Section: Obstetrics & Gynaecology

Research

RETROSPECTIVE STUDY OF MATERNAL OUTCOME IN OBSTETERIC EMERGENCIES AT TERITARY CARE HOSPITAL GGH, VIJAYAWADA, SOUTH INDIA

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Abstract

Background: To identify obstetrics cases as emergencies needing critical care to determine the pattern of obstetric emergencies and its influence on maternal outcome. **Materials and Methods:** A total 150 cases of obstetric emergencies admitted and treated at government general hospital Vijayawada, over a period of 6 months from January 2022 to June 2022, data was collected after the ethical committee approval. It is a clinical study of maternal outcome irrespective of gestational period, parity and medical complications. **Result:** A total of 4,087 deliveries were conducted during this period. the majority of obstetric emergencies were in the age group of 20-30 years.63.4% cases were un booked and 56.6% are multigravida, 67.3%cases were preterm pregnancies, referred cases 74.6% and 45.3% had education upto primary school level and most common emergency was obstetric haemorrhage 33.3%, and delivery through caesarean Section 68.6% and common cause for ICU admission was Eclampsia 37.5%, maternal mortality was 10.6%. Majority of the cases 88.6% were discharged within 10 days **Conclusion:** In our study majority of the cases were unbooked and referred from rural areas hence early registration of pregnancies and regular antenatal checkups and identification of high risk cases timely management could decrease the maternal mortality rate

INTRODUCTION

Obstetric emergency is defined as a life-threatening condition pertaining to pregnancy or delivery that requires urgent medical intervention to prevent death of women.[1] Maternal mortality is an index of effective ness of obstetric services prevailing in a country. prevention of maternal deaths is one of the fore most goals of not only maternal and child health programs but also other human development endeavours of a nation. Maternal and fetal out come in obstetric emergencies is adversely affected by delay at various levels, resulting in adverse outcome.[2] The course of the pregnancy, delivery method, and early postoperative care is essential. Pregnancy and neonatal period significantly impact maternal and child survival outcome.[3] The concept of birth preparedness and complication readiness is alien to most couples in developing countries as some of the pregnancies are unplanned and be unwanted.[4] This is compounded by poor transportation facilities, nonfunctional primary and secondary level of care services and inadequate or lack of skilled birth attendant.[5]

MATERIALS AND METHODS

Study Design: Retrospective study
Study Period: 6 months i.e from January 2022 to June 2022
Methods: Data of 150 cases of obstetrics emergencies who reported to our emergency department at government general hospital Vijayawada collected during this study period.

Inclusion Criteria

1.Pregnant women irrespective of gestational age, and/or with in 42 days of delivery
2.Singleton pregnancy
3.Multiple pregnancy
4.Obsteteric emergencies in labour such as mal presentation, deep transverse arrest, obstructed labour, antepartum haemorrhage, postpartum haemorrhage, eclampsia medical disease, liver

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disease diabetes mellitus, severe anaemia, heart disease.

Exclusion Criteria

Pregnancy with surgical complications appendicitis, cholecystitis, pregnancy with medical complications pancreatitis.

Statistical Analysis

Data was entered in Ms Excel spread sheet and analysis was done using SPSS version 2210.

RESULTS

There were 4,087 deliveries during our study period of which 150 obstetric emergencies were analysed and described through various aspects.

Table 1: ANC registrations

S.no	Anc registrations	no. of cases	percentage
1	Booked cases	55	36.6%
2	Un booked cases	95	63.4%
	Total	150	100%

Out of 150 majority of the obstetric emergencies 95(63.4%) cases were un booked

Table 2: Parity

S.no	Gravidity	No of cases(n)	percentage
1	primigravida	62	41.3%
2	multigravida	85	56.6%
3	Grand multi	3	2.1%
	total	150	100%

Majority of cases were multigravida 56.6%, (n=85)

Table 3: Educational status

S.no	Education	No. Of cases(n)	Percentage
1	High school	32	21.3%
2	Primary	68	45.3%
3	Illiterate	50	33.3%
	Total	150	100%

Majority of the cases had education upto primary school level 45.3%(n=68)

Table 4: Gestational age group

S.no	Gestational age	No. of cases(n)	Percentage
1	Before period of viability	11	7.3%
2	Preterm	101	67.3%
3	Term	38	25.35
	Total	150	100%

Majority of about 67.3%(n= 101) cases were preterm pregnancies

Table 5: obstetric emergencies in various age groups

S.no	Age in groups	No . of cases(n)	Percentage
1	<20years	10	6.66%
2	<20-30years	129	86%
3	>30years	11	7.3%
	Total	150	100%

The majority of the obstetric emergencies 86%(n= 129)were between 20-30 years of age.

Table 6: No. of referred cases

Status	Frequency(n)	Percentage
Referred	112	74.6%
Direct admissions	38	25.3%
Total	150	100%

Majority of them were referred cases 74.6%(n=112) and direct admissions were 25.3%(n=38)

Table 7: obstetric emergencies and its frequency

S. No	Variables	Frequency(n)	Percentage
1	Severe anaemia	7	4.6%
2	Ectopic pregnancies	6	4%
3	Placenta previa	30	20%
4	Abruptio placenta	11	7.3%
5	Postpartum haemorrhage	9	6%
6	Severe preeclampsia	28	18.6%

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7	Eclampsia	33	22%
8	Pprom	9	6%
9	Amniotic fluid embolism	1	0.6%
10	Puerperal pyrexia	2	1.33%
11	Cord prolapse	3	2%
12	Obstructed labour	2	1.33
13	Medical disorders	5	3.3%
14	Malpresentations	4	2.6%
	Total	150	100%

Majority of emergencies were obstetric haemorrhage (APH+PPH)33.3%(n=50) followed by eclampsia 22%(n=33)

Table 8: Emergency obstetric intervention and outcome

S.no	Type of intervention	Number	Percentage
1	Vaginal delivery	35	23.3%
2	Instrumental delivery	6	4%
3	Caesarean section	103	68.6%
4	Exploratory laparotomy for ectopic pregnancy	6	4%
	Total	150	100%

Most of obstetric emergencies delivered through caesarean section(n=103)68.6%

Table 9: Indications for ICU admissions

S.no	Indications	No. Of cases	Percentage
1	Eclampsia	15	37.5%
2	Haemorrhagic shock	10	25%
3	HELLP syndrome	3	7.5%
4	Amniotic fluid embolism	1	2.5%
5	CCF	6	15%
6	ARDS	2	5%
7	Pulmonary oedema	3	7.5%
	Total	40	100%

Most common cause For ICU admission were eclampsia(n=15) 37.5% followed by haemorrhagic Shock (n=10) 25%

Table 10: Duration of hospital stay

S.no	Duration	No. of cases	Percentage
1	<10 days	133	88.6%
2	10-20days	12	8%
3	>20 days	5	3.3%
	Total	150	100%

Majority of the cases discharged within 10 days 88.6%(n=133), more than 20 days were 3.3%(n=5)

Table 11: causes of maternal mortality

S.NO	Variables	Frequency	Percentage
1	Eclampsia	5	31.25%
2	Peripartum Cardiomyopathy	3	18.75%
3	Postpartum Haemorrhage	2	12.5%
4	DIC	1	6.25%
5	Amniotic Fluid Embolism	1	6.25%
6	Acute Renal Failure	1	6.25%
7	Pulmonary oedema	1	6.25%
8	APH	2	12.5%
	Total	16	100%

Eclampsia was the leading cause of maternal mortality(31.25%)

Table 12: Maternal outcome

S.no	Outcome	No.of caes	Percentage
1	Discharged cases	134	89.4%
2	Maternal death	16	10.6%
	Total	150	100%

In present study of 150 cases 10.6% (n=16)deaths were noted.

Table:13 ANC registration

Studies	Booked	Unbooked
Upadyaya Et Al,[7]	37%	62.89%
Present study	36.6%	63.4%

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In this present study 36.6% were booked cases, and 63.45% were un booked cases. According to upadyaya et al also showed majority of the cases were unbooked

Table 14: Mode of deliveries

Studies	Lscs	Normal vaginal delivery
Shivani badal lr et al,[8]	39.86%	17.64%
Present study	68.6%	23.3%

In this study 68.6% cases were delivered through caesarean section according to Shivani badal lr et 7 showed majority of the cases were delivered through caesarean.

Table 15: ICU admissions

S.no	Indication for admission	Saha r et al,[9]	Present study
1	Eclampsia	26%	37.5%
2	Haemorrhagic Shock	14%	25%
3	HELLP Syndrome	-	7.5%
4	Amniotic Fluid Embolism	-	2.5%
5	CCF	16%	15%
6	ARDS	8%	5%
7	Pulmonary Oedema	6%	7.5%

Majority of the cases admitted in ICU were eclampsia 37.5% followed by haemorrhagic shock 25%.In Saha r et al9 study eclampsia and CCF were admitted in ICU, eclampsia is the Most common direct cause of maternal death which accounts for 31.25% in our study which is comparable with studies conducted in west Bengal by paul A et al.[10] toxemia of pregnancy were 50.5%, according to puri et al 21%.[11]

DISCUSSION

150 obstetric emergencies satisfying inclusion criteria were assessed out of 4,087 deliveries. present study shown that obstetric emergencies were relatively common in our tertiary centre and unbooked patients substantially bulk of cases, obstetric emergencies were responsible for most of the mortality with in the period of study, maternal death rate was higher among unbooked cases, this study is similar to other developing countries6.

CONCLUSION

Obstetric emergencies continue to pose a significant challenge to mother hood in our country due to poor utilization of antenatal care, most of the maternal complications occurs in 3rd trimester of pregnancy. Eclampsia, haemorrhage were the most common obstetric emergencies in our study, majority of the cases were preventable. The health care workers at primary health centres should be trained properly. Health education and awareness by mass media and non-government organization can improve the health and social status of women in our country.

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