



INFLUENCE OF PARENTAL OCCUPATION ON NUTRITIONAL STATUS OF ADOLESCENT GIRLS OF OTHER BACKWARD CLASS (OBCs), SAGAR DISTRICT, MADHYA PRADESH

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Rajul Raikwar, Research Scholar
K.K.N. Sharma, Professor & Head
Department of Anthropology,
Dr. H. S. G. Vishwavidyalaya, Sagar, M.P.



Abstract

The cross-sectional study was carried out on purposively selected 600 high school going girls of Other Backward Class (OBC) of Sagar district, Madhya Pradesh. A pre-tested semi-structured questionnaire used for collection of information regarding the socio-economic status and anthropometric measurements were taken for the assessment of nutritional status. It was found that the majority of the population belongs to the low socio-economic profile and a maximum of them was engaged in low daily wages occupation like Labours, Farmers etc. Nearly one-third of girls (25%) were observed as malnourished. Out of them 4% girls were found as severely undernourished. The anthropometric measurement shows a statistically positive association between family socio-economic-status and parental occupation ($p < 0.01$). The studied Other Backward Class (OBC) adolescent girls were found backward in terms of socio-economical status, health and nutritional status especially those whose parental occupation is low are chronically malnourished.

Keywords: Health and Nutrition, Parental Occupation and Adolescence.

Introduction

Nutritional status of an adolescent is an important determinant of health outcomes

especially in the case of poor nutritional status. Parental occupation plays the very important role in health & nutrition of any adolescent children because in this period they are fully dependent on parents especially in the case of adolescent girls because they are the vulnerable part of the population and undergoes several physical changes during this period of age. Many r have been done on socio-economic status, occupation and nutritional status in developed and developing countries some of them are mentioned here. Galobardes et al. (2000) worked on The Differential Effect of Education and Occupation on Body Mass and Overweight in a Sample of Working People of the General Population in Geneva, Switzerland. They found that men are overweight than women. Education and occupation were directly related to the Body Mass Index especially in the case of women. The present study aims to assess the current growth pattern and nutritional status of adolescent girls of Sagar, Madhya Pradesh and also try to find out the correlation between parental occupation, health, and nutritional status.

Study Area and Population

This study is conducted in Sagar, Madhya Pradesh, India. For this study we selected Other Backward Class adolescent school



going Girls, Other Backward Classes (OBCs) is a collective term used by the Government of India to categorize castes which are socially and educationally disadvantaged. In the Indian Constitution, Other Backward Classes are described as "socially and educationally backward classes". Other Backward Classes (OBCs) in Sagar district is 39.5% (according to 2001 census) & 55% (according to 2002 BPL survey data). Lodhi, Patel & Yadav are the prominent caste which covers more than sixty percent of the total of Other Backward Class (OBC) residing in different places in Sagar districts of Madhya Pradesh. This covers more than sixty percent of the total Other Backward Classes population in Sagar district.

Methodology

The cross-sectional study was carried out on purposively selected 600 high school adolescent girls of Other Backward Class (OBC) of Sagar district Madhya Pradesh. Schools were selected by using data from the district education department. A pre-tested semi-structured questionnaire used for collection of information regarding the socio-economic status and anthropometric measurements were taken for the assessment of nutritional status using standardized tools.

Results

TABLE NO. 1
BMI FOR AGE CLASSIFICATION OF ADOLESCENT GIRLS

| S. No. | Classification | N (%) | Mean | SD | SE | Min. | Max. |
|--------|-----------------------|-------------|------|-----|-----|------|------|
| 1. | Severe Malnutrition | 22 (3.7%) | 1.00 | .00 | .00 | 1 | 1 |
| 2. | Moderate Malnutrition | 112 (18.7%) | 2.00 | .00 | .00 | 2 | 2 |
| 3. | Normal | 460 (76.7%) | 3.00 | .00 | .00 | 3 | 3 |
| 4. | Over weight | 6 (1.0%) | 4.00 | .00 | .00 | 4 | 4 |
| | Total | 600 (100%) | 2.75 | .21 | .53 | 1 | 4 |

Table no. 1 revealed the BMI for age classification, Mean and Standard deviation of Other Backward Class adolescent girls. A

majority (76.7%) of girls are normal. Nearly one-thirds of girls (25%) were observed as malnourished. Out of them (4%) girls were found as severely undernourished, while the prevalence of overweight was (1.0%).

TABLE NO. 2
DISTRIBUTION OF FATHER'S OCCUPATION

| S. No. | Father's Occupation | N (%) | Mean | SD | SE | Min. | Max. |
|--------|----------------------|-------------|------|------|-----|------|------|
| 1. | Farmer | 256 (42.7%) | 2.79 | 0.46 | .03 | 1 | 4 |
| 2. | Labour | 305 (50.8%) | 2.71 | 0.57 | .03 | 1 | 4 |
| 3. | Government Employees | 5 (0.8%) | 3.00 | 0.00 | .00 | 3 | 3 |
| 4. | Private Employees | 5 (0.8%) | 2.60 | 0.89 | .40 | 1 | 3 |
| 5. | Businessman | 23 (3.8%) | 2.73 | 0.54 | .11 | 1 | 3 |
| 6. | Unemployed | 6 (1.0%) | 2.66 | 0.81 | .33 | 1 | 3 |
| | Total | 600(100%) | 2.75 | 0.53 | .02 | 1 | 4 |

Table no. 2 shows the distribution of father's occupation; (42.7%) are the farmer, (50.8%) are Labours, (0.8%) are Government Employees, (0.8%) are Private Employees, (3.8%) are Businessman and rest are unemployed (1%).

TABLE NO. 3
DISTRIBUTION OF MOTHER'S OCCUPATION

| S. No. | Father's Occupation | N (%) | Mean | SD | SE | Min. | Max. |
|--------|---------------------|-------------|------|-----|-----|------|------|
| 1. | Farmer | 67 (11.2%) | 2.79 | .47 | .05 | 1 | 4 |
| 2. | Labour | 80 (13.3%) | 2.67 | .61 | .07 | 1 | 4 |
| 3. | House wife | 432 (72.0%) | 2.76 | .50 | .02 | 1 | 4 |
| 4. | Aasha Worker | 4 (0.7%) | 3.00 | .00 | .00 | 3 | 3 |
| 5. | Bidi Worker | 16 (2.7%) | 2.37 | .88 | .22 | 1 | 3 |
| 6. | Teacher | 1 (0.2%) | 3.00 | - | - | 3 | 3 |
| | Total | 600 (100%) | 2.75 | .53 | .02 | 1 | 4 |

Distribution of Mother's Occupation, Mean and Standard Deviation is presented in Table no. 3. It is apparent that the majority (72%) of the mothers are Housewife. Nearly (25%) mother's belongs to low-income occupation (farmer, Labour & Bidi worker). Less than (3%) mothers are government employees.



TABLE NO. 4
DISTRIBUTION OF BODY MASS INDEX OF ADOLESCENT GIRLS AS PER FATHER'S OCCUPATION

| S No | Father's Occupation | BMI for Age Classification | | | | | Tot. |
|-------|---------------------|----------------------------|----------------|-------------|----------|-------|------|
| | | Severe Malnut. | Moder. Malnut. | Normal | Over Wt. | Obese | |
| 1. | Farmer | 3 (1.2%) | 50 (19.5%) | 200 (78.1%) | 3 (1.2%) | - | 256 |
| 2. | Labour | 16 (5.2%) | 58 (19%) | 228 (74.8%) | 3 (1%) | - | 305 |
| 3. | Govt. Employees | - | - | 5 (100%) | - | - | 5 |
| 4. | Private Employees | 1 (20%) | - | 4 (80%) | - | - | 5 |
| 5. | Businessman | 4 (4.3%) | 8 (17.4%) | 38 (83.3%) | - | - | 23 |
| 6. | Unemployed | 16 (16.7%) | - | 8 (83.3%) | - | - | 6 |
| Total | | 22 (3.67%) | 12 (18.67%) | 60 (76.66%) | 1 (1%) | - | 600 |

Cross-tabulation (Table 4,) shows the Distribution of Body Mass Index of Adolescent Girls as per Father's Occupation. It is apparent that the high prevalence of Severe Malnutrition is found; Farmer (1.2%), Labour (5.2%), Private Employes (20%), Businessman (4.3%), and Unemployed (16.7%). Moderate Malnutrition: Farmer (19.5%), Labour (19%). Overweight: Farmer (1.2%) & Labour (1%). Rest are coming under the normal category.

TABLE NO. 5
DISTRIBUTION OF BODY MASS INDEX OF ADOLESCENT GIRLS AS PER MOTHER'S OCCUPATION

| S No | Mother's Occup. | BMI for Age Classification | | | | | Tot. |
|-------|-----------------|----------------------------|------------------|--------------|----------|-------|------|
| | | Severe Malnut | Moderate Malnut. | Normal | Over Wt. | Obese | |
| 1 | Farmer | 1 (1.5%) | 13 (19.4) | 52 (77.6%) | 1 (1.5%) | - | 57 |
| 2 | Labour | 4 (5.0%) | 20 (25%) | 54 (67.5%) | 2 (2.5%) | - | 80 |
| 3 | Housewife | 13 (3%) | 77 (17.8%) | 339 (78.5%) | 3 (0.7%) | - | 432 |
| 4 | Aasha worker | - | - | 4 (100%) | - | - | 4 |
| 5 | Bidi worker | 4 (25%) | 2 (12.5%) | 10 (62.5%) | - | - | 6 |
| 6 | Teacher | - | - | 1 (100%) | - | - | 1 |
| Total | | 22 (3.67%) | 112 (18.67%) | 460 (76.66%) | 6 (1%) | - | 600 |

Cross-tabulation shows the Distribution of Body Mass Index of Adolescent Girls as per

Mother's Occupation in Table 5. It reveals that the high prevalence of Malnutrition found in those adolescent girls whose mothers are Labour (5.0%), Housewife (3%) and Bidi worker (25%). Moderate Malnutrition was found in Farmer (19.4), Labour (25%) and Housewife (17.8%). Nearly (4%) are Overweight (Farmer & Labour) & Rest are coming under the normal category.

To understand the correlation between parental occupation and nutritional status f test (one-way ANOVA) were computed and presented in Table no.6. It is apparent from the table that there is a positive significant correlation found between father's occupation, mother's occupation, and Body Mass Index ($p < 0.05$).

TABLE NO. 6
ONE WAY ANOVA (F TEST) TEST BETWEEN FATHER'S OCCUPATION, MOTHER'S OCCUPATION WITH BMI FOR AGE OF ADOLESCENT GIRLS.

| S. No. | Variable | df | F | Significance |
|-----------------------------|--------------------|----|-------|--------------|
| 1 | Fathers Occupation | 3 | 2.678 | .046* |
| 2 | Mothers Occupation | 3 | 2.618 | .050* |
| Significant at $P < 0.05^*$ | | | | |

Discussion

Results from the cross-sectional study of the influence of parental occupation on the nutritional status of adolescent girls aged 10-17 years belong to other backward class (OBC) from Sagar, Madhya Pradesh are reported. The overall finding revealed that majority of the girls (76.7%) are normal and approximately 24% of girls are malnourished (.). The high prevalence of malnutrition and thinness is commonly reported by the developing countries. Deshmukh et. al. (2006) reported 53.8% of adolescents are malnourished in rural Wardha. Parents of



maximum girls are coming from low socio-economic groups (farmer, Labour, housewife etc). Prevalence of malnutrition is high in occupational groups such as labors, farmer and housewife's as compared to Children of employed parents. De (2017) reported the prevalence of malnutrition is 42.3% among the children of illiterate parents which is less in the case of literate mothers. In the present study correlation between Body Mass Index and parental occupation found significant ($p < 0.05$). Bruna et. al (2000) also discussed in their study that there is a correlation between occupation and BMI.

Conclusion

The studied Other Backward Class (OBC) adolescent girls were found backward in terms of socio-economical status, health and nutritional status especially those whose parental occupation is low are chronically malnourished. Significant correlation found between parental occupation and the nutritional status of adolescent girls. More research is essential to be investigating the possible ways of how parent's occupation affects the nutritional status of adolescent girls because they are pillars of next generations. So, there is an urgent need for programmes and policies for the improvement of their health & nutritional status.

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