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**Hypertension: Its prevalence and association with obesity among indigenous adolescents of Sarawak, Malaysia****Cheah Whye Lian, Ching Thon Chang, Helmy Hazmi, Razitasham Safii and Grace Woei Fen Kho**

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The association between obesity and hypertension has been largely reported in adult population but limited for adolescents, particularly in Sarawak. The objective of this study was to determine the prevalence of hypertension and its association with obesity among indigenous adolescents aged 12-17 years in Sarawak. It was a cross-sectional using questionnaire, anthropometric and blood pressure measurement. Using a systematic sampling procedure, a total of 18 secondary schools representing urban and rural from 11 divisions of Sarawak were selected. Data was analyzed using statistical package for social sciences program (SPSS) version 22.0. A total of 1780 secondary school children participated in the study with 58.9% females and 20.1% reported at least one of the parents with history of hypertension. The prevalence of pre-hypertension was 13.4%, stage 1 hypertension was 13.5% and stage 2 hypertension was 4.7%. The prevalence of overweight and obesity was 24.4%, elevated waist circumference was 13.4 and over-fat and obese was 6.2%. The prevalence of hypertension among male respondents was 23.9%, female respondents was 14.1%. In multiple logistic regression, adjusting for age and family history, hypertension was associated with sex (males) (OR=3.20,  $p<0.000$ ), ethnic group (ref=Iban, Malay, OR=0.72,  $p=0.015$ ; Bidayuh, OR=0.65,  $p=0.019$ ), overweight and obese (OR=3.311,  $p<0.000$ ), elevated waist circumference (OR=2.15,  $p<0.000$ ), over-fat and obese (OR=2.08,  $p=0.004$ ). Hypertension and obesity in this population is highly prevalent. Screening blood pressure and assessment of nutritional status can be recommended as the routine health assessment in school health program to detect and provide early intervention to those at risk of hypertension.

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