

ESTIMATING RISK FOR THE DEVELOPMENT OF CORONARY HEART DISEASE BASED ON CURRENT EATING PATTERNS AMONG UWI STUDENTS RESIDING ON CAMPUS

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Background: There exist differences in coronary heart disease (CHD) incidence when comparing male and female populations; to what degree these risk factors can be observed among a young adult Caribbean population is yet to be determined. Current trends in studies involving young adult populations worldwide prove that atherogenic modifications in the arterial lining can take place during and even before this stage in the lifecycle. Measurement of the types of and degree to which risk factors exist in this age group has been suggested.

Objectives: Given the current information, the main purpose of this study was to give an estimate of CHD risk after comparing current eating pattern and lifestyle behaviour and contrasting these with independent variables such as gender, anthropometry and family history of chronic, non-communicable disease (CNCD). The results should provide the preliminary data for more advanced studies and help in decision making processes for determining intervention procedures.

Design: This project is intended as a pilot that will provide the necessary information for future prospective studies among the chosen sample population. It measured the differences in diet and lifestyle within the population (residents of Milner Hall) and correlated these to either gender. Females and males ($n = 106$) were administered questionnaires and anthropometric data was collected. A cardiovascular risk group (CVGRP) was identified by assessing smoking status, alcohol consumption, waist circumference, BMI and participation in physical activity.

Results: Data analyses revealed that males (54%) are more at risk for CHD than female students (23.9%; $p < 0.05$), though they are more likely to engage in moderate physical activities more regularly ($p = 0.057$) and for longer duration ($p = 0.032$) than females. Females are more likely to engage in stress relieving, light exercise.

Female participants had a stronger family history of chronic, non-communicable disease, especially diabetes, but no significance was observed between the two groups exclusively for CHD family history. The dietary patterns which exhibited the most significance when compared to the calculated coronary heart disease risk group were fried food intake and meat intakes. Those displaying signs of moderate to high CHD risk were shown to consume meat (beef, lamb, other red meat) as part of an altered dietary pattern noticed since moving onto the Hall. Those with low CHD risk were significantly less likely to buy fried fast food ($p=0.001$).

Conclusion: The impact on CHD risk scores among young adults is significantly impacted by gender and is best underscored by physical activity, meat, and fat and oil consumption; alongside obesity and body fat distribution and family history of metabolic syndrome or diabetes.