Eating behaviors and the social status of families of malnourished children

ABSTRACT
The objective of this study was to learn about the everyday eating behaviors and the social status of the families of malnourished children. This qualitative study involved eight families. Data were collected by participant observation and semi-structured interviews. Thematic analysis revealed the following themes: family eating; the family’s social status and eating during childhood; and the presence of social programs and equipment. The family did not gather for meals and their food consisted basically of different sources of carbohydrates. Fruits and vegetables were very limited and considered to be food choices that did not provide sustenance. Differences were observed between the family’s and the children’s eating habits. Social programs and equipment provided important support, especially regarding the positive attachment with institutions and professionals and following the children’s health. The family’s social status does not allow the offering of appropriate quantities and quality of food throughout the month, thus compromising the nutritional status of the children, who are deprived of appropriate foods of adequate nutritional value.

PRÁTICAS ALIMENTARES E SITUAÇÃO SOCIAL DE FAMÍLIAS DE CRIANÇAS DESNUTRIDAS

RESUMO
Objetivou-se apreender o cotidiano das práticas alimentares e a situação social das famílias de crianças desnutridas. Estudo de natureza qualitativa envolvendo oito famílias. Os dados foram coletados por observação participante e entrevistas semiestruturadas. A partir de análise temática, emergiram os temas: alimentação da família; situação social da família e alimentação na infância; e presença de programas e equipamentos sociais. A família não se reúnia para as refeições e tinha alimentação baseada em alimentos fonte de carboidrato. Frutas e hortaliças eram escassas e consideradas alimentos que não sustentavam. Existia diferença entre alimentação da família e das crianças. Programas e equipamentos sociais constituíam suporte social importante, com destaque para vínculo positivo com instituições e profissionais e acompanhamento da saúde da criança. A situação social não possibilitava dispor da quantidade e qualidade adequadas dos alimentos durante todo o mês, o que compromete o estado nutricional das crianças, que são privadas de uma alimentação adequada.

DESCRIPTORS
Feeding
Family
Socioeconomic factors
Malnutrition
Child

DESCRIPTORES
Alimentación
Familia
Fatores socioeconómicos
Desnutrición
Crianza

DESCRIPTORES
Alimentación
Familia
Factores socioeconómicos
Desnutrición
Niño

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INTRODUCTION

Food is essential to human life and survival and is considered a basic need and human right. It is molded according to culture and is affected by the organization and distribution of wealth in society. Even though food choices are not regulated only by economic factors —these include acquiring knowledge about food that is specific to distinct social classes— such choices suffer effects accruing from the capitalist mode of production and the organization of domestic units within society.

Child malnutrition is a multi-cause problem, that is, it is determined by many factors. Diverse models have been proposed to explain the genesis of malnutrition. The World Health Organization (WHO) suggests the scheme food-health-care, proposed by the United Nations Children’s Fund (UNICEF), to be used as analytical instrument examining the interaction of various determinants of malnutrition at different levels of society. This scheme shows that child malnutrition is a result of inappropriate diet and diseases that result from lack of food safety, inappropriate care provided by the mother to the child, and deficient health services. The basic causal factors contributing to these sorts of determinants are social and structural, political and ideological, the distribution of wealth and potential resources.

The causes of malnutrition have also been explained through proximal, intermediate and distal determinants. Among the proximal determinants are food consumption and exposure to disease, which would be related to various factors such as the availability of food, the food itself and health care, cleanliness of the environment and antecedent reproductive factors, which are considered intermediate determinants. These in turn are influenced by family income and the family’s ability to rationally use income, which is then influenced by maternal educational level. Hence, income and the mother’s educational level would be distal determinants of malnutrition.

With the implementation of public policies, programs and actions, Brazil has invested in food safety and the promotion of healthy eating habits during childhood, seeking to fight common nutritional disorders in this population, such as malnutrition. Current political guidelines indicate the need to ensure the quality of food available, promote healthy eating practices, prevent and control nutritional disorders and encourage inter-sector actions for effective access to food. Income distribution, distribution of food and nutritional education are tools to be used jointly with prevention and control of prevalent diseases during childhood, such as diarrhea, acute respiratory infections, and immune-preventable diseases, which are essential actions for the promotion of child health and to fight malnutrition.

Even though improved economic, social and demographic conditions, coupled with policies and actions adopted to promote healthy eating habits have considerably changed the nutritional and educational profile of the population, malnutrition stills represents an important health problem in Brazil, especially where poverty prevails.

The daily feeding practices of families of malnourished children can reveal aspects that go beyond those related to the food usually consumed by these families, such as the life conditions faced by these individuals and support mechanisms they use to ensure food and care are provided to their children...

METHOD

This is an exploratory descriptive study with a qualitative approach. This design allows the experiences of families of malnourished children to be captured, while exploring their daily feeding practices in the environment where these occur. The study was carried out in Guaraú, located in the Midwest region of the state of Paraná, Brazil, whose data indicated that about 2% of children younger than two years of age were malnourished based on a weight/age index.

The main researcher collected data between May and August 2008. All children under two years of age from four health units located in the city’s peripheral region underwent anthropometric assessment. Those presenting anthropometric weight/age (W/A) indexes and/or height/age (H/A) indexes below the third percentile were included in the study.

Choosing who participated was intentional, seeking to study the specificities of experiences of families with malnourished children. Hence, inclusion criteria adopted in this study were: children under two years of age, malnourished, in follow-up in health units, and mothers who stayed at home most of the time. Exclusion criteria were: preterm children, with birth weight below 2,500g, twins, with other health problems, attending daycare, being cared for by others than the mothers, and who’s mothers worked out of home. Based on this search, 25 families with malnourished children were found, of which eight families composed of eight mothers, four fathers, eleven
siblings, five grandmothers, four uncles and two cousins, totaling 42 individuals, participated in this study. The children were aged between 11 and 23 months old.

Participant observation and semi-structured interviews were used to collect data focused on feeding practices in households. Participant observation was conducted through weekly household visits to the children’s homes according to a schedule established by the mothers. Seven visits, on average, where held per family, totaling 56 household visits. Each visit lasted one hour and half to two hours. Notations were made during and after each visit in a field diary highlighting elements concerning the study’s focus. Semi-structured interviews were held with the mothers at their households based on a script developed with questions addressing malnutrition in childhood. Interviews were generally held on the last day of the observation of eating habits. They took from 30 to 45 minutes and were recorded with the mothers’ consent. Data were collected through participant observation after gaining the consent of those involved in the study.

Data were submitted to thematic analysis. The organization of all the empirical material was processed during and after data collection. The analysis included readings and re-readings of the transcriptions: skimming, seeking to identify tendencies and relevant ideas of the observed eating practices, and reports of mothers that included their contexts of life.

The project was approved by the Ethics Research Committee at UNICENTRO in Guarapuava, PR, (document nº 0113/2007 COMEP/UNICENTRO) and complied with the standards and ethical guidelines of Resolution 196/96 National Council of Health, Ministry of Health. The participants were identified with codenames in the text.

RESULTS

The following themes emerged from the analysis concerning the eating habits of families of malnourished children under two years of age: Feeding the family; The family’s social situation and feeding in infancy; and Social programs and devices. From the results of the analysis, elements relevant to reflecting on the health of children, which can certainly contribute to improving interventions. Mothers played the role of main caregiver.

The children were characterized as malnourished with weight and/or height below the third percentile, with a history of hospitalization due to infections, especially respiratory and intestinal infections. In the case of some children of adolescent mothers, the mothers’ educational level was low (less than eight years of schooling), some mothers had more than three children and the fathers did not always live with the children in the same home. The houses were in general made of wood, with few rooms and the kitchen was not always equipped with a table, chair, cupboards and a sink.

Feeding the family

Observing the families’ meals was important to grasping how these occurred, what food was available at home and whether there was any difference between the child’s and the family’s meals. Food prepared for breakfast and lunch was usually left on the stove and each would individually self-serve, while the adults served the children; not all the individuals ate at the same time. No families were observed sitting around a dinner table in any of the households. Individuals would eat where they considered the most convenient, so that some would sit on chairs, others would eat while standing up or in front of the TV. Of the four fathers who lived with the children, two had lunch at work, one who worked next door to the house ate later after the children, and another had lunch in the middle of the afternoon because he worked the night shift. Field notes are presented below to exemplify such facts.

The grandfather prepared his plate and went to the living room. One aunt ate watermelon and the other aunt prepared her plate and ate a bit by the sink and left soon (Carolina’s field diary).

The mother prepared the plate of her nephews and oldest son. She put on rice, pasta and potatoes and went to the living room, where all ate sitting on the sofa watching TV (Silvia’s field diary).

The food consumed by the families was not always part of the children’s meals, who generally ate before the adults. Food offered to the children, usually soup, was different from that offered to adults in some homes. The family’s lunch was basically composed of rice, soup, beans, pasta, potatoes and, sometimes, meat. When there were vegetables available, these were not offered to the children, though some mothers reported that vegetables and greens were part of an appropriate diet.

(…) good food, you know, eating a lot of fruit, more healthy stuff (…) food you known, if you give what the child needs, to grow, only greens, fruits, vegetables, this kind of stuff, not junk food, cookie with filling, these things (…) (Evelyn’s interview).

The consumption of greens and vegetables was not observed even among the adults as the following field note shows:

I observed the grandfather preparing his plate. He put on corn flour, beans, rice, pasta, and fried salami and sat down on the sofa to eat (Carolina’s field diary).

Emmanuelle seasoned the lettuce salad with oil, lime and salt. The salad was reserved for her and the mother. The children were not served salad (Emmanuelle’s field diary).

The family’s social situation and feeding in infancy

This study did not directly focused on the monthly income of families, though some mothers and grandmoth-
ers spontaneously reported their salaries, and those of their husbands and other family members.

When the family members received their paychecks, a greater quantity and variety of food was available on the tables, in the pantries and cupboards. During the second half of the month, with a reduced availability of food, meals were mainly composed of staple foods (rice, beans, pasta). Fruits, greens and especially meats were no longer available and would be replaced only with the next paycheck. The reports of mothers and grandmothers also showed that not having meat on a daily basis represented an uncomfortable situation for the children and buying lower quality meats or even sausage was a solution to keep meat as part of their diet, as the following excerpt shows:

(...) she said that they eat when there is no meat but it feels like there is something missing. She likes beef best but ends up buying organ meat, backs, pieces with bones, because these are cheaper. These were usually bought for two days, but depending on the type of meat, it would last only a meal. She said that they never faced a situation when there was no food to eat, but that meat is not available every day and that the children ask for it or question why there is no meat (Clotilde’s field diary).

The use of a wood-burning stove instead of gas stove also indirectly demonstrated the economic situation of families. In two households with six people, the mothers made their own bread. It was the strategy found to save money, as the following shows:

I mentioned that I had seen smoke in the chimney when I arrived for a visit. Then she told me that she had to use the wood burning stove because she could not pay for gas and that she had also made their own bread twice that week (Silvia’s field diary).

There was no financial support, or support was only irregularly provided by the children’s fathers in four households. The controlled use of disposable diapers in four households also showed they had restrictions and needed to make priorities when buying groceries. Hence, mothers and grandmothers reported that children would only wear diapers during the night or when leaving home or either would not use them at all because they could not pay for them.

Social programs and devices

The families also reported several social programs and initiatives in which the studied children participated: Children’s Milk Program, Family Grant Program [Bolsa Família], Community Health Agents Program, Family Health Strategy (FHS), Nutrition Center and the Pastoral Care for Children.

Children’s milk program

Seven out of the eight studied families received 1 liter of milk a day per child included in the program. The mothers reported going monthly to the health units to have their children weighed and some expressed that they had observed that the children had gained weight after they started to consume the milk provided by the program.

(...) I take him to be weighed there in the health unit because of the milk program and the family grant, you know. I always go in the morning, I like to go there around 9, 10am and then he’s already weighed and I’m back at home (Clotilde’s interview).

(...) Now I just give him milk you know, but this milk is more, it is appropriate for them, you know. It’s, it is already working also. I’ve noticed the difference, because he’d gain very little weight per month, sometimes he didn’t gain weight at all, not even 100 g then he started to have bottles, ‘cause I weaned him and he started to eat better, started to have bottles, so he started to gain more weight” (Elizabeth’s interview).

In two households, the milk provided as a benefit to complement the diet of malnourished children was shared with other family members, especially other children in the house.

Family Grant program

Three families receiving the Family Grant Program benefit highlighted the access to the program and values received.

Clotilde says she was registered in the Family Grant program, which was previously called the School Grant program and she received US$ 70.00 per month for the three younger children (Clotilde’s field diary).

Another aspect that emerged in the reports referred to the need to comply with the conditions established to maintain participation in the program.

We take him to be weighed (...) then they weigh him, measure; we go every month (Paola’s interview).

Community Health Agents program and the Family Health Strategy

The Community Health Agent (CHA) program and Family Health Strategy (FHS) were mentioned in the reports and the visits from CHAs were highlighted, as well as the use of the family health unit.

The mother mentioned the use of the health unit, that the FHS physician was thoughtful, asked the same question many times and listened to the patients. She also talked about the nurse, that she liked her very much because she has lent her pieces for the inhaler so her daughter could use it at home; she had to have an inhalation treatment three times a day. She mentioned that the CHAs always visit her in groups of three, that the last time was S. and she was very helpful (Evelyn’s field diary).
Nutrition Center

The Nutrition Center located in Guaraúva, PR, Brazil delivers care to malnourished children in the city and region. Children between zero and six years old who are severely malnourished are hospitalized in this facility and those mildly or moderately malnourished are cared for in the outpatient clinic. Three families mentioned the facility mainly in relation to the hospitalization service, follow-up and treatment for low weight and anemia, as the following testimony reveals:

(... at the beginning I got pretty nervous, didn’t know what to do because she had never been hospitalized before you know, I thought it was something else, then I understood, came to know the women there better (...) they helped me a lot, I thank those who helped a lot, ah I don’t know, all I know is that Marcela got much better after she stayed there. It was good for her and for me, because she wasn’t gaining weight, wasn’t developing, and then after she went there, she started developing, gained weight, she is even eating better (...) (Carolina’s interview).

The mothers expressed concern with the hospitalization or follow-up of their children in this facility but highlighted the bonds established with the professionals, recognized them as supportive and perceived that children started to gain weight and improved their appetite.

Pastoral Care for Children

In relation to the actions implemented by Pastoral Care for Children, the benefits concerning following up in regard to weight, eating, clothes and others were highlighted.

The grandmother mentioned that she took Lorena to the Pastoral once a month. They weighted her, gave her the multimixture [bran-based cereal mixture] and soup with many diced vegetables. She said that Lorena liked and ate the soup (Celia’s field diary).

DISCUSSION

The families’ diet was basically composed of food rich in carbohydrates and sometimes meat, while some children ate soup. It is important to consider that given the children’s small stomach capacity they do not meet their energy needs when food is diluted, as it the case of soups, which is common among Brazilians, and should therefore be discouraged due to its low energy density(6).

The population from the lower economic classes classify beans, rice, meat, pasta and corn as a meal and in their representations these appear as strong foods that nourish and sustain, ensuring resistance, ability to work and halt hunger, prolonging the feeling of satiation. On the other hand, vegetables, greens and fruits are considered foods that serve to cheat hunger and are associated with eating light, not satiation. It is not about a lack of knowledge from the population about the nutritional value of fruits and greens but the feeling these foods leave(10-12). In fact, a study performed in two slums [favelas] showed that fruits were not included in people’s diets, and low proportions of greens and meats were consumed(12).

The studied children did not have the habit of sitting with the family around a table. This furniture was not available for them to have their meals, which may limit the socialization process and food intake of the studied children. Mealtime is not only important for the growth and development of children but it also provides an opportunity for socializing(11). It is a rich opportunity for children to share this moment with a family member, whether the mother or father, siblings or some other close family member. Being with another is essential for human beings and can contribute to the establishment of good eating habits, reflect on the consumption of food, and on children’s nutritional status(6,11).

Given the capitalist mode of production, daily meals suffered profound transformations. Family eating was reduced in the same way mealtime was reduced. This is usually shared with other activities such as working, watching TV, walking and studying. The types and schedules of work and children’s school schedules interfere in daily mealtimes in urban homes(1).

Home visits enabled us to verify how economic issues interfered in the family’s eating habits and, consequently, in the children’s eating habits. Perishable food was consumed before the end of the month, families used wood-burning stoves, the mothers prepared bread at home, could not count on financial help from their children’s fathers, and some children did not use disposable diapers.

A study addressing eating habits of children younger that three years of age, at nutritional risk, revealed that in addition to meat, fruits, greens and vegetables are also those that are most frequently lacking in households. When a hierarchy is adopted, staple foods gain priority in grocery shopping(13). A study consisting of surveillance of risk factors and protection factors against chronic diseases conducted through telephone interviews in 26 Brazilian capitals reported that the consumption of fruits and vegetables tended to be greater among women compared to men, and increases with greater educational level and aging. The consumption of meat with excess fat tends to be more frequent among men and decreases in frequency with aging and higher educational level(14).

A study of mothers of low-weight children revealed that infant malnutrition is seen as a set of deficiencies, especially a lack of resources and food, which originates in their economic situation and a lack of maternal care, or is even related to the child’s nature(15). Another study investigating the eating habits of individuals living in slums verified that when there was no gas available, they would prepare food on the ground, which shows the development of strategies to survive(12).
Lack of financial help from the children’s fathers concerned mothers and grandmothers; the basic needs of children, such as food and medication, were not met, in addition to other activities such as leisure. In addition to the process of growing up without a paternal figure, the fact that fathers did not live with the family compromised the domestic budget of the studied families, who could not count on financial help to buy food and essential commodities, which aggravated the nutritional deficit of the children.

The results reveal that the families participating in this study presented important Food Insecurity (FI), which can be considered severe even though it was not directly measured. The Brazilian Household Sample Survey conducted in 2009 revealed that the prevalence of households with people with FI was 30%, distributed in mild (19%), moderate (6%) and severe (5%) levels. Even though these rates declined in relation to the survey from 2004, the study showed that FI was even greater in households with children, decreasing as the age of the residents increased[18].

The studied families participated in welfare programs implemented by the state and federal governments. The Children’s Milk program is a social program implemented by the state of Parana, which began in 2003, aiming to reduce the nutritional needs of the poorest population through actions that contributed to reduce child morbidity and mortality and also malnutrition. It focuses on children from six to 36 months old, and gives priority to those from families whose average per capita monthly income is below half of the minimum wage. The families receive 1 liter of liquid milk a day per child registered in the program and have to monitor the weight of children in health units once a month. The milk is distributed to mothers or the individual legally responsible for the child in the city’s public schools[18].

The fact the mother has to take the children to monitor their weight may promote the identification, follow-up and recovery of malnourished children, because it conditions the contact of mothers/caregivers with the health unit and professionals, who can help to prevent childhood diseases. Given the program’s goal to improve the nutritional status of children, weighing children[8] is one of the strategies used to verify whether the program is effective or not, though this is not the only strategy that can be used to assess the program’s effectiveness. Further studies are needed to verify other aspects relevant to the issue.

The milk received for feeding the children was shared with other family members. A similar situation was found in another study verifying how the family dealt with child malnutrition. It was common among the studied families to share the milk received with all the family members[17]. Women living in two slums in São Paulo complained that the men exchanged the milk provided by the Program Viva Leite [Live Milk] for cigarettes and children were sent to the health unit itself to re-sell the milk the family received[12].

The mothers who participated in the Family Grant program also mentioned complying with the anthropometric control of children, which monitors their nutritional status. This reveals that control was accomplished, given their inclusion in more than one welfare program that are in general focused on families from lower economic strata. Despite the importance of the program for the studied families, it is merely a welfare policy. Considering that nutritional deficiencies are closely associated with the structural problem of poverty, the complete eradication of malnutrition depends on the eradication of immense social and economic contrasts, which arise and are maintained by the production process, so that its control requires policies addressing the availability of jobs and improved education[15,18].

Bonds have been established among health professionals (physicians, nurses and CHAs) and the studied mothers, which indicates positive relationships. These relationships were even more important in the case of nutritionally compromised children, who are more susceptible to infections and diseases. Positive relationships allowed caregivers to maintain continuous contact with health professionals and also facilitates restoring the nutritional status of children and the early identification of children with diseases.

The establishment of bonds between the health team and users ensures ties of trust and co-responsibility in the work performed by professionals jointly with users. Strategies such as listening to patient complaints make users feel important and increase patient willingness to trust in professionals, consequently promoting the establishment of bonds. Quality care leads users to feel their rights as citizens are heeded and respected[19].

Health problems should be addressed through intersector actions because such problems go beyond the sole responsibility of the health sector. However, current public policies, in general have a dependency-creating welfare nature and do not effectively improve the population’s working conditions and lives[20]. The studied families considered the social programs and devices an important social support; the positive bonds established with institutions and professionals that monitor the children’s health were also highlighted.

It is essential to ensure comprehensive public policies and effective social inter-sector policies with programs structured and planned to improve the life conditions and health of individuals[20-21]. Current political guidelines highlight the importance of ensuring the quality of available food aiming to promote healthy eating practices, prevent diseases and control nutritional disorders. In addition to encouraging inter-sector actions for effective access to food, networking is essential if health professionals and other social sectors are to cooperate with and connect actions to the delivery of integral health care to children and families[7].
CONCLUSION

This study explains differences existing between families’ and children’s eating habits. Families do not gather for meals, their meals are primarily carbohydrate-based, which are more accessible to lower classes and prolong the feeling of satiation. Fruits and vegetables were considered to be foods that do not stop hunger and are not a priority. When there are fruits and vegetables available, these are not offered to children.

The social situation of families do not allow them to have sufficient quantity and quality of food over the course of the entire month, which represents a severe FI directly compromising the nutritional status of children, who are deprived of an appropriate diet, which is itself an essential human right of citizens.

Families and children participate in social programs and devices that distribute food, transfer income and monitor health. According to the reports, the participation in these programs requires compliance with certain conditions, which in addition to improving children’s nutritional status, also promotes nutritional surveillance and represents an important social device.

Knowing the environment where families live, their social situations and daily eating habits helps health professionals to improve interventions that promote health, which includes healthy eating habits with appropriate, socially and culturally accepted foods. Such knowledge also helps address nutritional disorders such as malnutrition. The families’ context reveals rich elements that contribute to the delivery of integral care, especially related to child malnutrition, which requires an integrated view of social vulnerabilities, since the malnutrition issue goes beyond the exclusive responsibility of the health sector, demanding inter-sector actions to fight it.

It is worth mentioning that this study was limited to deepen the view of the daily eating habits of some families with malnourished children cared for in four health units in a single city. Even though this study’s results cannot be generalized, they portray important particularities of families that indicate the need to explore their daily eating practices, the participation of family members, the places where meals are served and the families’ experiences, which are essential to linking the health-disease continuum to concrete contexts. It is also worth noting that further research and other opportunities to discuss the issue can reveal further dimensions of the problem, important for the development of studies that investigate and evaluate the effectiveness of social programs and devices for these families.

REFERENCES


