Screening of Hypertension, Risks, Knowledge/Awareness in Second Cycle Schools in Ghana: A National Cross-Sectional Study Among Students Aged 12-22

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Abstract : In Ghana, the management of hypertension in primary health care is a cost-effective way of addressing premature deaths from vascular disorders that include hypertension. There is little or no evidence of large-scale studies on the prevalence, risk, and knowledge/awareness of hypertension in students aged 12-22 years in Ghana. In a cross-sectional study, blood pressure, anthropometric indices, and knowledge/awareness assessment of students at second-cycle schools were recorded from 2018 to 2020 in three regions of Ghana. Multistage cluster sampling was used in selecting regions and the schools. Prevalence of prehypertension and hypertension was categorized by the Joint National Committee 7, where appropriate, chi-square, scatter plots, and correlations were used in showing associations. A total of 3165 students comprising 1776 (56.1%) females and 1389 (43.9%) males participated in this study within three regions of Ghana. The minimum age was 12 years and the maximum age was 22 years. The mean age was 17.21 with standard deviation (SD: 1.59) years. A 95% confidence interval was set for estimations and a P value < 0.05 was set as significant. The prevalence rate of overall hypertension was 19.91% and elevated (prehypertension) was 26.07%. Risk indicators such as weight, BMI, waist circumference, physical activity, and form of the diet were positively correlated with hypertension. Among Ghanaian students currently in second-cycle educational institutions, 19.91% were hypertensive and 26.07% were prehypertensive. This may indicate a probable high prevalence of hypertension in the future adult population if measures are not taken to curb the associated risks.

Keywords: hypertension, second-cycle schools, Ghana, youth

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