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Perceptions of adults with obesity about multiprofessional remote monitoring at the beginning of the COVID-19 pandemic

Percepções de adultos com obesidade sobre monitoramento remoto multiprofissional no início da pandemia de COVID-19

Percepciones de adultos con obesidad bajo telemonitorización multiprofesional en el inicio de la pandemia de COVID-19

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ABSTRACT

Objective: To understand the perception of adults with obesity about remote monitoring at the beginning of the pandemic of COVID-19. **Methods**: A descriptive-exploratory, qualitative study with participants in remote monitoring of a multi-professional treatment program in southern Brazil. Data was collected through digital platforms with interviews in written or audio-recorded records. The results were submitted to content analysis, thematic modality. **Results**: 26 women participated, emerging the thematic category "Difficulties and potentialities in adherence to lifestyle changes during the pandemic. Among the difficulties are the change of routine and increased anxiety; and, among the potentialities are the multi-professional accompaniment, decreased tension, and weight control. **Final considerations**: The participants' perception showed considerable weaknesses in adhering to the program, caused by social distance. Studies with remote interventions are essential to improve the quality of this type of health care.

Descriptors: Remote Monitoring; Obesity; Risk Factors; SARS Virus; Pandemic**.**

RESUMO

Objetivo: Compreender a percepção de adultos com obesidade sobre o monitoramento remoto no início da pandemia de COVID-19. **Métodos:** Estudo descritivo-exploratório, qualitativo, com participantes em acompanhamento remoto de um programa de tratamento multiprofissional da obesidade no Sul do Brasil. Os dados foram coletados por meio de plataformas digitais com entrevistas em registro escrito ou audiogravado. Os resultados foram submetidos à análise de conteúdo, modalidade temática. **Resultados:** Participaram 26 mulheres, emergindo a categoria temática "Dificuldades e potencialidades na adesão às mudanças no estilo de vida durante a pandemia". Dentre as dificuldades, estão a mudança da rotina e o aumento da ansiedade; e, dentre as potencialidades, estão o acompanhamento multiprofissional, diminuição da tensão e controle de peso. **Considerações finais:** A percepção dos participantes mostrou fragilidades consideráveis na adesão ao programa, causadas pelo distanciamento social. Estudos com intervenções remotas são importantes para melhorar a qualidade desse tipo de assistência à saúde.

Descritores: Monitoramento Remoto; Obesidade; Fatores de Risco; Vírus da SARS; Pandemias.

RESUMEN

Objetivo: Comprender la percepción de adultos con obesidad bajo telemonitorización en el inicio de la pandemia de COVID-19. **Métodos:** Estudio descriptivo-exploratorio, cualitativo, con participantes en acompañamiento remoto de un programa de tratamiento multiprofesional de obesidad en el Sur brasileño. Datos recogidos por medio de plataformas digitales con entrevistas en registro escrito o audio grabado. Resultados sometidos al análisis de contenido, modalidad temática. **Resultados:** Participaron 26 mujeres, emergiendo la categoría temática "Dificultades y potencialidades en la adhesión a cambios en el estilo de vida durante la pandemia". Entre las dificultades, están el cambio de rutina y el aumento de ansiedad; y, entre las potencialidades, están el acompañamiento multiprofesional, disminución de tensión y control de peso. **Consideraciones finales:** Percepción de los participantes mostró fragilidades considerables en la adhesión al programa, causadas por el alejamiento social. Estudios con intervenciones remotas son importantes para mejorar la calidad de ese tipo de asistencia de salud.

Descriptores: Telemonitorización; Obesidad; Factores de Riesgo; Virus de la SARS; Pandemias.

INTRODUCTION

In December 2019, following the Wuhan, China outbreak, the coronavirus for the current Pandemic scenario of COVID-19 was discovered. COVID-19 is known as an infectious disease affecting humans that is highly contagious, rapidly transmitted, and usually affects, generally mildly, children and young adults. However, about one in five infected persons require hospital care[1]; and the disease can cause severe conditions, with complicated outcomes and mortality, especially in the elderly population and in individuals with chronic diseases[2].

It is common for people to worry about the impact of the COVID-19 outbreak on everyone's lives, causing unfavorable biological, psychosocial, and economic consequences for the population. Therefore, basic personal and community hygiene, mask-wearing, and social distancing have been essential strategies imposed to control the transmission network of SARS-CoV-2[1-2].

Given the need for social distance, remote monitoring becomes an option to follow-up individuals in treatment. It is known that people with chronic diseases such as obesity currently occupy a possible delicate position in the context of the pandemic since such diseases are one of the aggravating factors of COVID-19[2]. In this context, the Care Model for Chronic Conditions (MACC) provides an approach in the co-participation of care, according to each individual's limitations, to make available resources capable of favoring health services and recommending innovative technologies of care[3]. The model is applicable in the context of supported self-care, and it has been used as a theoretical reference in other chronic conditions, such as in a study on diabetes[4].

That said, the use of technology and innovative means of providing health care for chronic conditions represents promising options, especially for individuals with overweight and mild to moderate obesity[5]. In this sense, as part of the healthcare team, nurses can implement programs to assess and monitor chronic conditions and help people self-manage their health problems[6]. The use of technologies to monitor patients has already been addressed in the study known as mHealth; it has been used to assist in managing several diseases, such as HIV/AIDS, malaria, tuberculosis, diabetes, asthma, and smoking[7-10].

In telehealth, remote monitoring is an innovative technology with the possibility of helping people suffering from chronic health conditions. That can result in empowerment, better disease management, and treatment adherence. Researches using this technology have mainly involved people with other chronic health conditions such as chronic obstructive pulmonary disease (COPD), congestive heart failure, and diabetes mellitus[11-13], but little is known about its benefits in managing weight loss and weight control.

In a study conducted in the United States, obese participants received counseling on eating habits and physical activity via telephone, text messages, and access to study materials on a website about healthy habits and lifestyle. Patients showed significant weight change after 24 months, with an estimated average weight loss of 3.5 kg in the enhanced intervention group and 5.9 kg in the standard intervention group. Despite that, the study concludes that effective long-term treatments are still needed to combat obesity. Numerous specific technologies for physical activity and diet are available, but it is unclear whether they effectively improve the weight loss process[14].

Until now nobody has found studies that report the exclusive use of remote monitoring in the treatment of obesity in the context of the need for social isolation; therefore, this study advances the production of knowledge on the subject because the methodological approach adopted allows the recognition of subjective factors that interfere with behavior change, especially in the period of social isolation. In this sense, this study sought to answer the following research question: What is the perception of obese individuals about the use of remote monitoring in the treatment of obesity at the beginning of the pandemic of COVID 19?

OBJECTIVE

To understand the perception of adults with obesity about remote monitoring at the beginning of the COVID-19 pandemic.

METHODS

Ethical aspects

The project was approved by the National Commission for Ethics in Research with Human Beings and followed the ethical precepts of anonymity, right to information, and participation in the research.

All participants were informed about the research and signed the informed consent form, which was the formalization of their agreement to participate in the study, sent online before the remote interview, and after signing, the participants received their copy. The study replaced the names with the letter I (individual), followed by two Arabic numerals. The first number refers to the order of the interview, and the second, to the age of the interviewee (e.g., I1, 42 years old) to ensure confidentiality and anonymity.

Theoretical-methodological framework

The study adopted the MACC[3] as the theoretical basis; and used the content analysis[15], the thematic modality for data treatment.

Type of study

A descriptive-exploratory study with a qualitative approach, which used the *Consolidated Criteria for Reporting Qualitative Research* (COREQ)[16].

Study setting

The study was conducted based on the Multiprofessional Program of Obesity Treatment (PMTO) in a southern Brazilian city. The program comprises a multidisciplinary team including nurses, physical educators, nutritionists, and psychologists. It is part of a research project funded by the Araucária Foundation, linked to the State University of Maringá and the University Hospital of Maringá, which provides free care to obese individuals.

Data source

The study participants were obese individuals participating in PMTO.

For the approach, the primary author - with previous experience in developing and guiding qualitative research conducted through interviews - conducted individual interviews with the participants. Before starting the interviews, the researcher already had contact with the participants through a study group belonging to the Multiprofessional Obesity Study Center (NEMO) held in two public universities in southern Brazil which have this PMTO[17].

At selection, 38 individuals with body mass index (BMI) above 30, age between 18 and 50 years old, and access to the WhatsApp application, who were in PMTO follow-up, were invited to participate in the research, and twelve of them refused. Consequently, the sample consisted of 26 participants.

They were aware that the interview aimed to understand better how they felt about obesity treatment at this time of social isolation.

Study protocol

The multi-professional intervention model for the treatment of overweight and reduction of metabolic syndrome risk factors plus the nursing intervention using telenursing were carried out with the participants through orientations and interventions, three times a week, by professionals from the fields of nursing, physical education, psychology, and nutrition. They organized the interventions as follows: on Mondays, Wednesdays, and Fridays, the participants received guidance from physical educators; on Mondays, they also received psychological guidance; on Wednesdays, nutritional guidance; and on Fridays, nursing guidance.

The participants were included in two groups of the WhatsApp® application: the first group, named "Notifications," where only the group administrators (the team professionals) had access to send messages; this group facilitated that the orientations passed on by the multi-professional team were not lost among the participants' conversations. The second group, named "Participants," allowed everyone to forward messages, facilitating the interaction between them.

Collection and organization of data

The access to the participants and the application of the research procedures occurred through the WhatsApp® application, using the cell phone numbers listed in May 2020 in the registration form for the PMTO.

The study collected information on age, social class[18], race, gender, and anthropometric data through the participants' registration form in the PMTO. After gathering this data, the individuals were interviewed via WhatsApp®; the questions were sent via audio recorded on the application and answered in typed texts or recorded audios, according to the participant's preference. Afterward, the researcher read or listened to the answers and, if necessary, forwarded support questions.

The following question guided the interview: Tell us about your experience with multiprofessional monitoring via WhatsApp® during social isolation due to the COVID-19 pandemic. Other supporting questions tried to encourage more participation from the respondents, such as: Do you feel that the activities have the desired effect while done this way? Do you feel motivated to do the activities with distance guidance? How does the social distance affect your activity routine and make you achieve the goal? How do you feel physically about doing these activities at a distance?

Data analysis

The interview data was fully transcribed and submitted to content analysis[15], thematic modality, followed by the phases of pre-analysis, material exploration, treatment of results, and interpretation. In this aspect, readings were performed for the corpus organization, mapping of common themes, and systematic reduction. The thematic category "Difficulties and potentialities in adherence to lifestyle changes during the pandemic" was extracted, which was illustrated by excerpts/excerpts of the participants' writings.

RESULTS

Twenty-six women were interviewed, with a mean age of 37.3 years old (minimum of 20 and maximum of 48 years old); brown (n = 15) prevailed, followed by white (n = 6), and black (n = 5). Social class: the most prevalent was C1 (n = 13), followed by B2 (n = 7), C2 (n = 3), and A, B1, and D-E (n = 1). BMI classification: all participants had obesity, according to the classification in grade I (n = 12), grade II (n = 6), grade III (n = 8).

Category: Difficulties and potentialities in adhering to lifestyle changes during the pandemic

It was analyzed that the social distancing due to the pandemic reflected negatively on the exercises' performance at home:

> [...] *I, mainly, can't do any physical activity. I try. I do it one day and don't do it the next day. I'm eating much more than I used to; now was the time that I should be doing (exercises), have time to be doing healthier things, and such. Still, at home, I end up eating every five minutes without wanting to eat. I just eat for the sake of eating (*I4, 28 years old)

> [...] *I can't do it; I do the activities, but it's not like before, doing it the proper way* [...]. (I7, 34 years old)

> *My experience has been terrible, although we are getting assistance. However, my performance is not the same. I don't have the energy for the activities inside the house. I lost focus several times. Yes, this isolation is hindering my objectives* [...]. (I21, 36 years old)

Sometimes, the interviewees highlighted the fact that they did not exercise and had difficulty controlling their diet because of the changes in their routine, especially the accumulation of tasks and family demands:

> [...] *I am at home with my children. My baby does not let me do anything; she only wants attention, to stay in my lap. No matter how much we try to entertain her with toys or something, she is*

> *not interested. So, for me to do any activity when I want to, the first week it was fine, I began any training, and she came to me to play, running around me. Now, when she sees me preparing things for the exercises, she already wants to sit on my lap. And I am incredibly stressed to stay at home, very anxious, with the desire to attack the refrigerator all the time. It is very complicated.* (I16, 32 years old)

> *The experience is more difficult for me because I don't know if I am doing the right activities because I have knee pain and live alone at home. I have no help from anyone. I have to overcome a significant barrier because I am doing it. Almost every time someone comes to disturb me, even my little dog comes to play with me and bite me.* [...]. (I25, 42 years old)

The participants emphasized factors that directly influence habits and adherence to a healthy lifestyle, such as increased anxiety:

> *As far as food goes, I try not to eat junk food, candy, canned food, and not drink soda. The anxiety that everything will pass one day is already stressing me out, and I get fat without eating.* (I5, 36 years old)

> *When this coronavirus thing started, I loosened up. I am no longer participating, I am no longer controlling my food intake, I became very anxious. I'm eating everything, I'm eating anything. I was eating many salads, brown rice, and so on, and now I'm keeping the same rhythm, the same focus, so I gave it a rest. I'm very anxious.* [...] (I14, 32 years old)

> [...] *I think it jeopardized a lot (the pandemic). People were getting excited, really carrying away, and I see few people posting pictures of themselves exercising. So, but not because of them, right? It is more a matter of the moment. You get depressed, a little bit under expected, you get afraid, and fear leads to anxiety, and anxiety leads to the urge to eat, and I think one thing leads to another.* (I26, 30 years old)

Still, the original goal's focus was the generator of tenacity:

> *The isolation is really getting in the way of my activity routine and my goal. Still, it's essential for the sake of everybody. I don't feel very physically productive doing the activities from a distance, but I am fighting to get results and not get discouraged.* (I1, 42 years old)

Moreover, in some cases, the interviewers cited limitations to using digital resources:

> *I cannot keep up with it through WhatsApp®. It would be better to do it in person. Some days I do it, some days I don't. I can't follow it because I don't have Instagram, I don't know how to enter yet, to enter to do it live with you, so I sometimes feel like a fish out of water. Sometimes, I see everyone participating.* [...] (I19, 48 years old)

Furthermore, at the beginning of the social distancing period, some interviewees maintained their activities; however, they became discouraged during the quarantine:

> *The first two weeks, I watched the lives well. I could do the exercises; the following days without them, I could do some exercises from the internet* [...]. (I3, 34 years old)

> *For me, it's not being good? Well... I see that the teacher posts things there, but I can't keep up. I'm doing some things at home* [...] *for me, it's very complicated, really complicated. I must have the commitment to go someplace and do something, do you understand?* (I10, 40 years old)

Different activities were performed at home:

> *I've been biking, not exercising much. Video and Instagram monitoring are complex. I don't have an internet connection at home, I use more mobile data, so I can't use the videos. Still, three times a week, I ride my bike 20 km.* (I1, 42 years old)

> *I'm doing the exercises. When I can't follow the teacher on Instagram, I look for the activities there; there are many exercises on YouTube, so I do those. Monday, Wednesday, and Friday, I exercise. On Tuesday, Thursday, and the weekend I run, walk, do a little exercise, and so on.* [...] (I15, 48 years old)

And some interviewees pointed out the desirable effects:

> *I think the activities have the desired effect even from a distance; I don't have a scale, but I can tell by my clothes* [...]. (I2, 48 years old)

> *I see results even with the distance activities, even because the others comment "look you are skinny and so on", so it is possible to feel, yes, there's a result … I guess if I consider from the beginning until now.* [...] (I15, 48 years old)

On the other hand, other participants stressed that, although they are doing the activities at a distance, they recognize that it is only for weight maintenance or relaxation:

> [...] *the exercise was going well, but I believe now it is helping me to maintain because I have not been able to lose weight.* (I9, 40 years old)

> *I was very excited about the program. I had already lost 3.5 kg in the first month; this month, I think I've just maintained my weight* [...]. (I10, 40 years old)

It was analyzed that doing the exercises in person constitutes motivation among the different participants:

> *So, I have never been into exercise. I have never done anything, not even physical activity. At home, it is more complicated,* [...] *I walk, run around the house, do some squatting exercises, something, but I am always doing something. I can't do it with the same intensity when others exercise together in a group; it is different when you see someone else. So, it is encouraging, you don't let you give up, but if you do it alone, you say: "Oh, I am tired!* (I6, 40 years old)

> *Of course, this distancing is bothering me a lot; that's what I said: in a group, it is much better, one helps the other, we follow the instructions, people are alive there chatting. When we talk is another thing, and now we seem to be alone.* (I7, 34 years old)

> *The activities with WhatsApp monitoring are excellent, but being in a group certainly reinforces the activities' focus. You can ask the instructor if we are doing the correct posture. Besides, it is much easier to do the exercises with colleagues because it keeps the*

> *focus. People's minds are relieved of home and work problems. Everyone there is fighting for a better quality of life and feels more excited and motivated.* (I13, 38 years old)

Thus, it was also pointed out the follow-up by the different professionals:

> *The nutritionist, the psychologist and the people attending us, everything is in favor of helping us.* (I24, 20 years old)

DISCUSSION

The attention to chronic conditions, when stimulating supported self-care, can prepare and empower people to manage their own health and the actions of assistance provided. For this, it is necessary to use support strategies for the co-participation of individuals in care, including assessing health status, establishing goals to be achieved, evaluating the results obtained and recognizing that the effects of behavior change occur in the long term[3].

Thus, we emphasize the importance of encouraging self-care supported by the maintenance of healthy habits in obese individuals, especially during the period of social isolation due to COVID-19, since severe obesity is a clinical condition that worsens the infectious condition. Individuals with obesity present an alteration in different stages of the innate and adaptive immune response, characterized by a state of chronic and low-grade inflammation, contributing to the worsening of the condition. The difference between obese and thin individuals is adopting unhealthy habits, such as sedentarism or physical inactivity. Reduced physical activity is known to impair the immune response against microbial agents in several steps, including macrophage activation and inhibition of pro-inflammatory cytokines[19].

Among the determining factors for not performing or reducing the frequency of the activities proposed by the PMTO during the social isolation, the participants reported change in routine, accumulating tasks since many people are doing home office due to the COVID-19 pandemic, in addition to family demands. This difficulty meets the profile of the female participants, and this corroborates other studies that presented the history of women's role in society as wives, mothers, and caregivers, and the fact that they do not exercise due to the second shift they face almost daily[20-21].

It is noteworthy that the accumulation of activities and social distancing favor the increase of anxiety, directly related to the outbreak of a new coronavirus infection (COVID-19). The increasing and excessive supply of information and concerns are beginning to impact global mental health. All the time, information from various sources is released, with recommendations and updates released minute by minute about the spread and lethality of COVID-19. However, today, this infection's burden on global mental health is neglected, even though it may challenge patients, the general population, policymakers, organizations, and health care teams[22].

Prevention measures for COVID-19 consist mainly of distancing large segments of the population. Distancing or isolation may be protective in many circumstances, but healthcare professionals should be aware of the neurological system's functional disorders after stressful community events, particularly in individuals with a previous psychiatric diagnosis[22-23]. In this sense, a telephone follow-up is a valuable tool for monitoring individuals with chronic conditions, especially to reinforce the orientations aimed at health education and adopting healthy habits.

Although a period of social distancing is the best option and recommendation to stop the rapid spread of COVID-19, this can have side effects on other dimensions of isolated individuals' health, especially on those mentioned as most at risk. Initiating a sudden state of social distancing implies a radical change in the population's lifestyle. These lifestyles and behaviors, in many cases, include a certain level of physical activity and exercise to maintain a good state of health[24] in order to counteract the negative consequences of certain diseases. Furthermore, as a psychological impact of social isolation, adverse psychological effects have been reported, including post-traumatic stress symptoms, confusion, and anger[25]. Therefore, identifying individuals' protective factors and their families favors the planning of care actions that are more likely to be developed and maintained by that individual, which is in line with the stimulation of individual autonomy and supported self-care.

Participants often mentioned the increase in anxiety in their answers. Another study analyzed the impact of social isolation in obese individuals and identified increased anxiety in 72.8% and depression in 83.6% of participants during that survey. Thus, the PHC health team must develop actions to prevent adverse outcomes for this vulnerable population while there is a need for social isolation and to collaborate in recovery efforts after COVID-19[26].

Among the reasons for participating in PMTO activities remotely, participants reported focusing on the initial goal, which is the loss of 20% of body weight at the end of 16 weeks of follow-up. Internal motivational factors (pleasure, prevention of health problems, and adherence) significantly influence physical activity performance[27]. Therefore, the remote monitoring strategy is also an alternative that encourages individuals to maintain activities even in social distance.

One of the participants mentioned difficulty performing the PMTO activities because they are carried out through technological devices. It is important to note that new strategies for obesity treatment, such as using technology and innovative means of providing health care dependent on healthcare professionals other than physicians, represent promising options, especially for overweight and mild to moderate obesity patients[5]. In this sense, it is essential to individualize care and solve difficulties presented by people in the use of technologies and, if necessary, reorganize the individual's care. Moreover, as a relatively new strategy, it is understandable that individuals have difficulties initially, but they need to be encouraged by the possible benefits of using it.

In this context, the MACC can contribute to the collaborative management of care, in which healthcare professionals are not only prescribers but also partners of these patients in health care. That means including the regular use of support programs that can provide information, emotional support, and strategies, in addition to encouraging these people to recognize their role in their health[3]. Because the condition involves a chronic condition, self-care measures for health need to be maintained, and

professionals should reinforce that the results, in most cases, are long-term.

Nurses can implement programs to evaluate and monitor chronic health problems and help people self-manage their health problems[6]. Health care must encompass a practical attitude mediated by the interaction of different sets of knowledge, based on a humanized relationship between the actors involved in situations that demand a necessary therapeutic action, aiming at the best possible outcome[28]. Although telephone monitoring is not a routine practice in health services, it constitutes a valuable strategy incorporated into the monitoring practice, especially for those stratified as low risk.

Social factors and norms also affect physical activity and the adoption of healthy habits. Some are critical social events, such as economic crises, civil unrest, or natural disasters[29]. In this sense, some participants reported that they became discouraged to perform the PMTO activities as the days in social distance increased.

Not interrupting or completely altering people's lifestyles during social isolation and maintaining an active lifestyle at home is very important for the general population's health. Although outdoor activities are typically more available, varied, and there are more facilities and infrastructure to perform any physical exercise, there are still many possibilities to exercise at home during social isolation to maintain healthy habits. Some examples of physical activities performed at home are resistance training through exercises with body weights, such as squats holding a chair, sitting down and getting up from a chair or going up and down a ladder, carrying items with light and moderate weights (vegetables, rice, water), aerobic exercises such as walking indoors, dancing, balance exercises, such as walking in a line on the floor, walking on tiptoes or heels, walking evenly, and stepping over obstacles[30]. The participants in this research received videos with workouts that could be done at home, including items available in any household or with their body weight.

The fact that participants consider that face-to-face exercise is related to greater motivation to perform the activities proposed by PMTO goes in the direction of creating a bond with the user, considered fundamental to the control and prevention of obesity. Group work allows better stimulation of adherence and generates a better quality of life for patients. The World Health Organization defines adherence to treating chronic diseases as a multidimensional phenomenon determined by the combination of five sets of factors, called dimensions: health system, disease, treatment, patient, and caregiver-related factors. This classification clarifies that the belief that patients are solely responsible for their treatment is misleading[31].

So, changes in people's behavior, especially with obesity, involve articulated health services, which, through available resources, allow individuals to be informed and become active, with a relationship supported by the community and the health team. To this end, healthcare professionals need to be prepared and proactive to provide functional health outcomes for the population[3].

In this way, it will be possible to strengthen the pillars of PHC, which has the Basic Health Unit (BHU) as the entry point to users, which takes on and treats the overweight individual - it is the care organizer and communication center among the other points of the Healthcare Network, ensuring comprehensive care, seeking interdisciplinarity and intersectionality[32].

Study limitations

The study's possible limitations may be linked to the use of online questions, as they may exclude digitally illiterate people, make it difficult to help the participant when they do not understand some question, make it impossible to know the circumstances under which the questionnaire was answered. Nevertheless, it is believed that solutions to the limitations of online surveys will be increasingly analyzed and developed in the future due to the benefits of this type of data collection.

Contributions to the fields of Nursing, Health or Public Policy

This study is relevant for nurses and multi-professional teams because its results provided an understanding of the factors that hinder adherence to PMTO. Based on this, the nurse and the team can develop innovative strategies that can be effective remotely. In turn, this allows stimulating health practices directed to the assistance of overweight individuals, because besides being a public vulnerable to complications for having this chronic condition, the fact that they need social distancing and at the same time there is a self-blame in continuing in weight loss and control can lead them to a picture of psychological symptoms and social consequences for their lives. Therefore, this study can promote health care for this population, with appropriate planning for self-care supported by the health team.

FINAL CONSIDERATIONS

The perception of obese individuals during remote monitoring performed by nursing, nutrition, psychology, and physical education professionals, through a PMTO, showed weaknesses in adherence to the program due to social distance and changes in lifestyle during the pandemic. The statements pointed out that the social distance due to the pandemic reflected negatively on home exercises' performance and the difficulties to control food and weight, routine changes, and increased anxiety. As a potentiality, we emphasize the support and follow-up by different professionals at this moment, and some patients felt less tension and perceived weight control.

In this sense, self-care supported by digital technologies brings co-responsibility with the treatment and multidisciplinary monitoring of the obesity treatment program. However, for better results, innovative strategies and interventions are needed for greater and better adherence of this population to the program remotely. Future studies are imperative to understand how to reverse the overweight population and modify the various views of society about food, physical activity, body, and health, with the support of remote technologies.

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ERRATUM

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17. Bim H, Gonçalves ECA, Bolognese MA, Westpal G, Thon RA, Castilho MM, et al. Perfil de pacientes que procuram um programa multiprofissional de tratamento da obesidade[Internet]. 2018 [cited 2020 Jun 19]. Available from: http://www.revistaagape.com.br/index.php/revistaagape/article/view/9

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