



IMPACT OF SOCIOECONOMIC CONDITION ON NUTRITIONAL HEALTH STATUS OF URBAN ADOLESCENT BOYS

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ABSTRACT:

Adolescence is a period of physiological, psychological and cognitive changes, during which a child becomes an adult. During this period of life, the gonads produce hormones and the growth, function, and transformation of the voice, axillary body & broadening of shoulder. Nutritional status is a condition, as a result of the levels of nutrients in the body and the ability of those levels to maintain normal metabolic function. Socioeconomic status is a way describing individual's or group, based on their educational, economical and sociological combination. Aim of the study was to assess the nutritional status of the adolescence boys. Adolescent boys (50) aged 13-19 years were selected for the purpose belongs to urban area of Motihari (Bihar). Participant's socioeconomic data, food habits were collected through structured questionnaire and anthropometric measurements through different instruments. Overall mean age of participants was 16 years. The result came out as 26% adolescents who were undernourished based on BMI. Modernization is the significantly associated with nutritional status of respondent. Over & underweight both were found in all socioeconomic groups. Nutritional status of adolescence boys was affected by modernization nutritional awareness, occupation & social position of the family.

Keywords: Socioeconomic condition, Malnutrition, Adolescence, BMI

Introduction

Adolescence is named as transition from childhood to adulthood. On average, boys begin puberty at ages 11-12 years of ages and usually complete by ages 16-17. The major landmark of puberty for boys, it is the first ejaculation, which occurs on average at age 13. Boys experience their growth spurt about two years later, on average, than girls. Environmental factors also play a major role in biological changes during adolescence. During adolescence, many changes occurs such as biological, cognitive and socially that prepared for adult role. In the process of puberty, gonads produce hormones that stimulates growth, function and transformation of skin, hair, muscles, bones, brain and sex organs. Height and weight also changed. Nutritional status of an individual can be defined as it is influenced by the intake and utilization of nutrients. Nutritional health status is assessed by height, weight and the result is expressed as body mass index i.e. ratio of weight (kg) to height² (cm). Measurement of skinfold thickness, MAUC, is also major tools for estimation of body fat. Another method which are used for assess the nutritional health status are clinical sign, biochemical estimation and diet history. Changes in hair, nails, skin etc. shows nutritional adequacy or deficiency. Diet pattern is significantly associated with socioeconomic condition of family.

Socioeconomic status is defined as an individual's or family's economic and social position in reference to others, based on their income, education and occupation. Socioeconomic status of a family combined, total household income, education and social position of an earner's but an individual' shows their own combination.

The purpose of study is undertaken to know the impact of socio economic condition on nutritional health status in urban adolescent boys.

The objective of this study was to assess the nutritional status of the adolescent boys.

Review of Literature

Das D. Kumari S & Singh U.(2020) concluded by the studied on “effect of nutrition education and dietary counselling on the prevalence of anemia among adolescent girls belonging to different socio-economic background, samastipur district Bihar” adolescent girls were suffered from anemia due to lower socio-economic background poor nutrition education and dietary counselling, proper nutrition intervention and counselling must address not only the problem of anemia, but also in proper dietary habits and deficiencies of other micronutrients.

Kumar H, Kumar D & et.al; (2018) found that malnutrition is still a major problem that is indicated by anthropometric measurement. The major factor identified for this problem is illiteracy of mother and socio-economic status of their family.

Kumar Srivastava S. (2021) Associated factors and socio – economic inequality in the prevalence of thinness and stunting among adolescent boys & girls in Uttar Pradesh and Bihar. According to studies age, educational status, working status & wealth index were significantly associated with thinness among adolescents.

Methods and Materials

For this purposive study, subjects were adolescent boys aged 13- 19 years who belonging to urban area of Motihari, district East Champaran, Bihar. 50 adolescent boys were selected by purposive-cum incidental method. Socioeconomic data taken through structured questionnaire and anthropometric data through different tools such as weight was taken by weighing machine and height by stadiometer. MUAC taken by measuring tape. Diet history collected through 24 hours dietary recall method.

Results

Table-1: distribution by socioeconomic status

Socio-economic status	Participants	
	Number	Percentage
Low	14	28
Middle	30	60
High	6	12
Total	50	100

Table -2: Impact of socioeconomic status on nutritional status

Body mass index (BMI) (kg/m ²)	No.	Low SES		Middle SES		High SES	
		NO.	%	NO.	%	NO.	%
<18.5	13	5	38.46	6	46.15	2	15.38
18.5- 24.99	27	8	29.62	17	62.96	2	7.47
25- 29.99	7	1	14.28	5	71.42	1	14.28
>30	3	0	0	2	66.66	1	33.33
Total	50	14	28	30	60	6	12

Table -3: Impact of family size on nutritional status

No. of family member	No.	Body mass index (kg/m ²)							
		<18.5		18.5- 24.99		25- 29.99		>30	
		No.	%	No.	%	No.	%	No.	%
3-5	19	1	5.26	12	63.15	4	26.13	2	10.52
6-8	12	3	25	6	50	2	16.66	1	8.33
9-11	13	5	38.46	7	53.84	1	7.69	0	-
>12	6	4	66.66	2	33.33	0	-	0	-
Total	50	13	26	27	54	7	14	3	6

Table 4:- mean height and mean weight

Age group	Socioeconomic Group	Mean height (cm)	Mean weight (kg)
13-16 years	High & middle	155	57
	Low	152	50
17-19 years	High & middle	160	65
	Low	159	58

The nutritional status of adolescent boys belongs to lower socio economic condition was poor as compared to middle & upper socio economic condition. 38.46% boys from low socio economic group have BMI less than 18.5. 46.15 % and 15.38 % adolescence boys have less than 18.5 BMI belong to middle and high socioeconomic groups respectively. Respondent who have more than 30 BMI was belongs to middle and high socioeconomic status. In this study it was also found that outside food is more prefer than home food which was one of the major factor for their inadequate

nutrition. Most of the respondent were malnourished belongs to joint family and large family size. Results shows that boys between 13- 16 years who belong to middle & high socioeconomic group have mean weight 57kg and mean height 155cm, while age between 17-19 years have 65 kg and 160cm. adolescents boys age between 13- 16 years from low socioeconomic group have mean weight 50kg and mean height 152cm while age between 17-19 years have 58 kg and 159cm.

Conclusion

Over weight and underweight boys found in all socioeconomic groups. Nutritional health status of adolescence boys is affected by nutritional awareness, modernization, occupation & social position of the family.

Future Research: this study indicates the nutritional status of urban adolescent boys. This will help to implementation in nutritional awareness scheme to educate adolescent boys.

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