
**“Study To Assess The Physical Growth And Nutritional
Status Of School Going Children And To Develop And Test
Self Instructional Module On Physical Growth And
Nutrition Of Children In Selected Areas Of Jabalpur (M.P)”**

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ABSTRACT:

In this study Purposive sampling was to be the most appropriate. Sample size for this study was 500 school going children aged 9-12yrs, male and female both from primary and middle school. Structured questionnaire was prepared and used for data collection. . The pilot study was conducted on 10 samples to check feasibility and practicability of proposed research. Based on the objectives and hypotheses the data was analyzed by descriptive and inferential statistics is that percentage, Mean, Standard deviation, ‘t’ test and chi square test.

Keywords: *Physical growth, Nutritional status, Effectiveness, Self- instructional module, School going children.*

INTRODUCTION

Growth is a fundamental feature of children; child’s growth purely depends upon the fulfilment of his basic needs and must be satisfied for higher growth.⁶

Accurate measurement at the regular intervals is vital to assess the growth. Growth refers to an increase in physical size of the whole body or any of its parts, and can be measured in inches or centimetres and in pounds or kilograms.¹

Mothers’ role in bringing up children is very important; mothers should express their unconditional love for their children, as well as provide them with the continued support. It is important that mothers’ of toddlers need to be self assured with discipline, through discipline your child learns behaviors which are acceptable.²

A well-balanced nutrition is needed for proper growth and development of toddlers, there is a strong relationship between physical growth and dietary intake. Mothers’ knowledge regarding proper nutritional fulfilment is very important to ensure normal growth of toddlers.³

Toddlers are completely dependent on their parents especially upon their mothers for the fulfilment of their basic needs and mothers are the persons, who always accompany their toddlers most of the time and witnesses the growth and development, so they need to acquire knowledge of normal growth and development and also variations in the normal growth and development, attainment of milestones at appropriate age and any delay in attainment.⁴

OBJECTIVES OF THE STUDY

- ◆ Assess the physical growth of school going children.
- ◆ Assess the nutritional status of school going children
- ◆ Associate physical growth and nutritional status of school going children with the socio-demographic variables.
- ◆ To develop and test self instructional module on physical growth and nutrition.

REVIEW OF LITERATURE

A cross sectional study conducted by Tiwari MK, and Sharma KK (2007) on 551 children of both sex aged 4 years in the Bharia- a primitive tribe of Madhya Pradesh. “Growth and nutritional status of the Bharia-“ A primitive tribe of Madhya Pradesh. Body weight, height, sitting height, head circumference, upper arm circumference, chest circumference, biceps, triceps, sub scapular and calf skin fold thickness were measured. Body Mass Index was calculated as weight/height² to calculate chronic energy deficiency. The BMI according to the Indian standard was normal, but when the data was compared with the International standard malnutrition in both sexes was noticed in childhood. Boys remained undernourished after adolescence, while girls reached normal growth patterns.

A comparison study on the nutritional status by Haboubi GJ and Shaikh RB. (2009) “A comparison of the nutritional status of adolescents from selected schools of South India and UAE”. A total 2459 adolescent boys and girls between the age of 10 to 16 years old were selected as samples. The result showed, regardless of gender, the rate of stunting was higher in Indian adolescents from India (25.5%-51%) compared with Indian adolescents in UAE (3.1%-21%). The thinness was also more in India (42%-75.4%) when compared to adolescents living in UAE (4.5%-14.4%).The study concluded improved economic conditions favors better expression of genetic potential for physical growth.⁵

METHODOLOGY

In the present study the investigator selects the non experimental research design to observe the physical growth and nutritional status and its relationship and administer a self-instructional module to assess the gain in knowledge regarding growth and nutrition of school going children (9-12yrs). The investigator selected the middle and primary school of Govt.Pre-primary training institute, St.Pauls School, Saraswathi shishu mandir Garha phatak, Saraswathi Shishu Mandir, Jainagar, Govt.primary and middle school,Kacchpura, Jabalpur, Madhya Pradesh.

APPROACH:

An evaluative and observational research approach is used to identify physical growth and nutritional status of school going children and to develop and test self instructional module on physical growth and nutrition of children.

RESEARCH DESIGN

Non experimental research design is adopted.

HYPOTHESES

- **H1**-There will be significant relationship between physical growth and nutritional status of school going children with demographic variables.
- **H2**-There will be a significant mean difference between pre test and post test after the administration of self instructional module on physical growth and nutrition of children.

VARIABLES

The variables included in the study are

- **Independent variable**

Independent variables that stands alike and it's not dependent on other .Self instructional module is the independent variable in the study

- **Dependent variable**

Dependent variable is interested in understanding explaining knowledge of mothers of school going children (9-12yrs) regarding growth and nutritional status of school going children.

POPULATION

Accessible population of present study includes all the school going children of 9-12yrs studying in Government Pre-primary training institute, St. Pauls School, Saraswathi Shishu Mandir Garha Phatak,Saraswathi Shishu Mandir, Jainagar, Government primary and middle school, Kacchpura, Jabalpur, Madhya Pradesh and mothers of these children.

SAMPLE SIZE

Sample size for this study was 500 school going children aged 9-12yrs, male and female both from primary and middle school of Govt.Pre-primary training institute, St.Pauls School, Saraswathi shishu mandir Garha phatak, Saraswathi Shishu Mandir, Jainagar, Government primary and middle school, Kacchpura, Jabalpur, Madhya Pradesh were selected with fulfilling the sampling criteria.

100 mothers of those children were selected, Jabalpur was selected. It was suitable in keeping in view the time provided for data collection and the study.

SAMPLING TECHNIQUE

In present study school going children 9-12yrs of Government Pre-primary training institute, St. Pauls School, Saraswathi shishu mandir Garha phatak, Saraswathi Shishu Mandir, Jainagar, Government primary and middle school, Kacchpura, Jabalpur, Madhya Pradesh.

DATA ANALYSIS AND INTERPRETATION OF DATA

The obtained data were organized and presented under the following sections.

The tool was structured item consist of 4 sections

Section-A; Deals with the observational profile of the child. It's divided into 2 parts

1. Part A-Deals with the measurement of physical growth as height, weight, head circumferences and chest circumferences.

2. Part B-Deals appearance of child, mid arm circumference, condition of nail, hair, teeth, gums, tongue, eye, lips, skin and daily intake of meals.

Section –B; Deals with demographic data such as type of family, occupation of parents, income, education of parents, illness of child, place of delivery, age of children, sex, vaccination, tendency to go to school, number of children, diet, food decision, total number of children in home, responsibilities of feeding, exercise, members in family.

Section –C; It refers to the written and valid information self instructional module about physical growth and nutrition of children. It includes introduction, definition, importance of assessing growth and development, nutrition, importance of nutrition, physical growth, nutritional requirement of school going children, feeding school children, impact of nutrition of physical growth, improvisation of health, menu plan.

Section D: it deals with the questionnaire to assess the knowledge of mother checklist is used.

RESULT

Based on the objectives of the study the findings of pretest knowledge score of mothers regarding physical growth and nutritional status show that they were able to answer to some extent. The study shows that the mothers in pretest were having a mean of 5.72 (n=100) of knowledge on physical growth and nutritional growth. Mother's pretest level of knowledge

shows that (73%) had average knowledge and (26%) had poor knowledge. Considering the aspects of physical growth and nutritional status they are having below average knowledge.

The findings of the study revealed a significant increase in the post test knowledge score after the administration of booklet. In pre test the mean score was 5.72 and in posttest the mean was 16.83. The mean difference between pre test and post test knowledge score is 11.1. Mothers pre test knowledge on physical growth and nutritional status shows that (73%) had average knowledge and (26%) had poor knowledge. After the administration of booklets the post test level of knowledge on selected first aid measures shows that 100% of mothers had adequate knowledge, none of the mothers had moderately adequate knowledge or inadequate knowledge. This result is due to the effectiveness of booklet.

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