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# THE MATERNAL AND FOETAL OUTCOME IN PREGNANT WOMEN WITH FIRST TRIMESTER VAGINAL BLEEDING

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#### **ABSTRACT**

Background: First trimester vaginal bleeding is linked to complications like miscarriage, ectopic pregnancy, hydatidiform mole, premature birth, and low birth weight. Objective: In this study our main goal is to evaluate the Maternal and Foetal Outcome in Pregnant Women with First Trimester Vaginal Bleeding. Method: This study is a cross-sectional, analytical study of 60 pregnant women who presented to Abdul Malek Ukil Medical College, Noakhali during the first trimester of their pregnancies with vaginal bleeding. Research included all women who experienced vaginal bleeding during the first trimester of their pregnancies and whose pregnancies were confirmed scientifically. Results: During the study, most of the patients belong to 32-42 years age group, 60%. Mean age was 36±6.28 years. 70% had moderate level of bleeding volume current pregnancy, 30% had history of bleeding and 5% had history of abortion. 26% had premature labor, followed by 15% had placental abruption, 7% had premature rupture membrane, 49.5% had no complication. Plus, 30% had abortion, 25% had termination of pregnancy, 35% had cesarean section, 6% neonatal had weight more than 3500 gr, 55% were between 2500-3500 gr and 39% were less than 2500 gr. Conclusion: The present study suggests that vaginal bleeding during the first trimester of pregnancy is an indicator of future maternal and fetal problems. Pregnant women should be educated about these risks and how to avoid them.

**KEYWORDS:** First trimester, vaginal bleeding, pregnancy.

### INTRODUCTION

Abortion, ectopic pregnancy, hydatidiform mole, premature birth, and low birth weight are all linked to vaginal bleeding in the first trimester of pregnancy.

Approximately half of pregnant women who go to the emergency room because of vaginal bleeding go on to have healthy babies.<sup>[1]</sup>

As many as 15–25% of pregnancies are associated with vaginal bleeding in the first trimester.  $^{[1-10]}$ 

Vaginal bleeding is linked to a twofold greater risk of additional issues throughout that pregnancy, according to meta-analyses.<sup>[11]</sup>

Bleeding from the cervix can be an indication of a healthy pregnancy, the beginning of a spontaneous

abortion, or a pathologic situation such an ectopic pregnancy or gestational trophoblastic illness.

When a positive pregnancy test is followed by vaginal bleeding, it's important to do some more testing to figure out what's going on and whether or not it's a sign of something serious. [12,13]

The purpose of this research was to assess birth outcomes for a sample of Bangladeshi women who reported vaginal bleeding during their first trimester of pregnancy.

## **Objective**

To Evaluate Maternal and Foetal Outcome In Pregnant Women With First Trimester Vaginal Bleeding.

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#### **METHOD**

This study is a cross-sectional, analytical study of 60 pregnant women who presented to Abdul Malek Ukil Medical College, Noakhali during the first trimester of their pregnancies with vaginal bleeding.

Research included all women who experienced vaginal bleeding during the first trimester of their pregnancies and whose pregnancies were confirmed scientifically.

Participants were limited to women who did not have a history of infertility, hypertension, or diabetes, or who had no significant gaps in their obstetrical histories.

Patients were followed closely throughout their pregnancies and deliveries for the purpose of assessing pregnancy outcomes after receiving written informed permission. All ladies had a sonogram every 8-10 weeks.

Women were seen every two weeks for the first six months of pregnancy, once a week for months seven and eight, and twice a week for the last month. Pregnancy age at the time of bleeding, amount of blood, number of pregnancies, medical history, illnesses present, gestational age at birth, and birth weight were all documented.

SPSS- 11 was used to analyze the data, and a P-value of less than 5% was considered statistically significant.

#### RESULTS

A Study to Evaluate Maternal And Foetal Outcome In Pregnant Women With First Trimester Vaginal Bleeding.

In table-1 shows age distribution of the patients where most of the patients belong to 32-42 years age group, 60%. Mean age was 36±6.28 years. The following table is given below in detail:

Table-1: Age distribution of the patients.

Age limit	Valid Percent
21-31 years	22
32-42years	60
>43years	18
Total	100.0

In table-2 shows demographic status of the patients where 42% just completed their secondary level of education followed by 43% patients' husband were

farmer, 80% patients married in 13-17 years age and 78% got 1<sup>st</sup> pregnant by 14-18 years old. The following table is given below in detail:

Table-2: Demographic status of the patients.

<b>Educational status</b>	Percentage (%)
Illiterate	9%
Primary	11%
Secondary	42%
SSC	25%
HSC	13%
Husband occupation	
Businessman	35%
Farmer	43%
Rickshaw puller	16.7%
Track driver	6.3%
Income	
10000-15000tk monthly	45.8 %
>150000 monthly	54.2%
Age of marriage	
13-17 years	80%
18-25 years	20%
Living area	
Rural	65%
Urban	35%

Figure-1 shows parity distribution of the patients where 55% were nulliparas and 45% were multiparas.

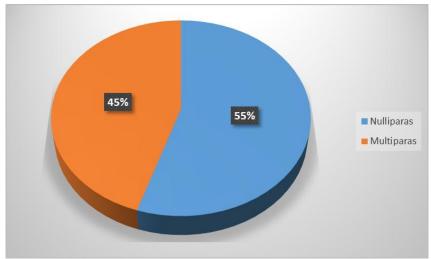


Figure-1: Parity Distribution.

Table-2 shows clinical status of the patients where 70% had moderate level of bleeding volume current

pregnancy, 30% had history of bleeding and 5% had history of abortion.

**Table-2: Clinical status of the patients.** 

Bleeding volume in current pregnancy	Percentage (%)
Spotting	5%
Moderate	70%
High	25%
History of bleeding in previous pregnancies	30%
History of abortion	5%

Table-3 shows Obstetrical complications in women with first trimester vaginal bleeding where 26% had premature labor, followed by 15% had placental

abruption, 7% had premature rupture membrane, 49.5% had no complication.

Table-3: Obstetrical complications in women with first trimester vaginal bleeding.

Percentage (%)
26%
7%
15%
2%
.5%
49.5%

Table-4 shows maternal and Foetal Outcome where 30% had abortion, 25% had termination of pregnancy, 35% had cesarean section, 6% neonatal had weight more than

 $3500~\mathrm{gr},\,55\%$  were between  $2500\text{-}3500~\mathrm{gr}$  and 39% were less than  $2500~\mathrm{gr}.$ 

Table-4: Maternal and Foetal Outcome.

Maternal And Foetal Outcome	Percentage (%)
Abortion	30%
Termination of pregnancy	25%
Normal vaginal delivery	10%
Cesarean section	35%
birth weight in newborns	%
weight more than 3500 gr	6%
between 2500-3500 gr	55%
less than 2500 gr	39%
Neonatal admisiion NICU	11%

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#### DISCUSSION

The research by Snell et al. shows that between 15 and 25 percent of pregnancies have vaginal bleeding, with 50 percent of those women going on to have healthy babies. [12,14]

Spontaneous abortion, endometriosis, and trophoblastic disorders are the three most common causes of pregnancy-related bleeding in the first trimester.

Abortion and endometriosis (EP) were shown to be the most prevalent causes of bleeding in the first semester of pregnancy in a research by Dogra et al., and genetic abnormalities were detectable in more than half of the abortions that occurred naturally. [13]

In this investigation, ultrasound examination of the uterus and pregnant sac was viewed as the first step in determining the root of the bleeding. Transvaginal ultrasound and monitoring the rise in blood level of HCG have been found to be the most important diagnostic activities in pregnancies with first trimester bleeding by research by Deutchman et al. (2009) and Thorstensen et al. (2000). [15,16]

Women who experienced bleeding in the first trimester of pregnancy were more likely to experience bleeding in the second and third trimesters due to the increased risk of placenta praevia, placenta disruption, and bleeding with unknown place of origin, as shown by studies by Saraswat et al. and Siddiqui. [17,18]

Premature fetal membrane rupture has been shown to occur between 2 and 4 times more often in women who experienced bleeding in the first trimester of pregnancy. [17] It has been shown in several studies, including one by Weiss et al., that abortion, preterm birth, and placenta disruption are the most prevalent consequences of first trimester bleeding in pregnancy. [19] Systematic research conducted by Saraswat et al. showed that first trimester bleeding does not influence delivery location. [17]

However, contrary research has found that women who experience bleeding are more likely to require a cesarean delivery. That's also what we found in our study, so there's no change there. Studies show that due to placental problems, women who have bleeding during their first trimester tend to have shorter pregnancies and a higher risk of delivering their babies early. [19]

In other words, growth failure occurred throughout these pregnancies, and the infant was delivered at a low weight because of the early birth. [20]

Many studies have found that infants delivered to mothers who experienced bleeding in their first trimester have a lower birth weight and an Apgar score of 5 or below, however there is conflicting data on infant death. [20,21] The average gestational age was 16.3 weeks

in the research by Yasaee et al., which analyzed data from 161 women with vaginal hemorrhage over a period of 10 years at the Taleghani hospital in Tehran. The study's inability to pinpoint the exact kind, magnitude, and frequency of the bleeding that appears to be the decisive element in the termination of the pregnancy is a significant caveat.

It is also proposed that future research explore the correlation between first trimester vaginal bleeding and BMI, as well as the sex of the infant in the present and any previous pregnancies.

#### CONCLUSION

Pregnant women need to be better informed about the potential risks associated with bleeding during the first trimester of pregnancy so that they can receive more attentive treatment.

Accurate management and planning by physicians is necessary for these high-risk pregnancies because the clinical interventions of attentive physicians play a vital role in ensuring pregnancy continuity and lowering the risk of fetal problems.

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