

Socio-Economic Conditions and Health Status and Physical Fitness of St Girl Students – A Study

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This paper is divided into 4 sections. Section-I deals with introduction, objectives and methodology. Section-II depicts the socio-economic conditions of the parents of sample respondent girls. Section-III examines the health care practices and physical fitness of Girl students. Section-IV presents the major findings, suggestions and conclusions.

SECTION – I

This section deals with the introduction, objectives, methodology and reviews of earlier studies.

According to 2011 census, the Tribal population is 10.43 crores accounting for 8.6 percent of the total population in India. The Tribals are economically backward and most of them are living in the forests and hilly areas. Tribals in India inhabit all states and union territories with the exception of Punjab, Delhi, Pondicherry and Chandigarh. 94 percent of the forest dwellers are tribals and they depend on the collection of minor Forest produce (MFP). Dependence on agriculture, limited use of modern technology, podu cultivation (some tribes), collective organization, production for consumption, barter system of exchange, improper division of labour, stagnant Socio-economic system and customs and traditions are some of the characteristics of the Tribals.

Apart from the socio-economic backwardness their health status is poor and worst among the primitive tribal groups. They are prone to seasonal diseases and some of them suffer from chronic diseases. They depend on local RMP's or village elders for treatment during illness. Customs, traditions and superstitions guide them even in the health related issues.

The state of Telangana was formed on 2nd June 2014 as the 29th state of India. It has the largest ST population among the states of South India (9.3%). Khammam district in the Telangana state has the largest ST population (27.4 percent) as per the 2011 census.

Malnutrition among children is a wide spread and complex problem that poses a serious threat to life in developing countries including India. Under nutrition in children and adolescents is determined normally through measurement of height, weight, skinfold thickness and age. Under weight is used as a composite indicator to immunity and ill-health problems.

A recent national review found that adolescents were commonly affected by both under and over nutrition, common mental disorder substance use and violence. Girls are particularly vulnerable. 45 percent of girls aged 15-18 have a BMI of less than 18.5.

OBJECTIVES

The main objectives of this study are as follows.

1. To analyse the socio-economic background of the parents of tribal girl students.
2. To examine the underweight in ST girl students due to malnutrition.
3. To examine the hemoglobin levels as an indicator of immunity.
4. To examine the health practices adopted by the tribals.
5. To suggest measures for improving health status and physical fitness.

METHODOLOGY

100 ST girl students are randomly selected from the ST self management college attached hostel in Khammam town. There are more than 300 girls students residing in this college girl's hostel. All these students are pursuing collegiate education of intermediate and degree courses. Most of these students belong to Lambada, Koya and Yerukula community. Hemoglobin percentage in the blood, height and

weight of all the 100 girls students are tested and recorded with the help of lab technicians for analysis. Socio-economic back ground of the parents of the girl students is also collected from them for analysis. Body mass index method is used to estimate the cases of underweight while Shalees method is used for HB test to estimate the level of immunity.

SECTION –II

This section deals with the socio-economic conditions of the parents of sample respondent girl students of the study. It covers age, literacy, nature of house, occupation, land particulars and annual income of the parents of the respondents.

Age indicates the physical stamina and capability to take up sustained work. Age particulars of the parents of sample respondents are examined in table-1 hereunder.

Table-1: Age particulars of the parents of sample respondents

Age	No. of respondents	%
31-35	10	10
36-40	26	26
41-45	38	38
46-50	15	15
51-55	8	8
56-60	3	3
Total	100	100

Source: Field study

Data shows that 74 percent of the parents of the respondents are within 31-45years of age. They can carry on physical work since they are active and effective. At the same time 26 percent of the parents of the respondent girl students are in the age group of 46-60 years. Parents of the respondents in the study belong to the competent work force as age is mostly in favour of them.

Education particulars of the fathers of the respondents are analysed in table-2, here under.

Table-2: Education particulars of the Fathers

Education level	No. of respondents	Percentage
Zero	65	65
Primary	10	10
Secondary	17	17
Inter	06	06
Degree	02	02
Total	100	100

Source: Field study

Education level is an important factor for the overall development of individual as well as family members by creating awareness in all aspects. Data shows that 65 percent of the fathers of respondents are having zero education level. It implies that 35 percent are having different levels of education. Among them 10 have completed primary level of education and 17 have completed secondary level of education. However, 6 percent have completed intermediate level of education and just 2 percent have completed degree level of education, which is commendable. Education levels of fathers of respondents are encouraging though literacy rate of the tribals is awfully low.

Education particulars of the mothers of respondent girl students are examined in table-3

Table-3: Education particulars of the mothers.

Education level	No. of respondents	Percentage
Zero	83	83
Primary	09	09

Secondary	05	05
Inter	03	03
Total	100	100

Source: Field study

It can be observed from the data that 83 percent of the mothers of respondents have zero level of education and only 17 percent have different levels of education. Among 17 percent, 9 percent have primary level of education, 5 percent have secondary level of education and just 3 percent have intermediate level of education. It implies very poor education levels are there in the study. Nature of the house owned by the parents of respondents is presented in table-4

Table-4: Nature of house of the parents of respondents

Nature of house	No. of respondents	Percentage
Pucca	73	73
Thatched	08	08
Tiles	06	06
Iron sheets	12	12
Hut	01	01
Total	100	100

Source: Field study

Data reveals that, 73 percent of the parents of the respondents have pucca houses, while those living in thatched houses are 08 percent and 6 percent are living in tile houses, 12 percent are living in iron sheet roofed construction houses and just 1 percent lives in Hut like constructions. Housing, to a large extent can be stated to be comfortable. Particulars of land ownership by the parents of respondents are shown in table-5

Table-5: Land particulars of the respondents family

Land in acres	No. of respondents	Percentage
Zero	43	43
1 - 2	20	20
3 - 4	18	18
5 - 6	08	08
7 - 8	03	03
9 - 10	06	06
Above 10	02	02
Total	100	100

Source: Field study

Data reveals that 43 percent of the respondent families have no land. It implies that 57 percent of the respondents families have lands. Around 45 percent of the land owning section is small and marginal farmers category and the remaining 12 percent are medium and big farmers category. Particulars of the occupation of parents of respondents is analysed in table-6

Table-6: Occupation particulars of the respondents family

Occupation	No. of respondents	Percentage
Agriculturel	57	57
Agricultural labour	24	24
Massionary	08	08
Petty business	05	05
Auto& trally drivers	06	06
Total	100	100

Source: Field study

Data shows that 57 percent are engaged in own agricultural activities as their main occupation. 23 percent are agricultural labour, 8 percent are engaged in construction work as massionary, 5 percent are involved in petty business and the remaining 6 percent are in the auto and trally driving activity as their occupations, to earn income for their family needs. Data with regard to the annual incomes of the families is furnished in table-7.

Table-7: Annual Income particulars of the Respondent households

Income range	No. of respondents	Percentage
25001-50000	19	19
50001 – 75000	31	31
75001 – 100000	39	39
100001 – 125000	05	05
125001 – 150000	03	03
Above 150000	03	03
Total	100	100

Source: Field study

Weaker sections earn income from two or more sources. Data shows that 70 percent of the respondent families have annual incomes of above Rs 50000 and below Rs 100000. While 19 percent have annual income ranging from Rs 25001 to Rs 50000. It is noted that 8 percent of the respondents have incomes between Rs 100001 to Rs 1, 50000, and just 3 per cent have incomes above Rs 1,50000. It can be stated that majority of the respondent families (89 percent) have below Rs 100000 as annual income.

Socio-economic background of the parents of sample girls students are elaborated so far, indicates the backwardness of the parents. Low incomes, dependency on agriculture and wide spread illiteracy as noted reveal the backwardness of the parents. The sample girl students in the project study have come from such a backward, where in nutritional deficiency is high and awareness levels are low besides affordability of the parents.

SECTION – III

This Section examines the health status, education and health care facilities of the sample respondent ST girl students. Age indicates the physical stamina. Age particulars of the sample respondents are presented in table-1

Table-1: Age particulars of the respondent students

Age in years	No. of respondents	Percentage
16	16	16
17	18	18
18	29	29
19	20	20
20	12	12
21	05	05
Total	100	100

Source: Field study

Data shows that 95 present of the students are below 20 years of age, while the remaing 5 percent are in the age group of 21 years. Caste particulars of the students are furnished in table-2.

Table -2: Caste particulars of the students

Caste	No. of respondents	Percentage
Lambada	62	62
Koya	29	29
Yerukula	09	09
Total	100	100

Source: Field study

Data indicates that 62 percent of the sample girls belong to Lambada tribe, 29 percent belongs to koya tribe and the remaining 9 percent belongs to yerukula tribe. Lambada tribe is dominant in this study.

Course wise distribution of the students is given in table-3.

Table -3: Course wise distribution of the students

Course	No. of respondents	Percentage
Inter 1 st year	29	29
Inter IInd year	14	14
Degree 1 st year	33	33
Degree 2 nd year	18	18
Degree 3 rd year	6	6
Total	100	100

Source: Field study

Data reveals that 43 percent of the students are in intermediate and 57 percent are in degree courses. Students in the degree courses are slightly more than those of intermediate courses.

Tribals are prone to seasonal diseases. Different diseases affecting the sample girl students and health problems are presented in table-4.

Table - 4: Health problems of the sample respondent students

Health problems	No. of respondents	Percentage
Headache	23	23
Breathing problem	08	08
Thyroid	03	03
Stomach pain	11	11
Fever & cold	21	21
None	34	34
Total	100	100

Source: Field study

Data shows that headache, general fever and cold are more as 44 percent of the sample students mention. Stomach pain is next disease as stated by 11 percent of the sample respondent followed by breathing problem (8 percent) and Thyroid (3 percent). It implies that the remaining 34 percent of the sample respondent students have no health problems.

Health facilities available to the sample respondent girl students in their villages are shown in table-5.

Table-5: Health facilities in the village

Health care facilities	No. of respondents	Percentage
Village elder	07	07
RMP	69	69
Govt doctor	13	13
RMP & Govt	08	08
PVT doctor	03	03
Total	100	100

Source: Field study

Data shows that 69 percent of the respondent girl students opined that RMP is the first priority to contact during illness. However 13 have stated Govt doctor, 7 village elders, 8 RMP & Govt doctor and just 3 stated Pvt doctor for contact during illness. It implies that nearly 84 percent of the sample respondents depend on unqualified agencies during illness as qualified doctors are not easily available.

In spite of the transformation of tribals to modernity in different degrees they stick to traditions and superstitious beliefs due to lack of education and awareness. Data furnished in table-6 examines this aspect.

Table-6: Do you believe in superstitious beliefs?

Response	No. of respondents	Percentage
Yes	37	37
No	63	63
Total	100	100

Source: Field study

It can be noted from the data that 37 percent of the respondent girl students opined that, they follow superstitious beliefs in their social living. By Nature, tribal societies are shunned and are averse to change. However, 63 percent of the sample respondent girls do not believe in them. A progressive change has taken place in the tribal community due to education.

With the background discussed so far the physical fitness of the sample respondents is examined in the following tables.

Hemoglobin percentage is examined in table-7 given here under.

Table-7: Hemoglobin percentage of the students

Hemoglobin percent	No. of respondents	Percentage
Up to 50	31	31
51 – 52	08	08
53 – 54	10	10
55 – 56	09	09
57 – 58	06	06
59 – 60	02	02
60 – 61	06	07
61 – 62	06	06
63 – 64	07	07
65 – 66	05	05
67 – 68	04	04
69 – 70	02	02
71 – 72	02	02
73 – 74	01	01
75 – 76	01	01
Total	100	100

Source: Field study

Data in the table shows the Hemoglobin content worked out in shales method pertaining to sample respondent girls. Hemoglobin content of 60 percent is to be treated as normal.

Data in the table shows that 66 percent of the sample respondent girls have less than 60 percent of the Hemoglobin content in the blood. In other words their general health and immunity levels are relatively low and they are susceptible to different diseases. 31 percent of the girls do not have even 50 per cent of Hemoglobin. About 34 percent of the sample girls are normal with above the required levels of Hemoglobin in blood.

Height particulars of the sample respondent girl students are presented in table-8

Table – 8: Height particulars of the students

Heights in (cms)	No. of respondents	Percentage
146 – 150	28	28
151 – 155	33	33
156 – 160	31	31
161 – 165	08	08
Total	100	100

Source: Field study

As per the data shown in the table 61 percent of the sample respondent girls are below 155 cm is height and the remaining 39 percent are above 155 cms. However, 8 percent of the girl students are in the range of 161-165 cms.

Weight particulars of the sample respondent girl students are shown in the table-9

Table-9: Weight particulars of the students

Weights in kg	No. of respondents	Percentage
36-40	32	32
41-45	29	29
46-50	19	19
51-55	15	15
56-60	03	03
61-65	02	02
Total	100	100

Source: Field study

Weight of the sample girls is shown in the table. It is found that 32 percent of the girl students are in 36-40 kgs of weight, while 29 percent in 41-45 kgs of weight. 19 percent have 46-50 kgs of weight while the remaining 20 percent have above 50 kgs of weight.

In the medical field the required weight for a given height is given in the tabular form. Under weight as an indicator of malnutrition is worked out in the study by taking the table figures as the basis. This aspect is analysed in table 10, given here under.

Table-10: Weight particulars (Less or over) of the students

Weight in kgs	No. of students	Percentage	Average HB %
0-5 kgs(+) or (-)	38	38	62
6-10 kgs less	19	19	53
11-15 kgs less	21	21	42
16-20 kgs less	17	17	41
Up to 10 kgs over weight	05	05	68
Total	100	100	

Source: Field study

The above table depicts the plus or minus, above or below the required weight and HB percent. Plus or minus 5kgs of weight in relation to the required weight is of little significance. It is noted that 38 percent of the respondent girls are in this category with HB percentage on an average of 62 percent which is above the normal. It implies that 38 percent of the sample respondent girl students have physical fitness, both in terms of body weight and HB requirements. Further, 19 percent of the sample respondent girl students have 6-10 kgs of less than required weight and their Hemoglobin content in the blood on an average is less than the normal level(53), 21 percent sample respondent girls have 11-15 kgs less than required weight and their HB percent level is just 42, less than required and 17 percent of the sample respondent girls have less than 16-20 kgs of required weight and the hemoglobin level is 41 percent, which is less than required. However, 5 percent of the sample respondent girl students have up to 10 kgs of overweight and the Hemoglobin level is 68 percent. By and large 57 percent of the sample respondent girls are in the underweight category with Hemoglobin content of less than the required 60 percent.

SECTION – IV

This section provides the major findings, suggestions and conclusions based on the study.

FINDINGS

1. Illiteracy is rampant among the sample parents as 65 percent of the fathers and 83 percent mothers are illiterates.
2. Housing facilities are comfortable as 73 percent sample respondent households have pucca houses.

3. Land less parents of the respondents are 43 percent while land owning section is 57 percent.
4. Agriculture and agricultural labour are the important occupations of the parents and it is 81 percent.
5. Majority of the sample respondent families have annual incomes of below Rs 100000 and it is around 89 percent.

WHEN IT COMES TO THE RESPONDENT GIRLS

1. 95 percent of the sample respondents are below 20 years of age, 62 percent belongs to Lambada caste, 29 percent belongs to koya and just 9 percent belongs to Yerukula caste. Thus, the sample represents three tribes.
2. 43 percent of the sample respondent girls are studying inter first and second years and 57 percent are studying degree courses.
3. With regard to health problems, 44 percent of the sample respondent girl students suffer from headache (23%) and general fever and cold (21%) and rainy season is one of the reasons for the above said health problems. Further, 11 percent stated suffering with stomach pain, due to food problem and breathing problem has been mentioned by 8 percent while 3 percent stated thyroid as the problem.
4. 84 percent of the sample respondents depend on unqualified agencies during illness as qualified doctors are not easily available.
5. 66 percent of the sample respondent girls have less than the required Hemoglobin level in blood. General health and immunity levels are relatively low and they are susceptible to different diseases. About 31 percent of the girls do not have even 50 percent of Hemoglobin in their blood.
6. All the girls belong to the adolescent group and 57 percent suffer from under weight due to malnutrition. Just 5 percent of the girls suffer from over weight.
7. It has been noted from personal observation that eggs and dall contents in their food in take in the hostel are not sufficient. Milk and milky items are not provided and only butter milk is made available.
8. It is also noted that physical activities like games and sports and entertainment facilities are not available to the sample girls in the hostels.
9. Due to lack of education and awareness tribals stick to traditions and superstitions despite their exposure to modernity.

Underweight, low HB level, lack of physical activities and exercises has their impact on the concentration of the girls on study. Most of them are appearing dull and inactive. They are not able to cope-up with their studies in the colleges as they have to compete with the girls of general population and this creates stress and they are always in tension of some sort.

SUGGESTIONS

1. Nutritious food is to be given top most priority in the hostels where ST girl students reside.
2. Medical check ups from time to time to locate the problems be taken up with qualified doctors.
3. Games and sports, physical exercises, yoga and entertainment facilities be provided in the hostels to improve the physical fitness.
4. The girl students must be involved in activities like NSS and NCC.
5. Health facilities in the tribal habitations are to be improved. Nutritious food items be supplied to the marginalized sections like the tribals through the public Distribution system (PDS).

CONCLUSION

Education, as Swamy Vivekananda put it, should be "Proportional development of body, mind and the soul". Policy makers and stake holders in Tribal Development are to address the health related issues to further improve the welfare of the tribals in general and of the tribal youth in particular.

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