FREQUENCY AND RISK FACTORS STRATIFICATION OF HYPERTENSION AMONG THE RURAL POPULATION OF BANGLADESH

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Background: One of major predictors of premature mortality and morbidity; and scarcity of epidemiological data regarding hypertension among the rural people in Bangladesh, the study has been designed to find out the frequency and risk factors stratification of hypertension among the rural people in Jashore, Bangladesh.

Methods: A cross-sectional study recruited 1812 participants above 18 years attending on national hypertensive week of 2019 in Bagherpara and Keshabpur upazila (sub-district) health complex in Jashore, Bangladesh. 2020 International Society of Hypertension Global Hypertension Practice Guidelines had been demonstrated to classify hypertension.

Results: Out of the total study population, the frequency of hypertension was 20.6% (Grade 1 and Grade 2 hypertensive patients 15.8% and 4.9% respectively), and high normal blood pressure was 9.0%. The mean age of the study population, Grade 1 hypertensive and Grade 2 hypertensive cohorts were 42 ±16, 49±15 and 51±14 years respectively with a male and female ratio was 1:2. Progressive rise of mean systolic and diastolic blood pressure occurred with increasing age. Age(p:<0.001), sex(p:0.004), occupation (p:<0.001), BMI(p:<0.001), family(p:<0.001) and past history (p:<0.001) of hypertension, sedentary life style(p:0.004), additional salt intake(p:<0.001) and smoking(p:0.011) were significantly associated with hypertension following bivariate analysis. Multivariate logistic regression analysis revealed that age after 50 years (AOR=1.866, 95% CI: 1.210-2.876), positive past history of hypertension (AOR=3.493, 95% CI: 2.676-4.558), additional salt intake (AOR=0.591, 95% CI: 0.453-0.770) and obesity (AOR=3.389, 95% CI: 1.830-6.274) were significantly associated with developing hypertension.

Conclusion: High frequency of hypertension was found among the rural population in Bangladesh where a lot of significantly associated risk factors. The data would be helpful for the health policy makers dealing Non-communicable diseases to reach the sustainable goal and mitigate morbidity and mortality of cardiovascular diseases in Bangladesh.

Key words: Hypertension, incidence, risk factors, rural people.

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