








ORIGINAL ARTICLE

THE CARE OF OBESE ADOLESCENTS IN PRIMARY HEALTH CARE: PERSPECTIVES OF MANAGERS AND PROFESSIONALS*

HIGHLIGHTS

1. Lack of guidelines for the organization of care for obese adolescents.
2. Difficulties in health care in the face of obesity are prevalent.
3. The current potential is related to the multi-professional team.

Vinícius Rodrigues de Oliveira¹ 
Jonas Sâmi Albuquerque de Oliveira¹ 
Bárbara Letícia de Queiroz Xavier² 
Jéssica Baracho de Souza Morais² 
Juliana Iscarlaty Freire de Araújo² 
Amanda Soares² 
Claudia Helena Soares de Morais Freitas³ 

ABSTRACT

Objective: Describe and explore, from the perspective of managers and health professionals, the care offered to adolescents with obesity in the context of Primary Health Care. **Method:** A case study conducted in a municipality in the state of Ceará-Brazil. Data collection took place in 2022 through semi-structured interviews. The data were examined using Bardin Content Analysis. **Results:** The care of obese adolescents is fragmented, and each professional acts according to their own decision, as the municipality does not use protocols that subsidize the practice of care. Potentials for care were listed, the main one being the multidisciplinary team. Regarding the difficulties, the adolescent's demand for health services was highlighted. **Conclusion:** It is necessary to (re) organize the care model for obese adolescents in the municipality. In addition, the study highlights the need for greater attention to adolescent obesity and causes reflections on the care provided to this adolescent.

KEYWORDS: Obesity; Adolescent Health; Adolescent Nutrition; Primary Health Care; Comprehensive Health Care.

HOW TO REFERENCE THIS ARTICLE:

Oliveira VR de, Oliveira JSA de, Xavier BL de Q, Morais JB de S, Araújo JIF de, Soares A, et al. The care of obese adolescents in Primary Health Care: perspectives of managers and professionals. *Cogitare Enferm.* [Internet]. 2024 [cited in "insert year, month, day"]; 29. Available in: <https://dx.doi.org/10.1590/ce.v29i0.93712>

¹Universidade Federal do Rio Grande do Norte, Programa de Pós-Graduação em Enfermagem, Natal, RN, Brasil.

²Universidade Federal do Rio Grande do Norte, Programa de Pós-Graduação em Saúde Coletiva, Natal, RN, Brasil.

³Universidade Federal da Paraíba, Departamento de Odontologia, João Pessoa, PB, Brasil.

INTRODUCTION

Obesity is one of the most serious health and well-being problems of the world population today. The disease affects more than one billion people on the planet and has a worsening trend for the coming years, especially for individuals aged 10 to 19 years, a phase that includes adolescence¹⁻².

International studies show that the global prevalence of obesity in children and adolescents has increased 10-fold in recent years, surpassing the situation of malnutrition³. At the national level, about 25% of the young population is overweight or obese, and, looking only at adolescent individuals, there is a combined prevalence (overweight and obesity) ranging from 11.4% to 27.2% for girls and from 9.5% to 26.9% for boys⁴.

Obesity affecting adolescents causes multisystemic damage, which compromises growth and development. Obese children and adolescents are at high risk of developing cardiovascular diseases, autonomic dysfunction, high blood pressure, diabetes mellitus, and other chronic non-communicable diseases (CNCs), which burden the Unified Health System (SUS), reverberating the economy with expenditures of approximately three billion between hospitalizations, outpatient procedures and medications⁵⁻⁶.

In addition to the biological repercussions, obese adolescents are also subject to psychosocial illness, which reflects emotional changes and sometimes causes depression, anxiety, stress, low self-esteem, social isolation, and negative perception of body image, compromising the quality of life of that individual, as well as interpersonal relationships².

Even in the face of so many complications, the prevention and control of obesity still represent a major challenge for the SUS. It can be noted that this disease is commonly overlooked, especially in adolescence, either due to the (un) knowledge of the family or the adolescent itself, the lack of preparation of health professionals to diagnose and intervene early, or the lack of public policies that encourage health promotion and the greater role of this public⁶⁻⁷.

Thus, schools and health services, especially those linked to Primary Health Care (PHC), play an indispensable role in the process of changing the current scenario and updating care practices, as they constitute favorable spaces for carrying out health promotion actions and primary prevention of overweight and obesity. The PHC also stands out for favoring the situational recognition of its territory, which enables the construction of a health plan that considers the continuous assessment of the nutritional status and comprehensive care of adolescents⁸.

In this context, health professionals and managers must recognize obesity as a public health problem and seek to engage in the fight against this epidemic, with a view to containing it through preventive actions and creating awareness strategies for its control and combat⁹. In view of these findings, we sought to describe and explore, from the perspective of managers and health professionals, the care offered to adolescents with Obesity in the context of Primary Health Care.

METHOD

Qualitative study, such as a single and integrated case study, conducted in the Primary Health Care of a medium-sized municipality in Ceará-Brazil. This municipality was chosen because its rates of childhood and adolescent obesity are higher than the national and state averages¹⁰. In addition, it is a reference health center for surrounding cities.

To select professional participants, it was initially determined which municipal schools, located in urban territory, were linked to the School Health Program (PSE), and from then on, the Basic Health Units (BHU) linked to this program were selected for convenience.

To participate in the research and maintain an employment relationship at the selected BHU, professionals should have at least six months of experience in the exercise of their position and not be on vacation, medical certificate, or maternity/paternity leave during the data collection period. These last eligibility criteria also apply to managers.

In the end, 39 participants, distributed among health professionals and managers, were eligible for inclusion in the study. Only 22 agreed to participate, five managers and 17 health professionals. Chart 1 presents a detailed description of the study sample.

Chart 1 - Description of the study sample. Natal, RN, Brazil, 2023.

Category	Sphere of action	Cargo	No. of interviewees
Health professional	Municipal	Nurse	08
		medic	07
		Nutritionist	02
Manager	Municipal	Secretary of Health	01
		PHC Coordinator	01
		PSE Coordinator	01
	State	Coordinator of the Decentralized Health Area (DHA)	01
		Technical responsible for Primary Care at DHA	01
Total number of participants			22

Source: The authors (2023).

For data collection, which took place between March and June 2022, individual, audio-recorded semi-structured interviews were conducted by a researcher specializing in the topic of obesity and scheduled according to the convenience of the subjects and the routine of the service, which lasted an average of 15 minutes. All PHC managers were interviewed. To conclude the interviews with health professionals, the theoretical saturation of the data was considered, and this situation occurred in the eighth selected BHU.

The researcher transcribed the interviews using the Microsoft Office Word processor and then formatted and inserted them into the software Interface de R pour les Analyses Multidimensionnelles de Textes et de Questionnaires (Iramuteq), version 0.7 alpha 2.

Using this software, similarity analysis was obtained (Figure 1), which helped reveal the relationships between the corpus elements, identifying connected and opposing words. It was also possible to verify the co-occurrence of the words in the corpus, exposing the most evident and relevant textual elements¹¹.

The data were examined in light of Bardin's Content Analysis. In the pre-analysis phase, the interviews were read floating and organized in the form of a textual corpus; then, during the exploration phase of the material, the data were processed and the

results obtained made it possible to formulate thematic categories. Finally, during the interpretation of the results, the inference technique sought to make sense of the data obtained, making associations with the relevant and updated literature¹².

This study was approved under opinion No. 5,272,685 issued by the Onofre Lopes University Hospital Research Ethics Committee, linked to the Federal University of Rio Grande do Norte.

RESULTS

The five managers interviewed were predominantly female (80%), aged between 40 and 59 years (60%), who had been in the position for more than a year (80%), with a degree in the health area (80%). All managers stated that they had a lato-sensu graduate degree, but only 40% of them were in the area of management. Among the 17 health professionals, the following characteristics prevailed: female gender (64.7%), age between 30 and 39 years (52.9%), working for one to nine years in the health service (58.8%), and lato-sensu graduate studies (82.3%).

The Iramuteq software processed the data collected through the interview. The textual corpus consists of 22 texts, fragmented into 190 text segments, with a use of 77.42%. As a result of the processing, the software generated the similarity analysis represented in Figure 1.

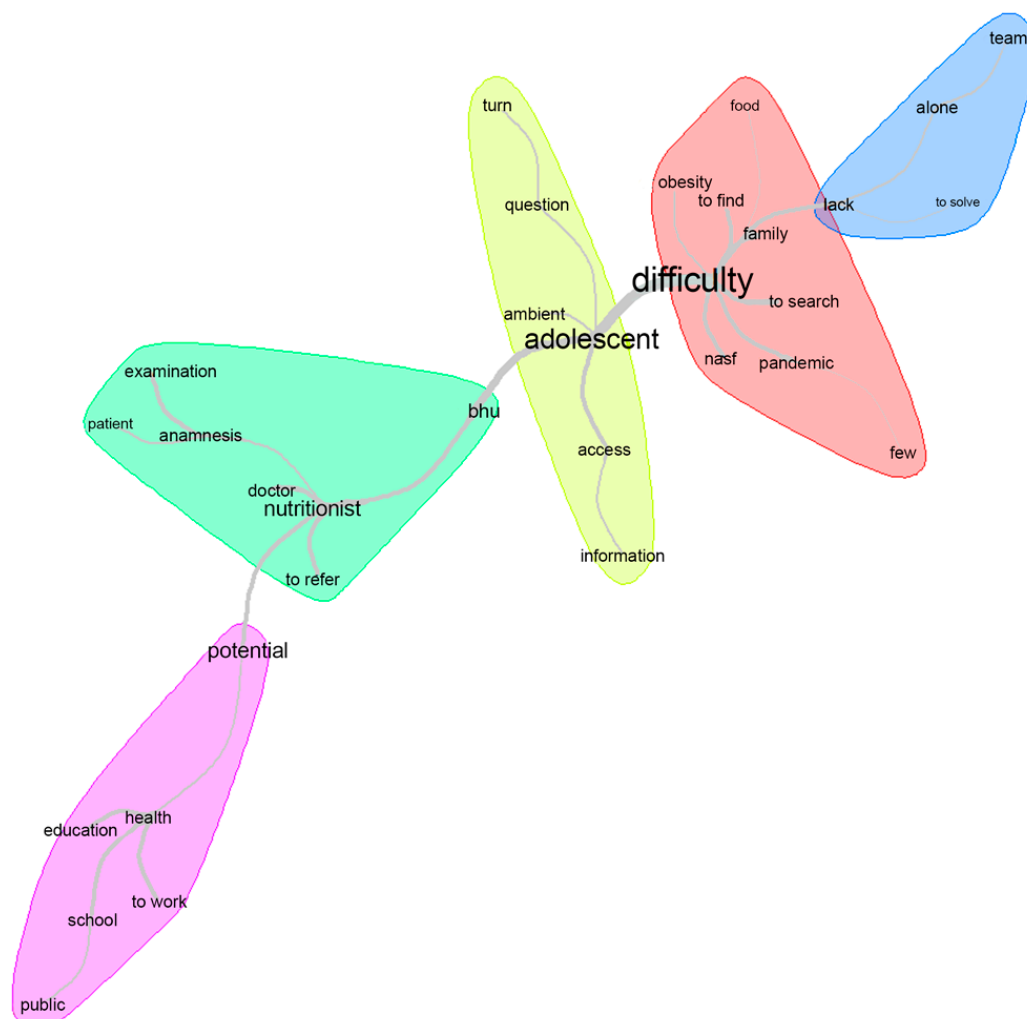


Figure 1 - Similitude Analysis. Natal, RN, Brazil, 2023

Source: The authors (2023).

The similarity analysis centered around the keywords “difficulty”, “adolescent”, “potentiality” and “nutritionist”, which represented the main lexical fields of the corpus. These words give rise to less expressive branches, that is, words that have lower frequencies, but are fundamental to give direction to the fact being investigated.

Thus, when observing its structure, it was possible to establish connections with the discourses of the textual corpus constituted by the interviews and, thus, define the thematic categories: I. Care for adolescents with obesity in Primary Health Care and potential for its consolidation; II. Difficulties in the care of adolescent obesity.

Category I: Care for adolescents with obesity in Primary Health Care and the potential for its consolidation.

For this category, the similarity analysis identified the most frequently cited care practices among professionals and managers: taking anamnesis during the consultation, requesting tests, and referral to other professionals. These practices are evidenced by the words “forward”, “anamnesis” and “examination” and are made clearer by observing the speeches of the interviewees, set out below:

During the consultation, a comprehensive approach is taken to the patient, starting with the anamnesis, then physical examination, and procedures that are important for us to follow up. (Nurse 6)

I take a medical history to identify the degree of obesity, the presence of comorbidities, and psychological symptoms, such as anxiety, for example. (Doctor 4)

When the patient arrives for consultation, initially, an anthropometric assessment is performed: weight, height, BMI, and waist circumference, followed by a dietary history, in addition, I also investigate other health habits. (Nutritionist 2)

Regarding the potential for care, its connection to this category is in line with the articulation demonstrated in the similarity analysis, validated by professionals, who, for the most part, state that the work of the multidisciplinary team and the structure of the service are the main points that can contribute to strengthening and facilitate health care for obese adolescents, while managers understand the potential of the articulation between the health and education sectors, which does not fail to consider the performance of the team. Chart 2 shows the potentialities mentioned by the participants.

Chart 2 - Potentialities listed by managers and health professionals for the care of obese adolescents. Natal, RN, Brazil, 2023.

Potentialities	Quoted by	Speech at the interview
Service structure and multi-professional team	Nurses medics Nutritionists	<i>The potential is the availability of a nutritionist, a physical educator, and even CPHC staff, if necessary. (Doctor 2)</i>
		<i>The potential is the multidisciplinary team [...] I, as a doctor, would not solve it alone. (Doctor 7)</i>
		<i>The professionals we have at the BHU have the potential to generate healthier adolescents. (Nurse 7)</i>

Partnership between the health and education sector, mediated by the PSE	Municipal Managers State Managers Nurses Nutritionist	<p><i>This partnership between health and education has recently strengthened, so in the school environment, it is suitable for raising awareness and working on the issue of education and health promotion. (Municipal Manager 2)</i></p> <p><i>The PSE, a health program in which you work on health within that school unit, is very good for getting teenagers to participate and understand the importance of taking care of themselves. (State Manager 2)</i></p> <p><i>The great potential is the networked team, the team where I talk about health and education together. Since the PSE was created, bringing health, especially to the school unit has had a strong impact. (Nurse 5)</i></p>
Adolescent knowledge and easy access to information	Municipal Manager medic	<p><i>[...] One of the potentialities is that, for the most part, they are enlightened people. (Municipal Manager 1)</i></p> <p><i>Access to information is very easy nowadays, everyone has access to information in the palm of their hand, so the internet itself is a form of ease. (Doctor 3)</i></p>
Family assistance in the treatment of adolescents	Nurses	<p><i>What helps is raising parents' awareness first, because sometimes the child's diet is in line with family nutrition. (Nurse 8)</i></p>

Source: The authors (2023).

Category II: Difficulties in the care of adolescent obesity

In this category, study participants point out more difficulties than potential in caring for obese adolescents, according to the following speech from the interviewee: we have more difficulties than facilities in this area of obesity (Doctor 4).

Thus, the same situation is demonstrated in the similarity analysis, in which the word "difficulty" is presented in a larger size and, therefore, appears more often in the speeches of the interviewees. Thus, Chart 3 was prepared to present the difficulties identified by health professionals and managers relative to the frequency of the appearance of words in the textual corpus.

Chart 3 - Difficulties listed by managers and health professionals for the care of obese adolescents. Natal, RN, Brazil, 2023.

Difficulties	Quoted by	Speech at the interview
--------------	-----------	-------------------------

<p>Seeking a health service and establishing a relationship/bond between the professional and the adolescent</p>	<p>State Managers Municipal Managers Nurses Doctors Nutritionist</p>	<p><i>They don't feel anything and they don't go to the BHU. (State Manager 2)</i></p> <p><i>I think the difficulty is establishing a closer link between the professional, the adolescent, and the BHU. (Municipal Manager 1)</i></p> <p><i>The main difficulty is the issue of searching for the adolescent himself. (Nurse 3)</i></p> <p><i>Relationships are like that, very fragile [...] I think the difficulty would be just that, the loss of contact, of follow-up. (Doctor 1)</i></p> <p><i>[...] This audience is an audience that has a certain difficulty in coming to the BHU [...], so it's a matter of interest. (Nutritionist 2)</i></p>
<p>Adherence to treatment</p>	<p>Nurses medics</p>	<p><i>The difficulty is their lack of commitment. Normally, they seek it when there is a problem, because they are being bullied, or they have issues of self-esteem, but they start and never complete the treatment. (Nurse 1)</i></p> <p><i>There is difficulty in patients' compliance, especially in this regard, to adherence to treatment. (Doctor 5)</i></p>
<p>Covid-19 pandemic</p>	<p>State Managers Municipal Manager Nurses Nutritionists</p>	<p><i>Although we know there is a lot to work with teenagers, in these two years of a pandemic that we have experienced, Covid has taken care of practically everything. (State Manager 2)</i></p> <p><i>During these two years of the pandemic, we have been orphaned from the practice of education and health promotion. (Municipal Manager 2)</i></p> <p><i>Before the pandemic, when we could go to schools and carry out nutritional assessments at school, this made it much easier, but with the pandemic, it became difficult. (Nurse 2)</i></p> <p><i>The pandemic issue made it a little difficult. (Nutritionist 2)</i></p>
<p>Food insecurity</p>	<p>Nurses Doctors Nutritionists</p>	<p><i>[...] Sometimes inadequate food is much more accessible than adequate food itself (Nutritionist 1)</i></p> <p><i>You have behavior to be done, so you offer the service but don't offer the condition for the person to do the right thing, especially with food [...] The patient asks: how am I going to follow this diet if I have no condition, if I only have the basics and the basics involve rice, beans, and salt. (Nurse 6)</i></p> <p><i>As a difficulty, I imagine the economic issue. (Doctor 7)</i></p>

Lack of professionals at the Expanded Family Health Center (NASF)	Municipal Manager Nurses Doctors Nutritionist	<p><i>With the defunding of the NASF, most of the teams were disbanded, so today we only have the resident NASF and one more NASF, and yet the professionals are in much smaller numbers. (Municipal Manager 1)</i></p> <p><i>I used to work at the NASF, which was a team composed of a nutritionist, physical educator, psychologist, and physiotherapist, but the SUS has been dismantled, and these professionals underwent changes in the sector, and some were even disbanded from the municipality. Before that, we had health education groups in schools, which was the most practical way to work with the public. (Nutritionist 2)</i></p> <p><i>At the NASF, we only have a nutritionist, but before, we had a psychologist and a physical educator who helped a lot; now, at the moment, I only have one nutritionist who is our NASF. (Nurse 7)</i></p>
Counter-referral process failed	Nurses Doctors	<p><i>There is no counter reference as it should be, it doesn't come, it doesn't exist, but since we are connected to the person, and they are there for a good while here at the BHU, we always seek to know. (Nurse 8)</i></p> <p><i>The counterreferral of the specialist to the BHU is a bit precarious. When the patient arrives, we ask what was said by the specialist and what was prescribed; this is a great difficulty. (Doctor 7)</i></p>
Negative influence of the family environment	Municipal Manager Nurses Nutritionist	<p><i>The greatest difficulty is the obesogenic environment, the family environment; the adolescent is not isolated in this situation, the family influences. (Municipal Manager 3)</i></p> <p><i>Family members don't help; they often like to see the chubby teenager. (Nurse 7)</i></p> <p><i>The difficulty is that obesity itself is multifactorial, and therefore requires a lot of things, in addition to the health professionals themselves, such as family support [...] (Nutritionist 1)</i></p>

Source: The authors (2023).

DISCUSSION

In view of the participants' speeches, it should be noted that there are no guidelines for the organization of care implemented in the practice of health professionals in the municipality under investigation. Thus, each professional acts according to their knowledge and does what they consider necessary to care for obese adolescents.

In the case of obese children and adolescents treated at the PHC, it is essential that biological parameters such as sexual maturation and psychosocial aspects, such as the relationship between peers in school and family environments, be investigated from the first consultations, regardless of the professional providing the care professional⁸. This information must be collected using anamnesis, which is a behavior mentioned by the study participants, but none of them demonstrated that they would perform it as recommended by the Ministry of Health.

Given this, studies have indicated that although non-nutritionist health professionals understand obesity as a disease, most of them do not have sufficient skills to provide effective care. This is because they have deficits in their training process, in addition

to acting under a model of fragmented care whose sick person must be referred to a specialized professional¹³⁻¹⁴.

Thus, referral, although considered an appropriate practice when it comes to obesity since it reinforces the nature of multi professional care¹⁵, is often considered a "transfer" from the individual to a specialist and without great concern for the continuity of care by the referring professional, as mentioned by the participants.

From this perspective, it can be observed that the current care model for treating obesity is marked by biomedical practices that have a low capacity to resolve the real demands of the subject¹⁶. In this context, the importance of building a Singular Therapeutic Project (PTS) for individuals with obesity is emphasized. The PTS works as a tool that helps in the construction of comprehensive care from an interprofessional perspective, outlining the best therapeutic possibilities for the patient, considering their life and health context, thus contributing to improving the care process and promoting trust and autonomy to the patient¹⁷.

In view of the above results, it is evident that the potentialities related to the individual have been little mentioned and when they appear, they are referred to a considerably smaller number of times. This situation constitutes a complicating factor in the health care provided to people with obesity, given that professionals must direct care so that the user is the protagonist in this process while having their family engaged¹⁸.

Among the difficulties, the one that most appeared in the discourse of the interviewees, whether manager or professional, was the adolescent's low demand for the health service, in this case, the BHU, which, consequently, leads to a process of separation between professional and user, recognized by the study participants themselves, who refer to the difficulty of the relationship linked to the low frequency of the adolescent in the service and demonstrate that the adolescent is not a priority audience.

These findings are consistent with the results found in a study¹⁹ on comprehensive adolescent care in PHC, the result of which showed that health professionals are subject to certain prejudices when dealing with adolescent health, not paying attention to the uniqueness of this phase, but in defining adolescents as difficult to deal with and self-neglecting, thus becoming an obstacle to the consolidation of health care, based on comprehensiveness.

The discourse of the interviewed medical professionals and nurses focuses on blaming the individual, when they express that the adolescent does not commit to their treatment and the search is only for aesthetic purposes, not for health. Blaming people with obesity for their weight is one of the most common situations in the care of this public and discourages the user from continuing to seek health care²⁰.

When this happens, it means that professionals have a unidirectional perception, in which weight loss only occurs solely due to the individual's commitment to treatment, when, in fact, obesity is a complex and multi-causal disease, determined not only by the user's adherence to the proposed treatment, but also by biological, environmental, and psychological factors. Therefore, it is important to establish a process of co-responsibility between professionals and patient²¹.

Another major difficulty in the obesity care scenario was the health crisis caused by Covid-19. This pandemic situation jeopardized care in other situations and conditions of illness that were treated in the PHC, such as obesity²². For adolescents, this period also had negative impacts, since, despite not being assiduous in the service, the ESF team, through the PSE, carried out actions aimed at the prevention and control of obesity in schools, which were also closed as a result of the pandemic period, which may have contributed to the worsening of the obesity situation as a result of the inertia of these actions in the municipality under investigation.

It should be noted that, in order to implement the above-mentioned actions, a multidisciplinary team is needed, which the official documents produced by the Ministry of Health reinforce as essential in the health care of people with obesity. However, the recommended scenario tends not to materialize, especially since public policies, such as the NASF, which increased the number of workers in the context of the PHC and relieved the excessive number of care for basic staff, were extinct²³.

It also reinforces the need to strengthen the referral and counter-referral system within the PHC and in other parts of the Health Care Network (HCN), as this, according to the doctors and nurses participating in this study, has been a major problem in following up on the process of caring for obese patients.

Finally, among the difficulties mentioned by professionals and managers, the negative influence of the family appears less frequently, but it represents a delicate field that needs extra attention because, according to Patel²⁴, obesity in parents is reflected in their children. Thus, adolescents' eating behavior is embedded in a complex interaction with their cultural environment, and dietary habits constitute a long-lasting routine.

The authors understand that the study had some limitations, such as research at only one level of health care and in a single municipality. In this sense, it is suggested to develop other studies that analyze the vision of managers at different levels of care and in different parts of the country, as research on obesity currently focuses heavily on interventions and treatments, with little approach to the work process of managers and professionals.

FINAL CONSIDERATIONS

It is an international consensus that the PHC must be the "gateway", the coordinator of the HCN, in addition to developing decisive and collective actions at the individual and collective levels. However, when the health of obese adolescents is put on the agenda, care gaps persist, leading to poor care.

In this study, it was observed that the care practices for obese adolescents are linked to fragmenting and stigmatizing ideas and senses that place this subject as the main culprit for their illness. Although some professionals have mentioned the need for holistic care, also being concerned about the mental health of adolescents, this has often only remained in the discourse.

Thus, it is urgent to rethink the model of care for adolescents with obesity and the attitudes of health professionals, but responsibility for care cannot be attributed to these actors alone. It is up to managers to coordinate the team and provide support for its performance, for example, the implementation of the Overweight and Obesity Care Line, which would enable better-articulated work.

Finally, this study highlights the need for greater attention to the problem of obesity in adolescents and causes reflections on the care provided to the public in PHC. In this field, all professionals are equally important. However, it is possible to highlight the role of nurses, since they are at the forefront when it comes to carrying out PSE actions, consultations with reception, and active listening, among other possibilities that manifest themselves in their daily lives, although still little explored in the field of obesity, they make it possible to prevent and control this disease.

ACKNOWLEDGMENTS

To the Coordenação de Aperfeiçoamento de Pessoal de Nível Superior (CAPES) for the design of a scholarship cod.001, to the main author of this manuscript.

REFERENCES

1. World Health Organization. Overweight and obesity. [Internet]. Geneva: WHO; 2021 [cited 2023 Feb. 05]. Available from: <https://www.who.int/news-room/fact-sheets/detail/obesity-and-overweight>
2. Rocha M, Morais M, Maia R, Silva E, Maia E. Aspectos psicossociais da obesidade na infância e adolescência. *Psicol. saúde doenças*. [Internet]. 2017 [cited 2023 Feb. 05]; 18(3):712-23. Available from: <http://dx.doi.org/10.15309/17psd1807>
3. NCD Risk Factor Collaboration. Worldwide trends in body-mass index, underweight, overweight, and obesity from 1975 to 2016: a pooled analysis of 2.416 population-based measurement studies in 128,9 million children, adolescents, and adults. *Lancet*. [Internet]. 2017 [cited 2023 Feb. 05]; 390(10113):2627-42. Available from: [https://doi.org/10.1016/S0140-6736\(17\)32129-3](https://doi.org/10.1016/S0140-6736(17)32129-3)
4. Guedes DP, Mello ERB. Prevalence of overweight and obesity in Brazilian children and adolescents: a systematic review. *ABCS Saúde Sci*. [Internet]. 2021 [cited 2023 Feb. 05]; 46:e021301. Available from: <https://doi.org/10.1590/1980-0037.2021v23e80352>
5. Nilson EAF, Andrade RCS, Brito DA, Oliveira ML. Costs attributable to obesity, hypertension, and diabetes in the Unified Health System, Brazil, 2018. *Rev Panam Salud Publica*. [Internet]. 2020 [cited 2023 Feb. 06]; 44:e32. Available from: <https://doi.org/10.26633/RPSP.2020.32>
6. Guimarães LVS, Ramos MA, Souza MJC, Moreira C, Silva JLP, Menezes RAO. Teen obesity: a public health problem. *REAS*. [Internet]. 2021 [cited 2023 Feb. 06]; 13(1):e5521. Available from: <https://doi.org/10.25248/reas.e5521.2021>
7. Neves SC, Rodrigues LM, Bento PAS, Minayo MCZ. Risk factors involved in adolescent obesity: an integrative review. *Ciênc. Saúde Colet*. [Internet]. 2021 [cited 2023 Feb. 06]; 26(Supl. 3):4871-84. Available from: <https://doi.org/10.1590/1413-812320212611.3.30852019>
8. Ministério da Saúde (BR). Instrutivo para o cuidado da criança e do adolescente com sobrepeso e obesidade no âmbito da Atenção Primária à Saúde. [Internet]. Brasília: Ministério da Saúde; 2022 [cited 2023 Feb. 08]. Available from: http://189.28.128.100/dab/docs/portaldab/publicacoes/instrutivo_crianca_adolescente.pdf
9. Corrêa VP, Paiva KM, Besen E, Silveira DS, Gonzales AI, Moreira E, et al. O impacto da obesidade infantil no Brasil: revisão sistemática. *RBONE*. [Internet]. 2020 [cited 2023 Feb. 08]; 14(85):177-183. Available from: <http://www.rbone.com.br/index.php/rbone/article/view/1208/949>
10. Sistema de Vigilância Alimentar e Nutricional (BR). Relatórios do Estado nutricional dos indivíduos acompanhados por período, fase do ciclo da vida e índice. [Internet]. 2022 [cited 2023 Feb. 09]. Available from: <https://sisaps.saude.gov.br/sisvan/relatoriopublico/estadonutricional>.
11. Klamt LM, Santos VS. O uso do software IRAMUTEQ na análise de conteúdo - estudo comparativo entre os trabalhos de conclusão de curso do ProfEPT e os referenciais do programa. *Res., Soc. Dev*. [Internet]. 2021 [cited 2023 Feb. 09]; 10(4):e8210413786. Available from: <http://dx.doi.org/10.33448/rsd-v10i4.13786>
12. Bardin L. Análise de conteúdo. São Paulo: Edições 70; 2016.

13. Teixeira FV, Pais-Ribeiro JL, Maia ARPC. Beliefs and practices of healthcare providers regarding obesity: a systematic review. *Rev. Assoc. Med. Bras.* [Internet]. 2012 [cited 2023 Mar. 01]; 58(2):254-62. Available from: <https://doi.org/10.1590/S0104-42302012000200024>
14. Jesus JGL, Campos CMS, Scagliusi FB, Burlandy L, Bógus CM. Work process in the family health strategy oriented to people with overweight and obesity in São Paulo. *Saúde debate.* [Internet]. 2022 [cited 2023 Mar. 01]; 46(132):175-87. Available from: <https://doi.org/10.1590/0103-1104202213212>
15. Aboueid S, Jasinska M, Bourgeault I, Giroux I. Current weight management approaches used by primary care providers in six multidisciplinary healthcare settings in Ontario. *Can J Nurs Res.* [Internet]. 2018 [cited 2023 Mar. 01]; 50(4):169-78. Available from: <https://doi.org/10.1177/0844562118769229>.
16. Burlandy L, Teixeira MRM, Castro LMC, Cruz MCC, Santos CRB, Souza SR, et al. Models of care for individuals with obesity in primary healthcare in the state of Rio de Janeiro, Brazil. *Cad. Saúde Pública.* [Internet]. 2020 [cited 2023 Mar. 01]; 36(3):e00093419. Available from: <https://doi.org/10.1590/0102-311X00093419>
17. Silva LKP da, Souza AAC de, Figueiredo LMV, Souza PP de, Siqueira JR, Dias LS, et al. Singular therapeutic project in interprofessional mental health care in primary care: experience report. *RSD.* [Internet]. 2020 [cited 2023 Mar. 01]; 9(12):e33191211025. Available from: <https://doi.org/10.33448/rsd-v9i12.11025>
18. Soeiro RL, Valente GSC, Cortez EA, Mesquita LM, Xavier SCM, Lobo BMIS. Group health education in the treatment of obese class III: a challenge for health professionals. *Rev. bras. educ. med.* [Internet]. 2019 [cited 2023 Mar. 01]; 43(1):681-91. Available from: <https://doi.org/10.1590/1981-5271v43suplemento1-20190005>
19. Silva RF, Engstrom EM. Comprehensive health care of teenagers by the primary health care in the Brazilian territory: an integrative review. *Interface (Botucatu)* [Internet]. 2020 [cited 2023 Mar. 02]; 24(suppl 1):e190548. Available from: <https://doi.org/10.1590/Interface.200703>
20. Farrell E, Hollmann E, le Roux CW, Bustillo M, Nadglowski J, McGillicuddy D. The lived experience of patients with obesity: a systematic review and qualitative synthesis. *Obes Rev.* [Internet]. 2021 [cited 2023 Mar. 02]; 22(12):e13334. Available from: <https://doi.org/10.1111/obr.13334>
21. Menezes TSB, Maciel SC, Faro A, Silva LL, Dias CCV. Representação social da obesidade: análise com estudantes do ensino médio e universitários. *Cienc. Psicol.* [Internet]. 2021 [cited 2023 Mar. 02]; 15(1):e2388. Available from: <https://doi.org/10.22235/cp.v15i1.2388>
22. Seguí FL, Guillamet GH, Arolas HP, Marin-Gomez FX, Comellas AR, Morros AMR, et al. Characterization and identification of variations in types of primary care visits before and during the COVID-19 pandemic in Catalonia: Big Data analysis study. *J Med Internet Res.* [Internet]. 2021 [cited 2023 Mar. 02]; 23(9):e29622. Available from: <https://doi.org/10.2196/29622>.
23. Massuda A. Primary health care financing changes in the Brazilian health system: advance or setback? *Ciênc. Saúde Colet.* [Internet]. 2020 [cited 2023 Mar. 05]; 25(4):1181-88. Available from: <https://doi.org/10.1590/1413-81232020254.01022020>
24. Patel SA, Dhillon PK, Kondal D, Jeemon P, Kahol K, Manimunda SP, et al. Chronic disease concordance within Indian households: a cross-sectional study. *PLoS Med.* [Internet]. 2017 [cited 2023 Mar. 05]; 14(9):e1002395. Available from: <https://doi.org/10.1371/journal.pmed.1002395>

***Article extracted from the master's:** "Práticas do cuidado ao adolescente com obesidade na Atenção Primária à Saúde", Universidade Federal do Rio Grande do Norte, Natal, RN, Brasil, 2022.

Received: 07/08/2023

Approved: 08/10/2023

Associate editor: Dra. Luciana Kalinke

Corresponding author:

Vinícius Rodrigues de Oliveira
Universidade Federal do Rio Grande do Norte
Campos Universitário, Br-101, s/n - Lagoa Nova, Natal - RN
E-mail: viniciusrodriguesvro@gmail.com

Role of Authors:

Substantial contributions to the conception or design of the work; or the acquisition, analysis, or interpretation of data for the work - **Oliveira VR de, Morais Freitas CHS de**. Drafting the work or revising it critically for important intellectual content - **Oliveira VR de, Oliveira JSA de, Xavier BL de Q, Morais JB de S, Araújo JIF de, Soares A, Morais Freitas CHS de**. Agreement to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved - **Oliveira VR de, Morais Freitas CHS de**. All authors approved the final version of the text.

ISSN 2176-9133



This work is licensed under a [Creative Commons Attribution 4.0 International License](https://creativecommons.org/licenses/by/4.0/).