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Children's food and obesity in the pre-school phase: meanings assigned by parents

ABSTRACT | Objectives: To evaluate the perception of parents of overweight or obese children, in relation to the quality of their children's food, in the preschool phase. Method: Descriptive and qualitative study, carried out through semi-structured interviews, with parents of overweight or obese children enrolled in a Municipal Center for Early Childhood Education (CEMEI) and registered in the Family Health Strategies (ESF's) in the municipality of Divinópolis -MG. Results: Regarding the characterization of the parents, all were female. The age group alternated between 22 to 45 years. From the data analysis, the categories listed were: Inadequate food; Technology and sedentary lifestyle; The underestimation of overweight; Prevention and treatment of childhood obesity in the FHS. Conclusion: There was a need for better preparation by health professionals in relation to the correct nutrition of children and also an involvement between these professionals, parents and the school.

Keywords: Child; Student; Obesity.

RESUMEN | Objetivos: Evaluar la percepción de los padres de niños con sobrepeso u obesidad, en relación a la calidad de la alimentación de sus hijos, en la etapa preescolar. Método: Estudio descriptivo y cualitativo, realizado a través de entrevistas semiestructuradas, con padres de niños con sobrepeso u obesidad inscritos en un Centro Municipal de Educación Infantil (CEMEI) y registrados en las Estrategias de Salud de la Familia (ESF's) del municipio de Divinópolis. -MG. Resultados: En cuanto a la caracterización de los padres, todos fueron del sexo femenino. El grupo de edad alternaba entre 22 y 45 años. Del análisis de datos, las categorías enumeradas fueron: Alimentos inadecuados; Tecnología y estilo de vida sedentario; La subestimación del sobrepeso; Prevención y tratamiento de la obesidad infantil en la ESF. Conclusión: Se identificó la necesidad de una mejor preparación por parte de los profesionales de la salud en relación a la correcta nutrición de los niños y también una participación entre estos profesionales, los padres y la escuela.

Palabras claves: Niño; Estudiante; Obesidad.

RESUMO | Objetivos: Avaliar a percepção dos pais de crianças com sobrepeso ou obesidade, em relação à qualidade da alimentação dos seus filhos, na fase pré-escolar. Método: Estudo descritivo e qualitativo, realizado por meio de entrevistas semi-estruturadas, com pais de crianças com sobrepeso ou obesas matriculadas em um Centro Municipal de Educação Infantil (CEMEI) e cadastrado nas Estratégias de Saúde da Família (ESF's) do município de Divinópolis-MG. Resultados: Em relação à caracterização dos pais, todos eram do sexo feminino. A faixa etária alternou entre 22 a 45 anos. A partir da análise dos dados, as categorias elencadas foram: Alimentação inadequada; Tecnologia e sedentarismo; A subestimação do sobrepeso; Prevenção e tratamento da obesidade infantil nas ESF. Conclusão: Identificou-se a necessidade de um melhor preparo por parte dos profissionais de saúde em relação a correta nutrição das crianças e também um envolvimento entre esses profissionais, os pais e a escola.

Palavras-chaves: Criança; Estudante; Obesidade.

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INTRODUCTION

Probably obesity is one of the oldest diseases of man. Recommendations related to maintenance and care of body weight already appeared in the writings of Hippocrates and Plato (430-377 BC). As time went by, modernity arrived, along with it there were also several historical factors such as wars, globalization and economic crises shaped

the shape of man in relation to the ways of living and the body. ⁽¹⁾

Regarding childhood obesity, there was an increase in prevalence, from 1% in 1975 to 5,6% in girls and 7,8% in boys in 2016. The causes may be associated with biological, historical, ecological, economic factors, social, cultural and political. It is considered a disease and, through it, the presence of chronic non-communicable diseases, such as hypertension and diabetes mellitus, prevails. ^(2,4)

The growth of obesity is a matter of public health concern. The amount of fat, whether abdominal or visceral, are aspects of body composition associated with the occurrence of chronic-generative diseases. Whether in a poor

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or rich country, the number of obese children has increased, so the World Health Organization (WHO) has come to consider obesity a public health problem, such as malnutrition. ^(3,4)

According to the Ministry of Health (2014). ⁽⁵⁾

“Brazil has been facing a significant increase in overweight and obesity in all age groups, and chronic diseases are the main cause of death among adults. Overweight affects one in two adults and one in three Brazilian children.”

Childhood obesity in recent decades has increased worldwide and is considered a public health problem in constant growth. Genetic basis and dietary basis are factors that contribute to obesity, caloric consumption of food and lack of physical exercise are factors that justify obesity. ^(6,7,3)

In addition to a poor diet, children are obese due to the lack of physical activity, because obesity itself makes them become slaves to physical inactivity. With the advancement of technology, children have switched from physical play to electronic play that does not promote any caloric burning. ⁽⁸⁾

The increase in body fat affects the child's formation and health, since obesity negatively affects physical conditions, which increases sedentary life and contributes to the emergence of new diseases, thus generating concern and expenses for the government. Schools have been an important setting for discussions, with most obesity problems starting in school life due to poor diet. Such interventions should happen not only in the target audience, children, but obesity is also related to their family members who, in a way, have a direct influence on their lifestyle. ^(3,6,7)

There is a need to change eating habits in order to have a gradual improve-

ment of this problem, including the practice of physical exercises and food with an adequate nutritional basis in the routine, will have a positive influence on a better body composition. ^(3,6,7)

Knowing that the cause of obesity is not an individual problem, but also an environmental and social one, it is up to SUS to carry out interventions and supervise the health promotion and prevention actions of individuals, in order to reduce the complex problems that integrate obesity. ⁽⁴⁾

Thus, for even greater prevention to be done to combat childhood obesity, a school health program was created, by decree number 6.286/2007, in which specific actions are carried out on the health of students in the public school system. Permanent education together with the training of professionals are actions that will facilitate the monitoring and analysis of the health of these children. ⁽⁹⁾

The estimate according to WHO (World Health Organization) is that 42 million children under five years of age will suffer from being overweight. The high consumption of foods that are high in fats and behavioral factors further aggravate this situation. A problem that, if left untreated in the beginning, is unlikely to be reversed in the future, since chronic diseases may arise over time. In addition, psychological and social complications can extend for a lifetime. ^(10,11)

Parents are considered a fundamental tool for the fight against obesity to be effective, as they are the preceptors of this child's diet. Without this awareness of the parents, a barrier is created, the lack of knowledge of the aggravations of obesity hinders the work of health professionals, because when parents have a real perception about their children's overweight and the consequences they can bring in short and long terms become more stringent regarding food at home. ^(10,11)

Thus, this article aims to assess the

perception of parents of overweight or obese children, in relation to the quality of their children's food, in the preschool phase.

METHOD

This is a descriptive and qualitative study, carried out through semi-structured interviews, recorded in mp3 audio, with parents of overweight or obese children enrolled in a Municipal Center for Early Childhood Education (CEMEI - Centro Municipal de Educação Infantil) and registered in the Family Health Strategies (FHS) in the municipality of Divinópolis-MG. Sixteen parents of overweight or obese children were invited to participate in this research, and only 13 accepted to participate in the interview, and with this number it was possible to obtain data saturation.

Data collection was carried out in September 2017, in meetings previously scheduled with parents at their homes and at CEMEI. The research objectives and how the interviews would be conducted were explained. At this time, they also signed the Informed Consent Form (Resolution No. 466/2012, National Health Council), approved by the Municipal Health Secretary of Divinópolis, by the Municipal Secretary of Education (SEMED - Secretária Municipal de Educação) and by the Research Ethics Committee of State University of Minas Gerais (CEP-UEMG), Belo Horizonte, Minas Gerais, Opinion No. 2.220.932. The interviews were conducted by the authors of the study using a direct approach, that is, the researcher interviewed the participants personally, without any interference, allowing them to express themselves freely. Finally, each interview required an average of 20 minutes to complete.

As inclusion criteria, parents of pre-school children between two and six years old, of both sexes, were

used, with anthropometric indices above the ideal indices for each age according to the Ministry of Health (Brazil, 2002) and that the parents agreed to participate in the study, by signing the Free and Informed Consent Form and that they were enrolled in CEMEI and registered in the FHS. The exclusion criteria are parents who do not accept to participate in the research, the possible dropouts during work and the others who did not fit the inclusion criteria.

The subjects received flower names as a form of identification, thus preserving the anonymity of their identities. All interviews were recorded in Mp3 audio, transcribed in full and analyzed through content analysis, which according to Bardin (2011) ⁽¹²⁾, content analysis is understood as a set of communication analysis techniques aiming to obtain, by systematic and objective procedures for describing the content of messages, indicators (quantitative or not) that allow the inference of knowledge related to the production/reception conditions (inferred variables) of these messages indicating three fundamental phases, namely: pre-analysis, material exploration and treatment of results: inference and interpretation. ⁽¹²⁾

The first phase, pre-analysis, can be identified as an organization phase. It establishes a work scheme that must be precise, with well-defined, yet flexible procedures; that is, a first contact with the documents that will be submitted for analysis, their choice, the formulation of hypotheses and objectives, the development of indicators that will guide the interpretation and formal preparation of the material where the documents need to adapt to the content and research objective. ⁽¹³⁾

In the second phase, there will be the exploration of the material where the location of the research will be chosen and the choice of the target audience. ⁽¹³⁾

Finally, in the third phase, it will be the exploration of the material collected and the treatment of the data making them meaningful and valid for the main objective of the research. The inference in the content analysis is guided by several poles of attention, which are the poles of attraction of communication. It is an induction tool for investigating the causes from the effects. During the interpretation of the data, it is necessary to carefully return to the theoretical frameworks, pertinent to the investigation, as they provide the basis and significant perspectives for the study. The relationship between the data obtained and the theoretical foundation is that it will give meaning to the interpretation, thus closing the process of data analysis, remembering that these three phases must be followed, there are many variations in the way of conducting them. ⁽¹³⁾

RESULTS

Regarding the characterization of the parents, all were female. The age group alternated between 22 to 45 years. The level of schooling among the participants fluctuated, 23% with a university degree, 54% with complete high school, 15% with incomplete high school and 8% with complete elementary school. Regarding family income, 85% reported varying between a minimum wage and three minimum wages, and 15% reported between three minimum wages and five minimum wages. Dependents of this income diversified between three to five people. Only 8% said they received family allowance, the other 92% denied receiving any kind of government aid.

From the data analysis, the categories listed were: Inadequate food; Technology and sedentary lifestyle; The underestimation of overweight; Prevention and treatment of childhood obesity in the FHS.

Inadequate food

According to the subjects' statements, we can affirm how much these children have autonomy when choosing their food and schedules, without a routine established by the parents and the difficulty they have in offering a balanced diet for their children, the majority reported that end up doing their will, that allow children to eat the most preferred foods among them. During the reports, some were shown to be annoyed by the fact that third parties offer treats for their children, which according to them has been a difficulty in regulating and balancing their food.

"Wow, her feeding is the time she wants..." (Iris)

"...ele come normalmente arroz com banana ou arroz com carne, ele não come outra coisa..." (Violeta).

"... now candy, lollipop is something that bothers me, because she sometimes asks I don't give it, or my mother-in-law gives it, my uncle gives it, but inside my house I try to have a healthy diet..." (Margarida)

"... because she gets candy from all over the family, and it's impossible to cut. Like, talk to her 'you're not going to eat' ..." (Copo de leite).

When asked about the use of industrialized products, they claim to use it, but in a regulated way, although some report the large intake of milk with chocolate.

"Hamburger, pizza, biscuit" (INTERVIEW 009).

"Vegetables, try to put them on, but it's very difficult..." (INTERVIEW 008).

"...I hardly ate any vegetables, little fruit, anything else, stuffed cookies..." (INTERVIEW 001).

"Fruit he eats easy, now vegetables are more complicated. He eats more at school ..." (INTERVIEW 002).

"Chocolate milk is three, sometimes four, when he's at home he asks for more..." (INTERVIEW 004).

"That, chocolate milk that I give him ..." (INTERVIEW 005).

One of the questions asked by the interviewers was how these parents, in this case, the interviewees, evaluated their children's food. And it is possible to observe the divergence between the statements, some reported being dissatisfied, while others were satisfied, but something that drew attention was how some are aware of the irregularity of their food and still remain the same.

"Not good." (INTERVIEW 002).

"It was terrible, everything irregular" (INTERVIEW 001).

"I think his feeding is good" (INTERVIEW 005).

"Ah, but his father talks to him that he cannot eat too much because we see that he is overweight, but as he doesn't drink coffee, I feel sorry" (INTERVIEW 007).

"He eats a lot that is not healthy" (INTERVIEW 009).

Technology and sedentary lifestyle

Most children like to jump, run, play ball, play with each other. However, in the interviews it was identified that these types of games nowadays, are not very related to childhood. These games gave way to other types of entertainment, technological entertainment with tablets, video games, cell phones and television are gaining more and more space.

"It gets a lot on television, a lot of cartoons, computer" (Copo de leite).

"He plays a lot, watches a lot of cartoons, lies a lot watching cartoons." (Violeta)

"So, when he 'is' at home with me, in the morning, he's watching cartoons on the tablet" (Chuva de prata).

A fun where sedentary lifestyle prevails are those involving technology, because when there is this exchange of physical activities for virtual ones the difficulty in combating overweight and obesity is greater. Some parents try to have their children play with other children, so that they have fun without using any electronic device. During the interviews we observed that in some cases the parents succeeded, but they realize that when this happens to the child they feel tired and soon afterwards they choose to return to the electronic devices.

"He's more in his, more cell phone, phone" (INTERVIEW 009).

"When people come to play she calls to go play video games, to play on the computer" (INTERVIEW 008).

"... but when he is with his cousins, he runs" (INTERVIEW 007).

The underestimation of overweight

Even having observed in some interviews the lack of knowledge about the disease, it was possible to verify that some parents understand the seriousness of the problem, even if it is late and their children already have a high degree of the disease, where it begins to affect social life and the child's affective and even psychological issues, which we have as an example their exposure to bullying by society.

"Yes, I thought you know, she was always chubby, since she was a baby, but I thought it was normal, then, after a year

and a little until two years, she started to put on a lot, but even so, I still thought, when I saw that I was too fat, I went to a doctor, then I already had high blood pressure, it was already too much." (Rosa vermelha).

"O Obesity is complicated because I already had a stomach reduction, so I was an obese child, since I was a little girl I was always obese, and I know that obesity is not good for him, both for the physical and for the mind..." (Violeta).

"... that the classmates in the future will start 'oh the chubby this, the chubby that' and this affects." (Violeta).

There is a great difficulty for parents to recognize overweight and obesity as a disease. Most parents underestimate the child's weight, believe that the chubby child is a healthy child, are more concerned with being thin than being overweight.

"...but I believe it is also gluttony (laughs), bad discipline, we cannot generalize, but gluttony, the big eye is what obesity is." (Margarida).

"... I thought it was normal." (Rosa Vermelha).

Prevention and treatment of childhood obesity in the FHS

It was identified in the interviews that the FHS do not provide monitoring or guidance to families with obese children, the majority of respondents denied any type of monitoring by the FHS.

"No. Why thank God I can pay health insurance for (her daughter)..." (Margarida).

"Nothing, nothing, nothing, none" (Copo de leite).

DISCUSSION

In the preschool phase between two and six years of age, it is the moment when the child begins to have preferences for certain foods, due to their color, flavor, texture and presentation. It is in this stage of life that your personality is being formed, the choice for what to do, what to wear and how to eat start to appear in a responsive way. ⁽¹⁴⁾

According to the World Health Organization (WHO) obesity is marked by abnormal excess or excess fat in specific regions or in the body as a whole, which can cause some type of damage to your body, and has been highlighted as a public health problem. According to the results of the National Health Survey (2013), the prevalence of obesity in men is 17,5% and in women 25,2%. It can be compared that childhood obesity is directly linked to family habits, where parents are the main influence and determinants for the types of food that the child will consume throughout life. ⁽⁴⁾

As stated by the WHO, Cunha (2014) ⁽¹⁴⁾ confirms this position that parents have total influence on their children's food at this stage, due to their habits and customs acquired throughout life. Having the habit of eating a balanced diet rich in nutrients is essential for a harmonious life. A child's diet directly reflects on their development, which is why it is important to have a balanced diet that contains a variety of foods such as meats, vegetables and cereals. Even allowing their children to eat the foods of their choice, the interviewees are aware that it is not ideal, but they report their great difficulty in making their children use fruits and vegetables.

Andrade and collaborators (2015) ⁽⁶⁾ describe in their study that the increase in the accumulation of fat in the body causes great damage to children's health, negatively compromi-

sing the physical and metabolic parts, contributing to insulin resistance and chronic inflammation. Thus, excess child weight can reduce physical well-being and also cause damage to self-esteem, contributing to the impact of diseases in adult life such as hypertension, type II diabetes, cardiovascular diseases and various types of cancers, which result in decreased quality of life.

Nowadays electronic entertainment is increasingly present in the lives of children. Street games, hopscotch, rope jumping, cycling, playing football, among other thousands of physical games that are increasingly scarce in the children's world, which has directly contributed to sedentary lifestyle and the increase in overweight and obesity. ⁽¹⁵⁾

According to Silva and Lacordia (2016) ⁽¹⁶⁾, practicing physical activity is part of the habits of a healthy life. It is known that the practice of regular physical activities brings numerous health benefits, such as the prevention of chronic diseases that may arise throughout life, also benefiting psychological and social factors.

There is a cultural belief that overweight is not seen as a problem, thinness is associated with health problems, with this in mind, many parents overfeed their children, leading to overweight, for fear of becoming malnourished. ⁽¹⁷⁾

Obese children end up suffering emotionally due to the rejection of their friends. They also tend to be overweight adults, at risk for hypertension, heart disease, orthopedic problems and diabetes. Childhood obesity can predict some diseases better than adult obesity. ⁽¹⁸⁾

According to the IBGE, through the Family Budget Survey (POF - Pesquisa de Orçamentos Familiares), the weight of Brazilians has been increasing, which has resulted in a decrease in malnutrition and an increase

in obesity progressively. Obesity has been reported frequently in children from five years old, without definition of income and region. ⁽¹¹⁾

An obese child is more likely to become an obese adult, about 80% of obese adolescents remain overweight in adulthood. In addition to physical characteristics, obesity can lead to health complications, such as cardiovascular disease, high blood pressure, cardiac hypertrophy, early menarche, high levels of total cholesterol, orthopedic problems and diabetes mellitus, are some of the diseases that can be developed through overweight. ⁽¹⁹⁾

Obese children have access to medical, nutritional, psychological and social care programs to treat obesity with specificity. There are goals in the National Health Plan to minimize obesity, which are implemented through national guidelines for healthy eating, the transfer of federal resources to municipalities, to finance specific actions to promote healthy eating and physical activity. ⁽²⁰⁾

Studies indicate that in Brazil the priority is not the long-term treatment of obesity, including changes in eating habits and physical activity, public policies are more focused on prevention and not on the treatment of the disease already in place. ⁽²⁰⁾

There is a great need for the development of interventions that help to reduce the prevalence of childhood obesity in pre-school age, these being based on highlights that obesity is linked to the increase in the consumption of caloric foods in the diet and the sedentary lifestyle.. These interventions should focus on changing this inappropriate behavior, seeking to guide not only the child audience, but also their family members, which, in a way, directly influences the change in lifestyle, be it the sedentary factor as well as unhealthy eating. ⁽⁰⁶⁾

The process of preventing obesity

from an early age may be a way to reverse the accelerated increase in this disease. Studies on the intervention of obesity in children in the long term, including changes in behavior and with a sufficient sample size, are still few, but of great value for the development of effective public policies.^(21,22)

That is, in order for interventions to be successful in the face of childhood obesity, it is extremely important that parents contribute to this difficult and painful process that is for the child, who most often suffers from various other physical and psychological problems due to being overweight.

CONCLUSION

There is an increase in the incidence of overweight and obesity in children in the preschool phase, because, due to the lifestyle of many families, there may be an impact on food. The reality evidenced in this study was that, in addition to the children having an inadequate diet, they are sedentary, use technologies for distraction, and practice little or no physical activity.

Another noticeable fact is the underestimation of the child's overweight by parents and family, who end up believing that being overweight is sy-

nonymous with a healthy child. This, coupled with the lack of preparation and care on the part of primary health care units ends up further aggravating the problem, that is, a higher rate of overweight children.

Many study participants showed a certain fear of adopting restrictive diets for their children, which can become a limiting factor for the development of activities in relation to food reeducation. Thus, there is a need for better preparation by health professionals in relation to the correct nutrition of children and also an involvement between these professionals, parents and the school. 🐦

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