

## **Prevalence of Obesity among school children of low socio economic status is much lesser than malnutrition**

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**ABSTRACT:** Obesity means having too much body fat .it is not the same as overweight which means weighing too much .A person may be overweight from extra muscles, bone, or water as well as too much fat. This article in both terms wt is higher than what is thought to be relative height. This article discusses obesity among poor children of school age. Obesity is now a day's most wide spread medical problems affecting children and adolescent living in developing countries as well as in US. It became a global problem which is in rise. This study was conducted to assess prevalence of obesity in poor children of north India. Prevalence of obesity is much lesser than malnutrition in north India in children of poor socio economic status. The risk of cardiac diseases cannot be denied it is present in poor children too. This study observed that 13.2% children are under risk. Obesity is more prevalent in female children than male children. Data represents that obesity increases with age as it is observed less in children below the age of 8 years. Nurses have a unique role in educating the public the study highlighted that awareness needs to be increased on obesity in poor children but more concentration still required to prevent malnutrition.

**Key words-**BMI, Children, north India, obesity.

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### **I. Introduction-**

According to American obese association 15 % adolescent and to 6 to 11 yrs children are obese. Numbers are expected to increase continuously.

Childhood obesity represents one of the greatest health challenges. Obesity has a profound effect on a child's life .obesity increases the child's risk of numerous health problems .it creates high blood pressure, high blood sugar, heart attack due to coronary heart disease, bone and joint problems, sleep apnea ,emotional disturbance, maladjustment in the societies due to looks. Obesity has a profound effect on a child's life .This is prevalent in developing countries a study was conducted to check prevalence of obesity among children of low economic status. According to WHO 22 million under 5 yrs of age children are overweight. In a national survey conducted in USA from 1960 to 1990 the prevalence of overweight in children increased from 5 to 11%. In studies urban Indian school children from different regions reports a high prevalence of obese and overweight children is significantly high till date no data is emerged from low socio economic group in India to project prevalence of obesity in UP..

### **II. Objective:**

This study aims to assess: a. Prevalence of obesity in poor children indirectly assessing risk of cardiac disease. B .Compare the risk of obesity with malnutrition in north India. C.Planning obesity awareness programme in children of low socio economic status.

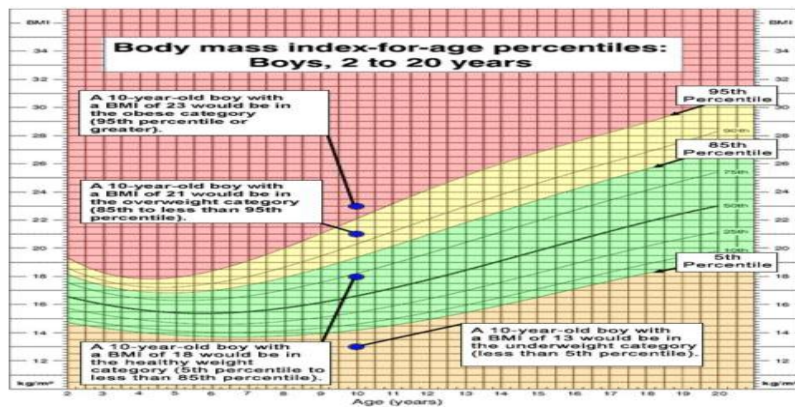
### **III. Methodology-**

Prevalence of obesity was checked in north India in the age group of 2 to 17 yr in one of the schools run by NGO FOR POORS .Based on direct measurement of their height and weight BMI is used to identify obesity in children.Wt was considered in kg .On the basis of CDC suggestion (centre of disease control and prevention) BMI was calculated for 143 children in health check-up camp.

Formula for calculation of BMI-

BMI=weight in kg/height in mt x height in meter

BMI does not measure body fat directly. But BMI correlates to body fat direct measure body fat.BMI is considered as an alternative for direct measure of body fat.BMI is an inexpensive and easy to perform This is a method of screening for overweight categories that may lead to health problems. After BMI is calculated for children and teen .The BMI no is plotted on the CDC and growth chart for boys and girls is plotted in percentile. The percentile indicates the relative position of child BMI number of the same sex and age. The growth shows the weight status category used with children under wt, healthy wt, over weight and obese.



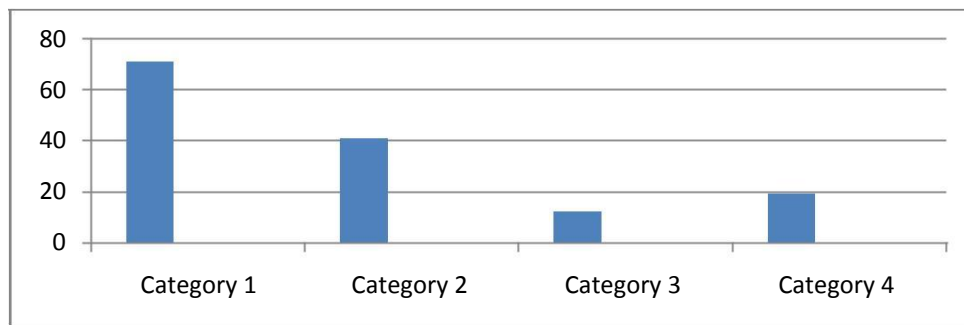
BMI for age weight status categories and the corresponding percentile shown in table.

Weight status categories	Percentile range
Under weight	Less than 5 percentile
healthy weight	5 to 85 percentile
Over weight	85 to 95percentile
Obese	Equal or greater than 95 percentile

American academy of pediatrics AAP recommend the use of BMI to screen for overweight and obese in children. Calculation and interpreting BMI using the BMI percentile involves following steps.

1. Before calculating BMI obtain height and weight measurement properly.
2. Reviewing the calculated BMI for age percentile and results .The BMI for age percentile is used to interpret the BMI number because BMI is both age and sex specific for children and teens.

important – The amount of body fat changes with age. The amount body fat differs from boys and girls.results – Total children -143



Wt status as per BMI

Under wt-71 49.6%

Healthy wt-41

Over wt-12s

Higher wt-19(8 to 10 yrs) 13.2 %

Gender wise distribution-

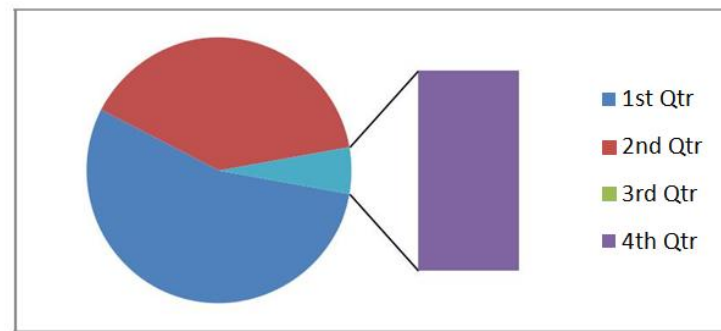
Male children

Under wt -29

Healthy wt-21

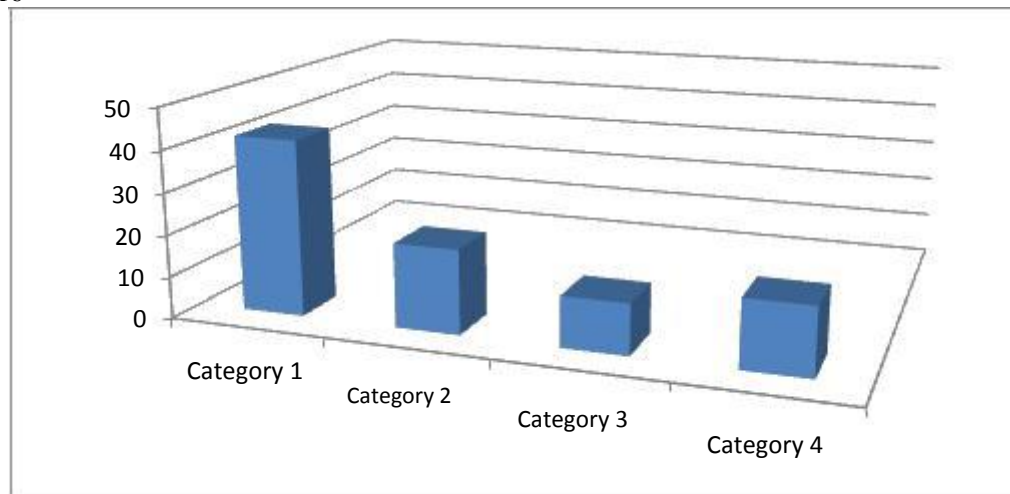
Over wt- nil

Obesity -3



Female children

Under wt -42  
Healthy wt -20  
Over wt-12  
Obese -16



#### IV. Conclusion

The finding revealed the following-

1. Prevalence of obesity is much lesser than malnutrition in north India in children of poor socio economic status.
2. The risk of cardiac diseases Cannot be denied it is present in poor children too. This study observed that 13.2% children are under risk.
3. Obesity is more prevalent in female children then male children. Data represents that obesity increases with age as it is observed less in children below the age of 8 years.
4. Nurses have a unique role in educating the public the studyhighlighted that awareness needs to be increased on obesity in poor children but more concentration still required to prevent malnutrition.

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