings are consistent with previous studies conducted in South Asian countries, where the average age of hysterectomy ranges between 40 and 50 years, and women typically undergo the procedure after completing their families.⁶ For instance, a study reported a mean age of 46.2 years, aligning closely with our results.⁷ The reproductive pattern observed in our study also mirrors regional norms, where hysterectomy is generally considered once childbearing is complete. The most significant finding in our study was the predominance of adenomyosis as the leading cause of hysterectomy, identified in 79.5% of cases. This contrasts with many previous studies where uterine fibroids were reported as the most common indication. For example, a retrospective analysis found fibroids in nearly 60% of cases, while adenomyosis was seen in only 25%. Similarly, studies from Western countries often cite fibroids and abnormal uterine bleeding as the leading reasons.⁸ The high prevalence of adenomyosis in our cohort may suggest underdiagnosis in other settings or improved diagnostic sensitivity in our institution due to the availability of advanced imaging techniques. Our study also found fibroids in 41.8% of patients, which is lower than figures reported in global literature but still a significant contributor to hysterectomy. Chronic cervicitis and uterine prolapse were present in 21.3% and 16.1% of cases respectively. While cervicitis is often managed conservatively, its presence alongside other pathologies could explain the surgical decision. Uterine prolapse, on the other hand, continues to be a prominent reason for hysterectomy in rural South Asian populations, where early and repeated childbirth, lack of pelvic floor rehabilitation, and limited access to non-surgical treatments contribute to its prevalence. A notable observation from our data is the high rate of co-existing conditions, with 50% of patients presenting with two gynecological pathologies and 16.7% with three to five. This finding underscores the complexity of cases leading to hysterectomy and is in line with reports who found that up to 40% of patients undergoing hysterectomy had multiple diagnoses.⁹⁻¹⁰ The

presence of multiple conditions suggests a delayed healthcare-seeking behavior or lack of early intervention, which is common in low- and middle-income countries due to financial constraints, social stigma, and limited access to specialists.

Less frequent causes in our study such as endometriosis (3.0%), endometrial hyperplasia (1.9%), and PID (0.8%) are comparable to international data, although their lower frequency might also reflect diagnostic challenges or underreporting. The inclusion of ovarian pathologies like cysts and tumors, albeit rare, supports the broader gynecological indication spectrum that justifies hysterectomy when malignancy cannot be ruled out or symptoms are severe. In summary, our study reflects a complex interplay of reproductive history, disease burden, and healthcare dynamics influencing hysterectomy decisions in Bangladesh. While some findings align with global trends, the prominence of adenomyosis and the high rate of multiple concurrent conditions highlight local diagnostic patterns and healthcare-seeking behavior. These results reinforce the need for improved screening, early management of gynecological disorders, and development of alternative, less invasive treatment options in the public health sector to reduce the overall hysterectomy burden.

CONCLUSION

In conclusion, this study highlights that the majority of women undergoing hysterectomy in Bangladesh are in their mid-40s and have typically completed childbearing, with 75% having two to four children. Adenomyosis emerged as the leading indication for hysterectomy, followed by fibroids and chronic cervicitis. A significant number of patients presented with multiple gynecological conditions, emphasizing the complexity and multifactorial nature of cases leading to surgical intervention. These findings underscore the importance of early diagnosis, appropriate management, and consideration of alternative treatment options to potentially reduce the need for hysterectomy in similar populations.

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