

Body Mass Index of a group of Sri Lankan Moor children

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Abstract

1128 Sri Lankan Moor children (327 boys and 801 girls) from four Islamic schools in Kandy and Gampola were studied. The Body Mass Index (BMI) of the girls at all ages were higher than the BMI of the boys. The boys reach a plateau at 15 years and the girls at 14 years. The Sri Lankan Moor children showed similar BMI values to those of Sinhalese children of Kadawatha schools but their gender difference was similar to that of the affluent Sinhalese children.

Key words: Sri Lankan Moor, Body Mass Index, Socio-economic status.

Introduction

In the ethnographic survey of 1939, significant differences have been shown in the morphometry of Sinhalese and Sri Lankan Moors (1). This survey however was limited to adult males. In an auxological study of school children (2) significant differences have been shown in both boys and girls between the Sinhalese and "others". The "others" in that study refers to Sri Lankan Moors, Malays, Burghers and Chinese. The Body Mass Index (BMI) of Sinhalese and Tamil children of both high and low socio-economic status have been studied (3). No data is available on the Sri Lankan Moor children although Sri Lankan Moors constitute 7% of the total population (4).

The present study was undertaken in 1990/91 to assess the BMI of Sri Lankan Moor boys and girls attending the Baddudin Mohamud Vidyalaya and the Siddi Lebbe Vidyalaya in Kandy and Zahira College in Gampola. The study population consisted of 1128 Sri Lankan

Moor children, 327 boys and 801 girls. Children with mixed parentage Moor/Malay, Moor/Sinhalese and Moor/Tamil were excluded at interview. Date of birth and parents' occupation obtained from school records were confirmed at direct interview. The socio-economic status of the children was determined based on the occupation of parents, as given in the annual report, Central Bank of Ceylon 1984 (5). All the children were from households of low socio-economic status.

Heights (H) were measured in centimetres using a Harpenden anthropometer. Weights (W) were measured in kilograms using a Salter weighing scale. Both measurements were taken with the children in their school uniforms but without shoes, by one observer throughout the study. Quetelet's Body mass Index ($BMI = W/H^2$) for each child was calculated. Table I gives the BMI (mean and sd) for each age group (5 to 17 years) for boys and girls. The boys reach a plateau at 15 years with a BMI of 16 and girls at 14 years with a BMI of 17. At all ages girls have higher BMI values than boys with significant differences in the age range 9 to 14 years ($p < 0.05$ to 0.001).

An earlier study (3) has shown that affluent Sinhalese boys from St. Thomas College Mt. Lavinia and Kollupitiya have higher BMI values than those from Kadawatha schools who come from households of low socio-economic-educational levels. In the same study the affluent Sinhalese girls from St. Bridget's Convent and Holy Family Convent in Colombo have higher BMI values than those from Kadawatha schools. In terms of gender difference in the affluent group significant differences have been shown from 9-14 years whereas in the Kadawatha group the significant

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difference is from 11-16 years. Sri Lankan Moor children of low socio-economic status from Kandy and Gampola have BMI values similar to

the Sinhalese from the Kadawatha schools, but gender differences similar to the affluent Sinhalese.

Table 1. BMI values of Moor boys and girls

Age	No.	Boys			No.	Girls			Significant
		Mean	±	sd		Mean	±	sd	
5 -	4	13.4	±	0.5	1	13.6	±	0.0	NS
6 -	47	13.2	±	0.4	84	13.7	±	1.5	S
7 -	61	13.2	±	0.9	135	13.4	±	1.2	NS
8 -	77	13.4	±	1.2	175	13.8	±	1.6	NS
9 -	18	13.5	±	0.6	96	14.1	±	1.4	HS
10 -	16	14.0	±	0.8	56	14.4	±	2.2	NS
11 -	26	13.8	±	1.0	68	15.1	±	2.0	HS
12 -	18	14.5	±	1.9	79	16.0	±	2.4	HS
13 -	13	14.7	±	1.6	62	16.1	±	2.8	S
14 -	13	15.1	±	1.0	27	17.2	±	3.0	HS
15 -	11	16.4	±	1.6	7	17.1	±	1.1	NS
16 -	8	16.1	±	1.4	6	16.8	±	1.9	NS
17 -	10	16.6	±	1.2	5	18.8	±	2.6	NS

NS - Not significant

S - Significant ($p < 0.05$)

HS - Highly Significant ($p < 0.01$ to $p < 0.001$)

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