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Acculturation and Weight Loss Strategies Among Latinas

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Abstract

This study examined the relationship between indicators of acculturation and weight loss strategies among Latinas. Latinas residing in the United States longer had more experience with various weight loss strategies (r = 0.24, $p = 0.05$). Controlling for demographic factors and BMI, years of U.S. residence was related to whether increased physical activity (OR 1.18, 95 % CI 1.01–1.39, $p = 0.04$) and reduced portion sizes (OR 1.39, 95 % CI 1.02–1.91, $p = 0.03$) were used as strategies for weight loss. More English spoken at home was associated with use of reducing calories as a strategy for weight loss (OR 4.13, 95 % CI 1.06–16.09, $p = 0.04$). Regardless of acculturation level, less empirically supported methods such as using herbal products and a girdle were more prevalent than commonly recommended methods such as using meal replacement products and commercial weight loss programs. Behavioral weight loss interventions for Latinas should consider acculturation to more effectively target subgroups, address cultural practices, and teach lifestyle-appropriate strategies.

Keywords

Obesity; Weight loss strategies; Latina; Acculturation

Introduction

Changes in lifestyle with time in the United States are suggested to contribute to the growing rates of obesity among Latinos. Latino immigrants with at least 15 years in the U.S. are almost four times at risk of obesity than recent immigrants [1]. Acculturation, often measured by English language proficiency, U.S. nativity, and/or greater length of time in the U.S., is associated with a shift away from traditional foods such as rice and beans and

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adoption of unhealthy dietary practices such as consumption of added fat, fast food, and sugar-sweetened beverages [2]. Acculturation appears to have serious health implications for women, as English language acculturated Latinas are more likely to be overweight or obese than non-Hispanic White women [3].

Latinos are disproportionately affected by obesity [4] and are less likely than non-Hispanic Whites to follow the recommendations of consuming fewer calories and exercising when trying to lose weight [5]. Identifying weight loss strategies practiced by Latinos could help inform the development of culturally appropriate weight loss interventions that are effective for subgroups of Latinos. Given that health behaviors are influenced by acculturation, the purpose of this study was to examine the association between acculturation indicators and weight loss strategies used by Latinas.

Methods

Sample

For this cross-sectional study, participants were recruited through Latino-serving organizations in Rhode Island. Eligibility criteria included women (18–65 years) who self-identified as Hispanic or Latina. The Institutional Review Board at the Miriam Hospital approved the research protocol for this study.

Measure

A bilingual questionnaire assessed demographic information, acculturation indicators, weight loss history, and weight loss strategies. Participants were asked to provide their age, education, ethnicity, and nativity status. Acculturation indicators included continuous years residing in the mainland United States and language spoken at home, with responses ranging from only Spanish to only English. Body mass index (BMI; kg/m^2) was calculated from self-reported height and weight. Participants were asked about self-perception of weight status and weight loss attempts in the past 5 years. Participants were also asked to endorse strategies ever used to lose weight and response categories were dichotomized to indicate “not used” or “used” for analyses.

Analysis

Only data from women born outside the mainland United States (n = 75) were included in the analyses. Descriptive statistics were used to characterize the sample. Correlation analyses were conducted to determine the relationship between acculturation indicators and demographic factors, BMI status, and number of weight loss strategies used. Logistic regression analyses were performed to determine the relationship between acculturation indicators (years residing in the U.S. and extent of English spoken at home) and whether or not each weight loss strategy was used. These analyses controlled for BMI, age, and education. Data were analyzed using PASW Statistics 18 (©SPSS, Inc., Chicago, IL).

Results

The women were predominately Spanish-speaking Caribbean Latinas from the Dominican Republic (47 %), Colombia (24 %), and Puerto Rico (11 %) with an average of 12.5 ± 9.3 years residing in the mainland United States. Their average age was 39.3 ± 11.4 years. The majority of women reported graduating from high school or college (72 %).

The women had an average BMI of 29.4 ± 8.3 kg/m^2. Nearly two-thirds were overweight or obese (74 %) and indicated they perceived themselves to be overweight (72 %). Attempting weight loss in the past 5 years was reported by 70 % of the women, with 47 % indicating at least three attempts.

Years residing in the U.S. was significantly correlated to greater English spoken at home ($r = 0.30$, $p = 0.01$) and age ($r = 0.37$, $p < 0.01$), but not education ($r = 0.02$, $p = 0.85$). Years residing in the U.S. was correlated with obesity status ($r = 0.28$, $p = 0.02$). After controlling for BMI and demographic factors, more years residing in the U.S. was associated with a greater number of weight loss strategies used ($r = 0.24$, $p = 0.05$).

The women had experience implementing various strategies for weight loss (Table 1). Strategies used more commonly included eating low-fat foods, decreasing portion sizes, eating more fruits and vegetables, and increasing physical activity. Non diet or exercise strategies for weight loss were also employed. In fact, a greater proportion reported using a girdle or herbal products than consuming calorie-controlled products such as shakes or frozen entrees. Although less common, maladaptive weight loss strategies such as fasting, using laxatives, or vomiting were reported. Few women had ever used a commercial weight loss program or surgical procedure to lose weight.

After controlling for BMI and demographic factors, acculturation indicators were associated with having used specific weight loss strategies (Table 1). For every year of U.S. residence, the odds of using reduced portion sizes (OR = 1.39, 95 % CI = 1.02–1.91) and physical activity (OR = 1.18, 95 % CI = 1.01–1.39) for weight loss increased by 39 and 18 %, respectively. Women who spoke more English at home were four times more likely to use reduced calories (OR = 4.13, 95 % CI = 1.06–16.09) for weight loss compared to those who spoke more Spanish at home.

Discussion

Although preliminary, this study is one of the first to examine the relationship between acculturation and weight loss strategies used by Latinas. Latinas residing in the U.S. longer tended to have more experience with various weight loss strategies. This is consistent with NHANES data which showed that less acculturated Mexican–American adults were less likely to attempt weight loss than more acculturated individuals [6]. Less acculturated Mexican–Americans who were overweight or obese were also less likely to want to lose weight and to perceive themselves as overweight compared to more acculturated individuals.

Overall, commonly recommended weight loss methods were most prevalent but some strategies were associated with acculturation. Although use of a low-fat diet to lose weight

has decreased among adults in the U.S., a study found that Latinos continue to use the strategy of lowering fat without calorie restriction [7]. Compared with non-Hispanic Whites, eating fewer calories to lose weight was reportedly less prevalent among Latinos [7]. This may be particularly the case for low acculturated Latinas since they were less likely to indicate reducing calories or using other strategies to control energy intake such as reducing portion sizes in the current study. Moreover, although low and high acculturated Latinos reported consuming more servings of fruits and vegetables than non-Hispanic Whites [8], Latinos trying to lose weight are less likely to eat the recommended servings of fruits and vegetables [7]. Given that women with higher intakes of fruits and vegetables may be more likely to maintain weight loss [9], Latinas should be encouraged to adhere to traditional dietary practices of consuming sufficient quantities of fruit and vegetable especially when attempting to lose weight.

National surveillance studies indicate that Latinas, especially of Caribbean descent, are less physically active than non-Hispanic White women [10, 11], and Latinas born outside the U.S. or who speak Spanish at home are more likely to be physically inactive [12]. In this survey, Latinas with greater years of U.S. residence were more likely to use physical activity as a strategy for weight loss. This finding may relate to the evidence that high acculturated Latinas report greater leisure-time physical activity and less occupational or housework activities than low acculturated Latinas [3].

Less empirically supported methods tended to be more common than other potentially beneficial strategies to control calorie intake such as meal replacements. Use of herbal products and a body girdle may be a reflection of socio-cultural factors. Latinos have been found to be more likely than non-Hispanic Whites to use over-the-counter supplements including appetite suppressants and herbal products for weight loss even after controlling for socioeconomic status [13]. Moreover, alternative methods for weight loss such as use of teas/herbs and home remedies are highly prevalent among obese Mexican–American women [14]. Also, use of a girdle to “burn fat” was previously reported in a qualitative study of Mexican–American women [15]. However, more studies have focused on whether Latinos meet the dietary and physical activity guidelines recommended for the general U.S. population and there is limited data on traditional or culturally specific weight loss practices used by Latinos.

Our study found that many Latinas have tried to lose weight but only a small percentage have experience with a formal weight loss program. Previous evidence indicates that compared to non-Hispanic Whites, Latinos are less likely to use commercial weight loss programs [13]. Although socioeconomic factors may reduce access to weight loss treatment, the limited availability of culturally and linguistically relevant programs may also serve as a barrier especially for less acculturated Latinas.

This study has limitations that should be considered. First, our sample consisted of predominately Caribbean Latinas from the northeast which may limit generalizability of our findings to other Latino subgroups or geographic regions. Second, self-reported data which are subject to bias were used for analyses. Third, acculturation was assessed using unidimensional and proxy measures as opposed to a bi-or multi-dimensional scale [16, 17].

Given that Latinos tend to fare worse in maintenance of weight loss than non-Hispanic Whites [18], further research on weight loss strategies used by Latinos could help inform the development of effective health promotion interventions. Because acculturation contributes to the diversity among Latinas, behavioral weight loss interventions should consider acculturation to target subgroups, convey salient messages, address cultural practices, and teach lifestyle-appropriate strategies.

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Table 1

Weight loss strategies used (N = 75 Latinas)

	Total %	Length of U.S. residence[a]			Language spoken at home[b]		
		OR	95 % CI	*p* value	OR	95 % CI	*p* value
Eat low-fat foods	88.7	3.26	0.79–13.44	0.10	2.74	0.49–15.12	0.24
Decrease portion sizes	88.6	1.39	1.02–1.91	0.03	2.95	0.67–12.88	0.14
Eat more fruits and vegetables	87.0	1.12	0.93–1.35	0.20	0.67	0.22–2.04	0.48
Increase physical activity	84.5	1.18	1.01–1.39	0.04	2.12	0.70–6.39	0.17
Reduce calories	82.6	1.09	0.95–1.25	0.20	4.13	1.06–16.09	0.04
Eat low carbohydrate foods	76.8	1.04	0.94–1.14	0.41	1.84	0.66–5.09	0.23
Wear girdle	51.4	0.99	0.93–1.05	0.92	0.68	0.33–1.40	0.30
Herbal supplements or teas	44.1	0.99	0.93–1.05	0.82	0.88	0.43–1.78	0.72
Meal replacements (liquid shakes)	39.1	1.01	0.95–1.08	0.62	1.00	0.49–2.01	1.00
Diet pills	36.2	1.06	0.99–1.13	0.07	0.99	0.49–2.01	0.99
Fast	35.7	1.00	0.94–1.06	0.87	0.96	0.46–1.97	0.91
Prepackaged meals (frozen entrées)	30.0	1.05	0.98–1.12	0.12	1.30	0.60–2.81	0.49
Laxatives	21.7	1.05	0.97–1.13	0.17	0.89	0.36–2.19	0.80
Commercial weight loss program	9.3	0.98	0.89–1.09	0.82	0.40	0.11–1.48	0.17
Vomit	5.8	1.06	0.95–1.19	0.26	1.18	0.27–5.14	0.82
Weight loss surgery	4.0	1.01	0.88–1.17	0.80	2.63	0.56–12.32	0.21

[a]Unit change of 1 year

[b]Unit change towards only English

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