

Colorectal cancer screening barriers and recommendations for successful interventions: Insights from a local Hispanic community

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Abstract

Hispanics have lower colorectal cancer screening rates than other populations and are diagnosed with cancer at later stages. In national-level data, barriers have been identified that contribute to lower screening rates. However, because Hispanic populations are not homogenous, it is not clear whether these same barriers operate in a particular Hispanic community in Northern Nevada which is an area with lower screening rates compared to the rest of the country. Therefore, the objectives of this study were to: (a) utilize a community-based participatory research methodology to identify colorectal cancer screening barriers in a specific underserved Hispanic community, and (b) identify the community's recommendations for an effective colorectal cancer screening intervention. To accomplish these objectives, three gender-stratified focus groups were conducted in Spanish with a total of 21 middle-aged female and male

Hispanics. A content analysis of the transcribed qualitative data revealed lack of education and financial issues were major screening barriers. Shame and embarrassment about cancer and screening procedures were discussed by men in particular. The importance of one's role and responsibilities to the family were suggested as ideas to motivate screening completions. The results from this study can be used to inform successful screening interventions in this population.

KEYWORDS: colorectal cancer, cancer screening, Hispanic health, qualitative methods

Introduction

Colorectal cancer (CRC) is the fourth most commonly diagnosed cancer and the second most deadly across the United States (American Cancer Society, 2018b). It primarily affects individuals aged 50 and older and men are slightly more likely than women to receive a diagnosis (National Cancer Institute, 2016). For Nevadans, this translates to an estimated 1,130 new diagnoses and 530 deaths due to the disease in 2018 alone (American Cancer Society, 2018b), which are both higher than the national rates (Flores, 2016). While this health issue cuts across lines of race and socioeconomic status, these demographic and social characteristics do impact CRC screening behavior, incidence, and mortality, and the United States' changing demographics will have implications for how this issue is addressed. As the population becomes older and more racially diverse (US Census Bureau, 2018), it is important to investigate the barriers faced by those who do not get screened. The barriers to CRC screening facing some groups are different than others (Licqurish et al., 2017; Wang et al., 2018). Toward the goal of

addressing these health disparities, the current study seeks to understand the unique set of barriers to CRC screening facing Hispanic Nevadans. Understanding the needs of this community will allow for the development of tailored and more effective colorectal screening interventions.

Despite the prevalence of colorectal cancer, it is a treatable form of cancer when detected early through preventive screenings. When CRC is detected early (i.e., stage 1), the five-year survival rate is 90% (American Cancer Society, 2018c; National Cancer Institute, 2016). If, however, the cancer goes undetected and spreads to other parts of the body (i.e., stage 4), the five-year survival rate drops to 14% (American Cancer Society, 2018c; National Cancer Institute, 2016). CRC screening, therefore, is considered one of the best ways to reduce risk and improve patient outcomes (American Cancer Society, 2018a).

Colorectal screening is an umbrella term that includes specific screening methods such as visiting a doctor's office for a colonoscopy or sigmoidoscopy but also includes take-home stool sample tests such as a fecal occult blood test (FOBT) or fecal immunochemical test (FIT; Centers for Disease Control and Prevention [CDC], 2013). Although the overall incidence and mortality rates for Hispanics are lower, those rates increase and more closely mirror non-Hispanic Whites as they become more integrated and acculturated (Pinheiro et al., 2009). Further, when Hispanics are diagnosed, they are more likely to be diagnosed in a more advanced (i.e., more deadly) stage of cancer (Gonzales, Qeadan, Mishra, Rajput, & Hoffman, 2017; Mandelblatt, Andrews, Kao, Wallace, & Kerner, 1996; Yanez, McGinty, Buitrago, Ramirez, & Penedo, 2016). Collectively, these findings underscore the importance of

targeted efforts to increase CRC screening within the Hispanic community.

Even though CRC screening is known to improve outcomes, about one in three adults between 50 and 75 do not follow the recommended testing guidelines (CDC, 2013). A recent multi-year initiative from the CDC has focused on increasing colorectal screening across the nation (Flores, 2016), but a 2016 report showed that screening among Nevadans (62%) still lags behind the national average (68%) and Nevadans who identify as Hispanic have even lower rates of screening (42%) (State Cancer Profiles, 2016). Taken together, Hispanics' lower screening rates and their increased likelihood of a later-stage diagnosis illuminate a need within the Hispanic community to focus on increasing screening as a preventive measure against colorectal cancer.

Given the longstanding guidelines for CRC screening, why are so many individuals non-compliant? Previous research identified several factors that increase the likelihood of getting screened as well as barriers that inhibit screening. Screening behavior is more likely among those who are White, have more education, higher income, and are more engaged in the system of healthcare in ways such as utilizing preventive health services, receiving a recommendation from a physician, and having health insurance (Beydoun & Beydoun, 2008). Screening behavior is also conditioned by health literacy (i.e., knowledge) about cancer including its lifestyle and genetic causes, signs and symptoms of cancer, treatment and prognosis (Licqurish et al., 2017) such that having higher health literacy increases screening. Attitudes about cancer also impact likelihood of getting screened. Specifically, pessimistic attitudes about diagnosis and prognosis decreased

likelihood of screening, as did attitudes of fear, embarrassment, perceived stigma (Licqurish et al., 2017). Finally, there are barriers associated with the screening itself. Among the most commonly cited are fear about the screening procedure, unpleasant feelings about the preparation required prior to screening, lack of knowledge about screening, and concerns about pain (Jones, Devers, Kuzel, & Woolf, 2010). In sum, there are a variety of demographic characteristics, general beliefs about cancer, and specific concerns about the screening itself that influence the likelihood of colorectal screening.

Considering these factors that positively and negatively influence colorectal screening, it is not surprising that Hispanics are screened at lower rates. Compared to non-Hispanic whites, Hispanics tend to be more economically disadvantaged, have less education, are less likely to have insurance, and are more likely to face a language barrier—all of which have been shown to decrease the likelihood of cancer screening (Yanez et al., 2016). Additionally, and similar to other minority groups, Hispanics tend to have lower health literacy (Licqurish et al., 2017), hold inaccurate cancer beliefs (Stacy, Torrence, & Mitchell, 2008), and have more fatalistic attitudes around cancer (Lyrtzopoulos, Liu, Abel, Wardle, & Keating, 2015). Finally, there are cultural-specific factors at play that could serve as barriers to CRC screening among Hispanics such as *allocentrism* (i.e., placing needs of group above oneself), *machismo* (i.e., male dominance and female submissiveness), *acculturation* (i.e., the degree to which they are integrated into the surrounding culture) (Yanez et al., 2016). In sum, Hispanics are disadvantaged in a number of ways that directly and negatively impact CRC screening rates. It is this confluence of

factors that must be examined and addressed holistically.

Because colorectal cancer screening is a behavior, it is important to understand the beliefs that influence whether a person decides to take action and undergo screening. Differences in beliefs about screening have been shown to account for differences in screening rates between European Americans and Mexican Americans (Cronan, Devos-Comby, Villalta, & Gallagher, 2008) and are important to understand to develop effective culturally appropriate interventions (Walsh et al., 2004).

It is therefore recommended that research incorporate community input to create more tailored and effective cancer programs (Natale-Pereira et al., 2008). Community-based participatory research (CBPR) is a collaborative community research approach that equitably involves all partners in the research process (Israel et al., 2003). The research topic and methods are determined in partnership with the community and therefore, CBPR gives those most affected by a health problem a voice and stake in the research. With this community involvement throughout the entire research process, it is believed stronger findings will emerge and that the outcomes will be more relevant and empowering to the impacted community (Faridi, Grunbaum, Gray, Franks, & Simoes, 2007). This study and the subsequent intervention utilized a CBPR approach.

Often lumped together, it is important for researchers and policy makers to recognize that Hispanics are not a homogenous group and that differences in acculturation, socioeconomic status, country of origin and features of the local context (e.g., size of population in area; economic factors) contribute to meaningful differences with

implications for the design of interventions. Although information on Hispanics and CRC is available at the national level, the Northern Nevada Hispanic community felt that the absence of data at the local level warranted a needs assessment to identify the issues related to colon cancer screening within this community. In their opinion, this was the appropriate starting point. Therefore, in partnership with a community taskforce established to address screening disparities, the research questions and methods were developed to address this gap.

Using a qualitative research methods approach, focus groups were chosen as the method. Qualitative research illuminates local perspectives in rich detail (Creswell, 2007) and, therefore is an appropriate research approach to be used to address the needs identified by the community. To answer the research questions, focus groups with specific populations within the Hispanic community were designed. These methods were chosen because they are relatively easy and inexpensive ways to bring people together, are effective with people with all levels of literacy, and allow for soliciting opinions about barriers experienced as a group rather than at the individual level (Silberman, 2006).

Developing an effective colorectal screening intervention for members of the local Hispanic community requires a thorough examination of the forces that interact to affect CRC screening behavior. The current study attempts to unpack the unique set of barriers facing Hispanics in Northern Nevada. The research questions to be answered in analysis were to: a) identify the issues and barriers associated with colon cancer screening as identified by the community, and b) determine the best intervention to implement in this community

based on the identified needs, priorities, assets and feasibility in population.

Method

Three focus groups of 8 to 12 people each were designed and consisted of one group of middle-aged female Hispanics and two groups of middle-aged male Hispanics. Given the lower rates of screening and higher cancer incidence in Hispanic men (CDC, 2013; National Cancer Institute 2016), two groups of men were conducted to allow for more insight into male-specific issues. To be eligible, Hispanic participants had to reside in the target area of Northern Nevada and understand Spanish, the language to be used in the focus groups. Middle-age participants were the desired sample for the study, especially people age 50 and older, the recommended age for CRC screening (CDC, 2013). We recruited people younger than 50 in part because they would need screening in the near future and we wanted to understand what would motivate them to obtain screening to inform the design of the intervention. Also, owing to the importance of intergenerational relations among Hispanic families (Gangotena, 2007), we planned to explore how younger family members can support screening for parents, aunts/uncles, grandparents, and other family members. The intergenerational aspect of Hispanic culture has been overlooked in traditional medical approaches and these relationships may prove very effective in increasing screening outcomes.

The focus group questions were developed from topics identified from the literature and with members of the Hispanic priority population (see Table 1). We used a 6th grade reading level for the demographic questionnaire which was reviewed by the community partners before use.

Table 1. Colon Cancer Screening (CRC) for Northern Nevada Latinos Focus Group Moderator Guide

Introductory comments: Purpose of study. DISTRIBUTE AND READ STUDY INFORMATION SHEET AND ANSWER ANY QUESTIONS. Next, introductions – where are you from? TURN ON AUDIO RECORDER

- 1) Have you heard about colorectal cancer or colon cancer screening? Yes? How?
- 2) What do you see as some of the barriers preventing people from getting screened?
- 3) What are your suggestions for increasing colon cancer screening among Hispanics in this area?
- 4) What should the message be? a) Which message is best? b) Who do you want to hear from? c) Would you rather read about it or watch a video?
- 5) Summary questions: All things considered, of all the things we discussed, what is most important...? Have we missed anything?

Will you please complete the demographic sheet? Please do not put your names on this sheet. If you prefer, I can ask you the questions instead of filling out the form.

If you are interested in the results, there is a sign-in sheet and we can send you more information or you can participate in a follow-up meeting to go over the results. We would like also to invite you to become a research assistant on a future study. If you are interested, there is a sign-in sheet for that. There is also a handout with community resources for colon cancer screening.

ASK AT ALL FOCUS GROUPS EXCEPT THE LAST ONE: If you know of family or friends who might want to participate, please share the information about this project with them. DISTRIBUTE FLYER

Finally, we would like to give you a \$15 gift card as a token of appreciation. If you would like one, we must get your names as proof that we gave them out.

Thank you! TURN OFF AUDIO RECORDER

Sampling

Various recruiting techniques were used for obtaining the focus group participants. Flyers were posted at community agencies that serve Hispanics, such as the soccer club and health clinics. Public service announcements were sent to Spanish-language newspapers and local radio stations. Members of the Hispanic community also assisted in identifying prospective participants. A snowball

sampling technique also was used wherein participants were asked to recruit family and friends for the upcoming focus groups. Reminder letters were sent out and scheduled participants were called one week prior to increase meeting attendance.

Procedure

The semi-structured interview guide was reviewed and revised in partnership with community members involved in the project.

A flexible guide for questions was used which allowed for alterations during data collection if needed based on responses from the participants. All data and research materials were translated from English to Spanish and back translated to English using an independent interpreter (Harkness, van de Vijver, & Mohler, 2003).

The focus groups were conducted in Spanish by a member of the priority population. Respondents were provided a consent form to read and informed verbally of the study procedures including that their responses would be audiotaped. The moderator also explained that all methods were reviewed and approved by the university IRB. After any questions were answered and participants were given the chance to refuse to participate (no one did), the focus group started. To promote access, childcare was made available. The meetings were held in a community location centrally located within the Hispanic community and easily accessible.

Demographic questions including age and education level were collected using a 1-page questionnaire in Spanish that was distributed at the end of the focus group session. Finally, information about local cancer screening resources were provided and participants were invited to a follow-up meeting to discuss the results and to become involved with future research on this topic. Participants received pizza and a \$15 gift card to a local store for their time and help.

Analysis/Coding

The focus group audiotapes were translated from Spanish to English and transcribed into the qualitative software program, ATLAS-ti. Two translators were used and two other study personnel coded all the transcripts. Coding was done line-by-line to identify themes related to the research questions.

The two coders worked independently and then met to resolve disagreements and refine the codes. A constant-comparison method (Glaser & Strauss, 1999) was used to refine the codes to improve clarity, remove redundancy and develop definitions for the codes. After this process which included six revisions of codes, the final coding was completed. A preliminary draft of the identified themes were reviewed by two community members as a member check on the validity of the results (Creswell, 2007).

Results

A total of 21 people participated in the three focus groups (8 males in group 1, 6 females in group 2, and 7 males in group 3). Participants ranged in age from 36 to 66 (Mean age = 49; SD = 7 years). All participants were born outside of the U.S. and lived in the U.S. an average of 24 years (range from 5 to 32 years). Just over half of the participants had been screened for colon cancer (57%) in their lifetime. Spanish was the primary language spoken at home for 100% of the sample. Each focus group lasted about 2 hours.

The presentation of the results is organized around the main purposes for conducting the focus groups: 1) to identify barriers to screening among local Hispanics and 2) to identify preferred methods for developing a successful intervention to increase screening in this population. Many direct quotes from participants are included to highlight the voices of the participants as recommended in qualitative research reports (DePoy, & Gitlin, 2016).

Screening Barriers

Major screening barriers discussed by the participants included cost and access concerns, and cultural attitudes about shame, embarrassment, and a lack of priority given to preventive care within the Hispanic

population. Women were more likely to discuss lack of insurance whereas men were more likely to describe shame and embarrassment. Other than that, the topics discussed were similar for both females and

males. The most common responses arranged by gender are presented in Table 2. The table represents the number of times a particular topic was mentioned across the three focus groups.

Table 2. Most Common Responses from Participants by Gender*

| Response | Number of Mentions | Female Mention | Male Mention |
|---|--------------------|----------------|--------------|
| Increase availability of information, spread information, communicate with others, educate oneself about colon cancer screening | 49 | 21 | 28 |
| Lack of information or the wrong information is a barrier to screening | 20 | 7 | 13 |
| Cost of procedures and health care in general is a barrier | 20 | 11 | 9 |
| Messages should be about prevention | 19 | 8 | 11 |
| Messages should come from variety of sources (videos, brochures/pamphlets) | 19 | 5 | 14 |
| Messages should include dealing with the cultural barriers, especially taboo, shame and embarrassment | 17 | 1 | 16 |
| Shame is a cultural barrier | 17 | 0 | 17 |
| Messages should come from people in the community or community leaders | 16 | 10 | 6 |
| Lack of insurance is a barrier | 15 | 10 | 5 |
| Messages should come from an expert or a doctor | 14 | 7 | 7 |
| Taboo is a cultural barrier | 14 | 3 | 11 |
| Waiting until last minute to see doctor, not seeing urgency of seeing doctor if nothing is wrong is a cultural barrier | 13 | 5 | 8 |
| Messages should be delivered via video | 13 | 7 | 6 |
| Have heard about CRC screening or CRC from a doctor or clinic | 12 | 1 | 11 |
| Family members have talked about CRC or other health issues | 12 | 4 | 8 |
| *Across the three focus groups, there was a total of 15 males and 6 females | | | |

Insurance and Costs Barriers

Financial concerns were one of the most commonly mentioned barriers which included not having insurance to access care or to help pay for costs. In the words of a

female participant: “And also the lack of insurance...not only for cancer, but for many things that we let go because we don’t have insurance.”

A specific concern about not wanting to get screened was that the costs are not always known beforehand. A related concern was that a visit leads to many more tests and thus more costs. Female participant: “I mean, they find a bunch of things and you say “How am I going to pay for all of these things? I came because I had a cold!” , no?”

Cultural Factors

Beyond financial or logistical obstacles, cultural attitudes about preventive medical care like cancer screening were barriers according to the group. There does not appear to be a cultural norm supporting the importance of seeking preventive medical assistance. Male participant: “Sometimes we are sent to the doctor, for what? I don’t have anything. Is the response, well, of the Hispanic.” Another male participant: “Yes, I have also heard something about this on television, only well, that we never listen and we always wait till we have it or we feel a symptom.” Female participant: “Because every time one is sick, one says ‘tomorrow’. One always has time for other things and the sickness, perhaps that is how we Hispanics are, we always say ‘later’, and in reality we do suffer a lot.” Another female participant: “I have heard that it’s a really bad thing but that we always leave it for later and we never seek for help on time.” Male participant: “No, like he says, we the Hispanics are shy, we don’t want to do anything and always wait for the last moment.”

A particular concern was the relative importance of preventive care compared to other responsibilities faced by participants such as employment:

Female participant: A lot of times one would rather take care of their job, because as scarce as they are...that’s why sometimes one doesn’t go to the checkups, because I

either go to the doctor or go to work. And one would rather go to work than to get checked up.

The participants also spoke about fears of hearing bad news:

Male participant: Because we would not like to find out, one says: and what if I have it? I will get worse by thinking about it, in thinking that I do have it, because sometimes we deteriorate more due to our thoughts (mentally) than the sickness itself.

Male participant: Yes, it is taboo, and more than anything it’s the fear that not only might I have colon cancer, but that I might have cancer or have another type of illness, so that is what makes it scarier. It’s not that people don’t want to do it, but it’s just that people are afraid that by doing it they might find another thing that, um, that they are not looking for.

Shame and Embarrassment

The role of shame and embarrassment also influences why early screening is not valued:

Male participant: A lot of people, I believe a lot of people, are ashamed to talk about this, I don’t know, there are people that are, and I am going to say it: Chauvinism of the people, and one that is Hispanic is ‘our nature’, why would I go to the doctor?, That is the answer of a lot of people, and sometimes they say, why would I do a prostate check up? Or for anything?, Why would I go?, I feel good- the words of a guy working there with me-I don’t have anything- that was his answer, and perhaps, one is not agonizing 100% no one, I imagine that no one, we all suffer

from one thing like [NAME] said, perhaps, maybe till one feels something is when one goes to the doctor.

Female participant: “Because a lot of people, what they have is, that they are embarrassed to talk about the topic...to talk about the colon cancer topic.” Another female participant: “What stops one, and more than anything talking about it is taboo. I mean it’s a thing like ‘don’t talk about this because it’s bad’ or ‘don’t talk about that because...no.’”

Males in particular shared their experience of shame about the topic:

Male participant: The problem is, going back to the same thing, a lot of people like I said, and he just said it too, sometimes people don’t go because of shame, like now here, maybe here they have information of something or this is for that, and a lot of people are: why would I go?, I get ashamed.

Male participant: I know that shame, is what he says, the shame, one does not go to a check up because people will mock you, that the doctor put the finger into you, the shame, to not feel that shame one better not go.

Male participant: Well to me, it happens the same, that one does not go to get the test done because of the fear that a finger is going to be put into one and one feels really bad and that one is going to lose the virginity [laughter] and all of that.

Intervention components

The participants’ recommendations for the intervention emphasized the need for more

education and the role of other people in influencing a person to get screened. Female participant: “Has to be more communication, I mean that there is more communication to people and that they have let’s say at least a fair, a health fair, for a certain date and perhaps communicate to people through the radio or television, and to not charge, to have it be something free, as well.”

Emphasizing the impact that screening could have on their relationships was mentioned in particular:

Female participant: To save lives, um, means to have more relationships with our own families, more relationships with our friends, because often times we don’t take care of ourselves, and if we don’t get screened on time, not only for colon cancer, but for any other thing we don’t get screened for, we won’t be there for them.

Male participant: “Having good health, we can attend to our jobs, attend schools, to attend - for those that have daughters, to attend to the weddings of their daughters, attend their ‘fifteens’ [quinceañera].”

Although participants mentioned a variety of sources for the materials, videos were the preferred delivery format and they felt that the messages should be delivered by experts such as doctors or from trusted community leaders.

Review of results

The review of the transcripts and draft of initial results by a male member of the Hispanic community who did not participate in the study and by the moderator confirmed that the summary of the results did not overlook cultural considerations. However, the community member emphasized the

importance of distinguishing shame from embarrassment which were not always separated in the presentation of the draft results. In his feedback, he described that shame was more about one's family and others as for example when a person did not do anything to prevent cancer.

Alternatively, embarrassment was more about what happens within the person such as taking off clothes so the doctor could see "private parts". This also included the shame of one's wife being seen naked by the doctor. A final comment was whether women held back a little in their answers as their responses seemed more reserved.

Discussion

The purpose of this study was to identify barriers to colon cancer screening faced by local Hispanics and to hear participants' recommendations for the design of a colorectal cancer screening intervention for the population. The results revealed both similar concerns to studies with other Hispanics but also some specific issues that were highlighted by this group.

One barrier addressed in the focus groups was their concern about the lack of education about screening. This finding supports other research which showed that Hispanics are less knowledgeable about CRC risks and screening tests (Cameron, Francis, Wolf, Baker, & Makoul, 2007). Providing more education will not only increase the recognition of the importance of screening, it will help to also reduce the taboo, shame, and embarrassment around the topic and colonoscopy procedure.

The cost was another barrier discussed by this group and identified in other studies of Hispanics (Nevada Cancer Coalition, 2015). In particular, the unknown charges associated with the colonoscopy procedure and additional costs for other tests were

highlighted as concerns. Lack of insurance was discussed in the context of not having the resources to pay for the procedure.

Shame and embarrassment

Overall, the themes identified were similar for both genders however men were more likely to discuss shame and embarrassment as barriers than women. The male participants reported these emotional responses about the procedure and about being diagnosed with cancer which has been reported in studies of Hispanic males' attitudes toward colorectal and prostate screening (Goldman, Diaz & Kim, 2009; River-Ramos & Buki, 2011). These topics are a particular concern as they are rooted in perceptions of masculinity and the culture of *machismo* which are strong forces to override (Gutmann, 2007). The existence of cultural taboos about this topic means people don't want to talk about it, which then leads to lack of information or misinformation, which then provides a vacuum which allows the cultural taboo to flourish. Educational interventions are important to combat this misinformation and taboo.

More promotion of the stool FIT would alleviate the shame and embarrassment concerns of the colonoscopy procedure performed at a doctor's office and research supports that Hispanics prefer using stool tests (Cameron et al., 2007) and congruence with patient preference for screen type increases screening rates for that test (Daskalakis et al., 2014).

Influence of others

The role of relationships in influencing people to get screened was emphasized by the participants. Especially for men who may not be motivated to see a doctor unless experiencing symptoms, hearing how screening can help ensure one remains able

to provide for the family and is around for important family milestones resonated with the group as it is congruent with role expectations in Hispanics (Gangotena, 2007).

Because prevention is not viewed as a priority (“why go to a doctor if not sick?”), we designed the intervention’s messages to target this. For example, patient navigators would tell older male Hispanics that you can either “pay now or pay later” emphasizing that paying now means you being able to still work and provide for family. This message also tried to impart some urgency about prevention.

Surprisingly, no participant mentioned language barriers which have been identified as a barrier in other research (Nevada Cancer Coalition, 2015; Peak, Gast, & Ahlstrom, 2010). It may be that most of the participants also spoke English so medical interpreters aren’t as needed (however all participants reported that Spanish was their primary language spoken), or that the local medical system has enough bi-lingual professionals that language is not a barrier for those with limited English proficiency.

There was no mention of the impact of undocumented status on seeking screening. We did not ask participant about their immigration status and it is likely that Hispanics who were willing to come to public meetings are documented or, if not, would not bring this up in a public forum in which they are being recorded.

Limitations

There are limitations to this study to note. The small sample size inherent to focus groups means that the data are not generalizable to all Hispanics. However, the use of focus groups and qualitative methods in general allows for a universality of

response to be identified through thick description of a topic (Glaser & Strauss, 1999). The study goal was not to generalize to all Hispanic but to understand the specific barriers within this Northern Nevada group. Relatedly, nearly all the participants were from Mexico so there was a lack of Hispanics from other countries represented.

We designed same-sex groups of participants but the moderator was female and a co-moderator was male and so there was a mix of genders. Whether this composition had any impact is not clear from the results. The co-moderator did not speak Spanish however so the participants may not have felt concerns about voicing their thoughts since they could not be understood. Also, the oldest participant was 66 years old. Perhaps having more participants age 66 and older would produce different results. As an attempt at community empowerment following the principles of a CBPR approach, all participants were invited to join the research team; however, no one signed up to volunteer. In retrospect, this should not be surprising given the participants’ busy lives.

Despite these limitations, the current study uncovered screening barriers and intervention components that were used in a subsequent intervention. For example, an older Hispanic male leader of the community was one of the people hired to provide education. We were able to address most barriers identified by the participants in the design of the intervention except the larger system issues of costs and access to care which remain significant obstacles for this group. As one participant in the intervention explained: “I know many people who do not get medical attention or medication because the fear of poverty is greater than the fear of death.” The cost barriers are expected to increase given the

cutbacks to the Affordable Care Act which had prioritized access for preventive care and Nevada was one of the states to accept the Act's Medicaid expansion (Nevada Cancer Coalition, 2015).

Conclusion

In conclusion, the use of a focus group methodology uncovered specific concerns for this group and allowed for a more tailored understanding of the experiences of local Hispanics about barriers to colorectal cancer screening. Without gathering these data first, it is likely the subsequent screening intervention would not have been as successful.

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Acknowledgements:

This project was supported by grants from the National Center for Research Resources (5P20RR016464-11) and the National Institute of General Medical Sciences (8 P20 GM103440-11) from the National Institutes of Health.