



The Role of Nurses in Addressing Student Obesity

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ABSTRACT

School nurses may play an important role in the prevention and management of overweight and obesity in school-aged children and young people. Obesity is an issue that affects individuals all over the world. In order to determine school nurses' responsibilities in this area and factors that might influence how they support and provide obesity prevention services, it is helpful to evaluate concepts and beliefs regarding obesity prevention in schools. An in-depth examination of the many ways in which nurses are combating childhood obesity in education setting is provided in this article. According to research, school nurses strongly support initiatives to reduce obesity in schools and are increasingly interested in offering primary and secondary preventive care services there. In India also such practices of nursing should be allowed in the school for the wellbeing of the students

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INTRODUCTION

Schools have been among the most crucial institutions for more than a century in ensuring that children and young people in India have access to opportunities for physical activity.[1] Indian schools have mandated some form of physical education for all students since the late 19th century, and since then school sports have played an increasingly significant role in the educational process.[2,10]The recess periods that are built into the school day's schedule, as well as walking or riding bicycles to and from school, have historically served as incentives for students to participate in some type of physical activity. This is a step in the direction of enhancing the students' general health and wellbeing.[3]However, concerning health trends are developing in the twenty-first century, indicating that schools need to update and extend their role in providing and encouraging physical activity for the youth of our society. Childhood and teenage obesity is one of the most common dietary problems, affecting people of all ages and in both developed and developing nations. According to the World Health Organization (WHO), obesity is one of the top five health concerns in industrialized countries and one of the top ten worldwide health hazards.[4,19] Around 22 million children worldwide are overweight and under the age of five, according to the most recent WHO recommendations and figures gathered from 79 developing countries and a few rich ones. Previously regarded to be a problem associated with prosperity, obesity is now fast rising in many undeveloped countries as well . [5,19] Children today often share homes with adults who are malnourished, overweight, or obese, even in nations like India that have a long history of a high prevalence of malnutrition.[6] People in the healthcare sector are extremely anxious as a result of the rising relative weight trends in populations. The present study was carried out because there is a dearth of data on the incidence of OW and obesity among children of different socioeconomic backgrounds in Hyderabad.This is because previous research on the topic has been limited.

A growing number of people in most regions of the globe are overweight or obese. [8] Atherogenic dyslipidemia is strongly linked to obesity, which is a major risk factor for the development of metabolic syndrome, which is a major risk factor for the development of atherosclerosis. Obesity is a factor in both of these illnesses.[9] Additionally, it has been discovered that young Asian adults who were obese as children also had higher blood pressure and thicker carotid intima-media (IMT). Moreover, since adiposity is mostly formed throughout infancy and adolescence, it is imperative that doctors work to reduce juvenile obesity rates during this time.[10] It is crucial to make an accurate assessment of the size of children's bodies to get started. For the time being, there isn't a common understanding of what constitutes childhood obesity. Using a function formula that takes into consideration both a person's height and weight may make determining their degree of obesity simple and quick. [11] Visceral obesity,

defined by an accumulation of visceral adipose tissue (VAT), is associated with an increased risk of obesity-related disorders, making it all the more important to measure the waist circumference (WC).[13] Throughout the years, a number of public health, medical, and educational authorities have advised schools to concentrate more emphasis on providing kids with physical activity. The provision of "excellent, everyday physical education" should be a goal that schools try to achieve, according to professional associations that have argued for this position for the greater part of three decades. There have been numerous requests for the expansion of Physical education programmes. Unfortunately, very few Indian schools are at that level, and no data exists to imply that significant progress has been made in that direction.[14]

School nurses are healthcare experts that work directly with students of school age, as well as with their parents and teachers, to offer support and direction on a range of health-related topics. For the growth and development of children, they are crucial. [7,15] Supporting healthy behaviors and encouraging children to participate in these behaviors, school nurses may assist school-aged children have access to suitable resources that will help them maintain or improve their health. A school nurse is an ideal candidate for this position. [16] As global obesity rates rise, professional school nurses are being asked to place more focus on promoting healthy lifestyles, including encouraging their students to strike a balance between eating well and exercising so that they may stay at a healthy weight. [17] Health promotion actions that lower the prevalence of illnesses that increase the risk of becoming overweight or obese may be greatly bolstered by school nurses because of their privileged position in the educational system.[12,18]

The goal of this study is to give a general overview of the many diverse tasks that a school nurse may undertake to lessen the prevalence of overweight and obese kids in educational settings. The report specifically focuses on the part school nurses can play in treating and preventing juvenile obesity. Evaluator, health educator, counsellor, referrer, leader, and researcher are a few positions that fall into this category.

ASSESSOR

A nurse assessor does first evaluations of patients using a Health Needs Assessment instrument. Since this degree of care is beyond the scope of non-qualified Carers, the goal of these reviews is to evaluate whether or not a Registered Nurse is necessary to provide or oversee care outside of school hours. As part of her participation in the health assessment process, the school nurse is tasked with compiling student medical histories and performing physical exams. Nurses in schools now have access to a wider range of nursing diagnoses, which helps them better identify and classify student issues.

The knowledge, abilities, and responsibilities required to manage these illnesses independently are available to school nurses [19] Obtaining a patient's medical history, doing a physical exam, and continually monitoring the patient's weight, height, body mass index (BMI), waist circumference, and other anthropometric measures are all part of the process of managing health concerns that impact children of school age. In order for this effort to be effective, it will need the participation of every member of the healthcare team, including physicians, nurses, nutritionists, and social workers.[20]

There are a few distinct forms that have been developed for the health history and physical examination. The individual priorities of each member of the medical care team are represented by these forms [21]

HEALTH EDUCATOR

While guiding and coaching students through the various phases of practical training, nurse educators also act as role models for them. Since students consult their instructors for feedback on patient engagement, decision-making, and health assessment, this is vital to clinical development. Students look to their instructors for advice. In both industrialised and developing nations, nursing practise includes the widely accepted component of health education. It is one of the school nurse's most important responsibilities, and in some states, it is required by various nursing practise legislation [22] One of the primary duties of a school nurse, in both developed and developing nations, is to teach people on how to live good lifestyles. [6,23]

When it comes to meeting the needs of school-aged children, the school nurse is well situated to provide assistance in line with the developmental phases these children are now experiencing. Children can be given preventative care and encouragement through weight-related counseling to achieve this [24]

School nurses have the chance to teach kids by promoting healthy lifestyles and assisting them in changing behaviours that could be harmful to them or others. For instance, they may provide dietary guidance and promote good eating habits (such as emphasizing the benefit of eating breakfast each day, which gives students the energy, vitamins, and minerals they need to succeed in class, according to the restrict the use of soft drinks, which are heavy in sugars and/or caffeine but have little visible nutritional value; and offer guidance on maintaining a clean home).[25]

The nurse plays a crucial role in promoting healthy living by providing services including health education activities. These community-wide activities take the form of, for example, consultations, classroom lectures, and exhibits that promote health in schools. One example of the nurse's significant contribution in this area is the provision of health education activities. These exhibits, which also contain quizzes, posters, and booklets, are meant to improve the effectiveness of health education for overweight children and teenagers, both in their own schools and in other settings. [26]

For two primary reasons, the position of an educator is very helpful in the attempt to enhance public health. To begin with, most kids in school are typically in good health and capable of learning, understanding, discussing, and using knowledge about health. Second, each visit presents an opportunity to engage with a bigger number of people [27] School nurses might significantly benefit a great deal of people if they focused their educational efforts on training teachers and parents.

The nurse is responsible for creating educational programs for persons who are overweight or obese (for example, on respiratory illnesses, eating disorders, orthopaedic issues, and hyperinsulinemia), and for sustaining effective intervention techniques by providing further assistance and gaining ongoing funding support [2,28]

COUNSELLOR

In order to help individuals concentrate on a goal or result and build self-care skills, the nurse assumes the position of a counselor and makes use of the therapeutic link. This paves the way for individuals and their loved ones to have a more proactive role in making choices about their health. School nurses are qualified to help kids choose the most appropriate course of action for any health issues they may be experiencing. They can give advice to kids who are overweight or obese about the difficulties they could encounter (including bullying, name-calling, and teasing), and they can also give advice to kids who are particularly at risk of getting fat. [29]

Promoting a balanced diet, regular exercise, and walking are the school nurse's responsibilities [30] School nurses may choose from a variety of options when it comes to scheduling counseling appointments for students and their families. The nurse at a school or clinic has many chances to interact with kids and advise others who work with them on how to best address any issues they may be experiencing.[31] In order to give patients the possibility to work toward leading more resourceful and satisfying lives, nurses have access to a wide range of counselling approaches that they might employ. The nurse may provide the support to the individuals, help them acquire understanding, and aid them in bringing about change in their beliefs, emotions, and behaviors.

For school children who are dealing with mental illness and addictions, the nurse can provide intake coordination, evaluation, rehabilitation (including counseling and group treatments), as well as follow-up care by using readily accessible assessment methods. Families of patients can receive this care as well. In addition to overseeing and monitoring the use of medications, nurses are also in charge of administering psychosocial skills. In order to address the stigma that is frequently associated with mental illness, nurses are better equipped to provide patients with recommendations that are suitable based on the requirements that have been identified for each individual.[32]

REFERRER

Without gaining prior approval from the relevant authorities, nurse education programs that result in nurses being authorized to recommend sophisticated treatments to treat obesity for schoolchildren cannot be offered. These standards and guidelines are intended to facilitate the development of nurse education programs and give nurses the authority to suggest several lines of treatment for obese school children.[33]

When a student is overweight or obese, school nurses should be able to advise them of the resources that are available, refer them to the proper services, and then follow up with them until the problem is either controlled or resolved [34] Through partnerships and open lines of communication with primary care physicians, community groups, education and health ministries, and other governmental and non-governmental agencies, RNs may locate useful referral resources. One of the most important aspects in avoiding obesity is a primary care physician and nurse team that works together in an organized manner.[35]

Nurse referrers must show the competent authority that they have successfully completed training to treat obese children. Both theoretical knowledge and hands-on experience in a clinical context must be included in this training. Following certification, nurse referrers are required to take part in ongoing education and training, which must cover the pertinent treatment recommendations for obesity.

LEADER

In the majority of healthcare organisations, nurse leaders with expertise in nursing informatics can be found. These nurse managers have a broad range of responsibilities, the bulk of which include "the procurement, deployment, and evaluation of clinical information systems" [36]. These experts are

essential to the functioning of the medical organization over its entire life. In addition to executive oversight, their responsibilities also include the administration of projects, the training of system administrators, and the data analysis.

A nurse leader with knowledge worker skills may be an integral element of providing informational and operational assistance in health centers. However, enterprises in the technology, retail, and consulting industries also make advantage of the critical skills and expertise that nursing information experts possess. Nurse executives with formal education in informatics contribute significantly to the growth of businesses' product and service offerings as well as their sales all over the world.

One important aspect that sets nursing leadership apart from other forms of leadership is the effect of clinical practise.[37] Simply said, nurse leaders have a responsibility to improve the environment in which healthcare is provided. The role of school nurses is to lead, influence, or persuade people to take actions that will improve the surroundings in which school-aged children learn and live.

Effective communication and collaboration between health experts and school staff is a top priority, and leaders play a key role in fostering these conditions [38]. One of the most important responsibilities of a school nurse is to supervise and oversee all areas of student health, including weight management programs and obesity screening clinics. The team's leader must keep lines of communication open and ensure that they are active and clear in order to accomplish the desired result. They must also take the required actions to inspire the team. [39]

Leaders in the healthcare field need to have the knowledge and expertise to collect data, conduct analyses, and recognize clinical patterns and arrangements in order to ensure that tasks are accomplished to enhance the quality of care provided to patients and the results of their treatments.

RESEARCHER

When it comes to health, illness, and medical treatment, researchers in nursing are scientists who look into a range of themes. They plan and carry out scientific investigations in an effort to find a solution, hoping to discover a method that could enhance health as well as health care services and outcomes. In the years upto 2022, the Bureau of Labor Statistics (BLS) projects nurse researchers will have faster-than-average growth of 19%. The growth rates of various other professions are comparable to this pace. Hypotheses are developed, experiments are planned and executed, data is collected, analyzed, and results are reported by those working in the field of nursing research. They often submit grant applications and meet reporting requirements since their work is supported by grants.[40]

They frequently submit articles, research reports, and other sorts of writing to nursing, medical, and other types of professional journals and periodicals, and many of them hold teaching positions in academic or clinical settings. In order to find the best solutions to difficult problems, researchers in the nursing sector often team up with their counterparts in other areas, such as pharmacy, nutrition, medicine, and engineering. Research assistant, clinical data coordinator, and clinical research monitor are just a few of the entry-level roles that RNs often fill at academic institutions.

In order to improve the health of children who are currently enrolled in schools, school nurses may assume the role of researchers and take part in systematic studies that collect and analyse data on overweight and obesity. This is possible as a component of their research role [41] School nurses can act as researchers to combat obesity by influencing at-risk kids, teens, teachers, and parents using qualitative and quantitative methods. This would pathway includes relationships with academic institutions for the purpose of conducting research on innovative solutions and increase the monitoring and comprehension of overweight and obesity issues.[42]

CONCLUSIONS

School nurses are well-aware of the many hats they may have to wear, but the many facets of student health care need them to continually juggle their priorities. School nurses may find it challenging to apply their varied expertise to combat the public health crisis of childhood obesity if they are expected to follow the rules and objectives put out by the instructors in such an atmosphere. For the welfare of the students, such nursing techniques must be authorized in schools in India as well.

CONFLICT OF INTEREST

All authors proved that they have no conflicting interests.

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