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Assessment of School Age Children's Awareness about Obesity

Thesis

**Submitted for Partial Fulfillment the requirement of
Master Degree in Pediatric Nursing**

By

Heba Ali Mohammed Ali

(B.Sc, Nursing Science)

(Faculty of Nursing, Ain Shams University, 2011)

Head Nurse of Pediatric Department

Kom Hamada Central Hospital

**Faculty of Nursing
Ain Shams University
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Supervisors

Prof/ Iman Ibrahim Abd Al Moniem

Professor of Pediatric Nursing
Faculty of Nursing, Ain Shams University

Prof/ Zeinab Fathy El Sayed

Professor of Pediatric Nursing
Faculty of Nursing, Ain Shams University

**Faculty of Nursing
Ain Shams University**

2022

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List of Abbreviations

<i>Abb.</i>	<i>Full term</i>
AHO	Albright Hereditary Osteodystrophy
ANA	American Nurse Association
BMI	Body Mass Index
CDC	Center of disease control and prevention
ECHO	Ending Childhood Obesity
FDA	Food and Drug Administration
GH	Growth Hormone
GHD	Growth hormone deficiency
MUAC	Mid Upper Arm Circumference
NHANES	National health and nutrition examination survey
TSH	Thyroid hormone deficiency
PA	Physical activity
WHO	World Health Organization

Assessment of School Age Children's Awareness about Obesity

Abstract

Background: Childhood obesity may have an adverse effect on health leading to increase physical and psychological health problems and reduced life expectancy due to lack of knowledge, practice and awareness about obesity among school children. **Aim:** to assess of school age children's awareness about obesity. **Design:** A descriptive design. **Setting:** 3 primary schools at Kom Hamada city affiliated to education directorate in El-Beheria governorate in Egypt. **Subject:** A systematic random sample from 540 primary school children at age of 6-12 years selected from three previously mentioned settings. **Tools:** 1- Structured questionnaire to assess children's' knowledge and reported practice. 2- Awareness scale to assess school children's awareness regarding obesity. **Results:** More than two thirds 65.5% of studied students had poor total knowledge about obesity, nearly three fourth 74.1 % of them had unsatisfactory level of total reported practice and less than half 46.3% of them had average total awareness. **Conclusion:** children had unsatisfactory knowledge and reported practice regarding obesity .There was positive correlation between children's knowledge and their awareness while negative correlation between children,s awareness and their reported practice .**Recommendation:** Educational program for school children and their mothers through planning and developing training programmes for acknowledgement of excess weight and an understanding of it's health consequences are essential first steps in tackling obesity.

Keywords: Childhood obesity, School children awareness , Educational program

Introduction

Childhood obesity is the major public health problem in which excess body fat has accumulated to an extent that may have negative effect on the health and it is a form of malnutrition that often result from imbalance between calories intake and calories utilization, childhood obesity defined as weight above 95 percentile for age and sex. The body mass index is an indirect measures of obesity based on the readily determined measures of height and weight (*Johnson et al., 2018*). Obesity is a complex disease that affects people of all ages, defining obesity will bring clarity to the problem. Reviewing signs and symptoms of obesity will help to identify children in need of support. The information regarding obesity can potential individuals children with obesity prevention or management, regarding obesity or other chronic illnesses affiliated with obesity. The provided information will enhance knowledge of obesity and explore the various populations in need, as well as methods used to prevent, manage or treat obesity (*Centers for Disease Control (CDC), 2020*).

The prevalence of obesity among children in United States increase and most obese children go on to become obese adult. Data in 2015-2016 show nearly 1 to 5 school age children and young adult (6-19) years in united state has obesity and obesity

prevalence is 18,4% among children 6-12 years (*Centers of Disease Control and Prevention, 2016*).

The etiology of childhood obesity is complex and multifactorial and it is caused by various genetic factor, familial lifestyle, environmental, psychological factors, high fat food energy intake excessive than energy expenditure, sugar sweetened drinks and may be due to pathological condition as endocrine disorder as hypothyroidism. Obesity has more negative effects on child health, it is considered health risk for children, it caused more physical health consequences as hypertension, coronary atherosclerosis, type2 diabetes etc. Not only can childhood obesity impact child,s physical health, but there are variety of social and emotional issues that can result from it as body dissatisfaction, negative body image, low self-esteem, depression, stigmatization, emotional taunts from peers and social marginalization which can influence their social and psychological issues (*Elsayed et al., 2017*).

There are several ways to assess obesity such as observation and clinical examination which include excessive weight and tall stature also assessment can include nutritional assessment as dietary intake and eating pattern also body mass index is the best single measure for children obesity (*Oliver et al., 2015*).

School children awareness about obesity should be assessed from nursing staff to improve their awareness about hazards of being obese person and enforcing healthy eating habits and the benefits of daily physical activity, most efforts to prevent childhood obesity (*Centers for Disease Control (CDC), 2020*).

The large attributes for emerging problem of overweight and obesity comes from changing lifestyles due to growing economy, technology and globalization. These lifestyles have contributed to obesity and metabolic risk factors like dyslipidemia, impaired glucose metabolism etc. and morbidities like type 2 diabetes mellitus, hypertension and depression among urban children, the increasing trends in childhood obesity, metabolic risk factors and morbidities are cause of grave concern among health care professionals and parents. The knowledge about obesity risk factors, metabolic risks and health consequences of obesity are lacking in school children, teachers and parent. Understanding school children knowledge regarding obesity and it's risk factors may be the cornerstone to success of preventive measures for childhood obesity (*Gunagi et al., 2020*).

Nurses have a role to play in tackling the effects of childhood obesity, and those focusing on pediatrics or family practice should be aware of the causes, consequences and

continued rise. Family nurse practitioners and pediatric nurse practitioners help curb childhood obesity can help treat childhood obesity in traditional clinical settings and other environments. NPs should be able to determine whether a child is overweight or obese based on one's BMI. Once the child is determined obese, nurse practitioners can plan to intervene through promoting health activities and refer pediatric patients to local health food stores, exercise facilities, sports centers, school programs or other resources (*Centers of Disease Control and Prevention, 2020*).

Nurses can help parents and children by providing advice about healthy nutrition and through weight management programs, offer strategies for decreasing calorie intake and increasing physical activity, nurses should always take whole family approach because it is challenging for obese children to alter their dietary or physical habits if not supported by their families, nurses should work with all family members of the multidisciplinary team in addressing childhood obesity as a major health issue with long -term morbidities (*Rabbit et al., 2016*).

Significance of the study:

- According to most recent national health and nutrition examination survey (NHANES) 18.5 percent of children and 39.5 percent of adult had obesity in 2015-2016.
- According to center of disease control and prevention (CDC) data in 2017-2018 show obesity prevalence was 13.4% of children among 2to 5years old and 20.3% of childrens among 6-12 years in united states, childhood obesity is also more common among certain populations.
- **In Egypt**, previous studies indicates that obesity is an important health problem among school children. The prevalence of obesity among Egyptian school children was 14.7 and 15.08 in boys and girls respectively (*Salem et al., 2020*). According to Egyptian pediatric association, the prevalence of obesity among school children 6-11years during period 2014-2015 was 11.24% - 12.28% (*Abdel Karim et al., 2017*). Therefore, it is important to carry out this study to shedlight on the children's awareness in their knowledge and practice about obesity.