



A Study To Assess The Knowledge Regarding Anthropometric Measurement Of 0-6 Years Of Age Among Nursing Students District Fatehgarh Sahib Punjab

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Abstract:- Descriptive study to assess the knowledge regarding anthropometric measurement of 0-6 years of age among Nursing Students of Desh Bhagat University School of Nursing Mandi Gobindgarh District Fatehgarh Sahib Punjab. Quantitative research approach and non-experimental descriptive research design was used to accomplish the stated objectives data was collected with the help of self-structured knowledge questionnaire. Pilot study was done on [1/10 th sample] which constituted of students of Desh Bhagat University School of Nursing to check reliability and feasibility of the study. Subjects were chosen by the purposive sampling technique and sample size was 60. The data collected was analysed by using descriptive and inferential statistics. The percentage distribution of Nursing students as per their knowledge regarding anthropometric measurement of 0-6 years of age. 0.0% students have Adequate knowledge, 18.3% students have Moderate knowledge and a considerable portion of Nursing Students i.e 81.7% have Inadequate knowledge. The Chi-square value shows that there is significance association between the score level and demographic variables (Types of Houses). The calculated chi-square values were more than the table value at the 0.05 level of significance. There is no significance association between the level of scores and other demographic variables (Age, Gender, Religion, Education of Student, Type of Family, Total Family Income, Occupation of Father, Occupation of Mother) The calculated chi-square values were less than the table value at the 0.05 level of significance **Conclusion:-** The data collected was analysed by using descriptive and inferential statistics. The pie and bar diagrams were used to depict the findings. The maximum students [81.7%] were having inadequate knowledge regarding anthropometric measurement of 0-6 years of age among Nursing students of Desh Bhagat University School of Nursing, followed by [18.3%] moderate and [0.0%] were having adequate knowledge regarding anthropometric measurement of 0-6 years of age among Nursing students of Desh Bhagat University School of Nursing respectively. Pamphlets were prepared and distributed to the students to bring more knowledge on anthropometric measurements

Index Terms - anthropometric measurement, students and school.

I. INTRODUCTION

Anthropometric measurements are used to assess the size, shape and composition of the human body. Anthropometry is concerned with the measurement of variation of the physical dimensions and the gross composition of the human body at different age levels and degree of nutrition. Growth is influenced by biological determinants including sex, intrauterine environment, birth order and by environmental factors including climate, season and socio-economic level. Physical dimension of the body are much influenced by nutrition particularly in the rapidly growing period of childhood. Despite the well-known importance of

nutritional health, cultural, social, political, economical and educational factors contribute to malnutrition among children. School-going children constitute one-fifth of the total population and are the future of the nation. The health supervision of the school children is necessary and can help to identify the magnitude of morbidity and malnourishment in a community.

The UNICEF reported that 150 million children are malnourished worldwide. One in every three malnourished children lives in India [Meera, 2009]. According to the World Health Organization, an estimated 250 million children in more than 100 countries are vitamin A deficient [Laxminarayan et al. 2008]. In developing countries like India, various forms of malnutrition affect a large segment of the population, and both macro and micronutrient deficiencies are of major concern. The school age period is nutritionally significant because this is the prime time to build up body stores of nutrients in preparation for rapid growth. Anthropometric measurements are useful in many fields. For example, athletes understand that body size and composition are important factors in sports performance. Health care professionals rely on body measurements to evaluate a patient's overall health. For example, body mass index, or BMI, is a measurement of a person's weight to height ratio.

Health care providers, insurance companies and government agencies use BMI to determine if a person is underweight, overweight or obese. A BMI of 30 or greater indicates obesity. Because obesity is linked to chronic disease, like heart disease, diabetes and certain cancers, knowing this anthropometric measurement can be a lifesaver. Anthropometric measurements can also be used when studying groups of people. This broader approach allows researchers to evaluate health trends and concerns in various populations. The Indian Express (2020) World Health Organization (WHO) claims childhood obesity is one of the 21st century's most severe public health problems. The issue is global, and the prevalence has grown at an alarming rate. A government survey (2019) shows the degree of obesity among Indian children and adolescents. The survey found that about 5 percent of children and adolescents aged 5 to 19 years were overweight. Minhas et al. (2019) more troubling is overweight, since obesity can be prevented. At a comparatively much younger age, these days, children become overweight.

In India, a study found that the prevalence of overweight in school-going children in urban areas has risen over 10 years from 16 per cent to 24 per cent. The study found that in boys the prevalence was 16.75% (overweight) and 5.59% (obese), while in girls it was 19.01% and 5.03% respectively. Similar findings were found in another study where overweight prevalence was 11.1% and obese prevalence was 14.2%. Similar results were found in another study, where the prevalence of overweight was 11.1% and that of obesity was 14.2%. Overweight children are likely to have health-related consequences during their young age. Khan et al. (2016) A variety of factors, including diet, genetic predisposition, physical activities, physiological, and behavioral factors, are implicated as contributing factors to obesity.

NEED OF THE STUDY.

Anthropometric indicators are useful both at an individual and population level. At any individual level, anthropometric indicators can be used to assess compromised health or nutrition well-being. This information can be valuable for screening children for intervention and for assessing the response to interventions. At the population level, anthropometry can be used to assess the nutrition status within a country, region, or socioeconomic group, and to study both the determinants and consequence of malnutrition. This form of monitoring is valuable both for the design and targeting of health and nutrition interventions.

OBJECTIVES:

1. To assess the anthropometric measurement among nursing students of Desh Bhagat University.
2. To find out the association of knowledge regarding anthropometric measurement of 0-6 years of age on nursing student of Desh Bhagat University school of nursing with selected socio-demographic Variables.

Operational Definitions.

Assess: Assess is to estimate the anthropometric measurements.

Anthropometric measurement: Anthropometric measurement means measuring the human body as to height, weight, head circumference, chest circumference, mid-thigh circumference, mid-arm circumference and BMI

RESEARCH HYPOTHESIS:

H₁ There is a statistically significant difference between the Knowledge regarding anthropometric measurement among nursing students of Desh Bhagat University.

LIMITATION.

- The study was limited on only 60 students.
- The study was conducted in only selected school i.e., Desh Bhagat University School of Nursing Mandi Gobindgarh Punjab.

RESEARCH METHODOLOGY**RESEARCH APPROACH.**

In the view of the nature of the problem and to accomplish objectives of the present study descriptive survey approach is considered to be most appropriate to assess the knowledge regarding anthropometric measurement among nursing students of Desh bhagat university.

RESEARCH DESIGN.

A descriptive research design was used to assess the anthropometric measurement among nursing students

RESEARCH SETTING.

The setting of the present study was conducted at school of nursing Desh bhagat university.

The criterion for selection this setting was

- Familiarity with the setting
- Availability of the subjects.
- Feasibility of conducting the study.

TARGET POPULATION.

The population for the present study comprised of students of Desh Bhagat university school of nursing.

SAMPLE AND SAMPLE SIZE.

60 students at school of nursing Desh bhagat university.

DESCRIPTION OF THE TOOL.

The tool comprised of two parts:

SECTION 1**Socio- Demographic Profile**

To assess the knowledge regarding anthropometric measurement of nursing students' variables were used. Age, Gender, Education, Place, Type of family, Family income, Religion, Dietary pattern, Education status of mother, Education status of father.

SECTION 2**ANTHROPOMETRIC MEASUREMENT PARAMETERS**

Anthropometric measurement of the children like weight, height, mid-arm circumference, head circumference, chest circumference, abdomen circumference, mid-thigh circumference and BMI parameters were assessed using anthropometric measurement parameters.

Organization of Analyzed Data:

The analyzed data was organized according to the objectives and presented under the following sections:

Section-I :- Description of demographic data.

Section-II Assess the the knowledge regarding anthropometric measurement of 0-6 years of age among nursing students of Desh bhagat university school of nursing mandi Gobindgarh

SECTION-I

FREQUENCY AND PERCENTAGE DISTRIBUTION OF DEMOGRAPHIC VARIABLES

TABLE: 1 DEMOGRAPHIC PROFILE OF THE SUBJECTS

Variables	Opts	Percentage (%)	Frequency(f)
Age	16-18 Year	30%	18
	18-20 Year	53%	32
	20-22 Year	17%	10
	22-24 Year	0%	0
Gender	Male	82%	49
	Female	18%	11
Religion	Muslim	20%	12
	Hindu	73%	44
	Sikhism	7%	4
	Others	0%	0
Education of Student	ANM	2%	1
	GNM	27%	16
	Post Basic BSc	0%	0
	BSc	72%	43
Type of Family	Joint Family	67%	40
	Nuclear Family	23%	14
	Extended Family	5%	3
	One parent Family	5%	3
Types of Houses	Paka House	82%	49
	Kaccha House	15%	9
	Rented House	0%	0
	Room on Rent	3%	2
Total Family Income	>10,000 Rs	22%	13
	Rs 10,000-30,000	37%	22
	Rs 30,000-50,000	28%	17
	Above Rs 50,000	13%	8
Occupation of Father	Government Job	27%	16
	Private Job	10%	6
	Farmer	18%	11
	Own Business	45%	27
Occupation of Mother	Government Job	12%	7
	Private Job	5%	3
	House Wife	83%	50

House Keeping

0%

0

Table 1 depicts socio-demographic characteristics of Nursing students as per age, gender, religion, education of the student, types of family, types of house, total family income, occupation of father, occupation of mother. Total 60 students of Nursing were involved in this study. A microscopic view of data illustrates percentage distribution of socio-demographic profile as follows:

Percentage distribution of students as per age depicts that maximum number of students i.e 53% were in age group of 18-20 years, 30% lied under age group of 16-18 years and only 17% were of age equal to 20-22 years. As per gender maximum number of students 82% were male and 18% were females. As per religion 73% were Hindu, 20% were Muslims, 7% were Sikhs and remaining 0% belonged to Others. As per education of student 72% were doing B.sc Nursing, 27% were from GNM, 2% were from ANM and 0% were from Post Basic Nursing. 67% were from Joint family, 23% were from Nuclear family, 5% were from Extended family and 5% were from One parent family. 82% belongs to paka house, 15% were from kaccha house, 3% were belongs to Rooms on rent and 0% belongs to Rented house, 37% students have income in between 10000-30000, 28% students have income in between 30000-50000, 22% have income less than 10000 and 13% have income above 50000. 45% students father own business, 27% students father are doing govt. jobs, 18% belongs to farmers and 10% students father are doing private jobs. 83% student mothers works as House Wife, 12% student mothers are doing govt. jobs, 5% students mothers are doing private jobs and 0% belongs to house keeping.

SECTION – II

ASSESSMENT OF KNOWLEDGE

Table –2: Frequency & Percentage distribution level of knowledge.

CRITERIA MEASURE OF KNOWLEDGE SCORE		
LEVEL OF SCORES N= 60	PERCENTAGE	FREQUENCY
ADEQUATE KNOWLEDGE.(17-25)	0.0%	0
MODERATE KNOWLEDGE.(9-16)	18.3%	11
INADEQUATE KNOWLEDGE.(0-8)	81.7%	49
Maximum =25 Minimum=0		

Table 2 illustrates the percentage distribution of Nursing students as per their knowledge regarding anthropometric measurement of 0-6 years of age. 0.0% students have Adequate knowledge, 18.3% students have Moderate knowledge and a considerable portion of Nursing Students i.e 81.7% have Inadequate knowledge.

ASSOCIATION OF SCORES AND DEMOGRAPHIC VARIABLES

This section deals with the findings related to the association between score and selected demographic variables. The chi-square test was used to determine the association between the score levels and selected demographic variables.

The Chi-square value shows that there is significance association between the score level and demographic variables (Types of Houses). The calculated chi-square values were more than the table value at the 0.05 level of significance.

There is no significance association between the level of scores and other demographic variables (Age, Gender, Religion, Education of Student, Type of Family, Total Family Income, Occupation of Father, Occupation of Mother) The calculated chi-square values were less than the table value at the 0.05 level of significance.

Hence **H₁** There is a statistically significant difference between to assess the Knowledge regarding anthropometric measurement among nursing students of Desh Bhagat University.

IMPLICATION.

- The nursing curriculum should consist of content activities like preparation of booklet, handouts, pamphlets regarding strategies that how the levels of knowledge can be increased about anthropometric measurement.
- As a nurse educator, there are an abundant opportunity for nursing profession to educate regarding the knowledge of anthropometric measurement.
- Nurse educator should emphasize more on preparing to impart information on anthropometric measurements among students.

NURSING ADMINISTRATION.

- The nurse administrator can take part in developing protocols standing orders related to design of the health education programme to update nursing personnel knowledge regarding anthropometric measurements among Nursing students.
- The nurse has to mobilize the available resources personnel towards the health education.
- The nurse administration should explore their potential and encourage innovation ideas in the preparation of appropriate information and modalities.

NURSING RESEARCH.

- The study helps the nurse researchers to develop appropriate health education foot for education the people specially students to educating regarding anthropometric measurements.
- The study will serve as valuable reference materials for the future investigator.
- The study will motivate the beginning researchers to conduct some study with different variables a large scale.

NURSING PRACTICE.

- The nurse can play an important role in identifying the different aspects regarding anthropometric measurements.
- As a practicing nurse in the hospital. She can provide adequate information on anthropometric measurements to the Nursing students and parents.
- Community can disseminate the information on anthropometric measurements to the mothers and educate family members on how to identify the normal and abnormal milestone of the children.

RECOMMENDATIONS.

- The study can be replicated in different settings with large sample.
- The study can be conducted on assessing the effectiveness of information booklet on knowledge of the same problem.
- A comparative study can be conducted on large sample with the problems on infants and toddlers.

CONCLUSION

This chapter dealt with the conclusion, implication recommendation and limitation drawn for the study. A study to assess the knowledge regarding anthropometric measurement of 0-6 years of age among Nursing students of Desh Bhagat University School of Nursing Mandi Gobindgarh District Fatehgarh Sahib Punjab. The present study assesses the knowledge regarding anthropometric measurement of 0-6 years of age among Nursing students of Desh Bhagat University School of Nursing. 15 students from each class were taken for knowledge assessment. The total sample for the study was 60.

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