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Religious Beliefs and Cancer Screening Behaviors among Catholic Latinos: Implications for Faith-based Interventions

Jennifer D. Allen, ScD, MPH, RN, **Bryan Leyva, BA**, **María Idalí Torres, PhD, MSPH**, **Hosffman Ospino, PhD**, **Laura Tom, MS**, **Sarah Rustan, MA**, and **Amanda Bartholomew, MPH**

The authors are affiliated with the Dana-Farber Cancer Institute, Boston [JDA, LT, AB], Harvard Medical School [JDA], the National Cancer Institute, Bethesda, Maryland [BL], the University of Massachusetts, Boston [MIT, SR], and Boston College, Chestnut Hill, Massachusetts [HO]

Abstract

Although most U.S. Latinos identify as Catholic, few studies have focused on the influence of this religious tradition on health beliefs among this population. This study explores the role of Catholic religious teachings, practices, and ministry on cancer screening knowledge, attitudes and behaviors among Latinos. Eight focus groups were conducted with 67 Catholic Latino parishioners in Massachusetts. Qualitative analysis provided evidence of strong reliance on faith, God, and parish leaders for health concerns. Parishes were described as vital sources of health and social support, playing a central role in the community's health. Participants emphasized that their religious beliefs promote positive health behaviors and health care utilization, including the use of cancer screening services. In addition, they expressed willingness to participate in cancer education programs located at their parishes and provided practical recommendations for implementing health programs in parishes. Implications for culturally appropriate health communication and faith-based interventions are discussed.

Keywords

Religion; spirituality; Catholicism; Hispanic; Latino; health; cancer screening; faith-based intervention; health promotion; qualitative research

In 2009, cancer surpassed heart disease as the leading cause of death among U.S. Latinos.[1] In 2012, an estimated 112,800 new cancer cases and 33,200 cancer deaths occurred among this population.[1] This is a major public health concern, given that Latinos are the nation's largest and fastest growing demographic group, accounting for 16% of the U.S. population in 2010[2] and projected to constitute 30% of the population by 2050.[3] Promoting the appropriate use of cancer screening and early detection methods are key strategies for reducing cancer morbidity and mortality. Nonetheless, cancer screening remains underutilized by U.S. Latinos,[4] resulting in screening rates that fall far short of the *Healthy*

Please address correspondence to Jennifer Allen, ScD, MPH, RN; Center for Community-Based Research, Phyllis F. Cantor Center for Nursing Research and Patient Care Services, Dana-Farber Cancer Institute, 450 Brookline Avenue, Boston, MA 02215; (617) 632-2269; Jennifer_allen@dfci.harvard.edu.

People 2020 targets of 81.1% for breast cancer, 93.0% for cervical cancer, and 70.5% for colorectal cancer.[5]

Barriers to cancer screening among Latinos have been studied extensively.[6-12] Previously reported structural barriers include: lack of health insurance and concerns about cost,[13, 14] undocumented legal status,[7] perceived discrimination,[15] inadequate awareness or knowledge about screening tests,[16] and lack of provider recommendation.[8, 17] Even with structural barriers removed, cancer screening remains underutilized among Latinos, thereby suggesting that factors beyond structural barriers be considered.

Lower cancer screening rates among Latinos are also affected by cognitive and attitudinal beliefs concerning cancer, cancer screening, and health.[15, 18, 19] For example, seeking health care only when sick,[20] embarrassment regarding screening procedures,[9, 21] fear/denial/lack of desire or motivation,[8] having other needs more pressing than preventive care,[10] preference for home remedies rather than Western biomedical care,[22] and lack of social support[6] have been found to be important contributors. Moreover, language barriers due to limited English proficiency, cultural norms regarding gender roles (*machismo*, *marianismo*), fatalism,[23, 24] and scarcity of Spanish speaking providers may deter Latinos from undergoing screening. Understanding existing structural, cognitive, and socio-cultural barriers is essential for the development of effective interventions to increase screening use among Latinos.[25]

Despite its critical importance for many Latinos, inadequate attention has been focused on the potential influence of religion on screening behaviors. A vast majority of U.S. Latinos report belonging to a religious denomination.[26] Latinos in the U.S., and immigrant Latinos in particular, are predominantly Catholic—with 70% identifying themselves as such.[26, 27] Forty-two percent of Latino Catholics report attending Mass at least once a week.[26]

A positive association between religiosity, often measured as frequency of religious attendance, and mental and physical health outcomes has been demonstrated across diverse racial/ethnic populations.[28-30] Various explanations have been proposed to explain this relationship.[30] For example, religious involvement may directly reduce exposure to stress,[31] increase access to social resources (e.g., social networks and social support),[32-34] provide access to health-related activities and health information,[35] promote positive psychological orientation/emotions (e.g., self-esteem, self-efficacy, optimism),[31, 36, 37] and offer coping resources for stressful events (e.g., abnormal screening results).[38-41] Church-goers may be healthier than those who are unable to go to church ("healthy church-goer effect").[42] Another likely mechanism is that religion shapes beliefs about the origins of health and illness, which influences perceptions about its causes and remedies, thereby affecting health care utilization and health behaviors.[30, 43]

Recently, studies have suggested that religiosity and/or religious beliefs may influence cancer screening behaviors.[35, 38, 44, 45] The role of religious factors in cancer screening behaviors may be especially pertinent to Latinos in the U.S. who, as a whole, express high levels of religious devotion and religious service attendance.[26] Therefore, understanding the role of religious beliefs, traditions, bodies of doctrine, and ministry in shaping health beliefs

and behaviors is of critical importance.[46-48] Not only would such understanding aid in the development of culturally and religiously relevant health communication, but it would facilitate the development of successful faith-based interventions for Latinos, which have been very successful among African Americans.[47, 49]

While literature on this topic is growing, current limitations include an emphasis on biomedical interpretations of religion/spirituality,[50] a focus on cancer patients,[51, 52] study of one Latino sub-group (i.e., Mexican Americans) residing in Western regions of the U.S.,[23, 53-62] and small sample sizes.[63] Focusing on a diverse sample of Spanish-speaking adults residing in Massachusetts, our qualitative study binds together perspectives from public health, anthropology, and U.S. Latino/a theology to describe the role of Catholic religious teachings, practices and ministry on cancer screening attitudes and behaviors among Latinos.

Methods

For this qualitative study, we conducted focus groups with Catholic Latinos in Massachusetts using standardized methodology.[64] Objectives were to describe: (a) participants' knowledge, attitudes and beliefs about cancer and cancer screening; (b) Catholic teachings or traditions that might influence self-care or use of cancer early-detection modalities; and (c) culturally acceptable strategies for the delivery of cancer screening education programs for Latinos in Catholic parishes. Focus group questions in our semi-structured moderator's guide were developed based on our prior work[38, 65-67] and were designed to elicit cultural explanatory models (CEMs) of cancer.[68-70] CEMs seek to elicit indigenous conceptions of cancer development, detection, and treatment rooted in social, cultural, and historical factors that influence screening behaviors.[68, 71, 72] They involve cultural beliefs and values, personal life experiences, and both biomedical and popular explanations of health and illness. Prior to conducting the focus groups, questions were cognitively tested using standardized procedures[64] among Latino parishioners from parishes not participating in the study (N=7). Questions were refined and reviewed by our Community Advisory Board (CAB) to ensure cultural and religious appropriateness and the accuracy of translation. The CAB for this study met biannually and was comprised of representatives from health and social service organizations and interfaith religious networks serving Latinos in Massachusetts. CAB roles included collaboration on development of focus group questions, recruitment strategies, data collection tools, and interpretation of study data. Focus group questions are provided in Box 1.

Recruitment and data collection

Four urban Catholic parishes were selected from the Massachusetts cities with the largest Latino populations (Boston, Lawrence, Springfield, and Worcester) based on our prior research partnerships. Parish leaders assisted study staff in recruiting Latino parishioners by distributing flyers after Mass, having the pastor make announcements from the pulpit, and promoting the study through word-of-mouth. Eligibility criteria for focus group participation included: (a) self-identification as Latino; (b) ability to speak Spanish; (c) being a member of a participating parish; and (d) being age 18 years old or older. Study staff screened

individuals for eligibility. Those eligible and interested then provided verbal consent and completed an anonymous demographic questionnaire prior to the focus group.

Experienced focus group moderators fluent in Spanish and English conducted groups between April and July 2011 in private meeting rooms at each of the sites. Groups were segmented by gender, and the facilitator's gender matched that of the group. All focus groups were conducted in Spanish, although in some of the groups, participants blended Spanish and English. Each focus group ranged from 6-10 participants and lasted approximately two hours. A research assistant audio-recorded discussions, took notes, and documented any clear non-verbal communication (e.g., gestures). Participants received a $50 gift card for their participation. The Harvard School of Public Heath Institutional Review Board approved all study protocols and procedures.

Data analysis

Focus groups discussions were transcribed and translated by certified Spanish translators and were reviewed by bicultural study staff for accuracy. All members of the research team independently reviewed transcripts to identify initial coding schemes, in addition to the pre-defined themes, which were categorized in the semi-structured interview guide (see Box 1). Schemes were compared and discussed until consensus was reached about a refined higher-level coding scheme. Thereafter, two team members independently coded each of the transcripts. Discrepancies in coding were resolved through discussion with the entire team. A qualitative research specialist then conducted line-by-line coding using QSR International NVivo 9 software (2011).[73, 74] Thematic analysis of participant responses focused on the general agreement among participants in each group, consistency of findings across groups, and concordance among the assessments of observers.[75] As is usual practice in qualitative research, we used qualitative descriptions and phrases to convey the breadth and strength of agreement with a statement or attitude, rather than quantifying responses.[64]

Results

Across the eight groups, there were a total of 67 participants, including 33 men and 34 women. Participants ranged in age from 18 to 86, with a mean of 53 years of age among men and 57 among women. Many participants (42%) had less than a high school education and over half (57%) of those who disclosed their income reported an annual household income of $30,000 or less. The majority were born in Puerto Rico (46%) or the Dominican Republic (37%). About half (54%) had been members of their respective parishes for more than 10 years. Most reported that they had health insurance (85%), which is mandatory in Massachusetts.[76] See Table 1.

Key qualitative findings are described below and are organized based on our evaluation of the major themes and subthemes. Quotations representative of each theme or subtheme are reported in Box 2.

General attitudes and beliefs about cancer

Participants believed there were many causes of cancer. Awareness was high in all focus groups about the cancer risks associated with cigarette smoking and unprotected sun

exposure. Many participants also believed a major cause of cancer was "*falta de cuidado*," or negligence — individuals neglecting to take care of their health or failing to go for regular check-ups. Other beliefs about cancer causes included chemicals found in processed foods, tap water, lack of nutrition, stress, family history, age, self-care products (e.g., fragrance body sprays, deodorant), prolonged use of medication, hormones, microwave ovens, Teflon, insect bites, and physical injury (such as strong blows to the chest). Fear of cancer was clearly expressed in all of the groups. Many participants associated cancer with "muerte" (death).

Perceptions of early detection and cancer screening tests

Most participants were aware that cancer could be present without symptoms. In addition, general awareness of colonoscopies, mammograms, and Pap tests was high among men and women in all focus groups.

Most men and women expressed positive attitudes toward colonoscopies and a willingness to undergo the test. Participants older than 50 years generally reported positive experiences with this procedure, describing it as relatively painless. When asked about age to begin colonoscopies and frequency of this test, most (correctly) stated that one should begin at age 50 and reported that their doctors recommend this exam be done every 10 years. Despite their clear knowledge about colonoscopies, the majority were unaware about other screening exams for colon cancer. When asked about the fecal occult blood test (FOBT), participants responded with "What is that?" or "We haven't heard about it." When asked about barium enemas, one participant seemed to speak for the others in the group, saying, "I don't understand any of this."

All participants believed in the importance of mammograms. Nonetheless, mammograms were described as uncomfortable in all of the four women's groups. Women in two groups concurred that the pain associated with this exam sometimes kept them from getting the test. Knowledge about current screening guidelines was low, with the vast majority believing that mammography was universally recommended beginning at age 40 (and sometimes, younger). Moreover, some women wanted to have mammograms as frequently as every six months: "*If it can be done every six months, it would be better*." Most women were knowledgeable about breast self-exams and believed them to be efficacious in detecting breast cancer.

Awareness of the Pap test was high among female participants, but knowledge about cervical cancer was low. Most women believed that they should have an annual Pap test. But when probed about which cancer can be detected by this test, participants differed in their responses. Most said that a Pap test can detect "cancer of the uterus." Others said "vaginal," "ovarian," and "all kinds." None of the women directly equated the Pap test with early detection of cervical cancer.

Men were most familiar with prostate cancer screening. Attitudes concerning prostate cancer screening were generally negative in all of the male focus groups, mostly due to discomfort associated with digital rectal exams (DRE). Few men were able to describe the risks associated with the prostate specific antigen (PSA) test and there was confusion about when

one should begin prostate cancer screening. However, there was very little discussion of the controversial nature of prostate screening, with only one participant knowing that screening guidelines were controversial.

Beliefs about religion and health

Participants universally affirmed the role of God and faith in health. Most participants expressed a belief that God bestows blessings, as well as challenges and hardships. One participant commented, “all good and bad come from God, including health, illness, and healing.” Many expressed their reliance on God for support, comfort, strength, and hope during times of illness. In each of the focus groups, participants used stories and testimonies to convey the healing power of God; nearly every participant reported knowing someone who had had a religious experience associated with some form of healing “by God” or “through faith.” Many times, these were referred to as “miracles.”

Much discussion focused on suffering and illness. Participants recounted offering prayers and making specific requests to patron saints (e.g., Saint John the Baptist) and various apparitions of the Virgin Mary (e.g., Our Lady of Guadalupe, Our Lady of Altagracia, Our Lady of Fatima) to ameliorate suffering and pain. They also consistently reported using religious rituals, offering prayers, wearing sacred objects (e.g., rosaries, crosses), invoking the intercession of saints, and lighting candles to receive health from God. Participants related that prayer, in particular, played a significant role in stress management and making meaning out of suffering and illness.

While the participants' description of religious rituals largely revolved around healing of those already ill, participants in several focus groups cited specific religious teachings from the Bible that they believed encouraged the maintenance of one's physical health. For example, several participants emphasized the Bible's teaching that the human body is “the temple of God.” Participants saw this as God's mandate for individuals to actively care for their own health, and also noted that taking care of one's physical health enabled one to better serve God, glorify Him and express gratitude for the bodies He had given them. Thus, “*being a healthy person is being a faithful person*.” Most believed their religious beliefs reinforced their health-seeking behaviors. For example, although faith was viewed as the central source of health, participants did not refute the importance of regular health check-ups. Many expressed the belief that health care providers' ability to treat cancer and other illnesses were gifts from God.

Furthermore, participants in two of the focus groups discussed specific unhealthy behaviors that they believed were discouraged by their religion. They described gluttony as a sin in the Catholic tradition, while highlighting Catholicism's emphasis on *moderación* (moderation), particularly as it relates to ensuring a balanced diet. Some participants explained that they take advantage of occasions that call for stricter religious observance, such as Lent (a period of 40 days culminating in Holy Week), to give up behaviors they perceive to be unhealthy.

Role of parish communities in maintaining and promoting health

Participants emphasized the importance of the parish in caring for the physical, mental, emotional, and spiritual health of the congregation. Although there were some differences in opinions among participants from different parishes, participants generally agreed that parish communities provide support for health through prayer, visits to the sick, material assistance to those in need, health information, and access to health services. We briefly discuss each of these categories in turn below.

Prayer—Participants most frequently said that prayer was the way the Church and its leaders promoted well-being, helped parishioners cope with life stresses, and raised awareness about God's role in matters of health.

Ministry to the sick—Participants in all focus groups reported receiving support from ministers via home or hospital visits. As one male participant said, “When someone is in danger, very sick, in danger of dying, or it seems like they have a very advanced disease, the priest is notified.”

Material assistance to people in need—When asked about activities at the parish that promote health, many participants talked about the parish's outreach and special initiatives to people and families in need, such as food drives and collections of clothing and money. Participants in two focus groups noted that donations collected from parishioners are generally provided to families who have experienced a tragedy or extreme hardship.

Health information—Some participants indicated that their parish provides regular exposure to health messages and information. Examples included announcements at the end of Mass or in parish bulletins, and information delivered through newsletters and flyers. Participants recalled having received information about mammography, organ donation, blood drives, and diabetes. Participants in all of the focus groups suggested that sermons, radio and television programs sponsored by local parishes could focus on health issues.

Access to health services—Participants in three focus groups mentioned receiving free health services at their parish, including blood pressure screening, dental checkups, and diabetes screenings. In addition to direct services, participants noted that information about local community resources was sometimes made available.

Strategies to promote health initiatives in Catholic parishes

When asked, all focus group participants expressed enthusiasm for cancer education programming and health promotion in parishes. Many described that although the parish sometimes provides informational support about health, they would like to receive more in-depth information and assistance with accessing health services. Participants gave their opinions on specific strategies for researchers working with parish communities to promote cancer prevention and early detection. These strategies are described below.

Clergy support and participation—Participants noted that priests are the gatekeepers to the parish community, along with the deacons, administrative staff, and Latino ministry

leaders who support the parish's mission and activities. Participants in nearly all the focus groups expressed that these individuals could effectively bring attention to health issues because of their influence among parishioners. Priests' sermons in particular were thought to be the most effective way for delivering health messages to parishioners. Participants also stressed priest involvement in all health initiatives, although they noted that this may be challenging due to time constraints and competing demands faced by priests.

Existing forms of communication—Participants suggested that cancer education programs should use existing forms of parish communication to deliver health messages. For example, in addition to sermons, participants agreed that inserting simple health messages into parish bulletins may be an efficient way to reach most parishioners. Other existing forms of communication that were frequently suggested were flyers, information tables before or after Mass, the parish website, and, less frequently, prayer groups.

Multiple formats and family activities—Participants noted that acceptable formats for health education included brochures and other print materials, workshops, speakers, videos, and “charlas” (small group discussions). There was interest in activities centered around the whole family, involving seniors as well as youth. Save for one gentleman, in all but one focus group there was consensus among participants that mixed-gender discussion groups were preferred. Moreover, participants preferred programming and materials that were interactive, culturally appropriate for Latinos, in Spanish, easy to read, and delivered over time if possible. Food was recommended as one strategy to increase participation.

Partnerships between parishes and health organizations—When asked about their opinion on partnerships between parishes and community health organizations, participants generally believed such partnerships would provide many benefits, such as facilitating access to screening. Participants in all focus groups also expressed enthusiasm about the idea of inviting doctors and other representatives from these organizations to give talks about health.

Parish health committee/ministry—When asked about their opinion on having a parish health committee or ministry to organize activities about health, nearly all participants responded positively. They noted that this would make it possible to have programs for the specific needs of their parish, thereby leading to greater attendance and involvement. They also noted that such a structure would make it more likely that a health program could continue over time, as this model has been used quite successfully for other ministries.

Free or low-cost programs—Participants suggested that all health activities be free. Moreover, participants in one focus group warned that parishes usually do not have a budget for these activities, so activities should be inexpensive to implement.

Personal testimonies—In each focus group, participants recommended using personal stories to promote positive health behaviors. Female participants in particular, noted that these stories could help reduce negative perceptions and fear of cancer screening. Hearing others' stories would also serve as a screening reminder.

Discussion

Participants in this qualitative study expressed a belief in a deep connection between religious beliefs and health. They believe that God and faith are vital for health and healing, but also that taking care of the body as the temple of God would in turn allow them to serve God.Participants' reliance on God and faith came in the form of frequent religious rituals such as prayer, to recover from illness and maintain emotional, physical, and spiritual health. A substantial number of participants shared stories of having witnessed instances of miraculous healing through their faith or religious practices. These findings add nuance to what is currently known about the influence of Catholicism and spirituality on health beliefs and behaviors among Latinos.[77-81]

Many participants perceived the parish to be a central source of social support in their lives, including informational (providing information and guidance), emotional (coping), and instrumental support (collecting food, clothing, and money) when needed. The majority of participants expressed that their parish was either directly or indirectly involved in the provision of health information and/or services for those who are ill (e.g., through prayer, ministry, and home-visits), which is consistent with prior studies reporting relying on assistance from the priest for coping with illness.[82, 83] An interesting finding of our study was that while many parishioners cited the availability of health information from the parish, they largely expressed a desire for parishes to take a more direct role in health promotion. Indeed, all participants expressed willingness to participate in parish health programs, suggesting that faith-based interventions for cancer prevention and control are acceptable to Latino Catholic faith communities.

This study highlights the importance of religion in shaping Latinos' health beliefs and behaviors and suggests that the incorporation of religious beliefs and traditions may enhance the potential effectiveness of cancer education messages and initiatives. Ample research has shown that health communications that are culturally appropriate are often more effective than those that are not culturally relevant.[84-86] Therefore, it seems likely that addressing salient religious themes (e.g., by incorporating prayer, treating health and health care as gifts from God, seeing the face of Christ in every person and caring for the body as the temple of God) in health promotion could boost the impact of health promotion programs. This hypothesis is supported by a growing number of studies that show that integration of spirituality and religion into health interventions can be effective at building trust,[87] establishing credibility of information,[88, 89] increasing receptivity and acceptance of messages,[90] and subsequently initiating behavior change.[85, 91, 92]

It is important to note several limitations of this qualitative study. Ours was a convenience sample, which although common practice in qualitative research, limits the generalizability of results. However, our goal was not to achieve a representative sample, but to gather a variety of perspectives on the phenomenon of interest.[64] We purposely selected churches from the Massachusetts cities with the largest Latino populations, which can be considered a strength of the study. A potential limitation is the relative homogeneity of respondents with respect to country of origin; most participants were Puerto Rican or Dominican. Nonetheless, this reflects the characteristics of the population in the area. Given that most

studies in this area of inquiry include mostly populations of Mexican origin, the composition of our sample may also be considered a strength, in that it expands research on Latino sub-groups. Nevertheless, the findings from this study should be interpreted with the appropriate socio-cultural context in mind. Although many in our sample were Puerto Ricans and are citizens of the United States, their socio-demographic characteristics suggest that they live in similar circumstances as other immigrants from Latin America. Indeed, more than half reported incomes of less than $30,000, indicating that we reached a low-income audience. Another potential limitation is that the data for this paper includes focus groups with Catholic Latinos only. The growing non-Catholic segment of the Latino population may have different beliefs and practices than the Catholic participants in our focus groups. Therefore, additional research is needed to identify culturally appropriate intervention strategies that reflect the other religious traditions and denominations in Latino communities. Despite these potential limitations, our study contributes to the literature linking religious factors with health behaviors, and to the limited but growing body of work on connections between religion and health among U.S. Latinos.

Given the importance of religious leaders in the lives of parish members and their role as gatekeepers to congregations, it is important that local Catholic leaders be involved in all stages of intervention planning, development, and implementation. These individuals can provide invaluable insight into cultural characteristics of parishes, such as values, beliefs, norms, and meanings that are not always observable to an outsider and ensure that interventions are acceptable and salient to parishioners.[88] Religious leaders have been effective community partners for health promotion interventions in African American communities, serving vital functions in dissemination of health information and the enactment of health-related policies in congregations.[47-49] A literature review of faith-based health promotion interventions demonstrated that the effectiveness of interventions is often moderated by the participation of the religious leaders.[93] However, involving leaders in health promotion might be challenging, as their schedules, limited expertise in health programming, and restricted resources might dissuade them from having health programs in their parish. The success and expansion of parish initiatives to support health services may depend in large part on the support of diocesan structures. In our study, some dioceses had central offices that provided parishes and leaders with helpful resources. However, most of these resources are in English and these central offices lack Spanish-speaking personnel. Developing closer partnerships with Catholic leaders, despite these challenges, should be a priority for public health practitioners and may provide significant community health gains by encouraging community members to engage in preventive and early detection behaviors, and enact healthier lifestyle behaviors overall. To aid this process, researchers can build on and draw from the positive teachings and sensitivities about health care that already exist in parishes, as well as the supportive doctrine and holistic approach to health of the Catholic Church. The Catholic Church possesses a solid body of teachings about health care, which range from explicit moral teachings to advocacy on matters related to social justice (e.g., care for the most vulnerable, access to health care).[94-96] This is a good starting point for researchers since such teachings point to influences on behavior as well as to resources that can be used in interventions in these communities.

Specific cancer screening intervention and outreach strategies recommended by focus group participants included: recruiting parish leaders to endorse health activities, using existing communication channels to deliver health information, delivering health education via multiple formats, facilitating partnerships between parishes and health organizations, developing health committees/ministries, implementing activities for both men and women, using free or low-cost programs, and integrating the use of personal testimonies in education activities. These strategies may be effective in educating and motivating Latino parish members who do not participate regularly in cancer screening. Although some of these strategies have been demonstrated to be effective in African American churches,[88, 91, 105-109] there is an insufficient number of studies to draw broad conclusions about the feasibility, acceptability, and relative importance of these strategies in *Latino* churches.[47, 105, 106] Although Latinos do not share the long tradition of health promotion activities in faith-based settings as African Americans, they bring with them the tradition of the Latin American Catholic Church's involvement in human rights and social justice. Given that Latino immigrants and African Americans share strong ties to their faith communities[97], are exposed to similar socio-economic challenges[98], and face similar health disparities[99], there is a need for future research to evaluate if and how existing models of faith-based interventions can be adapted for Latinos as well as how successful interventions can be adapted for faith-based settings.

As highlighted by the Institute of Medicine, there is a clear need to identify and create communication strategies and approaches that integrate cultural beliefs into health information programs and materials designed for diverse populations.[100] Approaches that tap into deeper levels of culture, what Resnicow, *et al*. referred to as the “deep structure”, may have more influence on beliefs and behaviors than peripheral and generic approaches to cultural appropriateness.[101-103] As the science of tailored health communication continues to evolve, additional research that examines how best to integrate religion and spirituality into health promotion programs and messages is needed.[104] Tailoring at the “deep-structure” level will first require a more in-depth understanding of cultural and religious values, beliefs, and behaviors so that they may be meaningfully integrated into communication efforts.

Developing religious and spiritually tailored health communication likely poses considerable conceptual, methodological, and practical challenges. One challenge, for example, is to understand the cultural adaptations required to successfully reach Latinos across age groups and at various levels of acculturation. Also needed are methods for respectfully and appropriately presenting sensitive health-related topics (e.g., HPV-- a sexually transmitted infection causally linked to cervical cancer) to Latino faith communities. However, leveraging Catholic teachings that affirm the connection between spirituality and care of the body may be a powerful strategy for addressing health disparities. Future prospective and quantitative studies are needed to determine what effects religious and spiritual tailoring may have on the different generations and national origins of Latinos, as well as the mechanisms through which this type of tailoring could influence health priorities, decisions, beliefs, and behaviors directly or indirectly.

Conclusions

Catholic parishes are promising sites for promoting the health of Latinos due to the potential for broad reach and influence.[49] Catholic parishes have a solid body of teachings that can facilitate interventions for cancer prevention and control. They provide a vital social support system, have a mission of service and caring for others, and often involve the entire family, which may ultimately have a positive impact on the health of the community.[47] In addition, the structural facilities and existing communication channels of parishes make them ideal for holding educational programs and in some situations, the provision of direct cancer screening services. These strengths and natural qualities of parishes provide a safe and supportive environment for reducing behavioral risks and increasing adherence to cancer screening recommendations among Latinos. The rapid growth of the Latino population over the past decade, both within the U.S. and within the Catholic Church[2, 27, 111] has created an opportunity to reach out to Latinos in faith settings with culturally appropriate and spiritually relevant health information and resources to address cancer inequalities.

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Box 1

Themes and Focus Group Questions

Themes	Questions
Attitudes and beliefs about cancer	In your own words, what is “cancer”? What causes cancer? Are there physical causes? Spiritual causes? What types of cancer exist? Can cancer be prevented? How? What is the best way to treat cancer?
Early detection and cancer screening	How is cancer found? What tests do you know about that can find cancer early? What do you know about mammograms/Pap tests/colonoscopies/tests to detect prostate cancer? Could you tell me about other tests to detect colorectal cancer, such as sigmoidoscopies, stool cards, and enemas?
Religion and health	In what way, if any, do your religious beliefs influence your health? What spiritual messages, themes, or ideas encourage people to care for their health?
Parish and health	What role, if any, does the parish play in your health? What types of support or assistance could you rely on from your parish if you have a problem, such as a health issue? Does your parish offer services or information related to health? Can you provide an example?
Health promotion strategies	What can your parish do to promote health of its members? Would you attend health education activities at your parish? If so, what types of activities would you like to see offered at your parish? What kinds of information about health would you like to receive from your parish? How would you feel if your parish started a committee or ministry to organize activities about health? Would you participate in the committee?

Box 2

Content Areas and Quotations

Content area	Sample quotations
Beliefs about cancer causes	
Injuries	"Some cancers are due to being hit or accidents that the person suffered years ago, and they get some little tumor, some bitty lump…being hit causes cancer, not every time you're hit, it depends on how you're hit and where, that is causes cancer." (Female)
Negligence/"falta de cuidado"	"How is cancer developed? A wrong step, you get a bruise, you don't take care of that bruise ['neglected'], and as it grows. It turns into an infection that takes over that toe, but you neglected that toe, you didn't go to the doctor on time, when your toe is already infected…Negligence. The cancer spread in one single moment." (Male)
	"It's carelessness, we don't go to the doctor and we don't get checked." (Male)
Food/diet	"The preservatives they put in food give you cancer." (Female)
	"Even food, the very things you eat. If you eat a lot you get cancer (laughter)" (Female)
Sun exposure	"Skin cancer started directly from the sun's rays and people who expose themselves to the sun a lot and mainly people with a white complexion." (Female)
Stress	"And stress I think is one of the causes, the same as nutrition. I think the body should get exercise." (Female)
Smoking/cigarettes	"Cigarettes can produce cancer. Excessive cigarette smoking. There are many things that can, like the latency of the mother can produce cancer. Excess of work, pesticides, the contamination that is in the air today that is completely contaminated. Yes, that produces cancer too." (Male)
Other (evil eye, self-care body products, etc)	"There is an evil effect that we Latinos call 'Mal de Ojo'…what is Mal de Ojo? A person who has negative energy…it's a bad influence, something that you have inside…and that also produces illnesses…my little sister when she was little someone put Mal de Ojo on her, there was no doctor who could find out what was wrong…regrettably, she had to go to a witch doctor." (Male)
	"And also the lotion you put on and they say that spray also causes cancer. (Group: that too). So many things." (Female)
Perceptions about screening tests	"Prostate cancer is the main one, that after 40, one has to get check-ups for periodically…then colon." (Male)
Prostate cancer	"That whole thing with the doctor introducing his finger in my anus, no no, that doesn't work brother, I do not accept that." (Male)
	"There are different tests that can detect cancer, at least in us men…the safest test is the prostate test." (Male)
Breast cancer	"You have to [get a mammogram] every year." (Female)
	"Mammograms are painful, even though I was supposed to go in five months, I haven't gone." (Female)
	"My wife is very strict regarding [mammograms], she never missed an appointment, …it's very important that she gets it because, as the brother here says, cancer is something that can happen in a matter of minutes." (Male)
Colorectal cancer	"Colonoscopy, it is recommended for men in their 50s. It is recommended to do it to check that you do not have colon cancer." (Male)
	"Today they've given me every five years because the last time, the doctor told me there are no polyps and everything's fine, thank God." (Female)
	"It's very good because it helps you if you have cancer they can detect it early" (Female)

Content area	Sample quotations
Cervical cancer	"The Pap test should be done approximately every year, that is very important for women." (Male)
	"But yes, the Pap smear is every year. It detects cancer of the uterus." (Female)
Religious beliefs that promote health	
Staying healthy to serve God	"For me spirituality helps a lot when you've grown up in it and within the church community, because you understand Christ's love for every one of us and taking care of our body to be better able to serve Him… He teaches us to love ourselves more, love our body because it is the temple of God, to stop doing a lot of things like smoking, drinking, lots of things." (Female)
Body is a temple	"The body is the temple of the holy spirit. We know that, and you have to take care of your body." (Female)
	"They say God does not inhabit a dirty body. He also does not want that we stay sick to inhabit our bodies. He always wants us to be healthy." (Male)
Scripture	"The Bible talks about going to the doctor. Last year, I had a small accident…and I saw a passage…it talked about listening to the doctor. Immediately, I said, 'Lord, give me the patience I need because Your Word says I have to listen to the doctor' and after that I calmed down." (Female)
Moderation	"It's a sin and as Catholics we cannot do that…We can't give to our bodies… more than what it needs…let's say, you eat your portion of food you want more…don't practice that. If you don't practice gluttony, you're giving health to your body." (Male)
	"Everything in the Catholic religion has to be measured, not extravagant or extreme, so drinking a little cup, but not getting drunk." (Male)
Perceptions about role of God in health	"Faith moves mountains. Faith is what heals us. Faith is what serves us. Faith gives us everything. If we don't have faith in something, we don't have faith in the Lord, we are never going to be cured." (Female)
Healer of the sick	"We all here could have cancer, but if we have faith in God, God takes it away." (Male)
Giver of health	"… every day that I wake up, every day, thank you God for my health." (Male)
Helps to cope with illness	"It is not necessarily due to the faith you have you won't get the disease, however if you get the disease, the difference is that you are going to have comfort and you won't have depression because you are trusting in God and you know that He is there." (Female)
	"Sometimes it's easier for you when you have God with you despite how serious the illness may be, but at least it gives you like that strength …or the hope that 'I can get out of this'. I mean, like, even though we don't see Him, it's like an invisible force that's there supporting you." (Female)
Provides conduits to healing (e.g., doctors)	"As a church, we understand that medical science is something that comes from God too, knowledge that God gives to the doctor is inspired by God. The doctor is an instrument of God. We pray for people but we 'exhort' going to the doctor. Do you understand? And we believe that the doctor has knowledge inspired by God to help these people." (Male)
	"God comes first and you have to trust in Him, but we have to go to the doctors." (Female)
Role of parish leaders in maintaining and promoting health	"We always, as brothers, visit each other, if a brother is not well, or someone knows that there is a neighbor who is not well, we gather and pray, we pray, and we give them the support that they need to get to, wherever he/she is, let's say the hospital or their doctors, because we pray, we only intercede for God's will, not ours…." (Male)

Content area	Sample quotations
Prayer	"In those times when we go through when they detect cancer in us, when they detect diabetes in us or any other disease, then we turn to our brothers in the community to pray for us, there is a group that prays." (Female)
Ministry to sick	"All priests go to houses to visit sick people, a group of us goes too." (Male)
Strategies for health promotion	"Since we have groups for everything in the church, at most it would be a special group to bring all that information just like you brought it us." (Female)
Health ministry	"One very important thing that hopefully could be achieved through the groups, through the parishes is to give more information on health, on cancer, on diabetes, in other words, to raise awareness. I'd really like the church to do it." (Female)
	"All of us are willing to take part. It would be, as they say in English, 'great' if they made that committee." (Female)
Interactive activities	"Let's take an example, a talk on preventing cancer, probably if you bring a projector with a cassette, a video, or a movie, people are going to pay attention and they are going to see for themselves. That is, you have to give people the information [in a way] that will grab their attention." (Female)
Easy to read print materials	"Communication is very important, you have to treat them with care…and give them the information so it can be explained to them in their homes over time and also read it to them." (Female)
Free or low-cost programs	"Activities should be free and not require documentation because a lot of people are afraid to go to the doctor because they don't have papers. That's the whole reality." (Female)

Table 1
Socio-demographic characteristics of participants (N = 67)

Characteristics	N	(%)
Age		
18-39	10	(15)
40-49	14	(21)
50-59	16	(24)
60+	25	(37)
Missing	2	(3)
Education		
No school or only kindergarten	2	(3)
Grades 1 through 5	10	(15)
Grades 6 through 10	16	(24)
Grades 11 through 12	11	(16)
College 1 to 3 years	16	(24)
College 4 or more years	10	(15)
Missing	2	(3)
Nationality		
Columbia	2	(3)
Puerto Rico	31	(46)
El Salvador	2	(3)
Honduras	2	(3)
Nicaragua	1	(1)
U.S.	4	(6)
Dominican Republic	25	(37)
Health Insurance		
Yes	57	(85)
No	7	(10)
Missing/Don't know	3	(4)
Income		
<$10,000	20	(30)
$10,000-$29,999	12	(18)
$30,000-$49,999	12	(18)
$50,000+	12	(18)
Missing/Don't know	11	(16)
Employment status		
Employed	31	(46)
Unemployed	13	(19)
Retired	8	(12)
Missing	15	(22)

Characteristics	N	(%)
Gender		
Male	33	(49)
Female	34	(51)
Years as a member of the parish		
0 to 10 years	26	(36)
11 to 20 years	15	(23)
21 or more years	21	(31)
Missing/Don't know	5	(7)

Themes	Questions
Attitudes and beliefs about cancer	In your own words, what is “cancer”? What causes cancer? Are there physical causes? Spiritual causes? What types of cancer exist? Can cancer be prevented? How? What is the best way to treat cancer?
Early detection and cancer screening	How is cancer found? What tests do you know about that can find cancer early? What do you know about mammograms/Pap tests/colonoscopies/tests to detect prostate cancer? Could you tell me about other tests to detect colorectal cancer, such as sigmoidoscopies, stool cards, and enemas?
Religion and health	In what way, if any, do your religious beliefs influence your health? What spiritual messages, themes, or ideas encourage people to care for their health?
Parish and health	What role, if any, does the parish play in your health? What types of support or assistance could you rely on from your parish if you have a problem, such as a health issue? Does your parish offer services or information related to health? Can you provide an example?
Health promotion strategies	What can your parish do to promote health of its members? Would you attend health education activities at your parish? If so, what types of activities would you like to see offered at your parish? What kinds of information about health would you like to receive from your parish? How would you feel if your parish started a committee or ministry to organize activities about health? Would you participate in the committee?

Content area	Sample quotations
Beliefs about cancer causes	
Injuries	"Some cancers are due to being hit or accidents that the person suffered years ago, and they get some little tumor, some bitty lump…being hit causes cancer, not every time you're hit, it depends on how you're hit and where, that is causes cancer." (Female)
Negligence/"falta de cuidado"	"How is cancer developed? A wrong step, you get a bruise, you don't take care of that bruise ['neglected'], and as it grows. It turns into an infection that takes over that toe, but you neglected that toe, you didn't go to the doctor on time, when your toe is already infected…Negligence. The cancer spread in one single moment." (Male)
	"It's carelessness, we don't go to the doctor and we don't get checked." (Male)
Food/diet	"The preservatives they put in food give you cancer." (Female)
	"Even food, the very things you eat. If you eat a lot you get cancer (laughter)" (Female)
Sun exposure	"Skin cancer started directly from the sun's rays and people who expose themselves to the sun a lot and mainly people with a white complexion." (Female)
Stress	"And stress I think is one of the causes, the same as nutrition. I think the body should get exercise." (Female)
Smoking/cigarettes	"Cigarettes can produce cancer. Excessive cigarette smoking. There are many things that can, like the latency of the mother can produce cancer. Excess of work, pesticides, the contamination that is in the air today that is completely contaminated. Yes, that produces cancer too." (Male)
Other (evil eye, self-care body products, etc)	"There is an evil effect that we Latinos call 'Mal de Ojo'…what is Mal de Ojo? A person who has negative energy…it's a bad influence, something that you have inside…and that also produces illnesses…my little sister when she was little someone put Mal de Ojo on her, there was no doctor who could find out what was wrong…regrettably, she had to go to a witch doctor." (Male)
	"And also the lotion you put on and they say that spray also causes cancer. (Group: that too). So many things." (Female)
Perceptions about screening tests	"Prostate cancer is the main one, that after 40, one has to get check-ups for periodically…then colon." (Male)
Prostate cancer	"That whole thing with the doctor introducing his finger in my anus, no no, that doesn't work brother, I do not accept that." (Male)
	"There are different tests that can detect cancer, at least in us men…the safest test is the prostate test." (Male)
Breast cancer	"You have to [get a mammogram] every year." (Female)
	"Mammograms are painful, even though I was supposed to go in five months, I haven't gone." (Female)
	"My wife is very strict regarding [mammograms], she never missed an appointment, …it's very important that she gets it because, as the brother here says, cancer is something that can happen in a matter of minutes." (Male)
Colorectal cancer	"Colonoscopy, it is recommended for men in their 50s. It is recommended to do it to check that you do not have colon cancer." (Male)
	"Today they've given me every five years because the last time, the doctor told me there are no polyps and everything's fine, thank God." (Female)
	"It's very good because it helps you if you have cancer they can detect it early" (Female)
Cervical cancer	"The Pap test should be done approximately every year, that is very important for women." (Male)
	"But yes, the Pap smear is every year. It detects cancer of the uterus." (Female)
Religious beliefs that promote health	
Staying healthy to serve God	"For me spirituality helps a lot when you've grown up in it and within the church community, because you understand Christ's love for every one of us and taking care of our body to be better able to serve Him… He teaches us to love ourselves more, love our body because it is the temple of God, to stop doing a lot of things like smoking, drinking, lots of things." (Female)
Body is a temple	"The body is the temple of the holy spirit. We know that, and you have to take care of your body." (Female)
	"They say God does not inhabit a dirty body. He also does not want that we stay sick to inhabit our bodies. He always wants us to be healthy." (Male)
Scripture	"The Bible talks about going to the doctor. Last year, I had a small accident…and I saw a passage…it talked about listening to the doctor. Immediately, I said, 'Lord, give me the patience I

Content area	Sample quotations
	need because Your Word says I have to listen to the doctor' and after that I calmed down." (Female)
Moderation	"It's a sin and as Catholics we cannot do that…We can't give to our bodies… more than what it needs…let's say, you eat your portion of food you want more…don't practice that. If you don't practice gluttony, you're giving health to your body." (Male)
	"Everything in the Catholic religion has to be measured, not extravagant or extreme, so drinking a little cup, but not getting drunk." (Male)
Perceptions about role of God in health	"Faith moves mountains. Faith is what heals us. Faith is what serves us. Faith gives us everything. If we don't have faith in something, we don't have faith in the Lord, we are never going to be cured." (Female)
Healer of the sick	"We all here could have cancer, but if we have faith in God, God takes it away." (Male)
Giver of health	"… every day that I wake up, every day, thank you God for my health." (Male)
Helps to cope with illness	"It is not necessarily due to the faith you have you won't get the disease, however if you get the disease, the difference is that you are going to have comfort and you won't have depression because you are trusting in God and you know that He is there." (Female)
	"Sometimes it's easier for you when you have God with you despite how serious the illness may be, but at least it gives you like that strength …or the hope that 'I can get out of this'. I mean, like, even though we don't see Him, it's like an invisible force that's there supporting you." (Female)
Provides conduits to healing (e.g., doctors)	"As a church, we understand that medical science is something that comes from God too, knowledge that God gives to the doctor is inspired by God. The doctor is an instrument of God. We pray for people but we 'exhort' going to the doctor. Do you understand? And we believe that the doctor has knowledge inspired by God to help these people." (Male)
	"God comes first and you have to trust in Him, but we have to go to the doctors." (Female)
Role of parish leaders in maintaining and promoting health	"We always, as brothers, visit each other, if a brother is not well, or someone knows that there is a neighbor who is not well, we gather and pray, we pray, and we give them the support that they need to get to, wherever he/she is, let's say the hospital or their doctors, because we pray, we only intercede for God's will, not ours…." (Male)
Prayer	"In those times when we go through when they detect cancer in us, when they detect diabetes in us or any other disease, then we turn to our brothers in the community to pray for us, there is a group that prays." (Female)
Ministry to sick	"All priests go to houses to visit sick people, a group of us goes too." (Male)
Strategies for health promotion	"Since we have groups for everything in the church, at most it would be a special group to bring all that information just like you brought it us." (Female)
Health ministry	"One very important thing that hopefully could be achieved through the groups, through the parishes is to give more information on health, on cancer, on diabetes, in other words, to raise awareness. I'd really like the church to do it." (Female)
	"All of us are willing to take part. It would be, as they say in English, 'great' if they made that committee." (Female)
Interactive activities	"Let's take an example, a talk on preventing cancer, probably if you bring a projector with a cassette, a video, or a movie, people are going to pay attention and they are going to see for themselves. That is, you have to give people the information [in a way] that will grab their attention." (Female)
Easy to read print materials	"Communication is very important, you have to treat them with care…and give them the information so it can be explained to them in their homes over time and also read it to them." (Female)
Free or low-cost programs	"Activities should be free and not require documentation because a lot of people are afraid to go to the doctor because they don't have papers. That's the whole reality." (Female)