



NUTRITIONAL STATUS OF UNDER 5 CHILDREN ATTENDING IMMUNO-PROPHYLAXIS CLINIC AT TERTIARY HEALTH CARE SETTING - A CROSS SECTIONAL STUDY FROM CENTRAL INDIA

Ujwala U. Ukey

Associate Professor, Community Medicine, GMCH Nagpur.

Sarita Wadhwa Sharma*

Associate Professor, Community Medicine, GMCH Nagpur.

*Corresponding Author

Vipul N. Deotale

Post Graduate student, Community Medicine, GMCH Nagpur.

ABSTRACT

Background-Poor nutrition is a major global health concern. In India, undernutrition among children under five remains a significant issue. This study aims to assess the nutritional status of children attending an immune-prophylaxis clinic in Central India. **Methods**-A cross-sectional study was conducted with 147 children under five years. Data on weight, height, and mid-arm circumference was collected through interviews. Ethical approval and informed consent were obtained before data collection. **Results**- Most children (87.07%) were of normal weight, and 97.27% had normal height. Only 2.73% were stunted, and mid-arm circumference was normal for most participants. **Conclusions**- The nutritional status of children in this study was largely normal, likely due to the urban setting and regular immunization clinic visits.

KEYWORDS : Under nutrition, children under five, nutritional status, weight for age, height for age, stunting, immune-prophylaxis

INTRODUCTION

World Health Organization considers that poor nutrition is the single most important threat to the world's health. Worldwide, approximately 1.9 billion adults are overweight, while 462 million are underweight.¹ Overweight or obese children under the age of five years are estimated to number 41 million, with 159 million stunted and 50 million wasted. Globally, one quarter of under five children are stunted (estimated 162 million). South Asia particularly has a high prevalence of stunting (38%), underweight (32%) and alarmingly high percentage of wasting (16%) as compared to other regions in the world.^{2,3} As per National Family Health Survey III, 48% children in India are stunted, 43% wasted and nearly 20% are under weight. Maharashtra state is performing better in terms of stunting (46.3%) and wasting (16.5%), but the percentage of under weight children is higher (37%) as compared to national level statistics.⁴ Multiple and interrelated determinants are responsible for under nutrition.⁵ With this background the present study was carried out to assess the nutritional status of under 5 year children attending to immune prophylaxis clinic at a tertiary health care setting.

MATERIAL AND METHODS-

A hospital based cross sectional study was conducted at the immuno-prophylaxis clinic attached to a tertiary health care setting in Central India. Study subjects were children aged less than 5 years whose parents gave consent to participate in this study. The study was conducted over 6 months. Convenience sampling technique was used to cover the sample of 147 estimated based on prevalence of underweight among ≤5 year as 24.5% among under five children in the reference study⁵ and absolute precision 7% and desired confidence level 95%. Data was collected from parents of the study subject after explaining them the nature and purpose of study with aid of a predesigned structured questionnaire using face-to-face interview. Data was entered in microsoft office excel software.

Ethical considerations-Approval from Institutional Ethics committee was sought. Informed written consent in subject's vernacular language was taken from the parents of the children.

RESULTS

The nutritional status of the study subjects was assessed by doing their anthropometric measurements. Less than one year age children constitute total 102 while remainder 45 were 1-5 years age. Male subjects were 71 and female were 76. Ninety-

nine children belonged to nuclear, 44 to joint and 4 to three generation family. Weight for age and height for age is shown in tables 1 and 2 respectively.

Table 1. Distribution Of Study Subjects As Per Weight For Age

Weight	No. of subjects	Percentage (%)
Normal weight	128	87.07%
Under weight	19	12.93%
Total	147	100%

Table 2. Distribution Of Study Subjects As Per Height For Age

Height	No. of subjects	Percentage (%)
Normal height	143	97.27%
Stunted	4	2.73%
Total	147	100%

Mid arm circumference was measured using a non-elastic tape in centimeter. It is displayed in figure 1.

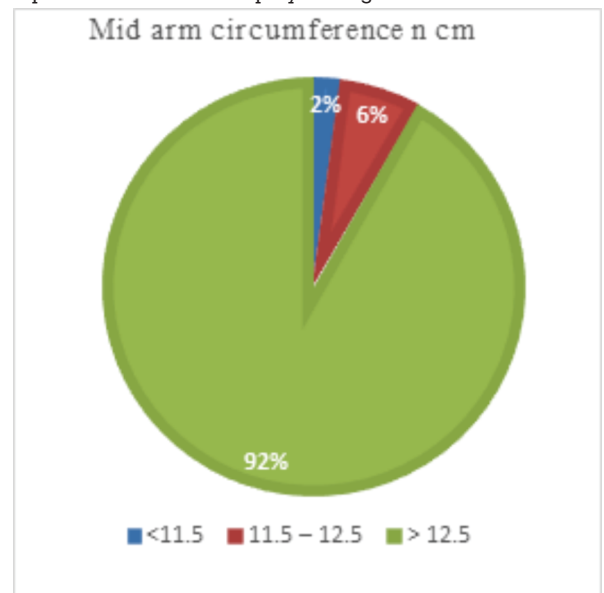


Figure 1. Distribution of study subjects according to their mid arm circumference in centimeter

DISCUSSION

In the present study majority of the study participants i.e more

three-froths were in normal weight category. Most of the participants were having height for age in the normal range. Similarly the mid arm circumference of the under five children in the present study was more than 12.5 cm which is also in the normal group. Thus most of the children from the present study were found to have normal nutritional status. This could be because these children belonged to urban area and attained the immune prophylaxis clinic regularly. These findings are similar to that of other researchers also.^{5,6} Another study has however revealed a higher occurrence of poor nutritional status.⁷

CONCLUSIONS

Nutritional status of under five children in the present study is satisfactory and normal as obvious from the weight for age, height for age and mid arm circumference which is in normal range for majority of the study subjects.

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