

A STUDY TO ASSESS THE BODY MASS INDEX AND DIETARY PATTERN AMONG PRIMARY SCHOOL CHILDREN LIVING IN WAGHODIA, VADODRA.

Baria Zeel, Rathva Bharti, Mansuri Shirin, Rathwa Snehal, Rathwa Kiran, Rohit Unnati

B.Sc. Nursing students, Parul Institute of Nursing, Parul University, Vadodara 391760, Dist. Vadodara
Gujarat, India.

*Corresponding Author: Patel Roma E Mail: Patelrp2306@gmail.com

Abstract

Background: Assessment of dietary habits gives a more comprehensive impression of the food consumption habits within a population. Poor dietary habits among school children have been reported as a lifestyle challenge, they face while in school. This study was carried out to assess the body mass index and dietary habits among school children living in a village. Assess the body mass index among and dietary habits among school children .To find out the association between body mass index and demographic variables among school children . To find out the association between dietary habits and demographic variables among school children

RESULTS: The knowledge of the school children regarding knowledge of the dietary habits living in waghodia Baroda revealed that 68.33 had average knowledge, 18.33 had poor knowledge and 13.33 had good knowledge. The frequency and percentage distribution of body mass index among school children result showed that majority 78.33 had score lower than $18.5\text{kg}/\text{cm}^2$ and 21.66 had score between 18.5 to 24.9.

CONCLUSION : Through this study it is concluded that there is need for paying attention on children regarding their body mass index and dietary habits.

KEYWORDS: Assess, Knowledge, Body mass index, Dietary habits, and School children.

INTRODUCTION

The BMI is defined as the body mass divided by the square of the body height and is expressed in units of kg/m^2 , resulting from mass in kg and height in meters. A measure of body fat that is the ratio of the weight of the body in kegs to the square of its height in meters.

The body mass index was introduced in the early 19th century by a Belgian named Lambert Adolph Jacques Quenelle. Body mass index is a value derived from the mass and height of a person. BMI is very easy to measure and calculate and is therefore the most commonly used tool to correlate risk of health problem with the weight at population level. BMI is an estimate of body fat good gauge of your risk for disease that can occur with more body fat. The BMI may be determined using a table or chart which displays BMI as function of mass and height using contour lines or colors for different BMI categories and which may use other units of measurement. The body mass index is a convenient rule of thumb used to broadly categorize a person as underweight, normal weight, overweight or obese based on tissues mass and height. BMI is used differently for children. It is calculate in the same way as for adults but then compared to typical values for other children of the same age. Instead of comparison against fixed thresholds for underweight and overweight the body mass index is compared against the percentiles for children of the same sex and age.

If your BMI is less than 18.5 it falls within the underweight range. If your BMI is 18.5 to 24.9 it falls within the normal or healthy weight range. Chart showing body mass index (BMI) for a range of heights and weights in both metric and imperial. Colors indicate BMI categories defined by the World Health Organization; underweight, normal weight, overweight, moderately obese, severely obese and very severely obese. Obese based on tissue mass (muscle, fat, and bone) and height. Major adult BMI classifications are underweight (under $18.5 \text{ kg}/\text{m}^2$), normal weight (18.5 to 24.9), overweight (25 to 29.9), and obese (30 or more). When used to predict an individual's health, rather than as a statistical measurement for groups, the BMI has limitations that can make it less useful than some of the alternatives, especially when applied to individuals with abdominal obesity, short stature, or unusually high muscle mass.

The BMI is expressed in kg/m^2 , resulting from mass in kilograms and height in meters. If pounds and inches are used, a conversion factor of $703 (\text{kg}/\text{m}^2) / (\text{lb}/\text{in}^2)$ is applied. When the term BMI is used informally, the units are usually omitted. BMI provides a simple numeric measure of a person's thickness or thinness, allowing health professionals to discuss weight problems more objectively with their patients. BMI was designed to be used as a simple means of classifying average sedentary (physically inactive) populations, with an average body composition. For such individuals convenient rule of thumb used to broadly categorize a person as underweight, normal weight, overweight.

METHEDODOLOGY

The research design refers to all researcher overall plan obtaining answer to their research question and it spells out strategies that researchers adopted to develop Information that accurate, objective and interpretable. Descriptive research design has been used to attain the objective of present study. Setting is physical location and condition in which data collection take place. This study was conducted in Bhulka Bhavan Primary school, Waghodia Vadodara. All primary school children studying in std 5 to 9.

It consists of demographic data which includes such as standard, gander, family income, father education, mother education, etc. It consists of assessing the Knowledge of school children regarding their Dietary habits. The structured questionnaires consist of 30 question to assess the knowledge of school children regarding dietary habits. Each correct answer carries one mark and wrong answer carries zero marks; total score was 30.

Non probability and convenient sampling method was used on school children, then a total of 60 study subject are selected as sample.

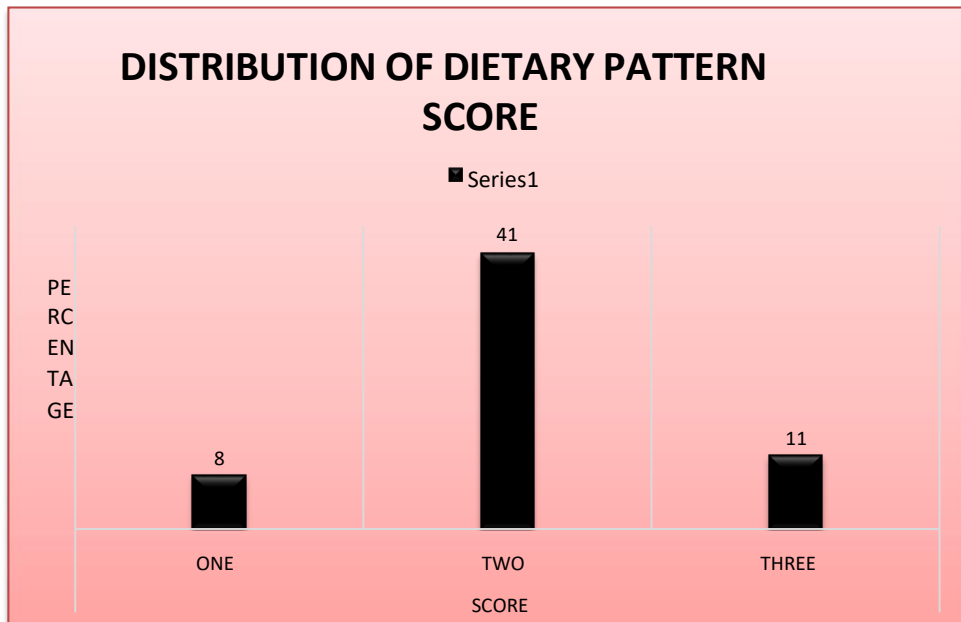
Pilot study was conducted to find out the feasibility of the study. The pilot study study conducted on 60 school children in waghodia Baroda. A questionnaires was used to obtained information. Data were collected to demographic characteristics, knowledge of school children regarding dietary habits and Body mass index.

The study was conducted after getting clearance from investigating ethical committee. After obtaining permission from the principal of Bhulka Bhavan primary school to explain purpose of study to the sample and their written consent was obtained. On the basis of inclusion criteria. On the basis of inclusion criteria. A questionnaire was used to obtain the required information. Data related to demographic characteristics, knowledge of mothers and prevalence of accident were collected from school children. Data collection is terminated by thanking the participant for their information and cooperation.

RESULT

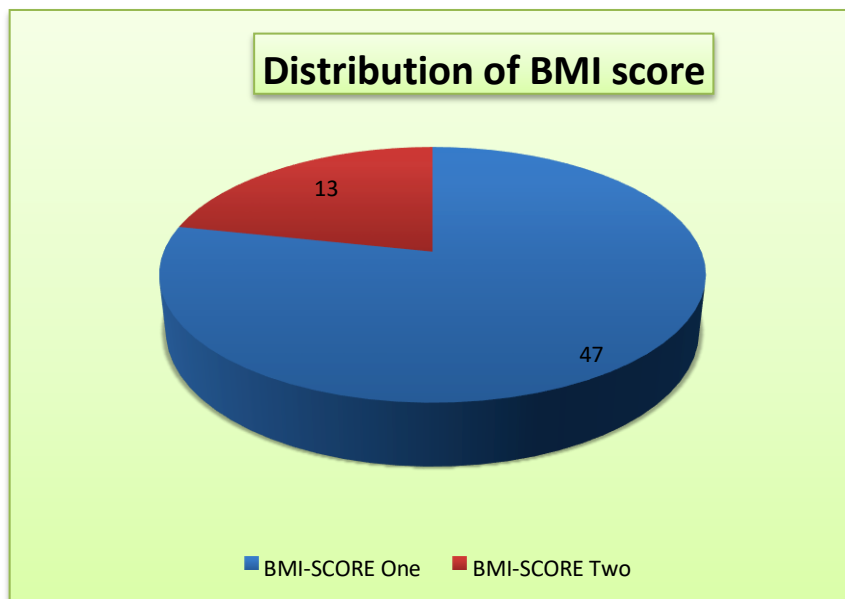
Data presented in the Table and Figure shows that level of dietary pattern score among 1,2 and 3 that schoolchildren 8(13.33) had first category,41(68.33) had second category and 11(18.33) had third category.

DIETARY PATTERN SCORE		Frequency	Perce nt
SCOR E	1	8	13.33 333
	2	41	68.33 333
	3	11	18.33 333



Data presented in the Table and Figure shows that the BMI-SCORE among 1.00 and 2.00 that school children 47(78.33) were in 1.00 and 13(21.66) were in 2.00.

BMI		Frequency	Percentage (%)
BMI-SCORE	Lowest thru 18.5	47	78.33
	18.5 thru 24.9	13	21.66



The finding reveals that, there was no significant association between dietary pattern score with socio demographical data such as standard, sex, religion, residential area, education and occupation of father and mother, caste, self-related health status, etc.

The finding reveals that, there was no significant association between dietary pattern score with socio demographical data such as sex, religion, residential area, education and occupation of father and mother, caste, self-related health status, etc. There was standard shows that statistically significant with dietary pattern score and socio demographic data, p value was 0.010($p \leq 0.05$).

Hence, there was significant association with standard and dietary pattern sc

CONCLUSION

Through this study it is concluded that there is need for paying attention on children regarding their body mass index and dietary habits.

REFERANCE

1. López-Sánchez GF, Sgroi M, D'Ottavio S, Díaz-Suárez A, González-Víllora S, Veronese N, Smith L. Body Composition in Children and Adolescents Residing in Southern Europe: Prevalence of Overweight and Obesity According to Different International References. *Front. Physiol.* 2019; 19. pmid:30837896
2. Flegal KM, Carroll MD, Kuczmarski RJ, Johnson CL. Overweight and obesity in the United States: prevalence and trends, 1960–1994. *Int J Obes.* 1998;22:39–47
3. Willet WC. Is dietary fat a major determinant of body fat? *Am J Clin Nutr.* 1998;67: S556– S562
4. Grace TW. Health problems of college students. *J Am Coll Health.* 1997;45:243250.
5. Nuttall, Frank. (2015). Body Mass Index. *Nutrition Today.* 50. 1. 10.1097/NT.0000000000000092.
6. Mai, Volker & McCrary, Quintece & Sinha, Rashmi & Gleib, Michael. (2009). Associations between dietary habits and body mass index with gut microbiota composition and fecal water genotoxicity: An observational study in African American and Caucasian American volunteers. *Nutrition journal.* 8. 49. 10.1186/1475-2891-8-49.
7. Akin et al.1986; Wirfa'lt and Jeffery 1997; Wirfa'lt et al. 2000; Millenet al. 2001; Quatromoni et al. 2002
8. Slattery, Martha. (2010). Analysis of dietary patterns in epidemiological research. *Applied physiology, nutrition, and metabolism = Physiologie appliquée, nutrition et métabolisme.* 35. 207-10. 10.1139/H10-0
9. Emerald HS, Thomas M, Raju A et.al. Body mass index and eating habits among the university students. *Int J Health Sci Res.* 2019;9(3):164-167.
10. Emerald HS, Thomas M, Raju A et.al. Body mass index and eating habits among the university students. *Int J Health Sci Res.* 2019;9(3):164-167.