

Short Communication

Prevalence and trends in hypertension in Andhra Pradesh

Sagam Dinesh Reddy*

Department of Family Medicine/ Industrial Health, LMR Hospital, G Konduru, NTR District, Andhra Pradesh, India

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*Correspondence:

Dr. Sagam Dinesh Reddy,

E-mail: dineshsagam143@gmail.com

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ABSTRACT

Hypertension is a significant public health concern globally, contributing to cardiovascular diseases, stroke, and kidney failure. Andhra Pradesh, a southern state in India, has witnessed rapid urbanization and lifestyle changes, potentially influencing hypertension prevalence. This cross-sectional study, conducted at LMR hospital, G Konduru, from January 2022 to December 2023, analyzed data from national health surveys (NFHS, DLHS), state health department records, and published research studies. Findings revealed a significant increase in hypertension prevalence over the last three decades, particularly among urban residents, elderly populations, and males. Urbanization, dietary changes, and sedentary lifestyles were identified as key contributors. Public health interventions had a modest impact on controlling hypertension rates. Comprehensive strategies, including awareness programs and improved healthcare services, are essential for effective hypertension management in Andhra Pradesh.

Keywords: Hypertension, Prevalence, Trends, Andhra Pradesh, Urbanization

INTRODUCTION

Hypertension, or high blood pressure, is a critical risk factor for cardiovascular diseases, stroke, and chronic kidney disease. Globally, it affects approximately 1.13 billion people, with a significant burden in low- and middle-income countries. In India, hypertension prevalence has been steadily increasing, becoming a major public health issue. Andhra Pradesh has undergone rapid socio-economic and lifestyle changes, contributing to this trend. This study aims to evaluate the prevalence and demographic trends of hypertension in Andhra Pradesh and assess the impact of urbanization and lifestyle changes.^{1,2}

METHODOLOGY USED

Cross-sectional study (short communication). LMR hospital, G Konduru, NTR District, Andhra Pradesh. Study conducted from January 2022 to December 2023. NFHS, DLHS, state health department records, and published studies were used.

Adults aged 18 years and above residing in Andhra Pradesh were included in study. Individuals with secondary hypertension, pregnant women, and those unwilling to participate were excluded from the study.

Ethical approval was not required; proper patient consent was obtained for conducting the study.

Data were analyzed using SPSS Version 25. Descriptive statistics, chi-square tests, and logistic regression were used to examine associations between hypertension and risk factors.

OBSERVATIONS

Urban residents (38.4%) exhibited higher hypertension prevalence compared to rural residents (27.6%).

Males had a higher prevalence (35.4%) than females (28.7%). The prevalence increased with age, reaching 60.2 percentages among individuals aged sixty and above.

Table 1: Prevalence of hypertension by age group.

Age group (in years)	Prevalence (%)
18-29	12.5
30-39	20.3
40-49	35.7
50-59	48.6
60+	60.2

Table 2: Prevalence by gender.

Gender	Prevalence (%)
Male	35.4
Female	28.7

Table 3: Prevalence by socioeconomic status.

Socioeconomic status	Prevalence (%)
Low	25.8
Middle	33.5
High	40.2

DISCUSSION

The findings align with global patterns showing urbanization and lifestyle changes as key contributors to hypertension. Studies by Gupta et al and Reddy et al reported higher hypertension prevalence in urban populations due to stress, unhealthy diets, and sedentary behavior.^{2,7} Socioeconomic factors significantly impact health outcomes, with higher-income groups exhibiting greater hypertension prevalence, possibly due to lifestyle factors and dietary habits.³

Community-based interventions and policy reforms play a critical role in mitigating hypertension. Recent studies have emphasized the effectiveness of dietary sodium reduction, increased physical activity, and early screening in controlling hypertension.⁵ Technological integration, such as mobile health apps and telemedicine, offers a promising avenue for enhancing hypertension management, particularly in underserved areas.^{8,9}

Moreover, collaboration between public health authorities, healthcare providers, and community stakeholders is essential to address this growing public health challenge. Comprehensive strategies involving education campaigns, healthcare access improvement, and lifestyle modifications can contribute to reducing the hypertension burden in Andhra Pradesh.¹⁰

CONCLUSION

Hypertension is a growing health challenge in Andhra Pradesh, driven by urbanization and lifestyle changes.

Effective management requires comprehensive public health strategies, including awareness campaigns, dietary interventions, and promotion of physical activity.

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