

**INTERNATIONAL JOURNAL OF FOOD AND  
NUTRITIONAL SCIENCES**

**IMPACT FACTOR ~ 1.021**



**Official Journal of IIFANS**

## PREVALENCE OF MALNUTRITION AMONG CHILDREN UNDER (1-5 YEARS) OF LOW INCOME GROUP

Sadaf Noorain<sup>1\*</sup> and Zoya Nureen<sup>1</sup>

\*Corresponding Author: Sadaf Noorain, ✉ sadafnoorain28@gmail.com

Received on: 4<sup>th</sup> May, 2018

Accepted on: 7<sup>th</sup> June, 2018

Malnutrition during childhood can affect the growth potential and risk of morbidity and mortality in later years of life. Malnutrition continues to be a major public health problems in developing countries. Nutrition plays an Important role in development of growth and development of child.in many developing countries poor nutritional status is mainly due to illiteracy, poverty, least job opportunities, etc., poor hygiene, intestinal infection, worm infestation are another important groups leading to malnutrition in india. The objective of the present study is to evaluate the level of malnutrition and the impact of socio economic and demographic factors of household on the nutritional status under 5 years of age in Hyderabad. A cross sectional study was conducted using a structural questionnaire. A sample of 100 children belonging to the low income group were selected along with theirs mothers.the primary outcome variables were height, weight, gender, age of the children. The rate of the underweight, stunting, wasting, and overweight were calculated, the rate of its are 7%, 13%, 5%, 3% respectively.the rate of malnutrition increases with the childs age. Role of mothers nutritional status during pregnancy, breast feeding, weaning, knowledge of proper health care could be the leading cause of malnutrition in children.

**Keywords:** Malnutrition, Wasting, Stunting, Nutritional awareness

### INTRODUCTION

Adequate nutrition is essential in early childhood to ensure healthy growth, proper organ formation and function, a strong immune system, neurological and cognitive development. Economic growth and human development require well nourished populations who can learn new skills, think critically and contribute to their communities. Child malnutrition impacts cognitive function and contributes to poverty through impeding individuals' ability to lead productive lives. In addition, it is estimated that more than one-third of under-five deaths are attributable to undernutrition.

Malnutrition is known to produce high morbidity and mortality, and considering its effect on the oral cavity,

malnutrition is shown to have pre eruptive and post eruptive effects. Nutrition exerts systemic effect upon the dentition via the pulpal blood supply and the saliva. Poor bone calcification, retarded centers of ossification, small teeth, delayed tooth eruption, retarded jaw growth, and crowded dentition have been related to protein deficiency during the critical growth period. A single, prolonged, mild to moderate malnutrition episode in the first year of life may result in higher primary dentition caries rates, an increase in permanent dentition caries and that the caries risk may be mediated by means other than enamel hypoplasia.However, in developing countries, in the absence of dietary sugars, undernutrition is not associated with dental caries.

It is important, therefore, to further understand and classify the prevalence and status of malnutrition in hospital

<sup>1</sup> Department of Nutrition and Dietetics, Anwar Uloom College, Mallepally, Hyderabad, India.

and facility-based populations, as studies focusing on community prevalence cannot provide us with subpopulation data allowing us to determine whether hospital and facility-based nutrition interventions would reach malnourished children. Where larger data sets examine district wide rates of malnutrition, this study investigated how rates of malnutrition remain higher than desired even within hospital and facility-presenting populations, which suggests increased nutrition efforts at centralized hospital and facilities locations could benefit overall population nutrition efforts.

Kwashiorkor or bi-lateral oedema is characterised by bilateral pitting oedema (affecting both sides of the body) in the lower legs and feet which as it progresses becomes more generalised to the arms, hands and face. Oedema is the excessive accumulation of fluid in body tissues which results from severe nutritional deficiencies. Marasmic Kwashiorkor or combined wasting and bilateral pitting oedema are a combination of both marasmus and kwashiorkor and is characterized by the presence of both wasting and bilateral pitting oedema.

**METHODOLOGY**

This survey was aimed to study the incidence of malnutrition in children of 1-5 years of age belonging to the low income group.

**Selection of Location:** The children were selected from two different places, Sample was selected from film nagarslum area, shamshabad maheshwaram area in Hyderabad city for present study.

**Selection of Sample:** A total of 100 children of the age group 1-5 years belonging to the low income group were selected.

**Data Collection Method:** The data was collected by preparation of a questionnaire, standardization of recipes and 1.

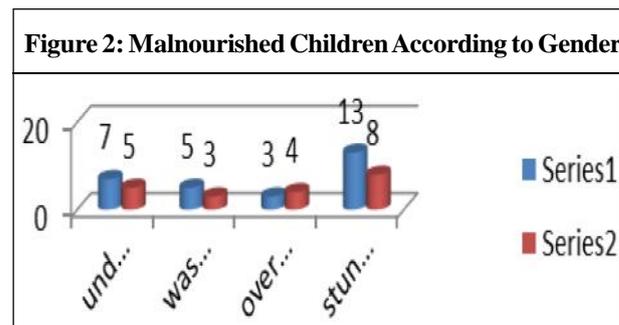
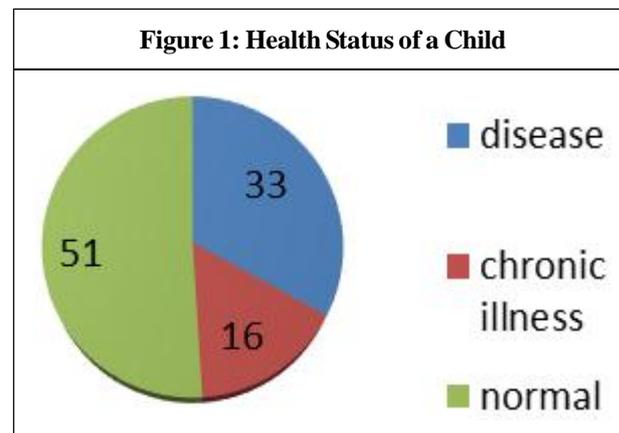
**Day Diet:** Recall of the respondents was taken.

**Period of Study:** January-April 2018.

**Construction of Questionnaire:** A structured questionnaire was prepared which was divided broadly into two parts: one for the mother and the other for the child. Information about the child included personal details, anthropometric measurements, clinical information and eating pattern of the child. Information of the mothers included the mother's anthropometric measurements, their education, knowledge, attitude and practices. The degree and type of malnutrition

among the children of the low income group were determined and classified by calculating the height for age and weight for age and comparing with the references. Percentages were calculated for analysis of the clinical assessment of the children. The results were represented in the form of tables, pie charts and bar graphs.

**RESULTS AND DISCUSSION**



**Clinical Examination**

**Table 1: Nail Examination**

Pigmented	Brittle	Soft	Normal
29	25	27	19

**Table 2: Hair Examination**

Dry	Rough	Discoloured	Thin	Normal
32	50	6	6	6

**Table 3: Mouth Examination**

Angular Stomatitis	Glossitis	Bleeding Gum	Normal
4	6	40	50

## CONCLUSION

Malnutrition among children is often caused by the synergistic effects of inadequate or improper food intake, repeated episodes of parasitic or other childhood diseases such as diarrhoea and improper care during illness. The rates of children suffering from frequent attacks of infections, diarrhoea, abdominal discomforts, cold and cough, fever were also very high. Gender bias was an important reason for malnourishment among girl child in the slums. Traditional beliefs and customs was an alarming cause for cessation of exclusive breast feeding was another pregnancy of the mother in about 55% of the cases. The dietary intakes of the children were inadequate and failed to meet the recommended allowances which could have led to poor health of the children and at large made the children susceptible to frequent infections. Poor hygiene and sanitary conditions are also the reasons of these infections. The mother's nutritional status, lack of awareness and knowledge as well as early pregnancy and multiple births affected the nutritional status of the child.

## ACKNOWLEDGMENT

The authors would like to thank the HOD of Anwarul Uloom College for moral support and all the members of slum areas visited for data collection.

## BIBLIOGRAPHY

- Black R E, Allen L H, Bhutta Z A, Caulfield L E, de Onis M, Ezzati M, Mathers C and Rivera J (2008), "Maternal and Child Undernutrition Study Group, Maternal and Child Undernutrition: Global and Regional Exposures and Health Consequences", *Lancet*; Vol. 371, pp. 243-260.
- Damanjeet Kaur and Mayuri Sen (2017), Deptt. of Food Science & Nutrition Management, J.D. Birla Institute, Kolkata, M.Sc. in Food & Nutrition, Vol. 4, No. 7.
- Omar Ali Juma<sup>1</sup>, Zachary Obinna Enumah, Hannah Wheatley, Mohamed Yunus Rafiq, Seif Shekalaghe, Ali Ali, Shishira Mgonia and Salim Abdulla, Juma *et al.* (2016), *BMC Public Health*, Vol. 16, p. 1094, DOI: 10.1186/s12889-016-3751-0.
- Punitha V C and Sivaprakasam P (2014), "Jaypee Oral Health Community Dental", Vol. 8, No. 1, pp. 12-15.

