

A Study on Clinical Presentation and Management of Per Vaginal Bleeding During Early Pregnancy among Admitted Cases in Rajshahi Medical College Hospital

Dr. Farjana Najnin^{1*}, Dr. Mohammad Motiur Rahman², Dr. Suzauddin Talukder³, Dr. Issa Muhammad Baker⁴,
Dr. Anupam Das⁵, Dr. Shamima Nasrin⁶

¹Consultant (Obs & Gynae), Puthia Health Complex, Rajshahi, Bangladesh

²Junior Consultant (Medicine), Department of Medicine, Rajshahi Medical College Hospital, Rajshahi, Bangladesh

³Junior Consultant (Medicine), Basail Health Complex, Tangail, Bangladesh

⁴Junior Consultant (Medicine), National Institute of Neurosciences and Hospital, Dhaka, Bangladesh

⁵Medical Officer, Mugda Medical College Hospital, Dhaka, Bangladesh

⁶General Practitioner, Sheba International Hospital, Tangail, Bangladesh

DOI: 10.36348/sijog.2021.v04i12.005

Received: 26.11.2021 | Accepted: 27.12.2021 | Published: 30.12.2021

*Corresponding author: Dr. Farjana Najnin, FCPS

Email: ripa.doc@gmail.com

Abstract

Background: To about 15% to 25% of early pregnancies have vaginal bleeding? Vaginal bleeding in the first trimester of pregnancy affects 50% of pregnant women, although the event may be controlled in various methods that alleviate the woman's concern. Pregnancy-related vaginal bleeding should be taken carefully. Vaginal bleeding during pregnancy might be a sign of an approaching miscarriage or a problem that requires immediate attention. If you know the most frequent reasons for vaginal bleeding during pregnancy, you will be able to act quickly and effectively. **Methods:** The study was a descriptive observational one with a sample size of 100 patients and was performed at the Department of Gynaecology and Obstetrics, Rajshahi Medical College Hospital, Rajshahi, Bangladesh. The study period was 15th July 2013 to 16th January 2014. **Results:** Among the 100 patients in this study maximum was within 21 to 30 years (53%). In most cases (57%), heavy bleeding was present in 15% of patients. Patients with heavy bleeding had a positive history of pain (80%), but the amount was reduced in the light or spotting group (61.18%). Fifty-seven percent of patients experienced bleeding for 2 to 3 days. Most patients (43%) reported bleeding during 8 to 10 weeks of gestation. This study showed that early pregnancy PV bleeding is more common in multigravida patients. History of stillbirth, IUD or abortion was proved to be strong predictors. DM and anaemia were found to be important associated diseases. In this study, 91% of patients were diagnosed as a case of abortion. Ectopic pregnancy was present in 5% of patients, and only 4 patients were found to have a molar pregnancy. In patients with abortion, incomplete is the maximum one (56.04%), next missed (23.08%), and threatened (14.28%). Complete was present in 6.59% of patients. 69.23% of patients continued their pregnancy in case of threatened abortion with a conservative. But 23.08% converted to incomplete and 7.69% to missed. Missed abortions were successfully treated with vaginal misoprostol in 38% of patients. Evacuation & curettage was done in 78.43% of patients with incomplete abortion, and patients with less bleeding and stability (21.57%) were given oral misoprostol. This was effective in 63.63% of patients. All 5 cases of ectopic pregnancy were treated with laparotomy, and in molar pregnancy cases, the only treatment was suction, Evacuation and curettage. **Conclusion:** The findings of this study, despite its limitations, give crucial new information regarding early pregnancy bleeding, including statistics on the timing, heaviness and length, color, and overall number of episodes. Pregnancy outcomes will be examined as a possible link between bleeding episodes and early pregnancy biology, placental pathophysiology, and pregnancy outcomes.

Keywords: Clinical Presentation, Vaginal Bleeding, Early Pregnancy, Rajshahi Medical College Hospital.

Copyright © 2021 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

During pregnancy, vaginal bleeding can be frightening. There are many reasons behind it, but it's not necessarily a disaster warning. It is very common

for pregnant women to suffer vaginal bleeding, especially in the first trimester (1 to 12 weeks). 15 to 25 percent of pregnancies in the first trimester have vaginal bleeding regularly. Only around one in five women who have vaginal bleeding in the first trimester

of pregnancy will go on to give birth to their child; however, this can be alleviated by a variety of methods [1]. Pregnancy-related vaginal bleeding should be taken carefully. Vaginal bleeding during pregnancy might be a sign of an approaching miscarriage or a problem that requires immediate attention. If you know the most frequent reasons for vaginal bleeding during pregnancy, you will be able to act quickly and effectively. Subchorionic haemorrhage, embryonic death, anembryonic pregnancy, spontaneous miscarriage, ectopic pregnancy, and gestational trophoblastic disease are all possible causes of bleeding during early pregnancy [2].

In the early stages of pregnancy, bleeding can be difficult to diagnose accurately and may need immediate care to prevent morbidity and fatality. Early pregnancy bleeding management aims to precisely identify a normal, viable intrauterine pregnancy. Other possible diagnoses must be examined and properly addressed if it cannot be established. Pregnancy complications include miscarriage, ectopic pregnancies, and molar pregnancies. Manage the bleeding, both in terms of the immediate condition and the reproductive potential of the female patient [3]. Those who reported significant bleeding during the first trimester had roughly three times the chance of miscarriage than women who did not report any bleeding [4]. Premature birth and placental abruption were more likely to occur in the second pregnancy among women who had a first-trimester haemorrhage in the first pregnancy, increasing the risk from 2.2 % to 8.2 %. According to these studies, there is a strong correlation between first-trimester vaginal bleeding in first and future pregnancies and an elevated chance of later difficulties in both pregnancies [5].

Women who reported first-trimester bleeding were more likely to give birth to babies with low birth weight (LBW), shorter gestation, LBW at term, and neonatal mortality. Preterm birth was twice as likely for women who had just light vaginal bleeding in the first trimester as it was for those who didn't. First-trimester bleeding was related to a 1.6-fold increased probability of term LBW birth. According to these findings, preterm vaginal haemorrhage is a significant predictor of poor newborn outcomes [6]. In the first few weeks of pregnancy, more pregnancies are lost than at any other point in gestation. These include spontaneous abortion, induced abortion, ectopic pregnancy, and Molar pregnancy. Early pregnancy losses are generally downplayed in favor of late-term miscarriages, yet this is a misplaced perspective. Pregnancy loss is always upsetting to the mother, no matter when. There is also a significant risk of maternal death and long-term illness associated with abortion and ectopic pregnancies. Early pregnancy difficulties must thus be given greater attention in order to guarantee prevention and early detection of such cases [7].

REVIEW OF LITERATURE

Although bleeding during early pregnancy is a very important women health-related issue, very few studies had done on it. Rather, studies had done on the different causes of bleeding individually. Bangash and associates [8] assessed 1434 women with early pregnancy bleeding. Amongst these, 1434 (95.9%) cases were of abortion, 28 (1.87%) ectopic pregnancies, 22 (1.47%) molar pregnancies and 10 (0.69%) was seen that prevalence of abortion increased with the increasing age of the mother. Females in their fourth and fifth pregnancies suffered a higher frequency of abortion. History of previous abortions and the last pregnancy abortion were the major contributory factors in the past obstetric history of the patients presenting with abortions.

Anemia, low health, preexisting diabetes mellitus, hypertension, and conception after infertility treatment were the main maternal risk factors leading to abortion. IUCD users had a higher miscarriage rate (72.9%) than other contraceptive measures. No obvious cause for abortion was found in 200 out of 1434 cases. The treatment for early pregnancy bleeding was carried out according to the cause. Laparotomy for ectopic pregnancy was done in 28 (1.8%) females. 22 (1.47%) women underwent suction curettage for a molar pregnancy. Abortion was conservatively managed in 345 (23%) cases. The pregnancy progressed in 108 (7.2%) females, and their bleeding settled later. Dilatation and curettage for missed abortion were done in 101 (6.7%) cases. 695(46.5%) patients with incomplete abortion had Evacuation and curettage, and 195 (13%) required no evacuation following complete spontaneous abortion. Hassan R and associates [9] studied 4539 patients. About half of all women were nulliparous. In total, about two-thirds of women with miscarriages reported some bleeding during pregnancy. After excluding bleeding episodes that occurred within 4 days of miscarriage, 24.6% of women with miscarriage reported at least one episode of bleeding during the first trimester, similar to the proportion of women without miscarriage who reported bleeding during pregnancy (26.8%). Of those reporting bleeding, 70.9% reported only one episode (n=856); 20.0% reported two episodes (n=241); and 9.1%, three or more (n=110).

In the first trimester, bleeding occurred regularly, culminating in the sixth and seventh weeks of pregnancy. Heavy episodes had a similar trend, although the peak lasted longer in the first trimester than in previous studies. The majority (75.6 %) of incidents were described as 'spotting only,' and the majority were painless (70.7 %). Heavy episodes were recorded in fewer than 10% of cases. It is estimated that about 20% of episodes lasted more than three days. The more severe the episode, the more likely it would be painful, long-lasting, and red. About 15% of the women who reported bleeding had an incident around the time

of their menstrual cycle. There was a wide range of women reporting more than one event (n=351). More than half of the recurrences happened within two weeks of one another. Most of the women who experienced more than one episode had a regular menstrual cycle, although none reported heaviness equivalent to their regular menses. More education, a longer cycle duration, fibroids, illness, preexisting or past gestational diabetes, nulliparity, a history of prior miscarriage, and induced abortion were all substantial predictors of bleeding. Pregnancy-related uterine infection was a risk factor. However, the connection was only somewhat enhanced. History of miscarriage was the biggest predictor based on the intensity of the link. Race/ethnicity, marital status, % poverty level, active or passive smoking, prenatal usage of folic acid, alcohol intake, caffeine intake, gravidity, and past preterm delivery were not substantial predictors of preterm labor.

A review paper on spontaneous abortion was published by Griebel P. and associates [10]. Their study found that up to 20% of identified pregnancies are affected by spontaneous abortion, which is the loss of a pregnancy without outside intervention before 20 weeks of gestation. It is possible to categorize spontaneous abortions as threatening, inevitable, incomplete, missed, septic, complete, and recurring spontaneous terminations. If an ectopic pregnancy cannot be ruled out, more testing may be necessary to determine the cause of the abortion. Chromosomal abnormalities cause most spontaneous abortions; however, other factors may also play a role. When a patient's prognosis is grave, surgery to remove the uterus is still the therapy of choice. A number of recent investigations have shown that expectant or medicinal care is suitable in certain cases. Medical or surgical intervention is rarely necessary for patients who have had a spontaneous abortion. Incomplete spontaneous abortions can be successfully treated with expectant care for up to two weeks, and medical therapy has no effect. Expectant management is the most popular when patients are given the opportunity to select from various treatment alternatives. Medical treatment with intravaginal misoprostol has an 80% success rate in the management of missed spontaneous abortions. Immediately following a spontaneous abortion, individuals and their spouses confront a variety of psychological challenges. For up to a year following a spontaneous abortion, women are more likely to suffer from despair and anxiety. There should be counseling for the grieving process and how to deal with friends and family.

Faisal M. and his associates evaluated threatened abortion cases. There was a 14.3 % rate of miscarriage among women at risk of miscarriage. Compared to women in the 16-20 and 21-30 age groups, older women had a much greater risk of miscarriage (27.1% vs 18.2% and 7.1%, respectively). Prior miscarriages and the frequency and severity of

vaginal bleeding episodes had no impact on the risk of a subsequent miscarriage [11]. Graziosi G.C. and associates [12] reviewed thirteen studies. Combined data in women with missed abortion managed expectantly or treated with misoprostol showed complete evacuation rates of 28% (49/173) (range 14-47%) and 81% (242/298) (range 60-83%), respectively. In women with incomplete abortion, these rates were 94% (31/33) (range 80-100%) and 99% (75/76) (range 99-100%), respectively.

Mahboob U and associates [13] examined ectopic pregnancy cases. A total number of 52 patients with ectopic pregnancy were identified and studied. The rate of ectopic pregnancy was 1:100 deliveries. Emergency laparotomy was performed in 30 (57.9%) women, 15 (28.8%) received methotrexate injection. Seven women (13.3%) were managed conservatively, and operative laparoscopy was not used as primary treatment in any patient. All cases of laparotomy did not require any further procedure. Twelve out of fifteen (80%) cases of medical treatment were successful, while one (6.7%) proceeded to emergency laparotomy, one (6.7%) to operative laparoscopy and one (6.7%) to laparoscopy preceding laparotomy. Five out of seven patients (71.4%) on conservative treatment did not require any further intervention, while two (28.6%) resolved with methotrexate injection. The duration of hospital stays in laparotomy, medically treated and conservatively managed groups was 6.5, 5.9, and 1.7 days, respectively.

Fatima M. and associates [14] studied molar pregnancy. There were 16,625 patients admitted to their department during the study period, out of whom 85 patients were diagnosed with a molar pregnancy. Vaginal bleeding was the commonest symptom (94.2%); theca lutein cysts were noted in 39% of the cases. In almost all cases, suction, dilatation, and curettage were preferred; hysterectomy was done in 12 (14.1%) patients. Single-agent chemotherapy was employed in high-risk patients and was well tolerated. Mean follow-up for these patients was 5.7 months (range 1–24 months). During the follow-up period, none of these patients developed persistent trophoblastic disease, invasive mole, or choriocarcinoma.

Aims and objectives of the study

a. **General-** Per vaginal bleeding during early pregnancy is a major health issue. This study is designed to evaluate the modes of presentation, clinical assessment, methods of diagnosis, management procedures and outcome of patients with bleeding during the first trimester of pregnancy. So, inadequate treatment in cases of unrecognized emergencies can be prevented.

b. **Specific-** Observe the various modes of presentation of the patient and thus aiding early diagnosis.

- Find the causes of per vaginal bleeding.
- Identify the loopholes in the diagnosis and the ways to improve it.
- Identify the shortcomings in the management and the ways of improvement.

MATERIALS AND METHODS

Main outcome variables: Age and sex of the patients, Amount and nature of bleeding, Abdominal pain, Blood pressure, Condition of cervical os, HCG level, Product of conception, Adnexal mass, Laparotomy, Dilatation & curettage, Conservative Treatment.

Place of study: Rajshahi Medical College Hospital, Department of Obstetrics and Gynaecology.

Type of study: Prospective observational study.

Time: 15th July 2013 to 16th January 2014.

Inclusion Criteria

- Per vaginal bleeding during early pregnancy (First trimester).

Exclusion Criteria

- Per vaginal bleeding due to trauma.
- Per vaginal bleeding due to induced abortion.
- Per vaginal bleeding due to bleeding disorder.

Sample size: 100

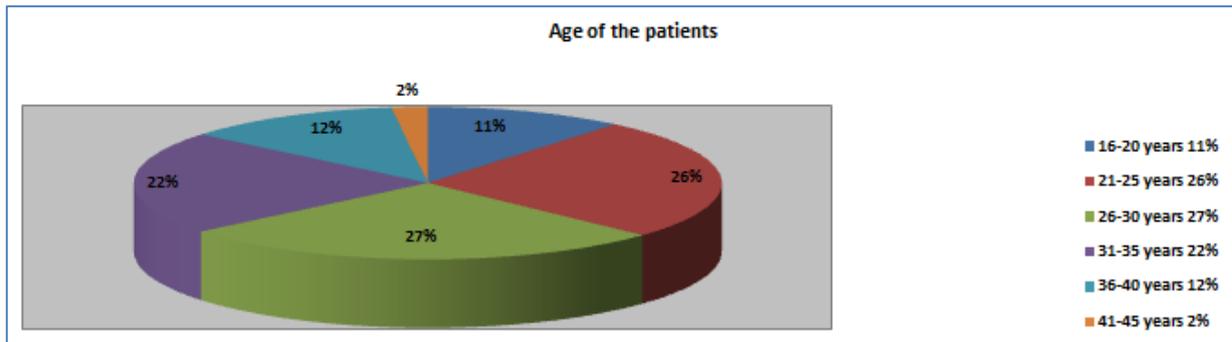
Sampling method: Patients of early pregnancy per vaginal bleeding come to the Obstetrics unit of RMCH; Rajshahi, who is the respondent of this study, are selected purposively depending on their consent to participate in this study.

Data collection procedure: Semi-structured questionnaire was used for data collection in the obstetrics ward by face-to-face interview and observation of documents by the investigator herself.

Data analysis procedure: After the collection of data, all the data were edited through checking and rechecking. Data analysis was done by computer-aided statistical software SPSS. Data is presented in the form of tables & graphs. Data is analyzed with descriptive statistics and bivariate analysis.

RESULTS

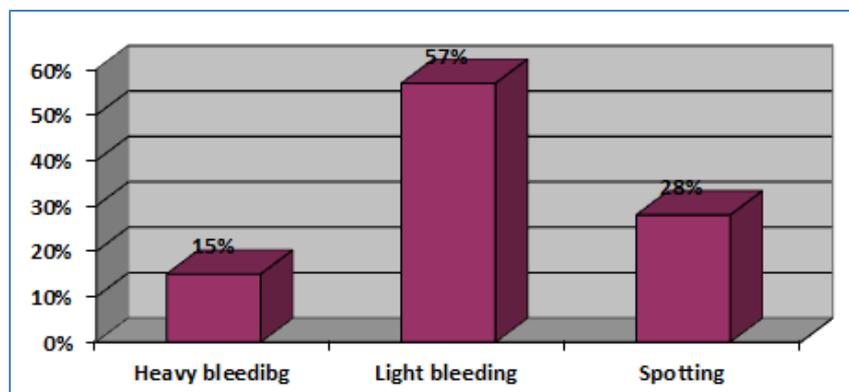
1. Age of the patient [N=100]



Among the hundred patients the youngest one was 16 yrs of age. Eleven patients were within 16 to 20 years. 26% of patients were from 21 to 25 years old and 27 % within 26 to 30 years. So maximum patients were within 21 to 30 years (53%). 22% of patients were from

31 to 35 years old and 12% within 36 to 40 years. Only 2 % were in 41 to 45 years age group.

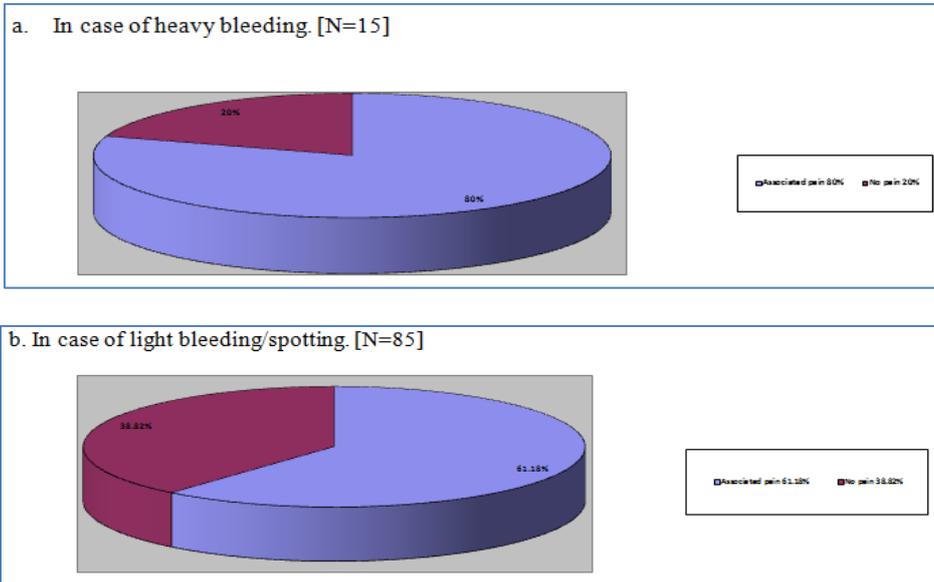
2. Amount of bleeding [N=100]



Among 100 patients, 15 patients reported heavy bleeding; on the other hand, most patients had a

history of light bleeding (57%). Spotting was present in the case of 28% of patients.

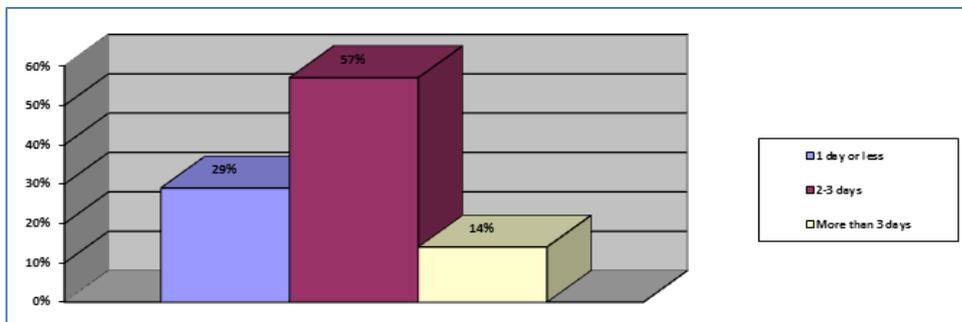
3. Association of pain with the amount of bleeding



Most of the patients with heavy bleeding had a positive history of pain (80%), but the amount was

reduced in the light bleeding or spotting group (61.18%).

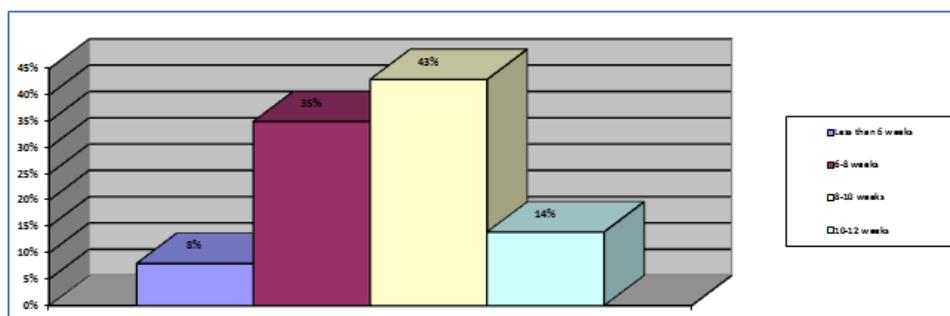
4. Duration of bleeding. [N=100]



Twenty-nine patients had bleeding for a few hours to a day, but most patients (57%) had been

suffered for 2 to 3 days. Fourteen patients (14%) experienced bleeding for more than 3 days.

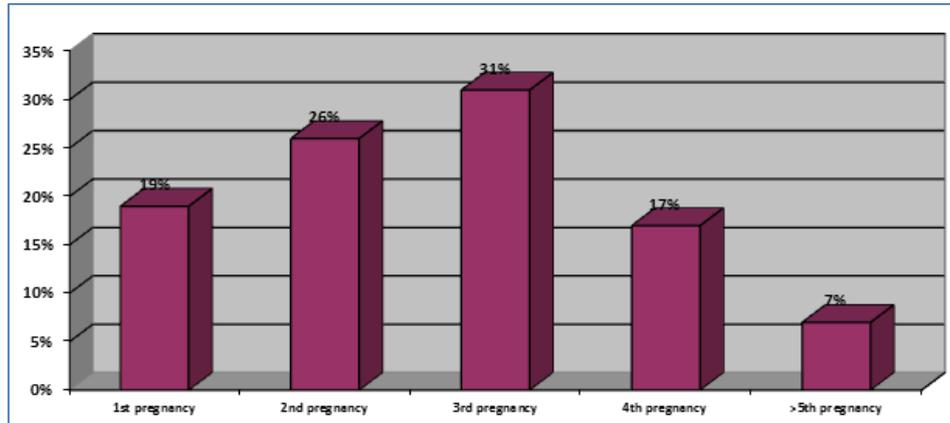
5. Gestational week during bleeding. [N=100]



Among the 100 patients, 8 reported bleeding during less than 6 weeks of gestation. Most patients reported bleeding between 8 to 10 gestational weeks

(43%). The second highest (35%) group is the 6 to 8 weeks. 14 patients had bleeding during 10 to 12 weeks of gestation.

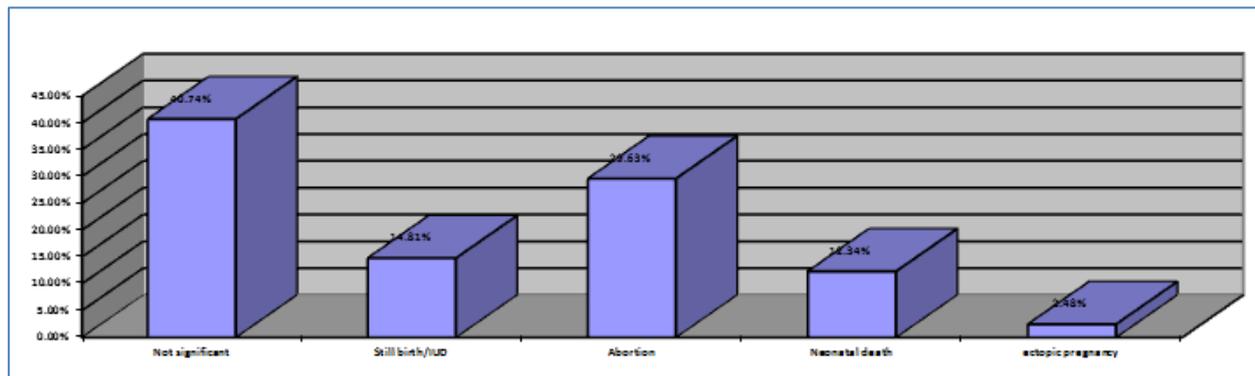
6. Number of pregnancies [n=100]



This study shows that early pregnancy PV bleeding is more common in multigravida patients. Only 19% of patients were primi; on the other hand, 26% of patients had 2nd pregnancy and 31% of patients

had 3rd pregnancy and 17% were 4th gravida, and 7% were > 5th gravida.

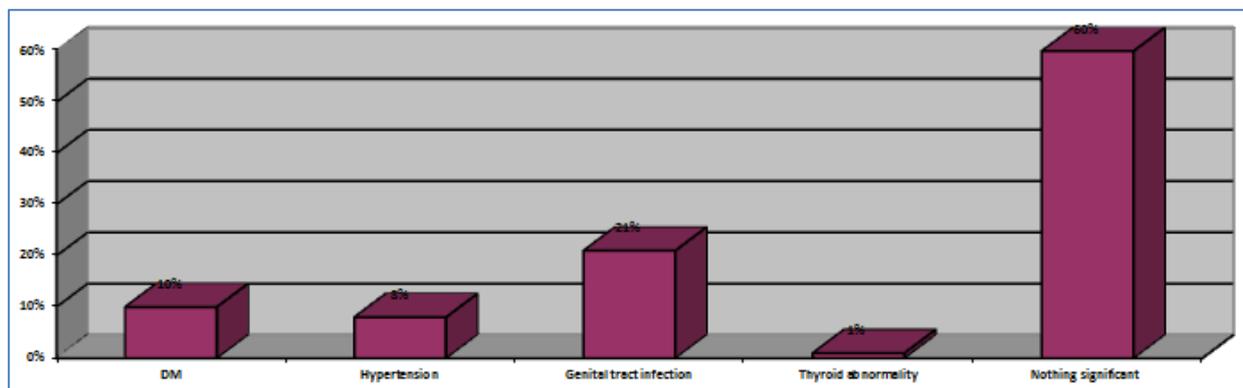
7. Previous obstetric history [n =81]



There was no significant obstetric history in the case of 33 patients (40.74%). Twelve patients (14.81%) had a history of Stillbirth or IUD in a previous pregnancy, and ten patients (12.34%) had a history of neonatal death (death of the baby occurs

within 28 days of birth), and twenty-four (29.63%) patients had an abortion. Only 2 patients (2.48%) had a history of ectopic pregnancy.

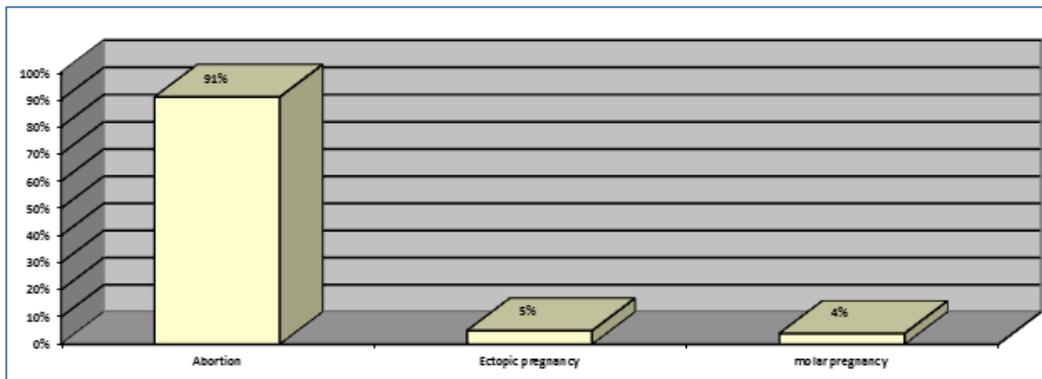
8. Previous medical history [n=100]



Maximum patients (60%) had no significant medical history. Diabetes mellitus was present in the case of 10 patients and hypertension in 8 patients.

Previous history of genital tract infection was present in 21% and thyroid abnormality in 1 patient.

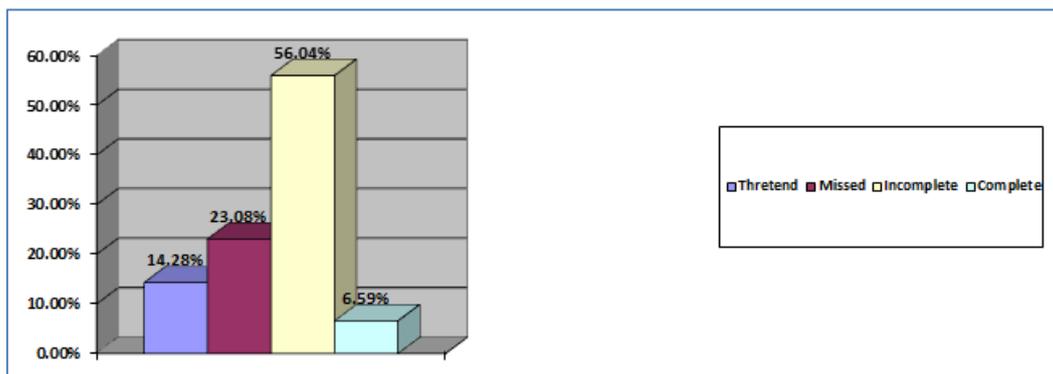
9. Causes of per vaginal bleeding [n=100]



Among all the patients presented with per vaginal bleeding during early pregnancy, 91% of patients were diagnosed as a case of abortion. Ectopic

pregnancy was present in 5% of patients, and only 4 patients were found to have a molar pregnancy.

10. Type of abortion [n=91]

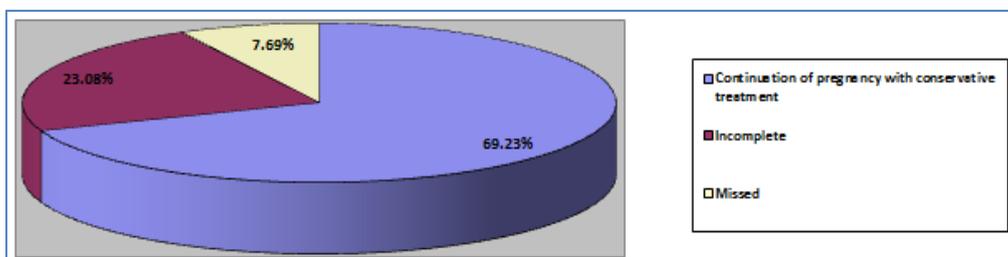


Among the 91 patients who were diagnosed as a case of abortion mainly on the basis of ultrasonogram and clinical findings, 13 patients (14.28%) were diagnosed as threatened abortion. Missed abortion was in the case of 21 patients (23.08%), 51 patients

(56.04%) were had incomplete abortion. Abortion was complete in 6 (6.59%) patients.

11. Treatment of abortion

a. Treatment and outcome of threatened abortion



In case all the patients of threatened abortion, conservative (rest, sedative and progesterone preparation in injectable form) was the first line of treatment. In 9 patients (69.23%) it was successful, but

in 23.08% and 7.69% patients, pregnancy was unluckily turned into incomplete abortion and missed abortion, respectively. D&C was done in all cases of incomplete and missed abortion.

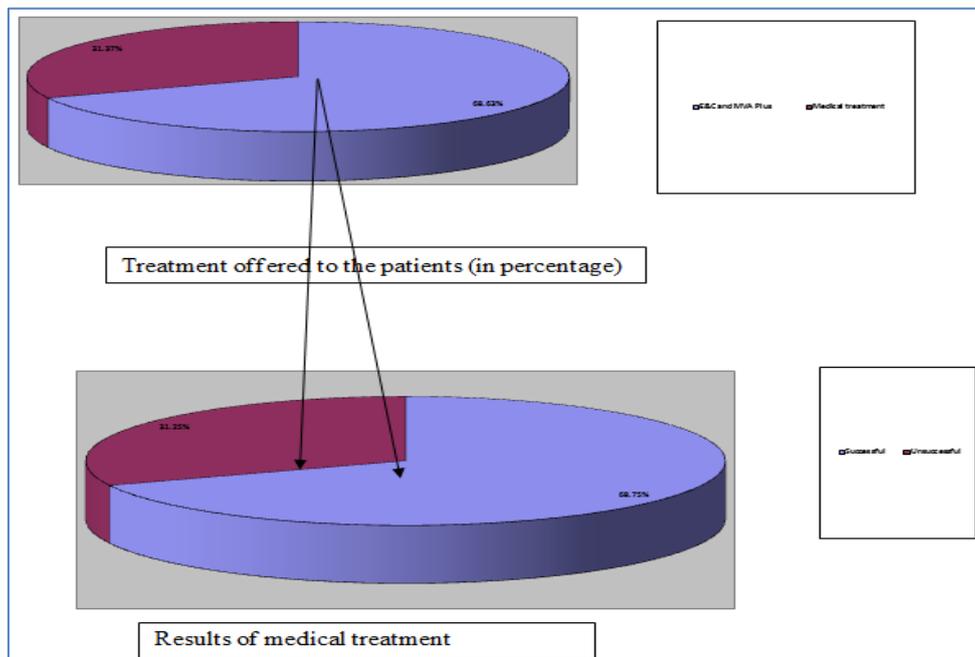
b. Treatment and outcome of missed abortion



All the patients with missed abortions had received misoprostol vaginally. In 12 (57.14%) patients, this was unsuccessful, and MVA Plus (manual vacuum aspiration plus) was done in 7 cases, and Evacuation

and curettage were done in the remaining 5 cases. In 9 (42.86%) patients, misoprostol was successful.

c. treatment and outcome of incomplete abortion:



In case of incomplete abortion 35 patients (68.63%) had directly surgical treatment in the form of Evacuation & curettage and MVA Plus; in 16(31.37%) patients, medical treatment was applied as oral misoprostol. But it was successful in 11 patients

(68.75%). In unsuccessful 5 cases (31.25%) ultimate procedure was MVA Plus.

12. Ectopic pregnancy

Table

	Number	%
Significant bad obstetric history	4	80%
No Significant bad obstetric history	1	20%
Total	5	100%

Among the 5 patients who were diagnosed as a case of ectopic pregnancy mainly on the basis of ultrasonogram and clinical findings, 4 patients (80%)

had significant bad obstetric history and 1 patient (20%) had no significant bad obstetric history.

Treatment of ectopic pregnancy.

All the cases were treated by laparotomy.

Treatment of molar pregnancy.

All the cases were treated by suction, Evacuation and curettage.

DISCUSSION

Bleeding in early pregnancy leads to significant maternal morbidity and mortality. The loss of wanted pregnancy is always distressing to the couple, and the associated psychological morbidity can cause mental, physical and sometimes social deterioration. Women with severe complications like ruptured ectopic pregnancy and haemorrhage in a molar pregnancy may have grave ill health, compromised obstetric future and even death. This is a highly traumatic emotional event in any woman's reproductive career and is greatly underestimated by medical practitioners. In this present study, the range of age is from 16 years to 45 years. Eleven patients (11%) were within 16 to 20 years. 26% of patients were from 21 to 25 years and 27% within 26 to 30 years, and 22% patients were from 31 to 35 years, and 12% patients were within 36 to 40 years, and only 2% were in 41 to 45 years age group. So maximum patients were within 21 to 30 years (53%). The second highest was 26 to 35 years (49%). Hasan and associates [9] have shown in their series, maximum patients (45.9%) were in the 28-34 years age group. The second highest is 18-27 years (39.5%) and 14.6% in the 35-45 years group. Bangash and associates [8] have observed that the maximum number of patients with first trimester bleeding are within 26-35 years. Both the studies showed similar results to the present study.

In the present series, 15 patients (15%) reported heavy bleeding; on the other hand, most patients had a history of light bleeding (57%). Spotting was present in the case of 28% of patients. But Hasan and associates [4] have shown that spotting was present in most cases (75.6%), light bleeding in the case of 18.6% and heavy bleeding in 6.1% cases. In our society, the cause may be that women do not come to the doctors unless the problem is more severe. In our study, most of the patients with heavy bleeding had a positive history of pain (80%), but the amount is reduced in the light bleeding or spotting group (61.18%). In the study done by Hasan and associates [9], of the spotting and light bleeding episodes, 28% were associated with pain. Among heavy episodes, 54% were associated with pain. This suggests that heavy bleeding may arise from different underlying biologic events than spotting. In our study 29 patients (29%) had bleeding for a few hours to a day, but most patients (57%) had been suffered for 2 to 3 days. Fourteen patients (14%) experienced bleeding for more than 3 days. But found a maximum of patients (51.5%) experienced bleeding for 1 day or less. Only 29% of patients had a history of bleeding for 2-3 days. Only 19.4% of patients experienced bleeding for more than 3 days. The late presentation may be due to a lack of

consciousness. Among the 100 patients, 8 reported bleeding during less than 6 weeks of gestation. Most patients reported bleeding between 8 to 10 gestational weeks (43%). The second highest (35%) group is the 6 to 8 weeks. Only 14 patients had bleeding during 10 to 12 weeks of gestation. Found most occurred between gestational weeks 5 to 8. This study shows that early pregnancy PV bleeding is more common in multigravida patients. Only 19% of patients were primi; on the other hand, 26% of patients had 2nd pregnancy, and 31% of patients had 3rd pregnancy. Only 17% of patients were 4th gravid, and 7% were >5th gravid. But Hasan and associates⁹. Reported that they found maximum patients (47.5%) were nulliparous; on the other hand, 34.8% of patients were primiparous, and only 17.7% patients were multiparous. They concluded that increasing parity was also related to increased abortions. Women in their fourth and fifth pregnancies had a higher rate of abortion than others.

There was no significant obstetric history in the case of 33 patients (40.74%). 12 patients (14.81%) had a history of Stillbirth or IUD in a previous pregnancy, and 24 (29.63%) patients had an abortion. 10 patients (12.34%) had a history of neonatal death (death of the baby occurs within 28 days of birth). Only 2 patients had a history of ectopic pregnancy. Also reported preexisting or prior gestational diabetes, infection, history of prior miscarriage and history of induced abortion were strong predictors of bleeding. Bangash and associates [8] also concluded that the history of previous abortions and the last pregnancy abortion were found to be the major contributory factors in the past obstetric history of the patients. And the strongest predictor based on the strength of association was a history of miscarriage. 2 patients had a history of ectopic pregnancy; now, one of them also presented with ectopic pregnancy, and another one presented with missed abortion. Thonneau P and associates [15] also reported previous ectopic pregnancy as a major risk factor.

Maximum patients (60%) had no significant medical history. Diabetes mellitus was present in the case of 10 patients and hypertension in 8 patients. Previous history of genital tract infection was present in 21% and thyroid abnormality in 1 patient. Hasan and associates [9] also stated that diabetes mellitus is a strong predictor of bleeding during the first trimester of pregnancy. Also identified DM and hypertension are maternal risk factors. Among all the patients presented with per vaginal bleeding during early pregnancy, 91% of patients were diagnosed as a case of abortion. Ectopic pregnancy was present in 5% of patients, and only 4 patients were found to have a molar pregnancy. Vardhan and associates [16] reported that there are three important causes of bleeding in early pregnancy, namely abortion, ectopic pregnancy and a hydatidiform mole in the order of frequency of their occurrence. Snell and associates [1] also reported 3 main

differential diagnoses associated with vaginal bleeding: spontaneous abortion, ectopic pregnancy, and gestational trophoblastic disease. Found that amongst the cases of early pregnancy bleeding, the prevalence of abortion was found to be 10.8%. This is comparable to the study from Liaquat Medical College Hyderabad, where the corresponding figure was 11.4%, and the study was done by Khaskheli M. and associates [17]. Regan and associates [18] found the risk of miscarriage before the 20th week to be 12%. This difference may be due to the difference in the number of patients reporting to the respective hospitals.

Among the 91 patients diagnosed as a case of abortion mainly based on clinical examination and ultrasonogram findings, 13 patients (14.28%) were diagnosed as threatened abortion. Missed abortion was in the case of 21 patients (23.08%), and 51 patients (56.04%) were had incomplete abortions. Abortion was complete in 6 (6.59%) patients. Griebel P. and associates [10] subdivided spontaneous abortion into threatened abortion, inevitable abortion, incomplete abortion, missed abortion, septic abortion, complete abortion, and recurrent spontaneous abortion. In case all the patients of threatened abortion, conservative (rest, sedative, and progesterone preparation in injectable form) was the first line of treatment. In 9 patients (69.23%), it was successful, but in 3 (23.08%) and 1(7.69%) patients, pregnancy was unluckily turned into incomplete abortion and missed abortion, respectively. D&C was done in all cases of incomplete and missed abortion. Faisal M. and associates [11] found the overall rate of miscarriage among women with threatened miscarriage was 14.3%. Weiss J.L. and associates [19] Patients with vaginal bleeding, light or heavy, were more likely to experience a spontaneous loss before 24 weeks of gestation. Alexandros and associates [20] stated that, Although there is no definite evidence that bed rest can affect the course of pregnancy, abstinence from an active environment for a couple of days may help women feel safer, thus providing emotional relief. And progesterone does not seem to improve outcomes in women with threatened miscarriages. But Sakhavar N. and associates [21] found that progesterone has significant results in reducing abortion and time of hospitalization and bleeding in threatened abortion. So, the role of progesterone in threatened abortion is still controversial.

All the patients with missed abortions (21 patients) had received misoprostol vaginally. In 12 (57.14%) patients, this was unsuccessful, MVA Plus was done in 7 cases, and Evacuation and curettage were done in the remaining 5 cases. In 9 (42.86%) patients' misoprostol was successful. But Graziosi G.C. and associates [12] found misoprostol treatment is effective in women with missed abortion (81%). The cause behind the poor compliance and ineffective monitoring system in our country. In the case of incomplete

abortion, 35 patients (68.63%) had direct surgical treatment in the form of Evacuation & curettage, and MVA Plus; in 16(31.37%) patients' medical treatment was treated as oral misoprostol. But it was successful in 11 patients (68.75%). In unsuccessful 5 cases (31.25%) ultimate procedure was MVA Plus. Pauleta J. R. and associates [22] found an 82.1% success rate with misoprostol. Blum J. and associates [23] had studied a lot of analytical papers and concluded that oral misoprostol is an effective alternative to manual Evacuation.

CONCLUSION

Vaginal bleeding is one of the most common complications of early pregnancy. Accurate assessment and diagnosis at first presentation avoid (a) life-threatening complications (ruptured ectopic, intrauterine infection, and septicemia), (b) delay in definitive treatment such as the Evacuation of retained products of conception (ERPC), (c) unnecessary hospitalization, and (d) relieves patient anxiety regarding pregnancy outcome. We acknowledge important limitations. Our results are based on women's recall of their bleeding during the early months of pregnancy, where recall accuracy was not perfect. The small sample size also limits our study for low-prevalence predictors, such as diabetes. The decreased precision of these estimates was particularly evident in the analysis of predictors of bleeding heaviness. The investigation facilities were not up to the mark. The use of laparoscopy in case of suspected ectopic pregnancy could be a better option. A small number of reference literature on this extensive topic made it difficult to compare its reliability.

Despite the limitations, our study provides important new information about bleeding in early pregnancy, including data on the timing, heaviness, duration, color, and overall number of episodes. The timing of gestational age was verified with ultrasound, which increases the confidence in our findings regarding the gestational timing of bleeding. The ultrasound also provided unique information about uterine fibroids unavailable to other perinatal researchers. Further research is needed to systematically study bleeding in mid to late pregnancy with the same detail. In conclusion, spotting or light bleeding episodes are common symptoms in early pregnancy. Heavy bleeding is much less common. Whether both light and heavy bleeding arise from the same mechanisms or have different etiologies is an important question for future research. Future steps include investigating the relationship between bleeding episodes, early pregnancy biology, placental pathophysiology, and pregnancy outcomes.

REFERENCE

1. Snell, B. J. (2009). Assessment and management of bleeding in the first trimester of pregnancy. *Journal of midwifery & women's health*, 54(6), 483-491.
2. Deutchman, M., Tubay, A. T., & Turok, D. K. (2009). First trimester bleeding. *American family physician*, 79(11), 985-992.
3. Nielsen, S., Hahlin, M., & Odén, A. (1996). Using a logistic model to identify women with first-trimester spontaneous abortion suitable for expectant management. *BJOG: An International Journal of Obstetrics & Gynaecology*, 103(12), 1230-1235.
4. Hasan, R., Baird, D. D., Herring, A. H., Olshan, A. F., Funk, M. L. J., & Hartmann, K. E. (2009). Association between first-trimester vaginal bleeding and miscarriage. *Obstetrics and gynecology*, 114(4), 860.
5. Persson, L. K., Sakse, A., Langhoff-Roos, J., & Jangö, H. (2017). Anal incontinence after two vaginal deliveries without obstetric anal sphincter rupture. *Archives of gynecology and obstetrics*, 295(6), 1399-1406.6.
6. Williams, M. A., Mittendorf, R. O. B. E. R. T., Lieberman, E. L. L. I. C. E., & Monson, R. R. (1991). Adverse infant outcomes associated with first-trimester vaginal bleeding. *Obstetrics and gynecology*, 78(1), 14-18.
7. Akbar, R., Azam, N., Mughal, F. A. R., Tariq, A., & Wajahat, M. (2021). Impact of antenatal care on maternal morbidity in three military hospitals of punjab, pakistan. *PAFMJ*, 71(5), 1682-86.
8. Bangash, N., & Ahmed, H. (2005). Evaluation of cases reporting with bleeding per vagina during first 20 weeks of gestation. *PAFMJ*, 55(3), 219-223.
9. Hasan, R., Baird, D. D., Herring, A. H., Olshan, A. F., Funk, M. L. J., & Hartmann, K. E. (2010). Patterns and predictors of vaginal bleeding in the first trimester of pregnancy. *Annals of epidemiology*, 20(7), 524-531.
10. Griebel, C. P., Halvorsen, J., Golemon, T. B., & Day, A. A. (2005). Management of spontaneous abortion. *American family physician*, 72(7), 1243-1250.
11. Basama, F. M. S., & Crossfill, F. (2004). The outcome of pregnancies in 182 women with threatened miscarriage. *Archives of Gynecology and Obstetrics*, 270(2), 86-90.
12. Graziosi, G.C.M., Mol, B.W., Ankum, W.M., Bruinse, H.W. (2004). Management of early pregnancy loss. *Int J Gynaecol Obstet Off Organ Int Fed Gynaecol Obstet*, 86(3); 337-46.
13. Mahboob, U., & Mazhar, S. B. (2006). Management of ectopic pregnancy: a two-year study. *Journal of Ayub Medical College Abbottabad*, 18(4), 34-37.
14. Fatima, M., Kasi, P. M., Baloch, S. N., Kassi, M., Marri, S. M., & Kassi, M. (2011). Incidence, management, and outcome of molar pregnancies at a tertiary care hospital in quetta, pakistan. *International Scholarly Research Notices*, 2011.
15. Thonneau, P., Hijazi, Y., Goyaux, N., Calvez, T., & Keita, N. (2002). Ectopic pregnancy in Conakry, Guinea. *Bulletin of the World Health Organization*, 80, 365-370.
16. Vardhan, S., Bhattacharyya, T. K., Kochar, S. P. S., & Sodhi, B. (2007). Bleeding in early pregnancy. *Medical Journal, Armed Forces India*, 63(1), 64.
17. Khaskheli, M. (2002). Evaluation of early pregnancy loss | Virtual Health Sciences Library [Internet. Available from: <https://vlibrary.emro.who.int/imemr/evaluation-of-early-pregnancy-loss/>
18. Regan, L., Braude, P. R., & Trembath, P. L. (1989). Influence of past reproductive performance on risk of spontaneous abortion. *British Medical Journal*, 299(6698), 541-545.
19. DAVARI, T. F., Shariat, M., Kaveh, M., Ebrahimi, M., & Jalalvand, S. (2008). Threatened abortion: a risk factor for poor pregnancy outcome.
20. Sotiriadis, A., Papatheodorou, S., & Makrydimas, G. (2004). Threatened miscarriage: evaluation and management. *Bmj*, 329(7458), 152-155.
21. Yassaee, F., Shekarriz-Foumani, R., Afsari, S., & Fallahian, M. (2014). The effect of progesterone suppositories on threatened abortion: a randomized clinical trial. *Journal of reproduction & infertility*, 15(3), 147. 22.
22. Pauleta, J. R., Clode, N., & Graça, L. M. (2009). Expectant management of incomplete abortion in the first trimester. *International Journal of Gynecology & Obstetrics*, 106(1), 35-38.
23. Blum, J., Winikoff, B., Gemzell-Danielsson, K., Ho, P. C., Schiavon, R., & Weeks, A. (2007). Treatment of incomplete abortion and miscarriage with misoprostol. *International Journal of Gynecology & Obstetrics*, 99, S186-S189.