

ANALYSIS OF BODY MASS INDEX AND RANDOM CAPILLARY BLOOD GLUCOSE LEVELS IN THE VEDDAS OF SRI LANKA

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Introduction

The indigenous people also known as “vedda” are a group of people living in several communities in the dry zone of Sri Lanka. They have a traditional way of life, which has been preserved for centuries. However within the past decade due to urbanization and admixture with the Sinhalese their life styles are gradually changing. But they still lead an active life. The body mass index (BMI) and random capillary blood glucose (RCBG) are considered as risk factors for coronary heart disease and diabetes mellitus. Therefore objective of this preliminary study was to asses these risk factors in the Vedda population.

Methodology

Four visits were made to Dambana during the period from March to August 2009. Individuals with at least one parent from the vedda clan (Warige) were included in the study.

The heights and weights were measured in meters and kilograms respectively using standard measuring equipments and the BMI [Weight (kg)/Height (m)²] was calculated using the quetelet body mass index (Garrow and Webster, 1985). Before measuring the RCBG informed verbal consent was obtained. A drop of blood was taken to the glucose strip by pricking the index finger of the non dominant hand with a lancet. RCBG was measured using a glucometer (Caresens[®]). The measurements were taken by one observer throughout. BMI values less than 18.5kg/m² is considered underweight, 18.5-24.9 kg/m² as normal range, 25-29.9 kg/m² as overweight and above 30 kg/m² as obese. The cutoff point for diabetes was considered as a blood glucose reading above 200 mg/dl and impaired glucose tolerance when the reading was between 140-199 mg/dl (Kumar and Clark, 2005)

Tabel 1. Mean BMI for male and female veddass in different age groups

Male			Female		
Age range	n	Mean±SD	Age range	n	Mean±SD
16-25	10	19.23 ± 2.10	16-25	18	21.53 ± 4.27
26-35	11	20.42 ± 2.19	26-35	9	21.19 ± 2.56
36-45	15	21.51 ± 2.81	36-45	14	20.46 ± 3.21
46-55	5	21.22 ± 5.61	46-55	6	20.93 ± 2.24
56-65	4	24.01 ± 3.37	56-65	2	18.98 ± 6.24
66-75	3	19.04 ± 0.78	66-75	1	12.03
76-80	0		76-80	1	17.86

