

Children Live, Feel, and Respond to Experiences of Food Insecurity That Compromise Their Development and Weight Status in Peri-Urban Venezuela^{1,2}

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Abstract

Children's experiences of food insecurity (FI) may be conceptually distinct and different from those of adults. Previous study of children's experiences of FI has relied primarily on their parents' perspective. This study explored, described, and conceptualized experiences of FI in children attending 5 public schools in peri-urban areas of the Miranda State, Venezuela, South America using a naturalistic approach. Children aged 10–17 y were studied through focus groups ($n = 42$) and individual interviews ($n = 13$). Interviews were recorded, transcribed, and analyzed using grounded theory. Children were cognitively aware of FI, worry in their parents, and causes both external and internal to their households. Children were also emotionally aware of FI, with feelings of concern, anguish, and sadness, and manifestations such as crying. Children reported being physically hungry, experiencing reduced quantity and quality of food intake, having smaller meals, and recognizing thinness and fainting as consequences. Children's responses to FI included reduction of quality and quantity of food, child labor, sacrifice in food consumption, food from waste, support from extended family members, and strategies for purchasing, acquiring, preparing, and cooking food. Children were not always protected, especially when the head of the family was unemployed, had drug-alcohol problems, or was extremely poor. Protection could come from parents to children and from older children to parents and younger children. Children should have certain access to food that is dignified, timely, efficient, and adequate in harmonious social conditions to prevent and resolve situations that compromise their physical, cognitive, and socio-emotional well-being. *J. Nutr.* 142: 1343–1349, 2012.

Introduction

Research investigating the behavior and response of people facing situations of food insecurity (FI) has provided an understanding of how people experience it (1–9). Most studies have focused on the perspective of adults, especially women (1,3,4,8,10–13) or seniors (5–7), whereas only some have referred to FI in children, although parents were interviewed (14–18).

Children's experiences of FI may be different from those of adults in 2 ways. First, what children experience of FI may be conceptually distinct from what adults experience (19), stemming from children's developmental vulnerability, limitation in managing financial resources, lack of independence, difficulty in preparing food when alone, and inexperience handling scarce moments. Children experience cognitive, emotional, and phys-

ical awareness of FI, participate in parental management strategies, and initiate their own strategies to manage FI and generate resources (19). Second, not all individuals in a household may have the same experience of FI, depending on the intra-household allocation of resources and possibly other factors (9,20,21). FI reported at the household level exceeded that reported by adolescents at the individual level in Ethiopia (22). Similarly, in Zimbabwe, children reported lower FI than did adults, except in better-off households, where children were often more likely to report FI than adults who work in the formal sector, using measures related with income and assets (quality of housing). They concluded that children are more likely protected from FI in households that reside in higher quality housing but not in households where the head earns a relatively high income (23).

These studies and others used quantitative methods by adapting and applying to children instruments originally designed for adults (24–27). One cross-sectional study using mixed qualitative and quantitative methods with the aim of determining the food sources and acquisition practices used by homeless youth ($n = 150$) in Adelaide, Australia found that the

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use of welfare food sources was high (63%). Youth supplemented food from welfare agencies with unorthodox food-acquisition methods such as theft (65%), begging for money for food (61%), begging for food items (44%), and asking for help from friends and relatives (34%). Reasons given for nonusage of welfare food services included affordability, access, being too busy, shame, or embarrassment (28). These reasons emerged from the qualitative component of the research, highlighting the value of insights from qualitative research to complement what is learned from quantitative research on the extent of the problem.

Two previous qualitative studies provided naturalistic evidence of children's experiences of FI, both in a high-income country, the United States. In the first, children reported on others' experiences instead of their own, providing valuable information but not a comprehensive understanding about children's experiences in their family context (29). In the second, children reported on their own experiences, which were distinct from those reported by parents about both children and themselves (19). We are not aware of any similar study of the perspectives of children about FI reported from low- or middle-income countries. Conducting such studies is important to understand to what extent children's perspectives about FI are universal and how their perspectives may differ with cultural, social, and physical contexts.

This study sought to explore, describe, and conceptualize experiences of FI in children attending public schools of peri-urban areas of the Miranda State, Venezuela, South America using a naturalistic-constructionist approach (30,31). The study addressed 6 questions about children's experiences of FI: 1) What happens to children because of FI? 2) What are the eating patterns of children living with FI? 3) What are the physical characteristics of children associated with FI? 4) Why and when does FI happen? 5) How do children face FI? and 6) Are children protected by their parents or caregivers from FI?

Methods

The population in Venezuela is 28.4 million, of which 19.1% are between 10 and 19 y. Since about 1960, Venezuela has had wealth and prosperity created by oil that has lured people away from the land and toward the cities. Today, 92% of Venezuelans live and work in urban centers. Although oil's riches have meant that the average Venezuelan has a per capita gross domestic product of US \$4063/y, FI has soared in the last decade due to rising costs and a lack of access to basic goods. The poorest sections of society, and in particular thousands of small farmers, have suffered most from this situation (32). According to Statistic National Institute, the Human Development Index is 0.82. Venezuela currently imports one-half of the food products it consumes (33), so its international dependency is high.

In Venezuela, Lorenzana et al. (11) found 78% of households had self-perceived household FI in 1999. The most common household indicator of FI was lack of food money. The items assessed reflected within-the-home adjustment strategies to cope with constrained resources: buying fewer essential foods for children, reducing the usual number of home meals, household members eating less food, and adults reducing the number of usual meals or eating less at the main meal. Experiences of adult hunger were more commonly reported than children reducing their usual number of meals (11). More recently, a cross-sectional study of adolescents found that 54% were in food-insecure households (27). Official data on the national prevalence of household FI have not been published.

The children studied attended 5 public schools in the Baruta and El Hatillo Municipalities of Miranda State in Venezuela. In Miranda state, 9.1% of the children between 7 and 16 y are out of school (33). The selection of children was purposeful, following suggestions from

teachers and through observation, to obtain strong cases exhibiting FI (30). In the initial penetration stage into the community, the principal, the priest, and community leaders played a fundamental role, because they were well known and respected in the community. Seven focus groups were carried out with children ranging in age from 10 to 17 y (with one girl aged 17 y and the rest from 10 to 15 y). Each focus group consisted of 6 children ($n = 42$) from 4th to 9th grade and grouped with classmates. As the interviews progressed, theoretical saturation was reached, which implied the absence of new data (30,34). In addition, 13 children of the same age and who were not part of the focus groups, were interviewed individually. These interviews were conducted in a private classroom to ensure the necessary silence and confidentiality. The aim of these individual interviews was to verify the information obtained from the focus groups and to gain in-depth information not easily obtained in the focus groups.

Focus groups and in-depth interviews followed a guide of open, semistructured questions (35) (Table 1). Some questions were based on the guide of Connell et al. (29). The interview started with a game of words related to food. In the guide, when children were asked about quantitative changes in food at times of shortage, models of dishes and foodstuffs of ordinary consumption such as rice, black beans, bread, and cheese were used. Use of visual material aimed at breaking the monotony of the conversation and encouraging active participation. In classrooms where group sessions took place, faces of all the participants could be seen. Children were informed that sessions would be recorded with audio equipment. The presence of the recording machine was not intrusive and did not interfere with discussion.

All focus groups and in-depth interviews were conducted by the first author who is a native Spanish speaker, was trained in and previously led qualitative research, and had prior experience working with children. The process was an open conversation in which each participant could speak at any moment. An observer accompanying the facilitator (a social worker, anthropologist, or nutritionist) took notes of the discussion and observed the children, their appearance, attitudes, and disposition. Each focus-group session lasted between 60 and 90 min, which was the maximum time the children paid attention. After this time, they began to

TABLE 1 Guide of open, semistructured questions

What is your favorite food? When do you eat it?
What did you eat yesterday? Did you enjoy your food?
At home, is the food that is bought enough to feed all the people? Why?
At home, is the food that is bought enough to feed children and/or youngsters? Why?
In which situations is there a shortage of food? At what time of the month or what time of the year?
On this plate, you can assemble a comparison with the quantity of food at those times when there is shortage of food.
When there is not enough food at home:
What do your parents do? What does your mom do? What does your father do?
What do the children do? What do you do?
When there is not enough food at home, how do meals vary?
Have you ever met any children from a family that are worried, anxious, or sad because the food is running out and they don't have enough money to buy more? You can tell me about any experience.
What do these children do?
Did the kind of food of the families change when they were worried?
What do they eat when the food runs out? Where do they get it from?
For you, what is an undernourished child?
Do you know any child from your community that is undernourished?
Do you know any child that goes hungry? What do they feel? Why do you think they go hungry? How do they solve that situation?
Have you ever been hungry? What did you feel? Why did it happen? How did you solve it?
What would you do to have enough food in your house or in your friends' house?
Do you know how to cook? What do you cook?

show symptoms of loss of attention such as playing and asking permission to use the restrooms. The first focus groups were longer than the later ones because of the novelty of the information. In the later sessions, the facilitator conducted the discussion of the points already covered by other focus groups more quickly, if the information generated was similar. The in-depth interviews were shorter, lasting ~20–30 min. Due to the sensitivity of the topic, superficial themes such as cooking recipes made by the children or nice anecdotes were used at the end as a way to “cool down” the conversation and forget the interactions (29).

To ensure quality control, immediately after each interview was completed, the quality of the sound recording was verified. In case the sound was not clear, notes were taken to avoid loss of information. The recordings were subsequently listened to several times, transcribed, categorized, interpreted, and analyzed (34,36,37).

Analysis and interpretation of the data were iterative and integrated until theoretical saturation was reached by using a process of interview coding that permitted the disaggregation of the data, reassembly in a new way, and the verification of the analysis with the other researchers. The most striking terms of the interviews were coded in MS Word and then were related to one another for the construction of the themes. These emerging themes were integrated in a logical structure (34,36,37). Each interview was initially individually coded and analyzed, and then the data combined. The data from focus-group and in-depth interviews were integrated. The depth of the data that emerged usually was greater from the individual interviews compared with the focus groups. For peer debriefing during the analysis, 3 specialists in human behavior, nutrition, and food security read some interviews and captured the different themes that were emerging. For some themes, the direction of the analysis was clear; for other themes, clarity was achieved after a discussion between the first author and the specialists.

The study protocol was reviewed and approved by the Bioethics Committee of the Universidad Simón Bolívar. The consent of the parents or legal guardians to allow participation of children in the study was requested; also, the children were asked to express their willingness to participate. All of the process was confidential and the child could abandon the study at any moment if desired. Only 2 teenagers declined due to lack of interest.

Results

The themes that emerged from the focus groups were: conscientiousness of the poor environment and scarcity associated with FI and hunger, absence of 1 or 2 parents, inadequate social support for the children, monotony of diet, role of family and friends helping in scarce situations, insufficient and low-quality meals, poor nutritional consequences, child labor, and others. Each of these themes also emerged from the in-depth interviews, but in addition, the following themes emerged only in the individual interviews: worry about food scarcity, shame due to lack of food, keeping food for moments when food is scarce, presence of drugs, robbery, self-sacrifice (eating less or not eating to protect other family members), and eating food from garbage.

Characteristics of the children and their environment. We observed that participating children had different personalities and varied in physical appearance. Some were open and receptive, whereas others showed distraction or lack of interest. The children were typically undisciplined (i.e., not following rules), which showed on numerous opportunities during the fieldwork. Although some children did not respect principals, teachers, or their classmates, the majority participated in the interviews openly and spontaneously. They showed interest in the novelty of being visited by people different from their context and wanted to participate in an unusual activity. Two 15-y-old children withdrew after the focus group was started; this was accepted by the rest of the classmates, and other students were invited to substitute. In the in-depth interviews, no child withdrew; they participated voluntarily and were in a good mood.

The clothing generally indicated a situation of material scarcity; they had old, stained shirts and worn-out shoes. With the exception of a school managed by religious Catholics, schools showed a deteriorated physical environment. Class schedules (i.e., having a full day in the school) were often unfulfilled for different reasons such as lack of water, maintenance of green areas of the school, or absence of teachers. Schools were characterized by high socioeconomic vulnerability and personal insecurity.

What happens to children because of FI? Feelings of concern, anguish, and sadness and expressions such as crying occur in children experiencing FI. Some of them show it, others talk about it with other children, and others resign themselves or remain silent. These feelings arise because children notice the food shortage in their home and in their immediate surroundings and because they notice the worry in their own parents. The following comments indicate knowing what they feel but not always showing it:

He states with monosyllables that he does “not” feel anxious, but “sad.” I tell my cousin [8 y] . . . not to my mother because she scolds me” (boy, 11 y).

I know some children who get desperate . . . they look for fruit on the trees and start eating . . . like guava, orange, passion fruit. Sometimes they go to the neighbors’ houses and they give them food. . . . I see them sad, you can see it on their faces . . . they look bad . . . they’re crying all the time. (girl, 13 y)

Because he is desperate and later when he comes in the evening he does a little shopping there . . . I feel bad. (girl, 10 y)

What are the eating patterns of children living with FI? Poor dietary intake is one of the experiences reported by children, including reduced quantity of food:

In my house, we eat little, my younger brothers eat first and then I do it. (girl, 10 y)

When I am served little food like this, and there isn’t more, I resign myself. I’m still hungry, but I resign myself all the same. (boy, 12 y)

Afternoon school schedules alter the waking-up time of the children, resulting in 2 meals/d, at the expense of adequate quantity of meals recommended for children:

I have two meals . . . breakfast and dinner . . . I don’t feel very hungry. . . . (boy, 15 y)

The quality of the diet is also diminished because of lack of resources to acquire or produce food. The lower quality occurs with less animal protein and more sources of carbohydrates or other cheaper foodstuffs being used.

My dad was not working and my mom didn’t have means to buy it; sometimes we have to eat an “arepa” [Venezuelan preparation with precooked cornmeal] for breakfast, plain like that, or with a little butter. (girl, 12 y)

A 13-y-old girl denied that this was happening at her home at the beginning of the interview, but later accepted it surreptitiously, talking on the topic:

When there isn’t a food shortage, the meal is larger, including a plate with three dishes and a drink. (girl, 13 y)

What are the physical characteristics of children associated with FI? Children expressed that lack of money and/or food is

associated with physical alterations of the body. Children do not understand the term malnutrition, although they understand the concept undernutrition, which they associate with “thin,” “undernourished,” or “sick” children:

The parents don't have enough money and they become thin. (boy, 13 y).

I know some very thin children that are on the street. No one goes out to work. They are thin and they don't eat. There are 7 children, all brothers and sisters, older and younger than me. They go to my aunt's grocery shop and ask for credit. (girl, 11 y).

Others come to school without food. Once, a kid fainted here [school], because there was no food in his house and he hadn't eaten . . . since it was recess time, a teacher bought him a snack. (girl, 13 y).

They are like thin, extremely thin, and their small head is like bigger than the body . . . at the hospital, at the children's hospital I was taken, I saw about ten children like those. (girl, 13 y)

Why and when does FI happen? Some reported causes of FI were situations external to their households: general strikes, inadequate infrastructure of roads or services such as water, electricity, or gas, national holidays, and environmental problems such as the rain. Other reported causes are inherent to the family, such as lack of resources, unemployment, absence of one parent, adult roles that children must fill, illnesses, large households, use of alcohol and drugs, and theft.

Regarding some of the external causes that affect FI, children answered:

When the grocery shops close during strikes. Not at any other time of the year . . . when it is a national holiday that the grocery shops don't open . . . when one cannot go out, because the roads are blocked . . . [this happens when it rains, because the roads are unpaved and difficult to access]. (boys-girls, 11–12 y)

And sometimes there is no food, because sometimes . . . we are left without gas . . . we wait for our father to bring bread and juice. (boy, 11 y)

In January, in January we're broke" [referring to the shortage of money to buy food at the beginning of the year]. (girl, 15 y)

Among the family causes reported by children, lack of economic resources stand out, especially dependency on only one source of insufficient income without any other economic source, which can make a household vulnerable days before collecting the next salary. Other elements found were unemployment, disease, and use of tobacco, alcohol, and/or drugs by any member of the household. The following comments reflect vulnerability of the ability to feed associated with wages, unemployment, illness, or drugs.

Last year it was lacking, because my father had not worked, had not yet started and my mother left the school canteen, then, the food was lacking. (girl, 12 y)

They are four children [my cousins] that live with the mother (her aunt), but my uncle is a drunk. Then he gives them a hard time. (girl, 13 y)

That is my cousin, well his father smokes drugs . . . so he carries water and does jobs like those so he can buy [food] for them . . . he is around 9 or 10 y old. (girl, 12 y)

How do children respond to FI? Children were asked about the strategies of their parents, other children, and themselves

when there is not enough food at home. Their goal is to stretch the food, improve domestic distribution, and increase income, and, for this, they turn to acquaintances and relatives to ask for money and raw or cooked food:

Uh, if there is money [for food], uh, anyone of us, my mom, my dad or I go out and buy it immediately and wait five or ten minutes, there is a grocery shop nearby and they sell everything there. If we have money . . . and if not, well, if not . . . we eat whatever there is, if there is something missing, we go out. As I told you, to my aunt's that she does have or to my grandmother, anyone, . . . if not . . . cook whatever there is, and if there isn't anything, we go to the bakery to buy bread and if not, well, we go to other houses, we call first and ask them if we can have lunch there or maybe dinner, I don't know. (girl, 15 y)

They do all they can to give us food [referring to the parents], so we don't run out of anything, so we don't become thin, for their kids to grow healthy and strong. That is how parents do it sometimes, at least my parents can do it for others, sometimes we are left without food, they ask for, they borrow [money for food], they borrow from my grandmother, on loan or from the people that live there, she borrows from them and later when she works, she pays them, leaving no debt. (girl, 11 y)

FI is relieved by the use of foodstuffs from the farm, grown for its consumption and/or sale, or from subsidized programs like the school snack:

Well, if there is no food, we take a little bit of that, like tuna and eggs, because we have a lot of hens, then we take eggs and tuna, and one pita or rice. (girl, 12 y)

They come without breakfast, without lunch and here [at the school] they give them their snack, they eat up to two or three bread rolls. (girl, 13 y)

There is a change in the domestic distribution of food with FI. Food is prioritized according to the vulnerability of the person. To improve distribution, the size of portions is reduced to make inventory last until there is more money to buy food:

Sometimes, my mom doesn't eat much, but there are times, that, for example, my sister likes, she loved the meal, and then she wants seconds and my mom pleases her . . . and my mom eats less. [Later, she was asked who eats less in second place, and she answers:] I, I eat less . . . I decide that. (girl, 15 y)

My mommy sometimes doesn't eat. (girl, 11 y)

The rupture of methods of household saving arises. In homes with a low economic level, there is a savings tool called a piggy bank, where money for special situations is kept. In case of food shortage, the piggy bank is used to obtain money. An 11-y-old girl said, “I draw from my piggy bank and buy fruit.”

FI results in higher valuation and appreciation of the food, though sometimes it is wasted:

No waste . . . Don't ask when I don't want something . . . Ask for what I am going to eat . . . Don't take it if I don't want something . . . I place it in the fridge and heat it later . . . Make [food] only what is needed . . . Not to waste, preserve, not to throw away. (boys and girls, 11–12 y)

People just now in carnival, throw away the eggs and toss them to people's heads [game during Carnival festivities], and those eggs can be useful for something, even to make yourself an omelet in the morning, for the arepas, to make yourself something . . . but . . . to throw it to some people on the head for nothing, only to see it on the head, I eat it. (girl, 11 y)

Sometimes I don't pay any attention, but sometimes I start to think and say: my mom who is the one that buys the food, sacrificing herself to buy, for it [the food] to go to waste, but sometimes I am one of the first ones to waste it. (boy, 14 y)

Food considered valuable is restricted. There may be a restriction to the access to certain foods considered expensive but essential for the proper growth and development of children (e.g., milk). An 11-y-old boy commented: "my dad hides the milk."

There is a change in the pattern of activities; children try to deal with hunger doing something else:

I am satisfied and sometimes in the morning I eat some arepitas [typical corn bread] or when there is nothing at home, I am not sent to school, because there is nothing to take and sometimes the older ones are sent, because sometimes we eat, sometimes we don't, but in the evening is when I eat more. (girl, 11 y)

I go to sleep or eat bread. (boy, 12 y)

None of the children admitted having sought food from trash, but a couple of interviews revealed that it is a phenomenon close to some children:

My uncle takes out from the trash to eat. [He was asked if he shared that food with someone else, and the child states:] Yes . . . with some children . . . that are friends . . . [He thinks that:] They should not be insulted because one could be like that at any time. (boy, 11 y)

We see them sometimes, in the containers, then they get inside, take things, trash, they eat it, they take things from there, see cookies, they eat them. (girl, 11 y)

Other strategies not directly involved with obtaining food arise when other means of obtaining food are exhausted. A passive strategy is to change activities "to forget" that they are hungry, like playing or watching TV:

A 13-y-old teenager refers to it with disdain: "I don't do anything; I go shopping or to my grandmother's or to play at my grandmother's, I eat there."

Nothing, I watch television, and when my brothers arrive from school, we start to play, and nothing else, later we do the homework and go to bed. (boy, 12 y)

One of the experiences in responding to FI and hunger is child labor. It occurs due to the lack of income in the home noticed by the children. Work allows them to generate income to help their parents buy food and satisfy other needs. The children know that if the flow of income to their households increases, the food situation improves and the variety of foodstuffs increases as well as quantity of some specific foodstuffs. When asked about their own strategies for when food is scarce at home, they answered that they have looked for temporary work, aiming to help with the situation in their house. Jobs such as polishing shoes, packing groceries at supermarkets, or doing shopping for others are activities that occur informally at first, with piecework jobs, with low pay. Later, they take formal jobs, where the children sacrifice their study and recreation time:

Right now, one of them, stopped studying first year of high school and started working, he doesn't want to study anymore. (boy, 13 y)

No, I don't know . . . I sometimes would like to work to help my mom to buy more food. (girl, 14 y)

They start working polishing shoes or cars and with the money they buy food. They look for a job at the grocery stores . . . packing, and he gives his payment to his mom. He is 13 y old. (boy, 11 y)

Yes, sometimes when I feel like eating snacks, I start to work. I carry water for someone so I am given money to buy snacks.

[When asked about the price of the service, he stated:] The bucket about two thousand [half dollar], the drum around ten thousand [two and half dollars]. [Sometimes, he carries] sand . . . like a small sack more or less empty. Well, I leave school, do the homework and . . . I start to work . . . Not today [referring to work], my shoulder hurts a lot. (boy, 11–12 y)

I know a kid, he runs errands [child work] because he is given a little [money] . . . that house is always a mess and he is always in the street. [When asked if he goes to school, the girl answers:] No, he doesn't go to school. (girl, 11 y)

Are children protected by their parents or caregivers from FI? Protection regarding food intake comes from different directions: from parents to children, from children to parents (especially mothers), and from children to children (especially younger and poorest):

When there is not enough food, my little brother eats first. In my house, there are children aged 3, 4, and 7, if there is food left, I eat and my parents eat last. (girl, 11 y)

My mom eat less . . . my brothers and sister didn't care about that . . . but I am worry. I tell my mom that she needs to eat. She usually eats too little. (girl, 15 y)

I eat less. If I am going to eat with my sister and there isn't much food, I give her more. I serve a little more [food] to her than to me. (girl, 15 y).

I knew the kids of a woman, that is always on the street. When he [father] arrives he prepared the food for their children, but after that, the kids are hungry . . . The kids are always on the street, and the boy (11 y old) left school, and began to work. He didn't want to study more. He began to work in a small shop. (boy, 13 y)

Sometimes, parents hide situations of food shortage from children. But there comes a time when the children begin to be more aware and alert faced with these moments. Not only can they notice their own situation but also the situations of their parents and other children in their surroundings:

They [the children] do notice, but the mother tried to hide it. [i.e., referring to another girl that is going through a situation of shortage of food. She went on:] Oh, you know that . . . I have a neighbor that hides from her children that they don't have food. (girl, 10 y)

They try to find a way to buy something. Mom buys in Mercal [subsidized food market]. Nothing, I keep quiet. (boy, 11 y)

Some conditions related to the care and attention of the family but not associated with lack of income or food in the household can influence the child to feel he or she has protection against FI. A boy emphasizes that when he is alone in his house, he does not feel hungry:

I went to make some food, then the girls and my little brothers left and I was left eating alone and . . . my hunger disappeared. (boy, 10 y)

From as young as 10 y, the children begin to lose protection from their right to an adequate childhood, acquiring responsibilities considered appropriate for adults. Activities like cooking and taking care of younger siblings are present in food-insecure households, leaving the children less time for activities proper for their age like studying and recreation.

A child, 13 y old, who is the seventh of 7 brothers and sisters, lives adult roles. He points out: "I am in charge, together with my brother [boy, 10 y] of buying food, with a shopping list mom gives me," where there are only foodstuffs supplying carbohydrates and

fats: rice, pasta, oats, beans and oil, “I help mom with the house chores.”

There are some situations when parents do not protect their children such as when the head of the family is unemployed, has drug or alcohol problems, or is in ultra-poor environment. One girl who told the story of other children said, “I know two brothers who are studying in this school. They are very thin, and short. I think they are in this situation, because their parents are lazy to work. The kids are sad, because their parents didn’t work. The parents can’t give what their children want” (girl, 13 y).

Discussion

This study provides naturalistic evidence of how children aged 10–17 y think, feel, live, and act when they are in food-insecure households in peri-urban communities in a middle-income country. The children show elements that make their FI experiences evident, i.e., they state the cause, the periods in which it arises, feelings, emotions, strategies, and awareness of the problem.

Children were cognitively aware of the FI that was taking place in their home and in their immediate surroundings and of the worry about FI in their own parents. They were aware of causes of FI that were both external and internal to their households. Children were also emotionally aware of FI, with feelings of concern, anguish, and sadness and manifestations such as crying. Children sometimes discussed the situation of FI with their parents or other children; at other times, they resigned themselves or remained quiet, so their parents would not notice their concern. Children reported being physically hungry and experiencing poor dietary intake, including both reduced quantity and quality of food. Children noted the serving of smaller meals with FI and recognized that thinness and fainting were closely linked consequences of severe or prolonged FI.

The strategies that children reported in responding to FI are creative and reflect in a practical way the solutions implemented by the children to a specific situation of food shortage, which sometimes becomes routine. Strategies reported included reduction of the quality and quantity of food, child labor, sacrifice in food consumption by older children, obtaining food from waste, and strategies related to purchasing, acquiring, preparing, and cooking food. Children reported the use of networks of support from institutions, family, and friends or acquaintances, including the use of loans of food or money and subsidized food programs.

Children were not always protected by their parents or caregivers from FI, including experiencing decreased food intake, as has been previously inferred (10,11,38,39). Parents do not protect their children in some situations such as when the head of the family is unemployed, has drug-alcohol problems, or is ultra-poor. Protection could come from different directions, including parents to children, but older children also protect parents and younger children.

Fram et al. (19) identified 6 components of children’s experiences: children experienced cognitive, emotional, and physical awareness of FI and they took responsibility for managing food resources through participating in parent’s strategies, initiating their own strategies, and generating resources to provide food for the family. The results of the current study fit well with these 6 components and provide an understanding of the experiences in a middle-income country in which FI (with its closely linked consequences) is overall more severe than in the US.

Commonly used definitions of FI (2) do not fully capture what children experience with FI. FI is experienced when there is uncertainty, insufficiency, and/or social unacceptability in food acquisition, along with consequences closely linked to these (8). This study contributes to our understanding of children’s experiences of FI and particularly closely linked consequences experienced by children that are related to their development. Children should not have to work, leave school, borrow money or food, worry, or become anxious about the lack of timely food. They should not have to resort to emergency food sources from the harvest, stealing, or any other illegal way to provide for themselves. They should not have to sacrifice their own consumption for the consumption of other members of the family or the community. They should have the protection of their parents or caregivers to receive adequate attention and care related with a right food environment. In summary, food security for children means full, certain, and continuous access to healthy and safe food provided under conditions that ensure their physical, psychological, emotional, educational, and social well-being.

This study was carried out in a multicultural Latino culture having European and African roots. Future research should delve more deeply into issues such as the period when the practice of strategies that are active (e.g., asking for food with some others) and passive (e.g., watching TV or sleeping) to relieve FI begin to appear in children and the longer term consequences of children for engaging in these strategies. In addition, there is a need for better understanding of how parents can best protect children from these consequences. It may be better for parents, at least for the age group studied, to not attempt to hide FI from their children and instead take measures to mitigate its effects on their children. Examples of questions that remain unanswered are: at what point should children be told, when should their collaboration be accepted, and should children sacrifice their right to education and recreation to provide themselves with adequate food.

Implications. The need of financial resources and the lack of autonomy to raise money and/or provide oneself with food are factors that lead to experiences of FI in the individual. Children are a priority for care in health and nutrition, because they are in a period of physical, cognitive, and emotional growth. Investment in food security is required to protect and strengthen human capital in all countries, especially if they are to reach the first Millennium Development Goal to decrease poverty and hunger (40). Individuals lose up to 10% of the proceeds of their lives and many countries lose at least 2–3% of their gross domestic product due to undernutrition (41).

Knowing how children think, feel, and act from an early age in the presence of FI can ensure adequate understanding in governmental, academic, and civil society sectors of the need and investment in the means to prevent risky practices (e.g., child labor) when children are living with FI. In the Venezuelan context, these results could enhance the political and scientific understanding of the problem and improve targeting of social programs for children and adolescents to prevent risky practices. For example, targeted scholarships and food vouchers that prevent FI situations would likely help prevent absences and dropping out of schools.

Children need to have certain access to food in a manner that is dignified, timely, efficient, adequate in terms of quantity and quality, and the food should be provided in harmonious social conditions to prevent and resolve situations that could compromise their physical, cognitive, and socio-emotional well-being.

Provision of food and/or income assistance to households does not guarantee that children benefit from that assistance or that the assistance addresses their cognitive and emotional along with their physical well-being. The enactment of research and policy to understand and direct the distribution of benefit to children in ways that ensure their development is warranted.

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