Original Article

A Comparative Study to Assess the Nutritional Status of Preschool Childern in Selected Rural and Urban Areas, Of Fatehgarh Sahib, Punjab

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Abstract

Malnutrition is like an iceberg, most people in the developing countries live under the burden of malnutrition. Pregnant women, nursing mother and children are particularly vulnerable to the effects of malnutrition. Malnutrition is widely prevalent among weaned infants and preschool children. The aim of the present study is to assess the nutritional status of urban and rural preschool children.

OBJECTIVES (1) To Assess the nutritional status of rural area preschool children. (2) To assess the nutritional status of urban area preschool children. (3) To compare nutritional status among rural and urban area preschool children. (4) To determine associations between nutritional status of rural and urban preschool children with selected socio demographic variables. (5) To develop pamphlet regarding recommended daily allowance for preschool children. **DESIGN:** Non experimental comparative design was selected for the study. **APPROACH:** A descriptive survey approach was used. **SUBJECTS:** The participants were 120 preschool children, 60 from saunti (rural) and 60 from gobindgarh (urban), Punjab.

METHOD: A purposive sampling technique was used to select the sample for study. **DATA COLLECTION TOOL:** An interview schedule and observation check list was used to collect data from the subjects. **DATA ANALYSIS:** The obtained data was analysed using descriptive and inferential statistics and interpreted in terms of objectives and hypothesis of the study. The level of significance was set 0.05 levels.

RESULTS: The researcher found the rural preschool children nutritional status 66.7% (40) had moderate nutritional status and 33.3% (20) had adequate nutritional status. Regarding urban preschool children nutritional status, 30.0% (18) had moderate nutritional status, and 70.0% (42) had adequate nutritional status.

CONCLUSION: From the analysis report the researcher concluded that there is significant difference between nutritional status of urban and rural preschool children and distributed pamphlet regarding RDA to mothers of preschool children with a view to improve the nutritional status.

Key words: Preschool children, Rural area, Urban area, Nutritional status, Malnutrition, Pamphlet, Recommended Daily Allowance.

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Introduction

(Hailu A, TessemaT. Ethiopian MedicalJournal.1997 Oct; 35(4):235-44) Malnutrition has been defined as "a pathological state resulting from a relative or absolute deficiency or excess of one or more essential nutrients". The effects of malnutrition on the community are both direct and indirect. The direct effects are nutrition deficiency diseases and indirect effects are a high morbidity and mortality among young children. According to data collected by National Nutrition Monitoring Bureau in 10 states in India, the percentage of preschool children suffering from severe, moderate, mild and no malnutrition was 8.4, 34.4 and 14.3 respectively.**01 (Dr. Dheeraj. 2010; 41; 682-696)** Nutrition may be defined as the science of food and its relationship to health. It is concerned primarily with the part played by nutrients in body growth, development and maintenance; Food means not only proteins, fats, minerals, vitamins and other nutrients- but much more; it is part of security and civilization. Nations and civilizations are linked together not only by ideas, but also by bread. Hunger and malnutrition are problems everywhere and have harassed mankind and threatened peace throughout history Today, malnutrition is less visible. We need more sophisticated understanding of this dangerous problem. Children of all shapes and sizes can be malnourished, since nourishment is dependent upon nutrient intake not body weight. Physically, these malnourished children do not appear nutrient deficient. They are malnourished, because their foods lack the nutrients their bodies need. Since their bodies are still growing, children are particularly affected.**02**

(Gupta MC, Mahajan BK 2003) The ecological factors related to malnutrition are, conditioning influences (diarrhoea, intestinal parasites), cultural influences (food habits, customs, beliefs, religion, food fads, cooking practices), socio economic factors (poverty, ignorance, insufficient education, large family size). According to food production, it is said that there will be very little malnutrition in India today if all the food available can be equally distributed in accordance with physiological needs. Health and other services like nutritional surveillance, nutritional rehabilitation, nutritional supplementations and health education are the key element in identifying the realistic picture of nutritional status and its development.**03**

(Park, K, 20thed. edition 2008, p.460-465) Malnutrition is the most widespread condition affecting the health of children. A childhood mortality study in the America showed that not less than 50% of the children who died before the age of 5years were found to have malnutrition as underlying or associated cause of death during 2000 to 2007, more than 255 of the world's children under the age 5years were under weight for their age. The proportion ranged from 1% of the children in developed countries to 26% in developing countries. In India the national family health survey (NFHS) 2005-06 included survey of the nutritional status of young children. Both chronic and acute under nutrition were found to be high in all the 7 states for which reports have so far been received, namely Haryana, Karnataka, Maharashtra, Orissa, Tamil Nadu, Uttar Pradesh and Goa. **04**

Material and Methods

The present study is aimed at a comparative study to assess nutritional status of preschool children in selected rural and urban areas Punjab, with a view to develop Pamphlet regarding Recommended Daily Allowance.

Data Collection

Formal permission was obtained from the concerned authority to conduct the study. The study was conducted during the month of March and April 2023. Samples were selected in accordance with laid down criteria. Consent was obtained from each preschool children parent after giving assurance of confidentiality. Each day 6 subjects were assessed. About 45 minutes were spent for each subject. Nutritional status was assessed by checking weight, height, head circumference, chest circumference and mid arm circumference and head to foot assessment. Thus, data collection was completed within stipulated time period.

Data Analysis

The socio demographic variables were described descriptively in terms of frequency and percentage. At test was done to compare the nutritional status of gobindgarh (urban) and saunti (rural) preschool children. A chi square ($\chi 2$) test was done to find out association between the nutritional status of

urban and rural preschool children with selected demographic variables.

Findings

Both descriptive and inferential statistics were used to analyse the data. Analysis is organized under the following headings.

Section A: Socio demographic variables of urban and rural preschool children.

Section B: Deals with comparison of nutritional status among rural and urban preschool children.

Section C: Deals with association between nutritional status and socio demographic variables of rural and urban preschool children.

Review of Literature

A study was done to find out the prevalence and severity of malnutrition in preschool children in a rural area. Anthropometric indices are presented for 2,103 children collected priorto and during intervention. The result showed that U5 mortality was 259. The prevalence of stunting (z-scores for weight-for -age <-2), wasting (z-scores for weight – for height - <-2) and being under weight (z- scores for weight- for-age <-2) was 30%, 4% and 20%, respectively, this was severe (z-score <-3) in 12% (stunting). 1% (wasting) and 5% (underweight) of the children. The study concluded that malnutrition is likely to interact with infectious diseases, placing the U5 children at high risk for mortality and morbidity.[01]

A study was done on comparison of the prevalence of stunting, wasting and underweight among children 3-5 year and 0-3 years. The study result showed that an overestimation of the prevalence of stunting, wasting and underweight in 3-5 years was 3.0, 0.3 and 2.6% points, respectively, and of 4.8, 1.0 and 5.2% points, respectively, in 0-3 years age group. The study concluded that comparable age ranges are essential in nutrition surveys for monitoring trends and evaluating programme impact. Greater awareness of early child under- nutrition is needed among policy makers.[02]

Summary

The purpose of this study was to compare the nutritional status of rural and urban preschool children. A non-experimental comparative design was used to conduct the study among preschool children. In order to achieve the objectives of this study, purposive sample technique was used to collect data. The data was collected from 120 preschool children 60 from urban and 60 from rural who are residing in saunti and gobindgarh.

Conclusion

The data was collected from the preschool children. The collected information was organized, tabulated, analysed and interpreted using descriptive and inferential statistics. Analysis was done based on the objectives and hypothesis of the study. The level of significance was set at 0.05 levels.The study was taken to a compare the nutritional status of preschool children in selectedurban and rural areas Punjab, regarding RDA. In the present study 120 preschool children were selected using purposive sampling technique.

The research approach adopted in the present study was a survey approach and non-experimental comparative design and with a view to assess the nutritional status of preschool children regarding RDA. A structured interview questionnaire and observation check list was used to assess the nutritional status of preschool children.The data was interpreted by suitable appropriate statistical methods.

Conflict of Interst: there were no conflicts of interest.

Source of Finding: This study if self-funded.

Ethical Clearance: prior to data collection, formal written permission was taken from research and ethical committee, **Dr. Prabhjot Singh associate professor and Ms. Dilpreet Kaur Sohi assistance professor ref.no (DBU/24) Date (6.04.2023)** desh bhagat university mandi gobindgarh Punjab. After that, permission was taken from principal of desh bhagat university. anonymity of the subjects and confidentiality of information was maintained. They were assured that their responses would be kept confidential and used only for research purpose.

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