# Available online on www.ijpcr.com

International Journal of Pharmaceutical and Clinical Research 2024; 16(4); 702-704

**Original Research Article** 

# To Study Incidence Etiology and Outcome of Post Partum Haemorrhage

Rajni Priyanka<sup>1</sup>, Juhi<sup>2</sup>, Geeta Sinha<sup>3</sup>

# <sup>1</sup>Senior Resident, Department of Obs & Gynae, PMCH, Patna <sup>2</sup>Senior Resident, Department of Obs & Gynae, NMCH, Patna <sup>3</sup>Professor, Department of Obs & Gynae, PMCH, Patna

Received: 25-02-2024 / Revised: 26-03-2024 / Accepted: 15-04-2024 Corresponding Author: Juhi

# Conflict of interest: Nil

# Abstract:

**Background and Objectives:** Primary PPH is classically/quantitatively defined as bloodloss from or in genital tract exceeding 500ml within 24hrs of vaginal delivery and 1000ml during Caesarean section. It is classically/qualitatively defined as any amount of bleeding from or into genital tract following birth of baby upto end of puerpurium which adversely effect general condition of patient evidenced by rise of pulse and falling of blood pressure. The aim of the study is to review the incidence, etiology and outcome in cases of PPH at our tertiary Centre, Patna Medical College and Hospital, Patna.

**Material and Methods:** It is prospective single center based study carried out in Labour room emergency (LRE) of PMCH, Patna from August 2019 to July 2021. Total 75 cases of PPH was noted in centre in which only 13 cases were booked cases and rest 62 cases reported directly in labour room or were referred from primary and community health center of adjoining area.

**Conclusion:** Haemorrhage is the leading cause of maternal mortality and morbidity worldwide. Effective measures like provision of antenatal care to all pregnant ladies, safe hospital deliveries and timely referral of high risk pregnancies, complications are expected to reduce PPH. 5th millennium development goals aims to reduce maternal mortality by primarily reducing number of cases of PPH by avoiding risk factors, especially those related to obstetrics intervention like increased caeserean rate and induction and augmentation of labour with injudicious use of uterotonics, active management of all stages of labour, especially 3<sup>rd</sup> stage of labour.

Keywords: PPH, Caesarean Section, Oxytocin, Ergometrine, Prostaglandin.

This is an Open Access article that uses a funding model which does not charge readers or their institutions for access and distributed under the terms of the Creative Commons Attribution License (http://creativecommons.org/licenses/by/4.0) and the Budapest Open Access Initiative (http://www.budapestopenaccessinitiative.org/read), which permit unrestricted use, distribution, and reproduction in any medium, provided original work is properly credited.

# Introduction

Primary PPH is classically/quantitatively defined as bloodloss from or in genital tract exceeding 500ml within 24hrs of vaginal delivery and 1000ml during Caesarean section. [1] It is classically/qualitatively defined as any amount of bleeding from or into genital tract following birth of baby upto end of puerpurium which adversely effect general condition of patient evidenced by rise of pulse and falling of blood pressure. Secondary PPH is defined as excessive blood loss from the genital tract after 24 hours following delivery until 12 weeks post delivery. [2] PPH is the one of the major cause of mortality and morbidity worldwide. Appox Onequarter. Obstetric haemorrhage contribute 38% of maternal deaths among all deaths, in which PPH accounts for 25%. PPH is the most feared obstetric emergency that can occur to any women at child birth, If unattended the hemorrhage can kill even a healthy women. [3] Among all the 4 stages of labour, 3rd stage is the most crucial because the most dreaded complication PPH (post patum hemorrhage) may occur in an otherwise uneventful delivery changing it into a formidable. Every day about 1600 women die during child birth and of these

approximately 500 bleed to death world-wide. [4]PPH is multifactorial and in two- third of patient, there is no identifiable risk factor so PPH is unpredictable but death due to PPH is preventable if delay is avoided. We all know four t's are cause of PPH, tone-80%, trauma-10-15%, tissue-3- 5%, thrombin-1-2%. Intelligent anticipation, skilled supervision, promt detection and effective institution of therapy can prevent and control PPH, prevent disastrous consequence and maternal death. [5]

# Aim of the Study

The aim of the study is to review the incidence, etiology and outcome in cases of PPH at our tertiary Centre, Patna medical college and Hospital, Patna.

# **Material and Methods**

It is prospective single center based study carried out in Labour room emergency (LRE)of PMCH, Patna Time Period August 2019 to July 2021.

Total 75 cases of PPH was noted in centre in which only 13 cases were booked cases and rest 62 cases reported directly in labour room or were referred from primary and community health center of adjoining area.

Medical management was done by oxytocin, ergometrine, prostaglandin.

Surgical management was done by Bilateral uterine artery ligation and compression suture.

#### Results

The incidence of post-partum haemorrhage in PMCH Patna during my study period was 1.9% (75 out of 3944 deliveries) lower than reported elsewhere.

ATONIC DOU

In our study total 75 patients had PPH, all including booked and referred case. Highest number of cases i.e 44 out 75 were in 21-25 year age group and 54 were multipara. 18% were only booked cases . in 2/3rd cases there was no identifiable risk factors. Main cause of PPH in my study was uterine atony i.e 68% and 2nd common cause was tissue.

Most of the cases of PPH seemed to be rapidly arrested soon after diagnosis before patient lost too much blood, but almost all patient required blood transfusion.

Nearly all patient resuscitated except 3 out of 75 who died post operatively.

Demographics	N=75	Percentage (%)
Age (Years)		
<20	8	10.6%
21 TO 25	44	58.6%
26 TO 30	17	22.3%
>30	6	8%
GRAVIDA		
PRIMI	21	28%
MULTI	54	72%
PRIOR PPH		
YES	12	16%
NO	18	24%
Not known	24	32%
Booking Stutus		
Booked	13	17.36%
Unbooked	62	82.6%

Table 1: Demographic distribution of PPH

# Table 2: Etiology Distribution of Pph

N=75	Vaginal	Caeserea	Laparoto
	Delivery	N Section	Му
ATONIC PPH	51		
Twin	6	4	2
Polyhydramnios	3	3	
Obstructed	4		4
PIH	3	1	2
Mixed	35	25	10

#### Table 3: Distribution A/C to Management

ATOMIC FFH		
MASSAGE & BIMANUAL	21	41%
COMPRESSION MEDICAL MANAGEMENT BALLON TAMPONADE SURGICAL MANAGEMENT	20 6 4	39% 11% 8%
TRAUMATIC PPH REPAIR OF TEAR HYSTERECTOMY	9 1	12% 1.3%
TISSUE CONSERVATIVE WITH Abx and blood Hystrectomy	2 12	2.6% 16%

### International Journal of Pharmaceutical and Clinical Research

# Discussion

A large number of risk factors for PPH have been identified but most cases of PPH have no identifiable risk factor3. [6] For those women known to have risk factors for PPH appropriate management should be instigated in both the antenatal and intrapartum periods to mitigate this risk. All women should birth in a unit with rapid access to blood and blood products and have antenatal correction of anaemia. Where a woman is likely to decline the administration of blood products, risk of death from postpartum haemorrhage becomes considerably greater and prophylaxis even more important than otherwise. Active management of the third stage of labour (use of prophylactic oxytocics and assisting delivery of the placenta) should be practised as this reduces the risk of PPH and the need for blood transfusion. [7] Prophylactic oxytocics should be used for the management of the third stage of labour, whether following vaginal or caesarean birth, as they reduce the risk of PPH by at least 50%.1 Oxytocin should remain the drug of choice for this indication in women without risk factors for PPH. The addition of ergometrine to oxytocin (Syntometrine®) may reduce the need for additional uterotonics and other PPH interventions but does not appear to reduce the risk of severe PPH or blood transfusion compared to oxytocin alone 4-7 and has notable maternal side effects including vomiting. Misoprostol has been used in routine management of the third stage of labour, but quality trials in the hospital setting have reported that it is less effective than oxytocin and is associated with a greater incidence of side effects. [8]

# Conclusion

Haemorrhage is the leading cause of maternal mortality and morbidity worldwide . effective measures like provision of antenatal care to all pregnant ladies, safe hospital deliveries and timely referral of high risk pregnancies, complications are expected to reduce PPH. 5th millennium development goals aims to reduce maternal mortality by primarily reducing number of cases of PPH by avoiding risk factors, especially those related to obstetrics intervention like increased caeserean rate and induction and augmentation of labour with injudicious use of uterotonics, active management of all stages of labour, especially 3rd stage of labour. Uterine atony is the primary direct cause of maternal mortality and morbidity globally. Judicious use of oxytocin and ergometrine can widely decrease uterine atony. Oral use of misoprostol has significantly decreases the acute cases of PPH and mean blood loss in low resources setting. Introduction of regular Obstetric drills and proper training of health personals to use anti- shock garments and ballon tamponads and stocked PPH boxes to deal emergency cases can prevent surgical intervention i.e. hysterectomy effectively.

# References

- Abouzahr C. Globalburden of maternal death and disability. Br. Med Bul.l2003;67(1):1–11. [PubMed] [Google Scholar]
- Reyders FC, Seuten L, Tjalma W, Jacquemyn Y. Postpartum haemorrhage practical approach to a life-threatening complication. Clin Exp Obstet Gynecol. 2006; 33:81–84.
- Lynn P, Freedman RJ, Waldman H de Pinho, Wirth ME. Who's got the power? Transforming health systems for women and children. UN Millenium Project Task Force Child Health Maternal Health. 2005:77–95.
- 4. Mousa HA. Alfirevic. Treatment for primary postpartum haemorrage. Cochrane Database Syst Rev. 2007;(1):CD003249.
- 5. Royal College of Obstetricians and Gynaecologists. Prevention and management of postpartum
- 6. WHO. MPS Technical Update: Prevention of Postpartum Hemorrhage by Active Management of Third Stage of Labour. 2006.
- 7. Thawal Y et al. Int J Reprod Contracept Obstet Gynecol. 2019 May; 8 (5): 1790-1794.
- 8. Bhavana G et al. Int J Reprod Contracept Obstet Gynecol. 2016 Jun; 5 (6) Jun; 5 (6): 2017-2021.