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Migrant Farmworker Mothers Talk About the Meaning of Food

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Abstract

Purpose—To describe the meaning of food in the family life of migrant farm worker mothers; specifically to describe their understanding of the relationship of dietary intake to health, the environmental contributors to their families' dietary intake, and the use of foods in the commemoration of family occasions.

Methods—The PRECEDE-PROCEED self-management model guided the qualitative research study which used short, guided interviews conducted at Midwest migrant camps. A sample of 43 Mexican mothers answered 3 interview questions, the answers to which were transcribed verbatim, read, sorted, and arranged into categories and then themes. Thematic analysis was used to analyze the data.

Results—The themes identified from the interviews were a) meal cost, b) lack of preparation time, c) distance to store locations, d) the importance of traditional ethnic foods, and e) limited knowledge of healthy food choices.

Clinical implications—Pediatric nurses should remember that before they dispense nutritional anticipatory guidance, situational and cultural assessments are needed. Because vulnerable populations such as migrant farmworkers have limited resources to follow nurses' teachings, nurses need to become knowledgeable about what is available in the community to support these families. In addition, facility appointment times may need to be expanded to accommodate their long work hours, and modes of transportation need to be evaluated. Recommendations for anticipatory guidance, prescriptions, treatments, over the counter items need to consider cost and ease in purchase, and cultural acceptability.

MeSH KEYWORDS

mothers; focus groups; transients and migrants; child nutrition sciences

Introduction

This article describes one phase of a 3 phase study ultimately aimed at developing a culturally tailored health promotion program on healthy eating for children of migrant farmworers (MFW). Based on a framework of self-management, the study, Dietary Intake and Nutrition Education (DINE) in the Migrant Farmworker Child, will span three years. The first phase explored and described the MFWs' social determinants and examined the daily lives of MFW families, and this article reports on the qualitative component of the study.

Despite the advances of technology and machinery, many agricultural crops still need to be harvested by hand to avoid damage to the produce. This work is often done by migrant

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farmworkers. Of the documented MFWs in the United States, 90% are Latino and over 60% travel with minor children from farm to farm throughout the year to do their work (Carroll, Samardick, Bernard, Gabbard, & Hernandez, 2005). Previous research has shown that compared to their Latino peers in the U.S. who are not migrant farmworkers, almost one-half of the Latino children of Midwest MFWs are overweight or obese (Kilanowski, 2006; Kilanowski & Ryan-Wenger, 2007). While health care professionals have developed various interventions programs to curb the epidemic of childhood obesity in general, the daily life of the MFW child is unique and has been studied seldom.

Health nutrition education interventions should be developed based on the social determinants of the group as well as the cultural nuances of nutrition and food. Respect for culture and ethnic traditions should be reflected to enable acceptance, adoption and success of said intervention (Sullivan-Bolyai, Bova, & Harper, 2005). If we hope to intervene successfully and inspire self-care, individuals in the targeted group must engage in the education program (McGowan, 2005). Thus, community-based health promotion programs based on self-management and designed for vulnerable populations such as MFW families need to take into account the resources and characteristics of those populations (Lorig & Gonzalez, 2000).

Currently, there is a lack of research knowledge concerning self-management practices of the Latino population, especially Latina MFW who are from Mexico (Weiler & Crist, 2007). In order to incorporated the self-management tenets of tasks (including emotional role) and skills (resources utilization and self-tailoring) into the ultimate DINE intervention design, it is necessary to first learn the meaning of food to these MFW mothers, who are the primary family food preparers (Lorig & Holman, 2003).

Mexican American women have established positions in the role of healing the family (Mendelson, 2002). They have been described as the “keepers of the culture and carriers of collective healing experiences” (Bushy, 1991, p. 135). These care giving roles include but are not limited to preparing meals, maintaining home cleanliness, and treating family illnesses either in a conventional or traditional manner. In an ethnographic study of 21 contemporary Latina women about household-based health behaviors, the theme of maintaining health emerged (Mendelson). Participants shared narratives that questioned the heavy use of fat (manteca) in the traditional Mexican diet, while others felt that traditional Mexican cuisine was an important source of cultural continuity and was responsible for their children’s physical vigor. Another study with rural Mexican American women concluded that these women were happy to share and describe their health experiences, concerns, and opinions (Mann, Hoke, & Williams, 2005). In a third focus group study, which involved mothers of young children, it was learned that any intervention that aimed to prevent unhealthy weight needed to focus on equipping parents with skill sets that would help them translate learned knowledge into behaviors (Zehle, Wen, Orr, & Rissel, 2007).

Methods

The participants of Phase 1 of the DINE study (n = 60) were recruited from a convenience sample of MFW parents who resided in six migrant camps in Ohio and Michigan. Posters were displayed and flyers distributed at the camps one week prior to the research team’s arrival. Only mothers (n = 57) were asked for participation into this qualitative component of the study.

These mothers traveled with their families to several locations in the Midwest migrant stream. They often originate in Texas, Florida, or Mexico. Some families only migrant to one camp for the entire harvest season while others pick first in Florida, next to Ohio and southern Michigan, then to upper Michigan and Iowa; staying several weeks or months in each location. Migrant housing is provided by the growers (owners of farms) for a fee per week with a security

deposit taken from the first paycheck, and space (number of rooms) for each family unit is limited. Kitchens are tiny by average standards, or multiple families share a common kitchen area. Migrant camps are located in remote areas often shielded from the general public, and vary in occupancy size.

Interview Guide

The research assistants followed the outline of the questions asked that were designed to elicit mothers' thoughts on the factors that affected dietary intake behaviors. Personal factors (belief in the relationship between dietary intake and health), environmental factors (time to prepare food, access to food and costs), and emotions/physical expectations (sensory appeal and foods used to cope with stress or emotion) were queried. This served to provide triangulation of the quantitative data collected and also captured insight into the attitudes, beliefs, and values of predisposing factors. After the interviews at the first data collection site, a few minor regional Spanish phrases were replaced in the original text, but the content was not changed. The interview guide used the concept of self-management from the PRECEDE-PROCEED Model of Health Program Planning and Evaluation (Green & Kreuter, 1999) which suggests that predisposing, enabling, and reinforcing factors influence behavior and health outcomes. This model serves as a roadmap and structure for the assessment of health needs, ultimately guiding the design of the DINE interventions that will best match this unique population.

Procedure

This study was approved in expedited review by the university Institutional Review Board. Mothers were asked to participate in an interview supplement to the larger DINE study survey questions measuring acculturation, self-efficacy, food security, children's dietary intake and general demographics. A separate consent form was signed by the participants that acknowledged the conversation would be digitally recorded. Semi structured interviews were conducted and recorded by research assistants of Latina ethnicity who were fluent in Spanish. The semi structured interviews were conducted at portable outdoor research data collection sites and privacy was maintained as much as possible. The team members created an environment for response that was non-threatening and respectful. The interviewer used caution in guiding answers, avoided pressure in obtaining answers to minimize social desirability, and verified the participants' answers. Children often grouped around the data collection site, and playground balls were provided to them while mothers participated in the study. It was not uncommon for a young child to sit on their mother's lap during data collection. Bottled water was offered to participants, who were compensated with a $10 gift card and portable headphones for their time from the main study, but no additional compensation was given for answering the three interview questions. The 3 questions asked were: (1*) How do you think your health is related to the kinds of food you eat? (2) Do you have any difficulties in preparing a meal for your family? (3) How is food a part of your family gatherings for happy occasions or sad occasions?*

Thematic Analysis

Each interview was transcribed verbatim, and if conducted in Spanish, was translated into English by a transcriptionist unknown to the participants. The professional translator is well-versed in Latino culture. The transcripts were then reviewed by the 2 research assistants for accuracy and compared to field notes by the investigators. The transcripts then served as the basis for composite reports that presented results for the full set of interviews (Morgan, 1998). The "Long-Table Approach," where the printed transcripts were first read in their entirety, cut apart, scored with colored markers, sorted, and re-arranged, was used to identify categories and patterns, and then grouped in themes for each question (Krueger & Casey, 2000). No computer software was used. Data saturation occurred at the fourth migrant camp

visited. The researcher decided to continue interviewing, however, as the last 2 migrant camps were in different regions, had different sized migrant camp populations, and the farms had different acreage and crops: interviews might have possibly yielded different commentary; reoccurrence of participants' narratives prevailed however. This was followed by summarizing responses of each question while comparing and contrasting answers. The conclusion of the analysis identified common themes across all questions. The transcripts were analyzed by the investigator in consultation with a senior nurse researcher experienced in qualitative research. Emerging themes were reported with the supporting participant quotations.

Results

The larger DINE study included 57 women; 43 (75%) of these MFW women agreed to answer the three interview questions. See Table 1 for demographics on the DINE female participants. No pattern or differences emerged between the age groups of women, preferred language, education, income or number of children. The themes identified from the interviews were a) meal cost, b) lack of preparation time, c) distance to store locations, d) the importance of traditional ethnic foods, and e) limited knowledge of healthy food choices.

Themes

Meal cost—The cost of food was commented on repeatedly by the mothers. *"Food is very expensive. Very expensive…the price is very high; in Florida it's even more expensive than here."*

Other MFW mothers continued: *"Food is really expensive and we don't have the money to buy everything that we want. In Texas a five pound of bag of flour is a lot cheaper."*

Lack of preparation time—Twenty-two (51%) of the 43 women in this study said they had no difficulties in preparing meals for their families. Eight (19%) of those women at first said they had no difficulties, but then went on to voice concerns; ultimately 30 women (70%) articulated problems with meal preparation. One of their difficulties was that they were picking perishable fruits, which need to be picked in the early morning hours to lengthen their store shelf time; this meant they had to be at work extremely early in the day. *"There is almost no time to prepare food* [when the crops need to be harvested]*… you go to work, get home pretty late, and there isn't any time. … and sometimes I get back* [home] *and make something quick to eat…"*Another mother said, *"Sometimes we don't have anything to eat because we get back late* [around sundown] *and have to prepare food and that takes even more time...But I before I cook I like to shower* [to get the dirt and chemicals off]*."*

A mother gave a glimpse into the daily routine of MFWs and how their work schedules affect meal preparation: "[I] *get up at five in the morning to prepare food, breakfast and lunch. I make food, tortillas, and lunch for all of us. There are no places to buy lunch in the fields; sometimes the food wagon comes around. Then at seven o'clock [I] have to go to work…"* [I] *sometimes doesn't get home from work until seven or eight o'clock at night, after picking all day."*

Another mother was of the same mind and shared her struggles. *"The difficulty is the time*, [because] *like almost all our ladies here* [we] *get up like at four or five in the morning and I'm not like an early morning person. I do everything in a hurry. I usually fix sandwiches or ramen soups–that kind of instant foods. We eat bread a lot."*

Many MFW mothers expressed the limitations of time and its effect on preparing healthy meals for themselves or their families. The following are some of their responses: *"Fat is what affects us most, sometimes we don't have time to cook right, and we [just] make something quick. Our*

families are hungry and so are we." "*We have to eat to be healthy…when I work, sometimes in the morning I don't eat* [because] *I don't want to be late leaving for work* [but if I don't have breakfast,] *sometimes I do feel bad. It is important to eat three times a day*."

Distance to store locations—"*The store is very far away, so when we work a lot* [when the berries are ripe]; *it's hard for us to go buy things.* Other MFW mothers had the same opinions: "*The stores are far away and the food is expensive and... there is no ride to go to the store. We don't all have cars and there is no bus out here and it's too far to walk. Most of us don't know how to drive." "We usually do our shopping here at Wal-Mart and sometimes at a little Mexican store down the street. They sell* [food items] *like corn tortillas and flour." "There is a store that is close here but it is really, really expensive… to go to a store with cheaper prices it is very far away. It's a long way to go to that store."*

The importance of traditional ethnic foods—Ethnic foods were often cited as part of every celebration and were a common theme. The inclusion of tamales in festivities was mentioned by more than half the MFW mothers; some mothers acknowledged that these ethnic foods were not healthy and often contained a large amount of fat. Mothers spoke of serving tamales, grilled meat, birthday cakes and pork rinds. They frequently questioned the nurse researchers if these foods were bad for them: "*We make a little of everything to celebrate. We make pozole* [a pre-Columbian soup made from hominy, with pork, chile, garbanzo beans, and other seasonings], *molé* [a rich, reddish-brown Mexican sauce often served over poultry], *tamales, champurrado* [thick hot chocolate], *ponche* [cold fruit punch, or it can be a beverage like mulled cider], *buñuelos* [small doughnuts], *menudo* [aromatic soup made of tripe, hominy, and chili that is simmered for hours with garlic and other spices], *and nopales* [vegetable made from the pads of the prickly pear cactus carefully peeled to remove the spines]. " Grilled meats were often mentioned as celebration fare, and mothers often talked about having meat as an important and special component of the menu. Some mothers were happy to share recipe ingredients to help the research team understand the ethnic foods of celebrations.

"*If it's a happy occasion, we usually make big pots of food for large* [numbers] *of people. The primary meals* [include] *baked pinto beans with…bacon and cilantro and spices… and sometimes we barbecue chicken. And we cook rice. We use oil* [to] *fry and then… water with a bit of consomate, which is tomato broth but* [comes] *in little cubes. Some people say it is bad because it has a lot of salt* [in it]." One mother spoke of her son's birthday party that was celebrated a few days earlier and verbalized that not all celebration meals are unhealthy: "*I made him supper. I made shrimp, fish, salad and he invited the people from the fields* (fellow migrant workers) *and his friends* [who] *came for a while*." "*We eat a lot of things made from corn flour, which, it is bad for us…but...*[if you're]*100% Mexican, that's just the way food is for us*!" (laughs)

Limited knowledge of healthy food choices—Some mothers said there was no relationship between dietary intake and health (n = 8, 19%), while the same percentage clearly identified a relationship between food choices and health. About one third (n = 13) of the MFW mothers said that fruits and vegetables were part of a healthy diet. Knowledge of some food groups in the food pyramid was expressed by one-fourth (n = 11) of the mothers: "*Some say that we should eat a lot of vegetables, milk to strengthen your bones, cheese, eggs*, [and] *that we shouldn't use a lot of fat*…."

Numerous mothers were able to identify foods that that they thought were not healthy, and the influence of those foods on wellness. They spoke of personal health problems and the challenge in eating a healthy diet and maintaining a healthy weight. Little mention was made of the use of moderation in foods: "*I try to eat healthy food*, [but] *sometimes I eat the food that I shouldn't eat with a lot of grease." "I'm in bad health. I'm very overweight and I have very high blood*

pressure, but I'm taking medication, [and since I've been back to work,] *I think I've lost twenty pounds. I really need help on my cooking skills and nutrition…I like fast… things in cooking, but it has had* [a bad] *effect, especially on my son. I was at Wal-Mart recently and* [he said,] *'Mom, I'm hungry,' so I bought him chicken nuggets, then he said 'Mom, but I want large fries*' (she expresses exasperation). *He loses and gains weight because he has ADHD…he's usually on medication, but in summer I take him off* [it] *so he can rest…that's when he gains the weight. The medication suppresses appetite…Yes, the food we eat is not healthy at all." "I try to balance out the food a little* [as] *I have problems with my son because he is very fat."*

Another mother talked about foods her family consumed that were not good for health. She identified, "*chips or that kind of thing, fast foods…sometimes McDonald's. They have cheap food there."*

One respondent was confused about whether certain foods were unhealthy, citing, for example, eggs, whole milk, and potatoes as food that are "*bad for us*." She was however, able to correctly identify other foods that were unhealthy choices, "*that we don't need to eat; cakes and chorizo sausage* [and foods that] *have a lot of fat*." "*We drink Coke; whatever does the most damage is usually what you like the most*!" (laughs)

Limitations

The limitation of using qualitative methods is that the results are not generalizable to the larger MFW mothers' population, however, transferability can be suggested (Kruger, 1998). Migrant farmworker camps were conveniently selected in the Midwest by owners who permitted the researchers to talk to their employees. Those mothers who chose to join the research study may not represent the larger community and no information is available about those who chose not to participate.

Clinical Implications

The framework of self-management used in this community health study reminds the researcher to remember the tenets of self-management intervention design: listen well, do no harm, and remember that simple changes in client dietary habits may be simple, but may not be easy to embrace; especially within the MFW community and other vulnerable populations (Lorig & Holman, 2003). Getting health and nutritional information delivered in a culturally sensitive format may help racial and ethnically diverse mothers feel empowered, and comfortable with making changes in the selection, and preparation of food items for their families (Shui, Kennedy, Wooten, Schwartz, & Gust, 2005). Culturally-tailored education materials need to be developed and may improve effectiveness of anticipatory guidance, and increase target population participation. Listening to the voice of a vulnerable ethnic group can be instrumental to health professionals in learning respect and honor for cultural differences, and promote acceptance, adoption, and success of health promotion and health education interventions, as well as participation in research studies.

Conclusion

The information gained from conversations with this vulnerable population of MFW mothers is an important lesson to be shared when working with racially and ethnically diverse populations. The unique cultural and social characteristics of target populations need to be considered in the delivery of anticipatory guidance and research activities, and community participation can contribute to the success of such endeavors.

Pediatric nurses should remember that before they dispense nutritional anticipatory guidance, situational and culturally assessments are recommended. Health promotion interventions

designed to combat the epidemic of childhood obesity may not be appropriate for racially and ethnically diverse populations, and nutritional materials should be evaluated for cultural sensitivity.

Future research in MRW families may include investigating preferred methods of learning, effectiveness of healthy eating interventions, and examination of the relationship of characteristics of MFW families to intervention outcomes.

Box 1

Clinical Implications

- Pediatric nurses should conduct situational and cultural assessments before dispensing nutritional anticipatory guidance.
- Meal cost, lack of meal preparation time, distance to stores, limited knowledge of healthy food choices, and the importance of traditional ethnic foods are essential considerations when teaching healthy eating to diverse populations
- Respecting racial and ethnic differences can promote acceptance, adoption, and success of health promotion and health education interventions and participation in research studies.
- Remember the tenets of self-management intervention design: listen well, do no harm, and remember that simple changes in client dietary habits may be simple, but may not be easy to embrace
- Populations such as migrant farmworkers have limited resources to follow nurses' teachings; nurses need to become knowledgeable about what is available in the community to support these families.
- Facility appointment times may need to be expanded to accommodate their long work hours and modes of transportation need to be evaluated.
- Recommendations for anticipatory guidance, prescriptions, treatments, over the counter items need to consider cost and ease in purchase, and cultural acceptability.

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Table 1

Demographics of total study participants n = 55 Mothers*

Characteristics	% (N)
Ethnicity	
Hispanic	76% (42)
Non-Hispanic	18% (10)
Other-not specified	6% (3)
Monthly family income	
Less than $500	53% (29)
$500–$1000	34% (19)
> $1000	11% (6)
Prefer not to answer	2% (1)
Mothers' age	
18–27 years	38% (21)
28–37 years	31% (17)
38–47 years	18% (10)
> 48 year	13% (7)
Mothers' Work status	
Full time	64% (35)
Part time	36% (20)
Marital Status	
Married	62% (34)
Living with partner	4% (2)
Widowed	18% (10)
Divorced	5% (3)
Single parent	11% (6)
Language at home	
Spanish only	65% (36)
More Spanish than English	18% (10)
More English than Spanish	2 % (1)
Both equally	11% (6)
Missing	4% (2)
Mothers' education	
Less than 9th	69% (38)
9–11	14% (8)
High School graduate	9% (5)
Some college	6% (3)
College graduate	2% (1)

* Data on two mothers were lost due to technological difficulties