



Nurses And Midwives Skillness On Postpartum Hemorrhage At Cumilla District In Bangladesh

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ABSTRACT: Post partum hemorrhage (PPH) is the leading cause of maternal mortality in Bangladesh. However, the present study has conducted to assess the nurses and midwives' knowledge on causes about postpartum hemorrhage, to assess barrier to manage postpartum hemorrhage case, to identify the nurses and midwives' efficiency on postpartum hemorrhage and to find out the socio-demographic characteristics of the respondents. The study was a cross sectional descriptive type. The study was conducted in selected hospital at Chattagram division in Bangladesh. The Hospitals are Cumilla Medical College Hospital, Cumilla General Hospital, Upozilla Health Complex, Nangolcourt, Cumilla and Upazilla Health Complex, Laksham, Cumilla in Bangladesh. Purposive sampling method was used for the study. Total 400 nurses were selected for the study. Data were collected from primary and secondary sources. Questionnaire was used for data collection. Data were processed by using of SPSS (Statistical Package for Social Science) windows software program version 16. From the result it was revealed that most common causes of PPH were retained placenta. From the result it was found that the nurses are the key personnel to serve the post partum mothers but very few of them has updated training for management of post partum hemorrhage. Uterine massage can be first nursing intervention for treating PPH. Oxytocin can be more effective first line medication for treating PPH.

Key words: Postpartum Hemorrhage, Nurses, Midwife, Maternal Mortality, Training, Management, Early Signs and Symptoms, Psychological Changes Occur, Treatment, Medication, Blood Loss, Vaginal Delivery, Uterine Atony, First Nursing Intervention,

INTRODUCTION

Bangladeshi total fertility and maternal mortality rates have remained high, with an average of 5.0 children per woman and 353 deaths per 100,000 live births, respectively. Bangladeshi population, estimated at 170 million in 2022, is largely rural, and although 82% of pregnant women receive at least one antenatal care (ANC) contact, only 44% of births are attended by a skilled health care provider, with 38% of deliveries in a health facility. While the majority of births currently take place outside of facilities, improving rates of institutional delivery suggests that facility-based providers will play an increasingly important role in reducing maternal mortality from postpartum hemorrhage (PPH). PPH is the leading cause of maternal mortality in low-income countries. A national assessment of 303 health facilities in Madagascar found that direct causes contributed to 84% of maternal deaths reviewed, with PPH the most common direct cause, followed by pre-eclampsia/eclampsia, obstructed labor, and infection. In Bangladesh the most common direct cause of maternal mortality is by pre-eclampsia/eclampsia, obstructed labor, and infection. Active management of the third stage of labor (AMTSL), of which administration of a uterotonic immediately after birth is a central component, remains the primary strategy for PPH prevention recommended by the World Health Organization (WHO).

Oxytocin is recommended as the first uterotonic of choice and plays a central role in the treatment of PPH. Although AMTSL for every birth is national policy in Madagascar, steps for correctly performing it may not be followed consistently during deliveries. Studies of provider AMTSL guideline implementation in low-income countries often find high adherence to individual components of AMTSL, but less for all components. A 2011 survey of 36 health facilities in Madagascar by the Maternal and Child Health Integrated Program (MCHIP) found that oxytocin was given in 85% of deliveries observed, but it was only given within 1 min of birth in the correct dose and route in 21% of cases. In the same study, compliance with all elements of AMTSL occurred in only 13% of observed deliveries, and in the few instances of PPH complications observed during delivery, uterotonics were only administered in half of those observed cases, despite uterotonic availability in the facilities.

Identified barriers to adequate implementation of evidence-based interventions recommended by WHO guidelines such as AMTSL range from healthcare system and supply issues, to insufficient knowledge due to lack of awareness or access to guidelines, in addition to numerous contextual and interpersonal influencing factors. However, these assessments rarely focus on the psychological drivers of health care provider behavior and how their environments, including structural constraints, physical context, and social influence, may shape how they provide care and their adherence to known clinical protocols. Our study addresses this discrepancy in the literature by employing a behavioral science lens to identify barriers that inhibit facility-based providers from following best practices for PPH prevention and management in Madagascar. Insights from behavioral science can help develop a more nuanced understanding of provider decision-making and behavior related to obstetric complications and identify opportunities for innovative solutions to address barriers faced in providing quality care, specific to the challenging circumstances in which providers work.

RESEARCH OBJECTIVES

General Objective

To assess the nurses and midwives skillness on postpartum hemorrhage, Bangladesh.

Specific Objectives

1. To assess the nurses and midwives knowledge on causes about postpartum hemorrhage.
2. To assess barrier to manage postpartum hemorrhage case.
3. To identify the nurses and midwives efficiency on postpartum hemorrhage.
4. To find out the socio-demographic characteristics of the respondents.

METHODOLOGY OF THE STUDY

Study design: The study was a cross sectional descriptive study which assess the nurses and midwives' efficiency on post partum hemorrhage, Bangladesh.

Study area: The study was conducted in selected hospital at Chattagram division in Bangladesh. The Hospitals are Cumilla Medical College Hospital, Cumilla General Hospital, Upozilla Health Complex, Nangolcourt, Cumilla and Upazilla Health Complex, Laksham, Cumilla.

Sampling method: Purposive sampling method was used for the study.

Study population: Total nurses of Cumilla Medical College Hospital is 462, Total nurses of Cumilla General Hospital is 79, Total nurses Upozilla Health Complex is Nangolcourt is 33 and Total nurses Upazilla Health Complex, Laksham is 27. So total population of the study area is $462+79+33+27=601$

Sample Size:

Sample size was calculated by using Yamane Slovin's formula

$$n = \frac{N}{1 + Ne^2}$$

Where, N= Total Population

Total Nurses of the selected study area were = 601

e= Margin of error=0.05

$$\text{So, } n = \frac{N}{1 + Ne^2}$$

$$\begin{aligned}
 &= \frac{601}{1+601(0.05)^2} \\
 &= \frac{601}{1+1.50} \\
 &= \frac{601}{2.50} \\
 &= 400
 \end{aligned}$$

So, 400 nurses were selected for the study.

Sources of Data: Data were collected from primary and secondary sources.

Sources of Primary data: Primary data were collected from the respondents of study area.

Sources of secondary data: Secondary data were collected from hospital records, books, research report, journals and internet.

Instruments of data collection: Questionnaire was used for data collection.

Media of language: Data were collected in English Media.

Methods of data collection: Data were collected through face to face interview with questionnaire and observation together with maintain social distance with using mask and secondary data were collected by reviewing hospital records, books, research report, journals and internet etc.

Data processing and Analysis: Data were processed by using of SPSS (Statistical Package for Social Science) windows software program version 16.

RESULTS AND DISCUSSION

Table 1: Age of the Respondents

Age group	Frequency	Percent	Cumulative Percent
21-30 Years	132	33.0	33.0
31-40 Years	159	39.8	72.8
41-50 Years	68	17.0	89.8
51 Years and above	41	10.2	100.0
Total	400	100.0	

Source: Field Survey, 2022

Ages of the respondents have shown in the above table. From the result it was found that 39.8% respondents were age group 31-40 years which was maximum but 10.2% respondents were age group 51 years and above which was minimum.

Table 2: Monthly Family Income of the Respondents

Income in Taka	Frequency	Percent	Cumulative Percent
<50000/-	189	47.2	47.2
50001/- 100000/-	211	52.8	100.0
Total	400	100.0	

Source: Field Survey, 2022

Monthly family income of the respondents has shown in the above table. From the result it was found that 52.8% respondents had monthly family income 50001-100000 Taka and 47.2% respondents had monthly family income less than (<) 50000 Taka.

Table 3: Religion of the Respondents

Religion	Frequency	Percent	Cumulative Percent
Islam	327	81.8	81.8
Hindu	63	15.8	97.5
Buddhist	4	1.0	98.5
Christian	6	1.5	100.0
Total	400	100.0	

Source: Field Survey, 2022

Religion of the respondents has shown in the above table. From the result it was found that 81.8% respondents' religion were Islam which was maximum but 1% respondents were Buddhist which was minimum. On the other hand, 15% respondents were Hindu and 1.5% respondents were Christian.

Table 4: Husband's occupation of the respondents

Husband's occupation	Frequency	Percent	Cumulative Percent
Business	156	39.0	39.0
Service	161	40.2	79.2
Live in Foreign Country	31	7.8	87.0
Others	52	13.0	100.0
Total	400	100.0	

Source: Field Survey, 2022

Husband's occupations of the respondents have shown in the above table. From the result it was found that 40.2% respondents' husbands were service which was maximum but only 7.8% respondents husband live in foreign which was minimum.

Table 5: Level of Education of the Respondents

Level of Education	Frequency	Percent	Cumulative Percent
Diploma in Nursing	217	54.2	54.2
Diploma in Midwifery	52	13.0	67.2
B Sc. in Nursing/Public Health	44	11.0	78.2
M Sc. in Nursing /Others	40	10.0	88.2
Diploma in Nursing and Midwifery	47	11.8	100.0
Total	400	100.0	

Source: Field Survey, 2022

Level of education of the respondents has shown in the above table. From the result it was found that 54.2% respondents had Diploma in Nursing degree which was maximum but 10% respondents had M Sc. in Nursing degree or others degree which was minimum.

Table 6: Working Place of the Respondents

Working Place	Frequency	Percent	Cumulative Percent
Medical College Hospital	130	32.5	32.5
General Hospital	124	31.0	63.5
Upazilla Health Complex	135	33.8	97.2
Others	11	2.8	100.0
Total	400	100.0	

Source: Field Survey, 2022

Working place of the respondents has shown in the above table. From the result it was found that 33.8% respondents worked in Upazilla Health Complex which was maximum but only 2.8% respondents worked in others places which were minimum.

Table 7: Duties as a Nurse or Midwife of the Respondents

Duties duration (Years)	Frequency	Percent	Cumulative Percent
<5 Years	102	25.5	25.5
5-<10 Years	154	38.5	64.0
10-20 Years	64	16.0	80.0
>20 Years	80	20.0	100.0
Total	400	100.0	

Source: Field Survey, 2022

Duties as a nurse or midwife of the respondents have shown in the above table and graph. From the result it was found that 38.5% respondents worked as Nurse or Midwife which was maximum but only 16% respondents worked as Nurse or Midwife which was minimum.

Table 8: Specific Training for Management of PPH of the Respondents

Respondents' opinion	Frequency	Percent	Cumulative Percent
Yes	119	29.8	29.8
No	281	70.2	100.0
Total	400	100.0	

Source: Field Survey, 2022

Specific training for management of PPH of the respondents has shown in the above table and graph. From the result it was found that only 29.8% respondents had specific training for management of PPH but it is a matter of concern that 70.2% respondents had no specific training for management of PPH.

Table 9: Long Period Got Training to Manage PPH of the Respondents

Duration of training	Frequency	Percent	Cumulative Percent
1 Week	23	19.82	19.8
4 Weeks	93	80.18	100.0
Total	116	100	

Source: Field Survey, 2022

Long period got Training to manage PPH of the respondents has shown in the above table. From the result it was found that 80.18% respondents received 4 weeks training to manage PPH and 19.82% respondents received 1 week training to manage PPH.

Table 10: Method Choice to Manage PPH of the Respondents

Name of methods	Frequency	Percent	Cumulative Percent
Syba's Method	3	.8	.8
Aortic Pressure	9	2.2	3.0
Fundal Message	221	55.2	58.2
Manual Remove of Placenta	167	41.8	100.0
Total	400	100.0	

Source: Field Survey, 2022

Method choice to manage PPH of the respondents has shown in the above table. From the result it was found that 55.2% respondents replied that fundal message was the choices method to manage PPH which was maximum but 0.8% respondents replied that Syba's Method was the choices method to manage PPH which was minimum.

Table 11: Early Signs and Symptoms of Hypovolemic Shock

Early Signs and Symptoms	Frequency	Percent	Cumulative Percent
Cool, Clammy, and Pale Skin	247	61.8	61.8
Decrease in Blood Pressure	35	8.8	70.5
Rapid Weak Irregular Pulse	21	5.2	75.8
More than one	97	24.2	100.0
Total	400	100.0	

Source: Field Survey, 2022

Early signs and symptoms of hypovolemic shock have shown in the above table. From the result it was found that 61.8% respondents replied that Cool, Clammy, and Pale Skin was early signs and symptoms of hypovolemic shock which was maximum but % respondents replied that rapid weak irregular pulse was early signs and symptoms of hypovolemic shock which was minimum.

Table 12: Most Common Causes of PPH

Most Common Causes of PPH	Frequency	Percent	Cumulative Percent
Cervical Laceration	11	2.8	2.8
Uterine Atony	170	42.5	45.2
Retained Placenta	219	54.8	100.0
Total	400	100.0	

Source: Field Survey, 2022

Most common causes of PPH has shown in the above table. From the result it was found that 54.8% respondents replied that retained placenta was the most common causes of PPH which was maximum but only 2.8% respondents replied that cervical laceration was the most common causes of PPH which was minimum.

Table 13: Answer Not a Risk Factor for PPH

Risk Factor for PPH	Frequency	Percent	Cumulative Percent
Over Distended Uterus	6	1.5	1.5
Obesity	157	39.2	40.8
Previous History of PPH	41	10.2	51.0
Preterm Delivery	196	49.0	100.0
Total	400	100.0	

Source: Field Survey, 2022

Answer not a risk factor for PPH has shown in the above table. From the result it was found that 49% respondents replied that preterm delivery was not a risk factor for PPH which was maximum but only 1.5% respondents replied that over distended uterus was not a risk factor for PPH which was minimum.

Table 14: Factors More Managed for PPH

Factors More Managed	Frequency	Percent	Cumulative Percent
Past History of PPH	117	29.2	29.2
Multiple Pregnancy	131	32.8	62.0
Genital Tract Injury	109	27.2	89.2
Intra Uterine Foetal Death	20	5.0	94.2
All of the above	23	5.8	100.0
Total	400	100.0	

Source: Field Survey, 2022

Factors more managed for PPH has shown in the above table. From the result it was found that 32.8% respondents replied that multiple pregnancy factors were more managed for PPH which was maximum but only 5% respondents replied that intra uterine foetal death factors were more managed for PPH which was minimum.

Table 15: First Line Medication for Treating PPH

First Line Medication	Frequency	Percent	Cumulative Percent
Methergine	14	3.5	3.5
Oxytocin	375	93.8	97.2
Cytotec	11	2.8	100.0
Total	400	100.0	

Source: Field Survey, 2022

First line medication for treating PPH has shown in the above table. From the result it was found that 93.8% respondents replied that Oxytocin was the first line medication for treating PPH which was maximum but only 2.8% respondents replied that Cytotec was the first line medication for treating PPH which was minimum.

Table 16: Long Time Worked in Hospital at Labor and Delivery Room of the Respondents

Experiences	Frequency	Percent	Cumulative Percent
< 5 Years	333	83.2	83.2
5-10 Years	42	10.5	93.8
10-20 Years	19	4.8	98.5
20+ Years	6	1.5	100.0
Total	400	100.0	

Source: Field Survey, 2022

Long time worked in hospital at labor and delivery room of the respondents has shown in the above table. From the result it was found that 83.2% respondents replied that they had < 5 years long time worked in hospital at labor and delivery room which was maximum but 1.5% respondents replied that they had 20+ years long time worked in hospital at labor and delivery room which was minimum.

Table 17: Volume of Blood Loss after a Vaginal Delivery is considered for PPH

Volume of Blood Loss	Frequency	Percent	Cumulative Percent
>1000ML.	15	3.8	3.8
<700 ML.	8	2.0	5.8
>500 ML.	377	94.2	100.0
Total	400	100.0	

Source: Field Survey, 2022

Volume of blood loss after a vaginal delivery is considered for PPH has shown in the above table. From the result it was found that 94.2% respondents replied that >500 ML blood loss after a vaginal delivery is considered for PPH which was maximum but 2.0% of the respondents replied that <700 ml blood loss after a vaginal delivery which was minimum.

Table 18: Symptom of Uterine Atony

Symptom of Uterine Atony	Frequency	Percent	Cumulative Percent
Firm Uterus on Palpation	78	19.5	19.5
An Unrepaired Laceration seen at the Perineum	28	7	26.5
Boggy Uterus on Palpation	176	44.0	70.5
Retained Placental Tissue	118	29.5	100.0
Total	400	100.0	

Source: Field Survey, 2022

Symptom of uterine atony has shown in the above table and graph. From the result it was found that 44% respondents replied that boggy uterus on palpation was symptom of uterine atony which was maximum but only 7% respondents replied that an unrepaired laceration seen at the perineum symptom of uterine atony which was minimum.

Table 19: First Nursing Intervention for Treating PPH

First Nursing Intervention	Frequency	Percent	Cumulative Percent
Pad Count	159	39.8	39.8
Patient Teaching	13	3.2	43.0
Uterine Massage	219	54.8	97.8
Have Patient Empty Bladder	9	2.2	100.0
Total	400	100.0	

Source: Field Survey, 2022

First nursing intervention for treating PPH has shown in the above table. From the result it was found that 54.8% respondents replied that uterine massage was the first nursing intervention for treating PPH which was maximum but only 2.2% respondents replied that patient empty bladder was the first nursing intervention for treating PPH which was minimum.

Table 20: Route cannot Misoprostal be Administered

Routes	Frequency	Percent	Cumulative Percent
Rectally	11	2.8	2.8
Vaginally	3	.8	3.5
Orally	2	.5	4.0
Intravenous	384	96.0	100.0
Total	400	100.0	

Source: Field Survey, 2022

Route cannot misoprostal be administered has shown in the above table. From the result it was found that 96% respondents replied that intravenous route cannot misoprostal be administered which was maximum but only 0.5% respondents replied that orally route cannot misoprostal be administered which was minimum.

Table 21: Surgical PPH Treatments Include All but One of the Following

Surgical PPH Treatments	Frequency	Percent	Cumulative Percent
B-Lynch Suture	4	1.0	1.0
Hysterectomy	87	21.8	22.8
Uterine Artery Ligation	9	2.2	25.0
Ultrasound	300	75.0	100.0
Total	400	100.0	

Source: Field Survey, 2022

Surgical PPH treatments include all but one of the following has shown in the above. From the result it was found that 75% respondents replied that ultrasound surgical PPH treatments include all which was maximum but 1% respondents replied that B-Lynch suture surgical PPH treatments include all which was minimum.

Table 22: Treatment Options for PPH may include

Treatment Options	Frequency	Percent	Cumulative Percent
Uterotonic, Bedrest, Transfusion and Repair of Lacerations	75	18.8	18.8
Uterotonics, Repair of Lacerations, Removal of Placental Tissue	261	65.2	84.0
Uterotonics, Increased Length of Hospital Stay, Hysterectomy	2	.5	84.5
Uterotonics, Initiation of Breast Feeding, Infrequent Fundal Massage	56	14.0	98.5
More than one	6	1.5	100.0
Total	400	100.0	

Source: Field Survey, 2022

Treatment options for PPH may include has shown in the above table number 22. From the result it was found that 65.2% respondents replied that Uterotonics, Repair of Lacerations, Removal of Placental Tissue were treatment options for PPH which was maximum but only 0.5% respondents replied that uterotonics, increased length of hospital stay, hysterectomy which was minimum.

Table 23: 4T's Associated with PPH

4T's Associated with PPH	Frequency	Percent	Cumulative Percent
Tone	59	14.8	14.8
Trauma	71	17.8	32.5
Tissue	11	2.8	35.2
Thrombin	5	1.2	36.5
All of the Above	254	63.5	100.0
Total	400	100.0	

Source: Field Survey, 2022

4T's Associated with PPH has shown in the above table. From the result it was found that 63.5% respondents replied all the 4T's associated with PPH which was maximum but only 1.2% respondents replied thrombin is associated with PPH which was minimum.

Table 24: Work Done for Postpartum Hemorrhage of the Respondents

Work Done for Postpartum Hemorrhage	Frequency	Percent
Save all Perineal Paid Used During Bleeding and Weight them to Determine the Amount of Blood Loss	242	60.5
Place the Woman in a Side Lying Position to Make Sure that no Blood is Pooling Underneath Her	14	3.5
Assess Lochia Frequently to Determine if the Amount Discharged is Still within the Normal Limits	5	1.2
Assess Vital Signs, Especially the Blood Loss	131	32.8
All of the Above	8	2.0
Total	400	100.0

Source: Field Survey, 2022

Work done for postpartum hemorrhage of the respondents has shown in the above table. From the result it was found that 60.5 % respondents replied that they saved all perineal paid used during bleeding and weight them to determine the amount of blood loss which was maximum but 1.2% respondents replied that they assess lochia frequently to determine if the amount discharged is still within the normal limits which was minimum.

Table 25: Observed for PPH of the Respondents

Observed for PPH	Frequency	Percent	Cumulative Percent
Assess the Amount of Bleeding	262	65.5	65.5
Assess Maternal Vital Signs to Establish Baseline Data	114	28.5	94.0
Assess the Sign of Shock	8	2.0	96.0
1 and 3	16	4.0	100.0
Total	400	100.0	

Source: Field Survey, 2022

Observed for PPH of the respondents has shown in the above table. From the result it was found that 65.5% respondents replied that they assessed the amount of bleeding observed for PPH which was maximum but 2% respondents replied that they assess the sign of shock which was minimum.

Table 26: Psychological Changes Occur in Female after PPH

Psychological Changes	Frequency	Percent	Cumulative Percent
Secrecy	32	8.0	8.0
Fear	255	63.8	71.8
Management of Baby with Family	6	1.5	73.2
Reluctant of Food, Work and Study	2	.5	73.8
More than one	105	26.2	100.0
Total	400	100.0	

Source: Field Survey, 2022

Psychological changes occur in female after PPH has shown in the above table. From the result it was found that 63.8% respondents replied that fear was psychological changes occur in female after PPH which was maximum but 0.5% respondents replied that reluctant of food, work and study which was minimum.

CONCLUSION

The incidence of postpartum hemorrhage is very high in Bangladesh inspiteuse of uterotonics. The risk factors identified could be addressed by extra vigilance during labor and preparedness for PPH management in all women giving birth. Technology-based detections could early detect and facilitate postpartum hemorrhage and provide immediate care. High health field technology advancement facilitates the patients' care, health care service cost reduction, and health care worker scale improvement to help many people. The technology allows effective, immediate, accurate, controlled, easy, and zero paper care services. The results of this research are useful to promote further research about modern-technology-based models to detect and diagnose postpartum hemorrhage in islands.

However, much of the surrounding literature on this topic does suggest an association between blood lactate concentration and haemorrhage rates. So, nurses and midwives should take necessary steps regarding this matter. This is of particular relevance to this study as blood lactate levels are very closely linked with blood P^H levels during labour. It is known that the strong, prolonged uterine contractions that occur during labour may decrease blood supply and subsequent oxygenation to the uterus. This reduced oxygen supply is then compensated by an increase in anaerobic respiration, which results in the accumulation of the biproduct lactate. Under normal conditions, lactate production is met with physiological bicarbonate and protein buffering systems to neutralize excess H^+ ions, and to reduce the negative effects of acidosis. However, if labour significantly limits oxygen supply and lactate levels accumulate, the buffering systems can become depleted, thus lactic acid accumulation and metabolic acidosis can ensue. Not only is uterine acidosis responsible for dystociclabour, but acidosis of the myometrium is also known to compromise the efficiency and strength of the uterine contractions which occur after the delivery of the placenta (Wray, 2007). If the blood vessels that once supplied the placenta are not adequately occluded then they will continue to bleed, which will result in an atonic PPH. So, nurses and midwives should become very much cautious and careful about the aforesaid matters. This study reveals how perception of low risk of PPH, limited feedback on compliance with best practices and consequences of current practices, and a context of scarcity may negatively affect provider decision-making and clinical practices. Behaviorally informed interventions, designed for specific contexts that care providers operate in, can help improve quality of care and health outcomes for women in labor and childbirth.

RECOMMENDATIONS

The Recommendations of the study are as follows:

The Nursing Process should be done

Nurses working in labor and delivery and postpartum settings must understand the signs and symptoms of postpartum hemorrhage and react immediately. Nurses can also educate patients on their risk factors for experiencing this complication and provide effective teaching on monitoring their recovery at home along with follow-up care.

Deficient Fluid Volume Care Plan

A drop in circulating blood volume decreases perfusion to vital organs.

Deficient fluid volume assessment should be done**1. Vital signs and LOC should be monitored**

The nurse should monitor vital signs closely during and after delivery. Hypotension, tachycardia, confusion, faintness, and weakness, are signs of hypovolemia and impending shock from blood loss.

2. The uterus should be assessed

The first step is to locate the source of the bleeding. A soft or “boggy” uterus signals it isn’t contracting and is the main cause of postpartum hemorrhage. If the uterus is round or bulging this signal uterine inversion. An internal exam may be needed to assess for lacerations or other signs of uterine rupture.

3. Laboratory work should be obtained

Laboratory work may further diagnose PPH. Low hemoglobin levels are expected and platelets or coagulation studies may also be abnormal depending on the cause of bleeding.

4. Lochia and characteristics should be monitored

Some bleeding is expected after delivery. The amount of lochia should decrease after a few hours and there should not be large clots.

Deficient fluid volume interventions should be done**1. Uterus should be massaged**

Massaging of the uterus after delivery can promote contractions and prevent PPH.

2. Oxytocin should be administered

Oxytocin is routinely administered immediately following birth to prevent and/or treat PPH.

3. Bed rest should be maintained

To maintain the safety of the patient with hypovolemia, encourage bed rest to prevent orthostatic hypotension, dizziness, and falling. This can also decrease bleeding. Keep legs elevated to promote venous return.

4. IV fluids should be administered

Administration of IV fluids will be a priority intervention to increase the intravascular volume. Normal saline is usually ordered.

5. Blood products should be administered

Packed red blood cells and/or plasma may be ordered to replace blood loss.

6. Surgery preparation should be prepared

If hemorrhage is due to lacerations, hematoma, trauma, or retained tissues (placental fragments) surgery may be required.

Anxiety care plan should be done

Traumatic birthing experiences can cause anxiety and even post-traumatic stress disorders.

Anxiety assessment should be done**1. Physiologic vs. psychologic symptoms should be determined**

Restlessness, tachypnea, and tachycardia are symptoms of anxiety but are also symptoms of PPH. The nurse must differentiate between the two to properly assess and treat the patient.

2. Patient’s thoughts and feelings should be assessed

Encourage the patient to express their thoughts and perceptions of the situation. The nurse can dispel any misconceptions and clarify information to prevent panic.

Anxiety interventions should be done**1. Clear communication should be maintained**

The nurse should communicate the interventions taken and outcomes. The nurse should remain supportive and empathetic and provide calm reassurance to decrease anxiety.

2. Support system should be involved

The patient's support system such as the spouse/partner and family should be included in teaching and instruction. They can support the nurse in reducing the fear of the patient and supporting the treatment plan.

3. Baby and mother should be kept together when possible.

Separating the mother from their newborn can cause unnecessary stress. If the mother is being treated in her room, try and keep the baby with her to promote bonding and distraction.

4. Therapy resources should be provided

Experiencing a life-threatening situation can cause long-term stress and anxiety. Additional counseling following the event can assist the patient and family in coping. Post-partum depression is also more likely to occur after PPH.

Deficient Knowledge Care Plan should be done

Providing education on childbirth and delivery expectations can prepare the mother and support person for complications before they arise.

Deficient Knowledge Assessment**1. Risk factors should be identified**

Placenta abruption, placenta previa, an over distended uterus, multiple-gestation pregnancy, preeclampsia, prolonged labor, and obesity are risk factors for PPH.

2. Patient's understanding should be assessed

Review possible complications with the patient and signs and symptoms to be aware of at discharge to know when to seek prompt treatment.

Deficient Knowledge Interventions**1. Discharge education should be provided**

Patients should have an understanding of what is considered normal after delivery. PPH usually occurs very quickly after delivery but can occur up to 12 weeks later. Instruct the patient to call their healthcare provider for increased vaginal bleeding (saturating a sanitary pad in an hour) or passing large clots, feelings of dizziness, fatigue, and new or worsening abdominal pain.

2. Breastfeed should be done immediately.

Breastfeeding is often encouraged immediately as it stimulates the oxytocin reflex which can stimulate uterus contraction, reducing bleeding. Educate and encourage the mother to request to breastfeed if they desire.

3. Follow-up care should be reviewed

PPH may require follow-up lab testing to monitor blood counts and iron levels to check for anemia. Iron supplements or diets high in iron may be recommended.

Pathological laboratory should be situated near to labour wards

Pathological laboratory should be situated near to labour wards. Because for management of PPH, quick blood matching is essential. But most of the pathological laboratories of the hospitals of Bangladesh are far from labour wards. For this reason, quick blood matching cannot be done. As a result, management of PPH become delay or damage occur.

Instruments for the management of PPH should be available

Instruments play a very important role for the management of PPH. In Bangladesh, there are lackings of modern or updated instruments for the management of PPH. So, instruments for the management of PPH should be available and modern or updated.

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