

## Study of clinical profile of hypertension in pregnancy

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### Abstract

**Background and Objectives:** Hypertensive disorders of pregnancy & their complications are one of the most common cause of maternal morbidity in world. In India the incidence of Hypertension is reported to be 8-10% of the pregnancies.

**Methods:** prospective study of 70 cases of hypertension in pregnancy during the period of one year.

**Results:** Regular ANC visits and follow up in patients of pregnancy with hypertension will reduce the morbidity and mortality in nearly 70-75 %.

**Conclusion:** Early detection of Hypertension, timely treatment & regular follow up can improve maternal morbidity & decrease the incidence of hypertension & prevention of complication related to Hypertension.

**Keywords:** hypertension, pregnancy, morbidity, mortality, treatment

### Introduction

Hypertensive disorders of pregnancy & their complications rank as one of the major cause of maternal morbidity in the world. 1 It occurs in the second half of the pregnancy (after 20 wks) & accounts for approx a quarter of all antenatal admissions, worldwide 10% of all pregnancies are complicated by Hypertension, with pre-eclampsia & eclampsia being major cause of maternal morbidity & mortality Hypertension is defined as BP >140/90mmHg, taken after a period of rest on two occasions OR >160/110mmHg on one occasion in previously normotensive women. 2 The incidence of Hypertension in pregnancy varies widely from 5-15 %. In India the incidence of Hypertension is reported to be 8-10% of the pregnancies. 3 Incidence of Hypertension varying according to age, race, & BMI. 4-6 The vast majority of Hypertension occurs in low & middle income countries. It is about 10% in primigravida & 5% in multigravida. There is national guidance on the care of women with severe pre-eclampsia or eclampsia and on screening for Hypertensive disorder during pregnancy. 7-10 However there has been no guidance on the assessment and care of women and their babies after diagnosis of hypertension (including the uses of anti-Hypertensive treatment or on maternity care for women with chronic Hypertension.

### Objectives

To find out the cases of Hypertension in pregnancy.

### Materials and methods

The present clinical study of "Clinical profile of Hypertension in pregnancy" with following groups of factors.

### Inclusion Criteria

1. All the patient who come to outdoor antenatal clinics, and pregnant patient visiting to medical OPD are included in this study
2. The pregnant patient > 20 weeks & BP >140mmHg, minimum for 2 frequent time or visit.

3. Patient with past history of gestational hypertension, pre-eclampsia & eclampsia.
4. Pregnant patient who are already on antihypertensive.
5. Patient with hypertension & preexisting medical illness.

### Exclusion Criteria

1. Gestational age <20weeks
2. Pregnancy at the age >42 years

### Observations

**Table 1:** Age Distribution in hypertension in pregnancy

S. No	Age Groups	No of Case
1	<20	3 (5%)
2	20-25	40 (57%)
3	26-30	15 (21%)
4	>30	12 (17%)
	Total	70

**Table 2:** Socioeconomic class in relation to HTN in pregnancy

S. No	Socioeconomic Class	No of Case
1	L- Lower	46 (65%)
2	M-Middle	20 (28%)
3	U- Upper	4 (7%)
4	Total	70

**Table 3:** Residence of the patient

S. No	Residence	No of Case
1	R- Rural	50 (71%)
2	U- Urban	20 (29%)
3	Total	70

**Table 4:** Parity in relation to hypertension in pregnancy

S. No	Parity	No of Case
1	Primi	37 (52%)
2	Second	17 (24%)
3	Multi	16 (24%)
	Total	70

**Table 5:** Antenatal visits in relation to hypertension in pregnancy

S. No	Gestational Age (In weeks)	No of Case
1	Pre-term (<37 weeks)	20 (30%)
2	Term (37-42 weeks)	48 (69%)
3	Post Term (>42 weeks)	02 (01%)
Total		70

**Table 6:** Gestational age in relation to hypertension in pregnancy

Sr No	No. of ANC Visits	No f Case
1	<3 visits	53 (76%)
2	>3 Visits	17 (24%)
Total		70

## Discussion

Table 1 shows the age distribution in pregnant females patient. 40(57%) of patients are between the age group of 20 + 25 years. 15(21%) patients are between 26 & 30 years. So, 55(78%) of patients are between 20-30 years. It come to more than 3/4th of the young pregnant hypertensive females are between 20 & 30 years. whereas, 12 (17%) patients are above 30 years. This indicates the incidence of hypertension remarkably decrease above the age of 30 years. Late Pregnancy above 30 years, do not usually are having much risk of developing hypertension.

Table 2 shows the socioeconomic class of a young hypertension pregnant. The Socioeconomic classification is decided acc to educational, status, income & percapita Space. 46(65%) of patients are of lower Socioeconomic group. 20(28%) of patients are of middle Socioeconomic class. Whereas 4 (7%) of patients are belonging to upper SC group. This shows that the incidence of hypertension in pregnancy in upper SE group is very less 4 (7%) that is < 10% of patients. This is because of increased awareness increased setter antenatal care taken during pregnancy.

Table- 03 shows the area or residential locality of the patient. 50(71%) of the patient are from the rural areas and 20 (29%) patients are coming from urban areas. This indicates that occurrence of hypertension during pregnancy is approx. 70% in rural areas which is very less in urban areas. This may be due to better health facilities available at urban region. Table 4 shows the parity in relation to development of hypertension in pregnancy. 37(52%) young hypertensive pregnant patient were primipara & 17(24%) patients were second para & multipara who develop hypertension.

Above finding concludes that development of hypertension is almost double in primipara than multipara (or second para). So judicious screening for hypertension is required to prevent maternal complication during pregnancy. The incidence of hypertension decreases as the parity increases.

Table 5 shows that the incidence of hypertension in term pregnancy 48(69%) of the young hypertensive pregnant patients. That is almost double than the incidence in pre-term and post term pregnancy, which is only 22(31%) of the young hypertensive patients.

Table 6 shows the development of occurrence of hypertension in relation to visits to antenatal clinic If patient is irregular in ANC less than 3 visits, 53(76%) develops hypertension during any stage of their pregnancy and if patient is regularly visiting to ANC 17(24%) patients had developed hypertension. This shows that the development of hypertension almost approximately 2.5-3 times more occurrence of hypertension in pregnant patients, those who are not regularly visiting to ANC.

## Conclusion

Hypertension common in younger age group between 20-25 years of age, which is about 57% of total cases. Hypertension common in the women belonging to lower socioeconomic class, which is 65% of total cases. Hypertension is common in the women belonging to rural area, which is 71% of total cases. Incidence of hypertension common in primigravida group, which is 52% of total cases. Incidence of hypertension was more in term pregnancy than preterm & post-term, which is 69% in term pregnancy. Incidence of hypertension was more in the women who had less antenatal follow up, 76% of cases had less than 3 antenatal visits. This also shows that regular visit to ANC, will held early screening of hypertension and maternal mortality in young pregnant hypertensive patients.

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