

Body Mass Index (BMI) Among The Sugalis - A Tribal Population of Cuddapah District, Andhra Pradesh

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INTRODUCTION

The tribes live in hilly and forest tracts of the country with different ecological settings, socio-economic conditions and diversified dietary habits, without the mediation effects of modern health care. As such, it is feared that they are facing many health and nutritional problems due to their poverty, illiteracy and ignorance (Reddy and Papa Rao, 1995a). At this juncture, it is obvious to conduct the health and nutritional studies on such vulnerable groups to take necessary steps towards improving the overall health status of those groups. Keeping this in view, an attempt has been made to know the nutritional status of the adults of Sugalis, a large tribal population of pastoral nomads inhabiting the Palakonda Hill ranges of Cuddapah district, Andhra Pradesh.

The Sugalis also known as Lambadi, Lambani, Banjari and Brinjari is the largest tribal population of Andhra Pradesh. They live in exclusive settlements of their own called 'Thandas' named after the headman (*Nayak*) of the group. The traditional dress pattern of the Sugali is colourful and attractive and is a distinctive identity marker of the community. The Sugali language closely resembles the Marvari language of Rajasthan both in accent and in script. Owing to the cultural contact with the surrounding Telugu people they become bi-linguistic and could speak Telugu fluently. They present a complete picture of transition of a group of people from pastoral nomads to settled peasantry. The economic life of the people varies from agriculture, lime-selling, fire-wood selling and agriculture labour. They worship all Hindu deities and celebrate all Hindu festivals (Reddy and A. Papa Rao, 1995b).

SUBJECTS AND METHODS

The sample for the present study has been drawn from 10 Sugali Thandas (Settlements) located in four mandals (revenue divisions) of

Cuddapah district Andhra Pradesh. The size of the sample consists of 1422 adults (705 males and 717 females) aged 21 to 60 years. The Anthropometric measurements Height and Weight were taken as per the standard techniques suggested by Singh and Bhasin (1989) and Weiner and Lourie (1969).

The degree of malnutrition among the Sugali adults of both sexes is assessed by using Body Mass Index ($\text{BMI} = \text{weight}/\text{height}^2$) (Sharma, 1992). BMI is an important anthropometric index which is most frequently used for detection of early cases of Protein-Calorie malnutrition among adults. It is independent of age and takes into consideration of weight in kilograms (kgs) in relation to height in meters (mts).

RESULTS AND DISCUSSION

It is observed from the table 1 that 'normal' grade is found in high percentage in both males (48.23) and females (49.93). 'Severe' degree of malnutrition is observed in low percentage in both males (6.52) and females (5.99). The prevalence of 'mild' to 'moderate' degrees of malnutrition is 32.91 per cent and 11.77 per cent among males and 31.94 per cent and 11.16 per cent among females respectively. 'Grade I obesity' is observed in very low degrees in both males (0.57%) and females (0.98%). 'Grade II obesity' is noticed neither in males nor in females.

'Normal' grade is found in higher percentage at all age groups of males. 'Severe' degree of malnutrition is observed in low percentages at all age groups except at the age group of 41-50 years. 'Mild' degree of malnutrition is found in high percentages than 'moderate' degree of malnutrition at all age groups. 'Grade I obesity' is noticed at the age groups of 21-30 and 51-60 years.

Females also present the same degree of malnutrition as observed in males. Here also

Table 1: Percentage distribution of Body Mass Index (BMI) among the Sugali adults by age and sex

Age	Males							Females						
(years)	No	Severe	Moderate	Mild	Normal	Obese I	Obese II	No	Severe	Moderate	Mild	Normal	Obese I	Obese II
21-30	181	3.32 (6)	12.16 (22)	38.12 (69)	45.30 (82)	1.10 (2)	0.00 (0)	223	2.69 (6)	14.35 (32)	38.57 (86)	44.39 (99)	0.00 (0)	0.00 (0)
31-40	208	2.83 (6)	6.73 (14)	35.10 (73)	55.29 (115)	0.00 (0)	0.00 (0)	215	4.65 (10)	11.63 (25)	36.74 (79)	43.72 (94)	3.26 (7)	0.00 (0)
41-50	172	13.95 (24)	12.79 (22)	26.16 (45)	47.09 (81)	0.00 (0)	0.00 (0)	166	7.83 (13)	9.64 (16)	19.28 (32)	63.25 (105)	0.00 (0)	0.00 (0)
51-60	144	6.94 (10)	17.36 (25)	31.25 (45)	43.06 (62)	1.39 (2)	0.00 (0)	113	12.39 (14)	6.19 (7)	28.32 (32)	53.10 (60)	0.00 (0)	0.00 (0)
Total	705	6.52 (45)	11.77 (83)	32.91 (232)	48.23 (340)	0.57 (4)	0.00 (0)	717	5.99 (43)	11.16 (80)	31.94 (229)	49.93 (358)	0.98 (7)	0.00 (0)

Severe: < 16.0; Moderate: 16.1-17.0; Mild: 17.1-18.5; Normal: 18.6-25.0; Obese I: 25.1-30.0; Obese II: >30.0

'normal' grade exhibits higher percentages at all age groups of females and 'mild' degree of malnutrition is observed in high percentage than 'moderate' degree of malnutrition at all age groups. 'Severe' degree of malnutrition is found in low percentages than 'moderate' degree of malnutrition at all age groups except at the age group of 51-60 years where, the 'severe' degree of malnutrition is found in high percentage. 'Grade I obesity' is seen at the age group of 31-40 years only.

KEY WORDS Nutritional Status, Body Mass Index, Sugali, Tribal Population.

ABSTRACT Present study has been conducted to know the nutritional status of 1422 Sugali adults (705 males and 717 females) aged 21 to 60 years belong to 10 Sugali Thandas located in four mandals of Cuddapah district, Andhra Pradesh. The degree of malnutrition is assessed by using Body Mass Index (weight/height²). The study reveals that both Sugali males and females present high percent-

age in 'Normal' grade and less percentage in 'Severe' degree of malnutrition. 'Grade I obesity' is negligible in both males (0.57%) and females (0.98%).

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