

PREVALENCE OF CARDIOVASCULAR RISK FACTORS IN AN ABORIGINAL COMMUNITY

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Awareness is growing of some of the more chronic diseases faced by Aboriginal people currently experiencing dramatic changes in lifestyle (Bastian 1979; O'Dea 1983).

A pilot study, using a modified version of the NHF risk factor survey protocol, was carried out in an Arnhemland Aboriginal community to assess the prevalence of risk for ischaemic heart disease. Heights, weights and waist and hip circumferences were taken together with duplicate blood pressure measurements at rest. Urine and overnight fasting blood samples were collected for cotinine/creatinine ratio and plasma glucose, lipid and gamma-glutamyl transpeptidase (g-GT) determinations respectively. A brief interview was performed to collect demographic details, as well as information on health, exercise and estimates of alcohol and tobacco consumption. Information on past related illness was collected on a confidential basis.

Results are still being analysed at this stage. 135 (39%) of the 344 adults aged over 24 years were screened during an initial visit, 66 male and 69 female volunteers. This visit attracted an older sector of the population, the non-response bias influencing results at this stage. More data is to be incorporated and will be available. Overall, the data presented here should be viewed conservatively. (Data divided by sex and arbitrary 35 yr. age groupings)

	male u35yr	male 35+yr	female u35yr	female 35+yr
BMI	23.15±0.74	22.42±0.42	24.00±1.33	23.16±0.84
Waist/Hips	0.93±0.01	0.95±0.01	0.89±0.01	0.95±0.01
Total Chol.	4.19±0.14	4.61±0.14	3.74±0.11	3.97±0.13
HDL Chol.	0.85±0.05	0.76±0.04	0.68±0.04	0.67±0.03
LDL+VLDL Chol.	3.34±0.15	3.85±0.15	3.06±0.11	3.30±0.12
Triglyceride	2.29±0.24	2.61±0.19	1.61±0.19	2.06±0.16
p. glucose	4.84±0.24	5.19±0.28	4.78±0.03	6.92±0.70

Body Mass Index: (kg/m²). All plasma concentrations: (mmol/l).

No expected increase of obesity with age was observed, possibly due to the non-response bias of this first group. Abdominal obesity, associated more with metabolic complications was evident in both sexes. Very little diastolic hypertension over 95mmHg was seen. Drinking was predominantly a male activity whilst smoking was widespread (men 86%, women 64%). Self-reported smoking and drinking was confirmed well by independent assessment of urinary cotinine and plasma g-GT levels respectively. Total cholesterol levels are relatively low with HDL levels low too, thus a high LDL:HDL ratio with generally more elevated triglyceride levels may still place a large proportion of the community at risk of ischaemic heart disease. Alcohol, refined carbohydrate and saturated fat consumption could help explain these lipid profiles. Prevalence of diabetes was estimated at approximately 10% (women) and 5% (men) in this sample, albeit from single fasting plasma glucose determinations.

Results are being fed back to the community in an attempt to increase awareness of these health problems.

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