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A study of antepartum haemorrhage and its maternal and perinatal outcome at tertiary care hospital in western Rajasthan

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Abstract
It is an obstetric emergency contributing to a significant amount of perinatal morbidity and mortality. In developed countries maternal mortality has decreased due to better emergency obstetrical facilities. In India it is still high due to associated problems like anemia, difficulty in transport facilities, lack of awareness, lack of blood transfusion facilities in Rural India. A hospital based retrospective analysis is done Obstetric haemorrage is leading cause of maternal mortality in the world [3]. The prevalence of APH varies from hospital to hosopital i.e.0.5% to 5% [1]. There are many complications which are associated with APH like malpresentation, premature labor, PPH, shock, higher rate of caesarean sections, peripartum hysterectomy and maternal death, perinatal complication include premature delivery, low birth weight, intrauterine death, congenital malformation and birth asphyxia [4, 5].
After studying of Demographic profile of the cases, it was found that better provision of antenatal services is very much essential for prompt management and to reduce APH related complications. To avoid maternal and perinatal complications of APH following measures can be taken. All cases of APH should be considered under high risk pregnancy and proper management plan should be followed.

Keywords: APH, antepartum haemorrhage, placenta previa, abruptio placentae

Introduction
APH is defined as bleeding from vagina after 28 weeks of gestation (24 weeks in western) [1]. It occur in 2 to 5% of pregnancies. It is an obstetric emergency contributing to a significant amount of perinatal morbidity and mortality. There are many causes of APH like placenta previa, abruptio placentae, inderminate causes or local causes of genital tract, systemic causes like bleeding disorders. In developed countries maternal mortality has decreased due to better emergency obstetrical facilities. In India it is still high due to associated problems like anemia, difficulty in transport facilities, lack of awareness, lack of blood transfusion facilities in Rural India.[2] Aim of present study to study and understand demographic profile, Types of APH and its complications. This will help to formulate preventive guidelines so as to reduce complication which are related to APH.

Material and Method
- **Study design**: This study is a retrospective analysis.
- **Study setting:** The study was conducted at Umaid Hospital, Dr. S N Medical College Jodhpur.
- **Study period**: Total duration of study is 6 months (From July 1 to December 31, 2020)
- **Inclusion criteria**: All patient with bleeding per vaginum after 28 weeks of gestation but before birth of the fetus were included.
- **Exclusion criteria:** cases with bleeding before 28 weeks were excluded.

Methodology
Data were collected from record section and analysed. 112 cases were taken in this study. Statistical analysis of the Data had been done by SPSS software version 2.1. Institional etical committee had clearance had been taken for this study.

Results
From july 1 to december 31, 2020 out of 9135,112 had APH. Incidence of APH is being 1.22%. Out of 112, 78 patients were unbooked and 34 were booked. According to frequency maximum number of cases were contributed by Abruptio placentae 50%, followed by Placenta previa 38% and undetermined causes were around 12%.
Results of our study have been shown with help of following tables and charts.

1. Distribution of Patient According to cause of APH

Types of APH	Frequency	Percentage
Placenta Previa	43	38%
Abruptio Placentae	56	50%
Undetermined causes	13	12%
Total	112	100%

Fig 1

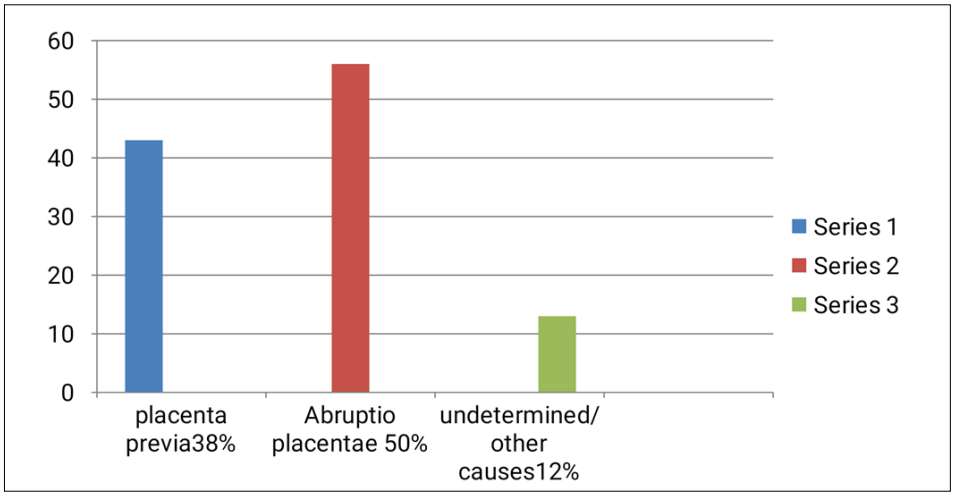


Fig 2

2. Distribution according to age and type of APH

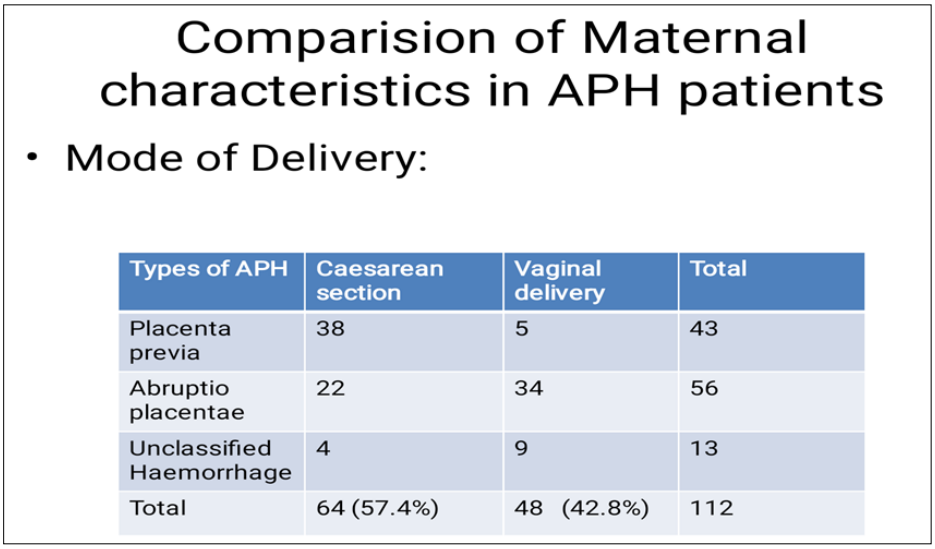
Distribution according to age and type of APH

Types of APH	20-24 years	25-29 years	30-34 years	More than 35 years	total
Placenta previa	11	22	8	2	43
Abruptio Placentae	10	25	15	6	56
Unclassified Haemorrhage	3	6	3	1	13
Total	24 (21.4%)	53 (47.3%)	26 (23.2%)	9 (8%)	112

Fig 3

In total cases incidence of APH is highest in 25 to 29 years age group around 47.3% followed by 30-34 year age group (23.2%)

3. Comparision of Maternal Characteristics in APH Patients

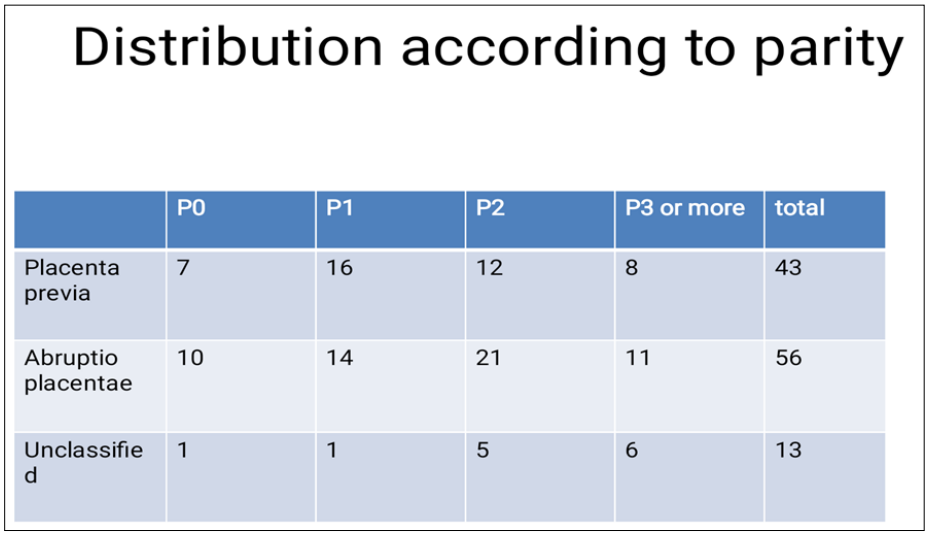


Types of APH	Caesarean section	Vaginal delivery	Total
Placenta previa	38	5	43
Abruptio placentae	22	34	56
Unclassified Haemorrhage	4	9	13
Total	64 (57.4%)	48 (42.8%)	112

Fig 4

In this table we find that more patients 57.4% were delivered by caesarean section.

4. Distribution According to Parity

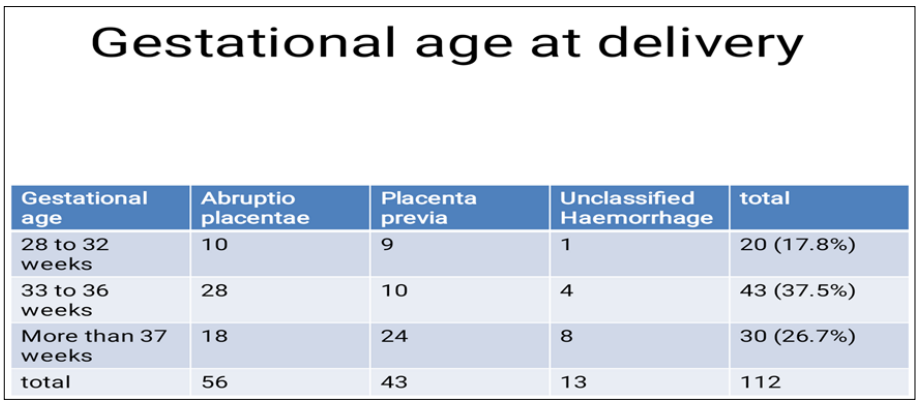


	P0	P1	P2	P3 or more	total
Placenta previa	7	16	12	8	43
Abruptio placentae	10	14	21	11	56
Unclassified	1	1	5	6	13

Fig 5

In the table we find that APH is more common in multipara (84%) than nullipara (16%).

5. Gestational age at Delivery



Gestational age	Abruptio placentae	Placenta previa	Unclassified Haemorrhage	total
28 to 32 weeks	10	9	1	20 (17.8%)
33 to 36 weeks	28	10	4	43 (37.5%)
More than 37 weeks	18	24	8	30 (26.7%)
total	56	43	13	112

Fig 6

In our study we find that around 55.3% deliveries are preterm deliveries. • Mean age of delivery was 33 to 36 weeks (37.5%)

6. Fetal outcome in APH Patients

Fetal outcome in APH patients

Fetal outcome	no. of cases	percentage
Live birth	90	80.3%
IUFD	13	11.6%
Still birth	9	8%
NICU admission	60	53.5%
Died in NICU	9	8%
Birth weight		
>2.5 kg	40	
2-2.5kg	32	
1.5-2kg	30	
1-1.5 kg	10	

Fig 7

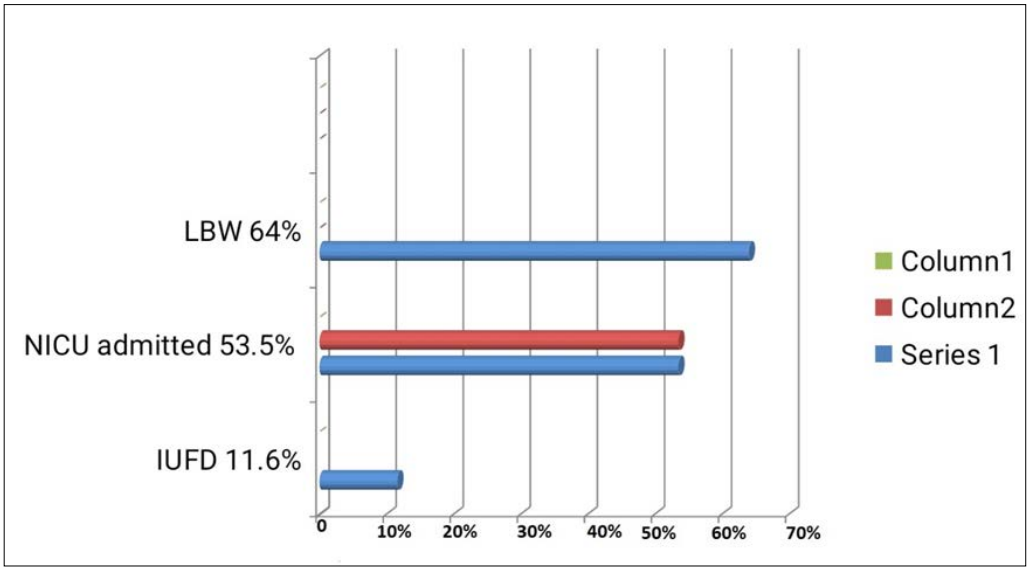


Fig 8

Around 53 % newborns admitted to NICU. In fetal complication 64% babies were low birth weight. Around 8% of babies are still birth. 11.6% of babies were IUFD.

Maternal Outcome

Most common maternal complication was post partum anemia that needed blood transfusion in around 50% of case followed by PPH 18.7 %. 4 cases out of 112 underwent caesarean hysterectomy. 2 patients got expired showing case fatality rate of 1.7%.

Discussion

Obstetric haemorrage is leading cause of maternal mortality in the world [3]. The prevalence of APH varies from hospital to hosopital i.e.0.5% to 5% [1]. There are many complications which are associated with APH like malpresentation, premature labor, PPH, shock, higher rate of caesarean sections, peripartum hysterectomy and maternal death, perinatal complication include premature delivery, low birth weight, intrauterine death, congenital malformation and birth asphyxia [4, 5]. Because of increase in the caesarean section rates there is an increase in the incidence of placenta previa and morbidly adherent placenta while main cause of abruption is hypertensive disorder of pregnancy, eclampsia [5, 6]. In this study the incidence of APH was found to be 1.7% which is concordant with study conducted by *Rajni et al* 1.2% [7]. while there are studies who have reported higher percentage of i.e. *Sheikh et al* 5.4% [8].

Singhal *et al* 3% [2], Samal *et al* 2.9% in their studies [9]. In our study majority of cases were due to Abruptio placentae (50%) followed by placenta previa (38%) while study done by *Singhal et al* found 52% cases of APH contributed by placenta praevia followed by abruptio placentae that contributes 29.6% [2]. In our study incidence of APH was highest in age group 25 to 29 years followed by 30 to 34 years which is concordant with the study conducted by *Adekanle et al* [10]. and *Samal et al* [9]. In our study among maternal complication incidence of caesarean section is 57.14% which is similar to study done by *Sheikh F et al* [8] and *Ayushma et al* [5]. In our study incidence of anemia was the most common complication (50%) followed by Post partum heamorrhage (18%). These findings are similar with study Conducted by *Sheikh et al* [8] and *Singhal et al* [2]. Coming to perinatal complication in our study Incidence of LBW child was found around 64%, Similar findings are observed By *Ayushma J et al* [5] while Singhal *et al* reported 83% incidence of LBW child. Incidence of perinatal mortality was observed by 16% in our study. This finding is similar with *Ayushma et al* [5] and Robbins *et al* [11]. While sheikh F *et al* reported very high perinatal mortality rate 49.6%. This difference may be due to advanced intensive care facility of present institute.

Conclusion

After studying of Demographic profile of the cases, it was found that better provision of antenatal services is very much essential for prompt management and to reduce APH related complications. To avoid maternal and perinatal complications of APH following measures can be taken. All cases of APH should be considered under high risk pregnancy and proper management plan should be followed. After studying sociodemographic profie and risk factors, provision of better antenatal services, Making women aware regarding antenatal check ups, Iron Folic acid supplementation, Doing correction of anemia, Provision of better family planning services can reduce complication. Multiparity is major risk factor observed in our study, so making women aware about family planning can reduce morbidity and mortality. Various Government schemes like Pradhanmantri Surakshit Matritva Abhiyaan should be followed religiosly. Adequate and timely referral or transport facilities, adequate trained medical and paramedical staff with blood transfusion facilities can improve outcome.

References

1. Dutta DC. Antepartum hemorrhage. In Konar. HL ed. Textbook of obstetrics. 6th ed. Kolkatta; New central book agency, 2006, 243-46.
2. Singhal S, Nymphaea, Nanda s. Maternal and perinatal outcome in antepartum haemorrhage : A study at a tertiary case referral institute. The Internet. Journel of Gynecology and Obstetrics,2008:9(2):5580/1b6.
3. Lolonde A, Davis BA, Acosta A. Postpartum haemorrhage today: ICM/ FIGO initiative 2004 - 2006 UGO,2006:94:243-53.
4. Cunningham FG, Leveno KJ, Bloom SL, Hauth JC *et al* williams obstetrics. Obstetrical haemorrhage. 22nd edition. McGraw Hill Companies, Inc,2005:810-20.
5. Ayushma J, Anjali K. Study of obstetric outcome in antepartum haemorrhage. Pana J Med Sci,2015:5(3):153-7.
6. Sinha P, Kuruba N. Antepartum haemorrhage: an update. J obstet Gynaecol,2008:28(4):377- 81.
7. Rajni P, Devi A, Singh A, Girishma P. Maternal and perinatal outcome in case of antepartum haemorrhage. IOSR Journal of Dental and Medical Sciences,2016:15(6):9-11.
8. Sheikh F, Khokhar S, Sirichand P, Sheikh R. A study of antepartum hemorrhage : Maternal and perinatal outcome. Medical Channel,2010:16(2):268-71.
9. Samal SK, Rathod S, Rani R, Ghose S. Maternal and perinatal outcome in case of antepartum haemorrhage : a 3 years observational study in a tertiary care hospital. Int J Reprod Contracept Obstet Gynecol,2017:16(2):268-71.
10. Adenkanle DA, Adeyami AS, Fadero FF. Antepartum Haemorrhage and pregnancy outcome in Leutech teaching Hospital, Southwestern Nigeria. J Med Sci,2011:1243-7.
11. Robbins PG, Gorbach AG Jr, Reid DE, Neurologic abnormalities at one year in infant delivered after care pregnancy haemorrhage. Obstet Gynecol,1967:29(3):358-61.