



## Original Research

# Evaluation of Nurse's Awareness regarding Fetus Nursing Practice during Antepartum Hemorrhage

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### Abstract:

**Objective of study:** To assess nurses' knowledge of how to provide nursing care to women suffering from antepartum hemorrhage.

**Methodology:** A descriptive research was conducted from October 28, 2021, to April 20, 2022, utilizing a complete coverage sample of fifty nurses from different units inside the Bint Al-Huda hospital. A pilot study is used to assess the validity and reliability of a questionnaire. Descriptive and inferential statistical methods were employed to assess the data, which was gathered through observational methods and interviews. For the purpose of the study, a questionnaire was prepared and produced, and an interview-based method was used to collect data. The SPSS version of the questionnaire, which had two sections—a tool to evaluate nurses' ability and sociodemographic data—was used to analyze the data.

**Results:** The largest percentage of participants (44%) had worked in maternity facilities for 6–10 years (11–15), and the oldest age group of nurses (24–25 years old) made up 44% of the total. 50% of the study sample held a diploma, and the majority of nurses (44–91.7%) agreed that placenta previa causes antepartum hemorrhage, while 1-1.9%) disagreed. Although the study that evaluated nurses' awareness was helpful, they still need to increase their comprehension.

**Recommendation:** According to the findings, a deliberate effort should be made to improve graduate nursing education and awareness of how to provide treatment and attentive monitoring to women with antepartum hemorrhage. This can be accomplished through lectures, workshops, seminars, and training courses.

**Keywords:** Evaluation, nurse's, awareness, nursing practice, antepartum hemorrhage.

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### Background:

One of the leading causes of maternal death in the world is obstetric hemorrhage. According to the MBBRACE research published in December 2019,

antepartum and postpartum hemorrhage were responsible for 11 of the 209 maternal deaths in the UK between 2015 and 2017, down from 18/225 in

2014 to 2017. Pregnancy bleeding is a common presenting symptom in early pregnancy clinics, maternity triage, general practice, and labor wards in the United Kingdom, therefore early diagnosis and treatment is an important element of prenatal screening. (Yvonne &, Aaron, 2019).

The severity of APH is not defined by any conventional criterion. Blood loss is frequently underestimated, and the amount of apparent bleeding does not always reflect the total amount of blood lost. Clinical shock, fetal deterioration, and mortality are all signs of significant volume loss. The RCOG Green top guideline uses the definitions below to evaluate the severity of APH: Staining, streaks, or spots are visible on the sanitary pad. Hemorrhage, albeit just a little one (blood loss of less than 50 mL that has settled) A significant haemorrhage is defined as a blood loss of 50–1000 mL without any clinical indications of shock. Massive haemorrhage resulting in a blood loss of more than 1000 mL, as well as clinical signs of shock (Diaa, 2016)

It affects around one in every 80 babies and is still a leading perinatal mortality and morbidity are caused by the following factors.. The incidence is between 5.9 and 6.5 per 1000 singletons and 12.2 per 1000 twins, according to recent large epidemiological studies. An abruption-related perinatal mortality rate of 119 per 1000 newborns was discovered. A tenfold increase in the likelihood of a subsequent pregnancy terminating in an abruption. (Jangsten et al., 2016)

The source of the abruption is unknown. A hematoma and an excess in hydrostatic compressing are caused by a bleed into the decidua basalis of the placenta, which causes the surrounding placenta to split. The haematoma that results might be modest and self-contained, or it can extend across the decidual layers. The bleeding, on the other hand, is a different story. On digital examination, an expert observer may be able to discern vessels beneath the presenting region, but recognizing this illness prior to these occurrences is challenging. (WHO, 2004)

If fetal blood is discovered in the vaginal bleeding, a caesarean section should be done as soon as

possible (Tan et al., 2008). Prenatal diagnosis resulted in 97 percent of babies surviving, compared to just 44 percent in the group that did not get a diagnosis before birth. Vasa Previa is suspected when grey-scale ultrasonography shows echogenic parallel or circular lines near the cervix that represent the umbilical cord. If abnormal vessels crossing the internal cervical os are identified, Doppler and endovaginal ultrasonography exams can confirm the diagnosis of vasa Previa. In vitro fertilization has been associated to vasa Previa in several studies. When utilizing in-vitro fertilization, keep the diagnosis in mind. Low-lying placenta pregnancies, as well as those in which the placenta was low-lying on the mid-trimester scan but had receded from the internal os on re-evaluation. Unless obstetric complications arise after fetal pulmonary maturity has been established and labor has commenced, an elective Caesarean section should be performed. (Decherney and Nathan, 2019)

Although there are few high-quality clinical trials to recommend treatment for antepartum haemorrhage or abruption, when there are, they are mentioned here. If there are signs of fetal or maternal discomfort, consider delivering the baby immediately soon. If placenta praevia has been ruled out, a vaginal examination is safe to undertake. A patient in advanced labor with an expected birth may be delivered vaginally if the mother has been stabilized. Otherwise, a caesarean section may be necessary. Transfusions should be given as needed to keep the patient stable, especially if the patient has placenta praevia early in pregnancy, when it may be useful to keep the pregnancy going. Anti-D gamma globulin is recommended for all Rhesus negative patients. Using the Kleihauer results, the required anti-D dose must be estimated. The following procedures should be done if the bleeding stops and the patient is in excellent: 37/40 – it's usually safer to deliver a baby placenta praevia via caesarean section with minimal abruption and a patient who's stable and reassuring on CTG, or induce labor if there's bleeding of unclear cause. If the etiology is uncertain, an IOL and admission to a prenatal unit should be requested at 38+ weeks (37/40). (96 or

98) If prelabor CS is scheduled before 38 weeks 34+6/40, daily CTG steroids may be used - if there is any uterine activity or concern about premature birth, provide steroids for fetal lung maturity. (WHO, 2018)

**Methodology:**

**Design of the Study:**

This descriptive, cross-sectional hospital-based study was conducted at Bint Al-Huda hospital from October 28th, 2021 to April 20th, 2022. The study takes place in the labor room of the maternity department.

**Sampling and Sample size**

The study enlisted the help of 50 nurses from the Bint Al-Huda hospital (all nurses working in maternity ward during study period)

**Sample of the study: which include:-**

**1- The inclusion criteria are:**

On a non-probability basis, a purposeful sample of (50) nurses was selected. During the morning and evening shifts at Bint Al-Huda hospital, these nurses work in the maternity department.

**Results:**

**Table 1: Socio-Demographic Characteristics**

Variables		Frequency	Percent
<b>1- Age (years 20– 25)</b>		22	44%
26-30		12	24%
31 – 35		10	20%
36 – 40		6	12%
<b>Total</b>		50	100
2- Educational status		Frequency	Percent
Diploma		25	50%
Bsc degree		13	26%
Master degree		2	4%
Others		10	20%
Total		50	100%
Variables	3-Duration of Nurses experience in Maternity hospital		

**2- Exception standard are:**

Nurses who were not present at the time of the data collection were unable to do so.

**Instrument that Used for Data Collection:**

Part 1: Demographic Data: A systematic self-administered questionnaire that looks at demographic information including age, gender, education, and work experience. Second installment: comprehension A self-administered questionnaire designed to assess nurses' understanding of how to give nursing care to women experiencing antepartum hemorrhage.

**Obtaining information:**

After receiving permission from the appropriate authorities and informed consent from the samples, the investigator completed his work. Nurses' knowledge of how to give nursing care to women suffering from antepartum hemorrhage was evaluated using a self-administered structured questionair

	Frequency	Percent %
1 - 5 years	5	10%
6 – 10 years	22	44%
11 – 15 years	10	20%
16 – 20 years	13	26%
Total	50	100

Table 1 shows that the nurses with the largest age range (20-25 years and up) made up 44 percent of the total, (50%) of study sample were diploma degree graduated and highest percentage (44 %) of

participants having experience in maternity hospitals between (6–10) years, and (26%) (11-15 years)

<b>Current Work place</b>	<b>Emergency Ward &amp; Maternity intensive care unit</b>	14	28
	<b>Maternal Wards</b>	<b>19</b>	<b>38</b>
	<b>Labor room &amp; Operation room</b>	17	34
<b>Previous site of working</b>	<b>Surgical ward</b>	6	12
	<b>Emergency ward</b>	<b>20</b>	<b>40</b>
	<b>Pediatric ward</b>	16	32
	<b>Other</b>	8	16
<b>Did know before about antepartum hemorrhage?</b>	<b>Yes</b>	<b>50</b>	<b>100</b>
	<b>No</b>	0	0
<b>If yes who are the source</b>	<b>Physician</b>	22	<b>44</b>
	<b>Nurse</b>	6	12
	<b>Relatives</b>	10	20
	<b>Friend</b>	12	24
<b>Did previously participation in any course about antepartum hemorrhage?</b>	<b>Yes</b>	0	0
	<b>No</b>	<b>50</b>	<b>100</b>

<b>Have ever nurse pregnant woman with antepartum hemorrhage? during your job?</b>	<b>Yes</b>	<b>50</b>	<b>100</b>
	<b>No</b>	0	0

More over a third of the survey participants (38%) work in maternal wards, with the lowest number (28%) working in emergency rooms and maternity critical care units.

When asked about their prior jobs, 40% of the survey participants said they worked in an emergency room, whereas just 12% said they worked in a surgical ward.

All research participants said they learned of antepartum hemorrhage via a physician (44%) followed by a friend (24%), relatives (20%), and nurses (20%) (12 percent). During their job, the whole study sample (100%) said that they did not attend any antepartum hemorrhage training sessions.

**Table (2): Nurses' knowledge of best practices during antepartum hemorrhage**

	<b>Yes</b>	<b>F</b>	<b>No</b>	<b>F</b>
1. Placenta Previa, an obstetric problem.	44	88%	6	12%
2. When a woman has placenta previa, should she be kept in bed?	39	78%	11	22%
3. Placenta previa leads to antepartum hemorrhage.	46	92%	4	8%
4. Did a woman who had a previal placenta cut back on her activity to avoid bleeding?	30	60%	20	40%
5. Placenta previa is divided into four types.	38	76%	12	24%
6. Women who have placenta previa should have a cesarean section.	28	56%	22	44%
7. Without surgery, the lady can be treated in the 36th week if she is not bleeding significantly.	32	64%	18	36%
8. Placenta previa affects around one in every 250 pregnancies.	42	84%	8	16%
9. Has the mother already undergone a D&C or caesarean due to placenta previa?	28	56%	22	44%
10. Reduced discomfort and vaginal bleeding are two symptoms of placenta previa.	47	94%	3	6%
11. Was the lady admitted to the hospital for treatment from the beginning of the bleeding to the time of the birth?	36	72%	14	28%
12. Was having a placenta previa diagnosis linked to a bad prognosis for both the mother and the fetus?	41	82%	9	18%
13. Women who have a large placenta are twice as likely to miscarry.	40	60%	10	20%
14. Were women over 30 at an increased risk of placenta previa?	39	78%	11	22%

Table 2 shows that the majority of nurses (88 percent) believe that antepartum bleeding is an

obstetric problem. Placenta Previa (78%) agrees that bed rest is recommended for a woman with

placenta previa, (92%) agrees that placenta previa causes postpartum hemorrhage, (60%) agrees that a woman with a previal placenta should limit her activities to reduce bleeding, and (76%) believes there are four types of placenta previa. Concerning(56%) believes that ladies with placenta previa should have a cesarean section, while (64%) believes that if the woman is not bleeding severely, she may be handled without surgery in the 36th week. (84%) believes that placenta previa affects one in every 250 deliveries, (56%) agrees that the lady had a previous D&C or caesarean surgery due

to her placenta previa, and (94%) agrees that placenta previa is characterized by less discomfort and vaginal bleeding. (72%) thinks that the lady should be brought to the hospital for treatment from the time the bleeding begins until the birth. (82%) believes that a diagnosis of placenta previa is linked to a bad prognosis for both the mother and the child, (60%) agrees that women with a large placenta are twice as likely to miscarry, and (78%) agrees that women over the age of 30 are at risk for placenta previa.

**Table (3): Nurses' knowledge of antepartum hemorrhage and its occurrence in the third trimester**

	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	5	8,4	8.5	8.5
No	44	91.7	91.5	100.0
Total	49	97.1	100.0	
Missing system	1	1.9		
Total	50	100.0		

Table (3) shows (44-91.7%) nurses agree antepartum hemorrhage occur in second or third trimester and (1-1.9%) miss

**Table (4): Nurses' knowledge of the causes of antepartum hemorrhage**

	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	49	99.1	99.1	100.0
Missing system	1	1.9	1.9	
Total	50	100.0		

Table (4) show that (49-99.1%) of nurses agree placenta previa cause antepartum hemorrhage

**Table (5): Nurses' knowledge of antepartum bleeding and the need for a caesarean section delivery**

	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	2	7,5	8.5	8.5
No	47	96.6	94.5	100.0

Total	49	98.1	100.0	
Missing system	1	1.9		
Total	50	100.0		

Table (5) (47-96.6%) of nurses agree that antepartum hemorrhage recommended deliver by caesarean section

**Table (6): Nurses are aware of antepartum bleeding and know that the woman and fetus have a poor prognosis.**

	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	10	16,8	18.0	18.5
No	39	82.5	85.0	100.0
Total	49	98.5	100.0	
Missing system	1	1.9		
Total	50	100.0		

Table (6) 39-82.5% of nurses agree that antepartum hemorrhage was had bad prognosis

**Discussion:**

In nearly half of the cases, the cause of APH is unknown. Clinical examination is used to identify placental abruption, whereas ultrasonography is used to diagnose placenta Previa. Because of the normal blood loss of 1 liter, at least a 2 unit blood transfusion should be started in instances of abruption presenting with intrauterine death. placenta Previa at term will not be detected unless the placental edge exceeds the internal os by at least 1.0 cm during the 21–23 week scan. At 34–36 weeks, a follow-up scan should be scheduled. The most senior available aesthetic and obstetric experts should be included in the Caesarean procedure for placenta Previa. Cross-matching should be done on at least four units of blood.

In situations of placenta Previa, the potential of placenta accrete should be investigated. Pregnancy is not indicated by the absence of an echoluscent line beyond the placenta. The most reliable indicator is sonographic detection of uneven sinuses with turbulent flow in the placenta. Early detection of vasa Previa during pregnancy reduces perinatal mortality significantly.

A multidisciplinary large obstetric hemorrhage protocol should be available in all units. In partnership with the blood bank, it should be updated and practiced on a regular basis.

**Part I: Socio-Demographic Characteristic**

The nurses with the most experience in maternity hospitals (6–10) years made up 44 percent of the total, (50 percent) of the study sample were diploma degree graduates, (44 percent) of participants had experience in maternity hospitals between 6–10 years, and (26 percent) had experience in maternity hospitals between 6–10 years (11-15 years)

More than a third (38%) of the research sample works in maternal wards, whereas the lowest number (28%) works in emergency rooms and maternity critical care units.

In terms of past employment, the majority of the study participants (40%) worked in an emergency room, whereas the minority (12%) worked in a surgical ward.

All of the participants in the research said they learned about antepartum hemorrhage from a doctor (44%) followed by a friend (24%), relatives

(20%), and nurses (20%). (12 percent). During their job, all of the research participants (100%) said that they did not attend any antepartum hemorrhage training classes.

Another research, which looked at the practices of nurse midwives in Anbara City, discovered that 22.8 percent of them had between (6-10) years of nursing experience. While 40.4 percent of midwives have only been in the business for five years or less, (Kongnyuy , & Broek, 2018).

## **Part II: Knowledge regarding antepartum hemorrhage**

demonstrates that the majority of nurses (88%) believe that antepartum hemorrhage is an obstetric complication: Placenta Previa, 78 percent of respondents agree that bed rest is recommended for a woman with placenta previa, 92 percent agree that placenta previa causes postpartum hemorrhage, 60 percent agree that a woman with a previal placenta should limit her activities to reduce bleeding, and 76 percent believe there are four types of placenta previa.

Concerning(56%) believes that women with placenta previa should have a cesarean section, while (64%) believes that if the woman is not bleeding excessively, she can be managed without surgery in the 36th week, (84%) agrees that one in every 250 births is affected by placenta previa, (56%) agrees that the woman had a previous D&C or cesarean surgery because of her placenta previa, (9%) agrees that the woman. (72%) believes that the lady should be admitted to the hospital for treatment from the beginning of the bleeding till the delivery. (82%) believes that placenta previa is associated with a bad prognosis for both the mother and the child, (60%) agrees that women with a large placenta are twice as likely to miscarry, and (78%) agrees that women over the age of 30 are at risk for placenta previa.

(44-91.7 percent) of nurses agree that antepartum hemorrhage occurs in the second or third trimester and (1-1.9 percent) misses, (49-99.1 percent) of nurses agree that placenta previa causes antepartum hemorrhage, (47-96.6 percent) of nurses agree that antepartum hemorrhage necessitates delivery by

caesarean section, and (39-82.5 percent) of nurses agree that ante

Cunningham, G., Gant, N., et al. published a study in 2001 that indicated a high degree of understanding among nurse-midwives on the same themes, such as definitions, signs, and symptoms (Pillitteri, 2017). Nurses' knowledge of perineal preparation, cleanliness, and sterilization was clearly high in this study, which was consistent with a previous study on nurse-midwives' practices in nursing interventions in the second stage of labor, particularly their performance in perineal preparation, cleanliness, and sterilization during actual delivery. (WHO 2005).

Women's knowledge and its impact on interactions with health care personnel in the birth room are crucial in avoiding labor difficulties. According to the researchers, the second stage of labor has spurred a reconsideration of the influence of maternal bearing down attempts on fetal/newborn status as well as maternal pelvic structural integrity. Most midwives are aware of the signs and symptoms of placental detachment.

### **Commendation:**

According to the findings, a deliberate effort should be made to improve graduate nursing education and awareness of how to manage and monitor women with antepartum hemorrhage. This might be accomplished through lectures, workshops, seminars, or training courses.

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