

Nutritional Status of The Nicobarese Tribal Children of Harminder Bay, Little Andaman

Madhumala Chattopadhyay and B.V. Ravi Prasad¹

Anthropological Survey of India, Andaman and Nicobar Regional Centre, Port Blair 744 101, India

KEY WORDS Nicobarese Tribe. Anthropometry. Body Build. Malnutrition.

ABSTRACT The present study throws light on nutritional status of 104 Nicobarese tribal children of Harminder Bay, Little Andaman. Age-independent indices derived from anthropometric measurements such as height, chest girth, mid-upper arm girth and body weight reveal that boys in all age groups have 'poor' or 'weak' or 'very weak' body build and are categorised under 'distinctly low' or 'mild undernutrition'. However, girls in the age-group of 11-13 years and above 14 years have 'average' or 'good' body build and are categorised under 'normal' state of nutrition. Interestingly, none of the boys are found to be 'obese' or 'sturdy' whereas 3.51 per cent of girls are 'obese' and another 1.75 per cent of girls are found as 'sturdy'

INTRODUCTION

Malnutrition in our country exist among the poorer sections of our population especially children and women in reproductive period and appears to be the worst suffers (ICMR, 1984). Many studies have been reported using nutritional anthropometric techniques from various parts of the country especially among children to find out extent of malnutrition in this group so as to provide better ameliorative measures—the Applied Nutritional Programme, the School-lunch Programme, the Special Nutrition Programme and the Integrated Child Development Services (Chandrasekhara Reddy et al., 1992; Chattopadhyay, 1989, 1992; Gillepsie and McNeill, 1992; Sharma, 1992; Vijay Kumar et al., 1989). Keeping this in mind, the present study is carried out to assess nutritional status of Nicobarese tribal children using nutritional anthropometric techniques.

The Nicobarese settlement at Little Andaman came into existence in 1973 to reduce population pressure at Car Nicobar Island. Under this scheme, from each *tuhet* i.e., a large extended joint family, one family was selected, altogether one hundred fifty families initially settled at Little Andaman with the assumption that they would represent later, on the whole Car Nicobarese society. The settlement being named as 'Harminder Bay' as the entire scheme was implemented by the then Chief Commissioner of Andaman and Nicobar Islands, Shri Harminder Singh.

The Nicobarese population at Harminder Bay settlement was 1147 (1991). Horticulture is their primary economy. Piggery and poultry are considered as subsidiary economies. All of them are Christians by religion except one family being Muslim by religion. The Nicobarese, now a days, eat rice, wheat, flour, pork, fish, coconut kernel, green vegetables, etc. Pandanus (*Pandanus lerrum*), traditional fruit of the Car Nicobarese is rarely consumed by them due to non-availability of edible variety at Little Andaman island.

MATERIAL AND METHODS

The Government Senior Secondary School, Harminder Bay was established by the Andaman and Nicobar Administration as a Primary School in 1978 for imparting formal education to the Nicobarese tribal children but children of other communities too are admitted in this school. The total number of children in this school were 278 of which the Nicobarese constitutes 190 (1993).

1. To whom address all correspondence

Table 1: Body build of Nicobarese boys and girls according to Pignet Index

Age group (in years)	Boys					Girls					
	Poor	Very Weak	Weak	Average	Good	Poor	Very Weak	Weak	Average	Good	Sturdy
6-10	18 (38.30)	9 (19.15)	3 (6.38)	-	-	24 (42.11)	9 (15.79)	-	-	-	-
11-13	5 (10.64)	3 (6.38)	1 (2.13)	-	-	4 (7.02)	1 (1.75)	2 (3.51)	2 (3.51)	1 (1.75)	-
14 & above	4 (8.51)	1 (2.13)		2 (4.26)	1 (2.13)	-	2 (3.51)	3 (5.26)	4 (7.02)	4 (7.02)	1 (1.75)
Total	27 (57.45)	13 (27.66)	4 (8.51)	2 (4.26)	1 (2.13)	28 (49.12)	12 (21.05)	5 (8.77)	6 (10.53)	5 (8.77)	1 (1.75)

Figures in parentheses indicate percentages

Body weight, height, chest girth and mid-upper arm girth were taken on 104 Nicobarese children aged 6 to 19 years after Jelliffe (1966) and Singh and Bhasin (1989). Each child was measured with minimum clothing during working hours of the school. The age of child was recorded in completed years from school registers after consulting with their parents and teachers to avoid discrepancies in age reporting.

Pignet index and Pelidisi index were calculated to assess nutritional status of Nicobarese tribal children.

RESULTS AND DISCUSSION

Body build of Nicobarese boys and girls according to Pignet Index is shown in table 1. Majority of boys (57.45%) and girls

(49.12%) have 'poor' body build. 'Very weak' body build constitutes among 27% of boys and 21% of girls. 'Weak' body build is seen among 8.51% of boys and 8.77% of girls. It is evident from this study that 10.53% of girls and 4.26% of boys have 'average' body build whereas 8.77% of girls and 2.13% of boys have 'good' body build. Only one girl above 14 years is reported as 'sturdy'.

The age group wise data (Table 1) reveal that both boys and girls have 'very weak' body build in the age group of 6-10 years, 11-13 years and above 14 years. 'Poor' body build is noticed among boys in all age groups but girls have 'poor' body build in the age group of 6-10 years and 11-13 years. Boys have 'weak' body build in the age group of 6-10 years and 11-13 years whereas girls exhibit 'weak' body build in the age group of 11-13

Table 2: Nutritional status of Nicobarese boys and girls according to Pelidisi Index

Age group (in years)	Boys			Girls			
	Distinctly low	Mild under nutrition	Normal	Distinctly low	Mild under nutrition	Normal	Mild over weight
6-10	12 (25.53)	16 (34.04)	2 (4.26)	11 (19.30)	18 (31.58)	4 (7.02)	-
11-13	-	5 (10.64)	4 (8.51)	2 (6.51)	6 (10.53)	2 (3.51)	-
14 & above	2 (4.26)	3 (6.88)	3 (6.88)	1 (1.75)	5 (8.77)	6 (10.53)	2 (3.51)
Total	14 (29.78)	24 (51.06)	9 (19.16)	14 (24.56)	29 (50.88)	12 (21.05)	2 (3.51)

Figures in parentheses indicate percentage

years and above 14 years. However, girls constitute 'average' or 'good' body build in the age of 11-13 years and above 14 years but boys exhibit 'average' or 'good' body build in the age group of above 14 years.

The nutritional status of Nicobarese boys and girls according to Pelidisi index (Table 2) shows that 51.06% of boys and 50.88% of girls in 6-10 years, 11-13 years and above 14 years are under the category of 'mild under nutrition'. Majority of boys (29.78%) and girls (24.56%) are under distinctly 'low state of nutrition'. Very few boys (19.16%) and girls (21.05%) are categorised under 'normal state of nutrition'. There are two girls according to this index in the age group of above 14 years are under category of 'mild over weight'.

The study broadly concludes that Nicobarese children exhibit poor-very weak-weak body build and are under distinctly 'low state of nutrition' or 'mild state of under nutrition'. The Nicobarese diet, however, can be considered as balanced diet. The most common diseases among Nicobarese children are gastro-intestinal disorders, bronchial disorders, malaria, scabies etc. The people are ignorant about the quality and quantity of food to be given at various stages of growth. So, the prevailing situation can be improved by strengthening the existing ICDS programmes and through community awareness programmes on various aspects of health, nutrition and personal hygiene.

ACKNOWLEDGEMENTS

The authors are grateful to Dr. R.K. Bhattacharya, Director, Anthropological

Survey of Inida, Calcutta for providing facilities at A & N Regional Centre, Port Blair in undertaking this work. Thanks to teachers, Government Senior Secondary School, Harminder Bay, Little Andaman for rendering co-operation throughout the study.

REFERENCES

- Chandrasekhara Reddy, R.L., Venkatarmana, P. and Chengal Reddy, P. : Nutritional status of Pre-School children of Chittoor District. *Man in India*, 72: 469-473 (1992).
- Chattopadhyay, Madhumala : Nutritional problems, ecological aspects and planning in regard to tribals of West Bengal. pp. 257-259. In: *Tribal Ecosystem and Malnutrition in India*. P.D. Tiwari and A.N. Sharma (Eds.). Northern Book Centre, New Delhi (1989).
- Chattopadhyay, Madhumala : The Great Andamanese: An appraisal of economy and nutrition. *Vanyajati*, 40: 12-14 (1992).
- Gillespie, Stuart and Geraldine, McNeill: *Food, Health and Survival in India and Developing Countries*. Oxford University Press, Delhi (1992).
- I.C.M.R. Report: Studies on pre-school children. *Tech. Rep. Series 26*: Indian Council of Medical Research, New Delhi (1984).
- Jelliffe, D.B. : *The Assessment of Nutritional Status of the Community*, W.H.O. Geneva (1966).
- Sharma, K.K.N. : Assessment of nutritional status of Khairwar children of Madhya Pradesh, India. *J Hum. Ecol.*, 3: 47-48 (1992).
- Singh, I.P. and Bhasin, M.K. : *A Laboratory Manual on Biological Anthropology, Section I, Anthropometry*. Kamla-Raj Enterprises, Delhi (1989).
- Vijay Kumar, P., Singrol, C.S. and Mitra, Mita Shree : Food consumption pattern and nutritional status of Kumars of Raipur (M.P.) - A pilot survey. pp. 165-177. In: *Tribal Ecosystem and Malnutrition in India*. P.D. Tiwari and A.N. Sharma (Eds.). Northern Book Centre, New Delhi (1989).