

THE PREVALANCE OF HYPERTENSION AND HYPERTENSION RISK FACTORS IN RURAL ARESES OF HAZARIBAGH JHARKHAND

Shafroz Parween

Junior research fellow, Vinoba Bhave University

Keywords : hypertension, India

Abstract

Background : Hypertension is growing as an important public health problem in India. Both urban and rural communities are equally affected by it. Hypertension is defined as systolic blood pressure (SBP) of 140 mmHg or greater and/or diastolic blood pressure (DBP) of 90 mmHg or greater or any level of blood pressure in patients taking antihypertensive medication in adults aged more than 18years.

Objectives: The aim of this study was to identify the prevalence and risk factors for hypertension in a rural community in Hazaribag Jharkhand India.

Methodology:

- Design – cross sectional community based study.
- Sample size- sample size was calculated using the relative error method and was 400.
- Study setting – random sampling method was used to select the rural area from sadar block and then door to door survey was conducted in the area. Demographic data, family history, dietary habits were recorded. Blood pressure measurements were taken and anthropometric data was collected.
- Study participants- adults 15years and above

Results: of the total sample size 150 were female and 250 males. 10% of the males and 13% females were found to be hypertensive. Increasing BMI and age were independent predictors of hypertension in both sexes.

Conclusion – the result shows that non communicable diseases are increasing in India

Introduction

Hypertension (HTN) is emerging as a public health problems in various ethnic groups in the developing countries like India^{1,2}. Hypertension is defined as systolic blood pressure (SBP) of 140 mmHg or greater and/or diastolic blood pressure (DBP) of 90 mmHg or greater or any level of blood pressure in patients taking antihypertensive medication in adults aged more than 18years.

Hypertension is increasing in urban, rural as well as tribal areas. High blood pressure is one of the most preventable risk factors which is responsible for cardio vascular diseases. According to the “Rule Of Halves” stated in 1970s; ‘only about half of the hypertensive subjects in the general population are aware of their condition, only about half those aware are being treated and only half of those being treated are adequately treated to keep it under control. This leaves the vast majority of hypertension cases not

controlled and being at risk of developing complications. Total deaths due to cardiovascular diseases were 9.1 million in developing countries and 1.5 million in India³. It has been predicted that by 2020, there would be 111 per cent increase in cardiovascular deaths in India. HTN is directly responsible for 57 per cent of all stroke deaths and 24 per cent of all coronary heart diseases (CHD) in India³.

In analysis of worldwide data for the global burden of HTN, 21 per cent of Indian men and women were found to suffer from HTN⁴. Globally, the overall prevalence of hypertension in adults aged 25 years and above was 40% in 2008⁵. The prevalence in India as per the study by Indian Council of Medical Research (ICMR) was 25% among urban population and 29% among rural population when systolic BP of 140 and above and/or diastolic BP of 90 or above were considered as hypertension⁶. According to NCD risk factor survey conducted by Integrated Disease Surveillance Project (IDSP), during 2007–2008, the prevalence of hypertension in India varied between 17% and 20%, and 23%–24% in Kerala state where this study was conducted⁷.

Materials and Methods:

Objectives: The aim of this study was to identify the prevalence and risk factors for hypertension in a rural community in Hazaribag Jharkhand India.

Methodology:

- Design – cross sectional community based study.
- Sample size- sample size was calculated using the relative error method and was 400.
- Study setting – random sampling method was used to select the rural area from sadar block and then door to door survey was conducted in the area. Demographic data, family history, dietary habits were recorded. Blood pressure measurements were taken and anthropometric data was collected.
- Study participants- adults 18years and above

Results: Of the total sample size 150 were female and 250 males. 10% of the males and 13% females were found to be hypertensive. Increasing BMI and age were independent predictors of hypertension in both sexes. Logistic regression analysis was carried out to identify correlates of hypertension by including predictive variables such as gender, age group, income, educational status, employment, family history of hypertension and comorbidities, diabetes, and hypercholesteremia (self-reported).

Fig -1

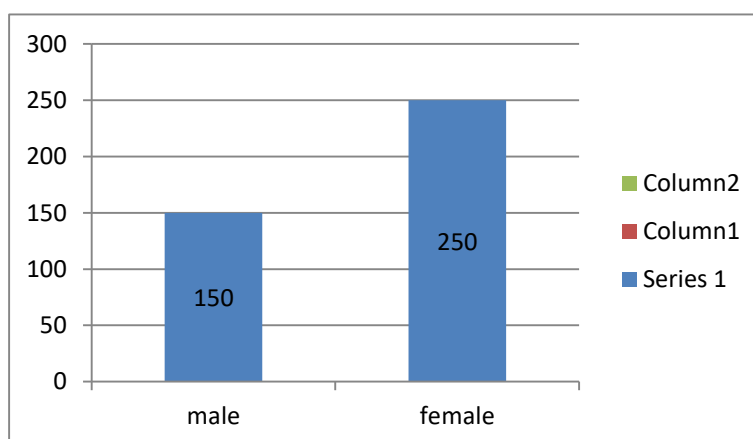
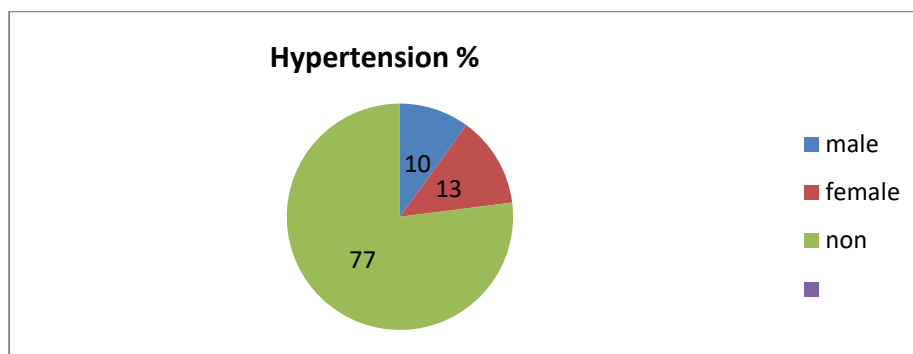


Fig-2



Conclusion – the result shows that non communicable diseases are increasing in India. India

were 70% of the under five children and 40% of adult are undernourished and at the same time presence of HTN which is generally a disease of the affluent society clearly shows that india is having a double burden of disease. With the exception of age, all the risk factors identified were potentially modifiable.

Healthy lifestyle, health education, awareness and intervention program should be carried out to solve these problems.

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