The aim of this study was to identify primary health care nurses’ perception on their performance in the health status assessment of overweight adolescents in schools. This is a descriptive, qualitative study. It was conducted in Natal-RN with four nurses who worked in primary health care units whose territory encompassed a number of state schools. Data collection was carried out through semi-structured interviews. The data were then analyzed by using the technique of content analysis (theme coding). The following thematic categories were identified on the role of nurses in the assessment of overweight at schools: a) difficulty of monitoring adolescents in primary health care; b) causes for the increase of overweight in adolescence; c) health actions developed in schools; d) overweight prevention, identification and intervention in adolescents at school. Our study revealed gaps in nurses’ performance related to the monitoring of adolescents. The interviewees held other professionals accountable for the problem and exempted themselves from the obligation to implement actions, such as health promotion, disease prevention or treatment. The lack of articulation between health services and educational institutions is a limiting factor for the provision of care to adolescents in primary care units.

Keywords: Nursing; Adolescent; Overweight; School Health; School Health Services.
INTRODUCTION

Adolescence is the stage of life between childhood and adulthood. It is marked by a complex process of growth and biopsychosocial development. The Ministry of Health follows the convention established by the World Health Organization, which defines adolescence as the period between 10 and 19 years of age.³

This stage of life is a critical period for the development of overweight, due to the predominance of sedentary leisure activities and inappropriate eating habits.² These are associated with an increased risk of developing other health problems, such as hyperinsulinemia, insulin resistance, cardiovascular and orthopedic diseases, and infertility.⁴

Primary Health Care (PHC), which is considered to be the gateway to the Unified Health System (SUS), has proved unprepared to meet the needs of these users, especially with regard to the training of its professionals and to its daytime service hours (when students are at school). This implies the absence of adolescents in healthcare services and represents a challenge for nursing practice.⁵

In order to solve this problem, the School Health Program (PSE) was released in 2008. The first goal of the PSE is the assessment of students’ health status, through the classification of their nutritional status and early identification of hypertension and diabetes. Primary Health Care Units (PHCU) are responsible for developing the actions recommended in the PSE in those schools that are in their territories.

According to these recommendations, the school is a place of action for primary care nurses. In this environment, nurses may act as a link between adolescents and health services, institute prevention strategies, and identify and intervene in cases of overweight.⁶

Moreover, the health status assessment of children and adolescents (including the assessment of overweight) is an important tool in Nursing practice, since ‘overweight’ is a nursing diagnosis (ND), according to International Classification of Nursing Practice (ICNP), Version 2.⁷ Despite the increasing prevalence of this problem (overweight in adolescents increased from 3% to 21% between 1974 and 2009) and the chances of success through an early intervention in PHC, targeted screening to identify individuals with this ND in schools is still not a routine procedure, nor are the planning and implementation of care programs, and the monitoring of individuals.⁸ However, little is known about the views of these professionals regarding this health problem and its control as a responsibility of nurses who work in primary health care.

Faced with this situation and due to the scarcity of literature on the implementation of actions proposed by the PSE in the schools and on interventions directed at overweight students, we pose the following question: how do PHC nurses perceive their involvement in the health status assessment of overweight adolescents in the school environment?

The aim of this study was to identify primary health care nurses’ perception on their performance in the health status assessment of overweight adolescents in schools.

For purposes of this study, the concept of perception is used to indicate the understanding of concepts and abstractions, and not to describe sensory phenomena with respect to light, smell, sound and tactile sense.⁹

The relevance of the study lies on the need to create subsidies and develop instruments for improving nursing practice in primary care, specifically in the provision of healthcare to populations that, for some reason, are not included in the “care-flow”. In addition to demonstrating the intentionality of some nurses, the study contributes to the strengthening of public health policies, with an emphasis on health promotion, since it addresses the problem of adolescent overweight is included in the National Agenda of Priorities in Health Research.¹⁰

METHODS

This research is part of a broader descriptive study among students from eight elementary schools in Natal-RN, Brazil. Its objectives were to analyze the presence of overweight in adolescents and to identify PHC nurses interactions with these users.¹¹

This is a descriptive, qualitative study. Data were collected from nurses who worked in a PHCU whose territory encompassed the state school where the first part of this study had been conducted.

Only four of the eight schools participating in the original research were part of the territory covered by the PHCU. For this reason, four nurses participated in the second part of the study. The findings are presented in this paper.

Data collection was carried out through semi-structured interviews with voice recording. An interview script was written to guide the initial interviews. The script was submitted to five experts with postgraduate qualifications (Masters and PhDs), researchers of overweight in adolescents with scientific expertise (Qualis Journal System). They evaluated the content of the proposed guiding questions, in relation to: organization, clarity, simplicity, readability, appropriateness of vocabulary, objectivity, accuracy, credibility and adequacy. For each question, a rating of “Yes” or “No” was assigned.¹²

After implementation of the changes recommended by the experts, the script was composed of four guiding questions: what could you comment on the problem of overweight in adolescents? What health actions are developed in the school? What health actions are being developed in the school on the subject of overweight? What do you think about the evaluation of the health status of adolescents in the school environment?
The interviews were conducted between March and April 2013. The nurses were initially contacted by telephone and briefly explained the research objectives. Then, they were requested to schedule an in-person meeting. On the scheduled day, the research objectives were explained in detail. The nurses were also informed about anonymity, confidentiality and were also told that their participation was voluntary and that they could withdraw from the study at any time. All nurses signed an Informed Consent Form and provided written permission to be recorded. The interviews were conducted at the PHCU.

The recorded interviews were transcribed. These data were then analyzed by the technique of content analysis (theme coding). First, we conducted a pre-analysis of the material, a “floating reading”, in order to get to know the data and the narratives. Next, the statements were carefully read, the interview data were sorted into coding categories and searched for themes.

Next, we discussed the categories identified in relation to the concept of PHC in the school context, emphasizing the actions developed by nurses for the overweight prevention/identification/intervention in adolescents.

The study project was approved by the Research Ethics Committee of the Federal University of Rio Grande do Norte, under the CAAE No. 10200812.0.0000.5537. In order to ensure the anonymity of participants, they were only identified by the letters A, B, C and D.

RESULTS AND DISCUSSION

All four participating nurses were between 40 and 52 years of age. They all had extensive work experience in PHC: between 18 and 27 years.

The following thematic categories were identified on the role of nurses in the assessment of overweight at schools: a) difficulty of monitoring adolescents in primary health care; b) causes for the increase of overweight in adolescence; c) health actions developed in schools; d) overweight prevention, identification and intervention in adolescents at school.

DIFFICULTY OF MONITORING ADOLESCENTS IN PRIMARY HEALTH CARE

This category emerged from the statements made by the interviewees. In general, they declared that promoting preventive care or routine care of adolescents in PHC is an impracticable task. This is mainly due to the lack of interest shown by this specific population in seeking these health service units. This perception is exemplified in the following statement: “adolescents think they can’t get sick. That’s why they only seek our services when they are getting sick or due to an unwanted pregnancy. They do not seek our services to check whether everything is alright with them” (Nurse A).

In this statement, we can see that the nurse has a clear vision that adolescents “have no place” in the PHC context. She also critically highlight those factors that would contribute to the maintenance of this situation. However, this vision does not seem to have succeeded in going beyond analysis of the problem to make proposals to transform the practice of nursing care delivery, as shown by the statements of Nurses B and C:

Teenagers do not come often to the health care unit. This is because they attend school in the morning, take care of their siblings, are involved in some kind of program at school or stay idle in the afternoon. […] it has to appeal to them. I never learned to do that in the university or in my day-to-day practice (Nurse B).

I find it very important to get out of the unit and develop actions in schools. In everyday life, however, actions especially developed for teenagers are rare, unfortunately. (Nurse C).

The views expressed by these nurses show the understanding that, from the perspective of wholeness, the PHU is also responsible for the care of adolescents. However, as they reflect upon this issue, they realize that adolescents “have no place” in PHC and they hold on to the idea that providing care in schools is difficult because of this absence. Some of the perceived barriers are: the typical teenage life, which impedes adolescents from seeking the unit; lack of appeal of this unit to adolescents; and the deficient education of nurses about implementing actions for overweight adolescents.

It is understood that the PHC perspective, to promote such assistance, it is first necessary that the nurse watch out for the idea that care to adolescents should occur at different times, such as: childcare, training groups by range age, nursing consultation, assistance in schools and home visits. We observe, however, that professionals have difficulty enforcing their actions outside the conventional health units.

A study that aimed to analyze the scientific production developed by Nursing postgraduate programs on nursing care delivery to adolescents in PHC came to the conclusion that the “no place” of adolescents is more strongly revealed when nurses are questioned and, in a way, led to reflect about their practices. Therefore, in order to ensure the development of innovative actions, partnerships between universities and PHCU should be encouraged.

This difficulty in promoting health to adolescents is mainly associated with the organization of health delivery services and nurses’ training, which do not support the construction of knowledge about adolescence and care to the “non-sick”.

Thus, there is a need for the creation of opportunities for PHC professionals to rethink their conceptions about the role they occupy in the work process. If this reflection about adolescent users does not take place, inaction will be maintained or
ineffective actions will be developed, and this specific population will remain invisible to health services.16

**CAUSES FOR THE INCREASE OF OVERWEIGHT IN ADOLESCENCE**

The respondents demonstrated understanding of the problem of overweight in adolescents. The statements below illustrate the concept that nurses had about the extent and growth of the problem:

*The problem of teenage obesity is clear. It is a current public health problem (Nurse A).*

*Obesity in adolescents is something that is increasing in the population aged 12-18 years (Nurse D).*

The concern identified in these statements is relevant. In Brazil, the 2008-2009 Household Budget Survey revealed that the proportion of overweight 10-19-year-old boys increased from 3.7% in 1974-1975 to 21.7%. Among girls, the increase was from 7.6% to 19.4% over the same periods of time.17

Nurses were also aware of the complications caused by obesity, since they identified as a primary concern about obesity the potential to cause other health problems, including in adult life:

[...] It is of concern because of the onset of diabetes and hypertension in adolescents (Nurse B).

*It sure is of concern because of the diseases that are correlated with obesity. These can range from joint and musculoskeletal problems to hypertension, diabetes and dyslipidemia in adolescence (Nurse C).*

Studies have found an special association between obesity and diseases related to metabolic abnormalities, such as dyslipidemia, hypertension and glucose intolerance. It is noteworthy that these diseases are considered risk factors for type 2 diabetes mellitus and cardiovascular diseases. The latter have become more frequent among younger age groups.18

Overweight can be understood as a multifactorial process. However, nurses agreed that poor dietary habits are the main cause of the disease:

*We ask some adolescents: ‘what does your breakfast look like? He answers: “Um, I eat three toasts, doctor”. And how many fruits? “None” (Nurse A).*

*I believe that the media has a great influence on them, the malls, the fast food houses, the snacks (Nurse C).*

*It’s associated with their lifestyle, because they consume a lot of fast food. (Nurse D).*

We notice that nurses easily associate adolescents overweight with their eating habits. However, this detail should be discussed, because it is possible that, by holding on to this idea, nurses refrain from taking possible actions against the problem, as can be seen in the following statement:

[...] The cause are poor dietary habits. So, when this problem is identified I refer them to our nutritionist (Nurse D).

First of all, we should consider it as a problem of the entire healthcare team, including the nursing staff, and not just a problem of nutrition. According to the second version of the CIPE classification system, the identification of overweight configures itself as part of a nursing diagnosis.7 Moreover, “unbalanced nutrition, caloric intake that exceeds the body's needs”, is a nursing diagnosis included in the taxonomy of the NANDA-I.19 This reinforces the idea that this problem is preventable/identifiable/intervenable by Nursing.

A second point to be considered is that the this problem is not solely caused by poor nutrition. The problem of overweight in adolescents has several causes, such as pubertal changes, low self-esteem, physical inactivity and use of nutritional supplements. Furthermore, the media uses advertising campaigns to sell products that arouse interest to unhealthy lifestyle habits.20

In this sense, we call attention to the challenging role of health promotion strategies in going against the capitalist culture, which promotes a sedentary lifestyle and the consumption of processed foods.

Only one nurse raised the issue of parental physical inactivity and perpetuation of unhealthy habits as a cause for the problem:

*This population follows parental guidance. Parents do not have the habit of engaging in physical activity and this is copied by their children (Nurse A).*

Having a broader view of the problem is essential to the planning of nursing care. The benefits of habitual physical activity associated with healthy eating habits, which contribute to skeletal health, increased flexibility and aerobic capacity, and an inverse relationship with cardiovascular risk factors, need to be considered.15

Yet, technological advancements such as such as video games and computers lead adolescents to a physically inactive lifestyle and a higher caloric intake. The forecast for the next years is that broadband and video games industries will continue to grow, focusing on younger consumers, which will contribute to an unhealthy lifestyle.21
In addition to this worrying scenario, there is also the influence of parental habits, as mentioned by the interviewees. The planning of family-based interventions by the Nursing team is of paramount importance, since intervention programs show better results when the strategies used include the family component.21,22

In general, participants identified the cause of obesity as multifactorial. Intervention planning should therefore incorporate a more comprehensive approach, in which the priority is to implement public policies to encourage healthy lifestyle habits in the entire population.22

**Health actions developed in schools**

When asked about the educational activities that were developed in schools, participants cited sexuality and immunization programs as the main guidance activities for which nurses were responsible.

> We work with immunization programs (Nurse A).

> On the day we go to the school, the nutritionist calculates the percentile and the BMI, we vaccinate (Nurse B).

> We are allowed to go the schools and give lectures on immunization and sexually transmissible diseases (Nurse D).

Although the respondents had a good level of knowledge about overweight in adolescents, we found that they did not see as their responsibility to prevent and/or treat this medical condition. The importance of the role of the nurse in developing actions for health promotion and disease prevention among adolescents attending educational centers is highlighted by many studies.16

Among these actions, which relate to the prevention and early identification of overweight, we must consider the promotion of adequate and healthy eating habits (PASS), one of the recommendations of the National Policy for Food and Nutrition (PNAN). The aim of the PASS is to improve health-related quality of life. It promotes health by focusing on different age groups, in order to reduce the prevalence of overweight, obesity and chronic diseases associated with or related to nutrition and eating habits.23 The PHC nurse is also responsible for developing primary prevention actions for overweight control through educational activities.15

In order to implement effective health education activities and achieve the creation and social control of public policies, the articulation of knowledge and participation of a multiprofessional team, as well as of students, parents, the school community and the society in general is needed.6 However, we found that the nurses saw overweight as a problem that must be dealt with by a single professional: a physician or a nutritionist.

> If you would like to get information on health actions against overweight, you should ask at the school, because there is a nutritionist there (Nurse B).

> […] If I find him with a BMI of ‘overweight’ or ‘obesity’, then he will once again be evaluated by our physician (Nurse A).

Another participant identified other problems that hamper the development of health actions in schools.

> We implement only a few actions in the school because of our workload, which leaves us little time to develop these kinds of activities more often. It is not easy to implement these activities, especially in schools of adolescents, because they have a tight schedule (Nurse C).

It was possible to identify the following as difficulties or reasons for not implementing actions in schools: lack of time of healthcare providers and the tight schedule of school activities. However, the PSE recommends that health actions are included in the schools’ Political-Pedagogical Project. Thus, health units should take the school schedule into account when planning their activities.22

In general, the nurses recognized the importance of developing health actions in schools. However, they also cited difficulties that prevent the implementation of more effective health actions. This corroborates the results of another study, which emphasized that health professionals are only trained to develop actions in health care units and working outside of this scenario represents a challenge for them.24

**Overweight prevention, identification and intervention in adolescents at school**

In order to achieve good results, nurses should use the development of educational activities as a strategy for the control of overweight in primary prevention.25 We could identify that nurses hold a favorable opinion about the development of nursing actions, since all respondents cited the importance of assessing the health of adolescents in the school environment.

> I believe very satisfactory results could be achieved through health assessments in schools if they were properly carried out (Nurse C).
I find these assessments in the school environment to be very important, because they portray the teenager’s home reality (Nurse D).

These statements show that nurses are aware of the close relationship between education and health. This is reinforced in the following statement: “Health and education go hand in hand. Yes, those people who work in nursing care, have a strong belief in this” (Nurse D).

This is the proposal of the PSE, which considers the school to be an ideal space of relationships for the development of critical and political thinking. From this perspective, it is possible to envision a school that prepares students to be critical and informed citizens, who have the skills to act in defense of life and its quality, and whose needs must be met by nursing care strategies.6

Thus, confirming the perception of the interviewees, the PSE contributes to strengthening actions to promote the comprehensive development of young people and provides the school community with programs and projects linking health and education, in order to address vulnerabilities that compromise the full development of adolescents.6

Although they are aware of the importance of providing health care to adolescents in the school environment, the interviewees identified the school environment as “a place of difficult access”. It is evident that the proposed goals of preventing, identifying and treating overweight will only be achieved if families, schools and communities are fully involved, and in a joint effort between society and government.15

Commenting on this fact, the interviewees stated that the schools hindered the implementation of the PSE, mainly because health activities allegedly interfere in the compliance with the school calendar of activities. Furthermore, it is assumed that knowledge is acquired in schools and body health is acquired (or maintained) in health facilities.

There really are difficulties in making the assessment, because it does not depend only on the health unit. It also depends on the school (Nurse B).

There is no health education in schools. The school is concerned with knowledge rather than with the student as a whole (Nurse C).

Because sometimes the school fails to facilitate this union, then the unit also tends to fail in this sense, and instead of resulting in a sum, the whole thing results in a division (Nurse A).

It is worth noting that, in order to achieve its goals and be successful in developing health activities in schools, it is of paramount importance to understand the concept of comprehensive education together with health practices that include prevention, promotion, restoration and maintenance of health of individuals and human collectives.6

In addition, the analysis of the statements revealed that the busy schedule of adolescents, which is filled with a plurality of activities and duties, make it difficult for health professionals to perform their work. The process, however, can be developed in two ways. The first one is the search for cases of adolescents with overweight in order to treat them. The second is the prevention of new cases. Attention and efforts are directed to the provision of guidance on adequate eating habits associated with the practice of physical activity, since the latter is a mandatory activity in schools.10

A study with school students revealed that regular physical activity, when initiated in childhood and/or adolescence, protects against physical inactivity in adulthood. Moreover, combined interventions of promoting physical activity and providing nutrition education had the most positive effects in reducing body mass index. These data provide the basis for understanding the importance of developing educational activities in schools in order to identify and assess overweight adolescents.21

Finally, with the effective implementation of such activities and procedures to combat overweight in the school environment, a greater purpose may be achieved: to link adolescents to PHC services.6

CONCLUSION

The nurses interviewed for this study perceived the assistance to overweight adolescents as crucial, particularly because of their growing number. They highlight, however, the difficulties associated with providing care to this population, due to their reluctance to seek access to primary health services. Other factors that limit care are the excessive number of tasks that are required of nurses in the work process and the low number of collaborations with schools in order to develop activities for adolescents.

Despite the knowledge shown by the respondents, they considered the high prevalence of overweight among adolescents to be a public health problem. Thus, they held other professionals accountable for the problem and exempted themselves from the obligation to implement high impact actions, be it in health promotion, disease prevention or treatment. In addition to the non-performance of tasks inherent to their jobs, this culminates in damage to the health and disease process of adolescents.

We invite further reflection on the gaps that exist in the articulation between health services and schools. These hamper the monitoring of students by the nurse and the multidisciplinary team, and goes against the recommendations of
the Ministry of Health regarding the health of students. These recommendations propose the link between health and education through the PSE, with activities mainly targeting health promotion and disease prevention in this group.

Given the above, there is a need to improve PHC nurses’ sensitivity and awareness in working with the schedules of the schools. Furthermore, PHC services should take responsibility in solving this problem, rather than just recognizing it.

One limitation of this study was the fact that data collection took place at only four PHCUs, which did not allow generalizations. However, the findings of this study may be compared with the perceptions of nurses in other future studies.

REFERENCES


