

Perception of factors associated with overweight and obesity in individuals with special needs: An action of food and nutrition education



<https://doi.org/10.56238/globalhealthprespesc-036>

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ABSTRACT

Obesity is a public health problem whose etiology is multifactorial and requires knowledge about determining factors for its emergence. Food and nutrition education (NEC) actions are relevant for understanding and diagnosing this situation in its complexity. The study evaluated the perception of factors associated with overweight and obesity through written and confidential expression in individuals with special needs practitioners of hippotherapy of the IF Goiano- Campus Urutaí. The method was qualitative and the results expressed in a cloud words. In this study, the number of factors related to mental health cited by the individuals is highlighted, the words "anxiety" and "depression" received prominence and also appeared the terms "emotional" and "relationship with food", in addition, were mentioned "lack of physical activity", "inadequate diet" and "genetics". It was concluded that the diagnostic intervention was effective in showing that obesity and overweight are dependent in which the individuals presented satisfactory perceptions about the relationship of biopsychosocial factors and weight gain and obesity.

Keywords: Overweight, obesity, individuals with special needs, action of food and nutrition education.

1 INTRODUCTION

Food and Nutrition Education (EAN) is a nutritional intervention strategy that aims to promote reflection and collective dialogue that contribute to the learning of the target audience through educational resources (BRASIL, 2021; RODRIGUES et al., 2020). Thus, the EAN can be applied in different life cycles and public as a measure of creation and maintenance of healthy eating habits, and



consequently, prevention of comorbidities such as obesity (BRAZIL, 2012; DE CASTRO, DE LIMA, ARAUJO, 2021). With the focus on improving the quality of life of the assisted population, EAN strategies can be applied to individuals with special needs (RACHID, 2019).

For this public, food education actions are relevant to reduce behaviors that can be generated by characteristic aspects of a given picture (DE PAIVA, GONÇALVES, 2021). In this case, EAN activities have the potential to develop skills related to the act of eating and working with issues that guide their perception (MILANE, BORTOLOZO, PILATTI, 2022). The emphasis on the perception of these individuals is relevant because it promotes discussions about known and unknown factors of any theme, pointing out possible gaps in this population (DE CASTRO, DE LIMA, ARAUJO, 2021; RACHID, 2019).

In addition, it is worth noting that the population with needs presents characteristics that make them more prone to the appearance and development of nutritional disorders, so a personalized approach is essential (LOPEZ, 2017; BERTAPELLI et al, 2017). Among the eating disorders, there is food selectivity, monotonous feeding, swallowing difficulties, physical dependence to feed (LOPEZ, 2017). Thus, the approach of different forms of intervention can help maintain an adequate nutritional status in this population (LEITÃO et al, 2022)

The promotion of awareness and information actions using the EAN as a tool, considering the particularities of the individual with special needs assisted, is of great value for the promotion, maintenance and/or recovery of health through eating habits. Thus, the objective of the study was to collect data on the reasons associated with overweight and obesity according to the perception of people with special needs practicing hippotherapy at the Federal Institute of Goiano- Urutaí Campus.

2 THEORETICAL FRAMEWORKS

Obesity is a public health problem that increasingly affects society, causing significant impacts both for individuals and for society as a whole. The exponential growth of obesity rates is related to several factors, such as the change in eating habits, sedentary lifestyle and easy access to ultra-processed and poorly nutritious foods (DIAS et. al, 2017).

The data presented in the new edition of COVITEL (2023), a telephone survey of risk factors for chronic non-communicable diseases in times of pandemic, reveal an alarming picture in relation to the younger population, specifically between 18 and 24 years old. This age group emerges as a leader in obesity factors, with a significant increase in the number of overweight young people. In addition, habits harmful to health, such as excessive time in front of screens, high consumption of soft drinks and artificial juices and the lack of inclusion of fruits, vegetables and greens in the diet, further aggravate this worrying scenario (COVITEL, 2023).



According to a survey conducted on the website of the Food and Nutrition Surveillance System (SISVAN), which monitors diet and nutritional status in Brazil, in 2019, approximately 10% of children between 5 and 10 years of age were overweight than recommended for their age. In addition, according to the WHO Atlas of Childhood Obesity, it is estimated that by 2030, about 22.8% of children aged 5 to 9 years and 15.7% of children aged 10 to 19 years in Brazil will be obese (LOBSTEIN; BRINSDEN, 2019).

Corroborating this scenario, the Brazilian population as a whole has been going through a worrying nutritional transition, where we have observed an increase in the consumption of ultra-processed foods to the detriment of in natura and minimally processed foods. This change in dietary patterns has led to a reduction in malnutrition rates, however, it has resulted in a growth of overweight and obese people. This scenario is particularly prevalent in the young public, where a diet characterized by foods high in sodium, fats and sugar is predominant, while natural and healthy foods are little consumed (IDEC, 2021).

To combat the growth of obesity, food and nutrition education (EAN) strategies are key. These strategies aim to guide the population on the importance of a healthy and balanced diet, providing information on the proper choice of foods and the benefits of a balanced diet. Thus, the EAN is consolidated as an effective tool in the promotion of healthy habits and, consequently, as a way to prevent and combat obesity and its diseases (SANCHES; GREGGIO, 2022).

When analyzing the growth and feeding process of children and adolescents with special needs, it is possible to notice that it differs greatly from the general population. Most special needs can affect food and nutrition, because their physical and intellectual limitations and genetic disorders can cause deficiency in their development, chronic diseases and various eating disorders (DANIEL et. al, 2021).

Researchers have observed a higher prevalence rate of overweight in people with Down Syndrome, Intellectual Disability and Autism; these conditions are associated with genetic, behavioral, environmental factors and physical limitations that can increase the risk of excessive weight gain (LOPES, 2017).

In their study, with children with Down Syndrome, Giaretta and Ghiorzi (2009) demonstrated that through the playful activities of food and nutrition education it was possible to identify the desires, thoughts and food preferences of people with Down Syndrome. Most participants demonstrated a strong desire for high-calorie foods high in fat and sugars. This food preference is in line with the current reality of these people, since many of them are overweight or obese.

NAS actions, which seek to combat obesity in children with disabilities, are necessary and efficient when relevant variables of these individuals are considered that can influence the results of actions such as age, type of disability and participation of parents and caregivers. These variables may play a relevant role in the effectiveness of the strategies adopted (MAGAGNIN, 2021).



This current panorama of overweight and obesity brings the need to develop strategies of food and nutrition education directed to such a public in the search for awareness of the factors that lead to obesity. To work with strategies of food and nutrition education, the educator or professional needs to be didactic and should arouse the interest of students to the content addressed, facilitating their participation in the teaching processes through playful techniques, which facilitate learning, and increase the performance of students in the acquisition of new knowledge (LANG; CIACCHI, 2021).

3 METHODOLOGIES

The Food and Nutrition Education Action was developed and carried out by students of the Nutrition course of the Federal Institute of Goiano-Campus Urutaí, addressing the theme of obesity and overweight. The study involved 10 participants, aged 5 to 40 years, among them the practitioners of hippotherapy with special needs, auxiliaries and employees of the Integrated Center of Equine Therapy (CIEU) of the Federal Institute of Education, Science and Technology Goiano – Campus Urutaí.

Three stages were carried out: the first was the making of a colored box that aroused the curiosity of the individuals and the elaboration of a poster with the following phrase "WHAT DO YOU THINK LEADS PEOPLE TO BECOME OVERWEIGHT" (figure 1).

The second step involved the movement of the students to the hippotherapy site to fix the poster and box, in which the individuals present at the site were approached and instructed to answer the highlighted question and deposit it in the box, in which it was exposed in the place for 10 days.

The third stage consisted of the analysis of the results in which a word cloud was elaborated using the online program WordArt (<https://wordart.com/nwl5dq0aletg/nuvem-de-palavras>). In this tool, the words that appear most prominently show the terms that were most frequently mentioned by the individuals (figure 2).

In order to preserve the identity of the participants, the answers were not identified with name, for the action the individuals gave consent by filling out the Term of Free and Informed Consent (ICF), in order to contemplate all the necessary ethical precepts.

Figure 1: Box and poster of the Food and Nutrition Education intervention.



Source: Authors, 2023.

4 RESULTS AND DISCUSSION

Individuals who attend the Integrated Equine Therapy Center of IF Goiano - Campus Urutaí participated in this Food and Nutrition Education Action. The result of the information collection was organized in a word cloud, after the box was opened, the answers were read and systematized into keywords to facilitate the presentation of the answers (figure 2).

Figura 2. Nuvem de palavras da coleta de informações.



The words described in larger letters were the ones that appeared most frequently, according to the opinion of the participants, an "Inadequate Diet" is one of the most relevant factors for the maintenance of an adequate body weight. This described factor was already expected, since studies point to lifestyle, which includes eating habits and physical exercise, as the main causes of obesity (JIA, LIU, 2021; DE CASTRO, DE LIMA, BELFORT, 2021). However, it should be noted that obesity has been declared as a disease of multifactorial etiology and the associated factors are already addressed and disclosed by the Brazilian Association for the Study of Obesity and Metabolic Syndrome (2016), in its Brazilian obesity guidelines.

The aspect "lack of physical activity" was also mentioned by the participants. It is known that this is an environmental factor that along with caloric intake are determinants in weight gain (BRAZIL, 2016). Therefore, there is a significant increase in the prevalence of obesity in various populations



around the world, including Brazil, which is often limited by issues of access and educational level (BRASIL, 2016).

The term "genetics" was pointed out as a possible factor associated with the appearance of obesity and overweight. Regarding this, common obesity is characterized by a polygenic inheritance, therefore, not all individuals gain weight in the same proportion when exposed to hypercaloric diets (NICOLAIDIS et al., 2019). The risk of developing obesity is higher when there is a family history of morbid obesity, with a Body Mass Index (BMI) equal to or greater than 40 kg/m², or even in cases of obesity at more moderate levels, determined by BMI.

In this study, the number of factors related to mental health cited by the individuals is highlighted, the words "anxiety" and "depression" were highlighted and the terms "emotional" and "relationship with food" also appeared as important for an individual to be overweight or obese. Thus, these findings evidence the importance of a multidisciplinary team for the integral health care of individuals considering the consequences that emotional eating can entail and implications in diagnosis and treatment (KONTTINEN, 2020; DA SILVA, BY ANDRADE, 2023). Individuals with depression tend to have an increase in inflammation (BREMNER et al., 2020).

Finally, a diversity of causal factors was observed that lead the individual to a poor control of their own body weight. Diet and obesity can influence mood through direct effects, while stress-related mental disorders can lead to changes in eating habits that affect body weight, in addition, stress or genetic predisposition can contribute to both obesity and stress-related mental disorders such as depression and post-traumatic stress disorder (PTSD) (ABIRI et al., 2022).

5 CONCLUSIONS

The results of the action of diagnostic food and nutrition education applied to the attendees of the Integrated Center for Equine Therapy (CIEU) of the Federal Institute of Education, Science and Technology of Goiás – Campus Urutaí demonstrated that individuals related environmental factors in the development of obesity, such as the built environment, sedentary habits and inadequate eating patterns. In addition, it was notorious that individuals have correct and satisfactory perceptions about the causal multifactoriality of obesity.

The results also underscore the importance of mental health in the context of obesity, such as anxiety, depression and emotional relationships with food mentioned by the participants. These findings emphasize the need for a multidisciplinary approach to comprehensive health care, especially in people with special needs, thus considering psychological and emotional implications associated with obesity and the diet of these individuals.



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