

## **A COMPARISON IN LIPID PROFILE AND FASTING GLUCOSE LEVELS BEFORE AND AFTER INTERVENTION IN SIBU, SARAWAK**

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In order to determine the changes in lipid profile and fasting glucose levels in an urban community, a community-based epidemiological survey was conducted to compare 5-year mean changes in lipid and glucose levels after intervention. Sample size was 181 respondents with 66 (36%) males and 115 (63.5%) females. The majority of respondents were Malays (95%) with a mean age of 48.4 years ( $SD\pm 11.7$ ). Only 19 (15.5%) had family history of cardiovascular disease and 8 (4.4%) respondents had cardiovascular disease. Of the sampled population, 96 (53%) were obese, 41 (22.7%) were hypertensive and 30 (16.6%) had diabetes. Calculation of the cardiovascular risk factors using the Framingham Score showed that 121 (66.9%) of the respondents had moderate to high risk. Mean levels for LDL-cholesterol and triglyceride was higher whilst HDL-cholesterol was lower in the pre-intervention group ( $p<0.05$ ). Fasting glucose levels was noted to be higher in the post-intervention group ( $p<0.05$ ). Comparison between the cardiovascular risk ratio between the pre- and post-intervention group showed a higher level in the pre-intervention group ( $p<0.05$ ). There was no difference in total cholesterol levels between the two groups. Males were 9.4 times more likely to develop diabetes as compared to females ( $p<0.05$ ). The study indicates significant degree of improvement in lipid profile but worsening levels of fasting glucose in the community, which is consistent with the increase trends of diabetes.