



NUTRITIONAL ESTIMATION OF PRESCHOOL CHILDREN: BY “WHO” Z SCORE INTERPRETATION

Nursing

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ABSTRACT

A descriptive study to assess the anthropometric measurements among the preschool children attending at pediatric department in a selected tertiary care hospital , Kelambakkam. The objective of the study was to assess the existing level of anthropometric measurements of preschool children. The sampling technique was non probability purposive sampling technique with 60 samples were selected and assessed the anthropometric measurements with the help of “WHO” Z score interpretation (weight, height and mid upper arm circumference in cm). The study results showed that that the mean value of pre school children’s weight was 13.38 kgs, the mean value of height was 95.95cm and the mean value of mid upper arm circumference was 15.18cm. The study findings also revealed that the majority of the pre school children were having normal nutritional status according to weight, height & mid upper arm circumference. Few preschool children were having severe malnutrition and very few pre school children were having extremely over nutrition.

KEYWORDS:

Anthropometric measurement, pre-school children.

INTRODUCTION

The healthy population is the wealth of the Nation. Children are the most vital human resource a country possesses. Children hold the potential and set the limit of future development of any country. “Better the Nutritional Status of the children, higher will be the Nation rise”. Today’s children are tomorrow’s citizen who should be healthy. Good nutrition is the basic component of healthy growth & development and for maintaining health throughout life. Therefore their anthropometric measurement is of great significance.

Pre school children are the most vulnerable groups constituting 36 percent of the total population of India. The rate of growth and development of pre school children depend to a large measure on the adequacy of the diet assumed by them. Growth assessment is the single most useful tool for defining health and Measurement of weight in kg, height in cm, and mid-upper arm circumference in cm are reliable means to evaluate the progress of normal child and for early detection of health deviations.

A majority of them share the socio-economic deprivation of their parents, and do not have access to essential requirements of nutrition, health care and learning opportunities. Most of the children from low socio-economic status in the society are suffering from nutritional disorders. A healthy child can be expected to take full advantage of schooling. The diet of the school children should, therefore receive first attention. The diet should contain all the nutrients in proper proportion, adequate for the maintenance of optimum health.

A Nations Wealth depends on its healthy citizens. A Healthy adult emerges from healthy child. Early childhood constitutes the foundation of adult productivity and nutrition is a major determinant of the quality or strength of this foundation. As far as mankind is concerned, the early stage of growth and development is the vital factor in determining the ‘whole’ personality of an individual.

STATEMENT OF THE PROBLEM

A descriptive study to assess the anthropometric measurements among the preschool children attending pediatric department in a selected tertiary hospital, Kancheepuram District, Tamilnadu, India.

OBJECTIVES OF THE STUDY

1. To assess the existing level of anthropometric measurements of pre

school children.

RESEARCH METHODOLOGY

The present study was conducted to assess the existing level of anthropometric measurements among the preschool children.

Research approach & Research design

A quantitative – evaluative approach was selected, Non experimental - descriptive design found to be the appropriate design for this study.

Setting:

The present study was conducted at Pediatric Department, in Chettinad Hospital and Research Institute, Kelambakkam, Kancheepuram Doistrict, Tamil nadu, India .

Population:

Children in the age of 3-5 years who were attending pediatric department in a selected tertiary care hospital at Kelambakkam, Kanchipuram district, Tamil nadu.

Sampling technique & sample size:

Non Probability - purposive sampling technique was adopted & sample size for the present study was 60 preschool children who had satisfied the inclusion criteria.

Inclusion Criteria:

The study include the children who were

1. in the age group of 3-5 years
2. not having any chronic illness

Exclusion Criteria:

The study exclude the children who were

1. Not willing to participate in the study.
2. belong to other pediatric age group.

Decription of the tool:

In this present study the anthropometric measurements includes weight, height and mid upper arm circumference in cm and the scores was interpreted with the help of WHO (world health organization) Z score interpretation with five categories like severe malnutrition, moderate malnutrition, normal nutrition, over nutrition & extremely over nutrition.

Finding of the study

The study results shows that the mean value of pre school children weight was 13.38 kgs, the mean value of height was 95.95cm and the mean value of mid upper arm circumference was 15.18cm.

Table 1: Frequency and percentage distribution of degree of malnutrition among preschool children. (N=60)

S.No	Anthropometric measurement	Severe malnutrition	Moderate malnutrition	Normal	Over nutrition	Extremely over nutrition
1.	Weight	3(5%)	3(5%)	53(88%)	—	1(2%)
2.	Height	9(10%)	3(5%)	41(73%)	3(5%)	4(7%)
3	Mid upper arm circumference	—	—	59(98%)	—	1(2%)

Table shows that majority of the pre school children were having normal nutritional status according to weight, height & mid upper arm circumference. Few preschool children were having severe malnutrition and very few pre school children were having extremely over nutrition.

Conclusion:

The current study provides an update and more inclusive data on growth and nutritional status among preschool children. These data can be used as a primary source and base-line information for conducting experimental and non experimental studies both in urban and rural settings. Knowledge and practice on anthropometric measurement and assessment of malnutrition should be given special focus in child health nursing curriculum. The nursing students should be trained to find the differences between normal & abnormal growth pattern of children. By assessing the deviation from the normal growth, the nurse can find the causes & the nurse can plan for implementation & health education for the parents, there by malnutrition related morbidity and mortality can be reduced.

RECOMMENDATION:

- The study can be conducted in a large size samples.
- The study can be done in a rural setting.
- The comparative study can be conducted both in urban and rural settings.
- The study can be conducted among homogenous population.
- The experimental study can be conducted after the manipulation of structured instruction among mothers of preschool children.
- The long term study can be conducted to find out the risk factors of malnutrition among pre school children.
- The qualitative study can be conducted among the parents of pre school children with severe malnutrition.

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