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The Cultural Context of Obesity: Exploring Perceptions of Obesity and Weight Loss Among Latina Immigrants

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Abstract This study used focus group methodology to examine perceptions of obesity and weight management among Latina immigrant women in Alabama. Four focus groups ($N = 25$) were conducted in Spanish as part of a participatory intervention development process. Participants were obese/overweight Latina immigrant women (BMI > 25) primarily recruited from a community hospital. The majority of participants were from Mexico. Participants described obesity in the context of short-term effects such as physical symptoms and aesthetics. Perceived weight gain was related to lifestyle changes since moving to the US. Social isolation, depression, and stress were reported to contribute to weight gain. Participants expressed interest in weight loss but emphasized a desire for programs that preserve traditional foods and include family. Weight-management programs designed for Latina immigrants should address their perceptions of obesity. This data also suggests that those interventions that preserve culture and incorporate family may have increased community buy-in.

Keywords Obesity · Focus groups · Weight loss · Women · Latino · Hispanic · Knowledge · Beliefs

Introduction

The prevalence of obesity has reached epidemic proportions in the United States, where approximately 68% of the population is obese or overweight [Body Mass Index (BMI) > 25] and 33% are obese (BMI > 30) [1]. Racial

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and ethnic minority populations are disproportionately affected by the obesity epidemic. Among Latinos, now the fastest growing minority in the US, the prevalence of obesity is higher (38.7%) compared to non-Latino whites (32.8%) [1]. Latina women are particularly affected by obesity with a prevalence of 45.1% compared to 35.5% for all women [1]. The high rates of obesity contribute to higher rates of obesity-related illnesses such as hypertension, diabetes, and cancer [2, 3].

The widespread prevalence of obesity makes effective weight-loss programs vitally important. However, most successful weight-loss programs require interventions of considerable intensity, duration, frequency and cost; as a result, implementation and sustainability are major challenges [4, 5]. Translating clinically-proven weight-loss strategies for implementation in real-world settings requires understanding the ways in which obesity and weight are perceived in a given community. In a review of studies exploring concepts of obesity, Davidson and colleagues found that culture significantly influences individual perceptions of obesity [6]. However, the limited number of studies that included Latinos prevented the authors from drawing conclusions regarding perceptions of obesity among Latino immigrants living in the United States.

The southeastern United States has seen an exponential growth of Latino immigrants in the past two decades [7]. Although Latino immigrants may arrive in the US at a healthy weight, the prevalence of obesity-related health behaviors, specifically energy-dense food consumption without adequate physical activity, increases with length of residence in the US [8–10]. The Southeastern United States has the highest rates of obesity in the country, owing to a mix of environmental (high density of fast food establishments) [11] and behavioral (low rates of physical activity, high intake of energy-dense foods) factors [12]. Thus, the Southeast may be a particularly "obesigenic" environment for its new immigrants [13, 14].

Given the propensity to obesity and overweight among Latina women [15, 16], understanding the perception of obesity among Latino immigrants is critical for developing effective obesity prevention and control strategies. Therefore, this study sought to inform the development of a community-based weight-management program by exploring perspectives on obesity and weight loss among overweight Latina immigrants living in the southeastern United States.

Methods

Study Design

Focus groups with Latina immigrants were conducted in Jefferson County, Alabama, between August and November 2009. Groups were conducted until no new themes arose (thematic saturation). Institutional Review Board approval was obtained from the University of Alabama at Birmingham and Cooper Green Mercy Hospital (CGMH).

Participants

Women were recruited by bilingual research assistants from CGMH's primary care clinic, community events, and through referrals by study participants. Individuals were invited to participate if they were foreign-born Latinas, at least 19 years of age, overweight or obese (BMI $>$ 25), and reported no physician-diagnosed diabetes or pregnancy. To minimize no-shows, a research assistant made reminder calls a day prior to each focus group.

Development of Moderator's Guide

The moderator's guide was constructed by reviewing existing literature addressing obesity/overweight among Latinas and incorporated constructs from the Health Belief Model (HBM) [17], including perceived susceptibility and severity, perceived benefits, perceived barriers, and cues to action [6, 17–20]. The HBM has been applied to lifestyle modification behaviors, including obesity-related behaviors, and it has been suggested that the validity of the model for obesity may hinge on the general society's perceived susceptibility and severity for obesity [18]. Thus, we sought to explore these issues specifically.

The moderator's guide was written initially in English, translated into Spanish, and then back translated into English to verify accurate translation of content. Discussion topics included the following: health, obesity, weight management, barriers to weight management, diet, and physical activity. Table 1 provides a selection of the central questions from the moderator's guide. To ensure that it elicited the intended information, the guide was pilot tested with Spanish-speaking women recruited from a local church.

Focus Group Procedures and Data Collection

Focus groups were held in a location convenient to all participants, were conducted in Spanish by an experienced bicultural/bilingual moderator accompanied by a bilingual/bicultural note-taker, and lasted approximately 90 min. The moderator and the note-taker greeted each participant upon arrival, spoke with her about the risks and benefits of participation, and obtained written consent. Participants completed a short questionnaire prior to focus groups to assess demographics as well as factors related to obesity in Latinas as identified in the literature [18], these included age, education, marital and employment status, diabetes

Table 1 Moderator's guide with selected health belief model (HBM) constructs used in the focus group meetings held in Jefferson County, Alabama between August and November 2009

HBM construct	Question
None selected	What does it mean to be healthy?
	What does someone need to do in order to be healthy?
	How do we know if we are overweight?
	What are some advantages to being overweight?
Perceived risk/ perceived severity	What are some concerns or disadvantages that come from being overweight?
	Probe: How serious would that problem be for you?
	Has your weight changed since moving to the U.S.?
	What are some of the ways that your eating habits have changed since moving here?
	How about you activities, would you say you are more or less active now that you live in Alabama?
	Has anyone here tried to lose weight before?
	What did you try?
Perceived barriers	How did [weight loss attempts] work?
	Probe: Why or why not?
Perceived benefits	Are there benefits that come from losing weight?
Cues to action	If there was a program to help Latinas maintain a healthy weight or to lose weight, what might convince women to come?
	What would keep them coming?

risk factors, country of origin, length of time in the United States, and level of acculturation. The latter was measured using a modified 12-item Short Acculturation Scale for Hispanics [21] previously tested for reliability (0.92) and criterion validity (0.52–0.76) [22]. The scale assessed level of acculturation as a function of language preference in childhood, day-to-day living, media, and social relationships. Acculturation was measured on a Likert scale from one to five, with five indicating a higher degree of acculturation. The questionnaire was administered verbally due to limited literacy skills.

Childcare services and healthy snacks were provided, and participants received $20 in cash for their participation. All groups were audiotaped, and a bilingual transcriptionist with 10 years of experience transcribed and translated all audiotapes verbatim. The note-taker reviewed the transcripts and added information about participants' nonverbal behavior and level of engagement during the discussion.

Data Analysis

Descriptive statistics were used to characterize the sample. For qualitative analyses, the first author (AA) coded all transcripts in Spanish, and a second author (RD) coded the material in English. The authors employed a combined inductive/deductive approach to code the focus group data [23, 24]. Deductive analysis is described as a tighter approach to qualitative analysis and may be driven by questions from the moderator's guide or a priori hypotheses, while inductive analysis allows for recognition and inclusion of emergent themes that arise spontaneously during the discussions. To develop a thematic codebook, authors read an initial focus group transcript, developed a set of domains and themes within each domain, and met for consensus on the themes. The authors refined the codebook by repeating the process with additional transcripts. The final steps involved identifying subthemes and representative quotes. After the fourth focus group transcript was coded, thematic saturation was reached when no additional themes were identified. Using the final codebook, authors coded each focus group transcript to reach 100% consensus. The transcripts and codes were imported into ATLAS.ti software [25] to facilitate data management.

To confirm analyses and reduce researcher bias, all prior participants were invited to attend a follow-up focus group to give feedback on the authors' findings [26]. Participants were presented with the investigators' findings by domain and theme. The women were asked to provided feedback and comments.

Results

Among the total of 90 Latinas approached, 32 chose not to participate, primarily citing a lack of interest. Among the 58 recruited, 25 participants attended the focus group sessions. Common reasons for no-shows included lack of transportation, last-minute changes to childcare or work schedules, or forgetting about the meeting. Focus groups consisted of 4–10 participants (Table 2). The average age

Table 2 Characteristics of participants ($n = 25$) in the focus group meetings held in Jefferson County, Alabama between August and November 2009

Characteristics	Mean (range) or percent (n)
Age (years)	38 (22–65)
Married or living with a partner	44% (11)
Employed	64% (16)
Education (years)	
<9th grade	72% (18)
High school	16% (4)
Did not report	12% (3)
Country of origin	
Mexico	88% (22)
Guatemala and El Salvador	8% (2)
Colombia	4% (1)
Years in US	7 (1–17)
Body mass index	31 (26–46)
Overweight (25–29.9)	48% (12)
Obese (>30)	52% (13)
Acculturation[a]	1.3 (1.0–3.1)

[a] Scores ranged from 1 to 5, with a total score of 2.99 or greater indicating a greater degree of acculturation

was 38 years, with the majority of participants being Mexican and married or living with a partner. Over two-thirds were employed (64%) and reported less than a 9th grade education (72%). Participant Body Mass Index (BMI) ranged from 26 to 46, with over half of the women qualifying as obese (BMI > 30). On average, participants' degree of acculturation was low, with a mean of 1.3 on a scale of 1–5 [21].

Six women participated in the follow-up focus group. They reported that the findings concurred with their ideas and perceptions of obesity and weight loss.

Thematic results fell into 4 main domains: (1) perceptions regarding obesity, (2) contributors to weight gain, (3) prior weight-loss attempts, and (4) motivators/program needs (Table 3).

Perceptions Regarding Obesity

Themes discussed within the domain of obesity perceptions included aesthetics, physical symptoms and discomfort, health risks, and risks for children. Women judged weight gain primarily by the fit of their clothing. They also associated weight gain with the presence of multiple physical symptoms, discomfort, and reduced physical capability, such as breathlessness, fatigue, and low energy. Although women reported awareness of the obesity epidemic in the US and viewed obesity as a contributor to poor health in general, they did not cite avoidance of any specific obesity-related illness as direct motivation for weight loss, enumerating related health risks only after being prompted by the moderator. Rather, they desired weight loss in order to "be healthy" or "feel good." Obesity as a risk to children's health was a commonly discussed concern.

Perceived Contributors to Weight Gain

Women described a number of factors that they felt contributed to weight gain, including marriage and pregnancy, changes in diet and physical activity, and depression, social isolation, and stress. Many women described weight gain during and after pregnancy, citing increased weight gain with each subsequent pregnancy. One woman noted, "I saw that with every year, I gained weight. And more so when I had my baby." Another stated, "I gained a lot of weight because I am stuck inside with the kids." They also reported spousal tolerance for their increased weight, as represented by quotes such as this: "It seems like well that's the way my husband loves me and I feel fine and we keep eating."

Women reported specific changes to their diet since moving to the US that they felt had contributed to weight gain. They described a decrease in consumption of fresh fruits and vegetables and an increase in processed/fast foods, noting an emphasis in the US on "quick and convenient." One participant reported, "Things that you eat are healthier there, here (in the US) everything is frozen, lots of hormones." Another explained, "With work, you buy something real quick because they only give you short breaks… when you get home, it is late and you order something quick, pizza or something…" Women said that canned, frozen, or prepackage foods were more accessible than fresh foods, citing this increased availability of prepackaged foods as a contributor to weight gain.

When asked about changes related to moving to the US, many participants reported being less physically active. They noted that, in their home countries, they usually were able to walk daily to the market, but in the US this is not possible. The lack of public transportation and sidewalks in the US necessitated the use of a vehicle to go places: "But here (in the US) even if it's less than a mile you go in the car and then… then you don't walk." Another participant reported, "I think what happens here is you don't work, you stay at home and then go out to church, the store, and every (where) in the car."

Depression, isolation, and stress arose as perceived contributors to weight gain. Missing their friends and family, participants reported feeling sad and alone. For example, one woman explained, "It's the depression that gets you, you feel trapped, you don't go out, don't walk… you feel terrible." Women noted that the challenge of balancing work, family, and running a household left little

Table 3 Thematic results reported by Latinas in four focus group meetings held in Jefferson County, Alabama between August and November 2009

Domain	Themes	Illustrative quotes
Perceptions regarding obesity	Aesthetics	
	Fat hangs/swells	"They say it's impossible to lose weight when you are already fat like this [gesturing] and everything hangs like this!"
	Clothes don't fit	"If I gain weight it's, well I notice it more than anything…in the clothes."
		"Being overweight, you don't really notice the size of your body but you notice the clothes and all that."
	Symptoms	
	Fatigue, breathlessness, low energy	"Once you're obese, you aren't be able to do what you used to…You used to go out walking, you can't do it anymore because you're going to get tired and you can't breathe."
		"I am always sick, I have this and that and I think it's because of being overweight. I get so much more tired and sleepy."
	Health risks	
	Cholesterol, heart disease	"Your cholesterol goes up too much and well those types of problems."
	Risks for children	"It is bad that [the children] can't run or jump."
		"Like before, they would say if you're chubby you're healthy, he eats well! But it's not true because once I saw a lady who would give her son everything…and the little boy was very heavy…and still had his Coke, and then that little boy developed diabetes."
Contributors to weight gain	Marriage	"I gained more weight after having my second baby, my son… But with my son I lost some but afterwards I gained a lot, so much that my sister asked if I was expecting again."
	Pregnancy	
		"I gained a lot of weight due to my change of life with a husband and the kids for me it was new because I was with my young kids and the house chores…"
	Changes in diet & physical activity	"[Y]ou become fat from the foods that you eat here because over there from where we are, everything is cultivated, natural, and here it has a lot of hormones."
		"We get home to the fast [food], say like a hamburger. That makes you gain a lot. In our country we are used to making the tortillas; it's because you don't go to the store."
		"But since we all are just here [at home] with the vacuum and the little rag! Then the soap operas come on and how are you not going to be fat!"
	Depression	"Always I have thought about that maybe sometimes I can't lose weight because of depression."
	Social isolation	
	Stress	"I noticed that I was sleeping after eating. I don't know if this is due to feeling sad, I am [here] without my parents and here you are so alone."
Prior weight loss attempts	Crash diets	"I have tried [to lose weight] many times, I lost 14lbs in two weeks with [pills] and then I gained back double."
	Supplements	
	Diet pills	"The lady who sold me [pills] had me taking 12 pills morning and afternoon. It didn't work and I gained more weight."
	Exercise	"I tried to diet, my husband told me you're going to [make yourself sick], better exercise more… "
Motivators/ program needs	Inclusion of traditional foods	"In Mexico, you find everything, you pick the freshest [foods]… And here no, it is very refrigerated or canned. This is what I like [about Mexico]."
		"Going on a food diet, I know that it's difficult…to change your way of life…you miss your food."
	Family involvement	"It is the support of my family, they help me a lot [to lose weight]."
		"It's also important to include the sons and daughters, the husbands in programs like this, it opens you up more."
	Children as motivators	"I have a ten-year old and he is chubby. Sometimes he tells me I am very chubby and I tell him you are too and if we want to lose weight we have to eat better."
		"[My son] won't eat vegetables, he'd prefer to eat a bag of cheese puffs…so this motivates me, so that my son can see I am losing weight so that he might try it too."
	Incorporate physical activity	"Have material to do exercises but not very complicated."
		"And maybe an exercise video."

time for themselves. Women reported emotional eating as a coping mechanism and increased sedentary behavior as they lost the motivation to go out. One participant reported, "When you're anxious or depressed, you eat more…" and another explained, "I sought refuge in food."

Prior Weight-Management Efforts

Women described prior weight-loss attempts, including specific diets, supplements and diet pills, and exercise. As these efforts typically resulted in transient weight loss, these methods were felt to be unsustainable in general. A participant summarized her efforts saying, "The most you can last is… 2 months at the most, and then you can't stand it anymore!" The use of pills and supplements as well their negative side effects dominated the discussion. Women reported racing heartbeats, agitation, and dizziness when using diet pills and supplements: "The first time I dieted with natural products. They were capsules that came in a red envelope. And with those I started feeling bad… I started vomiting…." They also reported that specific diets often required the restriction of multiple foods or involved skipping meals. Exercise was noted as a healthier way to lose weight, and walking was an activity that all women approved. They reported poor weather conditions and a general lack of social support as barriers to physical activity.

Overall, failure to sustain weight-loss efforts was attributed to diets that were too divergent from their traditional eating habits, high costs, both economic and negative physical effects, of supplements and pills, and a lack of motivation and support for exercise.

Motivators/Program Needs

When asked to define factors that would aid their efforts to be healthier and lose weight, women said they wanted programs that incorporated their traditional foods and that involved the family. This emphasis was driven, in part, by family expectations around food, particularly from husbands, as exemplified by this quote: "Well, we're from Mexico, my husband prefers typical Mexican foods." They noted a need to educate and engage the men in order to promote healthy behavior: "If the [husbands] understand that they can develop cholesterol problems and diabetes from obesity, then they will get interested…." Participants reported the need to have family buy-in for weight loss. A participant reported that "Yes, on my part having [the family involved] where everyone is in agreement to lose weight". They also wanted programs that provided or encouraged support for physical activity as a group. "Having a support team is a good idea, someone to encourage you."

Overall, women reported an eagerness for weight-loss programs so that they as well as their children could be healthier: "I would like such a program for my daughter, so she can understand the risks…." Participants often described children motivating them to lose weight, one woman commented that her son said "Mama, why don't you get rid of your belly, [my son] told me and I didn't have an excuse". Another reported that "My son called us both out and told us—you have to change, you can't keep this life." They reported that being healthy and a good example for their children were important motivators to weight management and weight loss.

Discussion

This study assessed perceptions of obesity and weight management among 25 overweight Latina immigrants living in the southeastern United States. Participants described obesity in terms of body image and physical symptoms. Additionally, women discussed the contribution of depression, social isolation, and a lack of social support to weight gain. They discussed weight loss as a way to improve personal health and wellbeing and emphasized family, particularly children, as a motivator to begin weight-loss attempts. Regarding programmatic needs, women expressed desire for programs that incorporate traditional foods, support cultural traditions, and include a family focus.

This study's finding, in which women expressed both awareness of the obesity epidemic and desire to lose weight, diverges somewhat from prior studies describing cultural acceptance of overweight and suggests a possible shift in cultural norms [15, 16, 27, 28]. In a qualitative study examining weight-loss experiences among Latinas in South Carolina, Diaz and colleagues described a tension between participants' personal experience with obesity as unhealthy and what was described as a cultural acceptance and even preference for a heavier body weight [28]. While ideal body weight as perceived by Latina immigrants may or may not be higher than that of non-Hispanic white women, this study nevertheless demonstrates an awareness of the negative consequences of obesity and a desire to lose weight. Changing perceptions of overweight may not be unique to Latina immigrants. Results of a recent study among African-American women challenged the idea of a cultural tolerance of fatness among African-American women, stating, "Contrary to conventional thinking, African American women in our sample were dissatisfied with being overweight (p. 1542)" [29]. Other studies have demonstrated a change in public perception regarding the extent and seriousness of childhood obesity [30]. Increased attention to the obesity epidemic in the media as well as by

Table 4 Proposed intervention strategies based on selected thematic results reported by Latina immigrants

Theme	Proposed intervention strategy
Family involvement	Implement an orientation session that includes spouses and family members
	Implement a graduation session for spouses and family members
Social isolation depression	Implement group sessions close to home
Incorporate physical activity	Use exercise DVDs (walking/dancing)
	Provide on-site exercise classes
Traditional foods	Incorporate healthy meal planning based on traditional/typical foods
Children as motivators	Include activities focused on ways to improve children's eating habits and active playtime

policymakers may explain this change [31]; Michelle Obama's initiative to tackle childhood obesity is a prime example [32]. This change in awareness also may be related to increases in obesity rates globally; specifically, Mexico now has the second highest obesity rates among the Organisation for Economic Co-operation and Development (OECD) countries [33]. Our qualitative results represent a small, mostly Mexican sample; thus, future studies should explore quantitatively the extent to which these findings are generalizable to Latinos more broadly as well as to subgroups. However, if these findings in fact represent shifting attitudes and cultural norms regarding obesity, then the time is right for interventions tailored for high-risk communities.

With regard to risk and motivation, women in this study were focused more on the short-term weight loss effects such as aesthetics and feeling good/healthy than on avoiding obesity-related chronic diseases in the future. Only when prompted did women describe more long-term health risks such as heart disease, high cholesterol and blood pressure, and diabetes. These data are consistent with previous studies suggesting that health behavior is linked more strongly to immediate return on investment than future health risks [28]. Women were worried, however, about health risks for overweight and obese children. Several participants with overweight children expressed concern and uncertainty as to managing their children's weight. Previous studies among Latinos have noted parental concerns regarding their children's weight, with participants rarely feeling capable of implementing strategies to manage weight gain [34–36]. Thus, interventions that emphasize immediate outcomes for women and teach health promotion strategies for children may resonate among this priority population (Table 4).

An important finding in this study was the extent to which women described the impact of stress, depression, and social isolation on their weight. Social support has been suggested previously as being significant for weight management, given the importance of social networks within Latino cultures [37]. Our findings, however, are particularly salient for new receiver communities, such as those in the Southeast, where new immigrants cope with limited or absent social networks [7]. Compounding the problem, new immigrants often reside in low-resource environments and face discrimination along with limited access to quality healthcare services [7, 38]. Thus, interventions focusing on weight management in this population may experience greater success if they also address the need for increased social support and expanded social networks in these communities.

While this study provides a new insight on Latinas' perception of obesity, this research has several limitations. First, most of the participants were Mexican. Although this sample is representative of a majority of Latina immigrants living in the Southeast and in Alabama, these results may not be generalizable to the entire region and/or other Latino subgroups. Second, participants were overweight or obese, so their perceptions may differ from those of normal weight Latina women. Finally, as participants were selected from clinical and non-clinical venues, their responses may differ depending on their health status. Despite these limitations, this study provides important insights regarding perceptions of obesity among Latina immigrants in a southeastern state.

Conclusion

While the findings of this study highlight the role of culture and tradition in weight management for Latina immigrants, they also suggest an awareness of the obesity epidemic within the community. Changing attitudes towards overweight and obesity may provide a launch pad for implementing effective weight-management programs. Programs tailored for Latina immigrants, particularly those living in new receiver communities, should address multiple barriers, including limited access to fresh fruits and vegetables, low levels of physical activity, and high levels of social isolation and depression. The extent to which interventions maintain traditions and provide information promoting children's health also may predict the success of those programs.

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