# FOOD AND NUTRITION IN COLLECTIVE HEALTH

DOI: 10.12957/demetra.2023.70592



- Carolina Gusmão Magalhães¹
- Uirgínia Campos Machado<sup>2</sup>
- Lígia Amparo da Silva Santos²
- Poliana Cardoso Martins<sup>3</sup>
   Mônica Leila Portela De Santana<sup>2</sup>
- <sup>1</sup> Universidade Federal do Recôncavo da Bahia, Centro de Ciências da Saúde. Santo Antônio de Jesus, BA, Brasil.
- <sup>2</sup> Universidade Federal da Bahia. Departamento de Nutrição. Salvador, BA, Brasil.
- <sup>3</sup> Universidade Federal da Bahia. Instituto Multidisciplinar de Saúde. Vitória da Conquista, BA, Brasil.

Article from the doctoral thesis entitled "Obesidade, educação e mudança: mobilização do pensar na saúde", authored by Carolina Gusmão Magalhães and supervised by Mônica Leila Portela De Santana, defended in June 2022 at the Universidade Federal da Bahia (Federal University of Bahia).

Funding: This project was funded by the Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPQ), under Funding Code No. 439717/2018-

Correspondence Carolina Gusmão Magalhães carol.magalhaes@ufrb.edu.br

# An analysis of social representations of obesity by health professionals in primary health care

Uma análise das representações sociais da obesidade por profissionais de saúde na atenção primária à saúde

#### Abstract

*Introduction:* The understanding of whatobesity is will influence the way we structure public policies, the training process of health professionals, and, mainly, care practices. Objective: To analyze the social representations of obesity among Primary Health Care professionals in the state of Bahia, Brazil. Method: This brief communication refers to qualitative research, anchored in the Theory of Social Representations, developed in the context of a course on the qualification of care for people with overweight and obesity. For data production, we used an online semi-structured questionnaire and the Free Word Association Technique, based on the stimulus "Write the first three words that come to your mind when you think about obesity". The prototypical analysis was carried out with the assistance of the OpenEvoc software. Results: The results indicate that the central core of social representations about obesity was formed by the elements disease, food, overweight and fat, while the words mental health, quality of life, physical activity, stigma, health, and multifactorial constitute the peripheral system. They revealed that the pathological and individualized perspective is predominant, despite the enhancement of modern scientific knowledge and institutional guidelines on obesity; the assumption of psycho-emotional factors in the development of obesity; as well as the incipience of the multifactorial, ecological, and/or syndemic approach to obesity. Conclusion: This study suggests that research deepens the study of such social representations, and their motivations in the educational, labor, and social field, like the analysis of what consolidates and provokes the newly announced narratives.

**Keywords:** Social Representations. Obesity. Overweight. Health Professionals. Primary Health Care.

### Resumo

Introdução: A compreensão do que seja obesidade vai influenciar a maneira como estruturamos as políticas públicas, o processo formativo dos profissionais de saúde e, principalmente, as práticas de cuidado. Objetivo: Analisar as representações sociais sobre obesidade para profissionais de saúde da Atenção Primária do estado da Bahia, Brasil. Método: Esta comunicação breve refere-se a uma pesquisa qualitativa, ancorada na Teoria das Representações Sociais, desenvolvida no contexto de um curso sobre a qualificação do cuidado às pessoas com sobrepeso e obesidade. Para a produção dos dados, utilizaram-se um questionário semiestruturado on-line e a Técnica de Associação Livre de Palavras, a partir do estímulo "Escreva as três primeiras palavras que vêm a sua mente quando você pensa em obesidade". A análise prototípica foi realizada com a ajuda do software OpenEvoc. Resultados: Os resultados indicam que o núcleo central das representações sociais sobre obesidade foi formado pelos elementos doença, alimentação, sobrepeso e gordura, enquanto os vocábulos saúde mental, qualidade de vida, atividade física, estigma,

saúde e multifatorialidade compõem o sistema periférico. Revelaram que há predominância da perspectiva patológica e individualizada, em que pesem a ampliação do conhecimento científico moderno e das orientações institucionais sobre a obesidade; a assunção dos fatores psicoemocionais no desenvolvimento da obesidade; assim como a incipiência da abordagem multifatorial, ecológica e/ou sindêmica da obesidade. *Conclusão*: Este estudo sugere que pesquisas aprofundem o estudo de tais representações sociais, suas motivações no campo formativo, laboral e social, bem como a análise do que consolida e provoca as novas narrativas anunciadas.

**Palavras-chave:** Representações Sociais. Obesidade. Sobrepeso. Profissionais de Saúde. Atenção Primária à Saúde.

.



# **INTRODUCTION**

Obesity is defined as an abnormal or excessive accumulation of body fat, influenced mainly by the dietary and physical activity profile, which poses health risks,<sup>1</sup> or even as a chronic, progressive, and recurrent disease.<sup>2</sup> Although this is the dominant understanding, there are other narratives in debate. By extrapolating the individual dimension into the causal model that consolidates it, obesity is also recognized and called a "social phenomenon", a multifactorial event that is explained by behaviors, actions, and situations observed in social life and that affect relationships, the conflicts, and agreements between individuals in the community.<sup>3,4</sup>

Concerned with the social representations and stigmas that are built on the fat body, insofar as they produce conflict and suffering in the person who lives with obesity, studies also point to obesity called a "condition" to refer to the need for recognition of processes of subjectivation and differentiation that their bodies claim in the modern social context.<sup>3,4</sup> In this way, the ecological approach to health<sup>5</sup> proposes to discuss obesity from the integration and interconnectivity of different dimensions of life (biological, genetic, behavioral, socioeconomic, political, and environmental), recognizing their interdependence. In addition, there are recent studies that associate this phenomenon with two other pandemics - malnutrition and climate change - thus configuring a global syndemic scenario.<sup>3,6</sup>

In a recent international consensus, researchers suggest that the conception of several health professionals can influence the behavior of these workers in the act of care,<sup>3</sup> in addition to being intrinsically related to the process of formulating public policies and structuring the training path of health professionals. Although critical studies indicate the need forcare for people with obesity based on an expanded dialogue with the principles of integrality and intersectoriality, applied by multidisciplinary teams and respecting the food culture and body diversity, the practices implemented sometimes reinforced the stigma experienced by users.<sup>7</sup>

Aiming to understand such conceptions, studies of social representations are used in the interpretation of complex networks of meanings in social processes and practices.<sup>8</sup> In this context, this study analyzed the social representations of obesity for health professionals in Primary Health Care (PHC) in Bahia state.

# **METHODS**

This communication resulted from an exploratory-descriptive study with a qualitative method developed from the Qualification of Care for People with Obesity course offered by the Universidade Federal da Bahia (Federal University of Bahia) from September to December 2020. The course objective was to strengthen the conceptual, methodological, and strategic capacities of professionals linked to the Núcleo Ampliado de Saúde da Família e Atenção Básica (eNASF-AB) (Expanded Family Health and Primary Care Centers) and Primary Health Care (PHC) teams to qualify for care for people with overweight and obesity, considering social, community, family, and individual contexts).

The course had the facultative participation of 182 PHC health professionals from 77 municipalities in the state of Bahia, indicated by their managers. The sample consisted of 61 professionals who answered the assessment instrument. Data production occurred in the setting week (September 2020) through a semi-structured and self-completed online questionnaire via the SurveyMonkey Platform.

To understand the social representations of obesity the Free Word Association Technique (FWAT) was used, which acts directly on the psychological structure of individuals by inducing stimulus (verbal or non-verbal). The enunciated trigger was: "Write the first three words that come to your mind when you think about obesity". For the treatment of data, grouping by semantic criteria was performed, bringing together different words with similar meanings.

Subsequently, the prototypical data analysis<sup>9,10</sup> was carried out with calculus of frequencies and mean evocation rank (MER) of the words, based on the order of presentation, using the OpenEvoc software (version 0.92).<sup>11</sup> For the elaboration of the Frequency Table and MER, the suggestion calculated by OpenEvOC of a general mean frequency of 2.73% and MER of 2was considered. Data interpretation evaluated their frequencies, compositions and co-occurrences, and the report of the prototypical analysis followed guidelines<sup>9</sup> anchored in Central Nucleus theory.<sup>8</sup>

The present study was approved by the Research Ethics Committee of the Federal University of Bahia (registration n° 4.035.869) and Certificate of Presentation for Ethical Appreciation (CAAE) n° 29122420.1.0000.5023. All participants signed the Informed Consent Form before answering the questionnaire.

# **RESULTS**

Most participants (Table 1) were female (90.16%), aged between 30 and 39 years (62.30%), statutory public servants (52.46%), who worked in the NASF-AB (60.66%), and care for people with obesity (85.25%) for more than four years (49.18%). Regarding professions, most were nutritionists (34.43%), followed by nurses (18.03%) and physical educators (13.11%). All participants answered the three requested words, with a total of 183 evocations, with 82 distinct words semantically grouped into 17 vocables

**Table 1**. Characteristics of the participants. State of Bahia, Brazil, 2020.

		·	<u> </u>
Characteristics of the participants (n=61)		N	%
Sex	Male	06	9,83
	Female	55	90,16
Age	20 – 29 years	10	16,39
	30 – 39 years	38	62,30
	40 – 49 years	10	16,39
	50 years or above	3	4,92
Profession	Social Worker	3	4,92
	Accounting Assistant	1	1,64
	Dentist	1	1,64
	Nurse	11	18,03
	Physical Therapist	6	9,84
	Doctor	5	8,20
	Nutritionist	21	34,43
	Physical Educators	8	13,11
	Psychologist	4	6,54
	Occupational Therapist	1	1,64

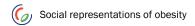


 Table 1. Characteristics of the participants. State of Bahia, Brazil, 2020.(Continues)

Acting in the area of	No	9	14,75
care for people with obesity	Yes	52	85,25
Sector that operates	NASF Team	37	60,66
	Oral Health Team	1	1,64
	Family Health Team	15	24,59
	Regulation and TFD	1	1,64
	Basic Health Unit	7	11,48
Acting time	2 - 4 years	18	29,51
	6 months - 2 years	10	16,39
	4 years or above	30	49,18
	Under 6 months	3	4,92
Employment	Commissioned position	1	1,64
relationship	Temporary contract for the provision of services	22	36,07
	"Mais médicos" Program	1	1,64
	Other (please specify)	5	8,20
	statutory public servants	32	52,46

Source: Prepared by the authors.

In Table 2, the words that compose the Central Nucleus occupy the first quadrant, in which the term *disease* stood out as the most evoked, followed by *food, overweight* and *fat*. When analyzing the first periphery (second quadrant), the term *mental health* was the most cited, followed by *quality of life, physical activity, stigma*, and *health*. In the second periphery (fourth quadrant), the presence of the terms *multifactoriality, knowledge*, and *body* were noted. In the contrast zone (third quadrant), the expression *lifestyle* was found.

Table 2. Frequency and Mean Evocation Rank. State of Bahia, Brazil..

++	Frequency >	= 2,73 /	+-	Frequency >= 2,73 /	
	Order of evocation < 2,00			Order of evocation >= 2,00	
31,69%	disease	1,9	18,03%	mental health	2,24
8,74%	food	1,69	9,29%	quality of life	2,12
4,37%	overweight	1,63	7,1%	Physical activity	2,38
3,83%	fat	1	6,01%	stigma	2,18
			2,73%	health	2,2
-+	Frequency < 2,73 / Order of evocation < 2,00			 Frequency < 2,73 /	
				Order of evocation >= 2,00	
1,09%	lifestyle	1,5	2,19%	multifactoriality	2,25
	-		1,64%	knowledge	2,67
			1,09%	body	2

Source: Prepared by the software OpenEVOC, version 0.92.

#### **DISCUSSION**

Most participants reveal the profile clues to the social representation of obesity, which dialogues, for example, with intersectionality.<sup>12</sup> Evidences suggest that the intersection of numerous conditions and possibilities of existence experienced by women (class, gender, age group, among others) conform to greater social regulation over their bodies, enhancing the stigma of obesity.<sup>13,14</sup> On the other hand, professional health training has historically been conducted by curricula with a more instrumental and biomedical approach, which can offer a bias towards care of aesthetic and "health" standards.<sup>15</sup>

In a recent literature review on the social representations of obesity, Couss and collaborators revealed the scarcity of research carried out with health professionals.<sup>14</sup> Some studies included in this research<sup>14</sup> revealed terms of semantic value found for the term *obesity*, similar to those evoked in the central core of this investigation, namely: *disease*, *food*, and *fat*, in line with the definitions of international regulatory agencies.<sup>1,2</sup>

The displacement of the epistemological status of obesity towards a more quantitative definition bias, defining it as a disease and, later, as a global epidemic by the World Health Organization, suffered great interference from economic interests, outlining the scope of most scientific investigations and society of specialists, who both assumed the hegemony of the biomedical bias, and the "warlike" logic of dealing with obesity, in which the control of body mass structured biopolitics techniques centered on the individualized body.<sup>4</sup>

When the results of the central nucleus are associated with those of the first and second periphery, they endorse the predominance of the reductionist biomedical perspective and the primacy of the individual's responsibility. Similar results were found, indicating that: "A classe 'Gordura é Problema', evidencia uma atribuição interna, em que os gordos seriam os responsáveis por sua condição atual, pessoas com problemas." Recent research<sup>3,6,7</sup> points to the risks of promoting the pathologization and medicalization of the body of the person with obesity and the use of health strategies and actions associated with this logic, which, in turn, produce harmful effects and results on their mental health. A formal second periphery, they endorse the primacy of the person second periphery, and the use of health strategies and actions associated with this logic, which, in turn, produce harmful effects and results on their mental health.

It is noteworthy that *mental health* obtained the second highest absolute frequency in the evocation, having an increased representation than the expression *physical activity*, opposing similar studies<sup>14</sup> that still endorse food and physical activity as preponderant etiological factors.<sup>14</sup> The findings denote an expansion in the perception of causal factors of obesity but still appear to the detriment of political, social and cultural determinants, reinforcing the perspective of pathologization<sup>7,16</sup> and the individual's responsibility.<sup>3,7</sup>

*Health*, a term not found in similar studies, appears as an element that can either contradict the notion of illness or indicate an aspect of deviation from the standard or transgression, an approach that establishes a subjective malaise due to the feeling of inadequacy, moral and social "defect", challenging the health field to approach the subjects and their singularities, to think about care.<sup>2,3,16,17</sup>

However, the presence of *multifactoriality, knowledge*, and *body* in the second periphery, despite being an outcome not found in similar studies,<sup>14</sup> signals new narratives about obesity, which bring the expansion of perception to a multidimensional approach,<sup>3-6,15-17</sup> inserting it in a complex paradigm<sup>18</sup> as "unity in multiplicity, and unity in diversity".<sup>19</sup> In health services, the multifactoriality provided by interdisciplinary matrix support can enhance the resolution of Primary Health Care teams by promoting the expansion of knowledge about the complexity of thisillness and allowing the qualification of care practices, including understanding the potentialities and limitations in the individual sphere.<sup>17</sup>



Critical studies on obesity have questioned the paradigmatic status of the production of knowledge about obesity, revealing that obesity(s) needs a new understanding, which reflects its tensions, inconsistencies, and uncertainties, limits now presented by the optics of the Social and Human Sciences, and which question the hegemony of the biomedical approach to obesity - called "Obesity Science" and the inaccuracies pointed out in many scientific publications on the phenomenon.<sup>4</sup>

Finally, the evidence shows signs that reproduce the health education process, which often assumes linear and fragmented explanatory models,<sup>15</sup> without properly qualifying professionals to think from the complexityparadigm,<sup>18</sup>despite the low resoluteness rates and negative impacts on job esteem in caring for people with obesity.<sup>17</sup> Or, thinking from the ecological approach which, in turn, has signaled this complex and dynamic system characterized by integration, interconnectivity, interrelationship and interdependence between different causal factors.<sup>5</sup>

The limitation of this study is due to the production of data, subject to the questions and evoked words that may have different meanings for different people..

# **CONCLUSION**

The present study analyzed the social representations of obesity for Primary Health Care professionals in the state of Bahia and revealed the predominance of the pathological and individualized perspective, in which so many movements, materials, and documents arising from public policies and the academic-scientific field, work in the multifactorial perspective of this phenomenon. It also revealed a gradual relevance of psycho-emotional factors influencing the development of obesity, even ahead of factors related to physical activity.

This study points to gapsin the understanding of the conceptual predominance of obesity, its motivations in the educational, work, and social fields, as well as the analysis of what consolidates and provokes the new narratives of health professionals in changing the obesity paradigm.

# **REFERENCES**

- 1. World Health Organization [Internet]. Obesity and overweight; 2021. [acesso em 21 mai 2023]. Disponível em: https://www.who.int/news-room/fact-sheets/detail/obesity-and-overweight
- 2. Bray GA, Kim KK, Wilding JPH; World Obesity Federation. Obesity: a chronic relapsing progressive disease process. A position statement of the World Obesity Federation. ObesVer [internet]. 2017;18(7):715-723. Disponível em: https://doi.org/10.1111/obr.12551.
- 3. Amparo-Santos L, França SLG, Reis ABC. (org.). Obesidade(s): diferentes olhares e múltiplas expressões. Salvador: EdUFBA; 2020. 101p. [acesso em 21 mai 2023]. Disponível em: https://ecosuspi.com.br/wp-content/uploads/2020/12/OBESIDADES-DIFERENTES-OLHARES-E-MULTIPLAS-EXPRESSOES\_Amparo-Franca-Reis-e-Book.pdf

**4.** Magalhães CG. Obesidade, Educação e Mudança: mobilização do pensar na saúde [Tese na internet]. Salvador: Escola de Nutrição, Universidade Federal da Bahia; 2022. 201 f. [acesso em 21 mai 2023]. Disponível em: https://repositorio.ufba.br/handle/ri/35821

- 5. Dooris M. Healthy settings: challenges to generating evidence of effectiveness. Health PromotInt [internet]. 2006; 21(1):55-65. Disponível em: https://doi.org/10.1093/heapro/dai030.
- 6. Swinburn BA, Kraak VI, Allender S, Atkins VJ, Baker PI, Bogard JR et al. The Global Syndemic of Obesity, Undernutrition, and Climate Change: The LancetCommission report. Lancet[internet]. 2019; 393(10173):791-846. Disponívelem: https://doi.org/10.1016/S0140-6736(18)32822-8.
- 7. Rubino F, Puhl RM, Cummings DE, Eckel RH, Ryan DH, Mechanick JI, et al. Joint international consensus statement for endingstigmaofobesity. Nat Med [internet]. 2020; 26(4):485-497. Disponível em: https://doi.org/10.1038/s41591-020-0803-x.
- **8.** Abric JC. Pratiques Sociales et Representations. Paris: PUF; 1994.
- 9. Wachelke J, Wolter R. Critérios de construção e relato da análise prototípica para representações sociais. Psic.:

  Teor. e Pesq [internet]. 2011; 27(4), 521-526. Disponível em: https://doi.org/10.1590/S0102-37722011000400017.
- **10.** Vergès, P. L'évocation de l'argent: une méthodepour la définition du noyau central de la représentation. Bulletin de Psychologie [internet]. 1992;45:203-209. [acesso em 21 mai 2023]. Disponível em: https://www.persee.fr/doc/bupsy\_0007-4403\_1992\_num\_45\_405\_14128
- 11. Sant'Anna HC. OpenEvoc: Um programa de apoio à pesquisa em Representações sociais. In: Anais eletrônicos do Encontro Regional da ABRASPO [internet]. 2012;Vitória: PsicSoc: Desafios Contemporâneos. 2012. [acesso em 21 mai 2023]. Disponível em: https://loop-ufes.org/wp-content/uploads/2021/02/openEvoc\_Um\_programa\_de\_apoio\_a\_pesquisa.pdf
- 12. Akotirene C. O que é interseccionalidade. Coordenação Djamila Ribeiro. Belo Horizonte: Letramento; 2018.
- 13. Rangel NFA. O ativismo gordo em campo: política, identidade e construção de significados[dissertação na internet]. Santa Catarina: Centro de Filosofia e Ciências Humanas, Universidade Federal de Santa Catarina; 2018.162 p. [acesso em 21 mai 2023]. Disponível em: https://repositorio.ufsc.br/handle/123456789/205904
- 14. Couss A, Borba GMP, Silva LMP, Scopel MVM, Polli GM. Representações sociais do sobrepeso e da obesidade: revisão sistemática. Boletim Academia Paulista de Psicologia, 2021;41(100):124-135. [acesso em 21 mai 2023]. Disponível em: http://pepsic.bvsalud.org/scielo.php?script=sci\_arttext&pid=S1415-711X2021000100013&lng=pt&tlng=pt.



- 15. Ramos DBN. Diversificação do cenário de aprendizagem do ensino superior em saúde: um novo olhar para a obesidade. Painel Brasileiro da Obesidade. Ciclo 2021. Working Paper. São Paulo: Instituto Cordial;2021. [acesso em 21 mai 2023]. Disponível em: https://lp2.institutocordial.com.br/pbo-112-wp-formacao-obesidade
- **16.** Poulain JP. Sociologia da obesidade. São Paulo: Ed. Senac São Paulo; 2013.
- 17. Morin E. Introdução ao pensamento complexo. Porto Alegre: Sulina; 2006
- 18. Burlandy L, Teixeira MRM, Castro LMC, Cruz MCC, Santos CRB, Souza SR et al.. Modelos de assistência ao indivíduo com obesidade na atenção básica em saúde no Estado do Rio de Janeiro, Brasil. Cad. Saúde Pública [internet]. 2020; 36(3).Disponível em:https://doi.org/10.1590/0102-311X00093419.
- 19. Almeida Filho N. A Saúde e o Paradigma da Complexidade. Universidade do Vale do Rio dos Sinos: Instituto Humanitas Unisinos; 2004. [acesso em 21 mai 2023]. Cadernos IHU https://www.ihu.unisinos.br/images/stories/cadernos/ihu/015cadernosihu.pdf

#### **Contributors**

Magalhães CG, Machado VC, Santos LAS, Martins PC and De Santana MLP participated in all stages of the work, from the conception of the study to the revision of the final version of the article.

Conflict of Interests: The authors declare no conflict of interest.

Received: October 6, 2022

Accepted: June 07, 2023