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Karla Pereira Balbino¹

Flávia Galvão Cândido¹

UHelen Hermana Miranda Hermsdorff¹

¹ Universidade Federal de Viçosa ROR, Departamento de Nutrição e Saúde. Vicosa, MG, Brasil.

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Correspondence

Helen Hermana Miranda Hermsdorff helenhermana@ufv.br

Assistant Editor

Érika Cardoso dos Reis

Instructions to multidisciplinary care for people with severe obesity: development and validation process

Instrutivo destinado ao cuidado multiprofissional da pessoa com obesidade grave: processo de elaboração e validação

Abstract

Introduction: The increasing prevalence of obesity and the growing number of bariatric surgeries highlight the urgent need to train healthcare professionals for the comprehensive care of people with severe obesity (PWSO). This population includes individuals with a body mass index (BMI) of 35 kg/m² with associated comorbidities or a BMI of 40 kg/m² without comorbidities. Objective: To describe the development and validation process of an instructional guide for. Methods: The instructional material was developed based on an extensive literature review and validated in two phases: content validation (via questionnaire) and face validation (via focus groups). A qualitative approach was employed for data analysis, using both manual analysis and the IRaMuTeQ software. Results: The instructional guide addresses the care of PWSO, accounting for the specificities, complexities, and challenges involved. The material includes tools specifically designed to assist the various professionals comprising the multidisciplinary team. In the content validation phase, 19 parameters were evaluated, resulting in a mean Content Validity Index (CVI) of 0.92, indicating high relevance to the addressed topics. During the focus group phase, the themes "line of care" and "challenges in multidisciplinary treatment" were discussed until saturation, that is, until consensus. Conclusion: The instructional guide and its accompanying tools can support health professionals involved in the care of PWSO within the SUS, in alignment with their regional and contextual needs.

Keywords: Obesity. Obesity Grade III. Sistema Único de Saúde. Patient Assistance Team. Validation Study.

Resumo

Observa-se um aumento na prevalência de obesidade e de cirurgias bariátricas, destacando-se a necessidade de capacitação de profissionais para os cuidados da pessoa com obesidade grave (PCOG), ou seja, para o manejo adequado da obesidade em indivíduos que apresentam IMC ≥ 35Kg/m², com comorbidades associadas, ou IMC ≥ 40kg/m², sem comorbidades associadas. *Objetivo*: Descrever o processo de elaboração e



validação de um instrutivo para o cuidado multidisciplinar da PCOG no Sistema Único de Saúde (SUS). *Métodos*: A construção do material foi baseada em extensa revisão de literatura e sua validação aconteceu em duas etapas: validação de conteúdo (aplicação de questionário) e validação aparente (grupos focais). Os dados foram tabulados com uma abordagem qualitativa, mediante análise manual e pelo software IRaMuTeQ. Resultados: O Instrutivo aborda o cuidado da PCOG, de acordo com suas especificidades, complexidades e dificuldades. Para o material, ferramentas para auxílio dos diferentes profissionais da equipe multidisciplinar foram especificamente elaboradas. Na análise de conteúdo, 19 parâmetros foram julgados, obtendose uma média de 0,92 para o índice de validade de conteúdo (IVC), o que indica adequação em relação às temáticas abordadas. Em seguida, nos grupos focais, as temáticas "linha de cuidado" e "dificuldades no tratamento multidisciplinar" foram discutidas até a saturação, ou seja, até o consenso. Conclusão: O conteúdo e as ferramentas do instrutivo podem auxiliar os profissionais de saúde envolvidos no cuidado da PCOG no SUS, de acordo com seu território.

Palavras-chave: Obesidade. Obesidade Grau III. Sistema Único de Saúde. Equipe de Assistência ao Paciente. Estudo de Validação.

INTRODUCTION

Obesity is considered the most significant epidemic of the 21st century, as it is associated with various chronic diseases, malignant neoplasms, and neuropsychological disorders. In Brazil, the prevalence of obesity increased by 72% over a 13-year period, rising from 11.8% in 2006² to 20.3% in 2019. According to data from the Observatório de Saúde Pública, in 2023, 22.8% of Brazilian adults were classified as obese, and 56.8% were overweight. Furthermore, the number of bariatric surgeries rose by 3.8% from 2022 to 2023, totaling 80,441 procedures in 2023. However, this number represents only 0.097% of Brazilians with grade I, II, or III obesity. These figures underscore the need for instructional and support materials to guide the multidisciplinary care of obesity.

Obesity is classified based on an individual's body mass index (BMI). According to the World Health Organization (WHO), individuals with a BMI between 30 and 34.9 kg/m² are considered to have grade I obesity; between 35 and 39.9 kg/m², grade II obesity; and a BMI of 40 kg/m² or higher constitutes grade III obesity. Severe obesity is not defined solely by BMI but also takes into account the individual's overall health status, particularly when comorbidities are present. ⁷

The Brazilian Ministry of Health recommends lifestyle modifications (including dietary and physical activity changes), psychological support, and sustained behavioral strategies as the first-line treatment for severe obesity within the *Sistema Único de Saúde* (SUS). When individuals with severe obesity (PWSO) fail to respond adequately to these interventions, a multidisciplinary evaluation is recommended to assess eligibility for bariatric surgery.^{8,9} The multidisciplinary team plays a critical role in facilitating lasting behavioral changes, and its involvement is essential during the preoperative, perioperative, and postoperative periods to ensure successful outcomes.¹

Managing severe obesity presents several challenges. For individuals affected by this condition, achieving and maintaining long-term lifestyle changes is often difficult.^{8,9} Additionally, the presence of comorbidities complicates clinical management and increases surgical risk. PWSO also commonly face stigma and discrimination, which further hinders their access to care.¹⁰ For healthcare professionals, the need for proper training and logistical infrastructure is vital for delivering comprehensive care. However, the actual implementation of multidisciplinary care in practice remains inconsistent.¹¹ Moreover, there is a noticeable lack of official documents to guide the management of severe obesity within the SUS.¹²

Thus, the objective of this study is to describe the development and validation process of an instructional guide for the multidisciplinary care of PWSO in the SUS, aiming to address this gap in Brazilian scientific literature and to support health professionals in delivering effective care to this population.

METHODS

Ethical aspects

The study was conducted according to national and international ethics guidelines and approved by the Comitê de Ética em Pesquisa com Seres Humanos da Universidade Federal de Viçosa (UFV), opinion no: 5.317.984; CAAE 54635721.7.0000.5153. The Informed Consent Form (ICF) was obtained from all individuals involved in the study online, as previously described. 13,14

Methodological Procedures

The development and validation of the instructional material were part of a broader project that aimed to produce three distinct documents: one focused on the nutritional care of PWSO,¹³ another designed for dietitians working in Primary Health Care (PHC),¹⁴ and a final instructional dedicated to the multidisciplinary care of PWSO.

The instructional titled "Organization of Care for the Person with Severe Obesity by a Multiprofessional Team in the Sistema Único de Saúde" was specifically developed to guide the actions of the multidisciplinary team. Its development and validation occurred across ten structured stages (Figure 1)

Survey of information on the organization of care for people with severe obesity (PWSO) and definition of the Instructional's executive summary

Presentation of the executive summary for review, discussion, and revision of the topics

Exploratory literature review on the organization of care for PWSO by a multiprofessional team within the Sistema Unico de Saúde (SUS), seeking regulatory guidelines and scientific evidence to support the content of the Instructional

Selection of high-quality national documents (guidelines, legislation, relevant scientific articles, and books) and an active search for international documents to fill existing gaps

Development of the Instructional

Presentation of the Instructional to the technical team for content review and discussion

Meetings with managers and professionals working in the overweight and obesity care line within SUS to improve the material developed

Validation process of the Instructional with professionals from the SUS multidisciplinary team and experts in the field

Analysis of suggestions and comments from the judges according to SUS's guiding principles

Preparation of the final version of the Instructional

Figure 1. Flowchart of the development and validation of the Instructional.

Each box represents a stage in the development of the Instructional. The events are described in chronological order.

To construct the instructional, a comprehensive literature review was conducted. ^{13,14} Search terms included: "severe obesity", "obesity", "overweight", "bariatric surgery", "guidelines", "recommendation", "practical guidelines", and "multiprofessional", used individually or in combination. Preference was given to official sources (manuals, guidelines, and instructions), legislative documents (laws, norms, resolutions, and ordinances), and Brazilian scientific articles, given that the primary audience of this instructional comprises managers and healthcare professionals within the SUS. International references were also incorporated, particularly when relevant for understanding the pathophysiology of severe obesity or updating clinical protocols. Materials were included based on their alignment with multidisciplinary management of severe obesity within the SUS. Resources whose recommendations were incompatible with the SUS context were excluded.

The instructional targeted the multidisciplinary care of PWSO in the SUS, defining severe obesity as a BMI of 35 kg/m² with associated comorbidities or a BMI of 40 kg/m² without comorbidities.⁷ The design considered the unique attributes of the three levels of care within the health system: PHC, Specialized Ambulatory Care (SAC), and Specialized Hospital Care (SHC). For each care component, the instructional provided guidance on responsibilities within the care network, suggested minimal staffing configurations, and



outlined roles for each professional category to assist in operational planning. For PHC, the content emphasized identifying patients, conducting initial assessments, organizing care flow, and included suggested evaluation tools and referral protocols. For SAC, an internal protocol worksheet was developed to guide surgical screening processes (bariatric and reconstructive plastic surgery) and multiprofessional care for nonintensive cases. In SHC, guidance was centered on preoperative, perioperative, and postoperative phases, with proposed standard operating procedures and clinical follow-up recommendations.

Given the multiprofessional nature of the instructional, it was authored by a team comprising professionals from various disciplines: nutrition, physical education, psychology, endocrinology, physiotherapy, social work, and nursing. All contributors had experience within the SUS or held academic positions at federal public universities.

Study Setting

The study was conducted in a virtual environment, enabling the participation of experts and professionals from various regions across Brazil.

The instructional was validated in November 2022 and included two consecutive phases: 1) Content validation, via a structured questionnaire; 2) Face validation, through focus groups to discuss key areas of disagreement identified during the content validation phase. 15,16

Data Sources

Experts in the field and SUS professionals with experience in obesity, severe obesity, bariatric surgery, and/or public health were invited to participate, as previously described. 13,14 Given the distinct expertise required, the judges were divided into two categories: 1) Content judges, consisting of professors and researchers from federal public universities with significant academic contributions in the relevant fields; 2) Technical judges, comprising healthcare professionals and managers from the Health Care Network (HCN), including PHC, SAC, and SHC, with practical experience in managing severe obesity.

Judges were recruited through various channels: referral hospitals for severe obesity, published academic articles, the Currículo Lattes (Brazilian academic CV platform), city halls, and federal health councils (Medicine, Nursing, Nutrition, and Psychology), federal university websites, and through snowball sampling techniques.¹⁷

Data Collection and Organization

For content validation, a structured evaluation questionnaire was developed, consisting of 19 guiding questions (Table 1) presented on a Likert scale. 13 The criteria assessed included usability, functionality, content, relevance, and visual appearance of the instructional, 18-20 along with sociodemographic and educational background information. Each judge received a complete, non-diagrammed version of the instructional, an informed consent form (TCLE), and the evaluation questionnaire. A 7-day window was provided for completion.

For face validation, focus groups were employed as the methodological approach 15, due to their capacity to foster interaction and deeper exploration of disagreements identified during content validation. 13,16

Three virtual focus groups were held via Google Meet®, scheduled on different days and times based on participant availability. Each session included a mediator, two observers, and the judges. The same mediator and observers participated in all sessions. The mediator facilitated discussions, while observers provided technical support and summarized the discussions. Both the mediator and observers were coauthors of the instructional.^{21,22}

A semi-structured discussion guide with five key questions was used:

- 1. To begin, I would like each participant to briefly state their name, city/state, and area of practice, and explain why they agreed to participate in this validation process.
- 2. The instructional begins with the organization of the care pathway and the ordering of the care flow for people with severe obesity. Is there any aspect related to this topic that differs from your knowledge or practical experience?
- Should intensive care be offered in PHC, SAC, or in both, depending on the possibilities of each health territory?
 - Who should be responsible for the medical reports for bariatric
 - What is the best reference care location for the management of non-responsive individuals?
 - 3. Another topic addressed in the instructional was the care of the person with severe obesity by the multiprofessional team. On this topic, is there any aspect in which the presented content differs from your knowledge or practical experience?
 - How can health demands be met without overburdening the system?
 - What do you think about the effectiveness of non-surgical care?
 - Is there any guidance that could improve the effectiveness of this
 - In practice, is interdisciplinarity feasible? How does it occur in the daily routine of the network?
 - 4. In your opinion, what should be added or removed to better adapt the content of the instructional without compromising its use?
 - Is there any specific part of the instructional in which the content is extensive and/or repetitive?
 - Do you consider it necessary to deepen the approach to any topic?
 - Should the content on reconstructive plastic surgery, binge eating, body dysmorphic disorder, dysfunctional relationship with the body, urgency and emergency, team training, weight stigma, and therapeutic alternatives for poorly responsive individuals be better addressed?
 - 5. Based on your knowledge and practical experiences, what are the major current challenges in the care of people with severe obesity in the *Sistema Único de Saúde*?
 - Are there current limitations in the provision of infrastructure, equipment, tests, pharmaceutical and nutraceutical support, available professionals, registered health facilities?
 - Were these challenges well addressed by the instructional?



After the publication of the instructional, what are the next steps to improve health care for people with severe obesity in the Sistema Único de Saúde?

It should be noted that the mediator and observers did not interfere with the judges' answers or interpretation of the questions at any time. 16,23

Data Analysis

Content validation – Questionnaire analysis

To analyze the content of the instructional, agreement with the questions in the questionnaire was evaluated. In this case, judges could assign scores from 1 to 5, where "1" corresponded to totally disagree; "2", partially disagree; "3", indifferent; "4", partially agree; and "5", totally agree. To calculate the content validity index (CVI), the proportion of judges who gave the highest scores (4 and 5) for each parameter analyzed was calculated, considering adequate those items that obtained a CVI greater than or equal to 0.8.²⁴

Additionally, the appearance of the instructional was assessed using a non-diagrammed version, which included figures, graphs, charts, and tables.

Face validation - Focus group analysis

For the analysis of the focus groups, the discussions were transcribed and analyzed using a qualitative approach, which helps to understand the subjective reality of the interviewees in their relationships, representations, and intentions.²⁵

The content from the focus groups generated a corpus of analysis, which was processed in two stages: one manual and one automated. The manual analysis was conducted using frequent categorical analysis to identify themes, while the automated analysis was carried out with the help of IRaMuTeQ software, which enabled similarity analysis and the creation of a word cloud.²⁶

In the manual analysis, to identify the themes, the three phases of analysis development proposed by Bardin were used.²⁷ The first is pre-analysis, which aims to prepare and homogenize the material through a floating reading. This allows for cleaning and homogenizing the corpus, to make it suitable for applying analysis techniques, as well as mapping possible themes. In the second phase, concerning material exploration, the technique of categorical analysis was applied, with the coding of the statements. In each part of the text where the theme appeared, the theme was identified, followed by its recording in an Excel® spreadsheet. Once the entire corpus had been coded and the spreadsheet completed, the coherence of the codes was verified, and they were grouped into categories expressing the content present in each group. Finally, the last phase involved the treatment and interpretation of results using IRaMuTeQ software.²⁷

The similarity analysis allowed for graphical identification of the occurrences among words and their connections. The size of each word indicates its importance in the textual corpus, and the thickness of the lines connecting the clusters indicates the degree of association between them. Therefore, the thicker the line, the stronger the association. The nuclei or clusters indicate similarities among the terms. ^{26,28} Finally, word cloud analysis made it possible to graphically identify the main elements of the textual corpus.

The arrangement and size of the words are proportional to their frequency in the corpus, meaning the more central and larger the word, the more prevalent it was in the discussions. ²⁶

RESULTS

Construction of the Instructional

The Instructional is organized into eight chapters (Figure 2). The first two chapters address the treatment of PWSO, considering the stigma of obesity, the complexity of follow-up, nutritional care, organization of the care network, care strategies (basic, intensive, individual, and collective), surgical and non-surgical approaches, and success in management.

Figure 2. Organization of the Instructional according to thematic areas.

MANAGEMENT OF SEVERE OBESITY



- Stigma of obesity
- Complexity of follow-up
- Multiprofessional care
- Organization of the overweight and obesity care line
 - Care strategies
 - Treatment modalities
- Management of comorbities
 - Successful treatment

SPECIFICS OF MANAGEMENT



- Responsibilities of PHC in the care of PWSO
- Common responsibilities of Family Health Team professionals
 - Responsibilities of each team professional
 - Referral to SAC
- Documentation of care provided
- Responsibilities of SAC in the care of PWSO
- Screening for bariatric surgery and guidance on the care pathway
- Responsibilities of each team professional
- Responsibilities of SHC in the care of PWSO
 - Bariatric surgery
- Responsibilities of each team professional
- Reconstructive plastic surgery

SUPPORT FOR MANAGEMENT



- Responsibilities of Support, Logistics, and Regulation Systems in the care of PWSO
 - Complementary tests
- Pharmaceutical assistance
- Health Transportation
- Regulation
 Information systems and effective communication
- Infrastructure and equipment
- Challenges for managers
- Challenges for health professionals

TOOLS



- Interactive guide for managers for implementing the overweight and obesity care line
- Standard Operating Procedures for the assessment of PWSO by the PHC multiprofessional team supporting the Family Health Strategy
- PWSO assessment questionnaire in SAC with care flow guidance
- Suggested care routine for presurgical assistance for PWSO by the bariatric surgery team in SHC
- Report template for use by different health specialties in the care of PWSO
- Suggested care routines for postsurgical bariatric surgery follow-up by the SHC multiprofessional team

PWSO: person with severe obesity; SAC: Specialized Ambulatory Care; SHC: Specialized Hospital Care; PHC: Primary Health Care. Each column represents a thematic area covered in the Instructional, and each box represents a chapter. Different colors were used to represent the different thematic areas.

Subsequently, three chapters cover the specific aspects of severe obesity management for each of the three different levels of health care (PHC, SAC, and SHC). The responsibilities of the various health professionals involved in the care of PWSO are described for each level of health care. Notably, the chapter dedicated to SHC provides information on bariatric surgery for the immediate, mediate, and late pre- and post-surgical phases.

Considering the complexity of obesity and the geographical dimensions of Brazil, one chapter focuses on support systems and logistical regulation of treatment. This section addresses the regulation of PWSO care, the complementary tests that must be conducted, pharmaceutical assistance, medical transportation, and methods to ensure more effective communication. Lastly, a chapter addresses the challenges associated with the care of PWSO.

Additionally, the Instructional includes tools to support the care of PWSO in the form of appendices.

Validation

The validation process involved 18 judges, with 14 participating in both phases (content analysis and focus group). Most judges were from the Southeast (n=10), with representation from the Northeast (n=3), Midwest (n=3), South (n=1), and North (n=1). The professional backgrounds included dietitians (n=7), physiotherapists (n=2), social workers (n=2), physicians (n=2), nurses (n=2), pharmacists (n=1), and psychologists (n=1), which ensured the Instructional was validated from multiple professional perspectives.

Regarding content analysis, all 19 questions achieved an acceptable CVI (\geq 0.8) (Table 1), indicating that the judges deemed the material's content appropriate for its intended purpose, and no modifications were necessary following this validation stage.

Table 1. Guiding questions with respective Content Validity Indexes (CVI) from the Instructional validation process. Brazil, 2023.

	Parâmetro	IVC
1.	1. The proposed topics are useful to your practice in caring for People With Severe Obesity (PWSO) within the Sistema Único de Saúde (SUS).	1.00
2.	2. The writing style facilitates understanding of the material.	0.89
3.	3. The organization of the topics contributes to the learning of the content.	1.00
4.	4. The quantity and quality of graphic elements (figures, charts, tables, and diagrams) are appropriate for the content of the Instructional, that is, neither insufficient nor excessive.	0.89
5.	5. The Instructional adequately describes the complexity and challenges involved in organizing health care for PWSO within SUS.	1.00
6.	6. The Instructional clearly and comprehensively presents recommendations for the implementation and/or organization of the Overweight and Obesity Care Line (LCSO) regarding the care of PWSO, respecting the different realities of Brazilian health territories.	0.83
7.	7. The Instructional appropriately and practically encourages the integrated use of individual and collective practices, interdisciplinarity, and comprehensiveness of health actions directed toward the care of PWSO within SUS.	0.89
8.	8. The Instructional adequately presents both non-surgical and surgical treatment modalities for severe obesity, with the necessary emphasis on the importance of lasting lifestyle changes regardless of the treatment modality adopted.	0.89
9.	9. The Instructional clearly and objectively addresses the main goals of interdisciplinary health care for PWSO, with a broad and realistic perspective, without excessive focus on weight loss alone.	1.00
10.	10. This Instructional appropriately addresses the role of different health professional categories in caring for PWSO, both regarding suggestions for team composition in each component of care (Primary, Specialized Ambulatory, or Specialized Hospital Care) and in the description of their responsibilities.	0.89



Table 1. Guiding questions with respective Content Validity Indexes (CVI) from the Instructional validation process. Brazil, 2023.(Continued)

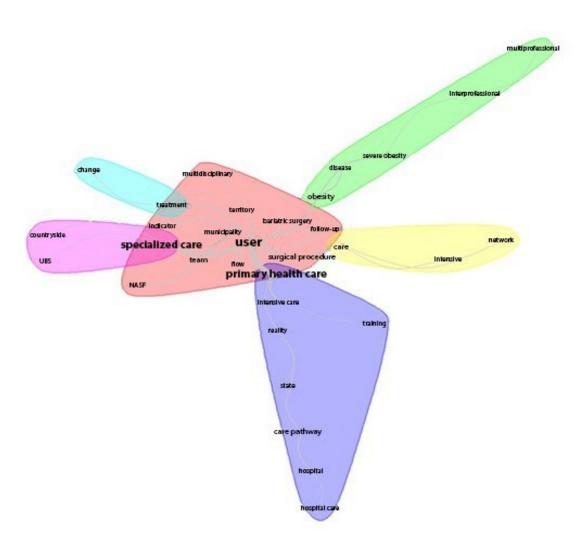
	Parâmetro	IVC
11.	11. The Instructional provides clear and useful information on organizing care for PWSO in each component of care (Primary Health Care, Specialized Ambulatory Care, and Specialized Hospital Care), contributing both to the organization of the patient flow and to the therapeutic approach by the multidisciplinary team.	0.94
12.	12. Considering the content as a whole, the recommendations and tools provided by the Instructional (forms, flowcharts, guides, questionnaires, summary tables, Standard Operating Procedures) address the main needs for organizing the shared interdisciplinary care of adults with severe obesity within SUS.	1.00
13.	13. The model containing the responsibilities and criteria for sharing the care of PWSO within SUS appropriately and coherently defines the flow between the different components of care.	1.00
14.	14. The customized flowchart model with therapeutic itinerary is a complete and functional tool capable of guiding the creation/adaptation of the PWSO care pathway within health territories.	0.94
15.	15. The "Interactive Guide for Managers" is a complete and functional tool capable of adequately supporting the implementation of the Overweight and Obesity Care Line in different SUS health territories.	0.89
16.	16. The PWSO assessment questionnaire with care flow guidance is a functional tool applicable to the reality of routines within Specialized Ambulatory Care in SUS.	0.94
17.	17. The report template to support decision-making regarding the indication for bariatric surgery is a functional tool applicable to health professionals in specialized care.	0.83
18.	18. The suggested pre- and post-operative routines are functional tools applicable to the realities of Specialized Hospital Care teams within SUS.	0.89
19.	19. The support sheet for structuring clinical protocols in Specialized Ambulatory Care is a tool capable of correctly supporting the organization of care routines for people with severe obesity.	0.89

Source: the authors

However, to ensure the material accurately reflected the reality experienced by professionals in the SUS, the judges provided input during focus groups. They recommended adding new bibliographic references and shared their professional experiences related to the topic. The content discussed by the judges in the focus group reached saturation, evidenced by a Hápax coefficient of 4.81%. This indicates that only 4.81% of the words appeared only once, demonstrating similarity among statements. All references and experiences shared by the judges were reviewed by the instructional team, who adapted the material accordingly to ensure that the content could be implemented in practice.

One of the questions examined in the focus group concerned the judges' perception of the care pathway described in the Instructional. To analyze this question, a similarity graph was generated (Figure 3), which highlights the centrality of the user within the network..

Figure 3. Similarity analysis of the "care pathways" corpus, content validation of the Instructional through focus group (n=14).

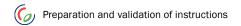


In different colors, it is possible to identify word clusters, meaning words that show similarities among themselves. These clusters may overlap, indicating that the same word belongs to two different clusters. The size of each word indicates its relevance within the textual corpus; that is, the larger the word, the greater its importance. Additionally, the words are connected by gray lines, with the thickness of the lines indicating the degree of association between the connected words. UBS: Basic Health Unit; NASF: Family Health Support Center.

Additionally, with regard to the care pathways, the difficulties in standardizing these pathways across Brazil's diverse contexts were discussed, as illustrated by one judge's comment: "when it is instructive for Brazil, our SUS is so different in the radius of more than 1,000 municipalities".²⁷

Finally, the challenges associated with the multidisciplinary care of PWSO were addressed during the focus groups, as reflected in the following statement 28 .

Because they don't have money for the bus fare, don't have anyone to leave the kids with, they're not in school, so yeah, it's like this worry, this thing of not being able to get their life organized. There's so much to do, the users have been saying this a lot. Bad memory, they forget, the date of the appointment. So we've been having this trouble with them showing up at the clinic. And also with buying food, even basic medicine.



For this question, a cloud of words was constructed (Figure 4), in which the terms "obesity" (n=33), "want" (n=17), "care" (n=16), "primary attention" (n=16) and "user" (n=14) were the most pointed out by participants.

It should be noted that there was no abrupt change in the material after this stage, refining only what was written with the reality of SUS professionals, i.e., ensuring that the theory addressed in the instructional was consistent with the practical reality.

DISCUSSION

Severe obesity is a complex condition with therapeutic and care particularities, the management of which demands multiprofessional support by qualified and experienced staff and therefore involves several actors and specialties in different spheres of care.²⁹ Still, the possibility of surgical treatment of severe obesity by the SUS has been established since 2000, with updates in 2007, 2013, and 2017,^{8,9,30-32} expanding the demand for the creation of more complex care networks and dialogue across all three components of health care.

However, the absence of specific publications on the best care strategies and protocols for these individuals may be considered an impediment to improving health care for PWSO in SUS.^{33,34} This highlights the novelty and relevance of developing and validating this Instructional, *Organization of care for people with severe obesity by a multiprofessional team in the Unified Health System*, aiming to address the lack of materials focused on the multidisciplinary treatment of PWSO.

The sample of validators included representatives from all five regions of the country, which indicates that the validation process accounted for different regional perspectives. Representatives of seven health professions, from the three components of care - PHC, SAC, and SHC - also participated. Evaluating the Instructional from these diverse perspectives ensures that the material meets the needs and realities of different health professionals,³⁵ making this step a distinguishing aspect of the validation process. Furthermore, the increasing prevalence of obesity, both in Brazil and worldwide, was noted by the judges as a key motivation for participating in the validation process, which reinforces the importance of developing this material.

In the Instructional, the roles of each health professional within PHC are clearly described, enabling these professionals to identify their responsibilities in managing severe obesity within a multidisciplinary team and thus act more confidently. Additionally, when PWSO do not respond to strategies implemented within PHC, such as dietary changes and increased physical activity, they should be referred to SAC for an evaluation of the need for bariatric surgery. 11,32

Finally, one of the judges raised the issue of the need for "uniformity of treatment." However, as discussed in the Instructional, organizing care pathways for managing PWSO is extremely challenging and complex due to the regional, structural, and multidisciplinary team differences present in each health territory. ^{9,11} Therefore, although the Instructional outlines various scenarios and contexts, we do not believe that treatment can be standardized, as the unique characteristics of each region must be respected so that professionals can apply the recommendations according to their specific context.

When evaluating the judges' care pathways, the user appears at the center of the similarity graph. This outcome underscores that the focus of treatment for severe obesity should be the individual rather than the

disease.³⁶ Furthermore, it shows that the user is strongly connected to both PHC and SAC. PHC serves as the gateway to the SUS, while SAC is where the individual will receive intensive interventions for obesity treatment.^{11,32} In both components of care, it is important to foster a strong bond between users and health professionals to ensure continuous care and, consequently, better outcomes.^{37,38}

Within PHC, building this bond strengthens care, helping to overcome gaps such as high staff turnover, lack of professional training, and work overload. Through empathy and humanized care, health professionals help users feel welcomed, which encourages their return to Basic Health Units, promotes shared responsibility for care, and builds mutual trust. Additionally, this bond fosters a sense of belonging and appreciation for health professionals, supporting continuity of care.³⁹

On the other hand, there is no strong bond between users and SHC, as these terms appear in separate clusters. This reinforces that bariatric surgery should not be the first line of treatment for severe obesity and highlights the necessity for individuals to prepare nutritionally, physically, and psychologically for this procedure.³²

As previously discussed, it is vital to consider the particularities of each region, and there must be flexibility regarding the roles of PHC and SAC in different health contexts.³² However, continuous care for the user is essential, so that they arrive better prepared at SHC, thereby increasing the likelihood of successful bariatric surgery. To facilitate the implementation of the overweight and obesity care pathway, the Instructional includes an interactive guide for managers with key information for developing an overweight and obesity care line.¹¹

There is no doubt that caring for PWSO is challenging. Among other factors, it is a multifactorial condition³⁷ that requires organized care pathways and faces significant stigma from both the public and health professionals.^{40,41} Therefore, the Instructional provides guidelines for addressing the challenges associated with caring for PWSO, directed toward managers and health professionals.

For managers, the main challenge is to build a care pathway that meets the population's needs while addressing inadequate infrastructure, human resources that are often insufficient and/or inadequately trained to care for PWSO, lack of interdisciplinary teams, disorganization of referral and counter-referral processes, low resolution capacity, difficulty with user adherence, delayed nutritional diagnosis, and failure to recognize obesity as a health issue.⁴⁰

For health professionals, there is a need for ongoing training and qualification to effectively care for this population, as well as a commitment to humanized care, which involves building a strong bond with PWSO, as previously discussed.^{37,38,40,41} These aspects are addressed to help managers and health professionals understand their roles in this process, thereby contributing to the success of PWSO care.

A limitation of this study was that not all participants took part in both stages of the validation process. However, although four volunteers did not attend the focus groups, data saturation was reached, which validates the focus groups conducted. Also, while the development and validation of the material were intended to enable its application across different Brazilian health territories, some adaptations may be necessary during implementation to better address the specific characteristics of each region. This need for adaptation may also be considered a limitation. Finally, a limitation is that the Instructional does not address obesity in general, as its focus is on the multidisciplinary care of PWSO within the SUS. It should be noted, however, that this Instructional complements other materials addressing the overall treatment of obesity within the SUS, previously published by the Brazilian Ministry of Health. 11,34,42-47

CONCLUSION

The instructional content addresses specific aspects of both care organization and therapeutic practice, with clearly defined responsibilities according to the SUS care components and professional categories. This makes the recommendations valuable for both managers and health teams. This is both a distinguishing feature of the document and a necessary element for effectively supporting care for these individuals within SUS. Therefore, the instructional content and tools can help health professionals work more confidently, with a comprehensive focus on the user, and assist in building an effective line of care for the treatment of severe obesity in SUS, adapted to their local context.

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Contributors

Dias MM contributed to the study design, data collection, analysis, interpretation, and manuscript writing; Balbino KP contributed to data collection, analysis, interpretation, and manuscript writing; Cândido FG contributed to data collection, analysis, and interpretation; Hermsdorff HHM contributed to the study design, data interpretation, manuscript editing and critical review. She was also responsible for the overall coordination of the project and management of the resources used. All authors participated in the final review and approved the manuscript for submission.

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