

A Study of Pregnancy Outcome in Various High Risk Pregnancies

Kiran Oswal¹, Uma Mahesh Sindoor²

How to cite this article:

Kiran Oswal, Uma Mahesh Sindoor. A Study of Pregnancy Outcome in Various High Risk Pregnancies. Indian J Obstet Gynecol. 2024;12(1):23-25.

Abstract

Background: A High risk pregnancy is identified as pregnancy in which there is a risk of adverse outcome in the mother and / or baby that is greater than the incidence of that outcome in general population. All pregnancies are at risk even though most of the pregnancies and childbirth worldwide are uneventful. Almost 15% of all the pregnant women can develop potentially life-threatening complications which might require skilled care with some requiring major intervention for survival.

Methods: This prospective study was carried out in 220 cases being brought in OBG dept of AL Ameen Medical College, Bijapur, from July 2023 to December 2023. A detailed data of sociodemographic profile, general examination and obstetric examination were carried out.

Results: Of the 220 antenatal cases studied, 99 cases (45%) of them had pre-eclampsia. Malpresentation pregnancies contributed to about 36% of cases and Anemia were seen in 13 cases (6%). The mode of delivery was caesarean section in 70 cases (31.2%). Normal vaginal delivery were done in 94 cases (42.8%). Instrumental deliveries were seen in 11 cases (5%).

Conclusion: High risk pregnancy, Caesarian section, Normal vaginal delivery of active phase of labour by making cervical dilatation faster and lowering the duration of usage of labour analgesics, which makes labour a pleasant experience for woman.

Keywords: Entonox; Labour analgesia; Cervical dilatation rate; First stage.

Author's Affiliation: ¹Associate Professor, ²Senior Resident, Department of Obstetrics and Gynecology Al Ameen Medical College, Vijayapura, Karnataka 586108, India.

Corresponding Author: Uma Mahesh Sindoor, Senior Resident, Department of Obstetrics and Gynecology Al Ameen Medical College, Vijayapura, Karnataka 586108, India.

E-mail: buzz2lohith@gmail.com

Received on: 28.02.2024 **Accepted on:** 13.04.2024

INTRODUCTION

A High risk pregnancy is identified as pregnancy in which there is a risk of adverse outcome in the mother and/or baby that is greater than the incidence of that outcome in general population. All pregnancies are at risk even though most of the pregnancies and childbirth worldwide are uneventful. Almost 15% of all the pregnant women can develop potentially life-threatening complications which might require skilled care

with some requiring major intervention for survival.¹ Although only 10-30% of the mothers seen in the antenatal period could be classified as high risk, they account for more than 70% of the perinatal mortality and morbidity among mothers studied.² Every year, nearly 500000 women die globally because of pregnancy related causes. For each death, nearly 118 women suffer from life-threatening events or severe acute morbidity.³ Hence this study was carried out to determine the prevalence of high-risk pregnancies in women attending ANC camps in AL Ameen medical college.

MATERIALS AND METHODS

This prospectivestudy was carried out in 220 cases being brought in OBG dept of AL Ameen Medical College, Bijapur, from July 2023 to December 2023. A detailed data of sociodemographic profile, general examination and obstetric examination were carried out investigations for specific medical complications like Liver function test, Sr-Uric acid, Plasma fibrinogen, Oral Glucose Tolerance test, Fasting & Post prandial blood sugars, complete Haemogram, Peripheral smear, Malarial parasite smear, Blood culture etc. were done whenever necessary. Measurement of neonatal outcome included incidence of still born, dead born, neonatal death, mode of delivery, birth asphyxia, birth weight and admission to NICU.

STATISTICAL ANALYSIS

The data was analyzed using SPSS software version 20. Differences in categorical and continuous data were assessed using the Chi-square test and Student's test, respectively. The statistical test is considered significant if the calculated p-value is less than 0.05.

RESULTS

Table 1: Risk Factors Distribution of Study Subjects

Risk Factor	n	Percentage
Abruptio placenta	8	3.6
Anemia	13	6
Antiphospholipid antibody syndrome	4	1.8
Malpresentation	79	36
Oligohydramnios	7	3.1
PET	99	45
Short stature	10	4.5
Total	220	100

A total of 220 cases were included in this study of the 220 antenatal cases studied, 99 cases (45%) of them had pre eclampsia. Malpresentation pregnancies contributed to about 36% of cases and Anemia were seen in 13 cases (6%).

Table 2: Mode of Delivery

Mode of Delivery	n	Percentage
LSCS	70	31.2
Assisted breech delivery	11	5
Forceps	11	5
NVD	94	42.8
VBAC	34	16
Total	220	100

The mode of delivery was caesarean section in 70 cases (31.2%). Normal vaginal delivery were done in 94 cases (42.8%). Instrumental deliveries were seen in 11 cases (5%).

Table 3: Analysis of Caesarian Section

Caesarian Section	n	Done	Not Done	P-Value
Abruptio placenta	8	5	3	0.08
Anemia	13	2	11	0.004
Antiphospholipid antibody syndrome	4	4	0	0.05
Malpresentation	79	63	16	0.16
oligohydramnios	7	6	1	0.004
PET	99	64	35	0.23
Short stature	10	9	1	0.003

Cesarean rate was about 100% in case of Antiphospholipid antibody syndrome and 99% in case of short statured mothers. Preeclampsia had 65% of cesarean deliveries as preeclampsia forms bulk of cases undergoing cesarean.

Table 4: Maternal Morbidity

Maternal morbidity	n	Percentage
Peripartum Cardiomyopathy	1	0.45
CVT	1	0.45
DIVC	1	0.45
Prongled hospital stay >10 days	104	47.3

Out of 220 high risk patients, 1 patient developed peripartum cardiomyopathy, 1 developed cerebral venous thrombosis, 1 developed disseminated intravascular coagulation.

Table 5: Maternal Mortality

Maternal Mortality	N	Percentage
Yes	1	0.45
No	219	99.55
Total	220	100

1 patients out of 220 high risk patients died where as 219 cases were discharged healthy.

DISCUSSION

High-risk pregnancy was associated with an adverse overall perinatal outcome with increased risk of perinatal morbidities and mortalities. The most common risk factors noted were pre eclampsia, Malpresentation which was consistent with the studies done by Majella MG *et al.*⁴ and Chate SU *et al.*⁵ who concluded that the maximum high risk pregnancies were seen in preclampsia, malpresentation and anemia. The mode of delivery was vaginal delivery and caesarean section in 31.2% of high risk pregnancies which was in accordance with the study done Kumar N *et al.*⁶ and Abedin S *et al.*⁷ who concluded that caesarian section was the preferred method of delivery in high risk pregnancies especially in cases of preeclampsia. This study is of Public health importance as it helps us to prevent bad pregnancy outcomes and take necessary precautions among high-risk pregnant women by early detection of adverse outcomes. It helps us to know the knowledge, attitude, and utilization of the National Health Programmes.

CONCLUSION

From this study, we can conclude that early detection and treatment of high-risk pregnancy prevents adverse outcomes which are determined by the prevalence of present and past pregnancy high-risk characteristics. Policies and programmes aimed at improving pregnancy outcomes need to

focus on all three sets of factors: women's autonomy, childbearing practices and use of antenatal care.

Funding: No funding sources

Conflict of interest: None declared

Ethical approval: The study was approved by the Institutional Ethics Committee

REFERENCES

1. 2nd ed. Geneva: World Health Organization; 2017. Managing Complications in Pregnancy and Childbirth: A Guide for Midwives and Doctors.
2. Kumar G, Choudhary TS, Srivastava A Utilisation, equity and determinants of full antenatal care in India: analysis from the National Family Health Survey 4. BMC Pregnancy Childbirth. 2019;19:327.
3. The transformation of maternal mortality. London I. BMJ. 1992;305:1557-1560.
4. Majella MG, Sarveswaran G, Krishnamoorthy Y, Sivaranjini K, Arikrishnan K, Kumar SG. A longitudinal study on high risk pregnancy and its outcome among antenatal women attending rural primary health centre in Puducherry, South India. J Educ Health Promot. 2019 Jan 29;8:12. doi: 10.4103/jehp.jehp_144_18. PMID: 30815483; PMCID: PMC6378831.
5. Chate SU, Shrishail S. Pregnancy outcome among high-risk pregnant women in the rural area of Belagavi. Journal of Family Medicine and Primary Care. 2022;11(8): 4440-4446.
6. Kumar Naina *, Yadav Ashu , High-risk Pregnancy and Perinatal Outcome: An Observational Study, Current Women's Health Reviews 2020; 16 (4). <https://dx.doi.org/10.2174/157340481699920042110055>.
7. Abedin, S., Arunachalam, D. Maternal autonomy and high-risk pregnancy in Bangladesh: the mediating influences of childbearing practices and antenatal care. BMC Pregnancy Childbirth 20, 555 (2020). <https://doi.org/10.1186/s12884-020-03260-9>.