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Predictors of HIV/AIDS Programming in African American Churches: Implications for Prevention, Testing and Care

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Abstract

Using data from the National Congregational Study, we examined predictors of having a HIV/AIDS program in predominately African American churches across the United States. We conducted regression analyses of Wave II data ($N = 1,506$) isolating the sample to churches with a predominately African American membership. The dependent variable asked whether or not the congregation currently had any program focused on HIV or AIDS. Independent variables included several variables from the individual, organizational, and social levels. Our study revealed that region, clergy age, congregant disclosure of HIV-positive status, permitting cohabiting couples to be members, sponsorship or participation in programs targeted to physical health issues and having a designated person or committee to address health-focused programs significantly increased the likelihood of African American churches having a HIV/AIDS program. A paucity of nationally representative research focuses on the social, organizational and individual level predictors of having HIV/AIDS programs in African American churches. Determining the characteristics of churches with HIV/AIDS programming at multiple levels is a critical and necessary approach with significant implications for partnering with African American churches in HIV initiatives.

Keywords

HIV/AIDS; churches; African American; programming; health services

Rates of HIV and AIDS among African Americans have far exceeded that of other racial and ethnic groups (CDC, 2013). Pervasive HIV/AIDS disparities among African Americans have gained recognition as a pressing national health issue among minority populations (NHAS, 2010). In alignment with the new National HIV/AIDS Strategy (NHAS), innovative intervention models are needed to prevent HIV and promote HIV testing and linkage to care in African American communities (NHAS, 2010).

The Centers for Disease Control and Prevention (CDC) recently advocated for targeted approaches to reach high-risk populations in their communities of residence (CDC, 2013). Employing community-based approaches that recognize the importance of culture and

context for African Americans is critical to the amelioration of HIV and AIDS in this population (Adimora et al., 2014; Bowleg & Raj, 2012). More specifically, the NHAS has acknowledged the importance of engaging faith settings as key community partners in reducing rates of HIV among African Americans (NHAS, 2010).

The African American church has a long history of being at the forefront of social change for underserved populations (Chatters, 2000; Lincoln & Mamiya, 1990). In particular it has historically served as the social and moral compass, as well as the organizational hub for change in the African American community (Chatters, 2000; Holt & McClure, 2006; Lincoln & Mamiya, 1990). Approximately 86% of African Americans report a religious affiliation, and African Americans are more likely than to report religious practices including prayer, dependence on God, and attendance at religious services (Pew Forum, 2008) than any other racial or ethnic group. In addition, many African American churches are located in communities with the highest HIV and AIDS incidence (Nunn et al., 2014; Levin, Chatters & Taylor, 2005) making them well suited for outreach among at risk populations. The fact that African American churches remain well regarded and trusted in the African American community also enhances the feasibility of engaging leaders in this setting in HIV/AIDS programming (Billingsley & Caldwell, 1991; Thomas, Quinn, Billingsley & Caldwell, 1994).

In a pivotal study with a nationally representative sample, Frenk and Trinitapoli (2013) discovered that only 5.6% of U.S. churches (approximately 18,500 churches) provide programs or activities for people living with HIV/AIDS. Further, they reported that African American Protestant churches are more likely to have HIV/AIDS programming than White, mainline Protestant churches (AOR +1.756, $p < .05$; 2013). While these results are encouraging and indicate that African American churches are engaged in HIV/AIDS programming, the number of African American churches involved in the HIV/AIDS programming is still relatively small.

Several health-related interventions have been housed within the African American church with substantial gains being made in health promotion (Freudenberg et al., 2000; Speers & Lancaster, 1998; Wilcox et al., 2007; Williams et al., 2012). However, churches have been slower to respond to the HIV epidemic (Cunningham et al., 2011; Harris, 2010; Wilson et al., 2011). Studies have reported that the most salient barriers are related to HIV stigma, sexuality, and aspects of religious culture and norms which have framed HIV as a moral issue rather than a health concern (Berkley-Patton et al., 2013a; Foster, 2007; Stewart, 2014b). In addition it has been hypothesized that churches located in the “Bible Belt,” or churches located in the southern US, are generally conservative and less likely to embrace HIV/AIDS programming (Abara et al., 2013b; Koch & Beckley, 2006).

Of late, however, churches have become increasingly involved in HIV efforts as they have become more aware of the importance of their role in diminishing the impact of HIV and AIDS among African Americans (Stewart & Dancy, 2012; Tesoriero et al., 2000; Wingood et al., 2013). This has resulted in more African American churches addressing HIV/AIDS; albeit many have remained uninvolved. It is vital to elucidate the factors that impede HIV and AIDS programming in nontraditional settings to ensure that HIV/AIDS resources are

made available in the hardest hit populations and communities. Inherent strengths and capacity within African American churches can be amplified to engage large numbers of African Americans along the continuum of HIV prevention and care.

The facilitators to African American church engagement have yet to be confirmed leaving several unanswered questions regarding the characteristics of churches that independently implement HIV programs. Several characteristics have been hypothesized including: denomination, pastoral/leadership characteristics (Fulton, 2011; Stewart, Sommers & Brawner, 2013), and conservative or liberal approaches to doctrine (Beadle-Holder, 2011; Brown & Williams, 2005). With its significant impact on the values and behaviors of African Americans across the nation (Isaac, Rowland & Blackwell, 2007; Rowland & Isaac-Savage, 2013), leveraging the African American church's role in the promotion of HIV risk reduction across the continuum is an approach with large potential gains (Coleman et al., 2012). Thus it is important to engage African American churches in collective action in the prevention of HIV, promotion of HIV testing, and care and support of people living with HIV and AIDS.

Great strides have been made in the identification of barriers and facilitators to engaging African American churches in HIV/AIDS programming (Berkley-Patton et al., 2013; Moore et al., 2012; Reese, 2011; Stewart, 2014a). Now, an integrated approach is needed to contribute to a more holistic and comprehensive view of the characteristics of African American churches with HIV programming. This requires examination of factors from multiple levels, including assessment of individual leadership characteristics, organizational characteristics, and the social environment. Accordingly, we focused our analyses on the impact of several factors at different levels on the existence of HIV/AIDS programs in a nationally representative sample of African American churches. Ultimately, our intent is to use these findings to partner with African American churches to provide much needed HIV prevention, testing and care initiatives in African American communities.

Conceptual Model

We used the previously developed multi-level church-based HIV testing model (Stewart, 2015c) in conjunction with previous research to identify potential factors that would impact the likelihood of African American churches having a HIV or AIDS program. Three levels are suggested in this model: individual, organizational and social. Individual factors are defined as those factors related to personal characteristics as well as interpersonal relationships attitudes and beliefs. Organizational factors include the norms, regulations and rules associated with the organization. Lastly, social factors include aspects of social conditions that directly affect lifestyles including education and location (Stewart, 2015c; World Health Organization, 2015).

The guiding model proposes contributing factors at the individual (clergy and congregant characteristics), organizational (denomination, norms, and governance), and social levels (geographical location of church, access to HIV-related resources, and discrimination). Other studies have presented several additional factors including the educational background of the pastor, a liberal or conservative church orientation (as often marked by views on the Bible), attitudes towards homosexuality, and presence of a health ministry (Marcus et al., 2004;

Stewart & Dancy, 2012; Teti et al., 2011). We considered these variables as well in our subsequent analyses. We hypothesized that (H1): at the individual level, clergy who have seminary degrees will increase the likelihood of having a HIV/AIDS program; (H2): at the organizational level, the presence of an organized effort or committee whose purpose is to provide members with health-focused programs (a health ministry) will increase the likelihood of having a HIV/AIDS program; and (H3): at the social level, churches located in the southern region of the nation will be less likely to have HIV/AIDS programs.

Methods

Secondary data from the National Congregations Study (NCS) were used for the analyses; the NCS is an ongoing survey of churches throughout the U.S. The protocols were approved by the university's institutional review board prior to data collection. In the NCS model, data are gathered via a 45-60 minute interview survey with one key informant, usually a clergyperson, from each congregation. Seventy-eight percent of NCS interviews were with clergy, 8% were with staff, and the remaining 14% were with non-staff congregational leaders. The interview asked about the church's activities, services, worship styles, and composition of the church and clergy characteristics. Complete data were collected from 1,506 congregations.

We conducted an analysis of Wave II data from 2006-2007 ($N = 1,506$). We further isolated the sample to churches reporting an African American membership of greater than or equal to 60%, which has been classified as being indicative of an African American church (Lincoln & Mamiya, 1990; Cavendish, 2000). This yielded a sample of 202 African American congregations. Nine out of the 202 had missing data on key study variables and thus were not included in analysis. The final sample for analysis was 193 congregations.

Dependent Variable

The dependent variable was a binary variable asking whether or not the congregation currently had any program or activity specifically intended to serve persons with HIV or AIDS ("Does your congregation currently have any program or activity specifically intended to serve persons with HIV or AIDS?"). The program could serve a variety of different HIV related needs including, testing, prevention, support groups, food distribution, housing or hospice care. Thirty-five congregations were identified to have such programs when the survey was conducted (coded as "1") while the remaining 158 did not have any (coded as "0").

Independent Variables

We explored a variety of independent variables in accordance with the aforementioned literature and our conceptual model. Individual level variables included: the characteristics of the clergy (race/ethnicity, age, whether or not they have graduated from a seminary or theological school, and attitudes towards a cohabiting or an openly gay or lesbian couple in the membership or in leadership positions), and whether anyone in the congregation had publicly disclosed his/her HIV status. Congregational/organizational level variables included structure (denomination, whether or not the congregation considers the Bible to be the literal

and inerrant word of God [a proxy for determining a conservative or liberal orientation], and the presence of programs or groups to address physical health needs). Lastly, social level factors included social environment (geographical location of the church).

Analysis

Data were analyzed using SAS Version 9.2 (SAS, 2012). Descriptive statistics including means and standard deviations were calculated for continuous variables and frequencies and percentages for categorical variables. Independent sample t-test and Chi-square tests or Fisher's exact tests were used to compare the characteristics between churches having any AIDS program or not. Variables that had p values $\leq .20$ at the bivariate analysis level were included in a binary logistic regression model. This model was modified through a backward elimination process, removing one independent variable at a time (the least significant variable), until all the variables were significant at the .10 levels.

Results

Sample Description

Table I shows the characteristics of clergy and congregations, and the presence of health programs. The majority of the clergy were male (182, 94.3%), Black (178, 92.2%) and had graduated from a seminary or theological school (119, 61.7%). The mean age was 55.2 (SD=11.7) ranging from 27 to 89 years. Out of the 193 congregations, most of them (70.0%) were located in the South Atlantic (Delaware, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, West Virginia and Washington, D.C), East South Central (Alabama, Kentucky, Mississippi, and Tennessee), or West South Central (Arkansas, Louisiana, Oklahoma, and Texas) regions. The majority of churches (78.2%) were affiliated with a denomination, convention, or other association with Baptists (representing 23 sub-denominations belonging to the Baptist tradition) accounting for 53.4%, Pentecostal (representing 8 sub-denominations belonging to the Pentecostal tradition) 13.5%, other Christian (representing 23 sub-denominations) 12.4%, and other (Christian churches without denominational affiliation) 20.7%.

Almost all of the congregations were black protestant (90.7%) and considered the Bible to be the literal and inerrant word of God (93.3%). Less than 15% of churches had members who had publicly disclosed their HIV status. About 3 in 4 (72.0%) churches would permit unmarried couples that cohabit to be full-fledged members, and half (52.8%) of the churches would give gay or lesbian individuals full-fledged membership. However, fewer reported that they would allow these groups to hold a leadership position even if they were qualified (unmarried and cohabiting couple: 16.1%; gay or lesbian: 6.7%).

More than half (63.2%) of the clergy reported having a designated or committed person whose purpose was to provide congregants with health-focused programs. In contrast, only 10 (5.2%) clergy mentioned that they had specific groups which were focused on individual's physical wellbeing. In addition, only 18.1% of the churches had either sponsored or participated in programs targeting physical health needs.

Comparison of Churches

Clergy in churches having AIDS program tended to be those who did not graduate from a seminary or theological school ($\chi^2=8.127$, $p<0.05$). The churches located in the South Atlantic, East south central, West south Central regions had a smaller proportion of churches with AIDS related programs ($\chi^2=811.944$, $p<0.05$) compared to other regions.

Compared with those having AIDS programs, churches not having AIDS programs had fewer reports of disclosure by HIV-positive congregants, and fewer unmarried but cohabiting, and gay or lesbian congregants (all p values <0.05). Churches with AIDS programs and those without did not differ significantly in whether or not they were affiliated with a denomination, the type of denominational affiliation, religious tradition, whether congregants consider the Bible to be the literal and inerrant word of God, or whether unmarried but cohabiting couples, gay, or lesbian individuals would be permitted to be members (all p values >0.05)

Regression Analyses

All variables significant at .20 level in Table I were included in a logistic regression model. Subsequently, the following variables were removed from the model in a backward elimination process to get a final model in which all variables had p values $< .10$: the pastor being a graduate from a seminary or theological school, whether an unmarried but cohabiting couple would be permitted to be full-fledged members, and affiliation with Pentecostal or other Christian denominations. The final model is shown in Table II

Hypothesis 1 was rejected as clergy education was eliminated from the final model. The results did, however, support hypotheses 2 and 3 as churches located in the South Atlantic, East South Central, or West South Central regions of the U.S. were significantly less likely to have HIV/AIDS programs ($OR = .129$, $p = .000$) and having an organized effort, designated person, or committee whose purpose is to provide members with health-focused programs made churches significantly more likely to have HIV/AIDS programs ($OR = 6.835$, $p = .007$). The pastor being older in age, however, increased the likelihood of having HIV programming by 4.4% ($p = .043$). Churches were more likely to have HIV/AIDS programs if they: had members who disclosed their HIV status ($OR = 4.276$, $p = .011$), permitted a gay or lesbian to be full-fledged members of the congregation ($OR = 4.766$, $p = .006$), had sponsored or participated in health-related programs ($OR = 3.918$, $p = .011$), and had a designated person or committee whose purpose was to provide members with health-focused programs ($OR = 6.835$, $p = .007$).

Discussion

Our study revealed that region, clergy age, congregant disclosure of HIV-positive status, permitting cohabiting couples to be members, sponsorship or participation in programs targeted to physical health issues and having a designated person or committee to address health-focused programs significantly predicted the likelihood of African American churches having a HIV/AIDS program. The findings support literature that has examined the influential role of having a health-related program or ministry as a facilitator to HIV/AIDS

programming in African American churches (Frenk & Trinitapoli, 2013; Fulton, 2011; Nunn et al., 2013; Pichon, Williams, & Campbell, 2013). Thus, we confirm the need for a designated person or committee to champion programs which address health concerns, including HIV efforts. We posit that successful partnership with African American churches will require the development of committees and training of lay leaders in the church to promote the health of the congregation. Given documented risk factors (Berkley-Patton, et al., 2012; Stewart, 2014a), it is imperative that we continue efforts to intervene in faith-based settings.

Our study uniquely adds to the literature by demonstrating nuances within African American churches that predict the availability of HIV/AIDS programs for their congregants. More specifically, our findings reveal that churches who had members who disclosed their HIV status, would permit membership for unmarried cohabitating couples, and had someone who coordinated health-focused programs were 4.3, 4.8 and 6.9 times more likely to have HIV/AIDS programs respectively. Further, sponsorship or participation in a targeted physical health issue resulted in an almost 4-fold increase in the likelihood of engagement. We surmise that these factors may be attributable to implicit theologies within certain church systems, as well as more liberal/progressive church cultural contexts. The identification and exploration of these factors can be used to engage non-participating churches in HIV/AIDS programs.

The prevailing belief has been that certain denominations have doctrine that would not support HIV programming. Other studies have found that religious tradition or denomination and/or a liberal or conservative stance within broader church systems affected the likelihood of HIV/AIDS programs (Frenk & Trinitapoli, 2013). However, our findings did not confirm this within the African American church. There is likely a great deal of diversity within individual denominations making HIV/AIDS programming possible in some churches and not in others. A more comprehensive variable of interest might be norms or religious culture which is beginning to be brought to the forefront of the literature on HIV/AIDS programming within African American churches (Deroose et al., Stewart & Dancy, 2012). However, our findings show that HIV programming exists across and regardless of denomination.

Researchers have made significant advances in the development and implementation of successful HIV/AIDS program models (e.g., prevention of HIV and stigma reduction) in a variety of geographical locations with subpopulations in the African American community (Berkley-Patton et al., 2013b; Isler, Eng, Maman, Adimora & Weiner., 2014; Whiteress, Santibanez, Dennison & Clark, 2010). Little investigation, however, has been made into the differences in churches in various regions and how this impacts the likelihood or challenges associated with implementing HIV/AIDS programs. Other studies have hypothesized that the educational level and/or training of the clergy serves as a significant barrier to engaging in HIV (Taylor, Ellison, Chatters, Levin & Lincoln, 2000; Thomas et al., 1994). Our study did not confirm this finding. In addition, with the exception of age, we did not find that any of the reported clergy characteristics predicted HIV/AIDS programming availability. Further research is needed to explore communication styles among clergy, including interpersonal and mass media correspondence, as it relates to having HIV/AIDS programs in African

American churches (Moore et al., 2012). Moreover, differences in willingness to discuss HIV and program availability warrant further exploration by congregant demographics, for example, reluctance to talk to youth about sexual behaviors.

Our study has significant implications for partnering with African American churches to provide much needed HIV prevention, testing and care initiatives in African American communities. Namely, we have identified factors that can be strategically used to target African American churches with the highest likelihood of success in engaging in HIV and AIDS efforts. Researchers and community health practitioners can use these findings to identify local congregations that currently operate under a model that is most conducive for the implementation of HIV/AIDS programming. So as not to “cherry pick” the best congregations and leave the rest of the community without resources, these same factors can also be used to increase the likelihood that churches which do not currently have HIV/AIDS programming could initiate programs in the future. For example, churches that do not address other physical health issues, or that do not have a designated person responsible for physical health programs, could be encouraged to consider starting small at a level they are comfortable with (e.g., host a blood pressure screening or disseminate educational pamphlets about diabetes). Additionally, it is important to note that researchers looking to partner with churches in HIV efforts should be willing and able to provide concrete resources as needed. In either case, our findings confirm the importance of engaging the faith community and building the capacity of African American churches to address health concerns, including HIV/AIDS, that disproportionately affect African American communities (Abara, Coleman, Fairchild, Gaddist & White, 2013a).

Limitations

This study is limited by several considerations. These include the use of self-reported data, which may have been influenced by social desirability and recall biases, especially for questions pertaining to HIV, which can carry with it a degree of HIV stigma. In addition, due to the fact that our analysis focused exclusively on HIV programming while the larger study did not, we did not have the opportunity to focus on all of the reported factors to consider in HIV programming in African American churches. Due to the grouping of churches into broad categories such as “Baptist” or “Pentecostal” we may not have been able to access information regarding the impact of different sub-denominations on HIV and AIDS programming.

The data was collected 10 years prior to this study undertaking. At that time these data were the most current. This may have implications for the findings as churches may have discontinued their HIV ministries, or several of the contributing factors may have changed. The questions asked on the survey did not delineate a difference between HIV and AIDS. As these are differing diagnoses the wording of the question may have impacted the results. Lastly, interpretation of the study's results is limited by the individuals that were asked who may have had limited knowledge of what the AIDS program contained and its applicability to impacting or reducing HIV or AIDS.

Despite these limitations the strengths of the study include the large and geographically diverse sample; few studies have been able to look at African American churches across the

nation. Furthermore this study provides valuable information on the factors impacting the likelihood of having an HIV program.

Conclusion

This study enhances existing literature by determining the factors that specifically support African American churches integrating HIV and AIDS programs into their congregations and communities. By using an approach that looked at factors from several levels, we have been able to expand knowledge on factors increasing the likelihood of church-based HIV/AIDS programming. Strategically engaging African American churches in HIV efforts is an urgent need to reduce HIV in African American communities. Efforts to support churches to integrate HIV/AIDS programming into their settings should target health ministries and promote capacity building and acceptance of individuals regardless of congregant characteristics that may be counter to church ideology (e.g., cohabitation and sexual orientation). A combination of strategies at multiple levels is likely to be more effective in encouraging African American churches to engage in HIV/AIDS programming.

References

- Abara W, Coleman JD, Fairchild A, Gaddist B, White J. A faith-based community partnership to address HIV/AIDS in the southern United States: Implementation, challenges, and lessons learned. *Journal of Religion and Health*. 2013a; :1–12. epub ahead of print. DOI: 10.1007/s10943-013-9789-8 [PubMed: 23334953]
- Abara W, Coleman JD, Fairchild A, Gaddist B, White J. A Faith-Based Community Partnership to Address HIV/AIDS in the Southern United States: Implementation, Challenges, and Lessons Learned. *Journal of Religion and Health*. 2013b:1–12. [PubMed: 23334953]
- Adimora AA, Ramirez C, Schoenbach VJ, Cohen MS. Policies and politics that promote HIV infection in the Southern United States. *AIDS*. 2014; 28(10):1393–1397. [PubMed: 24556871]
- Barnes, Sandra L. Black church culture and community action. *Social Forces*. 2005; 84(2):967–994.
- Beadle-Holder M. Black Churches Creating Safe Spaces to Combat Silence and Stigma Related to AIDS. *Journal of African American Studies*. 2011; 15(2):248–267.
- Berkley-Patton J, Moore EW, Hawes SM, Thompson CB, Bohn A. Factors related to HIV testing among an African American church-affiliated population. *AIDS Education and Prevention*. 2012; 24(2):148–162. [PubMed: 22468975]
- Berkley-Patton J, Thompson CB, Martinez DA, Hawes SM, Moore E, Williams E, Wainright C. Examining church capacity to develop and disseminate a religiously appropriate HIV tool kit with African American churches. *Journal of Urban Health*. 2013; 90(3):482–499. [PubMed: 22815053]
- Berkley-Patton JY, Moore E, Berman M, Simon SD, Thompson CB, Schleicher T, Hawes SM. Assessment of HIV-related stigma in a US faith-based HIV education and testing intervention. *Journal of the International AIDS Society*. 2013a; 16(3 Suppl 2)
- Berkley-Patton JY, Moore E, Berman M, Simon SD, Thompson CB, Schleicher T, Hawes SM. Assessment of HIV-related stigma in a US faith-based HIV education and testing intervention. *Journal of the International AIDS Society*. 2013b; 16(Suppl 2):18644.doi: 10.7448/ias.16.3.18644 [PubMed: 24242259]
- Billingsley, Andrew, Caldwell, Cleopatra Howard. The church, the family, and the school in the African American community. *Journal of Negro Education*. 1991:427–440.
- Bowleg L, Raj A. Shared communities, structural contexts, and HIV risk: Prioritizing the HIV risk and prevention needs of Black heterosexual men. *American Journal of Public Health*. 2012; 102(suppl 2):S173–S177. DOI: 10.2105/AJPH.2011.300511 [PubMed: 22401513]

- Brown EJ, Williams SE. Southern rural African American faith communities' role in STI/HIV prevention within two counties: An exploration. *Journal of HIV/AIDS and Social Services*. 2005; 4(3):47–62.
- Cavendish, James C. Church-based Community Activism: A Comparison of Black and White Catholic Congregations. *Journal for the Scientific Study of Religion*. 2000; 39(1):64–77.
- Chatters LM, Taylor RJ, Bullard KMcK, Jackson JS. Spirituality and subjective religiosity among African Americans, Caribbean Blacks, and Non-Hispanic Whites. *Journal for the Scientific Study of Religion*. 2008; 47(4):725–737. [PubMed: 21052481]
- Chatters, Linda M. Religion and health: public health research and practice. *Annual review of public health*. 2000; 21(1):335–367.
- Coleman JD, Lindley LL, Annang L, Saunders RP, Gaddist B. Development of a framework for HIV/AIDS prevention programs in African American churches. *AIDS Patient Care and STDs*. 2012; 26(2):116–124. [PubMed: 22149766]
- Centers for Disease, Prevention, Control, Centers for Disease, & Prevention. Center for Disease Control and Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention, Division of HIV/AIDS Prevention; Atlanta, Georgia: 2013 Aug. Highimpact HIV prevention: CDC's approach to reducing HIV infections in the United States. Website: http://www.cdc.gov/hiv/strategy/dhap/pdf/nhas_booklet.pdf
- Cunningham, Shayna D., Kerrigan, Deanna L., McNeely, Clea A., Ellen, Jonathan M. The role of structure versus individual agency in churches' responses to HIV/AIDS: a case study of Baltimore city churches. *Journal of religion and health*. 2011; 50(2):407–421. [PubMed: 19714469]
- Deroose KP, Bogart LM, Kanouse DE, Felton A, Collins DO, Mata MA, et al. Williams MV. An intervention to reduce HIV-related stigma in partnership with African American and Latino churches. *AIDS education and prevention : official publication of the International Society for AIDS Education*. 2014; 26(1):28–42. [PubMed: 24450276]
- Foster PH. Use of stigma, fear, and denial in development of a framework for prevention of HIV/AIDS in rural African American communities. *Family and Community Health*. 2007; 30(4):318–327. [PubMed: 17873638]
- Francis SA, Lam WK, Cance JD, Hogan VK. What's the 411? Assessing the feasibility of providing African American adolescents with HIV/AIDS prevention education in a faith-based setting. *Journal of Religion and Health*. 2009; 48(2):164–177. [PubMed: 19421867]
- Frenk SM, Trinitapoli J. US Congregations' provision of programs or activities for people living with HIV/AIDS. *AIDS and Behavior*. 2013; 17(5):1829–1838. [PubMed: 22311148]
- Freudenberg, Nicholas, Silver, Diana, Ms, Carmona, Jenniferm M., Mr, Kass, Daniel, Mr, Lancaster, Brick, Mr, Speers, Marjorie. Health promotion in the city: a structured review of the literature on interventions to prevent heart disease, substance abuse, violence and HIV infection in US metropolitan areas, 1980–1995. *Journal of Urban Health*. 2000; 77(3):443–457. [PubMed: 10976617]
- Fulton, Brad R. Black Churches and HIV/AIDS: factors influencing congregations' responsiveness to social issues. *Journal for the scientific study of religion*. 2011; 50(3):617–630. [PubMed: 22148134]
- Harris AC. Sex, stigma, and the holy ghost: The black church and the construction of AIDS in New York City. *Journal of African American Studies*. 2010; 14(1):21–43.
- Health, The National Institute of Mental. The National Institute of Mental Health Strategic Plan. 2008
- Holt, Cheryl L., McClure, Stephanie M. Perceptions of the religion-health connection among African American church members. *Qualitative health research*. 2006; 16(2):268–281. [PubMed: 16394214]
- House, The White. National HIV/AIDS Strategy for the United States: The White House Office of National AIDS Policy. 2010
- Isaac, E Paulette, Rowland, Michael L., Blackwell, Lewis E. Fighting health disparities: The educational role of the African American church. *Cross Currents*. 2007; 57(2):261–265.
- Isler MR, Eng E, Maman S, Adimora A, Weiner B. Public health and church-based constructions of HIV prevention: Black Baptist perspective. *Health Education Research*. 2014; 29(3):470–484. [PubMed: 24643141]

- Koch JR, Beckley RE. Under the radar: AIDS ministry in the bible belt. *Review of Religious Research*. 2006; 47(4):393–408.
- Levin J, Chatters LM, Taylor RJ. Religion, health and medicine in African Americans: Implications for physicians. *Journal of the National Medical Association*. 2005; 97(2):237–249. [PubMed: 15712787]
- Life, Pew Forum on Religion and Public. U S Religious Landscape Survey. 2008
- Lincoln, C Eric, Mamiya, Lawrence H. *The black church in the African American experience*. Duke University Press; 1990.
- Marcus MT, Walker T, Swint JM, Smith BP, Brown C, Busen N, et al. von Sternberg K. Community-based participatory research to prevent substance abuse and HIV/AIDS in African-American adolescents. *Journal of Interprofessional Care*. 2004; 18(4):347–359. [PubMed: 15801550]
- Moore D, Onsomu EO, Timmons SM, Abuya BA, Moore C. Communicating HIV/AIDS Through African American Churches in North Carolina: Implications and Recommendations for HIV/AIDS Faith-Based Programs. *Journal of Religion and Health*. 2012; 51(3):865–878. [PubMed: 20859766]
- Nunn A, Cornwall A, Thomas G, Callahan PL, Waller PA, Friend R, et al. Flanigan T. What's God got to do with it? Engaging African-American faith-based institutions in HIV prevention. *Global Public Health*. 2013; 8(3):258–269. [PubMed: 23379422]
- Nunn A, Yolken A, Cutler B, Trooskin S, Wilson P, Little S, Mayer K. Geography should not be destiny: Focusing HIV/AIDS implementation research and programs on microepidemics in US neighborhoods. *American Journal of Public Health*. 2014; 104(5):775–780. [PubMed: 24716570]
- Pichon LC, Williams TT, Campbell B. An exploration of faith leaders' beliefs concerning hiv prevention: Thirty years into the epidemic. *Family and Community Health*. 2013; 36(3):260–268. [PubMed: 23718961]
- V. H. National Center for HIV/AIDS, STD, and TB Prevention. , editor. *Prevention, Center for Disease Control and. HIV among African Americans*. 2011.
- Reese AM. “But of course he is led by god”: Pastoral influence on an HIV/AIDS ministry. *Journal of Homosexuality*. 2011; 58(6-7):919–931. [PubMed: 21740218]
- Rowland, Michael L., Isaac-Savage, E Paulette. As i see it: A study of African American pastors'; views on health and health education in the Black church. *Journal of religion and health*. 2013:1–11. [PubMed: 23334953]
- SAS. Version 9.2. Cary, NC: 2012.
- Speers, Marorie A., Lancaster, Brick. Disease prevention and health promotion in urban areas: CDC's perspective. *Health education & behavior*. 1998; 25(2):226–233. [PubMed: 9548062]
- Stewart JM. Implementation of evidence-based HIV interventions for young adult African American women in church settings. *Journal of Obstetric, Gynecologic, & Neonatal Nursing*. 2014a; 43(5): 655–663. DOI: 10.1111/1552-6909.12494
- Stewart JM. Pastor and Lay Leader Perceptions of Barriers and Supports to HIV Ministry Maintenance in an African American Church. *Journal of Religion and Health*. 2014b; 53(2):317–325. [PubMed: 22870846]
- Stewart JM. A multi-level approach for promoting HIV testing within african american church settings. *AIDS Patient Care and STDs*. 2015c; 29(2):69–76. [PubMed: 25682887]
- Stewart JM, Dancy BL. Factors contributing to the development of an HIV ministry within an african american church. *Journal of the Association of Nurses in AIDS Care*. 2012; 23(5):419–430. [PubMed: 22212914]
- Stewart JM, Sommers MS, Brawner BM. The black church, sexual health, and sexuality: A conceptual framework to promote health through faith-based organizations. *Family and Community Health*. 2013; 36(3):269–279. [PubMed: 23718962]
- Taylor, Robert Joseph, Ellison, Christopher G., Chatters, Linda M., Levin, Jeffrey S., Lincoln, Karen D. Mental health services in faith communities: The role of clergy in black churches. *Social Work*. 2000; 45(1):73–87. [PubMed: 10634088]
- 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 Reports*. 2000; 115(6):544–556. [PubMed: 11354338]

- Teti, Michelle, Drainoni, Mari-Lynn, Raj, Anita, Cozier, Yvette C., Harris, Cynthia, Bright, Donna, Welles, Seth L. Barriers and facilitators to providing HIV-related services in Bostonian African American churches: a focus group study of clergy and community members. *Journal of HIV/AIDS & Social Services*. 2011; 10(4):345–362.
- Thomas, Stephen B., Quinn, Sandra Crouse, Billingsley, Andrew, Caldwell, Cleopatra. The characteristics of northern black churches with community health outreach programs. *American Journal of Public Health*. 1994; 84(4):575–579. [PubMed: 8154559]
- Whiters DL, Santibanez S, Dennison D, Clark HW. A case study in collaborating with Atlanta-based African-American churches: A promising means for reaching inner-city substance users with rapid HIV testing. *Journal of Evidence Based Social Work*. 2010; 7(1):103–114. DOI: 10.1080/15433710903175981 [PubMed: 20178028]
- Wilcox, Sara, Laken, Marilyn, Anderson, Thaje, Bopp, Melissa, Bryant, Deborah, Carter, Rickey, et al. O'Rourke, Kathleen. The Health-e-AME faith-based physical activity initiative: description and baseline findings. *Health Promotion Practice*. 2007; 8(1):69–78. [PubMed: 16885511]
- Williams, Randi M., Glanz, Karen, Kegler, Michelle C., Davis, Ernest, Jr. A study of rural church health promotion environments: Leaders' and members' perspectives. *Journal of religion and health*. 2012; 51(1):148–160. [PubMed: 19960262]
- Wilson, Patrick A., Wittlin, Natalie M., Muñoz-Laboy, Miguel, Parker, Richard. Ideologies of Black churches in New York City and the public health crisis of HIV among Black men who have sex with men. *Global public health*. 2011; 6(sup2):S227–S242. [PubMed: 21892894]
- Wingood GM, Robinson LR, Braxton ND, Er DL, Conner AC, Renfro TL, et al. DiClemente RJ. Comparative effectiveness of a faith-based HIV intervention for African American women: Importance of enhancing religious social capital. *American Journal of Public Health*. 2013; 103(12):2226–2233. [PubMed: 24134367]
- World Health Organization. Health Impact Assessment N p. Nov 10. 2015 The Determinants of Health. 2015. Web

Table 1
The characteristics of clergy and congregation, and presence of health mission

	Churches having AIDS program (n=35)	Churches not having AIDS program (n=158)	<i>t/χ²</i>	<i>p</i>
	<i>M ± SD/n (%)</i>	<i>M ± SD/n (%)</i>		
Clergy characteristics				
Age	57.76±13.22	54.72±11.34	1.374	.171
Sex				
Female	1 (9.1)	10 (90.9)		.692 ^F
Male	34 (18.7)	148 (81.3)		
Race				.314 ^F
Black	34 (19.1)	144 (80.9)		
Non-black	1 (6.7)	14 (93.3)		
Graduate from a seminary or theological school?				
Yes	29 (24.4)	90 (75.6)	8.127	.004
No	6 (8.1)	68 (91.9)		
Congregation characteristics				
Region of location				
South Atlantic, East South Central, or West South Central	16 (11.9)	119 (88.1)	11.944	.001
Other	19 (32.8)	39 (67.2)		
Affiliated with a denomination			2.681	.102
Yes	31 (20.5)	120 (79.5)		
No	4 (9.5)	38 (90.5)		
Denominational affiliation				.114
Baptist	25 (24.3)	78 (75.7)		
Pentecostal	2 (7.7)	24 (92.3)		
Other Christian	2 (8.3)	22 (91.7)		
Other	6 (15.0)	34 (85.0)		
Religious tradition				
Black protestant	33 (18.9)	142 (81.1)		.536 ^F
Other	2 (11.1)	16 (88.9)		
Consider Bible to be the literal and inerrant word of God				.708 ^F
Yes	32 (17.8)	148 (82.2)		
No	3 (23.1)	10 (76.9)		
Anyone having AIDS in your congregation?				
Yes	13 (46.4)	15 (53.6)	17.661	<.001
No	22 (13.3)	143 (86.7)		
Would an unmarried couple that lives together be permitted to be full-fledged members of your congregation?			5.812	.016
Yes	31 (22.3)	108 (77.7)		
No	4 (7.4)	50 (92.6)		

	Churches having AIDS program (n=35)	Churches not having AIDS program (n=158)	t/χ^2	p
	$M \pm SD/n$ (%)	$M \pm SD/n$ (%)		
Would gay or lesbian be permitted to be full-fledged members of your congregation?			7.884	.006
Yes	26 (25.5)	76 (74.5)		
No	9 (9.9)	82 (90.1)		
Would be an unmarried couple that live together be permitted to hold leadership positions?			.037	.847
Yes	6 (19.4)	25 (80.6)		
No	29 (17.9)	133 (82.1)		
Would be a gay or lesbian be permitted to hold leadership positions?				.708 ^F
Yes	3 (23.1)	10 (76.9)		
No	32 (17.8)	148 (82.2)		
Presence of health mission				
Purpose of meet focused on physical well-being				.019 ^F
Yes	5 (50.0)	5 (50.0)		
No	30 (16.4)	153 (83.6)		
Sponsor or participate programs targeted physical health issue			13.768	<.001
Yes	14 (40.0)	21 (60.0)		
No	21 (13.3)	137 (86.7)		
Having someone who want to provide health-focused programs			14.637	<.001
Yes	32 (26.2)	90 (73.8)		
No	3 (4.2)	68 (95.8)		

^F denotes Fisher's exact tests.

Table II
Final logistic regression model of predictors of having AIDS programs

	B	S.E.	Wald	p	OR	95% CI
<i>Clergy characteristics</i>						
Age	.043	.021	4.098	.043	1.044	(1.001, 1.089)
<i>Congregation characteristics</i>						
Region of location						
South Atlantic, East South Central, or West South Central	-2.045	.535	14.626	.000	.129	(.045, .369)
Other	ref					
Whether affiliated with a denomination						
Yes	1.460	.759	3.705	.054	4.306	(.974, 19.043)
No	ref					
Denominational affiliations						
Baptist	.955	.517	3.416	.065	2.599	(.944, 7.156)
Not Baptist	ref					
Anyone having AIDS in your congregation?						
Yes	1.453	.569	6.512	.011	4.276	(1.401, 13.053)
No	ref					
Would an openly gay or lesbian couple be permitted to be full-fledged members of your congregation?						
Yes	1.562	.565	7.635	.006	4.766	(1.574, 14.428)
No	ref					
<i>Presence of health ministry</i>						
Sponsor or participate programs targeted physical health issue						
Yes	1.365	.538	6.453	.011	3.918	(1.366, 11.234)
No	ref					
Having someone whose purpose of providing health-focused programs						
Yes	1.922	.714	7.250	.007	6.835	(1.687, 27.691)
No	ref					

a. Pentecostal, Other Christian, and Other were collapsed into Not Baptist category.