

# Study of Antepartum Haemorrhage & Its Maternal & Perinatal Outcome

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**Abstract- TITLE:** - STUDY OF ANTEPARTUM HAEMORRHAGE & ITS MATERNAL & PERINATAL OUTCOME

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**AIMS & OBJECTIVE :-** (I) To study factors association with Antepartum hemorrhage, (II) To study maternal morbidity and mortality due to A.P.H, (III) To study perinatal outcome in A.P.H

**MATERIAL & METHOD :-** In this study 100 cases of A.P.H admitted in Kamla Raja Hospital were studied and inclusion criteria of patients were Gestational age more than 28 wks with bleeding per Vaginum. All the cases were grouped as placenta previa, Accidental hemorrhage, local causes and unknown. The diagnosis was made on the basis of history, Clinical examination and few cases aided by ultrasonography.

**RESULT:-** Out of 100 cases of A.P.H., Placenta previa contributed to 71%, Abruptio placenta 27% and undetermined cause 2%. Maternal mortality out of 71 cases of placenta previa was 3 and 1 Abruptio placenta. Perinatal mortality was 12.69 in placenta previa and 18.52% in Abruptio placenta.

**CONCLUSION:-** APH is a major causes of maternal and perinatal morbidity and mortality which could be prevented by early registration, regular antenatal care, early detection of High risk cases, early referral to higher centre.

**Index Terms-** Antepartum haemorrhage, abruptio placentae, placenta praevia, post partum haemorrhage.

## I. INTRODUCTION

Obstetric haemorrhage is one of the three leading causes of maternal deaths and is also a major cause of perinatal morbidity and mortality.

- ❖ Obstetric haemorrhage is responsible for 25-60% of maternal deaths.
- ❖ commonest single preventable cause of maternal death. Half of the cases are due to antepartum haemorrhage which continues to be one of the most common complication of pregnancy.
- ❖ APH occurs without warning signs.

In about 3% of pregnancies, significant bleeding from birth canal occurs after 28 weeks of gestation this is known as antepartum haemorrhage.

## AIMS AND OBJECTIVE

- ❖ To study factors associated with antepartum haemorrhage.
- ❖ To study maternal morbidity and mortality due to A.P.H.
- ❖ To study perinatal outcome in A.P.H.

## II. MATERIAL AND METHODS

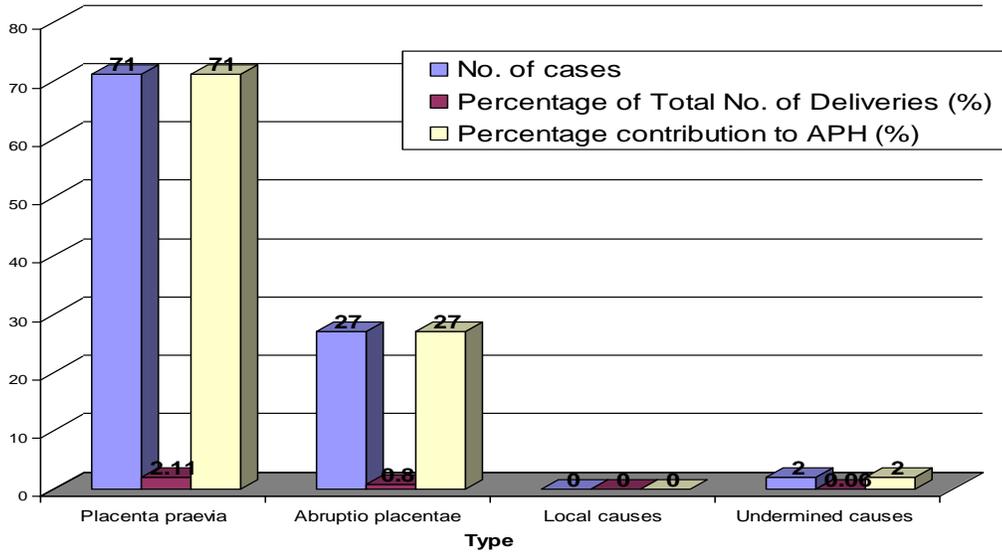
The material for this study comprises of 100 cases of antepartum haemorrhage admitted in Kamla Raja Hospital, Gwalior.

### Inclusion Criteria:

1. Patients with bleeding per vagina after 28 weeks of gestation.
  - ❖ All the cases of haemorrhage in late pregnancy were grouped as – placenta praevia, accidental haemorrhage, local causes and unknown.
  - ❖ The diagnosis of all cases was made on the basis of history, clinical examination and a few cases aided by ultrasonography. There were 3369 deliveries from 1 Sept. to 30 Sept. 2010.

## III. FIGURES

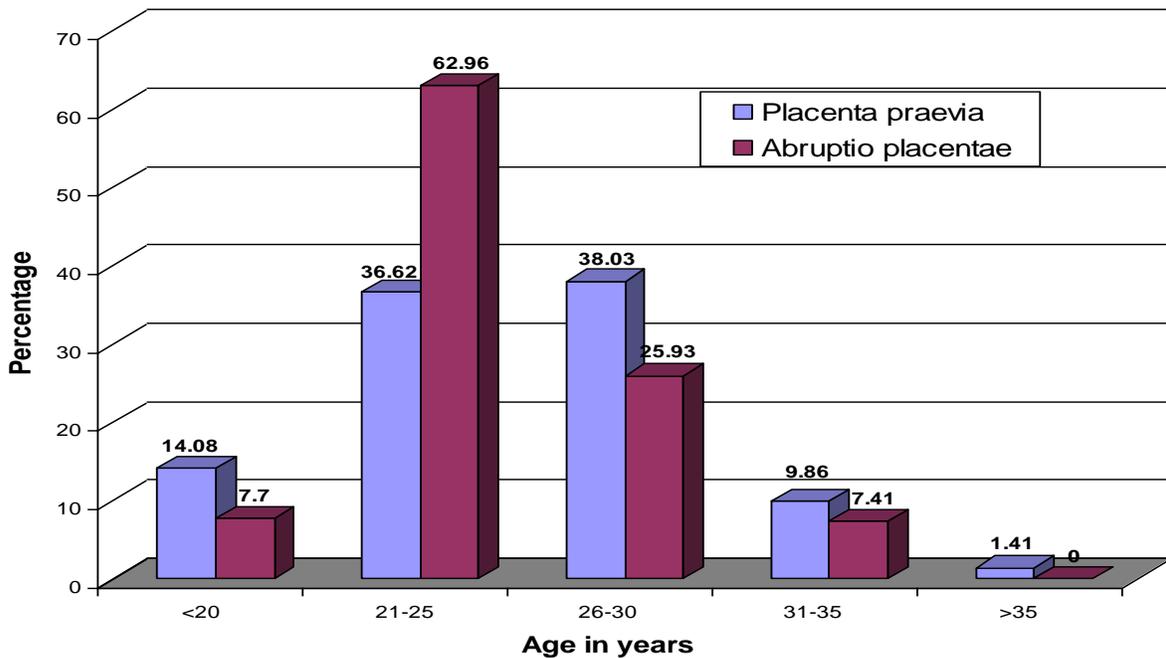
### Distribution of Cases According to causes of APH



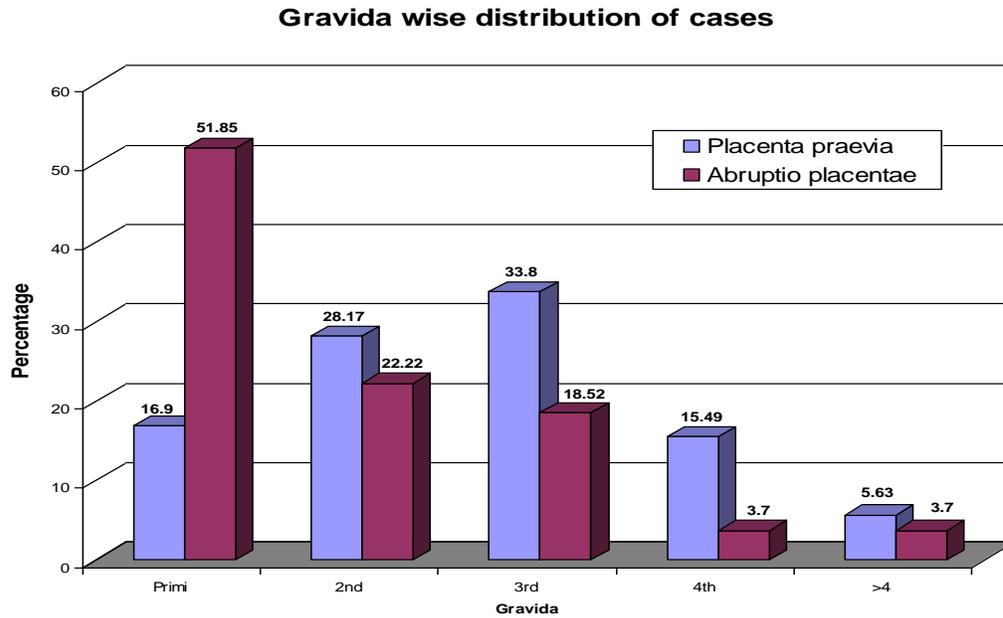
Out of 100 cases of APH there were 71 cases of placenta praevia giving incidence of 2.11%, 27 cases of abruptio placenta giving incidence of 0.80% and 2 cases of undetermined cause,

hence placenta praevia contributed to 71% of the total cases of APH, abruptio placentae 27% and undermined causes 2%.

### Age wise Distribution of cases



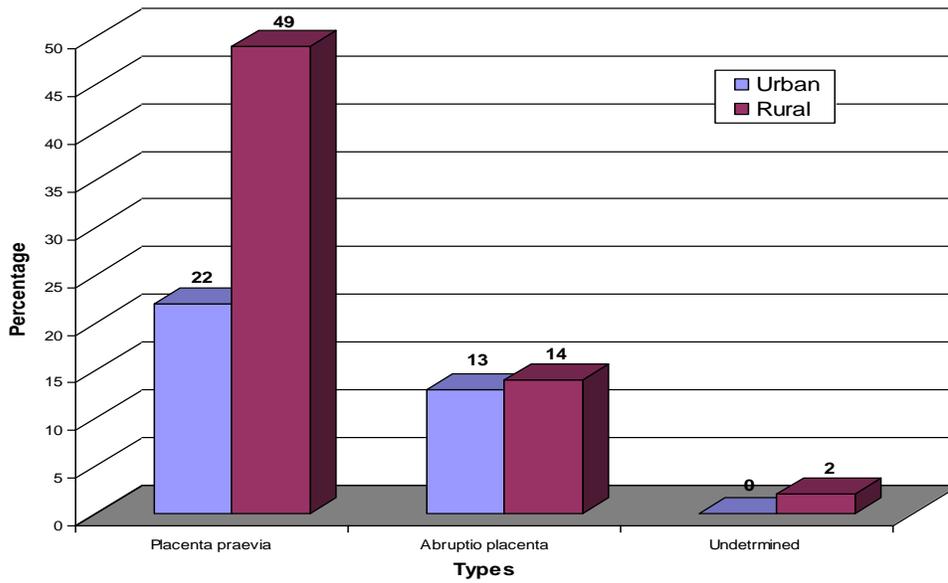
The table shows that incidence of placenta praevia is higher in age group. 26-30 yrs i.e. 38.03% and in abruptio placentae incidence was higher in age group 21-25 yrs.



Incidence of APH due to placenta praevia was higher in 2<sup>nd</sup> and 3<sup>rd</sup> gravida patients 20 (28.17%) and 24(33.80%) cases

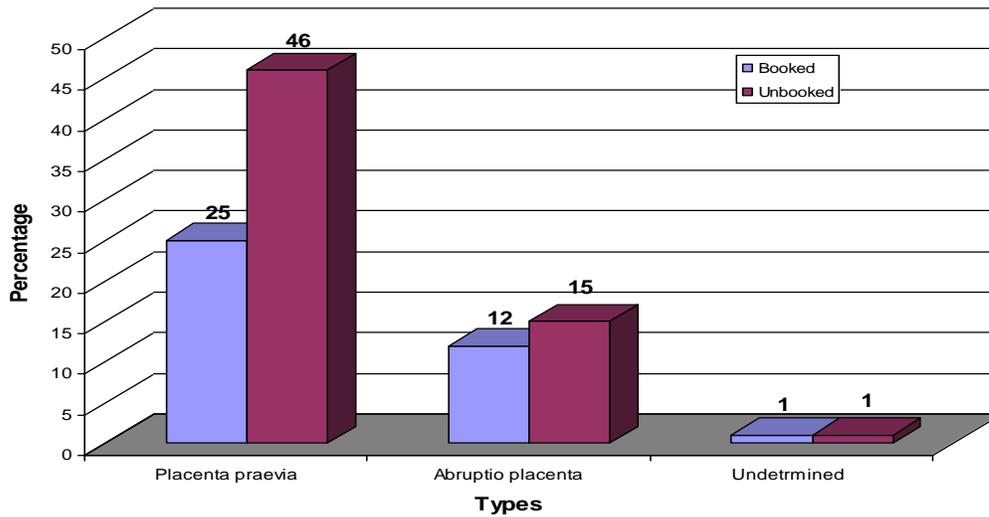
respectively and incidence of abruptio placentae is higher in primi and 2<sup>nd</sup> gravida 14(51.85%) and 6 (22.22%) cases respectively.

**Distribution of cases of APH according to urban and rural area**



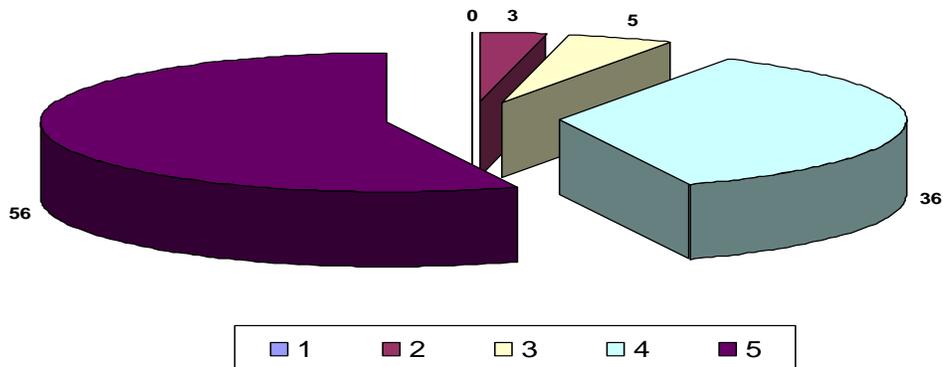
Majority of cases i.e. 65% of APH belonged from rural area  
35% from urban area 35%.

**Distribution of cases of APH according to booked and unbooked**



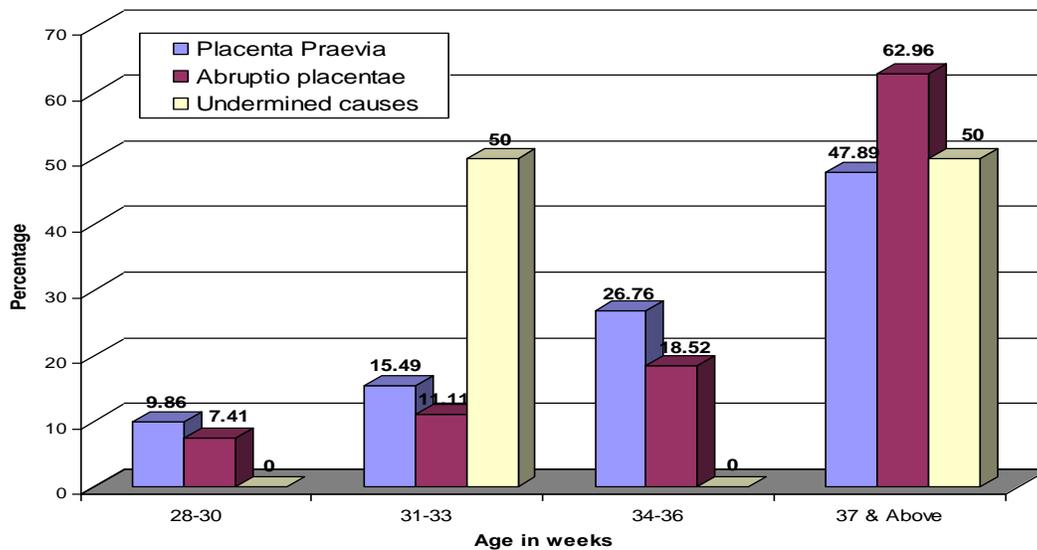
Majority of cases i.e. 62% of APH were unbooked  
emergency cases and the of booked cases was 38%.

### Distribution of cases according to socio-economic status (%)



The patients were graded according to kuppuswami's classification the maximum cases were in class 5 and 4 were 56% (56 cases) and 36% (36 cases) whereas, in category 2 and 3 were 3% (3 cases) and 5% (5 cases) respectively.

### Distribution of cases according to gestational age at the time of admission

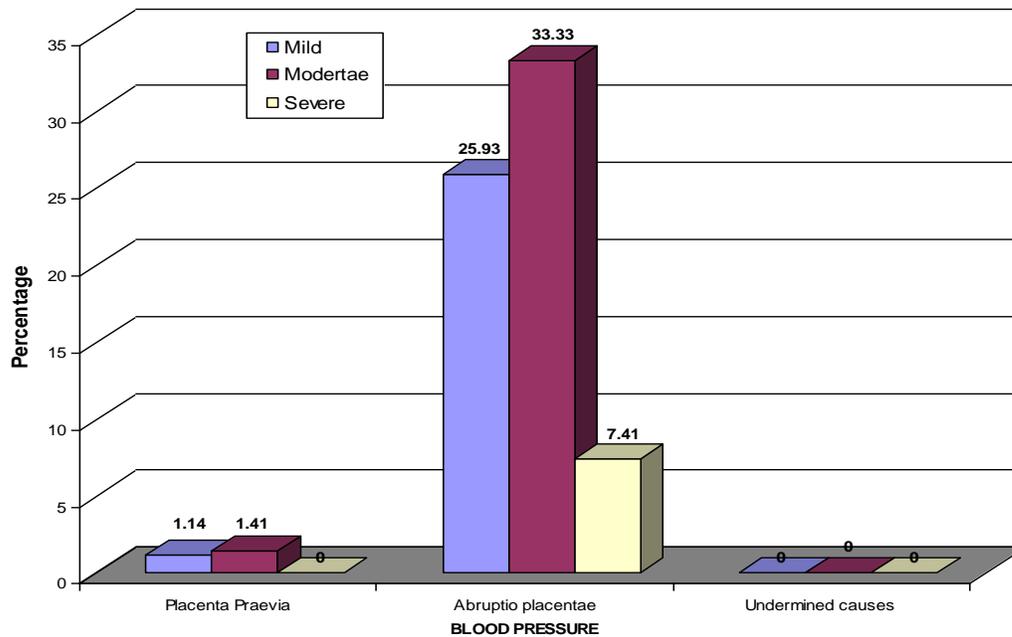


In cases of placenta praevia maximum number 37 cases i.e. 52.11% were below 37 weeks.

Hence chances of preterm delivery were much more in placenta praevia, however majority of cases, 17 cases of abruptio

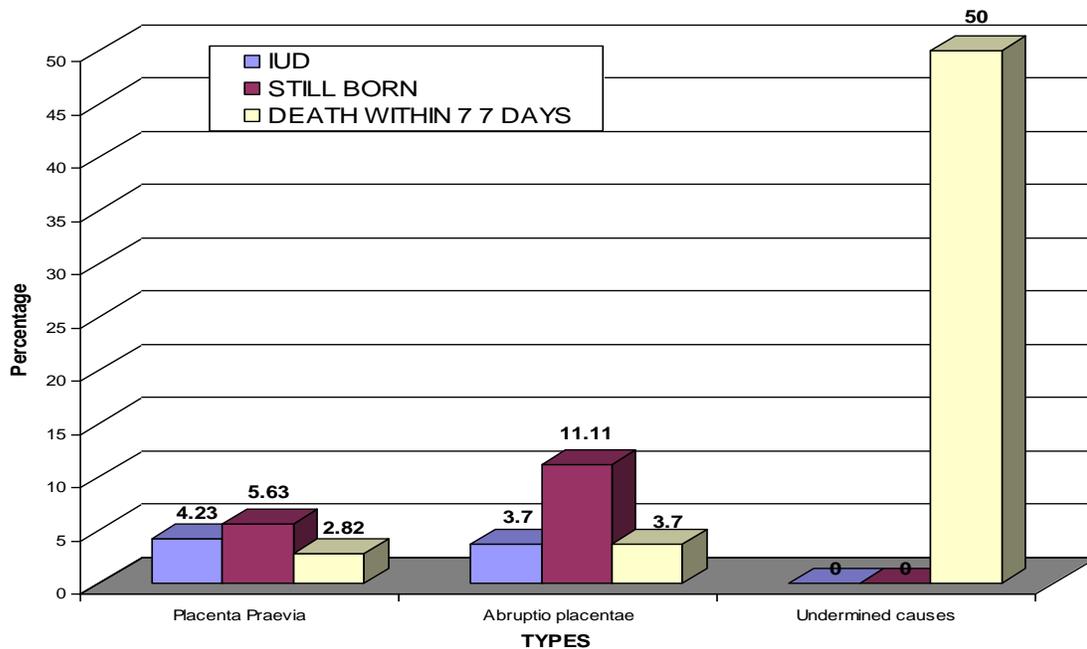
placenta were found to be 2 cases of undermined cause among which 1 was preterm and 1 was term.

### DISTRIBUTION OF CASES OF APH WITH HYPERTENSION



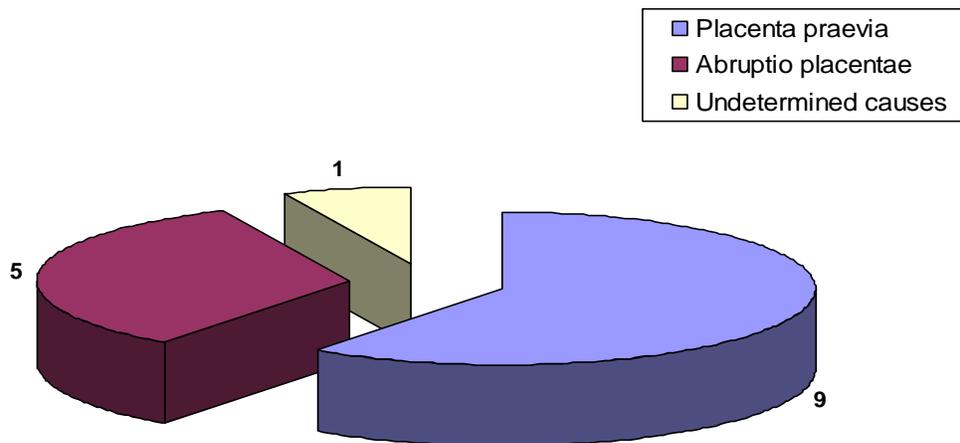
Hypertension was commonly associated with abruptio placentae.

### PERINATAL OUTCOME IN CASES OF APH



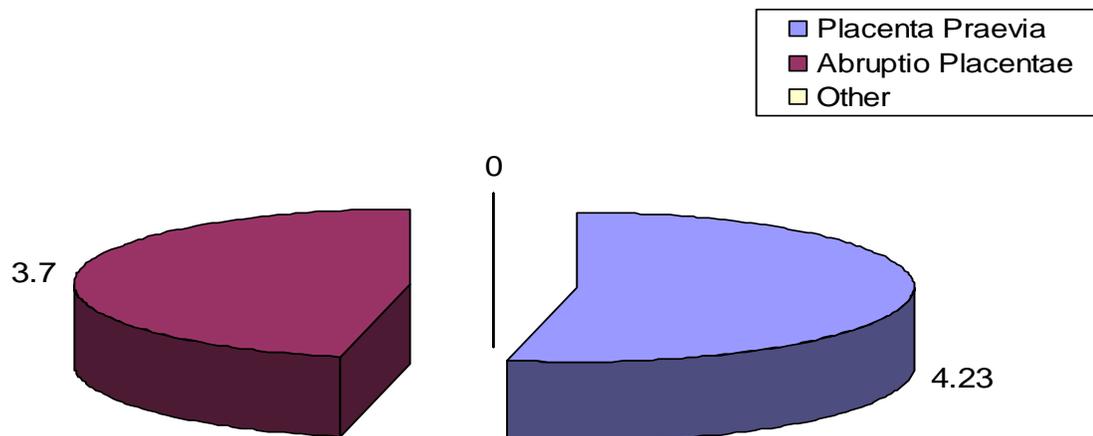
The perinatal mortality was 12.68% (9 cases) in placenta praevia and 18.52% (5 cases) in abruptio placentae. Thus prevalence LBW babies and preterm babies with low apgar score is high in cases of APH leading of high parinatal mortality.

### PERINATAL MORTALITY IN CASES OF APH (%)



Perinatal mortality in case of APH is 15%.

### METERNAL MORTALITY IN ANATEPARTUM HAEMORRAHAGE (%)



Out of 71 cases of placenta praevia 3 (4.23%) patients died of severe haemorrhage and hypovolumic shock. There was 1 death (3.70%) amongst 27 patients of abruptio placentae. The cause of death was uncontrolled PPH leading to coagulation disorder

#### IV. DISCUSSION

In present study there were 100 cases of APH. Out of 3369 deliveries giving incidence of 2.96%. This is similar to Feroza (1983) and Bhatt (1985)<sup>7</sup>. G. Roberts (1994)<sup>8</sup>. maximum cases of placenta praevia was in age 26-0 yrs. (3662%) which is similar to Penna and J.H. Pearee (1988)<sup>16</sup>. Nasreen (2003)<sup>13</sup> studies.

Incidence of APH to be 82.1% in multigravida and 16.9% in primi. Hibbard reported 76% incidence in multipara. O'Donel

Browne, Menon (1990)<sup>15</sup>, BCP Chan (1999)<sup>3</sup> high incidence in multipara.

71 cases of placenta praevia 3 had curettage following spontaneous abortion. Correlated with the study of Barrett (1981)<sup>2</sup>. 9 cases of placenta praevia had 1 previous section and 5 had previous 2 section giving an incidence of 6.39% and 3.55% respectively which is similar to Clark et al<sup>4</sup>.

The incidence of placenta praevia type 1 is 9.5% type 2, 40.8%, type 3, 28.17% and type 4, 22.54 which is similar to P.N. Sura (1986)<sup>17</sup>, Nasreen (2003)<sup>13</sup> and Bahar and Abusham (2009)<sup>1</sup> studies.

Malpresentation was seen in 25.36% cases which is similar to Macefee and Errol R. Norwitz (2010)<sup>12</sup> studies. In our study 94.37% cases of placenta praevia were delivered by C. section and 2.82% delivered spontaneously, similar to study done in SSG Hospital Baroda 1989<sup>19</sup> and study by Nusrat Nisar 2009<sup>14</sup>.

In present study the incidence of PPH is 21.49% which is correlated with the study conducted by G. Roberts 1995<sup>9</sup>, Nasreen 2003<sup>13</sup>. Maternal mortality due to placenta praevia is 4.23% and due to abruption is 3.7%. Similar to study done by David K. Skinner 1991<sup>5</sup>, HA Mansouri 2001<sup>10</sup> SAgauma Wiger 2002-04.<sup>18</sup>

The perinatal mortality in cases of placenta praevia is 12.6 and 18.5 is abruption placental, which is similar to study conducted in Women Hospital Madras 1990<sup>20</sup>. David K. Skinner (1997)<sup>6</sup>.

## V. RESULTS

Out of 100 cases of APH placenta praevia contributed to 71%, abruptio placenta 27% and undetermined caused to 2% of total cases of APH. Majority of cases i.e. 62% of APH were emergency cases and incidence of booked cases was 38%. Maternal mortality in APH showed out of 71 cases of placenta praevia 3 died of severe haemorrhage and 1 death in abruptio placenta. Perinatal mortality was 12.69 in placenta praevia and 18.52% in abruptio placenta. Prevalence of LBW babies and preterm babies is high.

## VI. CONCLUSION

Antepartum haemorrhage is a major cause of maternal and perinatal morbidity and mortality which could be prevented by early registration, regular antenatal care, early detection of high risk cases, and early referral to higher centre. Good facilities for caesarean section, availability of blood banks. Use of contraceptives can improve maternal and perinatal outcome of APH.

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## REFERENCES

- [1] Bahar and Abusham (2009)
- [2] Barrett (1981)
- [3] BCP Chan (1999)
- [4] Clark et al
- [5] David K Skinner (1991)
- [6] David K Skinner (1997)
- [7] Feroza (1983) and Bhatt (1985)
- [8] G. Roberts (1994)
- [9] G. Roberts (1995)
- [10] HA Mansouri (2001)
- [11] Menon (1990)
- [12] Macefee and Errol R. Norwitz (2010)
- [13] Nasreen (2003)
- [14] Nusrat Nisar (2009)
- [15] O'Donel Browne, Mennon (1990)
- [16] Penna and J.H. Pearee (1988)
- [17] PN Sura (1986)
- [18] SAgauma Wiger (2002-04)
- [19] SSG Hospital Baroda (1989)
- [20] Women Hospital Madras (1990)

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