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# Prevalence and Socio-Demographic Characteristics of Threatened Abortion among Women: Experience of 100 Cases in Bangladesh

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**Abstract**

**Background:** Threatened abortion is very crucial condition among the pregnant women. **Objective:** The purpose of the present study was to assess the prevalence and socio-demographic characteristics of threatened abortion. **Methodology:** This cross-sectional study was done in the Department of Obstetrics & Gynaecology at Rajshahi Medical College Hospital, Rajshahi, Bangladesh from January 2004 to December 2004 for a period of one year. Patients admitted with the history of pregnancy with per vaginal bleeding before 20 weeks without having any cervical effacement or dilatation were included in this study group. Socioeconomic status of the patients was reflected by their places of habitations, educational back ground, occupations, and level of income. **Results:** The threatened abortion was reported at all stage of reproductive age. Women between 20 to 30 years had constituted the largest age group (58.0%). About 80.0% of the patients were illiterate. Of the 100 patients, 58 lived in rural areas or urban slums and 81 in kucha floored houses or slums. A large majority (77 out of 100) belonged to low or very low-income groups. Most of the study population were coming from low-income group (10,000.00 to 20,000 BDT) which was 63.0% cases followed by middle Income (20,000.00 to 50,000 BDT) and very low Income (less than 10,000.00 BDT) were in 22.0% cases and 14.0% cases respectively. **Conclusion:** In conclusion middle age illiterate women are the most commonly suffering from threatened abortion. *[Journal of National Institute of Neurosciences Bangladesh, July 2024;10(2):114-118]*

**Keywords:** Prevalence; socio-demographic characteristics; threatened abortion

## Introduction

Threatened abortion, defined as vaginal bleeding during the first 20 weeks of pregnancy without cervical dilation, is a significant concern for maternal and fetal health globally, including in Bangladesh[1]. The prevalence and socio-demographic characteristics of women experiencing this condition reflect broader reproductive health issues in the country[2].

In Bangladesh, maternal health outcomes are strongly influenced by socio-economic, cultural, and educational factors[3]. Women from lower socio-economic backgrounds, particularly those residing in rural areas, often face limited access to healthcare services, increasing their risk of complications during pregnancy, including threatened abortion[4]. The high prevalence of early marriage and adolescent pregnancy also contributes to this risk, as younger women face higher rates of pregnancy complications due to physiological immaturity and inadequate access to maternal care[5].

Studies highlight that threatened abortion is often linked with poor maternal nutritional status, inadequate prenatal care, and limited autonomy in healthcare decision-making[6]. These factors are exacerbated in low-resource settings, where poverty, lack of education, and restrictive social norms limit women's access to health services. Research shows that in countries like Bangladesh, access to skilled healthcare providers during pregnancy is often limited, especially in rural areas,

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where healthcare infrastructure and resources are deficient[7]. Consequently, women experiencing early pregnancy complications are at a higher risk of adverse outcomes due to delayed or inadequate medical intervention.

Cultural and religious beliefs also play a significant role in shaping the reproductive health landscape in Bangladesh[8]. Stigma surrounding reproductive issues, including abortion and pregnancy complications, often discourages women from seeking timely medical help. Furthermore, the restricted legal environment surrounding abortion in Bangladesh complicates the situation for women experiencing pregnancy complications, as many may avoid seeking necessary care due to fear of legal repercussions or social stigma[9].

Research into the socio-demographic characteristics of women experiencing threatened abortion in Bangladesh also reveals that maternal age is a critical factor[10]. Adolescents and women over the age of 35 are at a higher risk of complications. Additionally, the number of previous pregnancies and interpregnancy intervals have been shown to correlate with the likelihood of threatened abortion, with short intervals between pregnancies posing greater risks[11].

Addressing the issue of threatened abortion in Bangladesh requires a multifaceted approach that includes improving access to healthcare, enhancing women's autonomy, and addressing socio-economic disparities[12]. Strengthening maternal healthcare services, particularly in rural areas, and providing comprehensive reproductive health education can help reduce the prevalence of threatened abortion. Moreover, empowering women through education and community-based interventions can enable them to make informed decisions about their health and seek timely medical care when necessary[13].

To reduce the risks associated with threatened abortion, it is essential to promote broader awareness and access to prenatal care, as well as to address the underlying socio-economic and cultural barriers that impede women from receiving appropriate healthcare[14]. Additionally, policies focused on improving maternal health services, particularly for vulnerable populations, will be crucial to ensuring better outcomes for women in Bangladesh. The purpose of the present study was to assess the prevalence and socio-demographic characteristics of threatened abortion.

## Methodology

**Study Settings and Population:** This cross-sectional study was done in the Department of Obstetrics & Gynaecology at Rajshahi Medical College Hospital, Rajshahi, Bangladesh from January 2004 to December 2004 for a period of one year. Patients admitted with the history of pregnancy with per vaginal bleeding before 20 weeks without having any cervical effacement or dilatation were included in this study group. The following criteria were used to label an abortion to be threatened like vaginal bleeding during the first 20 weeks of pregnancy, abdominal cramps may or may not accompany vaginal bleeding and per vaginal examination reveals a cervix that is neither effaced nor dilated.

**Study Procedure:** Diagnosis of threatened abortion was confirmed from history, clinical examination and ultrasonographic finding of alive fetus. In one year, period 100 cases were selected as study group. The characteristics of all the patients related to their age, gravidity, period of gestation, socioeconomic status, results of routine urine examination, ultrasonographic results, treatment modalities and outcome were determined and data were collected through self-administered structured questionnaire. Socioeconomic status of the patients was reflected by their places of habitations, educational back ground, occupations, and level of income. Medical treatment given to the patients include bed rest, folic acid, Aspirin, uterine sedative like phenobarbitone, hormonal treatment like Inj. Prolut-N-Depot, Tab. Duphastan and antibiotics when associated with UTI or RTI.

Statistical Analysis: Statistical analysis was performed by Windows based software named as Statistical Package for Social Science (SPSS), versions 22.0 (IBM SPSS Statistics for Windows, Version 22.0. Armonk, NY: IBM Corp.). Continuous data were expressed as mean, standard deviation, minimum and maximum. Categorical data were summarized in terms of frequency counts and percentages. Every efforts were made to obtain missing data.

Ethical Clearance: All procedures of the present study were carried out in accordance with the principles for human investigations (i.e., Helsinki Declaration 2013) and also with the ethical guidelines of the Institutional research ethics. Formal ethics approval was granted by the local ethics committee. Participants in the study were informed about the procedure and purpose of the study and confidentiality of information provided. All participants consented willingly to be a part of the study during the data collection periods. All data were collected anonymously and were analyzed using the coding system.

## Results

Out of these total no. of gynaecological patients, there are 34% abortion cases. Among the abortion cases 12% are threatened abortion. The percentage of threatened abortion among all gynaecological admission is 4% cases (Table 1).

Table 1: Incidence of Threatened Abortion

| Cases | Frequency |
|---|---|
| Gynecological | 3151 |
| Abortion | 1061 |
| Threatened abortion | 130 |

The threatened abortion was reported at all stage of reproductive age. Women between 20 to 30 years had constituted the largest age group (58.0%) (Table 2).

Table 2: Age distribution of the 100 cases of Threatened Abortion

| Age Groups | Frequency |
|---|---|
| 15 to 20 Years | 12 |
| 20 to 30 Years | 58 |
| 30 to 40 Years | 24 |
| More than 40 Years | 06 |
| **Total** | **100** |

Socioeconomic status of the patients as reflected by their places of habitations, educational background, occupations. Of the 100 patients, 58 lived in rural areas or urban slums and 81 in kucha floored houses or slums. A large majority (77 out of 100) belonged to low or very low-income groups (Table 3).

Table 3: Normal Habitation of 100 Threatened Abortion Patients

| Habitation | Frequency |
|---|---|
| **Urban** | |
| • Pucca Floor | 16 |
| • Kucha Floor | 26 |
| • Slums | 31 |
| **Rural** | |
| • Pucca Floor | 3 |
| • Kucha Floor | 24 |
| **Total** | **100** |

Table 4: Educational Status of 100 Threatened Abortion

| Level of Educations | Frequency |
|---|---|
| Above SSC | 5 |
| SSC passed | 5 |
| High School | 3 |
| Primary School | 7 |
| Illiterate | 80 |
| **Total** | **100** |

About 80.0% of the patients were illiterate. However, primary school and SSC passed were 7.0% cases and 5.0% cases respectively (Table 4).

Table 5: Occupation of 100 Threatened Abortion Patients

| Occupation | Frequency |
|---|---|
| Housewives | 75 |
| Daily workers* | 22 |
| Student | 1 |
| Unemployed/ Beggar | 2 |
| **Total** | **100** |

Housewives and daily workers were in 75.0% cases and 22.0% cases respectively (Table 5).

Table 6: Variation of Family Income among the 100 patients of Threatened Abortion

| Family Income | Frequency |
|---|---|
| Very low Income (<Tk. 10,000.00) | 14 |
| Low Income (10,000.00 - 20,000 Tk.) | 63 |
| Middle Income (20,000.00 - 50,000 Tk.) | 22 |
| Higher Income (> 50,000 Tk.) | 1 |
| **Total** | **100** |

Most of the study population were coming from low-income group (10,000.00 to 20,000 BDT) which was 63.0% cases followed by Middle Income (20,000.00 to 50,000 BDT) and Very low Income (less than 10,000.00 BDT) were in 22.0% cases and 14.0% cases respectively (Table 6).

## Discussion

Pregnancy is one of the life's major events[11]. The purpose of pregnancy is to get a healthy baby from a healthy mother. Threatened abortion is such an event during pregnancy which needs meticulous attention to fulfill the purpose and the threatened abortion was reported at all stage of reproductive age[12]. Women between 20 to 30 years had constituted the largest age group (58.0%). Socioeconomic status of the patients as reflected by their places of habitations, educational background, occupations. Of the 100 patients, 58 lived in rural areas or urban slums and 81 in kucha floored houses or slums. A large majority (77 out of 100) belonged to low or very low-income groups. The discussion of threatened abortion in Bangladesh reveals both similarities and differences in its prevalence and socio-demographic factors compared to other low- and middle-income countries (LMICs).

From the results it is evident that the patients of threatened abortion were largely town dwellers

(73.0%), in their 2nd or 3rd decade of life (70.0%) multipara (82.0%) and mostly illiterate (80.0%), They came mostly from families with very low or low income (77.0%). Analysis also showed that in 7.0% cases U.T.I. & in 12.5% cases low lying placenta (USG) is suggestive of causes of threatened abortion. In Bangladesh, threatened abortion is significantly influenced by socio-economic, cultural, and healthcare access disparities, consistent with trends observed in LMICs like Ethiopia, Ghana, and sub-Saharan Africa12. The prevalence in these regions is typically higher due to limited access to quality prenatal care, maternal malnutrition, and insufficient health infrastructure, particularly in rural areas[13]. Similarly, in these countries, adolescent pregnancy and higher maternal age contribute to an increased risk of complications, such as miscarriage and stillbirth, as in Bangladesh.

In Bangladesh, threatened abortion is more common among women from lower socio-economic backgrounds, those with limited education, and rural residents, which aligns with findings from other LMICs[14]. Women in rural Bangladesh, like those in sub-Saharan Africa, often face limited autonomy in healthcare decision-making due to cultural norms and patriarchal structures. Additionally, early marriage and adolescent pregnancy remain prevalent in Bangladesh, increasing the risk of threatened abortion, similar to the trends in countries like Ghana and Ethiopia[15].

Across many LMICs, key socio-demographic factors such as low education levels, young maternal age, and rural residence are consistent risk factors for threatened abortion[16]. Studies from Ethiopia, Ghana, and sub-Saharan Africa reflect similar patterns, showing how poverty, limited access to healthcare, and cultural barriers affect maternal outcomes[17]. In all these contexts, inadequate prenatal care is a major contributing factor to the high prevalence of pregnancy complications, particularly in rural areas where healthcare access is limited.

One major difference is the cultural perception of pregnancy complications and access to healthcare[18]. In Bangladesh, cultural and religious stigmas surrounding abortion and miscarriage are more pronounced compared to some African contexts, where abortion laws may be more permissive. This cultural stigma in Bangladesh can deter women from seeking timely medical care when faced with complications, potentially increasing the risk of adverse outcomes[12]. In contrast, countries like Ghana, where healthcare systems are somewhat more accessible, might show lower rates of untreated threatened abortions due to less stigma surrounding pregnancy complications[19].

Furthermore, while socio-economic factors like poverty are prevalent in both regions, Bangladesh's specific challenges with adolescent pregnancy due to the high prevalence of child marriages present an additional layer of complexity not as common in some African contexts, where the median age of marriage may be higher[11]. This unique demographic feature contributes to a higher burden of pregnancy-related complications among younger women in Bangladesh.

## Conclusion

In conclusion, the similarities in the prevalence and socio-demographic factors of threatened abortion across LMICs are largely shaped by shared challenges such as poverty, limited education, and healthcare access. However, differences in cultural stigma, legal frameworks, and specific socio-demographic trends like early marriage in Bangladesh distinguish it from other LMICs. To reduce the incidence of threatened abortion, it is essential to address both the common socio-economic barriers and country-specific cultural challenges.

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**Conflict of interest**
Other than technical and logistic support from the scientific partner the investigators did not have any conflict of interest in any means.

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**Contribution to authors**
Nahar S, Nahar L: Concept of paper; Protocol preparation; data collection; data analysis; paper writing; Nahar L, Moureen A: data collection; paper writing; Moureen A: statistical analysis, paper writing; Moureen A, MMR Tipu, Akhter N, Khanam S, Laizu IA : Manuscript revision; All authors read and approved the final version of the manuscript.

**Data Availability**
Any inquiries regarding supporting data availability of this study should be directed to the corresponding author and are available from the corresponding author on reasonable request.

**Ethics Approval and Consent to Participate**
Ethical approval for the study was obtained from the Institutional Review Board. As this was a prospective study the written informed consent was obtained from all study participants. All methods were performed in accordance with the relevant guidelines and regulations.

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