










Intervention in a basic health unit for preventing and controlling overweight and obesity: results from a multidisciplinary and participatory intervention



Intervenção em uma unidade básica de saúde para prevenção e controle do sobrepeso e da obesidade: resultados de uma abordagem multidisciplinar e participativa

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Abstract

This experience report describes the practice of health education to prevent overweight and obesity. The intervention was conducted by medical students in collaboration with the Family Health Team professionals, targeting the population assigned to a basic health unit in Olinda, Pernambuco, Brazil.

Keywords: Primary health attention; Health education; Obesity; Overweight; Primary prevention.

Resumo

Este relato de experiência descreve uma prática de educação em saúde voltada para a prevenção do sobrepeso e da obesidade. A intervenção foi conduzida por estudantes de medicina em colaboração com a Equipe de Saúde da Família, com foco na população adscrita a uma Unidade Básica de Saúde situada no município de Olinda, Pernambuco, Brasil.

Palavras-chave: Atenção primária à saúde; Educação em saúde; Obesidade; Prevenção primária; Sobrepeso.

How to cite: Pacífico **FA**, Toscano **AA**, Andrade **DC**, Menezes **JKL**, Cardoso **JCB**, Tenório **LGL**, et al. Intervention in a basic health unit for preventing and controlling overweight and obesity: results of a multidisciplinary and participatory intervention. *An Fac Med Olinda* 2024; 1(12):122 doi: <https://doi.org/10.56102/afmo.2024.297>

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Email: fapacifico@
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Funding: Nothing to
declare.

**Research ethics
committee:** Not
applicable.

Received in: 05/30/2023

Approved in: 11/20/2023

INTRODUCTION

Global health has been impacted by the increasing prevalence of overweight and obesity, raising concerns about the associated health risks¹. In Brazil, overweight and obesity cases increased by 132% and 231% (respectively) between 2013 and 2022, suggesting that over half of the Brazilian population is experiencing issues related to excess weight².

High intake of critical nutrients (salt, sugar, oils, and fats) and low consumption of grains, fruits, and vegetables are considered inadequate diets and the primary risk factors for chronic non-communicable diseases (NCDs) in Latin America³.

Over the past four decades, dietary patterns have changed worldwide. An increased intake of foods high in free sugars, sodium, saturated fats, and trans fats, combined with a minor intake of foods with high nutritional value, is associated with several NCDs⁴. For all regions and socio-economic levels, the overall dietary quality of Brazilian adolescents is inadequate, characterized by low consumption of fruits, vegetables, legumes, and dairy products and by high intake of fats⁵.

Regarding health services, food surveillance acts by anthropometric assessment and monitoring dietary consumption. These data, available in the Food and Nutritional Surveillance System (SISVAN)⁶, enhance the understanding of the health issues affecting the population, fostering the development of public policies and establishment of priorities⁷. The Surveillance System for Risk and Protective Factors for Chronic Diseases through Telephone Surveys and the Family Budget Survey also contribute to this effort⁶.

Monitoring body mass index allows the observation of tendencies in overweight and obesity across various geographic areas and the identification of critical factors associated with these conditions. This information is crucial to support public policies aimed at obesity prevention, promoting healthy lifestyles, and encouraging regular physical activity since childhood^{8, 9}.

A high number of basic health unit (BHU) users present NCDs (e.g., obesity), a risk factor for other complications, such as diabetes mellitus, hypertension, cardiovascular diseases, and cancer.

In 2018, the Unified Health System spent over 3.45 billion reais on hypertension, diabetes mellitus, and obesity³. About 370 million reais (11% of direct costs) were attributed to obesity, recognized as a major public health issue. Since obesity directly impacts the quality and duration of life, prevention and early diagnosis are essential to promote health and reduce morbidity and mortality³.

The epidemiological profile shows that the NCD cases are increasing in Pernambuco, Brazil; this tendency is also observed in other Brazilian cities. As for the nutritional status of the population, SISVAN data reveals an increasing number of overweight and obesity cases in the municipality of Olinda, Pernambuco, including at the BHU in this report⁶. The increased number

of cases and their associated morbidity and mortality highlights the need for interventions that can change this context.

Thus, this study reports a successful experience in health education aimed at raising awareness among the population served by a BHU in Olinda, Pernambuco, Brazil, about the benefits of making lifestyle changes to prevent overweight and obesity.

EXPERIENCE REPORT

The Maguerez Arc problematization methodology was used to explore the content of the study, emphasizing that learning originates from direct contact with the topic and the interpretation of reality. During the practical activities of the Curricular Unit Integration of Academia, Service, and Community, a group of medical students interacted with the population served by a BHU in Olinda.

This experience and the observation of SISVAN data evidenced a high prevalence of overweight and obesity among individuals registered at the BHU, along with a predominance of detrimental habits (inadequate nutrition, sedentarism, and alcohol consumption). These findings highlighted the need for an educational and preventive intervention, focusing on critical aspects of health promotion.

The study was thoroughly explored during the theorization phase. As a result, the students observed that overweight and obesity presented high prevalence and low control rates, represented some of the main modifiable risk factors, and were important public health concerns^{1, 2}.

After the theorization that clarified the community profile, the Family Health Team (FHT) professionals from the BHU helped with the hypothesis elaboration for solutions to the main problem. Among them, the conduct of a health education activity using a horizontal dialogue was considered, including anthropometric assessment and follow-up care.

On the day of the activity, an introductory dynamic was conducted in the waiting room with the present audience, encompassing the individuals previously invited by the community health agents and those who had appointments on that day. Then, the topic was discussed, covering the prevalence of overweight and obesity, the conceptual distinction between these conditions, and how to identify them. This step aimed to evaluate the prior knowledge of the population on the topic.

Subsequently, the audience was instructed on the importance of preventing and controlling overweight and obesity, considering the reality of community, access to physical activities, and healthy eating. Topics, such as sedentarism, healthy eating habits, and instructions for a balanced lifestyle, were discussed and aligned with the socioeconomic and cultural context of the population. Individuals were also informed about the importance of reducing smoking and alcohol consumption and practicing regular physical activity, emphasizing their benefits in the prevention

of obesity-related diseases and the management of existing health conditions.

Besides the instructions on the benefits of lifestyle changes, a poster with tips for physical activities and dietary guidance was elaborated based on the possibilities and daily life of the community. During the intervention, the proximity to the shore was emphasized, which is an accessible location for the practice of physical activity. As a final activity, a nutritive snack made from fruits and healthy ingredients was provided to consolidate the concepts of a balanced diet and healthy habits. This activity also aimed to demonstrate that maintaining a healthy diet is achievable, even with limited access and resources. Moreover, the fruits used in this activity (bananas, grapes, and apples) were bought from the local market, considering the affordability for the community and seasonality of the harvests. The initiative aimed to promote an experience of healthy food choices, offering a snack aligned with the principles of a balanced and nutrient-rich diet.

During the meeting, the population underwent an anthropometric assessment (body mass index) and abdominal circumference. Additionally, the personal data of the individuals (name and Unified Health System card number) was collected to facilitate follow-up care by the FHT and doctor at the BHU.

After evaluation, individuals received additional guidance on the importance of a physical activity plan and healthy eating. To continue individualized care, each individual had appointments scheduled over the following three months, enabling the FHT to closely monitor their progress and provide ongoing support for maintaining a healthier lifestyle.

The reported action innovates by combining an educational intervention adjusted for the socioeconomic and cultural context of the population with practical activities, such as guidance, provision of nutritive snacks, anthropometric assessment, and the creation of visual materials. This strategy aimed to teach and allow individuals to practice the principles of healthy habits. Furthermore, the initiative by professionals to document and follow up with the group over three months demonstrates commitment and engagement, further strengthening the intervention proposal. The close interdisciplinary collaboration among students, FHT, and the community fostered an atmosphere of trust and a constant feedback flow, optimizing the effectiveness of the intervention.

RESULTS

After the intervention, the students were satisfied with the results achieved by the active and engaged participation of the community, characterized by constant interaction, expressions of interest, and gratitude for the attention provided by the students.

Given the success and engagement of the population, strategies for obesity prevention must extend beyond guidance alone. Multifactorial interventions are widely recommended for the effective prevention and control of obesity, as they integrate nutrition, physical activity, and

behavioral change, including personalized counseling and continuous monitoring of diet or physical activity (or both)¹⁰. In this context, the population sought information about healthy eating and regular physical activity practices associated with continuous and individualized support.

One of the pillars for control and prevention of overweight and obesity is adequate and healthy nutrition. However, according to the National Policy on Food and Nutritional Security and the National Policy on Food and Nutrition, the problem is not only nutritional but also cultural, social, and economic¹¹. This concept guided the intervention adopted by the students and the FHT, promoting awareness of the importance of a healthy lifestyle.

Moreover, guidance on the regular practice of physical activity proved to be a crucial intervention. Besides its association with weight reduction, studies indicate that physical activity decreases the risk of NCDs, reduces mortality from all causes, and promotes quality of life¹². Thus, the intervention adopted by the students aligns with current recommendations, emphasizing the importance of global measures against obesity.

Adopting intersectoral policies to reverse the obesogenic environment in which individuals live, in addition to providing educational and behavioral support, is essential for the prevention and control of obesity¹³.

FINAL CONSIDERATIONS

In the short term, the effective interaction among the FHT professionals, students, and community of Olinda reinforced the positive aspect of this educational intervention in promoting healthy lifestyles. This synergy, combined with the active engagement of the community, reveals the power of health education adapted to local realities.

In the medium term, the commitment to medical follow-up will be crucial for the consolidation and expansion of the benefits already achieved. Continuous guidance to the community regarding the importance of healthy food choices and physical activities into daily routines is essential to positively change the health of the population.

However, additional measures must be implemented for sustainable long-term results, including extensive public policies, continuous awareness campaigns, and health support infrastructures. Thus, this experience report serves as a starting point and a reference model. Similar initiatives are encouraged to be replicated and adapted according to the needs of different communities, always striving for a healthier and more resilient future for all.

CONFLICT OF INTERESTS

Nothing to declare

AUTHOR CONTRIBUTIONS

FAP: Conceptualization, Data curation, Investigation, Methodology, Project administration, Resources, Supervision, Writing – original draft, Writing – review and editing; **AAT:** Writing – review and editing; **DCA:** Writing – review and editing; **JKLM:** Writing – review and editing; **JCBC:** Writing – review and editing; **LGLT:** Writing – review and editing; **CYSVM:** Supervision, Writing – review and editing. All authors approved the final version of the manuscript.

REFERENCES

1. Alfaris N, Alqahtani AM, Alamuddin N, Rigas G. Global Impact of Obesity. *Gastroenterol Clin North Am.* 2023 Jun;52(2):277-293. <https://doi.org/10.1016/j.gtc.2023.03.002>
2. Ministério da Saúde. Norma Técnica da Vigilância Alimentar e Nutricional – SISVAN. Brasil: Ministério da Saúde; [citado em 2023 Set 9]. Disponível em: <https://sisaps.saude.gov.br/sisvan/relatoriopublico/index>
3. Nilson EAF, Andrade RDCS, Brito DAD, Oliveira MLD. Custos atribuíveis a obesidade, hipertensão e diabetes no Sistema Único de Saúde, Brasil, 2018. *Rev Panam Salud Publica.* 2020;44:e32. <https://doi.org/10.26633/RPSP.2020.32>.
4. Cunha CMDL, Canuto R, Rosa PBZ, Longarai LS, Schuch I. Associação entre padrões alimentares com fatores socioeconômicos e ambiente alimentar em uma cidade do Sul do Brasil. *Ciência & Saúde Coletiva.* 2022;27:687-700. <https://doi.org/10.1590/1413-81232022272.37322020>.
5. Ronca DB, Blume CA, Cureau FV, Camey SA, Leotti VB, Drehmer M, de Carvalho KMB, et al. Diet quality index for Brazilian adolescents: the ERICA study. *Eur J Nutr.* 2020;59:539-556. <https://doi.org/10.1007/s00394-019-01923-8>.
6. Ministério da Saúde. Norma Técnica da Vigilância Alimentar e Nutricional – SISVAN. Brasil: Ministério da Saúde; [citado em 2023 Set 9]. Disponível em: <https://sisaps.saude.gov.br/sisvan/relatoriopublico/index>
7. Silva RPC, Vergara CMAC, Sampaio HADC, Vasconcelos Filho JE, Strozberg F, Ferreira Neto JFR, Carioca AAF, et al. Sistema de Vigilância Alimentar e Nutricional: tendência temporal da cobertura e estado nutricional de adultos registrados, 2008-2019. *Epidemiol Serv Saúde.* 2022;31:e2021605. <https://doi.org/10.1590/S1679-49742022000100019>.
8. Pinheiro MC, de Paiva Moura ALS, Bortolini GA, Coutinho JG, dos Santos Rahal L, Bandeira LM, Gentil PC, et al. Abordagem intersetorial para prevenção e controle da obesidade: a experiência brasileira de 2014 a 2018. *Rev Panam Salud Publica.* 2019;43. <https://doi.org/10.26633/RPSP.2019.58>.
9. Gonçalves IDSA, Pereira PF, Silva MBL, Ladeira FB, Moreira TR, Cotta RMM, da Costa GD. Nutritional status coverage trend registered in the SISVAN web in seven municipalities of the

Zona Da Mata Mineira, Brazil, from 2008 to 2017, and its association with socio-economic, demographic and organisation of health system variables. *J Nutr Sci.* 2020;9:e4. <https://doi.org/10.1017/jns.2019.42>.

10. Lombard CB, Deeks AA, Teede HJ. A systematic review of interventions aimed at the prevention of weight gain in adults. *Public Health Nutr.* 2009;12(11):2236-2246. <https://doi.org/10.1017/S1368980009990577>.
11. Brasil. Ministério da Saúde. Secretaria de Atenção à Saúde. Marco de Referência da Vigilância Alimentar e Nutricional na Atenção Básica. Brasília: Ministério da Saúde; 2015. p. 1-56. https://bvsms.saude.gov.br/bvs/publicacoes/marco_referencia_vigilancia_alimentar.pdf
12. UK NCGC. Obesity: Identification, Assessment and Management of Overweight and Obesity in Children, Young People and Adults. 2014. PMID: 25535639.
13. Jones PR, Ekelund U. Physical activity in the prevention of weight gain: the impact of measurement and interpretation of associations. *Curr Obes Rep.* 2019;8:66–76. <https://doi.org/10.1007/s13679-019-00337-1>