

Amanda Luisa Kessler<sup>1</sup>
 Eliziane Nicolodi Francescato Ruiz<sup>2</sup>
 Ilaine Schuch<sup>2</sup>

<sup>1</sup> Hospital de Clínicas de Porto Alegre /Residência Integrada Multiprofissional em Saúde. Porto Alegre, RS, Brasil.

<sup>2</sup> Universidade Federal do Rio Grande do Sul, Programa de Pós-Graduação em Alimentação, Nutrição e Saúde, Departamento de Nutrição. Porto Alegre, RS, Brasil.

#### Correspondence

Eliziane Nicolodi Francescato Ruiz elizianeruiz@yahoo.com.br

Article originated from the Conclusion Work of Multiprofessional Integrated Residency in Health, of the Hospital de Clínicas de Porto Alegre, by Amanda Luisa Kessler, defended in December 2019, supervised by professors Eliziane Nicolodi Francescato Ruiz and Ilaine Schuch. Porto Alegre, RS, Brasil.

# The assistential trajectories of users with obesity in the health care network of Porto Alegre

## As trajetórias assistenciais de usuários com obesidade na rede de atenção à saúde de Porto Alegre

### Abstract

Introduction: Starting from all the complexity involved in coping with obesity, the objective of this study was to analyze the care trajectories of users with obesity through the Health Care Network in the city of Porto Alegre. *Objectives*: to analyze the care trajectories of users with obesity through the Health Care Network in the city of Porto Alegre. Methods: Qualitative and exploratory study, with individuals who underwent bariatric surgery through the public network and with a health professional, through semi-structured interview. Results: From the content analysis it was possible to trace the trajectories, highlighting all the points of health care and professionals accessed by the users. It became evident that obesity care is weakened, mostly occurring in specialized services. Bariatric surgery appeared as a central option for the treatment of obesity, even before other attempts at care were exhausted. Some of the difficulties pointed out were the almost inexistence of a multidisciplinary team and the scarcity of other forms of care. As a potentiality, ease of access, service, and connection stood out. Conclusion: Despite the advances, the Brazilian health system, especially Primary Care, still needs improvement, and should be seen not only as the first place of access and referral, but as the main point of the network, where the user has their needs recognized.

Keywords: Primary Health Care. Obesity. Health UnicSystem.

### Resumo

Introdução: Partindo de toda a complexidade envolvida no enfrentamento da obesidade, o objetivo deste estudo foi analisar as trajetórias assistenciais de usuários com obesidade pela Rede de Atenção à Saúde do município de Porto Alegre-RS. Objetivo: analisar as trajetórias assistenciais de usuários com obesidade pela Rede de Atenção à Saúde do município de Porto Alegre-RS. *Métodos*: Estudo qualitativo e exploratório, com indivíduos que realizaram cirurgia bariátrica pela rede pública e profissionais de saúde, por meio de entrevista semiestruturada. Resultados: A partir da análise de conteúdo, foi possível traçar as trajetórias, destacando todos os pontos de atenção à saúde e profissionais acessados pelos usuários. Evidenciou-se que o cuidado à pessoa com obesidade se encontra fragilizado, ocorrendo em sua maioria em serviços especializados. A cirurgia bariátrica apareceu como uma opção central para o tratamento da obesidade, mesmo antes de se esgotarem outras tentativas de cuidado. Algumas das dificuldades apontadas foram a quase inexistência de equipe multiprofissional e a escassez de outras formas de cuidados. Como potencialidade, destacaram-se a facilidade de acesso e vínculos construídos na AB. Conclusão: Apesar dos avanços, o sistema de saúde brasileiro, em especial a Atenção Primária, ainda carece de melhorias, devendo ser vista não somente como primeiro local de acesso e encaminhamento, mas como ponto principal da rede, onde o usuário tenha suas necessidades reconhecidas.

Palavras-chave: Atenção Primária à Saúde. Obesidade. Sistema Único de Saúde.

### **INTRODUÇÃO**

In recent decades, Brazil has gone through several changes and transitions, both in the demographic sphere, with an increase in life expectancy and the elderly population, and in the epidemiological and nutritional sphere, with a decrease in infectious diseases and an increase in chronic diseases. Regarding the nutritional transition, it should be noted that it is characterized by the high prevalence of overweight in the population, in all age groups, income and both genders.<sup>1</sup>

Excess weight, which includes cases of overweight and obesity, was present in 59.4% of the population in 2018, according to data from the Surveillance System for Risk and Protection Factors for Chronic Noncommunicable Diseases.<sup>2</sup> Considered a critical risk factor for chronic diseases and being the significant cause of death today, it is observed that in the world, 44% of the burden of diabetes, 23% of the burden of ischemic heart disease, and between 7% and 41% of certain types of cancer are attributed to overweight and obesity.<sup>3</sup>

The World Health Organization (WHO) defines *obesity* as a chronic health condition defined by the excessive accumulation of fat in the body, which, in turn, has consequences for health. The diagnosis of overweight and obesity is currently performed by calculating the Body Mass Index (BMI) by measuring the individual's weight and height.<sup>1</sup>

In the city of Porto Alegre, according to Surveillance System for Risk and Protection Factors for Chronic Noncommunicable Diseases data from 2018, the frequency of adults with excess body weight (BMI  $\geq$  25 kg/m2) was 59.4%, the fourth highest frequency of overweight compared to other capitals. The frequency of adults with obesity (BMI  $\geq$  30 kg/m2) was 20.6% in the capital of Rio Grande do Sul, reaching 22.4% in men.<sup>2</sup>

It is important to point out that obesity is a disease of multiple and heterogeneous nature. It involves not only genetic predisposition and biological and behavioral factors but is also a complex and multifactorial condition determined by historical, economic, social, and cultural factors, food production, and public health policies impacting food choices.<sup>3,4</sup>

From this perspective and justified by studies that indicate its increasing prevalence, obesity has particularly strained public policies for organizing prevention and treatment actions within the Unified Health System.<sup>5-7</sup> In 2013, the Ministry of Health established the Health Care Network for People with Chronic Diseases, with obesity as a priority line of care. That same year, ordinances n° 424 were published, which redefines the guidelines for organizing the line of care, and n° 425, which establishes technical regulations, norms, and criteria for High Complexity Assistance to Individuals with Obesity, including the criteria to perform bariatric surgery by the Unified Health System.<sup>8,9</sup>

In Rio Grande do Sul (RS), since 2014, the process of elaborating a State Network for Assistance to Patients with Overweight and Obesity began, both in order to reduce the incidence of new cases and to structure the treatment of individuals who are already in this condition. However, this process of formulating a line of care is not fully implemented in the state and Porto Alegre (the capital of the State of RS).

It should be noted that lines of care, such as Obesity, are not only recognized as pre-established protocols but as a tool for managers to agree on care flows, referral and counter-referral, reorganizing work processes in order to facilitate the access of overweight users to the health units and services they need.<sup>10</sup>

Historically, health assessment considers, above all, the perspective of health managers and professionals based on morbidity and mortality and epidemiological indicators. However, there is a lack of evaluative processes that, in addition to these data, also consider the user-centered perspective, whose experiences of illness and demand for care provide subsidies for better social management in health.<sup>11,12</sup>

In this way, the use of care trajectories has been a qualified analytical tool, as it allows the identification and recognition of the paths, stories, and movements that constitute the trajectory of users or groups in the search for the preservation or recovery of health through health services, considering the context and complexity in which they are inserted. Thus, it is possible to analyze healthcare networks' organization, functioning, and resolution.<sup>11,13</sup>

An interesting element to address in the analysis of care trajectories is understanding, as pointed out by Cecílio et al.,<sup>14</sup> that there is formal health care (legally instituted) but also genuine care produced daily by users and workers in the services. This means that the generally idealized models of care are materialized through acts carried out in everyday life by different actors, who also act with their knowledge and experience, generating a differentiated set of practices with new and different models.

Starting from all the complexity involved in facing the phenomenon of obesity, the objective of this study was to analyze the care trajectories of users with obesity through the Health Care Network in the city of Porto Alegre.

### **METHODS**

Exploratory field research was carried out using a qualitative approach. Since the problem of this research is connected to the practices, work processes, and organization of services related to the trajectory of care for obesity, it is understood that the qualitative approach enables the understanding of the context of a given fact, covering in-depth aspects that refer to the researched phenomenon and making it possible to know and describe the processes present in society.<sup>15</sup>

The research participants were six individuals who underwent bariatric surgery through the public health network at the Bariatric Surgery Outpatient Clinic of the *Hospital de Clínicas de Porto Alegre* (HCPA, Hospital of Clinics of Porto Alegre) or who were being attended by the service in the preoperative period. We chose to include in the study subjects who underwent bariatric surgery at different times, aiming to cover more elements for understanding the research question. Thus, of the six participating subjects, three had undergone the surgical procedure three months ago (counting date of the interview), two had undergone surgery more than a year ago, and one was in the preoperative outpatient clinic. Ages ranged between 25 and 40 years old, five individuals with complete secondary education and one with complete elementary education, all residing in Porto Alegre.

In addition, a health professional who works at the bariatric surgery outpatient clinic of one of the State's Reference Hospitals was interviewed, aiming to elucidate more information about the operation of the service and her considerations about the performance of the Health Care Network of Porto Alegre in the care of the patient with overweight and obesity. Her participation in the research was essential to enrich the discussions presented; her speeches were identified by "PI" (Professional Interviewee).

The definition of both the place and the study participants was based on the understanding that, in qualitative research, the objective of what would be the sample is to enable the production of illustrative and in-depth information. Whether the number of participating subjects is small or large, what matters is the possibility of approaching the whole of the investigated problem in its multiple dimensions.<sup>15</sup>

A semi-structured interview was used as a technique for data collection, using a script with themes and guiding questions as a data collection instrument, which served as a guide for conducting the interview. This included the presence of open-ended and closed-ended questions that made it possible to obtain more data and information to achieve the study's objective.

All interviews were conducted in a reserved place, as previously scheduled with the subjects. Before conducting the interviews, the Informed Consent Form was presented to all subjects so that they could read and agree to their free and voluntary participation. The research was approved by the *Comitê de Ética em Pesquisa do Hospital de Clínicas de Porto Alegre* (Research Ethics Committee of Hospital de Clínicas de Porto Alegre), under the n° 3,227,590.

The organization and analysis of the data took place initially through the complete transcription of the recorded interviews and the registration of all the collected information. The care trajectories were portrayed through the analysis of the interviews, which, during this procedure, were identified and subdivided into units of concepts, which outlined the constitution of thematic categories. The analysis was performed based on the Thematic Content Analysis method.<sup>16</sup>

### **RESULTS AND DISCUSSION**

The thematic categories that emerged from the analysis of the interviews, which will be presented and discussed below, were: "Assistance trajectories of users with obesity in the Network and the centrality of Primary Care," "Follow-up of care for people with obesity: weaknesses and strengths of the Health Care Network" and "Bariatric surgery as an outcome of care trajectories."

### Assistance trajectories of users with obesity in the Network and the centrality of Primary Care

Based on the interviews, it was possible to trace the assistance trajectories of the participants through the services and spaces that make up the Health Care Network (HCN) of Porto Alegre-RS, highlighting all the points accessed and professionals through which the individuals passed and received assistance in the coping with the disease. All trajectories are shown in Figure 1.

Figure 1. Assistance trajectories of users with obesity through the Health Care Network. Porto Alegre, 2019.



### I5 (35 years, Female; Surgery 15/05/2018)





Source of Figure: Elaborated by the authors.

Based on the reports, it can be seen that the first place where some care was sought was the Primary health care units (PHU) or Family Health Strategy (FHS) of reference of the participants, as reported below:

> When I became hypertensive, I felt bad, anyway... then I noticed that it was due to being overweight and I went to the health center and he said that being overweight also increases blood pressure... (I3)

> I went to the health center to find a nutritionist... then he referred me to a nutritionist, I did everything, I did it for a long time, about 2 years or so. (I6)

This information shows that one of the main characteristics of the Health Care Networks (HCN), which is Primary Care (PC) as a gateway to health services, is present in Obesity care in Porto Alegre.

By having the BHU and FHS as the first level of care, the PC should, from an ideal conception, be considered the preferred access door for users in the system.<sup>17</sup> In addition to the unification of the health system around common objectives based on continuous, comprehensive, quality, and humanized care, PC would also have the power to be a space for carrying out promotion, prevention, and recovery actions, thus providing actions that meet the needs of users at the right time and place, coordinating care at all points of care.<sup>18,19</sup>

Given the recognition of the magnitude of chronic diseases, including obesity, the Unified Health System created the Care Network for People with Chronic Diseases and, within it, the Line of Priority Care for Obesity. This line, according to Malta & Merhy,<sup>20</sup> when it is composed of the design of care flows, places responsibilities on the PC in preparing not only the macro-institutional points of the network (based on the PC and organized beyond it) but also on the micro-institutional ones (within the PC itself) to meet the needs of users.

Considering PC as the gateway to Unified Health System care, it was observed that many users were advised about the possibility of having bariatric surgery during their first medical appointments, as illustrated in the statements below

> I had a very aggravating problem of depression due to my weight. That's where I ended up at the health center and the doctor asked me what I thought of the bariatric enrollment. (I4)

> I went to the center that is close to my house and then I talked to the doctor and he suggested that I try a bariatrician to do all the follow-up, because before that I had already done it there with a nutritionist, those things and nothing had been resolved.. (E1)

These reports show that, even though the PC is the gateway, there is a weakness in the care provided in this context. This is demonstrated when, on the one hand, even though there is a nutritionist (as in I1), this care seems to have been flawed, either because this professional did not pay attention to the integrality and complexity that the care of the person with obesity requires or because there was not integrated/team-work.

An important data observed is that the care trajectories studied presented, in general, a reference flow that goes from Basic or Specialized Care (outpatient clinics) to Hospital Care, ending with surgery. However, none of the trajectories presented shared flows or flows back to Primary Care, that is, effective coordination of care carried out by PC, as advocated by the regulations for the lines of care for people with Obesity.<sup>8,10</sup>

In response to this finding, Cecílio et al.,<sup>14</sup> when analyzing the narratives of users who are high users of health services in two cities in the ABC region of São Paulo, argue that Primary Care has been under-recognized in its strategic role as a communication center for thematic networks, as an adequate regulator of access to and use of necessary services for comprehensive care.<sup>14</sup>

### Monitoring of care for people with obesity: HCN weaknesses and strengths

Even though in the state the discussion about lines of care for people with obesity has occurred since 2014,<sup>21</sup> through the analysis of the trajectories (Figure 1), it is evident that, in practice, many users, when seeking care in the network's public services, encountered difficulties, such as delay or large periods between consultations, lack of human resources - especially the almost non-existence of a multidisciplinary team in Primary Care and specialized services - and yet, the scarcity of other forms of health promotion and prevention, in addition to individual medical appointments.

It's just that health center they don't have many resources, right? There were consultations, he weighed me and did everything correctly, he gave me the right diet for me to do, these were the resources they had. And they asked me to exercise too... Groups, they didn't have them, they don't have them there. (I6)

It could be more frequent, because depending on it, sometimes it takes a long time to go from one appointment to another [at the specialty outpatient clinic], it could be less time.(I1)

Some trajectories were long, as illustrated in Figure 1, with the user going through several network services (public and/or public and private) for many years but with low resolution of their demands and adherence to treatments. Others, however, despite being referred to other points in the network, did not carry out their services. Nevertheless, there were reports of users who did not access the PC, having performed care only in specialized outpatient clinics of the tertiary network of the health system.

In fact, my struggle with being overweight has been like this since childhood, so we always went to doctors like that, both public and private, but the real problem was never found. My blood tests were good and I didn't worry about the weight itself. But so, I went to the nutritionist all the time, I kept switching, I went to the psychologist, the hospital, private weight loss programs... not at the same time, you know, but the ones I've been through... (I2)



Accordion effect, me trying to diet.... alone, with nothing, just with him (Unified Health System doctor), we would go to the health center for some illness... (I3)

What was missing for we was that suddenly during the six months that I was at the health center until I was called to the hospital, I didn't have any other special monitoring like that, it was just like with the clinician, also according to when he could,but I didn't have any other responses, neither the psychologist, nor the psychiatrist, nor the nutritionist... (I4)

Similarly, in the study of Raupp et al.,<sup>22</sup> which evaluated the care trajectories in the care of people with the most prevalent chronic conditions in the region covered by the 16th Regional Health Coordination-RS, the vast majority of respondents also reported not participating in health promotion and prevention actions, still mixing the search for health care in private and public services. In some cases, the latter is only for occasional and acute health procedures.

In the research of Dornelles & Anton,<sup>19</sup> which investigated the perception of health professionals from different areas working at the three levels of care regarding assistance to users with overweight and childhood obesity in the Unified Health System, they mentioned great difficulty in carrying out referrals to other specialties, especially nutritionists and psychologists, both due to the limited availability of consultations and the lack of these professionals. However, it was these professionals, along with Physical Education professionals, that the physicians answered most felt the need for joint action in assisting people with obesity.

The statements below demonstrate the importance that users attributed to care provided by a multidisciplinary team, which occurred in private or even the specialized service of the pre-bariatric outpatient clinic.

When I went to the clinic, my first intention was to look for psychiatric help, someone who could help me psychologically at that moment. That's when the doctor said to me: 'no, I'll refer you to both, both to the psychologist and nutritionist and to the bariatrician'. Which until today I haven't received, you know... I only got everything after I was called to the hospital. [...] there you have the total preparation you need, and if they really think that you're not psychologically well, they don't release you. That was what made me feel calm and safe too. (I4)

By my insurance plan coverage, which was with a nutritionist and a psychologist, at the same time that's when I lost the most weight... but it really helped me a lot, it was the psychologist, which is a teamwork you know, the psychologist helped a lot... and it was good, it was the time that I lost more weight. (I3)

A similar element was noticed in the study of Raupp et al.,<sup>22</sup> in which, through the users' reports, one can see the predominant presence of the hegemonic medical model (centered on the disease), with multidisciplinary care actions, such as consultations with physiotherapists, psychologists, and nutritionists, occurring only at the hospital level.

Another weakness directly related to the place of PC in the HCN concerns the lack of knowledge or insecurity that users bring about their reference health unit and the care provided there.

So I don't go to the health center much, there I would go to the dentist, gynecologist...it was like just for that. (I5)

No, not even close, so much so that I don't even want to go back, you know (PC services), I didn't feel secure. But here (specialized hospital outpatient clinic) it is almost like perfect. I don't know exactly how to say it, ... it's just that there is a lack of resources in general, in health in general, right? There is no way to express this. (I2)

Similar findings were found in the study of Cecílio et al.,<sup>14</sup> which discusses the place of PCs and users' view of them in two cities in the ABC region of São Paulo. A widely shared perception among the survey respondents portrays PC as a "place of simple things," a space for obtaining medication, referrals, ordering blood tests, and even documents to obtain social aid. There is a certain fragility when it comes to PC as a care coordinator, lacking material/technological and symbolic conditions that would fill, in fact, a position of centrality in the coordination of the HCN.

According to the speeches of the nurse working at the HCPA bariatric surgery outpatient clinic, she considers that the HCN has been faltering in many ways since the care that the user with obesity is recommended to have in the network, and especially in PC, many sometimes it is only achieved at the outpatient hospital level.

In general, I think that the health centers and the line of care have been flawed... I see that many patients, when they come to the bariatric surgery program here at the hospital, have not seen a nutritionist, have not had any preoperative follow-up, you know, they didn't even see a psychiatrist, only a doctor recommended it... and some also don't even know why bariatric surgery was recommended. So I think it's been falling a lot like that. (PI)

Another worrisome consideration perceived by the professional is seen in the following report, in which many patients had a flawed care trajectory that they did not even understand the reason for the indication for the surgical procedure.

Many patients arrive here and have never even heard of a healthy dish... in the guidelines we give here. There are patients who have never tried to do it, and there are some who even say 'oh I don't even know why I'm here, the doctor said I needed to lose weight and sent me here'. So that's what I see, here we really have a very strong nutritionist structure and we end up doing the work that should have been done at the PHU in these two years [...] Because we almost always see it in the medical record or I ask 'Have you tried any treatment, any diet before? In consultations, we always ask. 'oh no, I never tried, you know, I do those low-carb diets that I saw in a book, I saw on television', most people say that [...].(PI)

On the other hand, as a potentiality of PC, many interviewees consider their reference health units as places of easy access and care, referring to the bond with PC professionals as a potentiality.

> I never lost contact with the health center. Whenever I can I go there...so I don't lose this contact, because I think it's important, it's close to home too, right? The health network, which takes a long time, due to its capacity. But you know, I've always been treated well, I can't complain. The doctor at the unit himself said to me 'If you don't have anyone to talk to, come here, make an appointment and come talk to me, I may not be able to help you much, except within my area, but I can listen to you'. So, every time I needed it I was very well attended. (I4)

> I've always been very well attended at the health center I have close to home. To this day, I consult with her (FHS doctor). (I6)

Also, a user mentioned that in her health unit, she participated in groups and performed auriculotherapy as complementary parts for the treatment, even though she was already on the waiting list for the surgery.

> I kept going to the consultations anyway, because then, when they called me, I think it took about 2 years for them to call me, then I continued treatment with the nutritionist, auriculotherapy, exercise there at the neighborhood health center... then I came here and everything was transferred here. In this case, I left there and all the appointments were transferred here. (hospital specialized clinic)... (I1)

In addition, the interviewees' satisfaction with the care provided by the bariatric surgery outpatient service at the Hospital de Clínicas de Porto Alegre is evident, both pre and post-operatively. This satisfaction seems to be related precisely to multi/interprofessional and comprehensive care elements, so valued and recommended in care and not found elsewhere in the network, as discussed earlier.

> I learned a lot in groups like that. There is the availability of the fitness group, the exercises, there is before, there is after the surgery as well.(11)

> I went to a psychologist, I went to a psychiatrist, an endocrinologist, a nutritionist... let me see if anything was missing... ah, I went to therapy... (referring to the specialized hospital outpatient clinic).(I4)

> Then I started to consult with the psychologist, with the nutritionist, with the whole team, you know, I had consultations with everyone, so there was no reason to go get it elsewhere, so it was all here.(15)

Currently, the biggest obstacle imposed on the Brazilian health system is linked to the construction of a health network that is, in fact, resolutive, hierarchical, and egalitarian through lines of care that depart from PC

### DEMETRA

and reach the panorama of care at all levels of assistance. In practice, the health system has functioned more as a "mobile, asymmetric and incomplete network of services that operate different health technologies and are accessed unequally by different people or groupings."<sup>23</sup> (p.19).

Some reflections could be built from this issue: is the PC serving only as a referral channel for specialized services? Or, is the PC overloaded, undervalued, without adequate training of professionals, with a lack of human and financial resources and a support network, seeing only tertiary services linked to bariatric surgery teams as an outlet for caring for people with obesity?

### **Bariatric surgery as an outcome of assistance trajectories**

User waiting time from referral to being called to the bariatric surgery outpatient clinic ranged from two months to three years of waiting.

It should be noted that a surgical procedure is not isolated for only the patient, as it requires prior preparation in the family, social and personal context, contributing to the emergence of anxiety and stress. Previous attempts to lose weight are even necessary since surgery is a complex procedure and not necessarily a solution. In the prospective study by Cambi, Marchesini & Baretta,<sup>24</sup> in Curitiba, of the 49 patients who underwent bariatric surgery after weight relapse, the BMI ranged from eutrophic (BMI 25.2 kg/m<sup>2</sup>) to severe obesity again (BMI 53.4 kg/m<sup>2</sup>).

In a study carried out with 100 adult patients, candidates for bariatric surgery, and those already submitted to this surgery with different postoperative times, assisted on an outpatient basis at the University Hospital of Sergipe, it was verified that only 27% of the individuals with obesity underwent nutritional follow-up and in the case of psychological care, only 18%, also, emphasizing the weight regain in 71 individuals.<sup>25</sup>

Weight relapse, even after a surgical procedure, is something to be considered, confirming that obesity is a chronic, multifactorial, and progressive disease that requires monitoring and specific and continuous treatment, together with an interprofessional team and managers who aim at change not only individual habits and behaviors but also the food environments and the context in which people are inserted.<sup>1,4</sup>

Considering the care trajectories, it is important to emphasize that some users also reported that the specialized service would have been the first place for care. And, again, referral for surgery appears as a conduct that seems to be simple, as exemplified in the statements:

I think I went like that twice (at the Health Care Unit), when I was nauseous, something like that... but not because I was overweight [...] It was the Otorhinolaryngologist, right here (at the hospital), he referred me. There came a time when I was doing the consultation here at the otorhinolaryngologist and he said 'Oh, you're snoring a lot because you're overweight, you don't want to have the surgery? (12)

When I was 26 years old, a colleague recommended me to participate in research because I had a lot of hair and a research for polycystic ovaries had opened. I came, I participated, I did 3 years of treatment, it was not successful, and then I was referred to do the bariatric through the polycystic ovaries team, the endocrine team here.(I5)

According to Nunes et al.,<sup>21</sup> the most adequate response in the field of current public policies seems to be the union of intersectoral and multidisciplinary efforts to implement actions consistent with the needs of the health and nutrition profile of the population. Within this purpose, it is imperative to include interventions that can be implemented by each point of the HCN in the treatment and prevention of health problems caused by the demographic and nutritional transition.

Given this accelerated growth of obesity and the inefficiency of care in the network, there is evidence of a significant increase in the performance of bariatric surgeries via the public health system: in nine years, 24,342 procedures were performed by the Unified Health System, led by the Southeast and South regions from Brazil, which is currently the second country in the world where most bariatric surgeries are performed. Concerning costs attributable to obesity, the economic impact in Brazil in 2011 was almost half a billion reais, with R\$ 31.5 million only in expenses related to bariatric surgeries in the Unified Health System.

Given that obesity is a multifactorial problem resulting from a complex interaction between external factors (environment, contexts and social relationships, economic and educational level) and internal factors (genetic predisposition, behaviors), actions are necessary both at the individual level and at the construction of environments that contribute to a healthier lifestyle. Therefore, public strategies and policies must consider the contemporary way of life, which increasingly encourages the consumption of ultra-processed and calorie-dense foods related to eating and food choices, to rescue attitudes and healthy behaviors toward food and lifestyle.<sup>3</sup>

The state document referring to the Care Line for Overweight and Obesity in RS considers this line one of the most challenging, as it is a chronic disease that brings significant financial repercussions for its treatment and significantly impacts the social life of the affected individual.

The prevention and early diagnosis of overweight and obesity are challenging demands for Unified Health System managers and all actors involved in health care[...]. There is evidence that conventional treatments involving lifestyle changes have proven effective. In this regard, Primary Health Care is the privileged space for developing actions that emphasize adopting early preventive strategies through a nutritional approach.<sup>21</sup> (p.4).

However, in practice and as evidenced by the care trajectories described, it is clear that although Primary Care exists and is considered a prioritized space for health promotion actions, there is no robust HCN that supports PC actions. Primary care is weakened, as there is no interprofessional work, and care cannot meet the health needs of the population; comprehensive care in its capacity to produce health in the context of the social, cultural, political, and economic context in which people live and the set of needs that the population has, not just those directly linked to diseases.<sup>28</sup> In this way, care for people with overweight/obesity is weakened and in the process of lack of assistance.

### **FINAL CONSIDERATIONS**

The care trajectories described clearly show that the Health Care Network in Porto Alegre is fragile concerning the care of people with obesity.

It was evident that most of the care in the Health Care Network already took place in specialized services, such as the Bariatric Surgery outpatient clinic of the Hospital. Users recognized this as a place of quality for the multidisciplinary follow-up and available resources.

In addition, the wide use of private services as attempts to resolve what the public system would not be able to resolve reveals how, in general, the SUS has still not managed to guarantee comprehensiveness (a set of actions for prevention, promotion, and treatment, expanded look carried out by different health professionals) and the longitudinal of care. The complementary health system plays a significant role in providing services for this health problem in the country.

The trajectories described also point to the need to reassess, together with managers, health professionals, and social control, how the Thematic Networks and Care Lines are being organized and executed, as well as what changes need to be implemented to respond to the users' needs, considering the high prevalence of obesity in Rio Grande do Sul and the significant number of surgical procedures to treat this condition.

Finally, it is worth emphasizing that the Brazilian health system, especially PC, despite its advances, especially in care coverage and resolution, still needs to be improved. It should focus not only on the exacerbation of problems and access to demands to resolve health issues when they are already installed but also on chronic diseases and their follow-up. The primary network is a producer of use values for millions of individuals and, therefore, should be defended as an achievement to be consolidated and improved, being seen not only as the place of first access and passages to other services but as the main point of the care network, in which the user has his needs met, in a comprehensive, continuous and quality way.

In this way, it is believed that this work contributed to a discussion about how care is being carried out in the fight against obesity in the public health network of the city of Porto Alegre. Strengths and weaknesses were elucidated based on different experiences and trajectories of users through the service network, making varied uses of these spaces depending on their individual needs and the offer of actions and resources available.

However, it should be noted that the results are limited to a small sample of users, making further studies in different locations in the country and with different audiences necessary, although research in the literature demonstrates findings similar to those of the present study

### REFERENCES

- Brasil. Ministério da Saúde. Secretaria de Atenção à Saúde. Departamento de Atenção Básica. Estratégias para o cuidado da pessoa com doença crônica: obesidade. Brasília: Ministério da Saúde; 2014.
- Brasil. Ministério da Saúde. Secretaria de Vigilância em Saúde. Vigitel Brasil 2018: vigilância de fatores de risco e proteção para doenças crônicas por inquérito telefônico: estimativas sobre frequência e distribuição sociodemográfica de fatores de risco e proteção para doenças crônicas nas capitais dos 26 estados brasileiros e no Distrito Federal em 2018. Brasília: Ministério da Saúde; 2019.
- Brasil. Ministério da Saúde. Secretaria de Atenção à Saúde. Departamento de Atenção Básica. Estratégias para o cuidado da pessoa com doença crônica: obesidade. Brasília: Ministério da Saúde; 2014.
- Castro IRR. Obesidade: urge fazer avançar políticas públicas para sua prevenção e controle. Cad Saude Publica 2017; 33(7):1-3.
- 5. Castro JM, Ferreira EF, Silva DC, Oliveira RAR. Prevalência de sobrepeso e obesidade e os fatores de risco associados

em adolescentes. Ver Bras Obes Nut e Emag 2018; 12(69):84-93.

- 6. Souza MGD, Vila L, Andrade CB, Albuquerque RO, Cordeiro LHO, Campos JM, et al. Prevalência de obesidade e síndrome metabólica em frequentadores de um parque. ABCD Arq Bras Cir Dig 2015; 28(1):31-35.
- 7. Costa MAP, Vasconcelos AGG, Fonseca MJM. Prevalência de obesidade, excesso de peso e obesidade abdominal e associação com prática de atividade física em uma universidade federal. Ver Bras de Epid2014; 17(2):421-436.
- 8. Brasil. Ministério da Saúde. Portaria nº 424, de 19 de março de 2013. Redefine as diretrizes para a organização da prevenção e do tratamento do sobrepeso e obesidade como linha de cuidado prioritária da Rede de Atenção à Saúde das Pessoas com Doenças Crônicas. Diário Oficial da União2013;19 mar.
- 9. Brasil. Ministério da Saúde. Portaria nº 425, de 19 de março de 2013. Estabelece regulamento técnico, normas e critérios para a Assistência de Alta Complexidade ao Indivíduo com Obesidade. Diário Oficial da União 2013;19 mar.
- 10. Brasil. Ministério da Saúde. Secretaria de Atenção à Saúde. Organização Regional da Linha de Cuidado do Sobrepeso e da Obesidade na Rede de Atenção à Saúde das Pessoas com Doenças Crônicas: Manual Instrutivo. Brasília: Ministério da Saúde; 2014.
- 11. Gerhardt TE, Pinheiro R, Ruiz ENF, Junior AGS. Itinerários terapêuticos: integralidade no cuidado, avaliação e formação em saúde. Rio de Janeiro: ABRASCO; 2016.
- 12. Junior ST. Trajetórias Assistenciais de Usuários com Transtornos Psíquicos na Rede de Saúde do Município de Porto Alegre. Porto Alegre. Dissertação [Mestrado em Enfermagem] - Universidade Federal do Rio Grande do Sul; 2010.
- 13. Argenton IS, Pilecco RL, Dolinski C, Medeiros CRG. A Análise de Trajetórias Assistenciais como Metodologia de Integração Ensino-Serviço na Saúde. Ver Bras Educ Med 2018; 42(4):184-190.
- 14. Cecílio LCO, Andreazza R, Carapinheiro G, Araújo EC, Oliveira LA, Andrade MGG, et al. A Atenção Básica à Saúde e a construção das redes temáticas de saúde: qual pode ser o seu papel? Cien Saude Colet 2012; 17(11):2893-2902.
- 15. Minayo, MCS. O desafio do conhecimento: pesquisa qualitativa em saúde. 14ª ed. São Paulo: Hucitec; 2014.
- 16. Bardin L. Análise de conteúdo. São Paulo: Edições 70; 2011.
- 17. Mendes EV. As redes de atenção à saúde. Brasília: Organização Pan-Americana da Saúde; 2011.
- 18. Brasil. Ministério da Saúde. Portaria nº 4279, de 30 de dezembro de 2010. Estabelece diretrizes para a organização da Rede de Atenção à Saúde no âmbito do Sistema Único de Saúde (SUS). Diário Oficial da União 2010; 30 dez.
- 19. Dornelles AD, Anton M. A percepção dos profissionais da saúde acerca da atenção ao sobrepeso e à obesidade infantil no Sistema Único de Saúde (SUS). Aletheia 2013; 41: 53-66.
- 20. Malta DC, Merhy EE. O percurso da linha do cuidado sob a perspectiva das doenças crônicas não transmissíveis.

Interface 2010; (14)34: 593-606.

- 21. Estado do Rio Grande do Sul. Secretaria Estadual de Saúde. Departamento de Assistência Hospitalar e Ambulatorial. Departamento de Ações em Saúde. Rede de Atenção às Pessoas com Doenças Crônicas Não Transmissíveis (DCNT) no Rio Grande do Sul - Linha de Cuidado do Sobrepeso e Obesidade. 2014.
- 22. Raupp LM, Dhein G, Medeiros CRG, Grave MTQ, Saldanha OMFL, Santos MV, et al. Doenças crônicas e trajetórias assistenciais: avaliação do sistema de saúde de pequenos municípios. Physis 2015; 25(2):615-634.
- 23. Brasil. Ministério da Saúde. Secretaria de Atenção à Saúde Acolhimento na Gestão e o Trabalho em Saúde. Brasília: Ministério da Saúde; 2016.
- 24. Cambi MPC, Marchesini SD, Baretta GAP. Reganho de peso após cirurgia bariátrica: avaliação do perfil nutricional dos pacientes candidatos ao procedimento de plasma endoscópico de argônio. ABCD Arq Bras Cir Dig 2015; 28(1):40-43.
- Rocha A, Hociki KR, Oliveira TV. Comportamento alimentar de pacientes de pré e pós-cirurgia bariátrica. Ver Bras Obes Nut e Emag 2017; 11(63):187-196.
- 26. Carvalho AS, Rosa RS. Cirurgias bariátricas realizadas pelo Sistema Único de Saúde em residentes da Região Metropolitana de Porto Alegre, Rio Grande do Sul, 2010- 2016. Epidem Serv de Saude2018; 27(2):1-10.
- 27. Oliveira ML. Estimativa dos custos da obesidade para o Sistema Único de Saúde do Brasil. Brasília. Tese [Doutorado em Nutrição Humana] Faculdade de Ciências da Saúde da Universidade de Brasília; 2013.
- 28. Mattos RA. Os sentidos da integralidade: algumas reflexões acerca dos valores que merecem ser defendidos. In:
  Pinheiro R, Mattos RA, organizadores. Os sentidos da integralidade na atenção e no cuidado à saúde. Rio de Janeiro:
  IMS-UERJ/Abrasco; 2001; 39-64.

### Contributors

Kessler AL, Ruiz ENF and Schuch I participated in all stages; conception and design, analysis and interpretation of data, revision and approval of the final version of the article.

Conflict of Interests: The authors declare that there is no conflict of interest.

Received: April 30, 2023 Accepted: July 12, 2023