

# PREGNANCY INDUCED HYPERTENSION AND ASSOCIATED FACTORS AMONG FEMALE PATIENTS

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## ABSTRACT

**Background:** Although complications of child birth pressure comprise one of the primary culprits of child and maternal mortality and death, they constitute a serious health issue in the medical population. The objective of this research will be to evaluate perinatal mortality by young women but also its lifestyle factors who gave birth at the Medical College Hospital in Hyderabad.

**METHODS:** At the Gynaecology and Obstetrics Medical Hospital in Hyderabad, the research was a cross-sectional examination. The hospitals chosen for the study were proportionately divided among the total sample size (416). Using a methodical sampling approach, sample members from a larger population are picked, the study's participants were recruited. Statistical significance was defined as P values of 0.05 or less.

**RESULTS:** With 53.8% of pregnancies having multigravida and when it comes to points in the cycle, 74.3% fall around 37 and 41 days, pregnancy-induced hypertension was discovered in 7.9% of women using delivery services. Among prenatal women hospitalised for deliveries, just 1.3% had ever experienced pregnancy-induced hypertension (PIH), 0.8% had ever experienced gestational diabetes mellitus, 4.8% had had multiple pregnancies, 10.3% had ever experienced chronic hypertension, and 3.8% had ever experienced PIH—most commonly from their mothers, or 84.6%. 7.7% of respondents who had renal illness reported having experienced it in the past during their present pregnancy.

**CONCLUSION:** Pregnancy-related hypertension was prevalent in 7.9% of the women who used delivery services. Gestational age, chronic renal illness, and a history of the condition in the family were all predictive factors for pregnancy-induced hypertension.

**KEYWORDS:** *Pregnancy induced hypertension, associated factors, family history of PIH, gestational age*

## INTRODUCTION

An increased blood pressure during pregnancy is characterized by a systolic measurement of 140 or a diastolic reading of or maybe both, 90 140 mm hg. For the detection of child birth antihypertensive, higher peak and diastolic blood pressure measurements readings are necessary (Kacica M et al., 2013). Perinatal mortality antihypertensive (PIH) is pressure that develops in women whom pulse rate was originally healthy after completing their 20-week pregnancy. High blood pressure, pre-eclampsia, and cephalic are also the 3 major categories of perinatal mortality people with high blood pressure that may manifest during pregnant (Paola A et al., 2006)

One of the main factors contributing to associated with significant morbidity and death in delivery is trimester hypertensive. Atherosclerosis, the second- leading cause of child deaths in us, accounts for 15% among all female fatalities. The mother's risk of organ dysfunction, myocardial infarction, renal disease, especially brain vascular disasters is increased by pulmonary hypertension. The foetus is more

likely to have problems such improper capillary delivery of oxygen, developmental limitation, premature delivery, preeclampsia, childbirth, and mortality rates (Menzies J et al., 2007).

The most common medical issues related to pregnancy are hypertensive disorders, which are claimed to occur between 5 and 10% of the time (Parmar MT et al., 2012). Consequently, the goal of this article was also to evaluate perinatal mortality antihypertensive in women and thus the relevant variables who were undergoing delivery services at Hyderabad's Gynaecology and Obstetrics Medical Hospital, India.

## MATERIALS AND METHODS

**Study design:** A cross-sectional study using a hospital as its base and a quantitative data collection method was employed. The study sample consisted of expectant mothers who used the delivery services provided by the Gynaecology and Obstetrics division of the Medical College Hospital in Hyderabad.

**Inclusion and exclusion criteria:** The experiment was open to all pregnant women who've been transferred to the delivering room and had fetal ages more than 6 to 8 weeks; however, many with known high blood pressure and those who was in grave disease and couldn't speak after completing the whole treatment regimen being ineligible.

**Sample size and sampling technique:** From the study hospitals, the entire sample size (416) was distributed proportionately. The study's participants were chosen using a methodical sampling procedure. A kind of snowball The data collection techniques known as proper sampling chooses study subjects from a larger group, but it uses a random beginning point rather than a predefined, recurrent periodic.

**Data collection procedure** Face-to-face interviews, measurements, a review of the pregnant women's medical records, and the use of a structured questionnaire were all used by trained data collectors to gather the necessary information. Upon diagnosis, blood pressure and protein urea levels for referred women were recorded on referral forms. In both the upright and supine positions, blood pressure readings were taken using mercury sphygmomanometers.

**Data processing and analysis:** Data input and analysis were conducted Mathematical Application for Scientific Science (SPSS) graph pad software 21.0 and EPI descriptive statistic programming model 3.1 were both used. All variables pertaining to the study's findings got calculated using descriptive and inferential statistics objectives once the data had been cleaned and organized. P-values under 0.05 were regarded as significant. Finally, tables and narrative styles were used to present the outcome.

## RESULTS & DISCUSSION

Neonatal conditions-related possible factors: Of something like the study's prenatal participants, 408 (98.1%) had wanted pregnancy, and 242 (53.8%) had order to meet customer requirements childbirth. The women were divided into 261 (62.7%) parous (fertility rate 1-4) and 309 (74.3%) had pregnancy ages from 37 & 43 days. 20 (4.8%) of both the pregnancy were numbers, and then only 3 (0.8%) of something like the young women whom was hospitalised for deliveries seemed to have a record of gdm. Of the childbearing age women, exactly 5 (1.3%) had to have a record of PIH (Table 2).

**Table 1: Breakdown of characteristics associated to maternity problems in women using the College And hospital Facility's home delivery, Hyderabad**

Variables		Frequency (n=416)	percentage (%)
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Pregnancy status	Wanted	408	98.1
	Unwanted	8	1.9
Gravida	Primigravida	192	46.2
	Multigravida	224	53.8
Parity (no. of births)	0	131	31.5
	1-4	261	62.7
	5	24	5.8
Gestational age	<37	106	25.5
	37-42	309	74.3
	>42	1	0.2
History of previous PIH (n=385)	Had	5	1.3
	Not had	380	98.7
Multiple pregnancy	Yes	20	4.8
	No	373	89.7
History of previous (GDM: Gestational Diabetes Mellitus n=386)	yes	3	0.8
	No	383	99.2

**Table 2: Multifactorial profiles for pregnancy for women with a family and medical history**

Variables		Frequency (n=416)	Percent (%)
Family history of chronic hypertension	Had	43	10.3
	Not had	373	89.7
Family history of PIH	Had	16	3.8
	Not had	402	96.6
History of diabetic mellitus (DM)	Had	7	1.7
	Not had	409	98.3
Family history of DM	Had	36	8.7
	Not had	380	91.3
History of kidney diseases	Had	32	7.7
	Not had	389	93.5
Currently history of asthma.	Had	2	0.5
	Not had	414	94.0

Out of the total, 43 people (10.3%) had a family 16 (3.8%) of individuals (those with a patient with chronic high blood pressure) had a past history of pregnancy-induced hypertension, which was typically passed down through their mothers, 11 (84.6%). Only 7 (1.7% of the respondents) had a history of chronic diabetes mellitus, while 32 (or 7.7%) of the respondents had renal illnesses in the past was during present gestation. Among the participants in the research, barely 36 (8.7%) had one diabetes-related history and only two (0.5%) had a history of asthma (Table 2).

In this study, 33 (7.9%) of the women using delivery services had pregnancy-related hypertension. The burden of disease of the early pregnancy might rise as a result of this. It might ultimately overtake other factors as the leading source of maternal mortality if appropriate prophylactic measures for pregnant women are not taken. This study's 7.8% PIH frequency is similar to that of an earlier study carried out in India (Charles & Aliner M, 2009). Nevertheless, it is marginally lower than the 9.8% reported in Iranian studies (Menzies J et al., 2007). This discrepancy can be caused by modifications to the study time and design. The lifestyle and culture of the populace may also vary. However, this study's prevalence is still higher than that of studies conducted 5.3% at Related to the current Carry an extensive Medical and Ability Karl Health centre in Georgia, where it was 2.4%. (Prakash J et al., 2006).

In this analysis, certain additional causes of perinatal mortality antihypertensive were found. A woman's chance of developing perinatal mortality antihypertensive increases by almost five times if her family had a history of it. The study conducted in Georgia and the textbooks on contemporary pregnancies and gynaecology diagnosis and treatment are in agreement with it now (Paola A et al., 2006). It's possible that genetic vulnerability to pregnancy-induced hypertension played a role in this development. This cross-sectional study has benefits and drawbacks, much like other ones. Women's readiness and capacity to honestly always provide information about themselves, while having families in regard to PIH may lead to the potential constraints. Therefore, pregnancy-related hypertension was present in 7.9% of pregnant women who used delivery services. Gestational age, chronic renal illness, and a history of the condition in the family were all predictive factors for pregnancy-induced hypertension.

## CONCLUSION

Most of the women requiring delivery options had perinatal mortality hypertensive; 53.8% had multiple miscarriages; 74.3% must have paternal periods around 37 and 42 months; and 10.3percent of the surveyed had a history of long-term people with high blood pressure in their families. The results of this study showed that 7.7% of individuals surveyed had a history of renal disease throughout their current pregnancy, and 3.8% had a family history of high blood pressure hormonal changes. Accordingly, it may be concluded that gestational age, chronic kidney disease, and family history of pregnancy-induced hypertension are all risk factors for developing this condition.

## REFERENCES

1. Kacica M, Dennison B, Aubrey R. Hypertensive Disorders in Pregnancy guideline summary. New York State Department of Health 2013 <https://www.health.ny.gov/professionals/protocols>.
2. Paola Aghajanian P, Ainbinder S, Andrew E. et al. Current Diagnosis and Treatment in Obstetrics and Gynecology, the McGraw-Hill., 2006.
3. Menzies J, Magee LA, Li J. Instituting surveillance guidelines and adverse outcomes in preeclampsia. *Obstet Gynecol*, 2007; 110:121-7.
4. Parmar MT, Solanki HM, Gosalia VV. Study of Risk Factors of Perinatal Death in Pregnancy Induced Hypertension (PIH). *Natl J Community Med*. 2012; 3(4).
5. Charles, Aline M. Maternal blood lead levels and the risk of pregnancy-induced hypertension. The EDEN Cohort Study. *Environmental Health Perspectives* 117.10 (2009): 1526+.
6. Prakash J, Pandey LK, Singh AK, and Kar B. Hypertension in pregnancy: Hospital based study. *J Associan physicians of India*. 2006; 54:273– 278.