Actions of nurses directed at obese teens in primary care

INTegrative literature review article

ACTIONS OF NURSES DIRECTIONED AT OBESE TEENS IN PRIMARY CARE

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ABSTRACT
Objective: to identify the scientific production on nurses’ actions directed to obese adolescents in Primary Health Care. Method: this is a descriptive bibliographic study, integrative literature review, from the search for indexed publications in the databases between 2010 and 2018: CINAHL, LILACS, MEDLINE, SCOPUS and Web of Science and SciELO Virtual Library. The method of reading and evaluation by level of evidence was used to perform the descriptive analysis of the data, which were presented in a synoptic table. Results: 13 articles were selected. It was evidenced that the actions of nurses directed to obese adolescents in Primary Health Care aimed at stimulating healthy eating, physical activity practice and improving self-esteem for weight reduction through health counseling, use of technologies, involvement family and intersectoral articulation, including the school. Conclusion: there is a need for the development of longitudinal, intersectoral and broad actions. It is important to invest more in the training of nurses in order to perform interventions in the primary care, aimed at obese adolescents, with reference to comprehensive care. Descriptors: Adolescent; Adolescent Health; Obesity; Nursing, Practical; Primary Health Care; Review.

RESUMEN
Objetivo: identificar la producción científica sobre acciones del enfermero dirigidas a adolescentes obesos en Atención Primaria a Salud. Método: se trata de un estudio bibliográfico, descriptivo, tipo revisión integrativa de la literatura, a partir de la búsqueda de publicaciones indexadas en las bases de datos entre 2010 y 2018: CINAHL, LILACS, MEDLINE, SCOPUS y Web of Science y Biblioteca Virtual Scielo. Se recorrió metodología de lectura y evaluación por nivel de evidencia para realizar el análisis descriptivo de los datos, que se presentaron en un cuadro sinóptico. Resultados: seleccionaron 13 artículos. Se evidenció que las acciones del enfermero direcionadas a adolescentes obesos en Atención Primaria a Salud visaran al estimulo a alimentación saludable, práctica de actividad física y mejora de la autoestima para una reducción del peso, por medio de aconselhamento en salud, de uso de tecnologías, envolvemento de la familia y articulación intersectorial, incluida a la escuela. Conclusión: apunta se a la necesidad de desempeñamiento de acciones prolongadas, intersectoriales y amplias. Torna-se importante major investimento no treinamento de enfermeiros com vistas a realización de intervencions, no ámbito da atención primaria, voltadas para adolescentes obesos, tendo por referencia o cuidado integral. Descriptores: Adolescente; Saúde do Adolescente; Obesidade; Enfermagem Prática; Atenção Primária à Saúde; Revisão.

How to cite this article
INTRODUCTION

It is identified that the prevalence of overweight and obesity is increasing considerably in urban areas of low and middle income countries, affecting mainly young and adults, previously more prominent phenomenon in developed countries. It is noteworthy that World Health Organization (WHO) estimates show that among children and adolescents aged five to 19 years, the prevalence of overweight and obesity rose dramatically from 4% in 1975 to just over 18%, in 2016.

From the assessment of the Body Mass Index (BMI), 8.4% of Brazilian adolescents between 12 and 17 years are obese and 25.5% overweight. It is known that obesity in adolescence is associated with mental health problems, asthma, obstructive sleep apnea, orthopedic problems, cardiovascular and metabolic diseases such as hypertension and insulin resistance. It is also observed that adolescents may experience bullying due to their excessive weight.

A meta-analysis showed an association between obesity and depression in obese individuals compared to those who were only overweight. It is emphasized that such adolescent health problems tend to perpetuate during adulthood and impact morbidity and mortality of these people.

It is known that adolescence is a fundamental moment for obesity prevention and control interventions, since young people experience a stage characterized by a complex process of biopsychosocial growth and development, and therefore an important period to invest in efforts to protect and promote health.

In this sense, the importance of the role of the multidisciplinary Primary Health Care (PHC) team is highlighted, in which the nurse occupies the role of coordinator of the development of actions, especially those aimed at children and adolescents. It is understood that nurses' efforts to implement practices and policies aimed at this audience can help improve health outcomes and overcome barriers faced by obese adolescents in seeking care.

This review aims to contribute to the reflection on the interventions developed by nurses in PHC aimed at adolescents with obesity, which may subsidize the health team, especially nurses, to guide their actions based on evidence identified in the included studies.

OBJECTIVE

- To identify the scientific production on nurses' actions directed to obese adolescents in Primary Health Care.

METHOD

This is a bibliographical, descriptive study, integrative literature review type, which allows the capture, critical appreciation and synthesis of knowledge about the object investigated, allowing the apprehension of themes or problems relevant to the field of health and public policies.

The following steps were followed for the systematization of this review: formulation of the guiding question; definition of inclusion and exclusion criteria of studies; establishment of the information to be drawn from the chosen studies; evaluation of studies included in the research; interpretation of results and synthesis of knowledge evidenced in the described articles.

The following research question was elaborated: “What is the scientific production on nurses' actions directed to obese adolescents in Primary Health Care?”. The search for publications was guided by the PICO strategy (Patient, Intervention, Context and Outcomes), where P = obese adolescents; I = actions of the nurse; C = Primary Health Care and O = scientific production found.

Data was collected in January and February 2019 by electronic search of scientific articles in the following databases: Scopus Info Site (SCOPUS); Latin American and Caribbean Health Sciences Literature (LILACS); Cumulative Index to Nursing and Allied Health Literature (CINAHL), Web of Science and Virtual Scientific Electronic Library Online (SciELO). The timeframe was delimited from 2010 to 2018, and was the starting point established after the publication of the document “Adolescent Job Aid”, by WHO, aimed at primary level health professionals to guide interventions aimed at to teenagers.

For the search, the descriptors “primary health care”, “nurses”, “adolescent” and “obesity” obtained by consulting the Descriptors in Health Sciences (DeCS) and the Medical Subject Headings (MESH) and the synonyms: (“Primary health care” / “primary care” / “community care”); (“Nurses” / “nurse practitioners” / “nursing”); (“Adolescent” / “adolescent health” / “teen”) and (“obesity” / “obese”). We chose to use the English language terms and the Boolean operators AND and OR.

The following inclusion criteria were used for the composition of the sample: articles resulting from research and systematic reviews that highlighted actions performed by nurses directed to adolescents with obesity, at the PHC level, in English, Spanish and Portuguese, published between 2010 and 2018, containing the terms raised in the title, descriptors, or body of abstracts, available in their entirety and free online.

One chose to use the term adolescence, without defining a standard definition, in order to
broaden the spectrum of productions to be analyzed. Experience reports, dissertations, theses and gray literature were excluded, as well as duplicates found in more than one database.

Studies were classified into seven hierarchical levels of evidence: level 1 - systematic review or meta-analysis of multiple controlled randomized controlled trials or derived from clinical guidelines based on systematic reviews of randomized controlled trials; level 2 - evidence from at least one well-designed randomized controlled trial; level 3 - evidence from well-designed clinical trials without randomization; level 4 - evidence obtained from well-designed cohort and case-control studies; level 5 - evidence from systematic review of descriptive and qualitative studies; level 6 - evidence from a single descriptive or qualitative study; Level 7 - Evidence from the opinion of authorities and / or expert committee reports.

An instrument was developed that allowed the descriptive analysis of the main information of the publications and encompassed the title, authorship, country and year of publication, research design, participants, intervention, outcome and level of evidence. A synoptic framework was built from the articles that met the inclusion criteria established that covered the evaluated aspects.

The papers were screened by a pair of reviewers independently. The article was considered when at least one of the reviewers deemed it eligible. Disagreements between reviewers were resolved by consensus between the pair or by consulting a third reviewer.

3,460 articles were identified in the databases and a total of 3,298 were excluded because they did not meet the inclusion criteria and / or did not answer the guiding question of the research. One hundred and thirty-five articles eligible for full reading were selected and, from these, 13 articles were elected to compose the definitive study set of the review (Figure 1).
A total of 13 studies that included actions of nurses directed to obese adolescents in Primary Health Care were included, of which 53.8% were classified as level of evidence 2 (Figure 2). As the country with the largest number of publications, the United States of America (USA) stood out, representing 69.2% of the selected studies.
<table>
<thead>
<tr>
<th>Author Year</th>
<th>Country</th>
<th>Design</th>
<th>Participants</th>
<th>Interventions</th>
<th>Outcome</th>
<th>Level of evidence</th>
</tr>
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<tbody>
<tr>
<td>Kelishadi, Malekahmadi, Hashemipour, Soghrati, Soghrati, Mirmoghtadaee, et al. 2012</td>
<td>Iran</td>
<td>Nonrandomized clinical trial.</td>
<td>n = 457 obese children and adolescents, aged two to 18 years.</td>
<td>A healthy lifestyle incentive program was conducted to control childhood obesity and associated cardiometabolic risk factors, with counseling (exercise, dietary education and behavior change) by doctors and a nurse for 24 weeks.</td>
<td>It was found that the mean anthropometric measurements and the cardiometabolic risk decreased; medium high density lipoprotein (HDL-C) cholesterol increased and the prevalence of metabolic syndrome decreased by 20.8%.</td>
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<td>Marild, Gronowitz, Forsell, Dahlgren, Friberg. 2012</td>
<td>Sweden</td>
<td>Randomized, multicenter clinical trial.</td>
<td>n = 64 children and adolescents aged nine to 13 years with normal weight and obesity.</td>
<td>A lifestyle change counseling program was implemented for 12 months. In one of the groups, the physical therapist replaced the nurse in one third of the sessions to stimulate physical activity. Normal weight, overweight and obese children were compared.</td>
<td>It has been shown that, of the 55 children who completed treatment, 13 (24%) changed from obese to overweight condition, 42 (76%) remained unchanged with the weight and no increased five units of baseline BMI. No significant difference was identified between the groups.</td>
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<td>Hessler, Siegrist. 2012</td>
<td>USA</td>
<td>Exploratory, descriptive and correlational.</td>
<td>n = 1,088 nurses working in urban and rural areas.</td>
<td>Questionnaires were used to investigate nurses' attitudes towards obesity in children, exploring their diagnostic and treatment practices.</td>
<td>Nurses recognized obesity as a problem that requires treatment, but did not evaluate or diagnose overweight. It was found that, in the rural region, resources to refer cases of obesity to other levels of care were scarce.</td>
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<tr>
<td>Yarborough, DeBar, Wu, Pearson, Stevens. 2012</td>
<td>USA</td>
<td>Randomized controlled trial.</td>
<td>n = 11 professionals (eight pediatricians, two primary care nurses and one school nurse).</td>
<td>Interviews were conducted with professionals to identify barriers to the management of obesity in children and adolescents and to provide training for a group of professionals who tested it through lifestyle change counseling.</td>
<td>Difficulties were reported in discussing weight issues and lack of time. It was found that those who received training reported greater ease of working with overweight in adolescents and more confidence to motivate them to adopt a healthy lifestyle.</td>
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<tr>
<td>Tucker, Ytterber, Lenoch, Schmit, Mucha, Wooten, et al. 2013</td>
<td>USA</td>
<td>Quasi-experimental, community intervention.</td>
<td>n = 130 children and adolescents aged four to 18 years.</td>
<td>Intervention was performed for 12 months through a motivational interview conducted by nurses to reduce overweight compared to standard clinical care (BMI assessment, weight reduction guidance and referrals when necessary).</td>
<td>Differences between groups were not found to be significant for BMI, however, reductions were greater in the intervention group, which also increased daily fruit / vegetable intake, physical activity, and decreased hours watching television.</td>
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<td>Riiser, Londal, Ommundsen, Smastuen, Misvaer, Helseth. 2014</td>
<td>Norway</td>
<td>Randomized controlled clinical trial.</td>
<td>n = 120 teenagers aged 13 to 15</td>
<td>A 12-week online program providing personalized physical activity counseling based on self-determination theory and motivational interviewing was accessed for 12 weeks. In the control group, standard follow-up of school nurses</td>
<td>Cardiorespiratory fitness was slightly impacted and moderately quality of life. There was a significantly lower increase in BMI in the intervention group than in the control group.</td>
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<td>Study</td>
<td>Design</td>
<td>Location/Participants</td>
<td>Intervention</td>
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<td>Windham, Hastings, Anding, Hergenroeder, Escobar-Chaves, Wiemann. 2014</td>
<td>USA</td>
<td>Randomized controlled clinical trial. n = 40 overweight and obese adolescents and ages 12 to 18 years.</td>
<td>Intervened through standard care (nutritional assessment and counseling) plus the use of a seven-minute Digital Versatile Disc (DVD) with information for parents and adolescents about obesity-related illnesses; readiness, motivation and self-efficacy to lose weight and connection with the health service. Standard treatment was provided for the control group.</td>
<td>The motivation to lose weight and the self-efficacy to choose the diet of adolescents in both groups were improved. It was found that the educational and motivational DVD did not change adolescents' weight-related outcomes, but parents who watched the DVD reported improvements in their knowledge of obesity-related illnesses.</td>
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<td>Keating, McCurry. 2015</td>
<td>USA</td>
<td>Descriptive. Systematic review. n = 7 studies involving 717 adolescents from 11 to 20 years.</td>
<td>Research that used text messaging as an intervention to treat or prevent obesity in adolescents was analyzed. Text messages aimed at weight loss were used in tertiary and community care settings such as secondary schools, colleges and health centers.</td>
<td>It was found that there was no consensus on which content / themes were most useful. It was found that the time and frequency of messages were not demonstrated and that there was no significant relationship between text message and BMI decrease, since the interventions analyzed had other intervention components.</td>
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<td>Nelson, Vos, Walsh, O'Brien, Welsh. 2015</td>
<td>USA</td>
<td>Exploratory, descriptive. n = 656 professionals (265 pediatricians, 143 family doctors and 248 nurses).</td>
<td>A structured questionnaire was applied to primary care professionals to evaluate and compare perceptions and counseling practices related to weight control in children.</td>
<td>Most professionals assessed fruit and vegetable intake (83%) and physical activity (78%). Goal setting has been reported to be effective (88%) and practitioners are able to encourage change in habits (85%), although they are less confident in their ability to counsel (72%).</td>
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<td>Pbert, Druker, Barton, Schneider, Olendzki, Gapinski, et al. 2016</td>
<td>USA</td>
<td>Randomized clinical trial controlled. n = 126 overweight and obese school adolescents.</td>
<td>The effectiveness of a counseling intervention provided by the school nurse and an exercise program to improve activity, diet and BMI were evaluated compared to only individual consultations with weight counseling nurses.</td>
<td>It was found that the intervention group did not show significant differences in BMI reduction or body fat percentage, but showed improvements in food intake, such as increase in breakfast consumption.</td>
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<td>Tyler, Horner. 2016</td>
<td>USA</td>
<td>Randomized clinical trial. n = 60 children and adolescents aged eight and 12 years.</td>
<td>The intervention was based on five follow-up visits by the nurse for weight management focused on behavior change (diet and physical activity, as well as support for written materials). Conventional care was provided to the control group.</td>
<td>It was shown that there were no significant changes in BMI percentile between groups, however, when this factor was transformed into BMI z-scores, significant weight reduction was identified. Parents in both groups reported improvements in children's eating and activity behaviors and pointed out the difficulties in trying to change their habits, but parents in the intervention group issued more positive responses.</td>
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<td>Panca, Christie, Cole, Costa, Gregson, Holt, et al. 2018</td>
<td>USA</td>
<td>Controlled clinical trial.</td>
<td>Lifestyle focused on motivation for change and Costs were found to be significantly higher in the...</td>
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Actions of nurses directed at obese teens in...

England

- n = 174 obese adolescents between 12 and 19 years old.
- Self-esteem during 12 sessions over six months. The control group was provided with a single session with conventional weight management guidelines provided by the nurse.

Intervention group. It was found that no evidence was found that the intervention was more effective than a single educational session to improve the quality of life of young people. Intervention has been shown to be associated with higher costs.

Busch, Hubka, Lynch, 2018 [2]

- n = 44 health professionals (17 nurses and 27 doctors).
- Exploratory, descriptive.
- An interview was used to evaluate the interventions, knowledge and limitations in the management of childhood obesity in the context of PHC and perform an educational intervention for these professionals.

Lack of time (73%) and parental resistance (77%) were shown to be the most frequent barriers, in addition to prioritizing other demands, lack of confidence and specific training for the approach. It was found that educational intervention increased from 6% to 16% referrals to other services and laboratory tests, from 14% to 26%.

USA

Figure 2. Summary of selected articles. Sao Paulo (SP), Brazil, 2019.
It is known that the prevalence of chronic non-communicable diseases in adolescence is a concern of health services today and its occurrence is mainly associated with cardiovascular and metabolic diseases, including obesity. This review included the study that showed that laboratory data from obese children and adolescents differed significantly from those of normal weight, especially the dosages of insulin, triglycerides, low and high density lipoproteins and apolipoproteins. These changes represent an important risk factor for the development and aggravation of chronic diseases.

These adolescent health problems tend to be perpetuated during adulthood and impact the morbidity and mortality of this public. In this sense, it is emphasized that the actions developed by nurses aimed at this clientele, with emphasis on the adoption of healthy lifestyle habits, can mitigate health problems.

After intervention based on lifestyle modification guidelines, with emphasis on healthy eating habits and physical activity practice, it was found that the average of all anthropometric measurements and cardiometabolic risk factors of obese children and adolescents between two and 18 years decreased significantly and the average HDL-C had a considerable increase. It was also identified in a program aimed at changes in the lifestyle of this audience, developed by nurse and multidisciplinary team, which in most participants, there was a reduction in BMI, with changes in the classification of obese overweight.

It was found, from the studies identified in the literature, that the main subjects evaluated and addressed by nurses and other primary care health professionals addressed to obese adolescents were the incentive to adopt healthy lifestyle habits, especially the encouragement of eating, healthy, physical activity practice and self-esteem improvement. Among the elements of the approaches to adolescents are the assessment of fruit and vegetable consumption, alcohol use, time spent in front of the screens (television, computer and smartphones) and sports time.

Counseling was based mainly on the following components: change in eating behavior; encouraging better dietary patterns by reducing the intake of energy-rich foods; improving food choices and addressing emotional eating triggers, as well as decreasing sedentary behavior and increasing physical activity time. The importance of developing actions involving the family is emphasized in obese adolescents’ health, since habits and family dynamics can influence the weight of young people.

It was evident from research conducted in the USA that the approach of the nurse to the family with obese children or adolescents, through home counseling, provided, from the perspective of parents, improvements in their children’s behaviors and easier to establish healthy family routines. In a non-randomized clinical trial based on nurses’ advice to improve their lifestyle, it was found that adolescents and their families increased the consumption of fruits, vegetables and hours of physical activity, decreasing hours of television watched.

In research, it was emphasized that long-term interventions had positive and more significant results. It was found in a systematic review that longer-term treatments based on guidance for lifestyle changes aimed at adolescents may lead to better results in weight loss and blood pressure when compared to shorter treatments based only on prescription.

The importance of longitudinal nursing care plans based especially on health education and support for changing lifestyle habits in order to favor weight loss among adolescents is emphasized. It is noteworthy that long-term educational practices may be able to favor the incorporation of healthy habits and positively impact adolescents’ quality of life.

It is noticed, in the scope of actions developed in PHC, that the almost inexistence of face-to-face contacts between nurses and adolescents can be a hindrance in the health monitoring of this public. The need for changes aimed at increasing the accessibility of young people and adolescents to health services is emphasized. In this sense, it was evidenced that the application of online technologies by school nurses for personalized physical activity counseling was an important tool for adolescents to be sensitized regarding the adoption of healthy lifestyle habits. This study obtained positive results regarding the improvement in cardiorespiratory fitness, weight control and quality of life of these adolescents.

It was also shown in an integrative review included in this study that research that used smartphone text messaging for the prevention or control of obesity in adolescents, despite not having impacted body weight, was considered as an approach with good acceptability, representing a possibility for professionals to get closer to this audience. It is emphasized that digital technologies were effective in promoting healthy eating.

Research conducted by a multiprofessional team found that the use of educational DVDs helped improve parents’ knowledge of obesity-related illnesses, although the resource was not able to change families’ body weight.

In addition, the advice given by nurses with emphasis on the adoption of a healthy lifestyle can be an important factor in encouraging change, especially when adolescents have risk factors for chronic diseases. In an integrative literature review, it was identified that the most prevalent...
risk factors for chronic diseases among adolescents are inadequate diet, physical inactivity, alcohol abuse and tobacco use. This review showed the importance of strategies that include such factors to minimize their negative impacts on adolescent health.24

It was pointed out in a research conducted in the USA that nurses’ actions aimed at adolescents with obesity should not be restricted to the individual level. It has been found that counseling and out-of-school physical exercise, although beneficial for weight reduction, are not sufficient to remedy the problem of obesity in adolescence as it is a complex problem that requires social and environmental change.20

It was evidenced, through a systematic review of the literature, that the articulation between the health sector, schools and other social facilities is necessary in facing obesity due to the multifactorial character of this problem. It is known that broad and integrated practices, permanently, may favor users’ adherence to health services.28 It is emphasized that intersectoral articulation may result in actions that encourage adolescents to adopt a healthy lifestyle, aiming at control and prevention of weight gain.

Mainly, the importance of the articulation between PHC and the school is emphasized, since the primary care services are located near the communities and have professionals able to develop actions that can interfere with the adolescents’ lifestyle, contributing to the improvement of their health and citizenship conditions. It is noteworthy that, in addition to schools, these services can work together with community movements, with different groups of young people, including religious, among other places frequented by this public, which favors the creation or strengthening of the bond between adolescents and the health professional.29

It is pointed out that the articulation of the health service with the school is essential for the practices to be supported by constructive and horizontal discussions with adolescents and other actors who participate in youth development in order to strengthen a safety net. In the Brazilian context, we highlight the Health at School Program and initiatives aimed at bringing primary health care professionals closer to this social equipment to meet the main demands of adolescents in an integral and longitudinal manner.30

In this context, the nurse occupies a fundamental position as a professional in primary care teams, being able to act with adolescents in order to promote positive impacts on their health conditions, as shown in the studies included in this review. Therefore, these professionals are considered to represent a respected source of information and potential to work with this group with obesity, both in the units and in other spaces of the community.31

Investigations were identified that showed that health professionals working in PHC had difficulties working with obese adolescents. The most prominent barriers were the lack of specific specialized services for the referral of obese children and adolescents; lack of interest and difficulty for behavior change by adolescents; parental resistance to treatment; poor integration between health services; the lack of guidelines for obesity management 19 the lack of time of professionals; little confidence in providing weight reduction counseling and the need for investment in professional training.14,19,23

It was noticed that the difficulties registered in the context of health services involve both users and the organization of primary care units and may negatively impact the management of obesity in adolescents, worsening their conditions. It was found in a study conducted in the USA that although nurses considered it necessary to treat obesity, nurses could not evaluate or diagnose overweight according to current guidelines; and in rural areas there were few resources to refer cases of juvenile obesity to other levels of care, which prevented the continuity of follow-up.13

Based on the acknowledgment of these limitations, the need for reorganization of health services, as well as training of professionals who work in them, which pointed to improvements in the identification and monitoring of cases of obesity in adolescents, was pointed out. In an investigation, it was evidenced that in-service training to equip health professionals for the management of obesity with adolescents was able to generate easier for them to work with adolescents and increased professional confidence to motivate adolescents to perform healthy lifestyle changes.14

It was noted that the training of primary care health professionals was also efficient to increase the referral rate of obese children and adolescents to the referral services existing in the Health Care Network and the provision of necessary laboratory tests for this public.23

It is noteworthy that, in the search carried out, national studies on the performance of nurses alone or in a multidisciplinary team in PHC aimed at adolescents with obesity did not emerge, which highlights the importance of developing studies on this subject in the Brazilian health context.

It can be seen that the findings gathered in this review may contribute to the increase of knowledge in the area of adolescent health and enable nurses to reflect on the relevance of performing interventions aimed at this public with obesity in PHC, aiming at health promotion and prevention of health problems in adolescence.
CONCLUSION

It was found that the scientific production on the actions of nurses aimed at obese adolescents in PHC included mostly intervention studies conducted in countries of the European and American continents, especially in the USA, in primary care units and in the school environment, as well as descriptive studies about the perception of health professionals about their actions with this public.

It was evidenced that the nurses’ actions were based on counseling, the use of technologies and the involvement of the family of obese children and adolescents, to promote a healthy lifestyle by stimulating healthy eating, physical activity and improving self-esteem for weight reduction.

The need for the development of longitudinal, intersectoral and broad actions is pointed out, as well as greater investment in the training of nurses, with reference to integral care.

FIUNDING

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REFERENCES


t/documents/Publications_Adolescent_Job_Aid1.pdf?ua=1


