

#### **ORIGINAL RESEARCH PAPER**

**Obstetrics & Gynaecology** 

INCIDENCE AND OUTCOME OF HYPERTENSION COMPLICATING PREGNANT WOMEN GETTING ADMITTED IN OBSTETRIC ICU IN TERTIARY CARE CENTRE – A RETROSPECTIVE ANALYSIS

**KEY WORDS:** 

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#### INTRODUCTION

Hypertensive disorder of pregnancy which is an commonly encountered problem but many times could cause detrimental effect to the extent of severe maternal and fetal morbidity and mortality.

#### **OBJECTIVES:**

The objective of this study is to analyse retrospectively incidence and outcome of hypertension complicating pregnant women getting admitted in obstetric ICU in tertiary care centre

#### **MATERIALS & METHOD:**

This retrospective study was conducted over a period of 2 years from Jan 2017-Dec 2018 in Department of obstetrics and Gynaecology at Government RSRM Lying in Hospital, Chennai, India. It is a tertiary care centre getting referrals from nearby PHC's, Government Hospitals and private Hospitals in and around Chennai. It has 8 bedded ICU with facilities for critical care management and ventilator facility. During this study period a total of 14412 deliveries taken place out of which 1282 got admitted in ICU in view of hypertensive complications and within this period 1358 hypertensive complicating pregnancies where referred from outside referral centres to our Hospital which makes the study population of 2640.

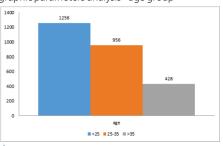
Data were collected from previous hospital records. All antenatal (in all 3 trimester) antenatal and postnatal (upto six weeks) hypertensive pregnancies from ICU admission included in this study. Admission BP, urine albumin, routine investigation reports, vital signs, urine output, all these parameters are used in this study to separate our study group into Gestational hypertension. pre Eclampsia, Eclampsia, HELLP, chronic hypertension.

For each patients data pertaining to ICU intervention like mechanical ventilator, the use of blood and bloodproducts, anticonvulsantsAntihypertensives were noted.

Table-1:

	Number of patients	percentage of admission
Total admissions	2640	
Referral in	1589	60.2%
Inpatients	1051	39.8%

### Demographic parameters analysis – age group



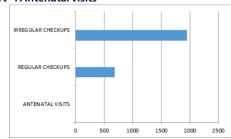
## **Chart -2** Socioeconomic status



#### Chart-3



#### **Chart -4 Antenatal visits**



#### Chart-5 case distribution

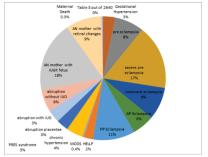


Table-2 Intervensions undertaken in obstric ICU				
Interventions	No of cases			
Blood transfusions	315			
Central line	283			
MgSo4 regimen	662			

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Anti hypertensives	2640
Mechanical ventilator	36
Pulmonary odema treated	23
Inotropic drugs	18
AN steriods	2102

#### **RESULTS:**

Out of 2640 ICU admissions, patient referred from outside was 1589(60.2%) patients which was higher than our inpatient admission no 1051(39.8%).

Regarding Demographic parameters observed , younger patients less than 25yrs of age showed 47.57% of admission . In other side more than 35yrs of age showed 16.21% of admission rate.

Patients coming from lower socio economic status showed major part of admission. Regular AN visits makes big difference in admission rate in ICU . 73.97% of patients had irregular AN visits in history taking.

While looking all our referral cases we found out that delay after referral (1 to 12 hrs) is 55.41%.

While going through interventions patients had blood transfusion 315, central line 283, Magnesium sulphate regimen 662, Anti hypertensive in all 2640, mechanical ventilator 36.

Most common diagnosis of hypertensive ICU admission was severe Pre Eclampsia 442(16.7%). The next common was imminent Eclampsia 224 (8.4%) followed by AP Eclampsia 152 (5.7%).

Abruption with IUD 3.3% and mild form of abruption placenta was 5.8%.AN Mother with IUGR fetus was 18.2%.AN mothers with retinal changes was 9.3% of total admissions.

Maternal death due to hypertension complicating was 10 out of 23which contributed to around 43% of total maternal death.

#### **DISCUSSION:**

In developing countries like India the burden of GHTN and its complications are very high the following pit falls are noted in our study.

- Lower socio economic status and family burden place a major negative role in this study.
- Time delay after referral to attend tertiary care centre also places a major role.
- Resistant of the patient to take regular anti hypertensive medications
- No proper AN visits

Although the multi disciplinary approach is given to the patient after reaching the tertiary care centre the above pit falls place a major role in deciding the outcome of the patient.

#### **CONCLUSION:**

A lot of issues need be addressed at different levels of patient care Multi disciplinary approach and making the patient to stick on the early treatment makes a huge difference in outcome of hypertensive complications which are seeking ICU admission.

Due to heavy burden of GHTN National health misision has introduced PIH campaign and idea of introducing TAB.CALCIUM and TAB.VIT D3 supplements in all three trimester as a prophylaxis of PIH which we in our hospital has implemented successfully. Case studies in future will indicate how GHTN incidence has reduced due to this initiative.

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