



## SCREENING FOR BLOOD PRESSURE GOAL OF PATIENTS ATTENDING CARDIOLOGY OPD IN A TERTIARY CARE HOSPITAL

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**ABSTRACT** The ratio of mortality of the Non-communicable disease are been increasing when compared to the communicable disease. This shift is alarming and requires intensive program and also monitoring to see if they meet the needs properly. It is a well established fact that control of hypertension decreases the morbidity and mortality. But still there is no sufficient awareness among patients regarding the importance of BP control and compliance to treatment. This study was to aim on the screening of adherence of the anti hypertensive medications. The clinical audit was conducted as a retrospective analysis of the case records of the hypertensive patients attending as outpatients in the department of Cardiology. Results : Out of 200 patients screened, irrespective of whether they had diabetes or not, it was found that 134 patients (67%) had BP less than or equal to the target and 66 patients (33 %) had BP higher than the target level. Out of 100 Hypertensive patients 83 % patients had adequate control of BP and 17 % had poor control. Out of 100 hypertensive diabetics 51 % had adequate control of BP and rest 49 % had poor control.

**KEYWORDS :** Adherence, hypertension drugs, Non communicable disease

### INTRODUCTION

In India, hypertension is the leading Non Communicable Diseases risk and estimated to be attributable for nearly 10 per cent of all deaths<sup>1</sup> It is estimated that the overall prevalence of diabetes, hypertension, Ischemic Heart Diseases (IHD) and Stroke is 62.47, 159.46, 37.00 and 1.54 respectively per 1000 population of India. The number of hypertensive individuals is anticipated to nearly double from 118 million in 2000 to 213 million by 2025<sup>2</sup>.

It is estimated that 16 per cent of ischemic heart disease, 21 per cent of peripheral vascular disease, 24 per cent of acute myocardial infarctions and 29 per cent of strokes are attributable to hypertension underlining the huge impact effective hypertension prevention and control can have on reducing the rising burden of cardiovascular disease (CVD)<sup>3</sup>.

Though national data on treatment and control are not available, multiple cross-sectional studies conducted across various regions of India such as north (Delhi 10.5%), south (Chennai 7.5%, Thiruvananthapuram 8.6%), east (Assam 18.1%), and west (Mumbai 13.6%) indicate sub-optimal blood pressure control.<sup>4</sup>

Co-existence of diabetes mellitus and hypertension increases the risk of macro - and micro-vascular complications. One of the important factors after diagnosing and starting patients on treatment is to check for adequate control of blood pressure with the prescribed treatment or whether there is a need for add-on drug for achieving proper control. This audit is to look for the control of blood pressure among patients who are regular in OP visits and based on JNC VII criteria

### AIM

- To know whether patients on regular treatment and periodic visits are attaining the target BP according to JNC VII guidelines in our tertiary care hospital.

### OBJECTIVES:

- To ensure that BP of all hypertensive patients on treatment is less than 140/90 mm Hg
- To ensure that BP of all hypertensive patients with Diabetes is less than 130/80 mm Hg

### Standards:

- 70 % of Hypertensive patients must have BP < 140/90
- 70 % of chronic hypertensive patient with DM must have BP < 130/80

### Source of Evidence:

The Seventh Report of the Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure (JNC 7)

**Type of audit:** Retrospective Outcome audit

**Sample size:** 200

**Type of sampling:** Simple random sampling.

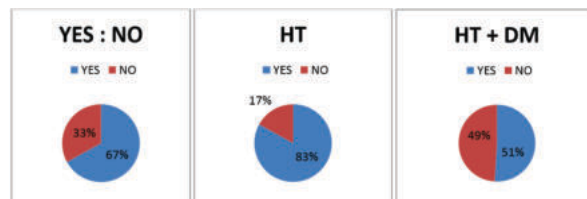
### APPROACH AND METHODOLOGY

The clinical audit was conducted as a retrospective analysis of the case records of the hypertensive patients attending as outpatients in the department of Cardiology in PSG hospitals. Case sheets of two hundred hypertensive patients who came for consultation during the study period were randomly chosen to check if their BP was in target. Information obtained was tabulated in the data sheet. The analysis was done.

### EXCLUSION CRITERIA:

- Newly diagnosed Hypertensive
- Secondary causes of hypertension – pregnancy, pheochromocytoma, renal artery stenosis etc

### RESULTS



- Out of 200 patients screened, irrespective of whether they had diabetes or not, it was found that 134 patients (67%) had BP less than or equal to the target and 66 patients (33 %) had BP higher than the target level.
- Out of 100 Hypertensive patients 83 % patients had adequate control of BP and 17 % had poor control.
- Out of 100 hypertensive diabetics 51 % had adequate control of BP and rest 49 % had poor control.

### DISCUSSION

The findings of the audit indicate that nearly 67 % of all hypertensive patients had good control. 83% of those patients with hypertension alone have adequate control of their BP in contrast to those with coexisting diabetic mellitus in whom the percentage drops to 51 %.

It is well established fact that control of hypertension increases the morbidity and mortality benefit. But still there is no sufficient awareness among patients regarding the importance of BP control. Previous community based studies done in different parts showed that people had suboptimal control of Hypertension like Bangladesh 74.4%<sup>5</sup> Nagpur 58.2%<sup>6</sup> Kerala 69.4 %<sup>7</sup> and 81.2 %<sup>5</sup> for diabetic hypertensives. In addition to lack of awareness, various factors like economic condition, irregularity of hospital visits, drug costs as being

contributory to the suboptimal control of hypertension in our population. But our audit has brought out that even in patients who are on regular visits, 33 % showed suboptimal control highlighting the need for increased awareness.

### CONCLUSION

The audit conducted among the Hypertensive patients showed 67 % are attaining target BP overall. And in case of only hypertensive patients it is 83% and diabetic hypertensives it is 51%.The audit has clearly indicated that there is a need for improving the awareness of BP control in hypertensive patients which can be achieved by optimising patient education measures.

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