

Latino Health Perceptions in Rural Montana

OPEN

Engaging Promotores de Salud Using Photovoice Through Facebook

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The primary purposes of this study were to use photovoice with Facebook to explore health perceptions and health needs among *promotores* living in rural Montana and to build community among geographically dispersed *promotores*. Seven *promotores* participated in a photovoice project where they uploaded photographs and shared comments in a private Facebook group. Emergent themes based on the *promotores'* health perceptions, discussions, and interviews were transcribed and coded. Findings of this study will be used to assess health perceptions and needs of the *promotores* and Latino community in rural Montana.

Key words: Facebook, Latinos, photovoice, *Promotores de Salud*

IN 2015, the Latino population was recognized as the largest ethnic minority in the United States, at 17.6% of the total population.¹ Areas where the Latino population is below 5% and growing quickly are described as “new growth communities.”² Montana fits this definition, with the Latino population growing from 2.9% in 2010³ to 3.6% in 2015.⁴ As the Latino population continues to grow in Montana, it is important to have an understanding of health perceptions and health needs to develop and implement effective health and other need-based programs.

Health disparities exist among Latinos,⁵ especially in rural communities where minorities are

more likely to face health care discrimination,⁶ receive poor quality health care, develop a chronic illness, have poorer health outcomes, and encounter other health challenges and health disparities.^{7,8} The use of *promotores de salud* (*promotores*) or Latino community health workers (CHWs) is an effective method for bridging language barriers and improving/increasing access to services, providing support, and improving overall health and well-being in their communities.⁹⁻¹¹ *Promotores* are usually recruited from the communities in which they live and work and are considered trusted and well-known members of the community.^{10,12,13} *Promotores* have inside knowledge of the strengths and barriers of their communities, which allows them to address health and social issues effectively.

Through a partnership between faculty members (including the third author) and student researchers (including the fourth author) at Montana State University and a local community health center, Community Health Partners, the Gallatin County *Promotores* Program began in 2013. The program transitioned to the Gallatin County Health Department in fall of 2017 and continues at this time. Participants were recruited based on status in their community as someone others turned to for support and advice, bilingual skills, and willingness to participate. The researchers and health care professionals traveled to the *promotores'* communities to offer monthly health trainings.

The goals of the program are to reduce health disparities through prevention and basic health education, connect the emerging Latino communities with affordable health care and resources, and provide support to community members.¹⁴ Research studies with *promotores*/CHWs have used various methods for implementing, evaluating, and supporting the work of the *promotores*. Among the methods is photovoice.^{12,15}

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Photovoice was developed in 1992 with the goals of identifying and documenting strengths and concerns within a community, promoting critical dialogue and knowledge about these important issues, and educating the public and reaching out to policy makers.¹⁶ Typically, participants are provided with cameras and basic photography and ethics training. The participants turn their lens to issues that concern them, return the cameras to the academic partners who develop the photographs, and the partners collaboratively review photographs to identify common themes and create action plans to address those themes. Previous photovoice studies have worked with groups ranging from 5 to 29 participants,^{17,18} ages ranging from young children to the elderly,^{17,19,20} varying races and ethnicities,^{18,20,21} genders,^{22,23} rural and urban communities,^{19,21} and international locations.²¹ Photovoice provides community members the opportunity to express their social, cultural, political, and health concerns through photographs¹⁶ and encourages diverse perspectives, equalizes community and academic voices, and emphasizes community-level change.²¹

This study explored the benefits and challenges of using of Facebook and photovoice together as a new method to (1) explore health perceptions and health needs among *promotores* living in rural Montana and (2) build community among geographically dispersed *promotores*. Face-to-face communication between the *promotores* was difficult due to the distance between communities; the longest being about 115 miles. We saw geographic distance as a rationale for conducting the study versus a limitation. The underpinnings of social network theory show that interventions delivered via social media had some of the strongest outcomes of health-related behavior change.²⁴ We found no literature that used photovoice methods together with Facebook with *promotores*, with CHWs, or photovoice together with Facebook in other health intervention research. Results of this study can be applied to other rural or geographically dispersed *promotores*/CHW programs.

METHODS

Setting and sampling procedures

This study was conducted in 4 communities in Southwest Montana, where the *promotores* program was located. There were 6 *promotores* in the program and they all participated in this study. One *promotora* who lived in a neighboring county and who was not officially a part of the program but who had many years of experience performing typical *promotora* activities also participated.

Recruitment was based on bilingual skills and experience working in the community in which they were from.²⁵ There were 6 females and 1 male with an age range of 27 to 65 years. One *promotora* is the mother of the first author. The institutional review board at Montana State University approved this study, and all subjects signed an informed consent form. Each participant received a \$50 Walmart gift card upon project completion. Five of the *promotores* who participated in this study approved their full names to be used in this article, and 2 participants approved the use only of their first names.²⁶

Study procedures and data collection

We developed a private Facebook group in which information and photographs could only be viewed by the *promotores* and project team members. After receiving consent, the *promotores* were added to the Facebook group. All the *promotores* knew the first author but not each other. This was a benefit, as having these relationships and establishing trust prior to starting the study facilitated the progress of the project. To begin to create community and build trust among the geographically dispersed *promotores*, the first author prompted introductions on the Facebook page, asking questions such as “where are you from?” and “what do you and your family like to do for fun?” She described that the goal of the project was to allow the *promotores* to express what health topics were important in their communities through photographs and discussions.

The *promotores* were instructed to use their own smartphones/cameras to take and upload photographs. They were instructed to photograph and upload anything of interest to them that spoke about the theme of health and well-being. Detailed instructions on how to upload photographs directly to the Facebook group were uploaded as PDF files to the Facebook group in both English and Spanish. For the 3 *promotores* who did not have a Facebook account, a shared profile was available for them to log in and participate. The *promotores* were also provided with information about ethics in photography and the importance of being safe while photographing and protecting the privacy of others. Photographing public figures and areas was recommended, but if a photograph showed any identifying information, such as someone’s face or private property, the *promotores* were instructed to obtain a signed consent form. Example photographs and descriptions were uploaded as a reference for the *promotores*. All forms, materials, and discussions were offered in both English and Spanish on Facebook and as hard copies at monthly health trainings for the *promotores*.

Initially, the first author provided a photograph upload schedule instructing the *promotores* to share 1 photograph every other week for 10 weeks during the spring of 2017. Only 1 *promotora* shared a photograph the first week and 3 *promotores* shared photographs the third week. In order to increase the number of photographs uploaded, the process was changed and the *promotores* were asked to upload a minimum of 5 photographs and a brief description of the photograph's relation and importance to health. They were also instructed to comment at least once on another *promotora's* photograph with their thoughts, experiences, and ideas. After each photograph was posted, the following prompts, based on the PHOTO method,^{16,27} were posted to engage discussion among the *promotores*: What do you see happening in this photograph? What do you think or feel about this photograph? Do you have experience with this or something similar? What do you hope happens in the future? How does this photograph provide opportunities for us to improve? The first author and a student researcher also contributed their own thoughts and experiences to photograph discussions.

Each of the *promotores* received a photobook with all 37 photographs, their descriptions, and discussion comments, as recognition and appreciation of their participation and hard work. The photobook is a tangible representation of the *promotores'* work in their communities that they can continue to use as a resource and outreach tool. This was done as an alternative to community meetings that are frequently conducted with photovoice projects and met the needs of the dispersed *promotores*.

After the 10-week photograph posting period, individual semistructured interviews were conducted with each of the *promotores* by the first author to gain insight into their experiences with the project. A total of 7 questions asked the *promotores* what they liked about the photo project, what could be improved, how the project impacted their role as *promotores*, how their relationships with the other *promotores* changed, how the photo project impacted the group, and what parts of the project they would like to see continue in the future.

Interviews were recorded using QuickTime Player. The *promotores* had the freedom to express themselves in the language they felt the most comfortable with and were reminded that there were no right or wrong answers. Each of the *promotores* chose a convenient place and time for the interview to take place and whether the interview was to take place in person or over video chat. The interviews ranged from 7 to 43 minutes; 4 interviews were conducted in English and 3 were in Spanish, and 4 were done in person and 3 over video chat.

Data analyses

There were 2 types of data analyzed: photographs and comments from the *promotores* on Facebook and interviews with the *promotores*. Photographs were downloaded and categorized into themes, and comments were translated and coded by the first author, a bilingual and bicultural researcher.

Interviews were conducted, transcribed, and translated by the first author. Each interview audio recording was transcribed verbatim, and interviews in Spanish were transcribed into Spanish first and then translated into English. All interviews were hand coded by the first 2 authors separately. These authors then met to discuss and come to consensus on codes and then the first author recoded the interviews based on the consensus set of codes. Coders allowed codes to cross-questions versus coding question by question.²⁸

RESULTS

Photographs and comments posted to Facebook

A total of 37 photographs and 95 comments were uploaded by the *promotores*. The 37 photographs and comments were coded into 5 themes: (1) nutrition—*la nutrición*, (2) exercise—*el ejercicio*, (3) healthy mind healthy body—*mente sana cuerpo sano*, (4) healthy habits—*los hábitos saludables*, and (5) helping our community—*ayudando a nuestra comunidad*.

Theme 1: Nutrition—*la nutrición*

Twelve of the 37 photographs (32.4%) and 39 of the 95 comments (41.1%) focused on nutrition. The difference between healthy food and unhealthy food was a popular discussion topic among the *promotores*. *Promotora* Betty shared a photograph of a colorful display of fresh fruits and vegetables and described the benefits of eating a variety of fresh fruits every day. She contrasted this with a photograph of processed and packaged food and described the ingredients found in these foods that may be harmful to one's health. Ana shared a photograph of a frozen meal and its long, complicated ingredient list and said, "When looking at the ingredients, there are words that we do not know how to say, ingredients that surely are bad for our health." Yanet shared a photograph of McDonalds and described the importance of eating a balanced diet instead of fast food containing simple carbohydrates and processed meats. Yanet also shared a photograph of a bottle of Coca-Cola and described that it is "like water for most Mexicans" and suggested not buying soda because "once you have it at home, it is very easy to drink it instead of drinking water."

Promotora Lety shared a photograph of a healthy lunch and described the importance of eating “adequate portions of fiber, carbohydrates, and proteins” for good health. Kara commented on Lety’s photograph and observed that the meal had “a little bit of each nutrition group: vegetables, meat, and grains. It’s very healthy and it looks very tasty.” Ana agreed and commented that “a healthy and balanced meal can also be tasty and flavorful.”

Ana shared a photograph of her husband cooking a healthy lunch (Figure 1). “We are trying to eat healthier at home to be a good example to our daughter.” Kara commented that “He is being a good example for men and children because they too can make something tasty and healthy, not only women.” Betty commented, “It is very important that kids see their dads also helping out in the kitchen to prepare food. Cooking is a family labor where everyone can give ideas and be creative.”

Not having enough time to cook is one of the reasons why it is hard to stay healthy. Kara shared a photograph of protein drink mix and low glycemic peanut butter that she described as options for those with a busy schedule who want to maintain a healthy weight. Lety also shared a photograph of a nutrition shake, which she explained can help people with diabetes maintain balanced blood glucose levels. *Promotora* Viridiana shared her experience with meal preparation and explained its bene-



Figure 1. Healthy eating is a family responsibility. Photograph by Ana. Used with permission.

fits, which included saving time and money, being in control of portions, and not having to stress about cooking every day.

The *promotores* discussed the benefits of eating healthy. They shared their ideas about what a healthy meal looks like, what to buy and what to avoid when shopping at the grocery store, and the importance of involving the family in making healthy choices.

Theme 2: Exercise—el ejercicio

Eleven of the 37 photographs (29.7%) and 19 of the 95 comments (20%) focused on exercise. The *promotores* shared their thoughts on the importance of exercise related to good health, described how the outdoors offer a range of free exercise options, and expressed a need for more affordable and accessible places to exercise throughout the year where long winter months make this difficult.

Lety shared a photograph of a local gym and described the various amenities they offer, including different exercise classes, equipment, and a day care center for those who need it. Ana commented, “I am jealous of this gym. Here in West Yellowstone we only have a small gym, with old equipment, and no instructor to help us, and it is very expensive.” Kara commented, “What West [Yellowstone] needs is a bigger facility with more exercise classes for the whole family.”

Promotor Rafa shared his experience with how sports have helped him to stay active. He shared a picture of himself running in the park. Viridiana commented how important exercise is for improving overall health and explained its many benefits including an increased heart rate and metabolism, reduced unwanted body fat, and a reduced risk of heart disease. She commented that it has helped her sleep better at night and have more energy during the day. Betty agreed and also commented on Rafa’s photograph that it can be “hard for many of us that work most of the day to be able to include an activity like this into our schedules, but we should make an effort. In the communities of Bozeman and Livingston there are many places specifically where people can go run or enjoy a hike.” Ana commented, “I am always making excuses to not go out and walk or run. But my husband, who is in a healthy phase, is encouraging me to do more exercises.”

Yanet also shared her experience with sports and said, “We Latinos love soccer. In our community of Gallatin Valley, a lot of men practice sports during the summers and they stay active by playing soccer.” She described the outdoor activities Montana can offer, even during the winter such as skiing or snowboarding. “Not only do we move our body in the outdoors but we can relax our mind in nature, in

this gorgeous state we live in.” Lety shared a photograph of a local playground and explained how important it is for children to be physically active on a regular basis. Betty commented that even children are suffering from chronic illnesses due to inactivity and too much screen time.

The *promotores* shared their experiences with exercising and discussed the many outdoor activities Montana offers during the summer. Staying active in the summer is easier, but during the harsh winter months this is difficult, especially when affordable family fitness facilities in the community are limited.

Theme 3: Healthy mind healthy body—mente sana cuerpo sano

Five of the 37 photographs (13.5%) and 11 of the 95 comments (11.6%) uploaded focused on a healthy mind and healthy body. The *promotores* discussed how the environment, alcohol, and stress can all impact mental health.

Betty shared a photograph of Livingston and described how it reflects the loneliness of the long winters. “The freezing environment and lack of color makes me feel sad. This is a very small community and doesn’t offer much for entertainment during winter. People are more secluded and it makes it hard to be active and social” (Figure 2). Ana commented on a similar experience in West Yellowstone. “When winter comes, many Mexicans with work visas return to their country and our town is left empty. Restaurants and hotels close and there is nothing to do. A lot of people are depressed during these times.” Rafa shared a photograph of Bozeman in the summer and explained the difference of emotional effects of the environment. “Make an agreement with your family and friends and tell depression goodbye.” The *promotores* explained that having a hobby can help stay busy and improve



Figure 2. Livingston winter. Photograph by Betty. Used with permission.

mental health during the winter months. Lety also commented on the need for a community group that offers classes, games, and a space to unite.

Rafa shared a photograph of a margarita and described the secondary effects of alcohol, not only on one’s health but also on family and other relationships, and explained that drinking in moderation is best. Betty commented on society’s acceptance of alcohol and explained that if abused, alcohol use can turn into an addiction and can have the harmful effects on the body. Yanet shared a photograph of a bottle of Corona and described the act of drinking as “a mask for people that suffer from stress or depression.” She described that “a healthy mind equals a healthy body” and explained the importance of learning new ways to cope with stress, anxiety, and depression. She suggested trying meditation or yoga and also emphasized the importance of helping family and friends seek professional help when needed.

The *promotores* shared their thoughts on how Montana’s different seasons impact the mental health of Latinos, specifically during the winter, and as a result, many suffer from seasonal depression. They suggested organizing events for the community to meet, talk, play cards, and participate in other indoor activities to stay busy during the winter. The *promotores* also described how alcohol is accepted culturally and how its abuse can impact health and relationships.

Theme 4: Healthy habits—los hábitos saludables

Five of the 37 photographs (13.5%) and 13 of the 95 comments (13.7%) focused on healthy habits. The *promotores* discussed incorporating healthy habits such as hand washing and regular doctor and dentist visits into daily routines to prevent illness and stay healthy.

Betty shared a photograph of dental care products and discussed the importance of dental hygiene. She recommended regular teeth brushing and flossing, avoiding sugary foods, and seeing a dentist regularly. Betty also shared a photograph of one of her students washing her hands with soap and warm, running water and explained that this is another form of basic hygiene that can help avoid the spread of infections and germs. She emphasized the importance of promoting appropriate healthy habits at home, school, and work.

Lety shared a photograph of Bozeman’s hospital and expressed the importance of having a family doctor “to have regular health checkups and decrease the surprise of diseases that in many occasions could have been prevented with lab exams and other types of tests.” Ana commented that her husband was very sick, overweight, and his blood

glucose levels were at 253, an abnormally high level. About 6 months later, everything changed. By exercising, eating healthy, and eliminating alcohol, his glucose levels decreased to 89. The other *promotores* shared their support and congratulated him for making this big change. Rafa commented, “This is an excellent example that by eating a healthy and balanced diet, anyone can achieve this.”

The *promotores* discussed how many health issues can be fixed and even avoided simply by implementing healthy habits and preventive measures into daily routine, such as hand washing, exercising, and regularly going to the doctor and dentist.

Theme 5: Helping our community—ayudando a nuestra comunidad

Four of the 37 photographs (10.8%) and 13 of the 95 comments (13.7%) uploaded focused on helping the community. The main goals of the *promotores de salud* are to provide accurate information to allow community members to be informed and take control of their health and advocate for their communities in many different ways. One way *promotores* help their community is through bridging language barriers. Yanet shared a photograph of English-learning resources and described the challenges of not speaking English in rural Montana. She explained that not being able to communicate in English can negatively impact one’s health and that it is important to make an effort to learn.

Kara and Ana shared a photograph of themselves standing in front of the HealthCare Connections van, a mobile health service that provides routine checkups and other medical examinations for free (Figure 3). Kara explained that this is an important resource in the community, especially for those who do not have health insurance. Viridiana shared a photograph of herself standing in front of the van



Figure 3. *Promotores* Kara and Ana. Used with permission.

helping community members to fill out forms, make appointments, and interpret their visit. Ana commented, “It feels great to be able to help others. We should always take advantage of everything our community offers us to take care of our health.” Rafa commented that “if everyone could help those who need it, the world would be easier and different. We continue to support our community to move forward. It is our goal as *Promotores de Salud*.”

The *promotores*’ goal is to continue supporting their communities by improving their language skills as well as promoting the various free health services and resources offered in their communities.

INTERVIEWS

The *promotores*’ responses fit under 9 main themes: (1) a simpler way of understanding health, (2) a picture is worth 1000 words, (3) new awareness through photography, (4) learning about health and community needs through photography, (5) sharing experiences and perspectives among the *promotores*, (6) photobooks, (7) freedom of expression, (8) a new experience, and (9) longing.

Theme 1: A simple and cost-efficient way of understanding health

The *promotores* described how the process of sharing photographs through Facebook was simple and easy. Lety shared that “it was a way to capture [ideas] more clearly, visualizing each photo.” Even the *promotores* who did not have a Facebook profile mentioned that the instructions were easy to follow. Betty said, “It was very straightforward and we [had] all the rules or expectations, instructions on how to do the project, how to take the pictures, how to download them, and put them in your computer, so I think that was easy.”

Using Facebook was a cost-efficient way to communicate. Betty described how “you can just have a simple camera or your iPod [to take photos] and it doesn’t cost money.” Yanet explained that using Facebook is easy and “everybody knows Facebook, especially the Latino community,” and “when working with rural communities, [using social media] is so beneficial because you can communicate through your phone.”

Theme 2: A picture is worth 1000 words

The *promotores* described the visual depth a photograph can show. Betty explained that photography “can be a very simple thing and then it can tell you a lot about health issues.” Lety explained that using photographs was “a good option because the photos that you visualize are interesting and clearer. It’s not the same as when someone tells you and

you listen. I think when you look at a photo the information stays clearer. It was one of the main things that the community let us know about when we would hand out information and gave them flyers with photos.” Yanet believed the photographs shared on Facebook “added more value to everything [and] to the project.”

Theme 3: New awareness through photography

The *promotores* explained having a new personal awareness of health and the environment through photography. Many of the *promotores* described how they stopped to think about what their photographs represented. Betty described that photographs “reflect everyday life, the things we do every day, like for instance going for a walk around the park or riding your bicycle.” Ana said that the photographs showed “the things that we go through every day and I don’t stop to look, so I think that was the most beautiful part.” Ana expressed that “it’s like stopping to look at a part of the world you see every day but you don’t notice the details. I think photography does this.” She expressed that she was grateful for “the opportunity to slow down and have a new perspective, to stop and think about the things we do to photograph them.” Yanet described that she would take a photograph and later identify its significance. She said, “You really start to analyze the photo and think about [why] this came up and then overall what it really means to you and your community.”

Kara shared that the photo project opened her eyes to different health topics. “I have two kids and so I’m always open to new ideas with feeding them and trying to give them the right nutrients because sometimes you just want to buy the cheapest thing, [but] I’ve learned that even though it’s the fast way out, it’s not the best way.”

Theme 4: Learning about and taking action for health through photography

Through photography, the *promotores* learned about health and other needs among the communities they were working in and were able to share that with the broader community through photographs. Lety said, “People have questions but if we do not have the answer, we can visualize a photo and I think that is our best way to share it.” Ana explained that the information she gained from the photo project “helped me a lot as a *promotora* to be able to pass on the correct information.” They talked about the importance of building trust with the community, especially when approaching people about health, prevention, and culturally taboo topics.

Yanet described the project as a reminder “to realize the importance of why you’re there” and that sometimes the small interactions can have the most impact. She said, “[I’m] planting a seed every now and then and that’s my mission.” The photographs portray different lifestyles and health habits, and Yanet expressed that “if you really take charge and make the decision [that] you want to be a healthier person, have a healthier mind, have a healthier body, you can do it.”

As a *promotora*, Yanet described herself as a “powerhouse” for someone to offer encouragement to make an appointment, go to the doctor, and make healthier decisions in general. She explained that resources are limited and people “don’t know who to go to or what to do” if they are new in the community. Using photography “gives a *promotora* the power to speak up, especially [for] people that can’t really represent what they’re feeling. You can represent that for them. Not everyone gets that opportunity.”

Theme 5: Sharing experiences and perspectives among the promotores

Using Facebook was an efficient way to explore the health perceptions of the growing Latino population in rural Montana, share health information, and build trust among the *promotores*. Using photography through Facebook was helpful for the *promotores* to express their own health concerns and ideas, as well as understand the other *promotores’* experiences.

The *promotores* discussed the power of teamwork, collaboration, and supporting each other. Betty described that the Latino population in her community is very small compared to other surrounding areas and that through this project she felt connected to a bigger community. The *promotores* taught each other how to work in the community and overcome challenges. Kara explained that “Lety in Bozeman has more experience with people there because there’s more people interested in the program, so I learned a lot from [her].”

Using Facebook was also beneficial because the *promotores* could access the group when it was most convenient. Lety explained that “we could open the Facebook page and we could find new ideas, new questions, messages from the other *promotores*. We didn’t all have to be there exactly at the same time. I think it was a good choice because not all of us have the same schedule.”

Through the Facebook group, the *promotores* described how the project brought them closer together. Ana shared, “After this I felt, not necessarily like a friend, but closer and more comfortable [with the other *promotores*].” Betty also shared that

“even though I didn’t really know them in person, it was a good way to get acquainted.” Kara expressed that she learned from the other *promotores* about their lifestyles and she “shared things that you normally don’t share with people every day.” Ana enjoyed being able to share her “vision” and expand her thinking by seeing the others’ perspectives. Betty shared that it was “interesting to know about the challenges that everybody faces by being a *promotora* because we all have jobs, families, and we volunteer doing this because we want to help.” Yanet said there was “a lot of work to be done, and that with all of us together, much more can be accomplished” and the photographs represented “what is going on [in the community], what we care about, and why we’re here [doing the work].” Rafa expressed that “as long as we are all in a *promotores* team, we will be able to continue supporting our community.”

Theme 6: Photobooks

Many of the *promotores* commented on sharing their photobooks with family, friends, coworkers, and other members of the community. Kara said, “I thought [the] photobook was awesome, it was lovely. I showed my family, everyone loved it.” Ana received positive responses about the photobook and shared that it was a great success for her personally. She appreciated being able to show people “what kind of project it was, how we participated, [and] how it all happened.”

Another benefit of sharing photographs is that one photograph may represent similar experiences among different people and can create critical discussion. The ideas that arise through the photographs can be a reminder to some, raise awareness, and provide information to those who may not have a similar experience or knowledge of the topic. Yanet explained that “you’ll have the book with you [and] maybe someone will take a look at it and read about it and it will get them thinking.”

Theme 7: Freedom of expression

Promotores were free to take photographs of anything related to health. Yanet expressed, “I liked that we had the freedom to have open themes about how health impacts our Latino community.” Betty expressed that there was “not a wrong answer or right answer, so there’s always that flexibility.” Yanet also shared, “We had the opportunity to comment and see everybody’s opinions. [It was nice] that you allowed for that opportunity [instead of saying] post your pictures and what do you think about it and that’s it.”

The *promotores* also described how using photographs was a fun and enjoyable way to express

health concerns and ideas. Betty said, “I like to take pictures. I am not a professional, but I enjoyed to just get creative and think about ways to promote health using simple pictures.”

Theme 8: A new experience

Many of the *promotores* also described how participating in this project was a new experience for them. Yanet shared, “I had never thought about taking photos or had never heard of a project about this before.” Rafa said, “[I] had never been part of a project like this. We learned so much and I think it was excellent.” Lety said, “I had never participated in anything like this and I really liked the experience, and the ability to learn and share with everyone. I think it was a beautiful experience.”

Theme 9: Longing

Many of the *promotores* expressed how they wished they would have contributed more photographs and comments and participated more on the Facebook page. They also expressed their hopes that the project would continue into the future.

Ana explained that she was hesitant to post photographs at first because she was focused on sharing quality photographs and was “embarrassed” if she had to ask for a participant’s photograph consent but later decided that was not necessary for her to feel that way because “it is something you are looking at. I could have taken advantage of it more. It wasn’t an obligation of something I had to do. If there’s another opportunity, I won’t wait so long.” Kara shared, “I was kind of stressed out at first, [but I liked it at the end].” She also thought that “it was a good start to the program” and wished she would have had more time to participate. “I’ll do it again and I’ll be more detailed next time.”

DISCUSSION

This study expands the literature by providing a combination of *promotores de salud*, photovoice, and Facebook, 3 methods that have not been applied simultaneously. We found that this combination is effective for exploring health perceptions and for building community among geographically dispersed *promotores*. The private Facebook group was a safe and respectful space for *promotores* to ask questions, express concerns, and learn about each other.

Most of the posted photographs and comments from the *promotores* centered on nutrition. The *promotores* shared their experiences with healthy meals, what foods to look for and to avoid, and the importance of family involvement in making healthy nutrition choices. Exercise was the second most popular topic, and the *promotores* shared how

they stay active, how the lack of a fitness facility can make it difficult to exercise, especially during the winter months, and the importance of affordable access to an exercise facility for the whole family. Simultaneously, the *promotores* discussed how the environment impacts mental health and that many Latinos in the area deal with seasonal depression. The *promotores* also described the cultural use of alcohol and the impacts alcohol abuse can have on health, as well as relationships. Another topic with multiple photographs and comments was the *promotores*' responsibility and goal of helping the community by learning English and taking advantage of the opportunities and resources the community offers to improve one's health.

The *promotores* described the benefits of using photography to share perspectives and health information and that using Facebook was an easy and efficient way to communicate with each other and with the community. The methods were beneficial because it gave the *promotores* an equal opportunity to express their perspectives among themselves and is a safe method for reaching undocumented community members. The photo project was a new experience for the *promotores* and they felt it was a creative and productive way to share ideas. Frequent examples of photographs with descriptions, reminders, and encouragement were needed and important for the study's success.

Using Facebook was an efficient and low-cost way to promote health, share resources, and build trust among the geographically dispersed *promotores*. All of the *promotores* had a smartphone/camera they could use to take photographs, had a basic understanding of how to navigate Facebook, and had access to the Internet; Internet connectivity was not considered a limitation in this study. The *promotores* created an online community where they became acquainted with and supported each other as a team.

Limitations to this study include a small sample size, the short duration of the intervention, and the discomfort of one *promotora* to using Facebook. Having a larger sample size, including both women and men, could have provided a broader portrayal of the context of health among Latinos in rural Montana. The short duration of the intervention was due to the timeline of the first author in completing a master's degree. Some of the *promotores* said that at first they felt stressed, that they saw it as another task added to their busy schedules, but that in the end it was educational and worthwhile. The *promotores* discussed that they wished they would have shared more photographs and participated more on the Facebook group. A longer duration may have facilitated this. Three of the *promotores*

did not have a Facebook profile, which seemed to have impacted participation and access to discussions, resources, and other information for 1 *promotora*. In a discussion after the intervention was complete, this *promotora* recommended use of an alternate social media platform such as Instagram. A future study could compare Facebook and Instagram or use the 2 platforms together.

Previous photovoice studies discussed potential limitations of using photographs to share information, including how participants were challenged with expressing the meaning of their photographs with words.¹⁹ However, in this project, the *promotores* discussed the power of photographs and that the photographs can lead to discussion with community members about health, including topics that are potentially sensitive.

Most photovoice projects conclude with a photo exhibition to share ideas and concerns with the community and reach out to policy makers.^{16,19,21} Instead, the *promotores* received photobooks and used them to promote community discussion around health topics. This is a method that could be used in communities where CHWs are dispersed.

Although this project has finished, the *promotores* are still working together in their communities and using social media to communicate with each other and with the general community and continue to promote well-being and healthy lifestyles in their communities.

Future recommendations

Sharing health information and photographs through social media is an accessible and efficient method that allows for all community members' voices to be heard and can empower community members to share their stories and make lasting changes in their lives and their communities. Feedback provided from the *promotores* about the project was overwhelmingly positive. When asked what could be changed to make the project better, most of the *promotores* said "nothing." Rafa shared that the project was organized and led professionally. Lety expressed how the first author prompted the *promotores* in a positive and encouraging way. "I liked the way you asked for information. You asked with [a good] attitude and overall in a way that motivated us to keep going and continue to support you. You shared your enthusiasm for us to continue participating."

Based on the interview responses, all of the *promotores* expressed that they would like to continue taking photographs and sharing them online publicly. Viridiana suggested that they should continue posting photographs so the community can see "what we're doing and the difference it can

make.” Social media is an efficient and accessible method of reaching and interacting with the general community, especially those who are new to the area. Since this study ended, the first author became a *promotora* and has been posting health information and photographs of community events on the Facebook page. The group has been discussing the use of Instagram to share photographs as an additional method for reaching community members.

Community organizations can benefit from using social media methods to engage their audiences, improve communication, and reach a larger social network.²⁹ Reports suggest that the use of social media can encourage health promotion, as well as “increased social support, benefit-finding, or positive peer-modeling.”³⁰ While many people use Facebook, and its popularity is increasing among Latinos,³¹ some people do not use Facebook. By including the use of a public Web site or blog to share photographs, it would be easier for other community members to participate, as suggested by Viridiana. With approval from the *promotores*, the photographs and comments have been made available through a public Latino Facebook page. In addition, the general community was invited to post photographs and comments regarding topics important to them. We recommend that a health care professional monitors posts and comments to ensure that accurate health information is being shared.

Although this project focused on health topics, it could be expanded to other topics explored in other studies such as the “physical environment, social norms, and behaviors of communities.”³² Ana suggested one way to improve the project would be to broaden the topics to other issues beyond health such as “Hispanic life in small communities.”

Betty shared that “sometimes some of the *promotores* didn’t download their pictures on time, then a few days later you have 6 pictures that you need to comment on,” which was “time consuming, but doable.” Kara also expressed that having more structure would be helpful and suggested “a subject of the week, and [have] people submit one photo per week.”

Yanet explained the importance of sharing the results of the project with the community and described that sometimes “with different projects you get the information you need and then forget about showing the results, especially going back to the community.” Along with the successful photobook, Yanet suggested sharing the photographs in a video. Future goals of the *promotores* include to continue sharing photographs, questions, and resources on Facebook and to continue helping and supporting the community.

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