

Reasons of Referral In Obstetric Referred Women

ABSTRACT

Background: Due to lack of awareness and absence of regular antenatal care, often the critically ill patients report late and hence referred late. Timeliness and appropriateness of referral is an important factor in the ultimate outcome of the patients. Referral services are an integral part of maternal and child health services.

Method: The study included 220 referred obstetric cases. Reasons for referral were evaluated and data compiled.

Result: Medical disorders in pregnancy were the leading cause of antenatal referrals, with anaemia and hypertensive disorders each accounting for 34.88% of cases. Labor complications led to 81 referrals, mainly due to premature rupture of membranes (43.21%) and abnormal presentations (23.46%). Post-delivery referrals were mostly for postpartum hemorrhage (66.67%) and hematoma (33.33%). Blood transfusion need varied, depending on the cause.

Conclusion: Improving antenatal care, thus early diagnosis of anaemia can decrease the referral cases. Timely referral of Hypertensive disease or other medical disorders could prevent the disease becoming severe and improve pregnancy outcomes.

KEYWORDS: Anaemia, Hypertensive disease, Medical disorders.

Introduction

Maternal mortality is a key indicator of maternal health and is indicative of the performance of a country's health care system. Most maternal deaths are due to direct obstetric causes and can largely be prevented with access to appropriate health care including presence of skilled birth attendance at delivery.¹ It is recommended to electively refer pregnant woman with

previous caesarean section, hypertension, severe anaemia, diabetes mellitus, breech presentation, transverse lie and multiple gestation for delivery before any complication arise to a well-equipped health care centre where all possible complications can be managed well.² Due to lack of awareness and absence of regular antenatal care, the critically ill patients are referred late. Timeliness and appropriateness of referral is an important factor in the ultimate outcome of the patients.³ Referral services are an major part of maternal and child health services.⁴ This study aimed to assess the reasons of tertiary care hospital referrals . This could help decrease the number of referrals by evaluating the causes,early management at peripheral level and referrals before complications arise.⁵

Method

This observational, prospective analytical study was conducted at SMS Medical College, Jaipur, from November 2022 to October 2023.Ethical approval was obtained.The study included 220 referred obstetric cases .Women who expired before treatment could be initiated were excluded. Reasons for referral were evaluated and data compiled.

Results

The mean age of the referred women was 27.7 years, majority (37.27%) in the 26-30 years age group.74.09% had primary or secondary education, while only 8.64% were graduates. The majority of participants were Hindu (87.73%). 62% belonged to the lower middle socio-economic class or below. Additionally, 64.55% of the women resided in urban or urban slum areas.

Analysing the period of referral , it was observed that 60.45% were antepartum, 36.81% intrapartum, 2.7% post partum .

In the antepartum period,the most common reasons were medical disorders, previous lower segment caesarean section (26.32%) placenta previa (12.03%) and oligohydramnios (9.77%). Other reasons include twin pregnancies, polyhydramnios, Rh-negative pregnancies,

intrauterine growth restriction, and congenital anomalies, each accounting for approximately 6.67% of cases. These findings help find the prevalence of high risk pregnancies, necessitating specialized care and management. Table 1

Table 1 : Reasons of Referral in Antenatal Period

High Risk Pregnancy	Number (Total=133)	%
Medical Disorders	43	32.33
Previous LSCS	35	26.32
Placenta Previa	16	12.03
Oligohydramnios	13	9.77
Twin pregnancy	6	4.51
Polyhydramnios	6	4.51
Rh Negative Pregnancy	6	4.51
Intrauterine Growth Restriction	6	4.51
Congenital Anomaly	2	1.50

Medical disorders in pregnancy, the most common reason for referral in antenatal period included anaemia and hypertensive disorders including eclampsia, accounting for 34.88% each, liver disorders in 16.28% women, while both thrombocytopenia and respiratory disorders each were seen in 6.98% women. These highlight the common medical challenges encountered during pregnancy among the referred women. Table 2

Table 2 : Medical Disorders in Women Referred in Antenatal Period

Medical Disorders in Pregnancy	Number	%
Anaemia	15	34.88%
Hypertensive Disorder including Eclampsia	15	34.88%
Liver Disorders	7	16.28%
Thrombocytopenia	3	6.98%
Respiratory Disorders	3	6.98%

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65 Complication during labour were the reason for referral in 81 women. Premature rupture
66 of membranes was the most frequent complication, occurring in 43.21% of cases.
67 Abnormal presentation was seen in 23.46%, with non-progression of labour, cephalopelvic
68 disproportion, and meconium-stained liquor each accounting for between 6.17% to 8.64%
69 women. Postdatism and obstructed labour are less common, each occurring in
70 approximately 4.94% to 6.17% of cases. Table 3

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Table 3 : Reasons of Referral During Labour

Labour Complications	Number of woman (n=81)	Percentage %
Premature rupture of membrane	35	43.21
Abnormal Presentation	19	23.46
Non progression of labour	7	8.64
Cephalo pelvic disproportion	6	7.41
Meconium stained liquor	5	6.17

Postdatism	5	6.17
Obstructed Labour	4	4.94

Referral post-delivery was in 6 women. Postpartum haemorrhage was the predominant reason, occurring in 66.67% of cases, and hematoma in 33.33% of cases. Table 4

Table 4: Reasons of Referral in Post-Partum Women

Reason	Number (n =6)	Percentage %
Post-partum haemorrhage	4	66.67
Hematoma	2	33.33

DISCUSSION

Analysing the period of referral in the women referred it was observed that there was 60.45% antepartum, 36.81% intra partum, 2.7% post partum. Previous caesarean section was the cause of referral in 39% of women.

The patients with previous caesarean section are referred to higher centre from PHC/CHC due to non availability of gynaecologists, anaesthetist, trained staff or basic infrastructure deficits or lack of operation theatre .

Medical disorders in pregnancy were the most common reason for referral in antenatal period. These highlight the common medical challenges encountered during pregnancy among the referred women.

Ambike et al reported that the most common cause of referral was pre-eclampsia in 20% women and 11% had eclampsia.⁶ In a study of Busumani and Mundagowa found that 18.4% pregnancies were hypertensive.⁷ Das et al in 2023 also assessed that most common reasons for referral were pregnancy-induced hypertension or eclampsia in 17% cases.¹

Narendra and Shree in 2019 reported that 77.34% patients had obstetric complications and the commonest risk factor for ICU admission was hypertensive disorders of pregnancy. These findings highlight the variety and prevalence of conditions that classify pregnancies as high risk, necessitating specialized care and management.⁸

Patel HC et al, in their study found that causes of referral were preeclampsia (16%).⁹ In Goswami et al study, however, anaemia (27.86%) followed by hypertensive disorders of pregnancy (17%) were the major causes of referral to the tertiary care hospital.¹⁰

Early management of anaemia and timely referrals of the women with these medical disorders helps in decreasing there severity, improving both the maternal and foetal outcome.

Complication during labour was the reason for referral in 81 women. The various challenges and complexities that arise during the labour process, requiring appropriate management and intervention. Patel et al in 2012 found that majority of referrals were during the intra-natal period (64.5%), followed by antenatal cases (23.9%) and post-natal cases (11.6%). The common reasons for referral were non progressive labour (14.8%), severe anaemia (10.3%), preeclampsia (10.3%), malpresentation (9.7%) and postpartum haemorrhages (9.7%).⁹

Study done by Kant et al in 2018 found that preterm labour (30.6%),⁹ Mahendra et al in 2019 found that premature rupture of membranes was the most common cause of referral.¹²

Reasons for complications and referral post-delivery was in 6 women. Sabale and Patankar in 2015 reviewed the referred obstetric cases for reason of referral and to study

the maternal and perinatal outcome. Major complication during immediate postpartum period in their study was postpartum haemorrhage (PPH).¹² In 2022, Prakash et al reported that PPH, septicaemia, wound gaping and puerperal pyrexia were reasons of postpartum referral.¹³

Since improvement in maternal health care services, most high risk cases are referred timely. Hence the postpartum referral cases have decreased significantly.

CONCLUSION

The referral system faces challenges due to late identification and inadequate management of complications at lower healthcare levels. Anaemia and hypertensive disorders were major causes of antenatal referrals, while labor complications like premature rupture of membranes and abnormal presentations were common. Post-delivery referrals were mostly due to postpartum hemorrhage.

Strengthening antenatal care services, timely referrals, better transport, and improved resources at primary healthcare levels can enhance maternal and neonatal outcomes.

LIMITATION OF THE STUDY

This study was conducted in a single tertiary centre, which may not be representative of whole state community.

DECLARATIONS

FUNDING: No funding sources

CONFLICT OF INTEREST: None declared

ETHICAL APPROVAL: The study was approved by the Institutional Ethics Committee

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