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Salud de la Mujer: Using Fotonovelas to Increase Health Literacy Among Latinas

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Abstract

Background: There is an identified need for health literacy strategies to be culturally sensitive and linguistically appropriate.

Objectives: The goal of our community-based participatory research (CBPR) project related to health and nutrition is to demonstrate that active community involvement in the creation of health education fotonovelas that are relevant to culture, ethnicity, gender, social class, and language can increase the health literacy of women in a disadvantaged community.

Methods: We recruited 12 women to take part in our pilot fotonovela intervention about healthy eating and nutrition. Pre- and post-test assessments of knowledge, attitudes, and behavior around nutrition were given at baseline and will be collected after the completion of the project.

Results: We hypothesize that post-test assessments of our participants will reveal increased nutrition knowledge as well as positive changes in attitudes and behavior toward healthy eating.

Conclusions: We believe that our fotonovelas will represent experiences of community members and encourage good health practices by increasing knowledge and cooperation among community members.

Keywords
Community health partnerships, health disparities, health promotion, urban population, population characteristics, health care, women

Health literacy is defined by the Department of Health and Human Services as “the degree to which individuals have the capacity to obtain, process, and understand basic health information and services needed to make appropriate health decisions.” Low and limited health literacy is associated with lower levels of preventive care, increased use of emergency services, higher levels of chronic disease, and higher general health care costs. People with limited health literacy are more likely to enter the health care system when in poorer health and more likely to be admitted to the hospital for preventable reasons. These problems exist among all racial and ethnic groups, but may be of particular importance among Latinos, because language barriers may exacerbate the problem of low health literacy.

This paper describes the initial stages of a unique fotonovela health literacy intervention centered on healthy eating and nutrition created with a strong community–academic partnership with an underserved female Latina population in a large metropolitan Midwestern city.

Theoretical Framework for Fotonovelas

Fotonovelas are a common and popular style of novel among Latinos that contain interesting and suspenseful storylines. Fotonovelas are told in a format that includes pictures or photographs and small amounts of text. Given the popularity of these types of novels, a number of private and governmental agencies use them to disseminate health education materials to Latinos in underserved communities. For example, the
Substance Abuse and Mental Health Services Administration has created a few fotonovelas geared toward the alcoholism and drug abuse and the National Institutes of Health have created several fotonovelas on exercise in elderly populations.

Educational research indicates that collective action and full participation of learners are essential to the educational process. The traditional approach of fotonova development for health education relies on professional photographers, health specialists, and government agencies to document what transpires in the Latino community surrounding a particular health issue. This approach has been criticized by feminist and educational researchers for its “top-down” approach and paternalistic design, with little or no input sought from the community that the fotonovelas are designed to reach.

Research indicates that the fotonova is an effective way to increase the health literacy of those that participate in the creation of the fotonova as well as those who read the fotonova after production.

The process of community participation in the creation of health materials was made popular by the educational philosopher Paulo Freire, and involves members of the community using drawings or photographs to reflect common social experiences. Academic and community partners work closely together to actively shape the fotonova so that it is relevant to the culture, ethnicity, gender, social class, language, and norms of the community, and specific to community health needs. Inherent in the process of fotonova development is group discussion and problem solving. Community members must share ideas and discuss life conditions and community health concerns as they work cooperatively to create the fotonova’s storyline. The final product becomes a way to convey ideas and information to other members of the community. This approach empowers the community by encouraging community members with few resources (i.e., money, power, or status) to communicate individual health concerns, community issues, and most important seek advice on health information.

This philosophy, paired with the systematic process of inquiry, is consistent with CBPR. CBPR involves community and academic partnerships that have increasingly become recognized as an orientation that stresses community partnership and action for social change and reductions in health inequities. CBPR is a paradigm that requires community engagement in the research process; it recognizes that understanding community context is necessary. As a collaborative approach to research, it involves all partners equitably and recognizes the strengths that each partner brings. Key principles include recognizing the community as a unit of identity; building strengths and community resources; facilitating collaborative partnership; integrating knowledge for mutual benefit; promoting co-learning; addressing health from a positive perspective; and disseminating findings and knowledge to all partners. An underlying assumption of CBPR is through active and genuine involvement of all participants, the community receives maximum benefits, and the range of harmful effects of research is minimized.

The CBPR process is not research in the community; it is research with the community as co-investigators in all steps of the process. The process not only recognizes the community as co-investigators, but starts where the people are through open and authentic dialogue. To improve the health of the members of the community, CBPR draws on multiple strengths to generate understanding and meaningful change. Understanding the community environment from the perspective of individuals who live there in a language they recognize and can relate to, before the development of interventions provides a foundation for consequential and meaningful change.

This paper describes how our community–academic partnership engaged members of an underserved Latino community to capture images of relevant health concerns and used photographs to tell a story through fotonovelas. The overall goal of this CBPR project is to determine whether participation in the creation of fotonovelas related to healthy eating and nutrition increases the health literacy of Latina women in a disadvantaged community. This paper describes the first step in the process of developing fotonovelas. That is, how our community–academic partnership engaged members of an underserved Latino community to capture images of relevant health concerns and used photographs to tell a story through fotonovelas.

Objectives

The primary objectives are to increase the health literacy of Latina women in a Milwaukee community through the participation in the creation of fotonovelas related to healthy eating and nutrition. The specific aims of the project described here
were developed through a collaboration between academic and community partners and include the following:

1. Actively engaging the community in the development of fotonovelas to improve health literacy;
2. Training project team members in participatory materials development process;
3. Training project team members in data collection methods; and
4. Building community capacity to continue fotonovela style projects after the end of the study period.

**ACADEMIC–COMMUNITY PARTNERSHIP**

Community and academic partners in this project have a long-standing, strong, dynamic, transformative relationship that includes bidirectional learning. Academic partners represent a private medical school and community partners represent a large community center servicing Latinos in a large metropolitan city in the Midwest. The community faces social and economic difficulties and is a federally recognized medically underserved area. Many adults speak little or no English, have marginal writing skills, and fewer than half of the adults in the area have a high school diploma.

The academic partners are part of a unique department that employs internationally renowned experts in CBPR, has an ongoing postdoctoral training program in community-engaged research, houses a research center dedicated to doing research with underserved communities, and is the headquarters of an international organization promoting community–campus partnerships. Academic partners are not fully bilingual or bicultural, but our long-standing relationship allowed for mutual trust and bidirectional learning. The project team also included a bilingual and bicultural project coordinator to oversee all aspects of the intervention.

Partners have worked together on all aspects of this health literacy project, including (1) idea initiation, (2) project formation, (3) grant writing, (4) project initiation, and (5) day-to-day operation of the fotonovela project. Community partners initially identified a need for improved health literacy among Latinas through a set of targeted focus groups. Community members indicated that medical information currently available to them is written in complicated medical jargon, is often not translated into Spanish, and is generally difficult to understand. They suggested the materials be developed in the familiar fotonovela format to ensure interest and cultural relevance for the community. Community and academic partners then worked together for several months to write successfully for a grant to implement a health literacy fotonovela project. Funding obtained to implement this project was split evenly between academic and community partners with both contributing equally to the day-to-day operations. This project is being used as the basis for future fotonovelas to increase health literacy among Latino populations, including dementia caregivers and those managing diabetes.

**FOTONOVELA HEALTH LITERACY PROJECT**

**Recruitment and Community Engagement**

We recruited female participants for the fotonovela sessions through flyers and word of mouth at the Elementary School and Senior Center located at the community center. Community–academic partners decided that the best way to involve participants in the process of developing fotonovelas was to provide them with a camera to use for the duration of the project. Women were invited to attend an information session through flyers and face-to-face interaction with community partner. Twelve women agreed to participate in the fotonovela session and, after providing informed consent, were given a pre-test to assess nutritional health literacy. Five women received digital cameras with which to take photographs. After the first month, one woman withdrew from the project and returned the camera. Those without cameras were paired with women who had cameras during sessions so that everyone had a chance to be involved in taking pictures.

All participants signed a consent form to appear in the photos and for their photos to be used as part of the fotonovela intervention. Photos that were not used in the fotonovela are stored on a password-protected computer for possible later use. Participants also had the opportunity to print their favorite photos to keep for themselves. A photo consent form was collected on all participants who appeared in photos. All Institutional Review Board approvals and consent forms were obtained for this project through the academic partner’s institution.

**Training Project Team**

The training of the project team members was (and continues to be) a bidirectional learning process where skills are...
valued equally. Researchers from the academic institutions trained community partners on aspects of survey execution, focus group facilitation, and the entering and coding of qualitative and quantitative data. Community partners trained researchers in the nuances of community culture, the needs of community members, and the Spanish language. A professional photographer provided training to project team and community members on how to correctly use the cameras, artistic aspects of photography, and presentation of fotónovelas. Training and fotónovela session planning took place weekly for the first several months of the funded project.

**Fotonovela Sessions**

With feedback from community members, we decided to hold monthly, 2-hour fotonovela sessions for 9 months. This fit the schedules of potential participants and allowed time for the women to take photographs in between sessions. The fotonovela sessions were divided into two sections. The first hour consisted of didactic information about healthy eating and nutrition and the second was spent doing activities such as looking at photos taken by the women during the month and discussing potential formats of the fotonovelas. Nutrition specialists from a local community college presented nutritional information at the sessions and provided all didactic materials in Spanish. We also held “office hours” in between the monthly sessions. The office hours provided project team members with the opportunity to meet with the women individually to answer questions about the cameras, to upload photos to be shown at the next session, and to discuss any issues.

Participants took photos of all aspects of healthy eating and positive nutrition. For example, if the topic was portion size, women were asked to take photographs of their portions at home. As a group we decided which photos lent themselves to a good story and visual representation of healthy eating and nutrition. Decisions about the story line took place over several sessions; participants were charged with writing out a storyboard. Storyboards were put to a vote, text was decided on, and photos were selected for the preliminary fotónovelas. To date, the storyline, text, and photographs have been completely drafted.

**Formative and Summative Evaluation**

We will use objective criteria to evaluate the fotónovelas using the established methods based on *Clear and Simple,* *Simply Put,* and *Making Health Communication Programs Work.* Once a preliminary fotónovela has been created, we will hold focus groups with community members that will center on evaluating the readability, attractiveness, cultural relevance, and potential for comprehension for the community. An expert review panel made up of physicians, nurses, dieticians, community members, marketing specialists, researchers, and photographers will be assembled to review the fotónovela. Feedback from the focus groups and expert review panel will be used to modify the final fotónovelas before they are printed in significant numbers. In addition, the Fry Method and Flesch-Kincaid reading level assessment will both be used to ensure that the reading level of the fotónovelas is not above a fifth-grade level. This comprehensive approach will guide the adaptation and development of tailored, readable, accurate, attractive, and culturally relevant educational materials.

A summative evaluation is planned for the final print version of the fotónovelas. We will print the fotónovela with a short survey in the back to be detached and returned to us for feedback. We will also pass out the fotónovelas at local health fairs and ask individuals to answer questions about the attractiveness, usefulness, and relevance of the health information provided and the format. Fotónovelas will then go through a final revision before being printed and distributed more widely. The community partner is highly respected and valued in the community and serves many in the community. There is a level of trust between the community group and the people it serves. We anticipate that we will be able to recruit the necessary numbers of individuals for the summative testing of the fotónovelas, but will also plan for alternative strategies.

We intend to present a finalized version of the fotónovela at a semi-annual health fair, where we will ask people who take a fotónovela whether they would be willing to be contacted by phone for their reactions to the fotónovela. We also plan to work closely with health care professionals to identify the best way to disseminate the fotónovelas to the community at large when the summative evaluation is complete.

**Building Community Capacity**

One important tenet of CBPR is the passing of knowledge to the community so that projects can be continued after the end of project funding or without the help of the
academic partner. An important element of our project is the creation of a fotonovela manual that describes exactly how we executed the program so that it can be duplicated and used by the community after the end of the study period. Partners also worked together to leverage additional resources, such as a photographer and a local community college to provide didactic sessions, that will help the project to continue should additional funding not be obtained.

EXPECTED OUTCOMES/COMMUNITY CHANGES
Finalized fotonovelas will be created as well as post-test assessments in July 2009 and be ready for limited distribution and summative evaluation. The overarching goal is to increase the health literacy of Latinas in a predominantly Latino community. Specifically, we want to know if participation in the process of creating fotonovelas improved the health literacy of participants related to food and nutrition. We expect to see changes in knowledge, attitudes, and behavior as a result of the implementation of our proposed project. Increased health literacy can equip women in this community with the knowledge that will ultimately lead to better health outcomes. Health literacy is multifaceted and represents improvements in knowledge about specific health issues, attitude changes related to knowledge improvements, and changes in behavior (such as screening and preventive care).

Community and academic partners worked together to develop a pre–post test assessment on knowledge, attitudes and behavior around nutrition. Participants took pre-test assessment and post-test assessments will be completed at the end of the project. We hypothesize that post-test assessments of participants will reveal increased nutrition knowledge and positive changes in attitudes and behavior toward healthy eating. Additionally, we hypothesize the summative evaluation will reveal the fotonovela format as an attractive, useful, culturally relevant way to disseminate information on healthy eating.

LESSONS LEARNED
Because of the collective strength, collaborative spirit, and understanding of CBPR principles, limited issues arose in developing the fotonovela. The group quickly rectified issues that did arise during the process. Despite the overall positive experiences, the group learned valuable lessons. Lessons learned included the partnership members developing flexibility, developing the storyline and storyboards early in the process, and adjusting the timeline to complete the project. The first lesson the partnership learned was flexibility. Our initial idea was to provide digital cameras to all participants. We thought they would be happy to receive and use them during the grant period. We found, however, that some of the women were either nervous about using cameras, nervous about technology, or had a fear of losing or breaking the cameras. We solved the problem in the end by pairing the women during the session. In this case, one took charge of the camera and took most of the pictures, but both worked together during the photographing sessions.

The second lesson learned pertained to developing the storyboard and storyline. The group supported complete participation by all members of the team including community members taking the photographs. We believed the storyline and supporting storyboards for the fotonovela would develop from the photographs. After some false beginnings and a frustrating lack of progress, we changed tactics. Although all participants still weighed in on the design of the fotonovela, we developed the storyline and storyboards first, and then the participants took the pictures. This way, participants had a clearer sense of the expectations and were more confident of the types and kinds of needed photographs.

The third lesson for future fotonovelas is the required timeline to complete the project. The entire community–academic partnership developed the initial timeline. Despite the best of intentions, the initial project took longer than expected. Working with multiple individuals and groups, scheduling conflicts arose. In addition, what seemed clear to one group often needed explaining to another. Fortunately, because of the experience and reflecting nature of the members, the group adjusted the timelines and avoided conflict. The strength of this partnership is the collective experience and willingness of the members to work together. The group will apply these lessons learned to future sessions and provide guiding principles to others through dissemination.

CONCLUSION
In Healthy People 2010\textsuperscript{26}, the federal government set forth goals for the health of the United States population. One important goal is to reduce health disparities among different
segments of the population with a focus on strategies that are culturally sensitive and linguistically appropriate given social and cultural variation in U.S. populations. We believe that the fotonovela created with community members will set the stage for dealing more effectively with health disparities on a national level. The next steps in the process are to create, print, and decide on dissemination strategies for the fotonovela which in turn will address health disparities on a larger scale.

REFERENCES


