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Congregation-Based Programs to Address HIV/AIDS: Elements of Successful Implementation

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Abstract

Religious organizations may be uniquely positioned to address HIV by offering prevention, treatment, or support services to affected populations, but models of effective congregation-based HIV programs in the literature are scarce. This systematic review distils lessons on successfully implementing congregation HIV efforts. Peer-reviewed articles on congregation-based HIV efforts were reviewed against criteria measuring the extent of collaboration, tailoring to the local context, and use of community-based participatory research (CBPR) methods. The effectiveness of congregations' efforts and their capacity to overcome barriers to addressing HIV is also assessed. We found that most congregational efforts focused primarily on HIV prevention, were developed in partnerships with outside organizations and tailored to target audiences, and used CBPR methods. A few more comprehensive programs also provided care and support to people with HIV and/or addressed substance use and mental health needs. We also found that congregational barriers such as HIV stigma and lack of understanding HIV's importance were overcome using various strategies including tailoring programs to be respectful of church doctrine and campaigns to inform clergy and congregations. However, efforts to confront stigma directly were rare, suggesting a need for further research.

Keywords: Congregation-based health programs, HIV/AIDS, Community-based interventions, Health promotion, Prevention, Race/ethnicity, Health promotion, Prevention, Race/Ethnicity, Sexual health, Substance abuse

Introduction

HIV is one of the leading causes of mortality and morbidity in the United States and demands increased attention. This is especially true in minority communities where black and Hispanic persons represent about 25% of the US population, but more than half of newly reported cases of HIV.[1] Because of religious organizations' access to institutional and social resources and their history of engagement in social issues, they are uniquely positioned to address HIV, particularly in minority communities.[2] Yet, congregation efforts to address HIV are not well understood since there has been little published research on the role that congregations can play in HIV/AIDS prevention, testing, treatment, and supportive care.[3–6]

In comparison, there is a vast and growing literature on congregation-based health programs in general. These include several recent review articles that summarize the lessons learned across various studies[7–9] that could be useful when considering congregation-based HIV programs. In the remainder of the introduction, we review lessons learned on implementing health programs in religious settings, highlighting the opportunities these interventions present for improving health, particularly among racial and ethnic minorities. We also review the challenges these programs present to planners.

Congregations and Health Programs

Recent reviews of the literature on congregation-based health programs (CBHP)[7–10] suggest that faith-based organizations may be ideally suited for engaging in health promotion and disease prevention activities. There are 2 primary reasons for this. First, congregations are often places where healthy behaviors are encouraged and supported. They do so by providing access to social networks and social support;[7,8] encouraging the development of coping strategies;[8] improving emotional health;[8] and in some cases, by proscribing healthy behaviors such as nutritious diets, and discouraging the use of alcohol or tobacco. As a result, congregations are likely to be places where health promotion messages are more readily accepted. Second, many congregations engage in health promotion because it fits their mission, they possess physical assets such as buildings that provide space for health-related activities, and they have access to regularly convening groups that are generally stable over time.[7] This access can provide a useful pool of potential volunteers and participants.

Despite noted limitations in the availability of outcome data,[7,9] CBHPs have successfully addressed a range of health conditions (e.g., cardiovascular health, mental health, cancer, high cholesterol, and HIV prevention) and health-supporting activities (e.g., diet, physical activity, cancer screening, and smoking cessation).[3,7–9] Congregations often engage in activities that require minimal effort or that match the services they already provide such as posting health information on bulletin boards,[11] however, the most successful programs are those in which more comprehensive services (e.g., using lay volunteers to deliver health messages, providing culturally relevant self-help materials, and facilitating access to telephone counseling) are offered.[7]

Nevertheless, there are also several potential barriers to implementing health programs a particular those addressing HIV within religious settings. These include the presence of n and a reciprocal lack of understanding of the values, norms, and customs between religio

ganizations and their partners in science, public health, or academia;[7,8,10] separating the interests of churches (which may include evangelism) and those of their partners (who may be government agencies);[7,8] ethical concerns related to study design (e.g., those in which comparison churches do not receive an intervention),[7] or other factors such as asking churches to take on health issues like HIV that challenge their moral values;[8] and finally, competing church priorities may make it difficult to implement all aspects of the intervention.[7]

Addressing the Health of Racial and Ethnic Minorities

In spite of these challenges, religious organizations may be particularly well-suited to improving the health of minorities. Participation in religious organizations has been shown to be exceptionally strong among minorities,[12,13] and as others have noted, a large proportion of the information on faith based-health promotion is based on activities in African American churches.[7,9] Successful efforts by black churches have been noted in the areas of community medicine, primary care delivery, community mental health, health promotion and disease prevention, and health policy.[10] Involvement in health issues is likely due to the history of social engagement that many minority congregations share.[7,8,10,11] Their work on this issue is crucial since these organizations serve populations that may be skeptical of government public health efforts and are often underserved by public health and health care services.[7,8,10,11]

Elements of Successful CBHPs

There seems to be broad agreement that several factors are critical to the success of CBHPs, including relying on collaborative relationships with outside organizations, being sensitive to the specific cultural and spiritual context of the congregation in the development of such programs, and using CBPR methods to develop interventions. These lessons are described in more detail below.

Collaborations Partnerships between congregations and outside organizations can increase the efficacy of CBHPs since they bring together positive elements of each sector.[7–9,14] For example, congregations may draw on the public health sector's capacity to identify, prevent, or treat health problems. Religious organizations, on the other hand, offer the ability to motivate people to come together in a caring and supportive manner,[14] and in some cases are better equipped to address the concerns of hard-to-reach populations.[7,8,10] Developing collaborations also increases the capacity of CBHPs to evaluate programs and report results in the research literature thus increasing the likelihood that successful programs will be replicated.[7,9]

Tailored Programming To be effective, interventions need to be tailored to the needs of the target population and the program setting. Incorporating program elements that take into account issues such as culture, age, and religious beliefs can make the intervention's messages mo[illegible] ily understood by congregation members and increase participation.[7,14] Congregations ca[illegible] this by matching materials to observable audience characteristics (e.g., translating materi[illegible] non-English speakers); and incorporating information about how a target population's cu[illegible] social, psychological, environmental, and historical characteristics affect perceptions of h[illegible]

behaviors and potential to change (see Campbell et al.[7] for a review).

Use of CBPR Principles CBPR has been defined as "a collaborative approach to research that equitably involves, for example, community members, organizational representatives, and researchers in all aspects of the research process."[15] CBPR stresses conducting "research with rather than on communities."[16] Applied to CBHPs, this implies building effective and equal partnerships with churches to elicit trust between participating organizations and provide mechanisms by which those affected by the issue can help shape the programs designed to address it. Campbell et al.[7] have suggested that using CBPR in congregation-based intervention development can help participating organizations better understand issues related to cultural values and spiritual sensitivity and identify the right approach to successfully initiating the intervention. CBPR methods can also be used in formative research to identify key cultural and social context of the organization so that appropriate tailoring can be achieved.[7,17] Although Chatters et al.[8] do not specifically advocate for a CBPR approach to developing partnerships, they do emphasize that involving religious organizations as partners early in the planning process of an intervention can help ensure that new programs are feasible and have the support of church leadership.In sum, reviews of CBHPs suggest that collaborations with external partners, tailored programming, and application of CBPR principles can enhance the success of congregation-based health efforts. Given that the depth and breadth of congregational HIV efforts are not clearly understood, we sought to address this gap by conducting a systematic review of congregation-based HIV efforts to summarize the scope, content, and effect of such programs and the extent to which they incorporate lessons learned from the development of CBHPs in general. By doing so, we aim to inform the development of sustainable and successful HIV programs in congregation-based settings.

Methods

The key questions that this research sought to address were:

1. What are congregations in the United States doing to address HIV/AIDS?
2. How have these efforts been successful in addressing HIV/AIDS?
3. How do these programs compare on incorporating lessons learned on successfully implementing CBHPs?
4. What additional lessons can these programs offer for future planners of congregation-based HIV programs?

To address questions 1 and 2, we reviewed 11 studies identified through a systematic literature search using the terms described in Table 1. Our search, conducted with the assistance of a research librarian, included the following databases: PubMed, Web of Science, PsychINFO, Social Science Abstracts, and Sociological Abstracts & Social Services Abstracts.

Table 1

Literature search keywords

Database	Years searched	Keywords	Number of citations
PubMed	1966–2009	(HIV OR AIDS OR HIV INFECTION) AND (church* OR faith OR faith-based OR congregation* OR religious OR religion)	933
Sociological Abstracts & Social Services Abstracts	All years	(HIV OR AIDS) AND (church* OR faith OR faith-based OR congregation* OR religious OR ministry)	417
Social Science Abstracts	All years	(HIV OR AIDS OR Subject Heading "AIDS (Disease)—Religious Aspects") AND (church* OR faith OR faith-based OR congregation* OR religious OR ministry)	116
Web of Science	1980–2009	(HIV OR AIDS) AND (church OR faith OR faith-based OR congregation* OR ministry)	76
PyschINFO	All years	(HIV OR AIDS) AND (church* OR faith OR faith-based OR congregation* OR religious OR ministry)	74
		TOTAL	1,616

Table 1 also shows the number of citations resulting from each database for a total of 1,616. After excluding duplicates, 1,163 unique citations were identified and used to create an initial list to review for inclusion eligibility based on titles and abstracts. Two co-authors reviewed this list independently to determine eligibility. Figure 1 shows the selection process for the remaining articles. First, we excluded any citation with an explicit focus outside the United States. Next, we deleted publications from the review if they were (1) not about HIV/AIDS, (2) not a research article published in an academic or professional journal, or (3) focused on individual spirituality and religiosity rather than on faith-based institutions and/or congregations.

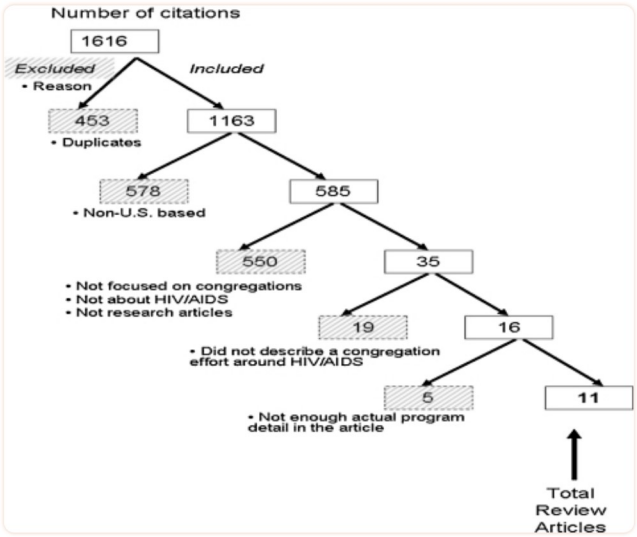

FIGURE 1

Exclusion process for reviewing citations.

The remaining articles were selected for a more comprehensive review to identify those that included descriptions of congregation efforts to address HIV/AIDS and the outcomes of these efforts rather than some other aspect of congregation involvement (e.g., a survey of pastor attitudes toward addressing HIV within religious settings). Those that included such descriptions were then formally reviewed to assess whether specific, identifiable activities to address HIV were described and whether enough detail about these activities were reported for us to draw conclusions about their effectiveness, the specific program elements that might contribute to their effectiveness, or any information on the barriers that were overcome to engage in the activities. As a result, 5 additional articles were eliminated because they (1) provided details on a program that was already included in the review; (2) described faith-based campaigns such as the Balm in Gilead's National Week of Prayer for the Healing of HIV/AIDS,[18] but did not identify specific churches or activities; or (3) reported qualitative or quantitative survey results of multiple congregations' efforts without sufficient detail on individual congregations' efforts. For example, Hicks et al.[19] conducted qualitative interviews with leaders in nine churches in Washington, DC that engaged in HIV efforts but did not report enough specific information about any one church program to be included in this review.

To address the third research question regarding how congregation-based HIV programs have incorporated lessons learned on successfully implementing CBHPs, we distilled the most common elements of these lessons into 3 basic criteria:

1. the use of *collaborations* with outside organizations to increase the efficacy of the prog
2. evidence of *tailoring* to target audiences in program development and implementation make the message more easily understood by congregation members and increase

participation among congregation members; and
3. the use of *CBPR* methods to develop interventions initiated by outside organizations to build trust between participating organizations and lead to more relevant and sustainable interventions and findings that are actionable.

Programs included in our review are classified first by whether or not they include partnerships with outside organizations, and then by the extent to which they incorporate tailoring to the local context. Partnerships can be further classified using a framework described by Lasater et al.[14] that uses 4 levels to measures the strength and content of partnerships between faith organizations and their outside partners:

- ▪ *Level I*: the religious organization is simply a convenient location or a venue to recruit and track participants for an externally sponsored intervention
- ▪ *Level II*: programs include the delivery of most or all of the intervention in the religious organization by extrinsic workers
- ▪ *Level III*: trained lay religious organization volunteers deliver a significant portion of the intervention
- ▪ *Level IV*: trained lay religious organization volunteers deliver a significant portion of the intervention and there are substantial religious or spiritual components in the intervention

We assigned a "Lasater Level" to each program based on these same criteria. All of the programs were further classified by whether they were developed using CBPR principals.

Lastly, to answer our final question regarding the additional lessons learned from these programs for future planners of CBHPs, we synthesized results of each program or initiative. This synthesis focuses not only on summarizing the major findings of each article, but also looks across programs to identify new conclusions about what elements help to ensure success and overcome barriers among CBHPs.

Results

A total of 11 congregation-based HIV/AIDS programs were reviewed to assess the scope, content, and effectiveness of their efforts to address HIV/AIDS and their adherence to the lessons learned on successfully implementing CBHPs (Table 2). Ten involved churches of Protestant Christian denominations and 1 was a statewide initiative targeted to all faith communities that reported participation from faith leaders of Catholic, Jewish, and various Protestant congregations.

Table 2

Congregation-based efforts to address HIV disease

[a]Lasater level l indicates that the religious organization is simply a convenient location or a venue to recrui
and track participants for an externally sponsored intervention; level II indicates that the programs include
delivery of most or all of the intervention in the religious organization by extrinsic workers; level III indica

that trained lay religious organization volunteers deliver a significant portion of the intervention; and level IV indicates trained lay religious organization volunteers deliver a significant portion of the intervention and there are substantial religious or spiritual components in the intervention

Focus of Congregation HIV Activities

The programs conducted by the congregations covered a range of activities. All of the programs offered prevention services, and these ranged from education about HIV to traditional harm reduction activities such as needle exchange. Prevention services were offered alone or as part of a comprehensive set of HIV services that included aspects of treatment, counseling, social support, and, in some cases, ancillary services for low-income and homeless persons (Table 2).

Target Populations Among the reviewed programs, 7 served primarily African-American persons or churches; 1 of these programs also targeted Latino congregations. When a subgroup was targeted within a church, most often the focus was on adolescents, with 4 such programs doing so. Three other programs targeted the community more broadly; 2 focused on faith leaders to increase the number of churches involved in prevention activities within an entire region, while another focused on the social networks of volunteers recruited from various churches. Half of the programs focused specifically on people with HIV or at high risk of acquiring HIV because of behaviors such as substance abuse (Table 2).

Extent of Collaboration Partnerships between congregations or faith leaders and other organizations were described in 10 of the 11 articles reviewed. The single program that did not identify partnerships was an AIDS ministry developed independently within a church. Outside partners were typically faith-based nonprofit organizations that often had a specific focus on addressing HIV/AIDS. Only 2 programs involved a local health department, while 3 involved partnerships with health researchers. Two programs involved the secular nonprofit community. Six of the 11 programs incorporated CBPR principles into their development (Table 2).

We were able to determine a Lasater level (I through IV) for the 10 programs that involved partnerships. All but one of the partnerships were ranked as Lasater level III (involving delivery of a significant portion of the intervention by trained lay religious organization volunteers) or IV (intervention includes significant religious or spiritual components; Table 2).

Reported Findings

Authors reported that congregation-based HIV programs decreased high-risk sex and drug behaviors, changed attitudes toward risk behaviors associated with HIV, increased compassion for persons with AIDS, successfully trained volunteers in delivering an HIV testing and preve messages within their social network, increased knowledge and understanding of HIV/AI transmission, and generated safer sex negotiation skills and practices among adolescents dition, these programs reached numerous people and faith leaders with information abou

and technical assistance around developing new programs (Table 2).

Overcoming Barriers to Engaging in HIV/AIDS Activities Several barriers to implementing congregation-based efforts to address HIV/AIDS were reported, including stigma (e.g., negative attitudes toward HIV, homosexuality, and sex education),[20–23] time and resource constraints, and apathy toward HIV—the belief that it is not relevant to one's own congregation.[22,23] If the congregation is not comfortable with the health condition being addressed and the activities being undertaken, or is not fully engaged as a partner in the development of the program, and this can reduce its commitment to addressing the issue.[24]

Program planners employed several strategies to overcome such obstacles. First, some used data and information about HIV in the congregations' geographic community or the community it serves to inform congregations (e.g., discussed the impact of HIV on African Americans). This strategy was designed to increase compassion for persons with or at high risk for HIV and to help motivate the church to take action.[25,26] In fact, one project presented data to churches on a host of health concerns in the geographic communities surrounding the church, and among these conditions, HIV and youth sexual risk behaviors were subsequently selected by the congregations to be the primary focus of intervention efforts.[25]

Engaging in partnerships[23,24] and using CBPR methods to structure programs[23,25,26] were also cited as facilitators of new program development. Together, these methods create a platform on which the strengths of multiple organizations can be leveraged to create an effective program. Partnerships and CBPR also highlighted the specific concerns of targeted populations and congregations to design programs that are feasible in each context.[23,25,26] For example, MacMaster et al.[27] found that incorporating spirituality in their substance use treatment programs increased relevance for their African American target population and effectiveness.

Finally, some churches choose to address stigma head on. Koch and Beckley,[20] for example, concluded that a conservative theology does not necessarily have to be inconsistent with harm reduction and HIV prevention activities. They reviewed the activities of one church in a traditionally conservative denomination that has argued to its parishioners and church leadership that there is a religious imperative to create an AIDS ministry. By serving as the single conduit of AIDS services in that community, they allow other local churches of the denomination to participate (through donations of resources) without having to specifically engage in those activities they may feel less comfortable with (e.g., needle exchange and condom distribution). Leong's ethnography[21] of an AIDS ministry of one church in Los Angeles, CA, United States concluded that the church was able to comprehensively address HIV because its ideology is accepting of members who are homosexual, at risk, or HIV positive. This in turn reduced HIV stigma and allowed for more effective conversations about testing, HIV status, adherence to medication, and other risk behaviors.

Discussion

The relatively low number of church-based HIV programs in the literature raises questior

about the barriers churches face in implementing such programs. Primary among these may be stigma.[4,28,29] As Chin et al.[28] note, religious organizations often experience a tension between wanting to address HIV and struggling with their beliefs about the morality of homosexuality, drug use, and the disease itself.

Stigma, alone, however, does not always explain low participation in HIV programs among religious organizations. In fact, several recent surveys have noted that church leaders were much more willing to engage in some level of HIV programming than was previously believed, but were hampered by other barriers, including lack of pastor experience and knowledge of HIV programming,[4,19] low awareness about the level of need within the church and the broader community among congregants,[4,19,28] resource constraints,[5,6] and lack of strategic planning around HIV.[19]

Francis and Liverpool's[3] review of 4 HIV prevention programs in African American churches found that they can be successfully adopted in religious settings and confirmed the importance of collaboration and being sensitive to the moral and religious tension raised by HIV/AIDS in some churches. Our review extends these findings to a broader range of race–ethnic groups and HIV activities including testing, treatment and counseling, social support; services to address predisposing characteristics such as poverty; and prevention services that included traditional harm reduction activities such as needle exchange.

Our review also found that planners of congregation-based HIV programs use a variety of strategies to overcome barriers to implementation. Some of these strategies seem to be drawn directly from the literature on promoting health more broadly in religious settings. For example, congregations will often work in collaboration with outside organizations such as public health agencies, non-profit community based organizations (both faith-based and secular), and researchers. Moreover, collaborations often rely on CBPR methods that emphasize equal partnerships. This not only allows the partners to draw on the unique resources, expertise, and experiences of one another, but it also ensures that program content is tailored to match the cultural and spiritual needs of the target population. Finally, it appears that sharing information on the level of need for HIV services within the community is a powerful motivator to action.

While we may have expected to see that congregation-based HIV programs, which have been implemented relatively recently, have benefited from the lessons of past CBHP efforts, we were somewhat surprised by the high number of programs that utilized trained lay religious organization volunteers and in some cases incorporated significant levels of religious or spiritual components into the intervention (Lasater levels III and IV). This surprise was due to the fact that Lasater et al.[14] previously had little success in identifying level III and IV models in real world examples of other types of congregational health efforts. Perhaps the sensitive nature of addressing HIV within religious congregations has increased the emphasis on ensuring that the needs, ideas, and concerns of the congregations are fully incorporated into the program. T[illegible] creasing emphasis on CBPR approaches in developing public health programs also could [illegible] also contributed to this trend.[15,16,30,31]

Although we identified and reported on a larger number of successfully implemented

congregation-based HIV programs than had been found previously, we still only found 11 programs in our systematic search. This low number of programs is likely due to 2 primary factors. First, while there are probably additional programs that exist, not all programs are evaluated or are developed in conjunction with researchers and thus are less likely to have results reported in the research literature. Second, there is a publication bias toward studies with statistically significant findings.[32–34] One implication of this is that we may have overestimated the ease with which congregation-based HIV programs can develop successful collaborations, engage CBPR principles in their programming, and tailor programs to their target populations.

A second important drawback to these findings is the lack of specific attention on how congregations can overcome HIV-related stigma. As noted earlier, attitudes about homosexuality, drug use, and discussing sexual behaviors in church are salient, but not the only barriers to developing new programs. However, they present such an important potential barrier to addressing HIV that the lack of information on how to confront these attitudes is a large gap in the literature. Evidence from this review suggests that direct approaches such as focusing efforts within a single church of a denomination[20] or reframing theological views on homosexuality and other factors related to HIV risk[21] may reduce stigma, but it is not clear whether these strategies can be adopted on a wider scale in the religious community.

Despite these limitations, these findings provide critical information on the role that congregations can play in addressing HIV and the important lessons they have learned on overcoming the varied obstacles to doing so. Additional research is needed to understand effective ways to reduce HIV-related stigma within congregations, and how such efforts can be applied across diverse types of congregations.

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References

1. Anderson RN. Deaths: leading causes for 2000. *Natl Vital Stat Rep.* 2002;50(16):1–85. [PubMed] [Google Scholar]

2. Brown EJ, Williams SE. Southern rural African American faith communities' role in STI/HIV prevention within two counties: an exploration. *J HIV AIDS Soc Serv.* 2005;4(3):47–62. doi: 10.1300/J187v04n03_05. [CrossRef] [Google Scholar]

3. Francis SA, Liverpool J. A review of faith-based HIV prevention programs. *J Relig Health.* 2009;48(1):6–15. doi: 10.1007/s10943-008-9171-4. [PubMed] [CrossRef] [Google Scholar]

4. Hernández EI, Burwell R, Smith J. *A study of Latino congregations in Chicago.* Notre Dame: Institute for Latino

at University of Notre Dame; 2007. [Google Scholar]

5. Smith J, Simmons E, Mayer KH. HIV/AIDS and the Black church: what are the barriers to prevention services? *J Natl Med Assoc.* 2005;97(12):1682–1685. [PMC free article] [PubMed] [Google Scholar]

6. Tesoriero JM, Parisi DM, Sampson S, Foster J, Klein S, Ellemberg C. Faith communities and HIV/AIDS prevention in New York State: results of a statewide survey. *Public Health Rep.* 2000;115(6):544–556. doi: 10.1093/phr/115.6.544. [PMC free article] [PubMed] [CrossRef] [Google Scholar]

7. Campbell MK, Hudson MA, Resnicow K, Blakeney N, Paxton A, Baskin M. Church-based health promotion interventions: evidence and lessons learned. *Annu Rev Public Health.* 2007;28:213–234. doi: 10.1146/annurev.publhealth.28.021406.144016. [PubMed] [CrossRef] [Google Scholar]

8. Chatters LM, Levin JS, Ellison CG. Public health and health education in faith communities. *Health Educ Behav.* 1998;25(6):689–699. doi: 10.1177/109019819802500602. [PubMed] [CrossRef] [Google Scholar]

9. DeHaven MJ, Hunter IB, Wilder L, Walton JW, Berry J. Health programs in faith-based organizations: are they effective? *Am J Public Health.* 2004;94(6):1030–1036. doi: 10.2105/AJPH.94.6.1030. [PMC free article] [PubMed] [CrossRef] [Google Scholar]

10. Blank MB, Mahmood M, Fox JC, Guterbock T. Alternative mental health services: the role of the Black church in the south. *Am J Public Health.* 2002;92(10):1668–1672. doi: 10.2105/AJPH.92.10.1668. [PMC free article] [PubMed] [CrossRef] [Google Scholar]

11. Baruth M, Wilcox S, Laken M, Bopp M, Saunders R. Implementation of a faith-based physical activity intervention: insights from church health directors. *J Community Health.* 2008;33(5):304–312. doi: 10.1007/s10900-008-9098-4. [PubMed] [CrossRef] [Google Scholar]

12. Cadge W, Ecklund E. Religious service attendance among immigrants: evidence from the new immigrant survey-pilot. *Am Behav Sci.* 2006;49(11):1574. doi: 10.1177/0002764206288455. [CrossRef] [Google Scholar]

13. Taylor RJ, Chatters LM. Black and white differences in religious participation: a multisample comparison. *J Sci Study Relig.* 1996;35(4):403–410. doi: 10.2307/1386415. [CrossRef] [Google Scholar]

14. Lasater TM, Becker DM, Hill MN, Gans KM. Synthesis of findings and issues from religious-based cardiovascular disease prevention trials. *Ann Epidemiol.* 1997;7(S7):S546–S553. [Google Scholar]

15. Israel BA, Schulz AJ, Parker EA, Becker AB. Review of community-based research: assessing partnership approaches to improve public health. *Annu Rev Public Health.* 1998;19:173–202. doi: 10.1146/annurev.publhealth.19.1.173. [PubMed] [CrossRef] [Google Scholar]

16. Leung MW, Yen IH, Minkler M. Community-based participatory research: a promising approach for increasing epidemiology's relevance in the 21st century. *Int J Epidemiol.* 2004;33:499–506. doi: 10.1093/ije/dyh010. [PubMed] [CrossRef] [Google Scholar]

17. Boltri JM, Davis-Smith M, Zayas LE, et al. Developing a church-based diabetes prevention program with African Americans: focus group findings. *Diabetes Educ.* 2006;32(6):901. doi: 10.1177/0145721706295010. [PubMed] [CrossRef] [Google Scholar]

18. The Balm in Gilead. http://www.balmingilead.org/ Accessed February 4, 2010.

19. Hicks KE, Allen JA, Wright EM. Building holistic HIV/AIDS responses in African American urban faith commu

qualitative, multiple case study analysis. *Fam Community Health.* 2005;28(2):184–205. [PubMed] [Google Scholar]

20. Koch JR, Beckley RE. Under the radar: AIDS ministry in the Bible belt. *Rev Relig Res.* 2006;47(4):393–408. [Google Scholar]

21. Leong P. Religion, flesh, and blood: re-creating religious culture in the context of HIV/AIDS. *Sociol Relig.* 2006;67(3):295–311. [Google Scholar]

22. Merz JP. The role of churches in helping adolescents prevent HIV/AIDS. *J HIV/AIDS Prev Educ Adolesc Child.* 1997;1(2):45–55. doi: 10.1300/J129v01n02_05. [CrossRef] [Google Scholar]

23. Tyrell CO, Klein SJ, Gieryic SM, Devore BS, Cooper JG, Tesoriero JM. Early results of a statewide initiative to involve faith communities in HIV prevention. *J Public Health Manag Pract.* 2008;14(5):429–436. [PubMed] [Google Scholar]

24. Agate LL, Cato-Watson D, Mullins JM, et al. Churches united to stop HIV (CUSH): a faith-based HIV prevention initiative. *J Natl Med Assoc.* 2005;97(7 Suppl):60S–63S. [PMC free article] [PubMed] [Google Scholar]

25. Kruger DJ, Lewis Y, Schlemmer E. Mapping a message for faith leaders: encouraging community health promotion with local health data. *Health Promot Pract.* 2010;11(6):837–844. doi: 10.1177/1524839908328995. [PubMed] [CrossRef] [Google Scholar]

26. Marcus MT, Walker T, Swint JM, et al. Community-based participatory research to prevent substance abuse and HIV/AIDS in African-American adolescents. *J Interprof Care.* 2004;18(4):347–359. doi: 10.1080/13561820400011776. [PubMed] [CrossRef] [Google Scholar]

27. MacMaster SA, Jones JL, Rasch RER, Crawford SL, Thompson S, Sanders EC. Evaluation of a faith-based culturally relevant program for African American substance users at risk for HIV in the Southern United States. *Res Soc Work Pract.* 2007;17(2):229–238. doi: 10.1177/1049731506296826. [CrossRef] [Google Scholar]

28. Chin JJ, Mantell J, Weiss L, Bhagavan M, Luo X. Chinese and South Asian religious institutions and HIV prevention in New York City. *AIDS Educ Prev.* 2005;17(5):484–502. doi: 10.1521/aeap.2005.17.5.484. [PMC free article] [PubMed] [CrossRef] [Google Scholar]

29. McNeal CS, Perkins I. Potential roles of Black churches in HIV/AIDS prevention. *J Hum Behav Soc Environ.* 2007;2(3):219–232. doi: 10.1300/J137v15n02_13. [CrossRef] [Google Scholar]

30. Tandon SD, Phillips K, Bordeaux B, et al. A vision for progress in community health partnerships. *Prog Community Health Partnersh.* 2007;1(1):11–30. doi: 10.1353/cpr.0.0007. [PubMed] [CrossRef] [Google Scholar]

31. Cargo M, Mercer SL. The value and challenges of participatory research: strengthening its practice. *Annu Rev Public Health.* 2008;29:325–350. doi: 10.1146/annurev.publhealth.29.091307.083824. [PubMed] [CrossRef] [Google Scholar]

32. Dickersin K. The existence of publication bias and risk factors for its occurrence. *JAMA.* 1990;263(10):1385–1389. doi: 10.1001/jama.263.10.1385. [PubMed] [CrossRef] [Google Scholar]

33. Dickersin K. How important is publication bias? A synthesis of available data. *AIDS Educ Prev.* 1997;9(1 Suppl):15–21. [PubMed] [Google Scholar]

34. Easterbrook PJ, Berlin JA, Gopalan R, Matthews DR. Publication bias in clinical research. *Lancet.* 1991;337(8756):867–872. doi: 10.1016/0140-6736(91)90201-Y. [PubMed] [CrossRef] [Google Scholar]

35. Baldwin JA, Daley E, Brown EJ, et al. Knowledge and perception of STI/HIV risk among rural African-Americ lessons learned in a faith-based pilot program. *J HIV AIDS Prev Child Youth.* 2008;9(1):97–114.

doi: 10.1080/10698370802175193. [CrossRef] [Google Scholar]

36. Cashen MS, Sklar BM, Nguyen HH, Just M, Galzagorry G, Bakken S. Implementing a web-based information resource at an inner-city community church: lessons learned. *Comput Inform Nurs.* 2002;20(6):244–250. doi: 10.1097/00024665-200211000-00011. [PubMed] [CrossRef] [Google Scholar]

37. Lightfoot M, Rotheram-Borus MJ, Towns B, et al. Religious groups as diffusers of HIV antibody testing and prevention messages. *J Community Psychol.* 2001;29(4):459–472. doi: 10.1002/jcop.1029. [CrossRef] [Google Scholar]