

HHS Public Access

Author manuscript

J Racial Ethn Health Disparities. Author manuscript; available in PMC 2023 February 01.

Published in final edited form as:

J Racial Ethn Health Disparities. 2022 February; 9(1): 59–67. doi:10.1007/s40615-020-00929-x.

Facilitators and Challenges to Health Promotion in Black and Latino Churches

Annette E. Maxwell, Dr.P.H.¹, Claudia Vargas, M.P.H.², Rhonda Santifer, M.Min.², L. Cindy Chang, M.S.¹, Catherine M. Crespi, Ph.D.¹, Aziza Lucas-Wright, M.Ed.²

¹University of California Los Angeles Fielding School of Public Health & Jonsson Comprehensive Cancer Center; UCLA Kaiser Permanente Center for Health Equity, Los Angeles, CA, United Sates

²Charles R. Drew University of Medicine and Science, Division of Cancer Research and Training, Los Angeles, CA, United States

Abstract

Background: Churches are important assets for the African American and Latino community. They can play a critical role in health promotion, especially in areas that are under-resourced and in which residents have limited access to health care. A better understanding of health promotion in churches is needed to support and maintain church collaborations and health initiatives that are integrated, data-driven and culturally appropriate. The purpose of this study is to identify churches' facilitators and challenges to health promotion, and to contrast and compare Black and Latino churches of different sizes (<200 members versus 200 members).

Methods: We interviewed leaders of 100 Black and 42 Latino churches in South Los Angeles to assess their history of wellness activities, resources, facilitators and challenges to conduct health promotion activities.

Results: 83% of African American and 86% of Latino church leaders reported at least one health activity in the last 12 months. Black and Latino churches of different sizes have similar interests in implementing specific health promotion strategies and face similar challenges. However, we found significant differences in the composition of their congregations, number of paid staff, and the proportions of churches that have a health or wellness ministry and that implement specific wellness strategies. 57% of African American and 43% of Latino church leaders stated that they needed both financial support and professional expertise for health promotion.

Discussion: Our findings highlight the importance of conducting a readiness assessment for identifying intervention content and strategies that fit the intervention context of a church.

Terms of use and reuse: academic research for non-commercial purposes, see here for full terms. http://www.springer.com/gb/open-access/authors-rights/aam-terms-v1

Contact information for the corresponding author: Annette E. Maxwell, DrPH, 650 Charles Young Dr. South, A2-125 CHS, Box 956900, Los Angeles, CA 90095-6900, amaxwell@ucla.edu.

Publisher's Disclaimer: This Author Accepted Manuscript is a PDF file of a an unedited peer-reviewed manuscript that has been accepted for publication but has not been copyedited or corrected. The official version of record that is published in the journal is kept up to date and so may therefore differ from this version.

Conflicts of Interest

The authors have no conflicts of interest to report.

Keywords

Black and Latino churches; readiness assessment; survey of senior pastors; wellness promotion; health promotion

Background

Churches are important institutions in the Black and Latino communities. After the Civil War, a large number of Black churches were established in the South that served as primary institutions for social cohesion in the African American community. Since that time, many Black churches have supported leadership development, schools, civic engagement and economic opportunities for members of the Black community [1]. Churches also provide important social networks in the Latino community. They are often attended by multigenerational families that may also include undocumented immigrants. Research suggests that religious resources in this community can be leveraged to reduce health disparities [2].

Churches have long been involved in a large variety of health promotion and public health interventions [3–8]. This is consistent with the Social Ecological Framework, which recognizes that individuals are part of families that belong to organizations and social groups, live in neighborhoods and communities, and are influenced by broad environmental, cultural and social forces [9, 10]. The role of churches may be especially important in areas that are under-resourced and in which residents have limited access to health care providers. South Los Angeles (LA) is one of these areas. Its population is 68% Latino and 27% African American; 52% of adults are foreign-born and 33% of adults report difficulty accessing medical care [11].

As churches can engage in health promotion that can impact health and health disparities, it is imperative to understand the facilitators and challenges that they experience, their resources, interests and needs regarding the implementation of health promotion activities. One of many health promotion theories is the Consolidated Framework for Implementation Research that provides structure to the many factors that can influence the implementation effort [12]. Although this framework comprises five major domains (characteristics of the intervention itself, of the inner and outer settings, the individuals involved, and the implementation process), our study is limited to the inner setting factor of readiness related to health promotion. Readiness reflects broadly the degree to which an organization is willing and prepared to address an issue, as perceived by those who complete the assessment [13]. According to the Theory of Organizational Readiness for Change, organizations with high readiness for change are more likely to initiate change, such as health promotion activities, and exert greater effort and persistence to conduct these activities, which results in more effective implementation [13]. Constructs of readiness include structural characteristics (e.g., size of congregation), resources, facilitators and challenges to conduct health promotion. Prior studies have assessed the readiness of Black or Latino churches to promote wellness [14–18], which does not allow for a direct comparison..

A better understanding of health promotion in churches is needed to support and maintain church collaborations and health initiatives that are integrated, data-driven and culturally

appropriate and have the potential to improve community health [19]. We interviewed leaders of both Black and Latino churches in South LA. The purpose of this analysis is to identify facilitators and challenges to health promotion that these churches experience and to contrast and compare Black and Latino churches of different sizes. We were especially interested in learning about the needs and interests with respect to health promotion in churches with more than 1,000 members, since they have the potential to reach a large number of individuals. We are using Latino and Hispanic (abbreviated H in tables) interchangeably.

Methods

Instrument development

We developed a readiness assessment based on prior studies and theoretical formulations [12, 13, 15, 20–22] and in collaboration with four African American ministers and health ministry leaders. First we identified existing items from available instruments [15, 23] or modified existing items for our assessment. Then we discussed this initial item pool with our community partners. They recommended to justify the need for this assessment by explaining health disparities in South LA to church leaders and to have a mix of open-ended and closed-ended questions to give church leaders the opportunity to explain the special circumstances at their respective churches in their own words (see more details in [16]. Subsequently, the assessment was translated into Spanish. Pilot testing with 3 Latino church leaders resulted in a few minor modifications. Church leaders in both communities considered the content of the assessment suitable, thus establishing face validity.

The final questionnaire was 10 pages (see supplementary file). Using a mix of open-ended, yes/no and Likert scale questions, we assessed churches' history of wellness activities in the last 12 months (time frame was restricted to improve recall); resources to implement wellness activities and additional resources needed; willingness to implement a list of 14 activities; challenges to implement wellness activities; and church characteristics, including denomination, size of the congregation and number of paid staff.

Data collection

From 2017 to 2018, an African American pastor and an English-Spanish bilingual Latino health educator conducted surveys either face-to-face (32% of Black, 57% of Latino churches) or by telephone with leaders of Black (N=100) and Latino churches (N=42) in South LA. The sample sizes were unequal because the assessment was initially planned with Black churches only, but was then extended to Latino churches for a limited time period. Latino churches that offered at least one weekly service in Spanish were eligible to participate. We began by recruiting churches with which our research team had existing relationships. These churches then referred us to additional churches (snowball sampling). We were referred to several large Catholic Latino churches that also support schools and were therefore open during office hours and accessible for interviewing. We also approached 14 Latino churches that we identified online or through visits in the neighborhood. Church leaders received a \$100 incentive or church donation after completion of the survey. Since we only collected church-related information, not the church leaders' private information,

the need for ethical approval was deemed unnecessary by the University of California Los Angeles Institutional Review Board because the project does not involve "human subjects" as defined in the federal regulations. Therefore, no informed consent was obtained.

Analysis

Descriptive analyses were conducted to examine church characteristics, history of health promotion activities conducted at churches, and challenges and facilitators to conduct health promotion activities using SAS 9.4. Black churches had between 10 and 800 active members and Latino churches between 28 and 3,000 active members. Both samples included 26 churches with 200 members and more, which we chose as a cut-off point to group churches by size. In a previous analysis limited to Black churches, church size (number of active members) was significantly related to the number of wellness activities conducted in the last 12 months, the number of paid staff and the presence of a health ministry [16]. Therefore, we divided churches into 4 groups for statistical comparisons: small to medium Black churches (<200 members, N=74), large Black churches (200 members, N=26), small to medium Latino churches (<200 members, N=16) and large Latino churches (200 members, N=26).

Half of the large Latino churches had more than 1,000 members. Because these churches were unique to the Latino sample and have the potential to reach a very large number of community members, we sub-divided large Latino churches into large (200 to 1,000 members, N=13) and very large (> 1,000 members, N=13) to conduct exploratory comparative analyses. All analyses were conducted using Fisher's exact test for categorical variables and Kruskal-Wallis test for continuous variables. When comparing large and very large churches, we also report median values, due to the small sample sizes and asymmetric data distributions.

Results

Readiness assessments with 100 African American church leaders lasted between 20 and 90 minutes with a median of 45 minutes. Readiness assessments with 42 Latino church leaders lasted between 24 and 123 minutes with a median of 41 minutes; 62% were conducted in Spanish and 38% in English. Leaders of one Black and three Latino churches declined to participate.

Characteristics of Black and Latino churches

As shown in Table 1, the majority of Black churches in our sample were Baptist and the majority of Latino churches were Catholic, with statistically significant differences within each sample and by church size. Black churches that did not identify as Baptist (N=49) or Methodist (N=13) were grouped as "other" (N=38), which also includes 18 non-denominational churches. Large Black churches were significantly more likely to have a health ministry than small Black churches and compared to large Latino churches.

Large Black churches had the highest proportion of elderly parishioners (median 45%). Large Latino churches had the highest proportion of young families (median 40%) and the highest proportion of commuters, who only attended weekly church services but no

other activities (median 50%). The number of paid staff per church was significantly higher in large churches than in small to medium size churches in both communities; in small to medium size churches, Black churches had significantly more paid staff than Latino churches.

Wellness activities conducted by Black and Latino churches during last 12 months

On average, large Latino churches conducted 3 wellness activities in the last 12 months, whereas all other categories conducted, on average, two activities per month (p<.05, see Table 1). The vast majority, 83% of African American and 86% of Latino church leaders, reported at least one health activity in the last 12 months. As shown in Table 2, many events in both Black and Latino churches focused on increasing awareness and screening for disease and were conducted in partnerships with other entities, such as national organizations, clinics or universities. While many activities were common in both groups (e.g., dancing classes), few churches mentioned activities that suggest implementation of a health *policy* (e.g., Sunday school menu change).

Table 3 summarizes strategies used by churches for health promotion, in response to yes/no questions. The majority of churches promoted good nutrition and physical activity from the pulpit and 69% had partnerships with clinics or outside resources that could assist with wellness efforts at church. However, only about half of the churches had ever partnered with an academic institution to promote wellness and fewer churches reported having guidelines for healthy church meals (42%), having a health advisory program (37%) or having health policies for their congregation (35%). Among small to medium churches, Latino churches were significantly more likely than Black churches to have a health advisory program (56% versus 22%, p=0.01). Among large churches, more Black than Latino churches reported promoting good nutrition (92% versus 54%, p=0.004) and physical activity from the pulpit (92% versus 46%, p=0.001), and having 3 or more individuals who function as wellness champions (92% versus 23%, p<0.001).

Facilitators to conduct health promotion in Black and Latino churches

While almost all churches had meeting space, classrooms or conference rooms, other resources included a kitchen (65% of Black and 86% of Latino churches), volunteers (50% of Black, 69% of Latino churches) and parking lots (9% of Black and 26% of Latino churches). A few Black churches had exercise space (15%) and three Latino churches mentioned relationships with police departments, political leaders or immigration attorneys. However, 14% of Black churches had no resources other than space, and most of these were very small churches with 20 to 50 active members.

The majority of church leaders stated that they needed both financial support and professional expertise (57% of African American and 43% of Latino church leaders). Smaller proportions stated that they only needed professional expertise (25% of African American and 26% of Latino church leaders) or only financial support (6% of African American and 14% of Latino church leaders; data not shown). For example, church leaders stated that they needed "physicians and nurses willing to serve the community" and "finances, expertise and training to do things the right way". Twelve Black and two

Latino churches specifically mentioned their need for partnerships or collaborations with outside experts ("Credible community program interested in collaboration").

Both Black and Latino churches were most interested in obtaining the following resources: gift cards for volunteers or study participants; a list of local resources for referrals; printed health information; a list of speakers; a sample of a needs assessment for their congregation; and workshops to inform volunteers so they can pass on health information to church members. All of these resources were rated between 9 and 10 on a scale from not interested [1] to extremely interested [10] with no differences by church size.

When asked about the type of activities churches would be willing to conduct to promote health, Black and Latino churches had similar responses: They were, on average, most willing to distribute print information, conduct health fairs, partner with an academic institution to promote health, host a speaker, conduct a survey with parishioners to identify health concerns, host a health program delivered by an outside expert and help to recruit church members, promote health as part of a research study, and identify volunteers who would be trained to provide counseling (all rated >8 on a scale from 1 – not interested to 10 – extremely interested). Both Black and Latino churches were moderately willing to incorporate exercise breaks into church activities, institute policies regarding the food that can be served at church, regularly incorporate health messages in the sermon, raise funds to support a wellness activity at their church, and ask church members to give a testimonial (all rated between 6.7 and 8.3 on a 10-point scale).

Challenges to conduct health promotion in Black and Latino churches

As shown in Table 4, insufficient budget and lack of other resources were the most frequently endorsed challenges; however, lack of other resources was significantly more problematic for small to medium and for large Black churches than for Latino churches. One of the top challenges for all churches was "not sure how to implement wellness activities". Having not enough volunteers was a particular challenge for Black churches, while "having too many activities ongoing" was a particular challenge for Latino churches. Other challenges that were less frequently endorsed were lack of interest among members, not sure what topic would be of interest, small size of the membership, and members dislike participation in research. The average number of challenges ranged from 4 to 5 in all church categories, with no significant difference between groups.

Facilitators and Challenges to conduct health promotion in very large Latino churches

Very large Latino churches (>1,000 members) were significantly different from large Latino churches with 200–1,000 members in that all very large churches were Catholic compared to 54% of large churches (p=.01). As shown in Table 5, very large churches tended to have more paid staff (median 7) than large churches (median 4), but also experienced or expected more challenges (median 5 versus 3 in large churches); however, these differences were not statistically significant.

Large and very large Latino churches were significantly different with respect to the implementation of the following wellness strategies: very large churches were significantly *less* likely than large churches to have promoted during the last 12 months physical activity

(23% versus 69% of large churches) and good nutrition (31% versus 77%) from the pulpit, and only 23% of very large Latino churches had guidelines for healthy church meals compared to 69% of large Latino churches (all p<.05). There were no statistically significant differences between large and very large churches with respect to the types of challenges they experienced or expected to implement wellness activities; however, more very large churches than large churches stated that they had too many activities already ongoing, insufficient number of volunteers, members not interested and lack of commitment from church leadership.

Discussion

To our knowledge, this is the first comprehensive assessment of readiness for health promotion with both Black and Latino churches. Results of the assessment suggest that as a group, Black and Latino churches of different sizes have similar interests in implementing specific health promotion strategies and face similar challenges. However, we found significant differences in the composition of their congregations, number of paid staff, and the proportions of churches that have a health ministry and that implement specific wellness strategies. These findings complement a recent report by Derose and colleagues that describes their experience of developing a faith and public health partnership in South LA [24].

When discussing our findings, one should appreciate that health promotion is not the primary mission of the church. This may be one of the reasons that only few churches in our sample had health or wellness policies or goals for their congregation. Only a handful of faith-based interventions have encouraged policy changes, such as serving water instead of sugar-sweetened beverages or policies regarding the type of food served at church functions [25–27]. Future church interventions should attempt to integrate health policies, since even small policy changes can reach the entire congregation, may introduce new norms to the congregation and may be sustained after other intervention approaches have ended [27].

As in other church assessments [15], churches used a large number of strategies to promote wellness. Two prior surveys of Latino church leaders found that only 21 to 33% of churches had offered health programs in the last 12 months [18, 28] compared to more than 80% of Black and Latino churches in our survey. We asked in an open-ended question if churches had been involved "in any wellness activities in the last 12 months to promote mental health, better nutrition, physical activity, flu shots, cancer screening, cancer support groups, blood pressure screening, HIV/AIDS or any other health issues." These examples may have improved recall. Differences in sample characteristics and study methodologies may contribute to these large variations in findings. Nevertheless, we believe that there is value in assessing wellness activities in the last 12 months as such an assessment can provide important information on the type of activities churches are interested to implement and that are feasible with the available resources and with resources other organizations can provide to support churches. Therefore, we recommend conducting such an assessment prior to planning church activities to promote wellness.

While many studies have shown the value of interventions that are culturally relevant for specific communities [29, 30], our findings add to the literature by describing the interests, resources and challenges of churches that can potentially implement these programs. These church attributes, which can be conceptualized as intervention context at the organization level or the inner setting of the Consolidated Framework for Implementation Research [12], can influence important components of implementation fidelity [31, 32]. Fidelity is defined as the degree to which an intervention is implemented as it was initially developed and tested in a research setting and found to be effective. Components of fidelity are delivery of the core component(s) of an intervention to which its effectiveness is attributed; delivery of the full dose such as number, length and frequency of sessions and quality of delivery; and the format of intervention delivery, e.g., phone or face-to-face [31]. A good fit between the preferences and resources of community agencies and the structure and content of wellness programs will increase the fidelity of an intervention and limit the need for changes that may have consequences for its effectiveness. A needs assessment similar to ours will be helpful for identifying interventions that fit the intervention context of a church.

Overall, large churches had more resources than small to medium churches to conduct wellness activities. However, about half of the members of large Latino churches in our sample were commuters, who may be unlikely to attend wellness activities that require extra travel. In such a case, a church may focus on raising awareness and promoting health through social media, church bulletins and during regular church services. Large Black and Latino churches also had different audiences with respect to their age distribution: Large Black churches had the highest proportion of elderly parishioners, for which information on cancer screening would be most relevant, whereas large Latino churches had a high proportion of young families, who may be more interested in primary prevention through healthy lifestyles. These are examples of how church attributes (e.g., composition of the congregation) have to be considered when selecting intervention format and content.

Our exploratory analyses of very large Latino churches suggests that they have their own set of challenges, with too many activities ongoing and not enough volunteers, and that they underutilize several health promotion strategies that are popular in large Latino churches. One reason may be that the majority of the Latino churches in our sample conduct religious services in Spanish and English, which poses a greater workload for church leaders and for planning health promotion activities in both languages.

Limitations:

Our convenience sample of churches in South LA may not be representative of all Black and Latino churches. Responses are from one leader per church and may suffer from social desirability bias. Only 13 Latino churches with more than 1,000 members were included in our exploratory analysis, which provided low statistical power.

Conclusions

Based on the results of our study, we provide the following recommendations: Health promotion planning in churches should build on prior church activities that have been shown to be feasible given available resources and that meet the interests of church leaders

and members. We recommend completing a comprehensive readiness assessment prior to planning new health promotion activities in churches, as this allows church leaders to reflect on past activities and to consider the feasibility of implementing additional strategies. A readiness assessment allows church leaders to actively engage in the planning of new health promotion activities and to contribute their experiences and perspectives. With a completed readiness assessment, health promotion activities can be planned that take advantage of church resources and facilitating factors. Additional resources can be allocated to overcome identified challenges. Health promotion strategies that are aligned with churches' capacity and interests are more likely to be successfully implemented and may be more likely to be sustained, which is a prerequisite for having a positive effect on population health.

Supplementary Material

Refer to Web version on PubMed Central for supplementary material.

Acknowledgements

We would like to thank the church leaders who participated in this study and Reverend Dr. Joe Waller and Ms. Martha Navarro who provided church referrals.

Source of Funding

This work was supported by the Charles Drew University/UCLA Cancer Center Partnership to Eliminate Cancer Health Disparities, NIH/NCI# U54 CA143931 & U54 CA143930. CMC was supported by NIH/NCI grant P30CA16042.

References

- 1. McKinney RI, The Black Church: Its Development and Present Impact. The Harvard Theological Review, 1971. 64(4): p. 452–481.
- Shapiro E, Places of Habits and Hearts: Church Attendance and Latino Immigrant Health Behaviors in the United States. J Racial Ethn Health Disparities, 2018. 5(6): p. 1328–1336. [PubMed: 29549652]
- 3. Allen JD, et al., A pilot test of a church-based intervention to promote multiple cancer-screening behaviors among Latinas. J Cancer Educ, 2014. 29(1): p. 136–43. [PubMed: 24132541]
- 4. Markens S, et al., Role of Black churches in health promotion programs: lessons from the Los Angeles Mammography Promotion in Churches Program. Am J Public Health, 2002. 92(5): p. 805–10. [PubMed: 11988451]
- 5. Erwin DO, Cancer education takes on a spiritual focus for the African American faith community. J Cancer Educ, 2002. 17(1): p. 46–9. [PubMed: 12000107]
- 6. Erwin DO, et al., Replication and dissemination of a cancer education model for African American women. Cancer Control, 2003. 10(5 Suppl): p. 13–21. [PubMed: 14581900]
- 7. Davis DT, et al., The urban church and cancer control: a source of social influence in minority communities. Public Health Rep, 1994. 109(4): p. 500–6. [PubMed: 8041849]
- 8. Hou SI and Cao X, A Systematic Review of Promising Strategies of Faith-Based Cancer Education and Lifestyle Interventions Among Racial/Ethnic Minority Groups. J Cancer Educ, 2017.
- 9. Trickett EJ, et al. , Advancing the science of community-level interventions. Am J Public Health, 2011. 101(8): p. 1410–9. [PubMed: 21680923]
- Green L, Daniel M, and Novick L, Partnerships and coalitions for community-based research. Public Health Rep, 2001. 116 Suppl 1: p. 20–31. [PubMed: 11889272]

 Los Angeles County Department of Public Health. Key Indicators of Health by Service Planning Area 2017 1/16/2019]; Available from: http://publichealth.lacounty.gov/ha/docs/2015LACHS/ KeyIndicator/Correction/KIH_020617-sec.pdf.

- Damschroder LJ, et al., Fostering implementation of health services research findings into practice: a consolidated framework for advancing implementation science. Implement Sci, 2009. 4: p. 50. [PubMed: 19664226]
- Weiner BJ, A theory of organizational readiness for change. Implement Sci, 2009. 4: p. 67.
 [PubMed: 19840381]
- 14. Holt CL, et al., Health Ministry and Activities in African American Faith-Based Organizations: A Qualitative Examination of Facilitators, Barriers, and Use of Technology. J Health Care Poor Underserved, 2017. 28(1): p. 378–388. [PubMed: 28239008]
- 15. De Marco M, et al., Assessing the readiness of black churches to engage in health disparities research. J Natl Med Assoc, 2011. 103(9–10): p. 960–7. [PubMed: 22364066]
- 16. Maxwell AE, et al., Organizational readiness for wellness promotion a survey of 100 African American church leaders in South Los Angeles. BMC Public Health, 2019. 19(1): p. 593. [PubMed: 31101096]
- Tagai EK, et al., Assessing Capacity of Faith-Based Organizations for Health Promotion Activities. Health Promot Pract, 2018. 19(5): p. 714–723. [PubMed: 29058956]
- Allen JD, Shelton RC, Kephart L, Jandorf L, Folta SC, Knott CL, Organizational characteristics conducive to the implementation of health programs among Latino churches. Implementation Science Communications, 2020. 1(1).
- 19. Yu E, Community Approaches to Systems Change. J Public Health Manag Pract, 2020. 26(2): p. 195–197. [PubMed: 31990885]
- 20. Chaudoir SR, Dugan AG, and Barr CH, Measuring factors affecting implementation of health innovations: a systematic review of structural, organizational, provider, patient, and innovation level measures. Implement Sci, 2013. 8: p. 22. [PubMed: 23414420]
- 21. Livet M, Courser M, and Wandersman A, The prevention delivery system: organizational context and use of comprehensive programming frameworks. Am J Community Psychol, 2008. 41(3–4): p. 361–78. [PubMed: 18322791]
- Stockdale SE, et al., Assessing organizational readiness and change in community intervention research: framework for participatory evaluation. Ethn Dis, 2006. 16(1 Suppl 1): p. S136–45.
 [PubMed: 16681136]
- 23. Aarons GA, Ehrhart MG, and Farahnak LR, The Implementation Leadership Scale (ILS): development of a brief measure of unit level implementation leadership. Implement Sci, 2014. 9(1): p. 45. [PubMed: 24731295]
- 24. Derose KP, et al., A Community-Partnered Approach to Developing Church-Based Interventions to Reduce Health Disparities Among African-Americans and Latinos. J Racial Ethn Health Disparities, 2019. 6(2): p. 254–264. [PubMed: 30120736]
- 25. Wilcox S, et al., The Faith, Activity, and Nutrition program: a randomized controlled trial in African-American churches. Am J Prev Med, 2013. 44(2): p. 122–31. [PubMed: 23332327]
- Resnicow K, et al., Body and soul. A dietary intervention conducted through African-American churches. Am J Prev Med, 2004. 27(2): p. 97–105. [PubMed: 15261895]
- 27. Derose KP, et al., Eat, Pray, Move: A Pilot Cluster Randomized Controlled Trial of a Multilevel Church-Based Intervention to Address Obesity Among African Americans and Latinos. Am J Health Promot, 2019. 33(4): p. 586–596. [PubMed: 30474376]
- 28. Allen JD, et al., Enhancing organizational capacity to provide cancer control programs among Latino churches: design and baseline findings of the CRUZA Study. BMC Health Serv Res, 2015. 15: p. 147. [PubMed: 25889628]
- 29. Maxwell AE, et al., Developing theoretically based and culturally appropriate interventions to promote hepatitis B testing in 4 Asian American populations, 2006–2011. Prev Chronic Dis, 2014. 11: p. E72. [PubMed: 24784908]
- 30. Ko LK, et al., Cultural and linguistic adaptation of a multimedia colorectal cancer screening decision aid for Spanish-speaking Latinos. J Health Commun, 2014. 19(2): p. 192–209. [PubMed: 24328496]

31. von Thiele Schwarz U, Aarons GA, and Hasson H, The Value Equation: Three complementary propositions for reconciling fidelity and adaptation in evidence-based practice implementation. BMC Health Serv Res, 2019. 19(1): p. 868. [PubMed: 31752846]

32. Carroll C, et al. , A conceptual framework for implementation fidelity. Implement Sci, 2007. 2: p. 40. [PubMed: 18053122]

Table 1: Characteristics of Black and Latino/Hispanic Churches by church size

	Black	Churches (H	B)	Latino/His	panic Churcl	nes (H)	S/M Churches	L Churches
Characteristic (Mean ± s.d.)	S/M (N=74)	L (N=26)	S/M vs L	S/M (N=16)	L (N=26)	S/M vs L	B vs H	B vs H
	%	%	р	%	%	p	p	p
Denomination			.01			.001	.001	.001
Methodist	11%	19%		0%	0%			
Catholic	0%	0%		0%	77%			
Pentecostal	0%	4%		38%	8%			
Baptist	45%	62%		25%	4%			
Other	45%	15%		38%	12%			
Has health/ wellness ministry	31%	69%	.001	6%	19%	.38	.06	.001
% elderly parishioners	34 ± 27	45 ± 22	.03	31 ± 22	30 ± 17	.96	.88	.007
median	25	45		28	25			
range	0–95	10–85		5–70	7–60			
% young families	20 ± 18	30 ± 21	.02	33 ± 20	44 ± 21	.11	.01	.02
median	17.5	20		25	40			
range	0–80	7–90		10–70	10–85			
% commuters	30 ± 30	27 ± 26	.78	31 ± 26	48 ± 23	.02	.373	.001
median	20	15		15	50			
range	0–100	0–99		5–100	10-80			
Number of paid staff	4 ± 3	10 ± 6	.001	1 ± 1	9 ± 10	.001	.006	.07
median	3	8		1	7			
range	0–13	3–35		0–6	1–50			
# of wellness activities conducted in last 12 months	1.7 ± 1.4	2.3 ± 1.3	.05	1.8 ± 1.7	3.2 ± 1.6	.02	.95	.03
median	1.5	2		2	3			
range	0–5	0–5		0–5	0–5			
# of barriers to implement wellness activities	5.0 ± 1.8	4.4 ± 2.0	.27	4.1 ± 2.4	4.0 ± 2.2	.98	.10	.33
median	5	5		4	4			
range	1–8	0–8		0–9	0–9			

Kruskal-Wallis test for continuous variables, Fisher's exact test for categorical variables.

 $S/M = small \ to \ medium \ churches \ (<\!200 \ members); \ L = large \ churches \ (200+members); \ B = Black \ churches; \ H = Latino/Hispanic \ churches \ (<\!100+members); \ B = Black \ churches; \ H = Latino/Hispanic \ churches; \ H = Lati$

Maxwell et al. Page 13

Table 2: Health Issues addressed by Black and Latino/Hispanic churches during the last 12 months

Health Issues	Black Churches (N=100)			Latino/Hispanic Churches (N=42)			
	%	Examples of Wellness Activities	%	Examples of Wellness Activities			
Cancer	45	Mammogram van and talk on prostate cancer screening with American Cancer Society at community health fair; hosting speaker for cancer awareness/early detection; Worship in Pink during breast cancer awareness month; cancer support group; men's breakfast to discuss prostate cancer screening;	14	Mammograms and Pap tests in partnership with a clinic; prostate cancer workshop offered by a university;			
Diabetes	17	Table with print information at health fair;	43	Screening in partnership with a clinic or through American Diabetes Association; screening at a health fair; class by promotoras;			
Cardio-vascular disease/stroke	29	Blood pressure screening offered together with another church at a health fair; screenings through a health center at a health fair;	33	Blood pressure screening in partnership with a clinic; cholesterol screening by American Heart Association or during a health fair;			
Physical activity	29	Weekly dance class; Zumba; exercise during Sunday worship; walking club for seniors; gospel aerobics;	36	Zumba classes; hiking groups;			
Food/nutrition	22	Cooking demonstrations; informational sessions; community garden; Sunday school menu change; no soda at church events;	36	Cooking/nutrition classes; free food distribution; community garden;			
Mental health	15	Workshop on depression; Alzheimer support network;	2	Self-esteem support group			
General health	12	Guest speakers; wellness conference; annual health fair; health tips in church newsletter;	19	General health checks through Parish nurse program; health fair;			
Substance use/ sobriety	4	Recognition of members who do not drink alcohol;	10	Alcoholics Anonymous;			
Other	16	Flu shots at Prayer in the Park; HIV/AIDS movie screening; breast feeding seminar;	76	Volunteer dentist provides services; blood drive with American Red Cross; free flu shots by Los Angeles Department of Public Health or a pharmacy; Talks on different topics by doctors; free eye exams at health fair; family planning classes by promotoras;			

Author Manuscript

Author Manuscript

Table 3:

Wellness strategies in Black and Latino/Hispanic churches by church size

Church has	All N=142	Bla	Black Churches (B)		Latino/ F	Latino/ Hispanic Churches (H)	(H)	S/M Churches	L Churches
		<200 members (N=74)	200 members (N=26)	S/M vs L	<200 members (N=16)	200 members (N=26)	T SA M/S	B versus H	B versus H
	%	%	9%	ď	%	%	d	p	ď
promoted good nutrition from the pulpit in last 12 months	82	68	92	1.00	75	54	.21	.21	.004
promoted physical activity from the pulpit in last 12 months	77	58	92	.50	69	46	12.	.15	.001
partnership with clinics or outside resources that could assist in wellness efforts at church	69	65	85	.03	62	85	.14	1.00	1.00
conducted > 1 wellness activity in last 12 month	61	50	3	90.	99	85	20.	.78	.50
3 or more individuals that function as wellness champions	56		92	.001	38	23	84.	.17	.001
ever partnered with academic institution to promote wellness	49	49	69	.11	38	38	1.00	.58	.05
guidelines for healthy church meals	42	35	42	.64	62	46	.35	.05	1.00
health advisory program	37	22	54	.005	56	54	1.00	.01	1.00
health or wellness policies or goals for congregation	35	31	44	.33	50	31	.33	.16	.39

Fisher's exact test.

S/M = small to medium churches (<200 members); L = large churches (200+ members); B = Black churches; H = Latino/Hispanic churches

Maxwell et al. Page 15

Table 4:

Black and Latino/Hispanic churches that experienced or expect barriers to implementing wellness activities by church size

	All N=142	Blac	Black Churches (B)		Latino/H	Latino/Hispanic Churches (H)		S/ M Churches	L Churches
		<200 members (N=74)	200 members (N=26)	T sa W/S	<200 members (N=16)	200 members (N=26)	S/M vs L	B versus H	B versus H
	%	%	%	d	%	%	d	ď	p
Insufficient budget	81	86	81	0.53	69	73	1.00	0.13	0.74
Lack of other resources	89	82	LL	75.0	44	35	0.74	6.003	0.005
Not sure how to implement wellness activities	92	61	62	1.00	69	77	0.72	0.78	0.37
Not enough volunteers	49	58	85	1.00	25	27	1.00	0.03	0.05
Lack of commitment from church leadership	30	38	31	0.64	12	19	69'0	80.0	0.52
Too many activities already ongoing	42	30	38	0.47	50	73	0.19	0.15	0.02
Members not interested	40	47	46	1.00	31	19	0.46	0.28	0.07
Not sure what topics members would be interested in	35	39	31	0.49	31	27	1.00	0.78	1.00
Size of membership	22	28	0	0.001	38	15	0.14	0.55	0.11
Members don't like to participate in research	28	26	19	09.0	44	35	0.74	0.22	0.35

Fisher's exact test.

S/M = small to medium churches (<200 members); L = large churches (200+ members); B = Black churches; H = Latino/Hispanic churches

Maxwell et al. Page 16

 Table 5:

 Differences between large and very large Latino churches

	200–1,000 memb	ers (N=13)	>1,000 membe	ers (N=13)	р
	N	%	N	%	
Denomination					0.01
Catholic	7	54	13	100	
Pentecostal	2	15	0	0	
Baptist	1	8	0	0	
Other	3	23	0	0	
Number of paid staff					0.23
mean ± standard deviation	9.8 ± 14.1		7.6 ± 3.4		
median	4		7		
range	(1–50)		(3–15)		
Wellness Strategies implemented					
promoted physical activity from pulpit in last 12 months	9	69	3	23	0.05
promoted good nutrition from the pulpit in last 12 months	10	77	4	31	0.05
has guidelines for healthy church meals	9	69	3	2%	0.05
Challenges to implement wellness activities					
Too many activities already ongoing	8	62	11	85	0.38
Not sure what topics members would be interested in	5	38	2	15	0.38
Not enough volunteers	2	15	5	38	0.38
Members not interested	1	8	4	31	0.32
Lack of commitment from church leadership	1	8	4	31	0.32
# of challenges to implement wellness activities					0.34
mean ± standard deviation	3.7 ± 2.3		4.3 ± 2.1		
median	3		5		
range	1–8		0–9		

Kruskal-Wallis test for continuous variables, Fisher's exact test for categorical variables