Prevalence of obesity among school children in Dakkilivaripalem at Nellore

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Abstract

Back Ground: Growth and development usually referred to a unit and express the sum of the numerous changes that take place during the life time of an individual. The child’s bodies become large and more complex. The personality simultaneously expands in the shape and complexity.

Objectives
1. To assess the prevalence of obesity among school children.
2. To find out the association between the prevalence of obesity among school children with their selected socio demographic variables.

Materials and Methods: The researcher used quantitative research approach with Descriptive research design. The samples were selected by using Non-probability convenience sampling technique was used to assess the prevalence of obesity among school children in Dakkilivari Palem at Nellore.

Data was analyzed by using descriptive and inferential statistics. The results revealed that with regards to BMI of school children, 6 (20%) were under weight, 13 (43%) were normal weight, 8 (27%) were overweight and 3 (10%) were obesity.

Keywords: Prevalence, obesity, school children, Dakkilivari Palem

Introduction

School age is a significant period of human life. It is the segment of life span that extends from age 6-12 years. This is a time of gradual growth and development with steadier and more even progress is both physical and emotional aspects. Obesity refers to the state of weighing more than average for height and body build. Any child whose weight falls in the 90th to 95th percentile for age, gender and height on the national center for health statistics (NCHS) growth chart is considered overweight. Overweight is a complex condition and may involve a variety of influences including metabolic, hypothalamic, hereditary, social, cultural and psychological factors. It may contribute to cardiovascular, metabolic and hepatic complications.

The national morbidity survey report of childhood overweight was considered as a problem of affluent countries. Today this problem is appearing even in developing countries. In developing countries such as India especially in urban populations, childhood overweight is emerging as a major health problem. Studies from metropolitan cities in India have reported a high prevalence of overweight among affluent school children. Available studies from Chennai and Delhi have shown the prevalence of overweight as 6.2% and 7.4% respectively. About 29% urban school children are overweight in India.

Childhood obesity is a fast emerging nutritional problem. In the modern world, the sedentary life style, very little activity in terms of games and sports, exercise etc is some of the factors contributing to obesity in children. According to the previous studies on obesity and its related factors, the educational level has direct impact on reduction of obesity in children. Nurses also play an important role in recognizing potential weight problems and assisting parents and children in preventing overweight.

Prevalence of obesity among children are developing countries are consistently high. This indicates that there is need for health education campaign to the family especially to the mothers.
Statement of the Problem
A Study to Assess the Prevalence of Obesity among School Children in Dakkilivaripalem, Nellore.

Objectives
- To assess the prevalence of obesity among school children
- To find out the association between the prevalence of obesity with their selected socio demographic variables.

Materials and Methods
Research Approach: A quantitative research approach was utilized to assess the prevalence of obesity among school children.

Research design: The descriptive research design was adopted to assess the prevalence of obesity

Setting of the study: The study was conducted in Dakkilivari Palem at Nellore.

Population
Target population: The target population of the study was the prevalence of obesity among school children.

Accessible population: The present study includes school children who are residing in Dakkilivari Palem at Nellore.

Sample size: The sample size for this study was 30 school children.

Sampling technique: Non-probability convenience sampling technique was used to select the samples.

Criteria for sampling collection
Inclusion criteria
- Children who are available at the time of data collection.
- Children who know Telugu or English.

Exclusive criteria
- Children who don’t know Telugu or English.
- Children who are not willing to participate in the study.

Description of the tool
The tool was developed with the help of related literature from various text book journals website discussion and guidance from experts. The tool will be developed to assess the prevalence of obesity among school children in Dakkilivari Palem at Nellore. It consists of two parts:

Part I: It deals with the demographic variable which includes age, gender, birth order of the child, term maturity of the child, immunization schedule, religion, residence, dietary pattern, physical activity, family history of obesity, endocrine problem of the child.

Part II: deals with the structured questionnaire and BMI to assess the prevalence of obesity among school children.

Result and Discussions

Table 1: Frequency and percentage distribution of prevalence of obesity based on BMI among school children. (n=30)

<table>
<thead>
<tr>
<th>BMI</th>
<th>Frequency (f)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under weight</td>
<td>6</td>
<td>20</td>
</tr>
<tr>
<td>Normal</td>
<td>13</td>
<td>43</td>
</tr>
<tr>
<td>Over weight</td>
<td>8</td>
<td>27</td>
</tr>
<tr>
<td>Obesity</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
<td>100</td>
</tr>
</tbody>
</table>

Table no-1: Shows that with regards to BMI of school children, 6 (20%) were under weight, 13 (43%) were normal weight, 8 (27%) were overweight and 3 (10%) were obesity.

Table 2: Mean and standard deviation of prevalence of obesity among school children.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Mean</th>
<th>Standard deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>BMI</td>
<td>16.75</td>
<td>4.06</td>
</tr>
</tbody>
</table>

Table no-2: Shows that Mean and standard deviation of prevalence of obesity among school children based on BMI mean score is 16.75 and standard deviation is 4.06.

Association between the prevalence of obesity among school children with their selected socio demographic variables
There is a significant association between the prevalence of obesity among school children with their demographic variables like, age, dietary pattern and term maturity at birth. There is no significant association between the demographic...
variables like, gender, religion, birth order of child and immunization.

**Nursing Implications of The Study:** The findings of the study have several implications for nursing practice, nursing education, nursing research and nursing administration.

**Nursing Practice:** The nurse as member of the health team should be aware of the causes, risk factors and the management of obesity.

**Nursing Education:** Obesity is the leading cause of death among the children and also among the adults, and the nurse educators should teach the staff and students nurses regarding obesity, risk factors and also about how to manage the obesity for children.

- They should take up the responsibility to create awareness about how to manage the obesity in children and thus to prevent the attack of health problem in future.

**Nursing Administration:** The nurse administrator should conduct awareness program’s regarding prevention of risk of the obesity for children and also to reduce the obesity of children who are already affected.

**Nursing Research:** The findings of the study can generalized to increase the body of knowledge in nursing field, continuing research and health education will make the public general and health professional to understand the importance of prevalence of obesity to screen the children and to give information to reduce the obesity and also risk effects of obesity.

**Recommendations for Future Research:** Based on the finding, the following recommendations are suggested for future research.

- A similar study can be conducted with large sample with different setting.
- A comparative study can be conducted between children and adults.
- A similar study can be conducted with associating with other factors.
- A similar study can also be done in higher socio economic group children also.

**Conclusion:** The study concluded that, the prevalence of obesity among school children based on their BMI 8 (27%) were overweight and 3 (10%) were obesity. As a community Health Nurse, they need to conduct awareness programmes and educate about preventive measures of obesity to the school children and their family members it will useful to reduce incidence rates in future.

**References**

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