



School Health Nursing Program: prevention and control of overweight/obesity in adolescents^{*,**}

Programa de Enfermagem Saúde na Escola: prevenção e controle de sobrepeso/obesidade em adolescentes

Programa de Enfermería Salud en la Escuela: prevención y control de sobrepeso/obesidad en adolescentes

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ABSTRACT

Objective: To describe the construction process of an intervention in the form of a Nursing Care program to Adolescents aimed at preventing and controlling overweight/obesity in the school environment. **Method:** A methodological study developed through Intervention Mapping in Natal/RN, Brazil, between October of 2015 and September of 2016, with the participation of adolescents, public school teachers and nurses in Primary Health Care. Data sources were focus groups, interviews and an integrative review. The Collective Subject Discourse was used for analysis. **Results:** At the end of the six stages of the Intervention Mapping, the "School Health Nursing Program" (*Programa de Enfermagem Saúde na Escola*) was constructed, which should be implemented over 10 months with five weekly classes of exercises and a weekly session of nursing interventions detailed in the Program. **Conclusion:** The nursing intervention guided by Intervention Mapping allows actions based on theories, community participation, school/service bonds, and care continuity.

DESCRIPTORS

Adolescent; Overweight; Obesity; Nursing Care; Primary Health Care; Primary Care Nursing.

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INTRODUCTION

The present study addresses the use of an innovative method for constructing an intervention in the form of a program aimed at nursing care for preventing and controlling overweight or obesity in adolescents in Primary Health Care (PHC), and more specifically in the school environment.

According to the World Health Organization (WHO)⁽¹⁾, overweight and obesity together constitute a worldwide health problem with increasing prevalence across all age groups. Adolescents who have this condition are at higher risk of developing serious health problems such as diabetes, heart disease, liver, respiratory and psychological conditions. This short-term scenario represents high treatment costs for the health system, and in the medium and long-term it is related to a decrease in the economic productivity of this generation of future adults who are overweight, obese and have associated diseases⁽¹⁾.

It is estimated that the global prevalence of overweight and obesity among adolescents is over 20%⁽¹⁾. Brazil follows this trend, and the prevalence ranges from 7.4% to 36.5% in the different states with an average of over 20%⁽²⁾. At the local level, a study conducted in the city of Natal, Rio Grande do Norte, in 2013, identified a prevalence of 28.8% of overweight or obese adolescents among students of the state education network, as well as an absence of nursing care directed to this clientele in participating Health Units⁽³⁾.

Faced with so many negative short and long-term consequences arising from this problem, the Ministry of Health has reinforced the incorporation of Food and Nutrition Surveillance actions into PHC care routines. The objectives are to detect early nutritional risks and to carry out interventions that make it possible to prevent and treat them early⁽⁴⁾.

Moreover, because adolescents rarely attend health services, the Ministries of Health and Education have created the School Health Program (*Programa Saúde na Escola – PSE*), to facilitate actions of PHC multiprofessional teams by assisting adolescents in their convivial space. The planned actions include (among others): an anthropometric evaluation to identify overweight or obese students and the promotion of healthy eating and physical activity⁽⁵⁾. With regard to nurses, they have reported difficulties in performing such actions because the implemented methods are not able to attract adolescent participation, and because professionals are unaware of the required actions to prevent and control overweight or obesity⁽³⁾.

Therefore, we emphasize the relevance of the present study in developing a program, considering the difficulty that nurses working in the PHC have demonstrated in making clinical decisions regarding obesity in adolescence⁽⁶⁾. Although they perceive the assistance of the multiprofessional team as fundamental, nurses attribute the responsibility to other professionals and are unaware of nursing related interventions⁽³⁾. Thus, the practice with this population involves a broad issue, and developing a program that will guide nursing interventions will partially meet the immediate needs, as it represents a technology to guide nursing actions which enables widening knowledge about the

problem and thereby favoring bonding between PHC and schools, and also stimulating adolescents to create/maintain healthy habits.

In this perspective, some studies⁽⁷⁻⁸⁾ have employed an innovative method called Intervention Mapping to develop health promotion programs for individuals at risk of developing a condition or who are ill, but who can reverse this condition through a behavioral change related intervention⁽⁹⁾.

Considering that there is a gap in the nursing practice, and that an intervention with active participation of the community could achieve better results in the prevention and control of this health problem, the objective of this study is to describe the construction process of an intervention in the form of a Nursing Care program to Adolescents aimed at the prevention and control of overweight/obesity in the school environment.

METHOD

This is a methodological study with a qualitative approach carried out in the state of Rio Grande do Norte, in the city of Natal, Brazil, between August 2015 and September 2016. The study population was comprised of nurses who worked in Basic Health Units (*Unidades Básicas de Saúde – UBS*) of the municipality. The sample consisted of four professionals with one representative of each demographic zone, and selected by draw. The following inclusion criteria were considered: being a nurse and working in a UBS of the municipality whose assigned territory had at least one public state school. Exclusion criteria were: being on vacation or on medical leave.

The study population was also composed of adolescents enrolled in state schools in Natal/RN in Primary and Secondary Education. The participating schools were selected based on four UBS units which had been selected at random according to the territory corresponding to these UBS. A simple random sampling was used for selecting the adolescents, where a class from each school was randomly selected and their members were invited to participate in the study. The participants were then screened after parental consent, and those classified as overweight or obese were invited to form the focus groups. The groups from the northern and eastern schools had 10 participants in each group, while schools from the south and west region had 12 participants in each group.

Anthropometric data in the screening were measured in duplicate and the mean was considered. A Beurer brand portable digital scale was used to measure the weight of the adolescents barefoot, wearing light clothing and positioned in the center of the platform; while a portable WCS stadiometer was used for height with the adolescents again barefoot in orthostatic position, arms alongside their body, feet together, knees straight, head oriented in the horizontal plane of Frankfurt, and after a deep inspiration. Nutritional status according to the Z score was determined using BMI (Body Mass Index) by age and gender: thin ($\geq Z$ Score -3 and $< Z$ Score -2), eutrophic ($\geq Z$ Score -2 and $\leq Z$ Score +1), overweight ($> Z$ score +1 and $\leq Z$ +2), obese ($> Z$ Score +2 and $\leq Z$ Score +3) and severely obese ($> Z$ Score +3)⁽⁴⁾.

Adolescents identified as overweight or obese participated in the focus groups (for this technique it is advisable to have about 10 participants, 15 maximum)⁽¹⁰⁾, in preparation for the Program and the practical strategies test. The other adolescents in the class participated in the practical strategies test of the Program. The following inclusion criteria were considered: being between 10 and 19 years of age and being enrolled in a state school of the Municipality. The exclusion criterion was being on medical leave.

The study population was also made up of teachers from the state's municipal schools. The sample consisted of 40 teachers, 10 from each one of the four schools. The responsible planner invited them, and then they met and decided on the participants. The inclusion criterion considered was being a teacher or official of a state school of the Municipality. The exclusion criterion was being on medical leave.

Based on the adopted theoretical-methodological framework of Intervention Mapping⁽⁹⁾, the operationalization of the present research consisted of six stages:

Conducting a needs assessment: at this stage, the planner evaluated the health problem, reported the behavioral and environmental conditions involved, and associated them with the determinants. An integrative literature review was carried out and data were collected according to the model *Predisposing, Reinforcing and Enabling Constructs in Educational Diagnosis and Evaluation (PRECEDE)*⁽⁹⁾, where focal groups and interviews were conducted, and important information contained in scientific articles and documents from the Ministry of Health and the World Health Organization (WHO) was considered. Two focus groups were formed in each school; the first composed by teachers and the second by adolescents. The interview technique every 15 days was chosen for the UBS nurses.

Creating matrices of change objectives: this stage provided the basis for the intervention since after analyzing the data from the previous stage, the 'who' and 'what' will be changed were specified as a result of the intervention. The general objective was formulated, which was subdivided into performance objectives (what is expected to be achieved by the groups), and each was combined with its determinant. Finally, change objectives were created to specify what needs to be done to achieve change in the determinants.

Selecting methods based on theories and practical strategies: theoretical methods and strategies to change group behavior were selected. First, the methods related to the change objectives elaborated in the second stage were listed. A list of activities that would contribute to the achievement of change objectives was then formulated. A translation of the methods into an action was completed by defining the practical strategies, according to the interventions identified in the integrative review (stage 1) and in the Nursing Interventions Classification (NIC)⁽¹¹⁾.

Program: this stage included a description of the overall objective, goals and sequence of intervention components, materials and protocols to be used, which resulted in the first version of the Program. The pre-test was subsequently performed, the users and implementers themselves tested the practical strategies listed in the third stage, and based on this

experience the planner and participants evaluated them and made the necessary modifications to complete the program.

Adoption and implementation: contemplated the development of a matrix, similar to that carried out in the second stage; however an "adoption and implementation" column juxtaposed to the performance objectives was included in order to facilitate the overall vision of the Program. The participants met together and the Program, its practical strategies and protocols were explained with the help of the matrix.

Evaluation plan: the planner, along with the nurses, developed a program evaluation plan. In the Intervention Mapping, participating groups are questioned whether the determinants were well-specified, evaluating whether the strategies corresponded to the methods, measuring the proportion of the population that reached the expected level, and verifying whether the implantation was complete and appropriate⁽⁹⁾.

In view of the stages description, it is observed that the data sources of the research were the speeches collected during the focus groups and the interviews. The contemplated data of the integrative review were scientific articles, documents related to the subject of overweight or obesity in adolescents published by the WHO and the Ministry of Health, and specific nursing interventions contained in the NIC.

In the integrative review of the literature, articles related to nursing interventions directed at adolescents with overweight or obesity developed in the PHC were selected. The following data were then collected: database, title, objective, type of study and nursing interventions. All health actions proposed by nurses for the purpose of preventing, diagnosing or treating overweight or obese adolescents were considered as nursing interventions.

For the focal group technique, performed according to the literature recommendations⁽¹⁰⁾, eight groups were formed: four with adolescents who were overweight or obese (one per school); and four with teachers (one per school). Each group carried out meetings every 15 days, which always occurred in the school environment, lasting between 23 and 51 minutes. The planner, assuming the position of coordinator, was responsible for moderating and planning the meetings. The audio content was recorded, and then the speeches were transcribed using Microsoft *Word*.

Due to the nurses' workload at the UBS, gathering them in a focal group was not possible, so the collection took place through interviews, the audio was recorded and then transcribed in *Word*. For the data analysis of the speeches, the Discourse of the Collective Subject (DCS) was used, which was carried out concomitantly with the data collection to subsidize each stage of the Intervention Mapping. In order to preserve the privacy of the subjects, the following codes were used to identify them: Discourse of the collective subject of adolescents (DCS-ADOLESES); Nurses (DCS-NUR); and professors (DCS-PROF).

The project was conducted in accordance with Resolution 466/12 of the National Health Council, and was approved by the Ethics Committee of UFRN in 2015 under Opinion no. 1.250.119 and CAAE number 48378215.4.0000.5537, according to the norms of research with human beings.

RESULTS

The results of the needs assessment are described below as based on the diagnoses indicated by PRECEDE, which integrate the synthesis of focus groups by the DCS and the evidence in the literature:

SOCIAL DIAGNOSIS: QUALITY OF LIFE AND OBSTACLES FOR IMPROVING IT

In the study, it was revealed that the main difficulties for adolescents faced by being obese are related to discrimination and social exclusion, loss of self-esteem and difficulties with clothing, as observed in the following speech:

Being fat is annoying. I can't buy fashionable clothes, they don't fit me, I'm ashamed to do physical activity, because I feel short of breath, I get so sweaty and I can't keep up with my colleagues. Another bad thing is putting up with the teasing, sometimes I pretend I don't hear it, but it hurts. There are days I don't want to go to school. (DCS-ADOLE).

The central idea of the discourse shows that adolescents with obesity feel impaired in their quality of life, as evidenced by their difficulty in performing physical exercises, buying fashionable clothes and relating with their schoolmates.

EPIDEMIOLOGICAL DIAGNOSIS: CONSEQUENCES AND PREVALENCE

Overweight and obesity are associated with several complications, including: cardiovascular, respiratory, endocrine-metabolic, orthopedic, sleep disorders and psychosocial diseases⁽¹⁾. We can highlight that adolescents with obesity are more likely to present psychological disorders, especially depression and anxiety⁽¹²⁾. In Brazil, obesity is the most relevant nutritional deviation in the population; between 2003 and 2012, it was present in more than 20% of adolescents⁽²⁾.

BEHAVIORAL AND ENVIRONMENTAL DIAGNOSIS: CAUSES

Among the causes for overweight and obesity are biological, historical, ecological, economic, social, cultural and political factors. This condition has determinants of high consumption of calories and sedentary habits⁽¹⁾. The following is a summary of the perceptions expressed by adolescents, by teachers and by nurses, regarding the habits related to obesity:

I'm fat because I eat a lot, my relatives are like that too. The problem is that all good food is fattening. The school lunch is couscous, soup, or rice with meat, I don't want that at 3 p.m., so I go to the cafeteria and I buy a snack and a soda. About physical exercises, I used to do them when I was a child, it was mandatory at the school, now it isn't and the physical education grade is a written test. My hobby is playing video games, spending time on my cell phone and eating. That's why I'm fat. (DCS-ADOLE).

Students have grown a lot in recent years, both in height and in obesity. It must be a reflection of the hectic lifestyle, they eat a lot and wrongly and they don't do physical exercises at school. If they don't exercise here, I find it difficult for them to do it in the community (DCS-PROF).

Obesity is multicausal, there is the genetic factor, but surely the behavioral habits stand out. This is in the whole population, we eat more with less nutrients, more calories and we do not exercise our bodies. The result is an increasingly obese population (DCS-NUR).

The consulted literature and the central idea expressed in the participants' discourse agreed on the multicausality of the problem, with influences of society in perpetuating unhealthy habits.

ADMINISTRATIVE AND POLICY DIAGNOSTICS

Brazil has a National Policy for Comprehensive Health Care for Adolescents and Youth (*Política Nacional de Atenção Integral à Saúde de Adolescentes e de Jovens – PNAISAJ*), which is committed to incorporating the health care of this population group into the structure and management mechanisms and to promote actions for healthy growth and development. A study aimed at exploring the dissent based on the narratives of actors participating in the PNAISAJ construction process concluded that adolescents are not recognized as autonomous subjects and protagonists of decisions, which contradicts the text of the Policy. What prevails is the legitimation of politicians' interests and the understanding of the tutored protagonism, who poses as a spokesperson for adolescents, but paradoxically silences them⁽¹³⁾.

In order to partially meet the needs of this population, the PSE, an intersectoral strategy for Health and Education, was created in 2007⁽⁵⁾. However, it has still not been implemented in participating schools and the UBS, as noted below:

What is the School Health Program? Health professionals coming here? Those from the Health Units don't come. Sometimes there are lectures and vaccination campaigns, but they are carried out by the university people (DCS-ADOLE).

The PSE does exist, but with the children. I've never been to a state school because teenagers are very difficult, they don't come here, to the Health Unit, and I don't know what it's like working with them. And the demand of the Health Unit is enormous, it's a lot of weight on my shoulders. (DCS-NUR).

As evidenced by the central idea of the speeches, the implementation of the PSE has not yet been successful in reaching the study sites.

IDENTIFIED NEEDS

After gathering information, the following needs were summarized: support for adolescents in cases of bullying; guidance and encouragement of healthy food choices; availability of physical exercises at school; provision of healthy food options in the school cafeteria; guidance for weight reduction in cases of overweight or obesity; implementation of interventions with the whole class, regardless of nutritional status; assistance in creating and maintaining a bond between the school and the UBS; university support to nurses for implementation of nursing interventions at the school.

IDENTIFICATION OF CHANGE OBJECTIVES

In view of the identified needs, the general objective of the intervention was defined: creating a favorable school environment for the choice of healthier eating habits, physical exercise and good interpersonal relationships.

From this objective, performance objectives were formulated for each group. Because the chart is extensive, a summary is presented below (Chart 1), and the full version of the chart was published in the doctoral thesis of the first author.

Chart 1 – Overview of the results expected with the program and performance objectives for each target group – Natal, RN, Brazil, 2016.

Group	Objective of the Program	Performance Objectives (PO)
Nurses	Promoting interventions to promote adolescent health at school, related to eating, physical exercise and good interpersonal relationships.	PO1. Getting to know and maintaining bonds with students, their parents/guardians, and school teachers. PO2. Planning and implementing nursing interventions on diet at the school, reviewing the foods offered in the school with the parents, stimulating physical exercise and good interpersonal relationships.

After formulating all the performance objectives for each group, the determinants were specified, indicating the

corresponding change objectives which resulted in the program matrices, synthesized in Chart 2.

Chart 2 – Matrix containing performance objectives, determinants and change objectives for the nurses participating in the program – Natal, RN, Brazil, 2017.

OBJECTIVE OF THE PROGRAM: Promoting nursing interventions to promote adolescent health at school related to eating, physical exercise practice and good interpersonal relationships.		
PERFORMANCE OBJECTIVES (PO)	DETERMINANTS (D)	CHANGE OBJECTIVES (CO)
PO1. Getting to know and maintaining bonds with students and school teachers. PO2. Planning and implementing interventions at the school on diet, physical exercise, good interpersonal relationships and other issues that emerge as needs.	D1. Does not know the professionals or adolescents of the school. D2. Does not carry out nursing interventions for overweight or obese adolescents in the school.	CO1. Getting to know school professionals and students, participating in meetings. CO2a. Determining individual and group motivation to reduce/maintain weight. CO2b. Classifying and monitoring students' nutritional status. CO2c. Teaching students to classify their nutritional status and understand the result. CO2d. Determining dietary patterns and discussing the benefits of healthy foods.

THEORETICAL BACKGROUND OF PRACTICAL METHODS AND STRATEGIES

The first activity of this phase was relating each change objective to one of the following theories: *Elaboration Likelihood Model*; *Persuasion-communication matrix*; *Social*

Cognitive Theory; *Theories of information processing*; *Theories of learning*; *Theory of self-regulation*; and the *COM-B Model*; for each theory there is a list of related methods⁽⁹⁾. Participants then met to learn about these methods and to list the practical strategies to be used. The results are summarized in Chart 3.

Chart 3 – Matrix with an overview of the theories, methods and practical strategies to reach the changing objectives of the nurse group – Natal, RN, Brazil, 2017.

Group	CO	Theories	Theoretical methods	Practical strategies
Nurse	CO1 CO2a CO2b CO2c CO2d	ELM TIP ELM TL SCT	Elaboration Discussion Elaboration Targeted practice Reevaluation	Meetings and encounters (teachers/nurses) Conversation circle Nutrition Status Worksheet Practical class on nutritional status classification Conversation circle

Legend: CO (Change objectives), ELM (*Elaboration Likelihood Model*), SCT (*Social Cognitive Theory*), TIP (*Theories of Information Processing*), TL (*Theories of Learning*).

THE PROGRAM

In consensus, the participants created a program focusing on modifiable risk behaviors directed at all school adolescents, regardless of their nutritional status, which was named School

Health Nursing Program (*Programa de Enfermagem Saúde na Escola – PESE*). The following structure was agreed: a 10-month program with five weekly physical exercise classes (45 minutes each), and a weekly session for nursing interventions.

The implementers and users tested the practical strategies, and the difficulties were: some students did not own sneakers for practicing physical education (teachers sort out donations); one of the schools did not provide drinking water (the director provided for the repair of the drinking fountains); one of the schools did not have a sports court (the fire department offered the use of their court); and the nurses had difficulty in planning the interventions (they received support from the planner).

In the end, the adaptations were made to the strategies and the PESE was created.

ADOPTION AND IMPLEMENTATION OF THE PROGRAM

To facilitate implementation, the planner held a meeting with the groups to present and discuss the program, materials and protocols, where she explained the activities to be conducted. A matrix was designed to contemplate the overview of the Program, synthesized in Chart 4.

Chart 4 – Matrix with an overview of performance objectives, change objectives and practical strategies for each target group – Natal, RN, Brazil, 2017.

Group	Performance objectives (PO)	Change objectives (CO)	Practical Strategies (PS)	Adoption/implementation (AI)
NURSES	PO1. Creating bonds with the students and school teachers. PO2. Planning and carrying out interventions related to diet, physical exercise, good interpersonal relationships and other issues that emerge as needs.	CO1. Getting to know school professionals and students. CO2a. Determining individual and group motivation to reduce/maintain weight. CO2b. Classifying and monitoring students' nutritional status. CO2c. Teaching students to classify their nutritional status.	PS1. Meetings and encounters. PS2a. Conversation circles. PS2b. Spreadsheet. PS2c. Practical class.	AI1. Participation in the meetings (school and UBS), congratulating for the interest in health actions. AI2a. Coordination of conversation circles. AI2b. Classification of students' nutritional status 1 time per semester, registering it in a spreadsheet. AI2c. Planning and execution of a practical class on nutritional status classification.

EVALUATION PLAN

The plan suggested measuring abdominal circumference, weight, height, BMI, nutritional status classification and observation of the presence of *Acanthosis nigricans* in the first, sixth and tenth months of the PESE. These results should be organized in a spreadsheet, and the nurse will be responsible for identifying whether there were modifications in the parameters. In addition, meetings will be held every 2 months to discuss the acceptability, the encountered difficulties and the need to modify items of the Program.

DISCUSSION

In this study, a detailed outline of how an intervention in the form of a program was elaborated is presented based on evidence, practical experiences and community participation. We sought to construct a program that addresses local needs and potentialities.

The first need pointed out by adolescents was “support in cases of bullying”. The term bullying refers to aggressive, intentional and recurrent behavior, evidenced by physical, verbal or psychological pressure, with imbalance of power between the bully and the victims⁽¹⁴⁾. To guide the intervention of the family and school, the Public Ministry of São Paulo launched the “Anti-bullying” booklet⁽¹⁵⁾. This booklet was read and discussed among the participants of the research, helping to understand the problem, and an anti-bullying commission called the “Peace Commission” was created based on this.

The second need was “guidance and encouragement of healthy food choices,” since adolescents reported unhealthy eating for pleasure. The search for this type of food is stimulated by the media, and nowadays young people are always

on the internet connected to many people; however, these are relationships without a bond, which favors mood disorders and anxiety, and in this scenario the act of eating can take the place of guaranteed pleasure⁽¹⁶⁾.

The third need was the “provision of physical exercises at school,” which can increase self-esteem, social acceptance and the sense of well-being, in addition to helping prevent cardiovascular diseases, some types of cancer, osteoporosis, lung diseases and chronic mental conditions. The recommendation for adolescents is exercising at least 30 minutes a day, five days a week⁽¹⁷⁾. We pointed out that physical exercise was not performed in the participating schools, and for this reason the PESE proposed the practice of mandatory practical classes suggesting exercise options for each school, considering the available resources.

The fourth need was the “provision of healthy food options in the school cafeterias”, considering that healthy eating favors improved nutritional conditions, protects and improves school performance and helps growth and development⁽⁴⁾. Therefore, the PESE indicated a discussion between managers, a nutritionist and professionals of the school and the Health Unit regarding the best options according to the available resources.

The fifth need was “guidance for weight reduction in cases of overweight or obesity,” for which it was suggested that adolescents should receive interventions for weight reduction which are meant to be careful not to interfere with their growth, metabolic and cardiovascular health⁽¹⁾.

The sixth need addressed in the Program was the “implementation of interventions for the whole class, regardless of their nutritional status”. This need emerged based on the speeches of adolescents with obesity for fear of suffering bullying for participating in the PESE.

The seventh need was “aid in creating and maintaining a bond between the school and the UBS”. The bond concept is fundamental for the proposed Program, considering that the intention is to implement it in the PHC in partnership with the health actions carried out by the Family Health Strategy, which includes a set of structured actions and services based on recognized needs of the population, taken from the establishment of bonds between service users and health professionals, in permanent contact with the territory⁽¹⁸⁾.

The eighth need considered was “support from the university to the nurses in the implementation of school interventions”. The excessive workload of nurses at the PHC may be reflected by the lack of teamwork; therefore, it is imperative to re-evaluate the work process at this level of care. All members should be committed in order to avoid stress for the nurse, which consequently decreases the quality of care⁽¹⁹⁾. In addition to the excess workload, it is necessary to review and place nursing practice on teamwork, which means having specificities of their discipline, but sharing care methods in order to achieve effectiveness in their work through collaboration of different professionals, having the person as the center point of care rather than the disease⁽²⁰⁾.

In view of this scenario, the participants requested extension activities from the University in order to support implementing the interventions listed in the PESE. We emphasize that it is important to seek multiprofessional teamwork for such a complex goal, as the union of knowledge and skills has a greater potential to respond to adolescents’ needs.

We emphasize the integration of PESE elements to the theories, which are primarily related to the areas of education, sociology and psychology; however, its use is coherent in the health area when seeking to base an intervention that proposes to address problems that can be solved with the change of behaviors⁽⁹⁾.

This does not consist in a vertical educational method; the interventions are planned in such a way that the user

will have experiences, which can empower them and guide them into making a choice to change their behavior or not⁽⁹⁾. Although the PESE consists of practical collective strategies, its result is the creation of an environment that influences adolescents to adhere to healthy habits, despite change being a particular choice.

It is also believed that the proposed intervention has implications for nursing practice, as it suggests a Program with potential to influence the promotion of healthy habits among adolescents. Moreover, the PESE construction process made it possible to develop skills among the participating nurses, and reaches as a final product a technology based on nursing theories, processes and nursing taxonomy as its final product.

The present study has limitations for generalizing the results, considering that the four participating schools were public, and there may be discrepancies when compared to private schools. There was also absence in parental participation, or tutors of the adolescents, since they affirmed that they did not have time availability.

CONCLUSION

The present study detailed the construction process of the PESE, an intervention directed to the needs of public school adolescents for preventing and controlling overweight or obesity. This Program was scientifically-based and practical strategies were pre-tested, integrating the effective participation of Program implementers and users.

We conclude that the study has implications for nursing practice on the construction of a program with the potential to guide interventions to meet adolescent needs – including strengthening the PSE by contributing to the bond between UBS professionals, school teachers and students – and by providing an instrument to guide school interventions. Moreover, the PESE was designed based on theories, effective participation by the community and the application of nursing taxonomy.

RESUMO

Objetivo: Descrever o processo de construção de uma intervenção em forma de programa para assistência de enfermagem ao adolescente, direcionado à prevenção e ao controle de sobrepeso/obesidade na escola. **Método:** Estudo metodológico, desenvolvido por meio do Mapeamento de Intervenção, em Natal/RN, Brasil, entre outubro de 2015 e setembro de 2016, com a participação de adolescentes, professores de escolas públicas e enfermeiras da Atenção Primária. As fontes de dados foram grupos focais, entrevistas e revisão integrativa. Utilizou-se do Discurso do Sujeito Coletivo na análise. **Resultados:** Ao final das seis etapas do Mapeamento de Intervenção, construiu-se o “Programa de Enfermagem Saúde na Escola”, que deverá ser implementado em 10 meses, com cinco aulas semanais de exercícios e uma sessão semanal de intervenções de enfermagem, detalhadas no Programa. **Conclusão:** A intervenção de enfermagem orientada pelo Mapeamento de Intervenção permite ações embasadas em teorias, participação da comunidade, vínculo escola/serviço e continuidade da assistência.

DESCRITORES

Adolescente; Sobrepeso; Obesidade; Cuidados de Enfermagem; Atenção Primária à Saúde; Enfermagem de Atenção Primária.

RESUMEN

Objetivo: Describir el proceso de construcción de una intervención en forma de programa para asistencia enfermera al adolescente, dirigido a la prevención y al control de sobrepeso/obesidad en la escuela. **Método:** Estudio metodológico, desarrollado mediante el Mapeo de Intervención, en Natal/RN, Brasil, entre octubre de 2015 y septiembre de 2016, con la participación de adolescentes, profesores de escuelas públicas y enfermeras de la Atención Primaria. Las fuentes de datos fueron grupos focales, entrevistas y revisión integrativa. Se utilizó el Discurso del Sujeto Colectivo en el análisis. **Resultados:** Al final de las seis etapas del Mapeo de Intervención, se construyó el “Programa de Enfermería Salud en la Escuela”, el que deberá implantarse en 10 meses, con cinco clases semanales de ejercicios y una sesión semanal de intervenciones de enfermería, detalladas en el Programa. **Conclusión:** La intervención de enfermería orientada por el Mapeo de Intervención permite acciones fundamentadas en teorías, participación de la comunidad, vínculo escuela/servicio y continuidad de la asistencia.

DESCRIPTORES

Adolescente; Sobrepeso; Obesidad; Atención de Enfermería; Atención Primaria de Salud; Enfermería de Atención Primaria.

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