Published in final edited form as:

J Adv Nurs. 2014 October ; 70(10): 2303–2313. doi:10.1111/jan.12383.

Promotoras as facilitators of change: Latinas' perspectives after participating in a lifestyle behaviour intervention program

CR Albarran¹, MV Heilemann², and D Koniak-Griffin³

^{1,2,3}School of Nursing, University of California, Los Angeles, California, USA

Abstract

Aim—To describe immigrant Latinas' perspectives of a lifestyle behavior intervention, focusing on their interactions with and perceptions of the promotoras who delivered the program in the United States.

Background—Immigrant Latinas in the United States have high obesity rates, which contribute to increased risk for cardiovascular disease and other chronic diseases. Interventions using the promotora model appear to be effective in reducing cardiovascular disease risk by improving dietary habits, physical activity, and selected clinical variables among Latinas. However, there has been very limited inquiry into what it is about these interventions and promotoras that facilitates behavior change, from the perspective of participants.

Design—Grounded theory methodology guided the data collection and analysis.

Methods—This qualitative study was completed in 2012 in California, after the end of a lifestyle behavior intervention. Four focus groups and seven one-on-one interviews were conducted with a total of 18 immigrant Latina intervention participants.

Results—Women described promotoras as helping them change by motivating them through three interconnected elements: tools, support, and knowledge. Latinas viewed their ability to make lifestyle changes as connected with their emotional and psychological health, and saw promotoras as counselors who provided emotional and social support. In this respect, the intervention was emotionally therapeutic for this sample of Latinas, although this was not the original intention of the program.

Conclusion—Promotoras provided the backbone of the intervention and were crucial in motivating Latinas to implement lifestyle changes. Future lifestyle behavior interventions should include a strong component of mental and emotional well-being.

Keywords

grounded theory; health promotion; community; depression; obesity; international health

INTRODUCTION

The worldwide obesity epidemic has more than doubled over the last 15 years (James 2004). In fact, high body mass index is now one of the leading risk factors affecting global morbidity, with dietary risk factors and physical inactivity accounting for 10% of global disability-adjusted life years (Lim *et al.* 2012). In the United States (US), Latinos comprise

the largest ethnic minority population (US Census Bureau 2013) and face increased health risks compared with non-Latino whites, since obesity prevalence rates among Latinos are disproportionately higher (CDC 2010). Low levels of physical activity are reportedly common among US-based Latinos (Office of Minority Health 2012; Rogers *et al.* 2012), and diets may include high fat intake (Neuhouser *et al.* 2004). Immigration also is a risk factor for obesity; Mexican immigrants in the US are more than twice as likely to be obese than their non-immigrant counterparts in Mexico (OR = 2.62, 95% CI; Flórez *et al.* 2012). Research suggests that specific obesity-promoting factors are more intensified among low-income ethnic minorities in the US (Kumanyika & Grier 2006). Differences in the physical environment (safety, recreational facilities) and access/availability of healthy foods in low-income neighborhoods contribute to these health disparities (Popkin, Duffey & Gordon-Larsen 2005; Kumanyika & Grier 2006; Ford & Dzewaltowski 2008). This raises serious concerns and points to the urgent need for preventive interventions.

Positive outcomes have been reported for lifestyle behavior interventions (LSBI, e.g., healthy eating and physical activity) designed to prevent cardiovascular disease (CVD; Baquero *et al.* 2009; Maruther, Wang & Appel 2009; Artinian *et al.* 2010). However, few studies specifically target overweight/obese Latinos in a community setting where non-professional caregivers work. Only a handful of studies have explored women's perceptions of the role of non-professional caregivers or used qualitative measures to understand women's perspectives of community-based interventions using community health workers (CHWs; also known as promotoras). This paper reports findings of a qualitative analysis undertaken to enhance understanding of the experiences and perspectives of immigrant Latina women in the US who received a community-based LSBI delivered by promotoras (Author, under review).

Background

As trusted community members similar to target participants, promotoras have been instrumental in enhancing cultural appropriateness of programs, receptivity among participants, and recruitment/retention (Parra-Medina & Messias 2011). Typically, promotoras have served as educators or conducted outreach activities (e.g., intervention recruitment, provision of referral sources) and translation services within clinical agencies in the US (Andrews, Felton & Wewers 2004; Rhodes, Foley, Zometa & Bloom 2007; Fleury, Keller & Perez 2009). However, the potential of CHWs to fulfill a full spectrum of roles within community health teams is now being recognized, bringing community perspectives and building community capacity for health and wellness (Balcázar *et al.* 2011).

Promotoras have also been utilized to provide emotional and informational support to physical activity intervention participants (Keller *et al.* 2012). As a result of their involvement in the California WISEWOMAN program (delivered by bilingual, bicultural CHWs), Latinas improved their 10-year coronary heart disease risk profile (Hayashi *et al.* 2010). In the promotora-delivered intervention *Su Corazón, Su Vida* (Your Heart, Your Life; Balcázar *et al.* 2006), Latina participants had significant weight loss at 4-month follow-up, and improvements in lipids, blood pressure, and dietary habits (Balcázar *et al.* 2010).

Few studies have explored perspectives of participants of promotora-led programs on the promotoras' role but at least one study (see Uys *et al.* 2002) focused on promotoras' own views of their role. Another quantitative study included a patient testimonial that the care provided by promotoras was positive (Balcázar *et al.* 2006). An additional mixed-methods study used ethnographic interviews with patients; they viewed promotoras as peers and felt that promotoras spent more time with them than did physicians (Waitzkin *et al.* 2011).

Despite the widespread use of promotoras, to our knowledge only two published studies have offered a post-intervention view of promotoras from the perspective of participants (Reinschmidt *et al.* 2006, Deitrick *et al.* 2010). Understanding how Latinas perceive the promotora role will offer insight into future LSBI development and promotora training requirements.

Context of the parent study—A randomized clinical trial (RCT) evaluated a 6-month community-based LSBI designed to improve diet and increase physical activity in overweight/obese Latina immigrants, 35–64 years of age, in a Southern California community. Women in the LSBI ($n=111$) received eight classes delivered in Spanish by one of three pairs of promotoras (one main facilitator and an assistant) over a 2-month period. Classes were held at local community centers and churches at the recommendation of the Community Advisory Board, but the intervention was not faith-based. The curriculum was based on an adapted form of *Su Corazón, Su Vida* (Your Heart, Your Life; Balcázar *et al.* 2006). Group instruction was followed by individual teaching and coaching (ITC; four promotora home visits plus four telephone calls over four months), designed to reinforce class contact and assist participants to achieve goals. The current qualitative analysis is based on data collected after RCT completion.

Background and training of promotoras—All promotoras were female, had a high school diploma or equivalent, had work experience as a CHW in a community organization for four or more years, and either lived or had worked in the target community. Ages ranged from 41–50 years and all spoke Spanish as their first language. Because formal certification programs for CHWs are not available in California, program-specific training was provided. The training program included approximately 100 hours of structured activities including: research-specific skill sessions and training in conducting the ITC component of the LSBI (e.g. purpose of ITC, role and activities of teacher vs. coach, communication skills), core training on the relationship between lifestyle behaviors and health (how to make healthy food choices, utilize portion control, handle emotions associated with poor dietary habits, and increase physical activity), and classes with an experienced promotora trainer to learn and practice implementation of the *Su Corazón* curriculum modules.

THE STUDY

Aim

The aim of the current analysis was to explore Latinas' experiences with and perceptions of the LSBI intervention, focusing specifically on interactions with the promotoras.

Design

This qualitative study involved both one-on-one interviews and focus groups. Techniques based on grounded theory methodology (Charmaz 2006; Corbin & Strauss 2008) guided the data collection and analysis.

Participants

Eighteen Latina women were recruited via telephone to participate in an individual interview and/or focus group. Eligibility criteria included being a participant in the LSBI condition of the parent study, participating in the educational activities, and speaking English or Spanish.

Prior to data collection, participants provided written informed consent to be interviewed and/or participate in a focus group and be audio recorded. Focus groups were held in private rooms at a community center and a local parish; participants agreed that information shared in the group was confidential and would not be discussed outside of the room. For individual interviews, participants were given the option to meet at a community site or their home and were compensated with a \$25 gift card to a local store upon completion of the interview. A nurse researcher (doctoral student), who is fluent in Spanish and did not participate in the parent LSBI, conducted the focus groups and interviews. All women elected to use Spanish in individual interviews and focus groups.

Fourteen women participated in the four focus groups (3–5 participants per group). Afterwards, three of the 14 women were invited to participate in an individual interview; all agreed. In addition, four individual interviews were conducted with women who did not participate in the focus groups. Therefore, seven 1:1 interviews and four focus groups were done with a total of 18 Latinas.

Data collection

Qualitative data were collected between October 2011 and March 2012, after the completion of RCT data collection for the LSBI. A semi-structured interview guide was used for focus groups and individual interviews; this was tailored as data were collected to allow exploration of women's experiences of and perspectives on the intervention and the promotoras. Questions included: "What was helpful/difficult for you in trying to achieve your goal while you were in the program?" Additional questions explored how women viewed promotoras and what could be done to make the program better in the future.

Ethical considerations

The interviewer and other key personnel were all fluent in Spanish. All study materials were provided in Spanish and were reviewed verbally with participants. Interviews and focus groups were conducted behind a closed door and all transcribed data were identified with pseudonyms to protect confidentiality. Focus group participants agreed to keep shared information confidential. The study was approved as an addendum to the parent study by a university Institutional Review Board.

Data analysis

Focus groups and individual interviews were audio recorded, transcribed, and checked for accuracy. Initial coding was done line-by-line; codes were written as gerunds to focus on the action in each line of data (Charmaz 2006) and to seek understanding of the process of engagement in the LSBI. The most frequently occurring and/or significant codes identified in the data were compared across various transcripts, and memos were written to analyze the meaning of these codes (Charmaz 2006). Themes were identified and from this, we began to form categories. Memos, charts, diagrams, and various analytic techniques were used to deepen our analysis of these categories, their properties, and dimensions. The transcripts were originally in Spanish and then most were translated into English. All memos and analysis were done in English.

Rigor

In order to maintain scientific rigor, strategies were taken to establish credibility, fittingness, and auditability (Sandelowski 1986). The first author kept reflexive memos to describe and interpret her own experiences in relation to data collection (interviewing and leading focus groups) and data analysis. This helped reduce potential researcher bias from influencing results and also helped keep the focus on the participant's perspective (Sandelowski 1986). Special care was taken to ensure that the findings fit the data from which they were derived. In focus groups, the moderator (first author) summarized discussions among the group frequently to check that the main sentiments of the women had been heard and interpreted correctly. Finally, process memos served as an audit trail, to show how decisions were made and how researchers arrived at the final analysis (Sandelowski 1986).

FINDINGS

The study participants were women from 35 – 62 years of age, and had lived in the US a range of 9 – 32 years. Table 1 presents demographic information about the sample.

Participants reported that they were able to make lifestyle changes that positively impacted their lives. They perceived three main aspects of the “Healthy Women Prepared for Life” program that made transformative change possible: self-management tools, support from promotoras, and new knowledge. The women described how they accessed these program components by means of the promotoras (see Figure 1).

Self-Management Tools

Among the helpful aspects of the program were the tools that women found useful. These included a pedometer and the actual tangible feedback they received through a series of health assessments.

A Pedometer with a Nickname: The “Panchita”—Participants were clear that walking was the specific exercise that was central to their experience of this intervention. They received a pedometer from the promotoras that motivated them to walk; it became a symbol that was both valued and desired. Promotoras taught the women how to use the pedometer and personified it by giving it a nickname that the women adopted: the

“panchita” (a nickname for the female name “Francisca”). Participants claimed that, armed with the pedometer and the knowledge of how to use it, they gained motivation to spend time walking. The women also used a log to track the number of daily steps and this enhanced their “relationship” to the “panchita,” increasing its value as a tool that could give readings that meant something to them. In general, the women gained a sense of accountability knowing that promotoras would be checking their log. Some women set concrete goals (such as taking 10,000 steps per day); others pushed past limit-setting and challenged themselves to take as many steps as they could in a given day.

One woman felt the combination of the pedometer and her newly perceived accountability to walk had an additional benefit: it helped her come out of a depression. She had been feeling so low that she did not want to leave her home, but she said the panchita “obligated me to go out, because I had to put it on so they [promotoras] can see that I did walk. So that was helpful for me.” She discovered that she liked the panchita, and as a result she “began to feel good, with energy and with a desire to get ahead, and do something different.”

Many women told how their family members encouraged them to wear the panchita and increase their daily steps. While most participants valued the pedometer, were excited to use it, and incorporated it into daily life, a couple women reported frustration with it and questioned its accuracy.

Valuable insight gained from health assessments—A Registered Nurse (RN) did health assessments to check blood pressure, lipids and glucose at baseline plus 6 and 9 month follow-ups. These assessments functioned like tools that created important discoveries as women learned new information in classes with promotoras about the meaning of the results of these tests. Many women had been unaware they had a health problem until they enrolled in the program and realized they had high cholesterol and/or were overweight by “x” amount of pounds at the time of the program’s first health assessment. Such discoveries made the class content very “real” and motivated them to implement lifestyle changes. These health assessments enabled them to track their progress and identify the other lifestyle changes that were needed. To emphasize this, one woman proudly took her health record out of her wallet and showed the interviewer how her cholesterol had fallen significantly between the first two assessments. In her case, realizing that her cholesterol was above normal levels but decreased as a result of her efforts not only motivated her to initiate changes, but also to continue eating less fat and doing more walking.

Support from Promotoras

Promotoras offered support and encouragement to participants. Because promotoras were seen as women with whom participants could identify, the women paid special attention to promotoras’ actions and behaviors, as well as their personal qualities. Like the effect of “tools” on women in our sample, support from promotoras also motivated women to succeed.

Promotoras’ actions—Participants recounted how *promotoras* served as teachers who imparted knowledge to them. Women valued the pride *promotoras* took in giving hands-on

instruction by bringing examples of food to class as models for them to consider. The women were inspired when promotoras displayed enthusiasm in both teaching classes and modeling healthy behaviors. Women noticed the care of promotoras when they were held accountable for their efforts towards losing weight. Within their relationships with promotoras, participants were motivated not just by accountability, but also a dynamic of personal recognition of their hard efforts. Promotoras encouraged women to exercise and reminded them to take actions in the LSBI. This increased engagement in program activities. One woman said:

So all the time, I was with the food chart on the refrigerator, of seeing and counting, and I would always remember that I would say, “No, she’s going to call me, she’s going to call me, I have to write [it] down, I have to walk.” And I would always...suddenly, if I didn’t call her, she would call me and the lady would tell me, “How’s it going? Have you forgotten?” “No.” “Did you write [your notes] for me?” “Yes.” “Do you need a copy?” “No.” I’m going to go visit you in a bit.”

Promotoras also were perceived as counselors from whom participants wanted emotional support. Women voiced needing support not only for issues of weight loss, but also for associated challenges of depression, bereavement, or shock surrounding a recent health scare. They found they could “confide in [promotoras] and talk about our problems, our worries,” and when they did, they received valuable practical help. Promotoras were sensitive to the mental health needs of participants. One woman said,

If you aren’t well emotionally, you can’t be well physically, so then it must be... there has to be a balance and that’s why, that’s what this promotora did...she helped many people and the...she gave them options. You can go to the groups, you can do this...Because I tell you, the majority of...what I have seen, we want to talk and let all that out and that’s why many times people get frustrated, because you have it all kept inside and you don’t let any of it out...

The motivation gained from promotoras was crucial to the women because it increased their sense of self-worth. One woman felt trapped in her feelings of depression and wanted a way to get out but did not know how. She found out that the promotora herself had also been depressed in the past. So, when the promotora told her, “No, well you have to do this and the other so that your body can have strength,” it made sense to her. She realized that she needed to consider her own well-being and not just that of others in her life. She said, “... because I would tell myself, ‘and if something’s going to happen to me, what will be of my children if we don’t have family here or anything? It’s just us;’ I must pull through for them.” She credits this realization as being the force behind her ability to make a variety of lifestyle changes.

The emotional support the women received appeared to be an unintentional byproduct of the program. Women did not think that promotoras were trained to give mental health advice (nor that this was the program’s goal). One woman whose promotora had taken on the role of counselor stated that, “[I think] she had other training apart from that which you gave her [to be a promotora].” Women wished that mental health information and support would be an official part of the curriculum and the promotora training. All women heavily associated their mental well-being with their ability to lose weight and be healthy.

Women considered the promotora to be a friend whom they trusted and emphasized that they were available and accessible. They visited women in their homes and even though it wasn't required by the program, some promotoras offered participants their personal phone numbers. The women perceived these additional efforts as a personal bonus. Overall, the relationships women felt they had with promotoras fostered a relaxed environment that encouraged trust.

Compañerismo—Participants reported additional support because promotoras fostered a sense of *compañerismo* (companionship) that was shared among many women in the program. One woman said she gained perspective and realized her problems weren't "so bad." When sharing in an open forum, she said,

Like there are others that have more problems [that are] more difficult. So one realizes, well, "I'm so selfish," right? I'm not seeing that there are others that are suffering more and I'm closed in on my own [problems], that I only suffer, I – bad things happen to me and there are other people that have more problems. So that program helped me in many aspects.

Another woman pointed out that an important component of the program was sharing relationships and building trust among women. She said,

The program even serves as recreation for women, having other relationships, right? It helps women a lot, right? Because then we go and [say to each other] "What do you eat? And how do you take care of yourself?" And that is how we go on exchanging these relations and that helps us, and we get to know the people that are in the program, right? We begin to trust them, and we can call them, "I have this problem." And even though it isn't in the program, it can guide us to another area as well, right? So I support the program.

Thus, program support was multidirectional between promotoras and participants as well as between participants. Women expressed desire to exercise in groups to increase motivation. Some suggested that a future group dance class would be a fun way to exercise with other women.

Promotoras' personal qualities—Promotoras were thought to have a number of personal qualities that were desirable and motivating such as being patient, trustworthy, friendly, determined and caring. The promotoras had confidence not only in themselves but also in the program.

Women perceived promotoras as direct links to medical professionals and expected them to be proactive in either finding answers to healthcare-related questions, or bringing in an RN or physician who could give an answer. Therefore, women were frustrated when promotoras identified some topics as being beyond their scope, such as those related to medical management of hypertension and high cholesterol. One woman said, "Well, if they [the promotoras] don't want to say it, then bring a doctor. Bring a doctor and have him clear all doubts that everyone has." However, participants were not satisfied with being referred back to their personal physicians, as many did not have a primary physician and felt more comfortable asking their questions in the program environment.

Participants also valued promotoras who had experience in their role—they could tell who had prior experience and who was just learning for the first time. Promotoras were perceived as uninterested, inexperienced, and less motivating if they sat out during class exercises, delivered program information without spirit or excitement, lacked “chemistry” or teamwork with the other promotoras or failed to encourage interaction with participants during classes. Women valued promotoras who were happy and playful; those with a sense of humor stood out as more motivating.

New Knowledge

Knowledge was not simply perceived as cognitive content by women. It was described to be both product and process. As product, knowledge was described as facts and ideas. As process, it was described as an experience that had an interactional component. It was while engaging in dialogue with the promotora and other women that participants experienced the process of understanding ideas about food and health, diet and exercise.

Dramatic portrayals—Participants valued their experiences of learning through videos and role playing (skits). Watching and participating in these productions motivated women and inspired them with the desire to avoid illness. Multiple participants independently described a video that they had seen in class about a person having a heart attack. They cited the warning signs and risk factors for heart disease and described with emotion how the video had impacted them. In particular, several women recognized some of the risk factors in themselves and identified with the person in the video. Another woman told how her experience of reading a script in the LSBI class was key. By acting out a scenario about a person who was at risk for a heart attack and then discussing the experience with a promotora and her peers, she learned the distinction between what was “good” and “bad” for her own health.

Informational brochures—Another way that knowledge was infused (both as product and process) was through informational brochures given out by promotoras. Women posted these on their refrigerators because they were so useful. Height and weight charts, portion size diagrams, and informational tips on topics such as how to listen to your body and how to know when you are hungry/full were perceived as helpful and inspiring. The practical information provided feasible ideas they planned to implement in daily life. Through the brochures and charts, they became more familiar with their bodies and learned how to curb unhealthy eating habits and foster newer, healthier habits.

This knowledge differed from what “dieting” had meant to them in the past. One woman claimed that in the past, “the diets scare you because you are only allowed to eat one thing” and that may not include “the thing I like the most.” But with the LSBI, she was able to motivate herself because the promotoras taught her that “you continue eating everything, but smaller [portions].” For her, the message of this program was positive instead of negative; rather than admonishing her not to eat, it allowed her to eat within limits, which made it seem doable in her everyday life.

Imagining a future program—Women identified a few aspects of the program that could be improved, or ideas of how they'd like the program to be in the future. Overall, women wanted more of each component: more tools, more support and more knowledge. Again and again, women shared that they wanted additional women to benefit from the program as they had. They perceived the program as being relevant “because almost all of us women need this [kind of] help.” A few women even volunteered to be future promotoras and one wanted to host the program at her church. Women who reported that their promotoras prepared food in class or brought samples of healthy foods to taste were very pleased with this. Most participants desired more contact with promotoras such as greater frequency of phone calls and home visits. Women said they wanted more “constant” support from promotoras because it would nurture more motivation, which would then lead to a greater ability for her to change. Women also wanted the promotoras to facilitate communication between participants; they reported sadness over losing contact with their peers after the conclusion of the program.

DISCUSSION

The overweight, immigrant Latina women of this sample highly valued the promotoras of the LSBI and viewed them as facilitators of behavior change who brought tools, support and knowledge into their lives. The methodological focus on action and process with Grounded Theory (Charmaz 2006; Corbin & Strauss 2008) allowed us to see the ways women experienced the LSBI as dynamic over time. Women gained tools in the process of the LSBI such as the panchita which took on both symbolic and pragmatic meaning, support from promotoras in the form of companionship and mentoring, and new knowledge that was perceived as both process and product.

Only two other qualitative studies could be found that examined the role of the promotora. Reinschmidt and colleagues (2006) used content analysis to examine participants' perspectives of an intervention wherein promotoras made home visits to participants to diminish their barriers to attending a free medical screening exam. The authors noted, as we did, that participants viewed promotoras as educators and motivators of healthy behaviors with whom they felt secure and comfortable especially because they were bilingual, caring, respectful and from similar socio-cultural backgrounds. Our promotoras, however, were engaged with participants at a much deeper level over much more time (6 months compared to one home visit in the Reinschmidt study), and this had a profound impact. Unlike other programs that have used the *Su Corazón* curriculum, our LSBI included the ITC component (four home visits and four telephone calls from promotoras, who had been trained in individualized coaching). This ITC training offers one possible explanation for why women reported receiving significant emotional support from our promotoras.

Our findings are consistent with those detailed by Deitrick and colleagues (2010), who used grounded theory methodology to describe the personal characteristics of the promotora in a diabetes self-management program. Similar to our findings, their participants referred to the promotora as a *comadre* (kinswoman), a *buena profesora* (good teacher), a cultural mediator, and/or a role model. The promotora was viewed as facilitating connections

between herself, patient/s, and community healthcare providers as she offered support, health education, and cultural understanding to participants.

Just as our participants described the classes as a supportive space for them to share their struggles, so too did the participants in a diabetes education program evaluated by Castillo and colleagues (2010). Results showed that the CHW-led intervention increased participants' knowledge, assisted them in modifying behaviors, and ultimately benefitted their mental health. The CHW role included facilitation of communication including feedback, encouragement and emotional support. Our study extends these findings by highlighting that it was the relationship with and role modeling of the promotora that facilitated the safe environment for sharing struggles and providing mutual support. Indeed, a trusting, individualized relationship is the foundation for effectively imparting knowledge and encouraging use of self-management tools.

Limitations

Our sample, recruited from LSBI participants, included only women who were interested in the follow-up study; these women may have had more positive feelings toward the LSBI than other non-participants. Our findings are not generalizable to all immigrants or to Latinas living in their home countries, but may be applicable to women similar to the study participants. Finally, because this is a Grounded Theory study that explored perspectives of the promotora-led LSBI, we cannot elucidate correlations between promotoras' characteristics and their effectiveness in promoting behavior change.

CONCLUSIONS

In this study, overweight immigrant Latinas greatly valued the emotional support, counseling, and connection provided by promotoras and perceived this help as being transformative to both their physical and mental health. Promotoras were viewed as effective teachers because of the relationships they built with participants, and the supportive environment they fostered both in the classroom and one-on-one. Our findings raise awareness of the contributions of promotoras to community models of prevention, highlighting how CHWs can be important in providing mental health support.

Other authors have highlighted the importance of implementing workforce development strategies and occupational regulations for CHWs (Balcazar, Rosenthal & Hernandez 2011), and our findings add to this by suggesting that future promotora certification programs and/or LSBI promotora-led training curricula for Latinas should incorporate and emphasize mental health, because Latinas view emotional support as a valuable and necessary function of the promotora role. Specifically, the ITC training component for promotoras in this LSBI may have contributed to promotoras' ability to effectively impart knowledge, inspire utilization of self-management tools, and provide support within the context of a personal relationship. In the future, studies that aim to draw correlations between specific promotora training/characteristics and behavior change could strengthen workforce development strategies and occupational regulations for CHWs.

References

- Albright CL, Pruitt L, Castro C, Gonzalez A, Woo S, King AC. Modifying physical activity in a multiethnic sample of low-income women: one year results from IMPACT (Increasing Motivation for Physical ACTivity) project. *Annals of Behavioral Medicine*. 2005; 30:191–200. [PubMed: 16336070]
- Andrews JO, Felton G, Wewers ME, Heath J. Use of community health workers in research with ethnic minority women. *Journal of Nursing Scholarship*. 2004; 36:358–365. [PubMed: 15636417]
- Artinian NT, Fletcher GF, Mozaffarian D, Kris-Etherton P, Van Horn L, Lichtenstein AH. American Heart Association Prevention Committee of the Council on Cardiovascular Nursing. Interventions to promote physical activity and dietary lifestyle changes for cardiovascular risk factor reduction in adults: a scientific statement from the American Heart Association. *Circulation*. 2010; 122:406–441. [PubMed: 20625115]
- Avila P, Hovell MF. Physical activity training for weight loss in Latinas: a controlled trial. *International Journal of Obesity Related Metabolic Disorders*. 1994; 18:476–482. [PubMed: 7920873]
- Author. Feasibility and outcomes of a promotora-led lifestyle behavior intervention for overweight, immigrant Latina women. *Journal of Advanced Nursing*. under review.
- Balcázar H, Rosenthal EL, Hernandez L. Community health workers can be a public health force for change in the United States: Three actions for a new paradigm. *American Journal of Public Health*. 2011; 101:2199–2203. [PubMed: 22021280]
- Balcázar H, Alvarado M, Luna Hollen M, González-Cruz Y, Hughes O, Vasquez E, Lykens K. *Salud Para Su Corazón*-NCLR: a comprehensive promotora outreach program to promote heart healthy behaviors among Hispanics. *Health Promotion Practice*. 2006; 7:68–77. [PubMed: 16410422]
- Balcázar H, Alvarado M, Luna Hollen M, González-Cruz Y, Pedregon V. Evaluation of *Salud Para Su Corazón* (Health for Your Heart) – National Council of La Raza promotora outreach program. *Preventing Chronic Disease*. 2005; 2:1–9. Retrieved from http://www.cdc.gov/pcd/issues/2005/jul/04_0130.htm on September 20, 2010.
- Balcázar H, Byrd T, Ortiz M, Tondapu SR, Chavez M. A randomized community intervention to improve hypertension control among Mexican Americans: using the Promotoras de Salud Community Outreach model. *Journal of Health Care for the Poor and Underserved*. 2009; 20:1079–1094. [PubMed: 20168020]
- Balcázar HG, de Heer H, Rosenthal L, Aguirre M, Flores L, Puentes FA, Cardenas VM, Duarte M, Ortiz M, Schulz LO. A promotores de salud intervention to reduce cardiovascular disease risk in a high-risk Hispanic border population, 2005–2008. *Preventing Chronic Disease*. 2010; 7:A28. [PubMed: 20158973]
- Balcázar H, Rosenthal EL, Brownstein JN, Rush CH, Matos S, Hernandez L. Community health workers can be a public health force for change in the United States: three actions for a new paradigm (commentary). *American Journal of Public Health*. 2011; 101:2199–2203.
- Balcázar H, Castro FG, Krull JL. Cancer risk reduction in Mexican American women: The role of acculturation, education, and health risk factors. *Health Education Quarterly*. 1995; 22(1):61–84. [PubMed: 7721602]
- Baquero B, Ayala GX, Arredondo EM, Campbell NR, Slymen DJ, Gallo L, Elder JP. *Secretos de la Buena Vida*: processes of dietary change via a tailored nutrition communication intervention for Latinas. *Health Education Research*. 2009; 24:855–866. [PubMed: 19339374]
- Castillo A, Giachello A, Bates R, Concha J, Ramirez V, Sanchez C, Pinsker E, Arrom J. Community-based diabetes education for Latinos: the Diabetes Empowerment Education program. *The Diabetes Educator*. 2010; 36:586–594. [PubMed: 20538970]
- Centers for Disease Control and Prevention. Differences in prevalence of obesity among black, white, and Hispanic adults—United States, 2006–2008. *Morbidity and Mortality Weekly Report*. 2009; 58:740–744. Retrieved from <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5827a2.htm> on August 6, 2013. [PubMed: 19609247]

- Deitrick LM, Paxton HD, Rivera A, Gertner EJ, Biery N, Letcher AS, Lahoz LM, Maldonado E, Salas-Lopez D. Understanding the role of the promotora in a Latino diabetes education program. *Qualitative Health Research*. 2010; 20:386–399. [PubMed: 20133505]
- D'Alonzo KT. The influence of *Marianismo* beliefs on physical activity of immigrant Latinas. *Journal of Transcultural Nursing*. 2010; 23:124–133. [PubMed: 22294337]
- D'Alonzo KT, Fischetti N. Cultural beliefs and attitudes of Black and Hispanic college-age women toward exercise. *Journal of Transcultural Nursing*. 2008; 19:175–183. [PubMed: 18263846]
- Earp JA, Viadro CI, Vincus AA, Altpeter M, Flax V, Mayne L, Eng E. Lay health advisors: a strategy for getting the word out about breast cancer. *Health Education and Behavior*. 1997; 24:432–451. [PubMed: 9247823]
- Eyler AA, Matson-Koffman D, Vest JR, Evenson KR, Sanderson B, Thompson JL, Wilbur J, Wilcox S, Young DR. Environmental, policy, and cultural factors related to physical activity in a diverse sample of women: the Women's Cardiovascular Health Network project—summary and discussion. *Women's Health*. 2002; 36:123–134.
- Fleury J, Keller C, Perez A, Lee SM. The role of lay health advisors in cardiovascular risk reduction: a review. *American Journal of Community Psychology*. 2009; 44:28–42. [PubMed: 19533327]
- Flórez KR, Dubowitz T, Saito NS, Borges G, Breslau J. Unites States-Mexico migration and the prevalence of obesity: A transnational perspective. *Archives of Internal Medicine*. 2012; 172(22): 1760–1762. [PubMed: 23405407]
- Ford PB, Dziewaltowski DA. Disparities in obesity prevalence due to variation in the retail food environment: three testable hypotheses. *Nutrition Review*. 2008; 66:216–228.
- Hayashi T, Farrell MA, Chaput LA, Rocha DA, Hernandez M. Lifestyle intervention, behavioral changes, and improvement in cardiovascular risk profiles in the California WISEWOMAN Project. *Journal of Women's Health*. 2010; 19:1129–1138.
- Hovell MF, Mulvihill MM, Buono MJ, Liles S, Schade DH, Washington TA. Culturally tailored aerobic exercise intervention for low-income Latinas. *American Journal of Health Promotion*. 2008; 22:155–163. [PubMed: 18251114]
- James PT. Obesity: The worldwide epidemic. *Clinics in Dermatology*. 2004; 22(4):276–280. [PubMed: 15475226]
- Juarbe T, Turok XP, Pérez-Stable EJ. Perceived benefits and barriers to physical activity among older Latina women. *Western Journal of Nursing Research*. 2002; 24:868–886. [PubMed: 12469724]
- Keller CS, Cantue A. *Camina por Salud*: walking in Mexican-American women. *Applied Nursing Research*. 2008; 21:110–113. [PubMed: 18457751]
- Keller C, Fleury J. Factors related to physical activity in Hispanic women. *Journal of Cardiovascular Nursing*. 2006; 21:142–145. [PubMed: 16601533]
- Keller C, Trevino RP. Effects of two frequencies of walking on cardiovascular risk factor reduction in Mexican American women. *Research in Nursing and Health*. 2001; 24:390–401. [PubMed: 11746068]
- Keller C, Records K, Coe K, Ainsworth B, Vega López S, Nagle-Williams A, Permana P. Promotoras' roles in integrative validity and treatment fidelity efforts in randomized controlled trials. *Family and Community Health*. 2012; 35:120–129. [PubMed: 22367259]
- Kumanyika S, Grier S. Targeting interventions for ethnic minority and low-income populations. *Future of Children*. 2006; 16:187–207. [PubMed: 16532664]
- Lim SS. A comparative risk assessment of burden of disease and injury attributable to 67 risk factors and risk factor clusters in 21 regions, 1990–2010: A systematic analysis for the Global Burden of Disease Study 2010. *The Lancet*. 2012; 380(9859):2224–2260.
- Maruthier NM, Wang NY, Appel LJ. Lifestyle interventions reduce coronary heart disease risk: results from the PREMIER trial. *Circulation*. 2009; 119:2026–2031. [PubMed: 19349322]
- Neuhouser ML, Thompson B, Coronado GD, Solomon CC. Higher fat intake and lower fruit and vegetables intakes are associated with greater acculturation among Mexicans living in Washington State. *Journal of the American Dietetic Association*. 2004; 104:51–57. [PubMed: 14702584]
- Parra-Medina D, Hilfinger Messias DK. Promotion of physical activity among Mexican-origin women in Texas and South Carolina: an examination of social, cultural, economic and environmental factors. *Quest*. 2011; 63:100–117. [PubMed: 21731409]

- Pekmezi DW, Neighbors CJ, Lee CS, Gans KM, Bock BC, Morrow KM, Marquez B, Dunsiger S, Marcus BH. A culturally adapted physical activity intervention for Latinas: a randomized controlled trial. *American Journal of Preventive Medicine*. 2009; 37:495–500. [PubMed: 19944914]
- Perez A, Fleury J, Keller C. Review of intervention studies promoting physical activity in Hispanic women. *Western Journal of Nursing Research*. 2009; 32:341–362. [PubMed: 20040732]
- Popkin BM, Duffey K, Gordon-Larsen P. Environmental influences on food choice, physical activity and energy balance. *Physiology & Behavior*. 2005; 86:603–613. [PubMed: 16246381]
- Reinschmidt KM, Hunter JB, Fernandez ML, Lacy-Martinez CR. Understanding the success of promotoras in increasing chronic diseases screening. *Journal of Health Care for the Poor and Underserved*. 2006; 17:256–264. [PubMed: 16702713]
- Roger VL, Go AS, Lloyd-Jones DM, Benjamin EJ, Berry JD, Borden WB. American Heart Association Statistics Committee and Stroke Statistics Subcommittee. (2012) Heart disease and stroke statistics--2012 update: a report from the American Heart Association. *Circulation*. 125(1):e2–e220. Epub 2011 Dec 15. Erratum in *Circulation* 2012 125(22), e1002. [PubMed: 22179539]
- The Office of Minority Health. Health status of Hispanic/Latino women. Retrieved from <http://minorityhealth.hhs.gov/templates/content.aspx?ID=3722> on August 6, 2013
- Rhodes SD, Foley KL, Zometa CS, Bloom FR. Lay health advisor interventions among Hispanics/Latinos: a qualitative systematic review. *American Journal of Preventive Medicine*. 2007; 33:418–427. [PubMed: 17950408]
- Swider SM. Outcome effectiveness of community health workers: an integrative literature review. *Public Health Nursing*. 2002; 19:11–20. [PubMed: 11841678]
- Staten L, Scheu L, Bronson D, Peña V, Elenes J. *Pasos Adelante*: the effectiveness of a community-based chronic disease prevention program. *Preventing Chronic Disease*. 2005; 2:A18. [PubMed: 15670471]
- US Census Bureau. US Census Bureau News. Hispanic Heritage Month: Sept. 15 – Oct. 15. 2013. Retrieved on August 20, 2013 from http://www.census.gov/newsroom/releases/pdf/cb13ff-19_hispanicheritage.pdf
- Vella CA, Ontiveros D, Zubia RY, Dalleck L. Physical activity recommendations and cardiovascular disease risk factors in young Hispanic women. *Journal of Sports Science*. 2011; 29:37–45.

SUMMARY STATEMENT

Why is this research needed?

- Immigrant Latinas in the United States suffer from high rates of obesity (leading to increased risk for chronic diseases) that are disproportionate to their non-Latino white counterparts.
- Promotora-led lifestyle behavior intervention programs have not been examined from the post-intervention perspective of immigrant women in the United States who are predominantly of Mexican descent.
- Participant perspectives of promotoras who deliver lifestyle behavior interventions are necessary to understand what it is that makes these programs effective, and to improve/inform future program planning and promotora training requirements.

What are the key findings?

- Participants viewed promotoras as helping them change by imparting tools, support, and knowledge that women valued; promotoras were viewed as crucial motivators in Latinas' decisions to make lifestyle behavior changes.
- Latinas see emotional and psychological well-being as inextricably linked to their physical health.
- The influence of promotoras was viewed as being emotionally therapeutic, because promotoras heeded participants' emotional needs and facilitated contact and connections with other women with whom they could identify.

How should the findings be used to influence policy/practice/research/education?

- Training of promotoras should include information about emotional and psychological health and well-being, along with basic counseling skills and mental health referral sources.
- Future lifestyle behavior interventions should incorporate a strong component of emotional and psychological health.
- The value of promotoras should be recognized and utilized in planning community-based nursing interventions for immigrant Latinas.

Figure 1.
Diagram of LSBI program components that Latinas reported receiving from promotoras.

Table 1

Participant demographic characteristics

	Mean (SD)	Frequency (total N=18)	%
Age (years)	45 (8.7)		
Acculturation ^a	1.53 (.36)		
Length of time in the US (years)	21 (7.3)		
Foreign-born			
Yes		18	100
No		0	0
Country of origin			
Mexico		16	89
Central America (other)		2	11
Partner Status			
Married/living together		14	78
Separated/divorced/single/widowed		4	22
Language Spoken			
Only Spanish		7	39
Both Spanish and English		11	61
Highest education level achieved			
< 8 th grade		8	44
Some high school/high school grad		7	39
Some college or trade school		2	11
College degree or higher		1	6
Employed			
Yes		7	39
No		10	56
Missing		1	6
Income			
< \$20,000		8	44
\$20,001 – \$40,000		6	33
\$40,0001 – \$75,000		4	22

^aBased on 1–5 questions with the rating scale: 1) only Spanish, 2) Spanish better than English, 3) both English and Spanish equally well, 4) English better than Spanish, 5) only English. Higher score means more acculturated (Balcázar, Castro, & Krull, 1995).