

PARENTS' AND TEACHERS' PERCEPTIONS OF PROCESSED-FOODS IMPACT ON CHILD HEALTH

Percepção de pais e professores sobre a influência dos alimentos industrializados na saúde infantil

Percepción de padres y profesores sobre la influencia de los alimentos industrializados para la salud infantil

Original Article

ABSTRACT

Objective: To identify parents' and teachers' perceptions of processed foods impact on child health. **Methods:** Qualitative study, conducted with 19 parents of children and 11 teachers of public child day care centers in a municipality of Ceará State, in the period from January to September 2010. Four focus groups were conducted, audiotaped, and transcribed verbatim. After content analysis, three thematic categories emerged. **Results:** Teachers report that parents are influenced by advertisements diffused on the media and by the convenience of preparation and consumption of processed foods. Parents realize that processed foods are not healthy, but their consumption is common in the households. Despite the provision of free school meals, there are cases of processed foods commercialisation in the vicinity of child day care centers. **Conclusion:** The study demonstrates that there are several factors that may be influencing the intake of processed foods by children, which are not healthy for their health. It evidenced the need for interventions that focus on school and family, to prevent the indiscriminate consumption of processed foods.

Descriptors: Nutritional Transition, Child Health, Child Day Care Centers; Processed Foods.

RESUMO

Objetivo: Identificar as percepções de pais e professores sobre a influência de alimentos industrializados na saúde infantil. **Métodos:** Estudo qualitativo, com participação de 19 pais de crianças e 11 professores de creches públicas em um município do Ceará, no período de janeiro a setembro de 2010. Realizaram-se quatro grupos focais, gravados e transcritos na íntegra. Após a análise de conteúdo, emergiram três categorias temáticas. **Resultados:** Os professores referem que os pais são influenciados pela propaganda veiculada pela mídia e pela praticidade no consumo e preparo das comidas industrializadas. Os pais perceberam os alimentos industrializados como não saudáveis, mas é comum a sua utilização nos domicílios. Mesmo com a distribuição da merenda escolar, existem casos de comercialização de alimentos industrializados na porta das creches. **Conclusão:** O estudo comprova que existem diversos fatores que podem estar influenciando a ingestão de alimentos industrializados pelas crianças, não saudáveis para sua saúde. Evidencia-se a necessidade de intervenções que tenham como foco a escola e a família, para prevenir o uso indiscriminado de alimentos industrializados.

Descritores: Transição Nutricional; Saúde Infantil, Creches; Alimentos Industrializados.

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RESUMEN

Objetivo: Identificar las percepciones de padres y profesores sobre la influencia de los alimentos industrializados para la salud infantil.

Métodos: Estudio cualitativo con la participación de 19 padres de niños y 11 profesores de guarderías públicas de un municipio de Ceará entre enero y septiembre de 2010. Se realizaron cuatro grupos focales, gravados y transcritos en su totalidad. Del análisis de contenido surgieron tres categorías temáticas. **Resultados:** Los profesores refieren que los padres sufren la influencia de los anuncios de la televisión y la practicidad del consumo y preparo de las comidas industrializadas. Los padres percibieron que los alimentos industrializados no son saludables pero que es común su utilización en los domicilios. A pesar de la distribución de la merienda en la escuela hay casos del comercio de alimentos industrializados en la puerta de las guarderías. **Conclusión:** El estudio muestra que hay diversos factores que pueden influenciar en la ingesta de alimentos industrializados de parte de los niños que no son saludables para su salud. Se evidencia la necesidad de intervenciones en la escuela y la familia para la prevención del uso indiscriminado de alimentos industrializados.

Descriptor: Transição Nutricional; Saúde Infantil, Creches; Alimentos Industrializados.

INTRODUCTION

In Brazil, a shift in the nutritional profile has been observed in recent decades, with a significant increase in diseases related to the nutritional excess that has been associated with the improvement of living conditions of some segments of society, technological advancement and modernity. Such process, characterized as Brazilian nutritional transition, has brought to light the need for new explanatory and interventional approaches in the field of nutrition in the country, with a view to developing effective prevention strategies⁽¹⁾.

Obesity is becoming a serious public health problem in Brazil and throughout the world, affecting children of all ages, social classes, races, and ethnicities⁽²⁾. The results of the National Survey on Demography and Health (*Pesquisa Nacional de Demografia e Saúde - PNDS*), conducted in 2006, revealed that overweight in relation to height is a situation present in 7% of children below five years, ranging from 6% in the North to 9% in the South. Such findings indicate a moderate and increasing exposure to childhood obesity in all regions of the country⁽³⁾.

As regards children's food and nutrition, there are multiple associated factors, but the cultural aspects of food can influence the child's health status. The use of processed foods, so common nowadays, seems to be widespread in

children's eating habits, possibly because of convenience, but also as a result of the massive dissemination of the food industry, including the participation of televised media⁽⁴⁾.

Thus when analysing childhood overweight/obesity and the influence of processed foods, we seek to understand the issues concerning the way parents, school, and community perceive children's food and nutrition⁽⁵⁾.

The influence of advertising on food consumption by children has been studied, especially concerning processed foods consumption, with direct impacts on child health.

The persuasive mechanisms used by food companies in their advertisements appeal to elements of the child's imagination, such as animals, gifts, and characters of reference for the child. As a consequence, children are being induced to the consumption of unhealthy foods, with parents unaware of the risks to their children's health and poorly protected by a deficient industry regulation⁽⁶⁾.

The proposed study becomes relevant as it seeks to respond to current issues related to the factors that affect children's health and, at the same time, expands the debate, contributing to the understanding of the phenomenon.

Faced with the complexity implicated in the problems of erroneous nutritional practices, indiscriminate use of processed foods, and often inappropriate eating habits among children, it is essential to realize the magnitude and peculiarities that may be involved in such phenomenon, based on the conceptions and experiences of parents⁽⁷⁾ and teachers.

Therefore, this study aimed to identify parents' and teachers' perceptions of the influence of processed foods on children's health.

METHODS

This study is characterised as exploratory, using a qualitative approach as epistemological pathway. It was held in a municipality of the state of Ceará, with a population of 25,000 inhabitants, in the period from January to September 2010. The study subjects consisted of parents of children aged between 2 and 5 years, and teachers working in 14 public day care centers located in urban and rural areas.

Focus groups were conducted as a technique to deepen the study object, as it enables the participants' engagement in an interactive context, thus better responding to the objectives. Focus groups are used to: (a) focus the research and formulate more precise questions, that is, to go from a general to a particular view; (b) bring complementary information about the group's peculiar knowledge regarding beliefs, attitudes, and perceptions; (c) develop hypotheses for further studies⁽⁸⁾.

Four focus groups were set up at different occasions, namely: 1) at first, a focus group with teachers from urban areas, attended by seven teachers; 2) at a second moment, a focus group with parents from the urban area, attended by eleven parents; and 3) at the final stage, two focus groups were conducted, with the presence of nine teachers from rural areas and other with eight parents.

In focus groups with parents and teachers, their perception of processed foods influence on children's health was discussed.

Recruitment of group participants occurred through the identification of key informants in municipal day care centers (teachers), as well as in the community, by inviting students' parents to participate in the study. The teacher focus groups had their composition defined in agreement with coordinators of the municipal day care centers, which were instructed to identify the ones who were more skilful in speaking and interested in participating in the study. In order to prevent losses and guarantee a minimum number of people in the focus groups, fifteen people were invited to compose each group, including parents and teachers from both areas of residence. This step was used preventively for possible dropouts and loss of a more representative number of research subjects.

The selection of parents to compose focus groups was performed by the directors of day care centers, which were also previously advised to indicate parents who expressed readiness of speech, had available time, and were interested in participating in the planned activities. For teachers and parents from rural areas, a minibus was made available (by the city government) for transportation, since the meeting was held in the city headquarters. Thus the composition of the four focus groups did not involve any operational difficulties, since the survey was widely disclosed within the Municipal Secretariat of Education.

The participants' speeches were subjected to Bardin's Content Analysis technique. The content analysis, as a method, becomes a set of communication analysis techniques that uses objective and systematic procedures for message content description⁽⁹⁾.

For data analysis, the following methodological procedures were adopted: after the conduction of the focus groups, their digital recordings were transcribed verbatim, and a first reading of the prepared material was performed; the reports were organized, the objectives and the theoretical and methodological questions that guided the study were then reviewed; the participants' speeches were mapped, according to emerging issues. This grouping allowed the capture of meanings, the association of ideas, and seizure of the variety of thoughts expressed by the focus groups' participants.

From teachers' and parents' speeches, and based on content analysis, it was possible to apprehend the following thematic categories: 1) *the processed food in children's behaviour*; 2) *processed foods and goodies offered in the vicinity of day care centers*, and 3) *household use of processed foods and reflections on children's health*.

To guide the process of understanding and organizing the speeches, and given the need for anonymity, the following terminology was used: TEACH-UA (focus group of teachers from urban area); TEACH-RA (focus group of teachers from rural area); PARENT-UA (Focus group of parents from urban area); and PARENT-RA (focus group of parents from rural area).

The research project was approved by the Ethics Committee of the Federal University of Ceará (COMEPE Opinion 98/09 of April 30, 2009), thus meeting the principles that govern any research with human beings, as stated in resolution No. 466/12 of the National Board of Health, which regulates research involving human beings in the country.

RESULTS AND DISCUSSION

Characterization of the participants

Nine teachers from rural area and seven from urban area took part in the research. Teachers' average age showed little difference between the groups from urban and rural areas, reaching 34.3 and 38.9 years, respectively. There was no participation of male teachers, given that professionals working in day care centers are mostly women. Differences were observed in their education profile: teachers from rural areas were more qualified than the urban area teachers (50% had completed higher education or were attending college). The average years of experience working in day care centers was 9.7 years for urban area representatives and 4.7 years for those from rural areas.

There was a higher number of participant parents from urban areas (n=11) compared with rural areas (n=8). The average age of parents residing in urban and rural areas was 29 and 35 years, respectively. In each group, there was the participation of one male member, which enriched the discussion about gender and care. Regarding education, two parents recognized themselves illiterate, and the majority (n=10) had incomplete elementary school. The participants' average number of children was 2.6 and 2.4, respectively, for urban and rural areas.

The processed food in children's behaviour

The teachers interviewed reported perceiving changes in the eating behaviour of children attending day care

centers. They also declared that such changes are strongly influenced by commercials shown on the media, which seek to seduce and present an exacerbated consumption of processed foods in replacement of healthy foods, thus creating a “cult of the new and modern”, as described in their speeches:

“I think, as for youth and even the advertisements, I think that is the system. I think that is the current situation, and the child does not want to take a banana to school because the kids will make fun of them. It’s the media issue, it’s about the soda pop, about the teenager who likes that, right?” (TEACH-UA)

“I believe it comes from the media, right?” (Referring to the influence of processed foods on children’s behaviour.) (TEACH-RA)

Teachers are aware of mechanisms, established beyond school and family limits, which substantially interfere in the students’ eating habits. They refer to such influence as an “addictive system” materialized by the media, which causes the child to feel inhibited before their colleagues at the day care center, during the consumption of healthy foods.

In this context, one can perceive that television (TV) currently represents one of the major sources of information about the world available for all income ranges and can interfere in children’s and adults’ behavioural changes. In front of the TV, a small child can learn misconceptions about what is a healthy food, since most of the advertised food have high contents of fats, oils, sugars and salt. There are demonstrations that TV commercials impact on children’s eating behaviour, and that the habit of watching TV is directly related to requests for purchase and consume of certain products and foods advertised by the manufacturers. This problem is aggravated because most of the advertised food is not in accordance with the recommendations of a healthy, balanced diet, therefore helping to increase the number of children with overweight⁽¹⁰⁾.

In other situation, even parents yield to the power of television: rather than eating meals at the table, they began to gather in front of the TV while feeding.

“At home, at meals time, everyone gathers on the bed. Not at the table, no way... It’s on the bed, everybody watching TV...” (PARENT-UA)

In this sense, food industries have broadened their products. Taking advantage of various marketing techniques, they have penetrated into all segments of society, adopting strategies to promote “easiness and convenience”, even influencing indigenous populations’ eating habits⁽¹⁰⁾.

A recent study verified that the content of baby food advertisements is in urgent need of regulation by the

government, since the wrong use can be harmful to health, due to the negative influence they have in both children’s and parents’ decision to purchase⁽¹¹⁾.

Processed foods and goodies offered in the vicinity of day care centers

In addition to the mass media influence on children’s choice of their food preferences, the presence of self-employed people or school employees selling processed products and goodies can be evidenced in the vicinity of day care centers. In such case, even though free school meals are provided, children are led to the intake of processed products, as these are readily available at school, and there is no consumption restriction.

This information was revealed by teachers from rural areas, as shown in these lines:

“[...] There’s also some person working in school who wants to sell, who is exposed there for those children to see... and those children, as they see that different snack, like “xilito” and other corn pops, filled cookies, salty pastries... they won’t want the food brought in the bag lunch, they will have those meals that are being sold at school. [...] At the time of school meals, they don’t eat the school snack. Their infatuation is to have a snack like “xilito” or popcorn... to suck on a lollipop or some ice pop like “dindin”, to chew gum... so it’s hard for us to control them, you see?” (TEACH-RA)

“Because someone comes, somebody comes to sell that at school. It’s not from the school canteen; it’s some people who come from outside and get it.” (TEACH-RA)

“There are mothers who, besides the lunch provided at the day care center, they also give money to their children, for them to buy “xilito”, buy candy, chewing gum... I don’t do such thing.” (PARENT-RA)

The availability and affordability of processed foods near the school entrance have strong emotional appeal to children. They are, in fact, “competitive” foods that can lead to a lower acceptance and adherence to school meals, and therefore cause nutritional problems that interfere in the students’ growth and development⁽¹¹⁾.

However, the consumption and sale of manufactured goods in educational facilities is regulated by the Interministerial Ordinance No. 1,010 of May 8, 2006, establishing the guidelines for the Promotion of Healthy Eating in Childhood Education, Elementary and High Schools of public and private networks, at a national level. That Ordinance summarizes within its terms, in a clear and objective way, the urgency of implementation of programs aiming to provide students with healthy eating, in all the public or private educational institutions. In its clause IV, it

puts restriction on trade and commercial promotion, in the school environment, of foods and preparations with high contents of saturated fat, trans fat, free sugar, and salt⁽¹²⁾.

Despite the existence of a guiding legislation to the sector, a study comprising 26 canteens of public schools in the city of Porto Alegre, RS, found that the foods being offered were nutritionally inadequate, with predominance of goodies - chocolates, soda, and filled cookies⁽¹³⁾. Hence the importance of reflecting on the issue, so that viable solutions can be found within the overall society.

The sale of manufactured products and goodies near the school entrance must thus be monitored, considering that the presence of hawkers selling such products can be a factor that will adversely affect the healthy eating habits of these children assisted in public day care centers. In this sense, it is important that the school, along with other interdisciplinary segments such as the professionals working in Family Health Teams, make the surveillance of intra- and extra-school environment, and perform educational work with hawkers, school canteen workers, and students' parents⁽¹⁴⁾.

Household use of processed foods and reflections on children's health

The parents interviewed in the study understand that childhood obesity is related to the type of food they consume, mainly associating the use of high-calorie, processed foods with the increase in child weight:

"Obesity is also due to the foods. It's about things like "xilito", filled cookies, and other junk foods. Soda makes the child put on a lot of weight, right?" (PARENT-UA)

"I think the most fattening salty snacks are the deep-fried chicken-filled croquettes, fried samosas, and stuff like that, right? Basically, wheat products... It's pizza and such things. I think it's salty pastry what fattens the most." (PARENT-UA)

"When a mother gives a lot of pastry, then the child that eats a lot of it gets obese. The child eating a lot of junk food gets obese too, and I think the mother is to blame for pampering her child in every way..." (PARENT-RA)

However, though parents realize that processed foods are not healthy for children, the systematic offer of these types of food at home is common. Therefore, parents' speech is ambiguous, since they continue to offer unhealthy foods to children, despite knowing it is wrong.

The study entitled *"The Western dietary pattern: considerations about habits changes in Brazil"*, published in late last decade, already pointed a reduction in the consumption of beans, cassava flour, rice, and corn flour

- the most traditional foods in the average Brazilian's diet - with gradual replacement by processed products. The study concluded that this is partly due to modern, globally-spread mind, which disseminates the desire for unlimited consumption and the idea of supremacy of scientific and technical knowledge to the detriment of consumption of regional products associated with strong traditional culture⁽¹⁵⁾.

The trend towards overeating is typical of modern industrial societies. In the past, one used to "eat to live"; today, consumerism leads to "live to eat"⁽¹⁵⁾.

On a large scale, the food industry was responsible for the radical change verified in the diet of Americans and Latin Americans in the last eighty years. The industry flourished within a predatory system, where ethics was subjected to market mechanisms⁽¹⁶⁾. As a result, the number of obese people in the USA and in Latin America has increased radically. In recent decades, obesity and its complications typify a major public health problem, affecting 26% of American youths⁽¹⁷⁾.

Study carried out with 285 students enrolled in first to fifth year of elementary school, aged between 6 and 10 years, showed higher frequency of snacks brought from home to school among the private school students (83.7%), being the most preferred: cookies (72%), soda (54%), and salty snacks (50%). Children from public schools had higher consumption of cookies (68.2%), yogurt (61.9%), and fruit salad (55.6%)⁽¹⁶⁾. On the other hand, a study of obese adolescents from public and private schools in Fortaleza, CE, found that adolescents from public and private schools had inadequate feeding practices, with little difference between them⁽¹⁸⁾.

FINAL CONSIDERATIONS

The present study appears relevant to public health for seeking to deepen the examination of a phenomenon that affects children in the very growth period, especially those who spend much of the day away from their family, i.e., in public day care centers. Parents and teachers reported the use of processed foods as a factor that predisposes children to weight gain, thus contributing to the emergence of overweight and childhood obesity cases. Teachers report that parents are seduced by the convenience of processed foods, besides perceiving the role played by advertising in shaping children's eating patterns at home, showing that there is a strong influence of extra-familial impelling factors (media) that shape children's eating behaviour.

Even though parents realize that processed foods are not beneficial and healthy for children, the systematic supply of

such foods at home is common, appearing like a transition, established from models designed by modern society - an event that has been observed in less economically favoured populations.

Therefore, it is relevant to discuss the problem in meetings with parents and public day care teachers, including the participation of health professionals, in order to show the importance, for the family members' health, of consuming healthier foods and lowering the intake of processed foods.

It was also evidenced that, despite the offer of school meals, the commercialisation of processed foods and goodies near the entrance of day care centers in rural areas. This type of service eventually hampers the school's efforts to offer a more adequate and healthy food for children. To this end, the Department of Education should timely adopt control measures in the marketing of such products and guide the hawkers on the importance of respect to the food being served at school, as a way of protecting children's health.

In an interdisciplinary context, one should also consider that overweight and childhood obesity are issues that should be shared with different forms of knowledge, including not only the health professionals, but also the teachers, physical education teachers, psychologists, in short, all those who are directly or indirectly involved in child care.

Ultimately, it can be concluded that the study corroborates the existence of several factors that might be influencing the intake of processed, not healthy foods by children.

Further studies are therefore suggested, in view of the subject complexity and the need to deepen into its approach.

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