Prevalence and Risk Factors of Hypertension Among Adults Aged Above 40 Years Living in Mararaba, Nasarawa State, Nigeria

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ABSTRACT

Introduction: Hypertension is a major public health challenge in Nigeria, particularly among rapidly urbanizing areas. This study investigated its prevalence and associated risk factors in Mararaba, Nasarawa State. This study aimed to determine the prevalence of hypertension and identify its associated risk factors among adult aged over 40 years in Mararaba, Nasarawa State. Methodology: A cross-sectional descriptive survey design was employed, and data were collected using a structured questionnaire adapted from the WHO STEPS tool, alongside anthropometric measurements (blood pressure, height, weight, BMI) and pulse rate administered to a random sample of 420 respondents in selected permanent resident. A multistage sampling technique, such as the simple random sampling, and systematic random sampling technique, to select the study participants. Descriptive statistics, chi-square tests, and ANOVA were employed for analysis.

Results: According to the study results, it was found that hypertension is highly prevalent among this population with an overall hypertension prevalence of 90.95%. Prevalence increased with age: 80.77% (41-50 years), 96.70% (51-60 years), and 97.56% (>60 years). Females had higher prevalence (50.95%) than males (40.00%). Significant associations were found with behavioral factors: smoking (40.71% prevalence among current/former smokers), daily/occasional alcohol use (68.10%), high salt/fat diets (97.73%), and physical inactivity (59.38% among infrequent exercisers). Clinically, obese individuals (BMI >30) had 44.05% prevalence, and 55.24% reported family history. High stress affected 57.85%, linked to family (68.81%), health (58.81%), work (55.00%), and finances (47.14%). The hypothesis results showed that significant associations between hypertension and demographic factors (age, sex, education, occupation; all $p < 0.05$), behavioral/lifestyle factors (alcohol intake, exercise, diet, salt addition; all $p < 0.001$ except smoking, $p = 0.536$), while ANOVA indicated no significant difference in mean BMI between hypertensive and non-hypertensive groups ($F = 0.0048$, $p > 0.05$), underscoring modifiable risks as key drivers.

Conclusion: Hypertension prevalence is alarmingly high in this population, driven by modifiable factors like poor diet, inactivity, and stress. Targeted interventions, including community screening and lifestyle education, are urgently needed to mitigate this burden.

Keywords: Hypertension, Prevalence, Risk Factors, Nigeria, Cross-Sectional Study, Lifestyle Factors, BMI, Family History

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