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Prevalence of High Risk Pregnancy among Pregnant Women Attending District Hospital Satna (M.P.)

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ABSTRACT: High Risk Pregnancy is defined as a pregnancy in which mother ,fetus or newborn are at increased risk of morbidity or mortality during pregnancy,labor due to some complicating factors .India has about 25% high-risk pregnant mothers, who account for about 75% of perinatal morbidity. The main objective of this study is to study the pregnancy outcome and associated complications among high-risk pregnant women of Satna district. The study design for one year (2023) District Hospital, Satna. Data collection from was conducted using monthly maternity ward register after obtaining ethical approval. Early prediction and planned intervention of High-Risk Pregnancy complications. This can help prevent pregnancy and achieve good pregnancy outcomes.

KEY WORDS: Ante partum hemorrhage(APH), Pregnancy induced hypertension (PIH), Pre-eclampsia ,Eclampsia.

I. INTRODUCTION

The feeling of motherhood is special for everyone, but if complications are faced during pregnancy, it can become difficult for every women. Although small problems have to be faced during pregnancy, but in some problems, the life of the pregnant women and her fetus can be at risk, which is called high risk pregnancy**.** A high-risk pregnancy is defined as a pregnancy that is complicated by a variety of factors that adversely affect the pregnancy outcome (maternal, perinatal, or both). Ekabua etal (2011) had studied that identifying such pregnancies is the primary goal of antenatal care. He explained that the risk scoring system is very useful to detect high-risk pregnancies as these often lead to poor maternal and fetal outcomes and should be given special attention, especially in developing countries like India. Early prediction, severity and intervention planning of such conditions can help prevent complications. Kumar etal (2019) study reported that antenatal check-up helps in identifying and monitoring high-risk pregnancies, providing monthly specialist antenatal check-up and treatment of complex cases at almost all health centers. Simarpreet etal (2015) had studied "A risk assessment to identify, document and collect risk factors before delivery, during delivery and in the newborn with the aim of predicting complications for the fetus and newborn the assessment system was defined as a formal method. According to "UNICEF (June,2022) all pregnancies are at risk, even though the majority of pregnancies and deliveries worldwide are ineffective.

Approximately 15% of all pregnant women may develop potentially life-threatening complications which may require skilled care and some may require major interventions to survive. Jordan & Murphy (2009) had studied that complications can occur at any time during pregnancy, which in turn can harm the mother and fetus. This can affect the health and overall existence .The World Health Organization (WHO 2018) reports that approximately 830 women die every day as a result of complications during the prenatal period and delivery. The five main causes of death of pregnant women are complications such as severe bleeding, maternal infections, unsafe abortion, hypertensive disorders of pregnancy such as Preeclampsia and Eclampsia. All pregnancies need to be evaluated for high-risk pregnancies through routine prenatal care provided by pregnancy health care professionals. Even though many studies have been conducted to determine the prevalence of high-risk pregnancy in India, A high-risk pregnancy is any condition associated with pregnancy where there is an actual or potential risk to the mother or fetus. Holness (2018) reported that women with risk factors for a High-Risk Pregnancy had a one in four chance of developing complications, while Lennox (1984) found that women with risk factors for a high-risk pregnancy had a one in four chance of developing complications. The main focus of maternal and child care programs is to identify at high risk pregnancies to prevent women from developing obstetric complications during delivery. Prual etal (2000) and Groot etal (1993) studies had shown that high risk assessment is a key component of prenatal care and also a study conducted by Jordan etal (2009) showed improvements in maternal and perinatal outcomes.In Satna District, no studies

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have been conducted to determine the outcome of high-risk pregnancy. Therefore, the present study was conducted to determine the prevalence and outcome of high-risk pregnancy and its associated factors among women at delivery in Satna District.

II. MATERIALS AND METHODS

Satna is one of districts of Madhya Pradesh in India, Satna District population in 2022 is 2,492,728. As per 2011 census of India, Satna District has a population of 2,228,935 in 2011 out of which 1,157,495 are male and 1,071,440 are female. Literate people are 1,371,781 out of 801,051 are male and 570,730 are female. Satna District sex ratio is 926 females per 1000 of males. The District of Satna is situated in mid northern part of Rewa Commissioner's Division in Madhya Pradesh State of India. Present studyMaternity of wardSardar Vallabhbhai Patel District Hospital Satna for one year during (January to December 2023).This study has been conducted to survey various aspects related to women's health. It has been started with a comprehensive methodological framework of women's health, which includes both primary and secondary data which has been interpreted in percentage form.

III. RESULTS AND DISCUSSION

Result is based on a monthly record-study by reviewing the maternal ward register maintained in Sardar Vallabhbhai Patel District Hospital Satna(M.P). Records have been reviewed for pregnancy complication details (Table calendar 1,2) available over a one-year period from January-December 2023.

Table 1. Month –wise admission for deliveries in District Hospital Satna (M.P)

MONTH	**Normal delivery**		**High risk**		Total
	Number	Percentage	Number	Percentage	
January 2023	744	5.93	304	2.42	1048
February2023	598	4.76	90	0.71	688
March 2023	617	4.92	332	2.64	949
April 2023	500	3.98	352	2.8	852
May 2023	468	3.73	294	2.34	762
June 2023	546	4.35	237	1.89	783
July 2023	650	5.18	455	3.62	1105
August 2023	879	7.01	324	2.58	1203
September2023	900	7.17	466	3.71	1366
October 2023	903	7.2	529	4.21	1432
November2023	812	6.47	456	3.63	1268
December 2023	758	6.04	325	2.59	1083
Total	8375	66.8	4164	33.2	12539

Table 2.Distribution of the High Risk obstetrical casesof Maternity Ward District Hospital Satna(M.P.)

Maternal characteristic of women	Number	Percentage (4164)
Age (year)		
19-24	1209	29.0
25-30	1118	26.8
31<	1837	44.1
Some Pregnancy induced condition		
Anemia	460	11.0
Ante Partum Hemorrhage (APH)	62	1.4
Pre-Eclampsia	67	1.6
Eclampsia	53	1.3
Pregnancy Induced Hypertension (PIH)	261	6.2

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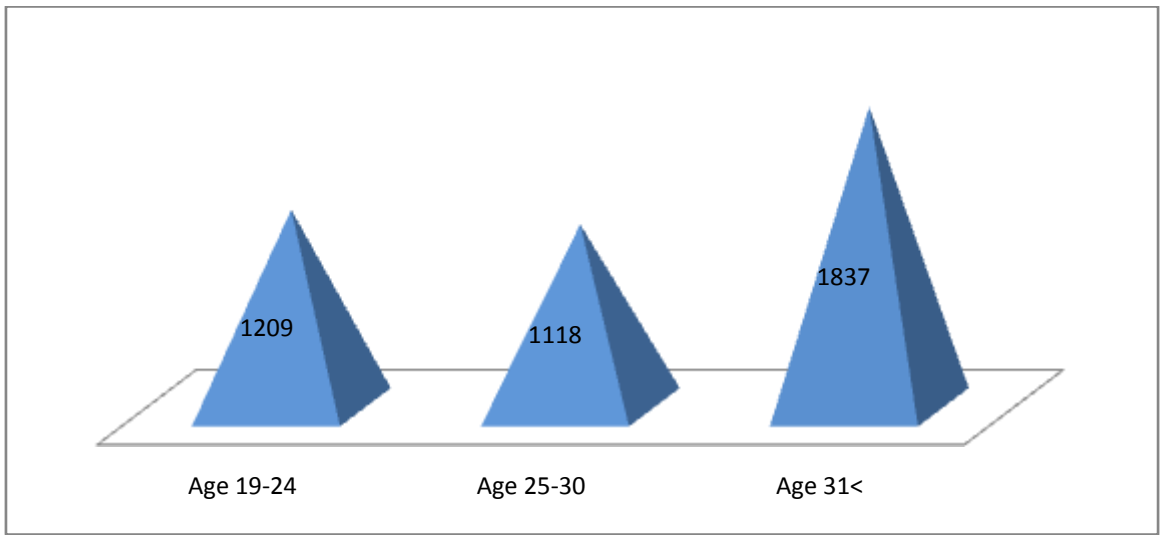

Fig 1 Graph showing High Risk Pregnancy women age group in District Hospital Satna MP

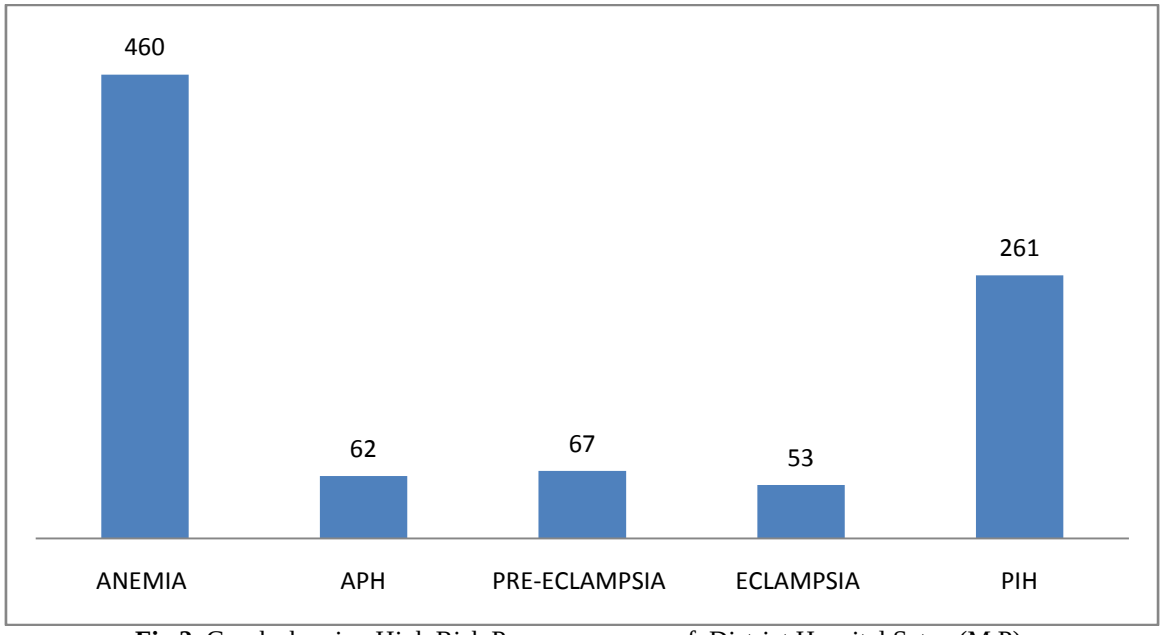

Fig 2. Graph showing High Risk Pregnancy cases of District Hospital Satna (M.P).

A pregnancy is considered high risk when there are potential complications that could affect the mother and baby, or both. In the present study, it was observed that 4164 (33.2%) women coming for delivery in maternity ward District Hospital Satna were High Risk Pregnancy (fig 1). A similar study was conducted by Antara etal (2019) which observed that 90.70% of antenatal women attending pregnancy days had High Risk Pregnancy (HRP) and anemia was the most common (81.4%) cause of HRP. Another study conducted by Jaideep etal (2017) found that the prevalence of HRP was 30.7%, of which 59.8% had poor obstetric history, 4% had pregnancy-induced hypertension, 5.5% had geriatric gravida, and 22.3% had other risk factors. Another study conducted in Rohtak, Haryana by Bharti etal (2013) found that the prevalence of HRP was 31.4% (292/931). John etal (2021) reported in their study that PIH is a common medical disorder associated with pregnancy and the most significant risk factor for PIH found in their study. Similar findings have been reported in studies conducted in Brazil and South Africa, where the prevalence of PIH was 13.9 and 12%, respectively. In the present study, the prevalence of PIH in antenatal women is 261 (6.2%). According to Kumari etal (2018) the leading cause of death in their study was hypertensive disorders of pregnancy (47.6%), followed by postpartum hemorrhage (PPH, 28.4%). The most common

obstetric complications in the present study (Table 2& Fig.2) were anemia, PIH, PPH, and APH. In another study conducted by Verma et al (2018) the prevalence of anemia was 87.3%. The prevalence of anemia in our study was 460 (11.0%), APH 62 (1.4%), pre-eclampsia 67 (1.6%) and eclampsia 53 (1.3%). Similarly, Chauhan et al. (2019) had studied showed that anemia was the most common risk factor (66.7%) among their high-risk mothers.

IV. CONCLUSION

As a conclusion of this study, it can be said that despite its preventable nature, an unacceptably large number of women remain victims in Satna District. This paper shows the prevalence of High Risk Pregnancy among women. In Satna District Hospital, there was 33.2 percent high risk pregnancy in which more number of women aged 31< years and 24> years were seen and also those in high risk were more affected by anemia and PIH. In my upcoming research paper, I will try to know the reasons for high risk pregnancy in Satna district.

V. RECOMMEDATION.

Prenatal risk screening has benefits over routine ANC-only care, so its use is encouraged. Earlier Identification of risk assessment system and its regular use instead of single administration would be beneficial as the health of pregnant women fluctuates due to physiological changes during pregnancy. The purpose of risk stratification is to ensure that high-risk women receive timely and appropriate additional care to prevent poor maternal outcomes. Future studies could use this risk stratification approach in peripheral health institutions to study its feasibility within the existing public health system.

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