Black Pastors' Views on preaching about sex: barriers, facilitators, and opportunities for HIV prevention messaging

Adaora A. Adimora^{a,b,c}, Moses V. Goldmon^{d†}, Tamera Coyne-Beasley^{a,b}, Catalina B. Ramirez^a, Gilbert A. Thompson^e, Danny Ellis^f, Joe L. Stevenson^g, Jerry M. Williams^h, Daniel L. Howard^{i,j} and Paul A. Godley^{a,b}

^aSchool of Medicine, University of North Carolina at Chapel Hill, Chapel Hill, NC, USA; ^bCecil G. Sheps Center for Health Services Research, University of North Carolina at Chapel Hill, Chapel Hill, NC, USA; ^cUNC Gillings School of Global Public Health, University of North Carolina at Chapel Hill, Chapel Hill, NC, USA; ^dShaw University Divinity School, Raleigh, NC, USA; ^eWorld Overcomers Christian Church, Durham, NC, USA; ^fEllis Research & Consulting Service, LLC, Wilson, NC, USA; ^gMacedonia New Life Church, Raleigh, NC, USA; ^hAgape Word Fellowship, Raleigh, NC, USA; ^lPublic Policy Research Institute, Texas A&M University, College Station, TX, USA; ^jDepartment of Sociology, Texas A&M University, College Station, TX, USA

ABSTRACT

Objectives: Despite the disproportionately high rates of heterosexually transmitted HIV infection among US Blacks and ongoing need for effective inexpensive behavioral interventions, the use of sermons as an HIV prevention tool in Black churches has received little research attention. The Black church plays an important role in Black communities and is a potential ally in development and delivery of sexual risk prevention messages. The objective of this study was to examine Black pastors' thoughts about whether sermons should address issues related to heterosexual relationships – and the barriers and facilitators to discussing these topics in a sermon setting.

Design: We conducted in-depth semi-structured, individual interviews among 39 pastors of Black churches in North Carolina and analyzed the interview data using thematic analysis strategies based on grounded theory.

Results: Pastors expressed widely ranging opinions, especially about discussion of condom use, but generally agreed that sermons should discuss marriage, abstinence, monogamy, dating, and infidelity - behaviors that impact sexual networks and HIV transmission. The major barriers to incorporation of these subjects into sermons include the extent to which a concept undermines their religious beliefs and uncertainty about how to incorporate it. However, scriptural support for a prevention message and the pastor's perception that the message is relevant to the congregation facilitate incorporation of related topics into sermons. **Conclusions:** These findings have implications for the potential utility of sermons as an HIV prevention tool and suggest that it is possible for public health professionals and pastors of Black churches to form partnerships to develop messages that are consonant with pastors' religious convictions as well as public health recommendations.

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CONTACT Adaora A. Adimora adimora@med.unc.edu Division of Infectious Diseases, University of North Carolina School of Medicine, Chapel Hill, NC CB #7030, USA

Introduction

Rates of HIV infection in the US are dramatically higher among Blacks than Whites. The Centers for Disease Control and Prevention (CDC) estimates that 1 in 20 Blacks in the US will be diagnosed with HIV infection - compared to 1 in 132 Whites (Hess et al. 2016). HIV was among the five leading causes of death among Black men and women between the ages of 25 and 44 in the US in 2010(Centers for Disease Control and Prevention 2015b, 2015a). Although men who have sex with men are most affected by the HIV epidemic, there are marked racial disparities in heterosexual transmission as well. In 2012 African Americans accounted for two-thirds (65.9%) of people diagnosed with heterosexually transmitted HIV infection in the US(Centers for Disease Control and Prevention 2014b). About 88% of US Black women who were diagnosed with HIV infection in 2012 acquired it through heterosexual contact(Centers for Disease Control and Prevention 2014a). Although economic, demographic, and other structural determinants of health promote HIV infection among African Americans (Centers for Disease Control and Prevention 2014c), interventions that change individual-level behaviors remain a critical tool in the armamentarium of HIV prevention strategies (Centers for Disease Control & Prevention 2017). Faith institutions can be important partners in development and delivery of these interventions (Wingood et al. 2013).

African Americans, especially those living in the southern US, are among the most religious ethnic groups in the industrialized world (Taylor, Chatters, and Brown 2014); 79% of African Americans, compared to 56% of all US adults, report that religion is important in their lives, and more than half (53%) of African Americans attend religious services at least weekly (Sahgal and Smith 2009). In addition to religion itself, the Black church as an institution continues to have major political, historical and cultural importance (Lincoln and Mamiya 1990; Barnes 2005) and has a long history of addressing unmet health needs in Black communities (Eng, Hatch, and Callan 1985; DeHaven et al. 2004). Many respondents in a North Carolina focus group study noted the church's positive role in the health of the community, citing its psychological support for members and role in problem solving (Adimora et al. 2001). In addition, Black churches are often trusted venues for guidance and education about health and behavior change (Taylor et al. 2000; Blank et al. 2002; Campbell et al. 2007).

Despite their initially slow response to the AIDS epidemic (Coyne-Beasley and Schoenbach 2000), some Black churches have developed HIV ministries in recent years. These ministries tend to include support groups, pastoral counseling, food, housing, and referral services for people living with or affected by HIV; HIV testing; and general information about the disease (Stewart, Sommers, and Brawner 2013). Black churches' involvement in HIV prevention – although sometimes limited by barriers, such as stigma, homophobia, religious doctrine (for example, against sexual activity outside marriage), and financial and resource challenges (Smith, Simmons, and Mayer 2005a; Nunn et al. 2012) – has increased in some cases to include partnerships with health officials and academicians, expanded HIV testing, educational events, sermons, and interventions to decrease HIV-related stigma (Nunn et al. 2013; Pichon et al. 2012; Wingood et al. 2011; Berkley-Patton et al. 2013; Derose et al. 2016).

Nevertheless, research concerning the role of sermons in HIV prevention has been relatively limited. Worship is a critical part of religious experience among African Americans,

and the sermon is a key part of worship (Hamilton 1972; Lincoln and Mamiya 1990). Scholars contend that sermons can 'be influential because of the focused nature of the biblical references, charismatic delivery by the minister, strategic use of text to affect behavior, and captive audience during the preaching moment (Barnes 2005).' Faith institutions seldom discuss sex, and discussions of sexuality are typically taboo in Black churches.(Harris 2010) Part of the reluctance to discuss safer sex is due to the discordance between doctrinal beliefs and public health recommendations, such as condom use. Some public health recommendations, however, are in harmony with church teachings. For example, behavioral messages that target avoidance of participation in high-risk heterosexual network patterns would be consistent with the principles of most Christian religious denominations prevalent among African Americans. Qualitative research suggests that identifying such 'points of agreement' could help engage churches in HIV prevention (Obong'o et al. 2016).

The theory of planned behavior posits that attitudes, subjective norms, and perceived behavioral control influence behavioral intention, the key determinant of behavior change (Ajzen 1991). Sermons could affect people's intention to decrease their risk behaviors by influencing their norms and giving them information that would affect their attitudes (Wooster et al. 2011). Moreover, Black pastors and their congregations may serve as an important social network through which these norms and attitudes may be disseminated in Black communities (Wooster et al. 2011). Thus, sermons offer a unique opportunity to reach a large number of people – including individuals who have not been reached by traditional HIV prevention interventions – at no cost.

Because churches are an especially strong focal point of Black communities in North Carolina and other parts of the southern US (Adimora et al. 2001; Taylor, Chatters, and Brown 2014), we worked with pastors of Black Christian churches in North Carolina to develop culturally appropriate heterosexual risk behavior prevention messages they would be willing to use in their sermons. The project focused exclusively on heterosexual behaviors because of the high sexually transmitted infection rates among heterosexuals and frequency of sexual risk behaviors, such as multiple sexual partnerships and condomless sex (McKoy and Petersen 2006; Adimora et al. 2001; Adimora et al. 2004; North Carolina HIV/STD Surveillance Unit 2015) – and also because discussion of homosexuality is especially controversial in many Black churches. This paper reports the results of a study comprised of in-depth interviews that engaged the pastors to explore two questions: (1) Do pastors think sermons should address issues related to heterosexual relationships? (2) What are barriers and facilitators to discussing these topics from the pulpit?

Methods

The institutional review board at the University of North Carolina at Chapel Hill (IRB #09-2142) approved all study procedures. All participants provided their written informed consent to participate in this study.

Recruitment procedures

Researchers used previously established academic-faith research networks and their own personal networks to identify pastors who were interested in participating in the overall sermon development project. Informational briefs outlining the proposed study were

disseminated throughout the Carolina-Shaw Partnership for the Elimination of Health Disparities (Project EXPORT), an NIH-funded research partnership between Shaw University (a historically Black university in Raleigh, NC) and the University of North Carolina at Chapel Hill. Researchers also contacted members of Shaw University Divinity School's (SUDS) Action Research in Ministry Network and pastors who attended SUDS annual Health Enhancement through Medicine and Spirituality Conference.

Male and female pastors were eligible to participate if they were at least 18 years old, regularly preached sermons in a Christian church comprised of a predominantly Black congregation, and either lived or worked in central NC (within a 90-mile radius of Raleigh). This region includes the cities of Raleigh, Durham, and Chapel Hill, as well as their surrounding suburban and rural areas. The region's many Black churches span a variety of congregation sizes. Because many congregations are small, pastors are commonly bi-vocational (Roman Isler et al. 2014).

Pastors who were eligible and had expressed interest in the overall sermon development project were invited to attend an informational meeting which provided a brief overview of HIV infection among African Americans in NC and the project. Pastors at the initial meeting were also asked to refer pastors from outside the network who might be interested in participating. Academic research staff met with each referred pastor to discuss the sermon project and answer any questions. All pastors who indicated interest in participating were also asked to participate in an in-depth interview with study staff.

Data collection & analysis procedures

Each pastor received \$50 compensation for the interview, whose duration ranged between 60 and 90 min, and was conducted in the pastor's office or other private location between January 2009 and February 2011.

Trained research staff used a semistructured interview guide which included focused discussion about key topics but allowed for rigorous and methodical probing. With the consent of the pastors, the interviews were recorded and later transcribed verbatim.

Interview questions examined pastors' beliefs about incorporating topics related to heterosexual risk behavior in sermons. Pastors were asked whether they believed it was appropriate for sermons to discuss a range of topics related to sexual behavior, such as dating, marital relationships, romance, infidelity, monogamy, abstinence, and condom use. They were also asked whether they mentioned these topics in their own sermons, whether they believed other pastors' sermons mentioned these topics, and their perception of barriers and facilitators for discussing these issues in sermons as part of HIV prevention messages. These topics were chosen to expand possibilities for discussion beyond the obviously controversial areas of condom use and premarital sex, which previous literature already has demonstrated that pastors tend to oppose and that represent an obstacle to churches' participation in HIV interventions (Berkley-Patton et al. 2013; Smith, Simmons, and Mayer 2005b).

Data analysis

Data analysis used a combination of structural coding to identify text associated with specific topics of inquiry covered in the interview guide and thematic analysis to identify broad emergent themes for a detailed analysis (Guest and MacQueen 2008). We used

ATLAS.ti software to organize and manage the data (Muhr 2004). For the thematic analysis a team of five trained analysts independently reviewed a sample of 10 transcripts, identified broad themes, and developed an initial codebook including definitions and examples of the emergent topics comprising each theme (MacQueen 1998; Ryan and Bernard 2003). Three analysts then coded all transcripts and expanded notes using an iterative process to refine the codebook, ensure that all salient text was coded, and corroborate individual interpretations of the data. The three analysts independently coded the transcripts; any discrepancies in interpretation of the data or in application of the codes were identified, discussed, and resolved through consensus; and transcripts were recoded as needed.

Once thematic coding was completed, all coded text related to the following research questions was abstracted for the analysis: whether sermons should address issues related to heterosexual relationships, and barriers and facilitators to discussing these topics in a sermon setting.

Results

Thirty-nine pastors participated in structured in-depth interviews; Table 1 outlines their demographic, denominational, and congregation information. Most were college graduates with over ten years of experience as bi-vocational pastors. Congregation size varied, but most pastors' churches had more than 150 active congregants.

Table 1. Pastor demographic characteristics (N = 39).

	N	%
Gender		
Male	35	89.7
Female	4	10.3
Age		
18–44	8	20.5
45+	31	79.5
Highest level of education		
High school graduate	0	_
Technical school or some college	4	10.3
Completed college	7	17.9
Graduate degree	27	69.2
Missing	1	2.6
Employment		
Full-time Pastor	15	38.5
Part-time Pastor	24	61.5
Years as a Pastor		
1–10 years	13	33.3
11–20 years	9	23.1
More than 20 years	17	43.6
Denomination		
Baptist	24	61.5
Non-denominational	10	25.6
Methodist	4	10.3
Pentecostal	1	2.6
Location of Church		
Urban	13	33.3
Rural	26	66.7
Size of congregation		
<100 people	13	33.3
≥100 and <250 people	15	38.5
≥250 and <500 people	5	12.8
≥500 people	6	15.4

The pastors expressed diverse opinions about almost all of the topics and questions that were addressed. There were no identifiable patterns of opinion by age, gender, or denomination. Multiple themes emerged, including relevance of topics to congregations' lives, church doctrine, scriptural and theological support, taboos against sex, and pastors' education and experience.

Appropriateness of discussing sexual behavior/topics in sermons

Many believed that marital relationships, monogamy, abstinence, romance, and infidelity should be discussed in sermons – mainly because people need instruction about how to have Christian relationships. They felt especially strongly that sermons should discuss marital relationships and monogamy because of their theological importance. 'People have to know how to enter into relationships according to kingdom principles... for people to understand kingdom principles about these issues the pastors have to teach them or preach them.' (Participant 27) A number of participants had discussed these topics in sermons themselves. Most pastors said they also talked about infidelity in sermons and believed others did as well because of 'the pain and hurt that could follow' (Participant 24) adulterous relationships and their perception that infidelity is a 'major issue' (Participant 13) in the church. Fewer pastors had discussed romance, but those who did tended to talk about it in the context of marriage, indicating that 'it's okay for a Christian to be romantic with their spouse.' (Participant 11].

Many also agreed that sermons should discuss dating, focusing their concerns on young people because dating is prevalent among that group and because societal pressures heighten youths' need for guidance. Some pastors' interest in discussing dating stemmed from their view of dating as a prelude to marriage; they therefore emphasized knowledge and selection of an appropriate partner. One noted, 'I've said in my sermons that since dating is an interview for marriage and after one or two dates if you discern that person doesn't share the vision – well you kick them to the curb.' (Participant 19).

Some indicated that their sermons discussed dating in general but refrained from commenting on physical interactions. One pastor, however, who had given a series of sermons about relationships, was more direct in his sermons about how to maintain appropriate (i.e, limited) physical relationships during dating:

'Part of the reason why I talked about dating is because I was trying to say to people okay, how should you interact physically in a dating situation so that you don't become immoral sexually – involved in a sexual relationship outside of your marriage.' (Participant 01)

The pastors overwhelmingly believed that unmarried people should abstain from sexual relations and that abstinence should be discussed in sermons because they believed it to be of fundamental importance to Christian theology. Several indicated that they discussed abstinence in their sermons:

'Well abstinence, yes, that's another one that I've spoken about and when I talk about young girls saving themselves and men, even young guys, a lot of times young guys think they ought to be sowing their seed – but they ought to be saving themselves ... for marriage.' (Participant 18)

Pastors expressed a wide variety of opinions about discussing condoms in sermons. They found condom use acceptable in the context of a mutually monogamous marital

relationship (e.g. for contraception or prevention of HIV transmission in HIV serodiscordant relationships). They also agreed that condoms are effective in preventing the spread of STIs – and believed people should use them. However, very few discussed condoms in their sermons, and the majority did not believe other pastors did either. 'I'm not going to tell guys, "hey go buy a condom," even though in the back of my mind I might think that, but I'm not going to say that from the pulpit.' (Participant 01) A substantial proportion reasoned that such discussions would undermine messages concerning abstention from sexual relations outside the context of marriage.

'For a pastor to talk about condom use outside of a marriage relationship is something that's just not really going to happen. I'm not going to talk about condom use outside of a marital relationship because ... in a way it's giving in ... As a pastor ... you just can't do that. You ... have to preach the standard and the standard is abstinence.' (Participant 01)

'The implication ... when you talk about condom use is you're implying that it's okay to have sex outside of marriage – [as if] it's okay to engage in other perhaps unacceptable behaviors because you've got the protection of a condom.' (Participant 19)

Some pastors, in discussing youth, felt that they should use condoms but worried that advice to use condoms would confuse them because they were also being told to abstain from sexual relations. One pastor expressed conflict between the need to disseminate information to protect the community and concern about undermining theological messages:

'I know it needs to be discussed, but where to discuss it, that's my problem, but it needs to be discussed, because that's got to be part of the control of HIV and AIDS. [Later] ... But then at the same time, you'll be condoning sexual relationships between unmarried people, so it's sort of a Catch 22.' (Participant 02)

Nevertheless, some pastors who preached about abstinence found a way to discuss condoms with their church members, although it is not clear that these messages were delivered from the pulpit. Another pastor indicated that he advised youth in his congregation to abstain but was explicit in his advice to use condoms if they could not abstain.

Barriers: doctrine, scripture, taboo

Pastors identified several barriers to incorporating discussion of heterosexual risk behaviors into sermons. It should be noted, however, that they were not necessarily reporting barriers to their own discussion of these topics, but rather their perceptions of barriers that pastors may face in general.

While conflict with religious doctrine was the most commonly cited barrier to discussion of the cited topics in sermons, in most cases this barrier was only mentioned in regard to condom use outside marital relationships, which was seen as undermining the Christian doctrines of abstinence and fidelity. Moreover, pastors indicated that discussion of condom use, even for the purposes of HIV prevention, would be interpreted as church acceptance of extra-marital sex or other heterosexual risk behaviors. Perceived inappropriateness of the topic for the sermon setting was another barrier. One pastor, who talked with youth and parent groups about condoms, would not do so from the pulpit because he felt that condom use has nothing to 'do with the good gospel [he] ought to preach.' (Participant 05) But although pastors sometimes felt some of these topics, such as condom use and sexual behaviors, were inappropriate for sermons, many indicated that they discussed

them in other more controlled and private settings, such as workshops, youth groups, and ministries where dialogues could occur between pastors and individual congregants.

'If someone wanted to talk to me about that I would talk to them about it but I don't feel as though I should be in the pulpit telling people what their sexual practices ought to be. I just don't think that that's the right place to have that discussion.' (Participant 13)

Pastors of Black churches typically base their sermons on Bible passages. Therefore, lack of relevant scripture presented a barrier to several, who indicated that while they were not actually opposed to discussing these topics from the pulpit, they were unsure how best to incorporate the messages because there are no scriptures that directly pertain to issues such as condom use, birth control, and HIV risk characteristics of sex partners. 'These are areas in which the Bible is often silent ... there are some pastors who just believe that you should speak what the Bible speaks and you should be silent where the Bible is silent.' (Participant 01).

Moreover, most sermons address spiritual concerns, as opposed to some of the frankly secular topics we posed. Thus, there are few models for inclusion of these subjects in sermons. Some noted that pastors simply didn't know how to talk about these issues in a sermon setting. '... the challenge is how best to talk about them.' (Participant 19).

Not surprisingly, the taboo nature of sex makes its discussion in sermons difficult for many pastors. 'Certain conversations are somewhat taboo and your sexual practices are somewhat taboo when it comes to the pulpit...' (Participant 13) Said another: '... it's [sex is] a taboo subject and there really is no language to pretty it up enough... for some people.' (Participant 15) In addition to societal proscriptions concerning discussion of sex, another participant suggested that pastors' own inhibitions concerning sexuality may prevent them from talking about it.

'Well because some of them don't know how, some of them come from a generation of secrecy about sexuality, some come from theological traditions that tend to make you want to apologize that you're a sexual being or that all sex is evil... some of them are in these prisons of doctrine and thinking that sex is of the devil and so as a result, you don't talk about it or you don't deal with it. And ... some people have so many issues about sex that's why they don't talk about it.' (Participant 28)

Some acknowledged the stigma that continues to surround HIV/AIDS and believed that this stigma contributes to reluctance to discuss it from the pulpit.

Another obvious potential barrier related to discussion of taboo or stigmatized issues is the possibility that preaching about these topics might offend church members and endanger the pastor's position. This theme was seldom explicity mentioned, although it did emerge. One pastor noted pastors' concerns that church members who are offended by controversial messages might leave the church – a potentially important problem in small churches. He reported that although a few people had left his church because of his controversial sermons, the overwhelming majority of responses were positive.

'There's another reason why people don't talk about this kind of stuff from the pulpit ... they're afraid people are going to leave ... Part of the reason why I don't have that fear is because it's easy enough not to have that fear when you have thousands of people that come, but you know if you've got a church of a hundred people you're not trying to get twenty of those people to leave. .. I have had people that have left, but for me the percentage

of people who have left versus the percentage of people who come and want to be a part is no comparison.' (Participant 01)

The same participant, who pastored a non-denominational church of which he was the sole authority, felt that the administrative structure of some churches limited their pastors' power and constituted a barrier to discussion of sex and other controversial topics, as pastors can be removed if church authorities or in some cases, the congregation, becomes displeased with them.

'A lot of pastors don't talk about these things ... because they are not in a position when it comes to power where they can [talk about them]. The church is their employer ... [The church] can vote them in and can vote them out ... and they may not necessarily have the kind of power to say, Well I'm going to talk about what I feel I want to talk about whether you like it or not." (Participant 01)

Another pastor who had previously led a church that belonged to a denomination but now pastors an independent church, recalled an experience that confirmed this concern:

'I shared in these topics at the church, and the bishop got a call before I gave the benediction. So [now that I'm in an independent church] I don't have to worry about that ... but preachers that have others over them, they may have to be careful ... ' (Participant 23)

Facilitators: theological support, education and experience, relevance

Pastors also mentioned several factors that facilitated their incorporation of heterosexual risk behavior topics into sermon messages. Theological support, in the form of scriptures or accepted church doctrine, facilitated discussion of several topics, most notably marriage, infidelity, monogamy and abstinence. 'As long as I can find it in the Bible, I'm comfortable talking about it.' (Participant 24) Pastors found the scriptural connection essential to ensure that the congregation interpreted the sermon's message as the 'word of God' rather than a dictum from the pastor. 'A preacher should always – just like Jesus did – should always have the Scripture as his or her backup and not their opinion.' (Participant 09).

Pastors believed that their backgrounds influenced their ability to incorporate the suggested topics into sermons. Some had experience in health education or substance abuse treatment fields and felt that this knowledge facilitated discussion of heterosexual risk behaviors, HIV, and related issues. Another without such a background reported his desire to talk about HIV and related topics and felt that appropriate education would help him do so.

'I wanted to prepare a sermon and talk about AIDS, but ... there is nothing in the Bible that addresses the epidemic of AIDS ... Eventually if the Lord says so I am going to address those things, but I've got to have the proper preparation for it.' (Participant 25)

Additionally, a few pastors indicated that tenure in their church allowed them latitude to discuss potentially challenging subjects without fear of rebuke from congregation members.

'I have a good group and it's very easy to talk to them – especially now with me being in my fifth year here ... It usually takes a pastor, the longer he's here the easier it is for him to talk about subjects like this.' (Participant 09)

Interestingly, pastors' belief in the relevance of the suggested topics facilitated their ability to include them in sermons, and they agreed that that many issues, such as marriage, dating, and infidelity, were pertinent to their congregations.

'I would be interested and willing to discuss sexual behaviors from the broader viewpoint of marriage and dating because ... [in] our congregation, we have quite a few that are not married but that are sexually active and so discussing it ... should be no problem.' (Participant 33)

Many pastors were especially concerned about the impact of sexual behaviors and HIV on youth and also felt that the topics were most relevant to youth. Some therefore believed that a younger congregation would facilitate discussion of these topics from the pulpit. 'If it's a... a young congregation... I would seek to focus on marital relationships, romance, infidelity, abstinence... Whereas there are those 65 and above, not saying they're not active, but they probably won't be as active as those [younger] groups.' (Participant 12)

Discussion

To explore the feasibility of using sermons as an HIV prevention tool, we interviewed pastors of Black churches in North Carolina to learn their thoughts about discussing various topics related to heterosexual behaviors in sermons and the barriers and facilitators to their discussion in this setting. They expressed wide ranging opinions but generally agreed that sermons should discuss marriage, abstinence, monogamy, and infidelity. Their views concerning discussion of condom use, however, varied widely. The major barriers to incorporation of these subjects into sermons include the extent to which a concept undermines their religious beliefs and uncertainty about how to incorporate it into a sermon. On the other hand, scriptural support for a prevention message and the pastor's perception that the message is relevant to the congregation facilitate incorporation of related topics into sermons. Pastors' willingness to discuss not only abstinence and marriage, but also monogamy, infidelity, and dating, has implications for the potential utility of sermons as an HIV prevention tool, as these behaviors affect heterosexual HIV transmission through their impact on sexual networks.

Black pastors' reluctance to discuss sexuality has been noted by many others (Coyne-Beasley and Schoenbach 2000; Lincoln and Mamiya 1990) and has been attributed by some scholars to the legacies of slavery, racism, and sexual stereotyping that have characterized much of the existence of Blacks in the US during the last three centuries (Douglas 1999). In addition, as has been noted extensively in the past, HIV infection and the behaviors that facilitate its acquisition (e.g. sexual activity, including homosexual activity, and injection drug use) are stigmatized, rendering their discussion difficult in the context of sermons. Open discussion, however, would likely help destigmatize sexuality and HIV (Nunn et al. 2012; Cunningham et al. 2011), which could in turn benefit prevention and treatment of HIV and other related health outcomes.

Despite stigma and taboo, pastors were nevertheless willing to incorporate some topics into sermons, especially the more social and perhaps less controversial aspects of heterosexual relationships. Many discussed at least some of these issues themselves to varying degrees and believed other pastors did as well. Although the study design did not allow

us to determine exactly what pastors actually said about these topics in their sermons, their remarks during the interviews suggest that they were mainly admonitions on the importance of these issues, as opposed to in depth discussions. Such discussion may help reinforce protective norms. However, given the powerful demographic and economic forces that militate against longterm monogamy among US Blacks (Adimora and Schoenbach 2005, 2002), more specific remarks about how individuals may actually achieve the desired sexual behavior goals (despite the sometimes hostile context of life) might also be helpful.

Pastors believed in the efficacy of condoms in preventing HIV transmission; as others have noted, we observed no denominational patterns in their opinions about condom use (Miller et al. 2012). But most – including one who had conducted a sermon series on sexual relationships – did not believe that sermons should discuss condoms, mainly because they felt that discussion of condom use would undermine their abstinence messages and send confusing mixed messages. Thus, among those who did not believe condom use should be discussed, the major barrier to discussion is its perceived conflict with religious doctrine, a sentiment echoed by Black Baptist pastors, church leaders, and congregants in North Carolina in another qualitative study (Roman Isler et al. 2014).

Interestingly, a number of pastors who were not willing to discuss condom use from the pulpit were willing to discuss it in smaller settings, such as workshops and one-on-one discussions with congregants. While this tactic could help disseminate prevention messages and has been recommended by some HIV service providers (Obong'o et al. 2016), it would clearly reach a smaller audience than sermon delivery would. A substantial minority of pastors in our study argued passionately for open discussion of condom use to prevent HIV transmission and teen pregnancy. A few pastors expressed considerable tension between the need to maintain their doctrinal integrity and the need to protect their congregations with practical information.

A number of pastors indicated that they would be willing and able to preach about these topics if they could identify related scriptures. Others felt that they had insufficient knowledge, especially about sexuality topics more closely related to HIV, and needed more education to incorporate them into their sermons. Similarly, faith leaders in a Philadelphia study cited lack of knowledge about HIV and about the local epidemic as a barrier to the Black faith community's engaging in HIV prevention programs (Nunn et al. 2012). Investigators have employed strategies to increase faith leaders' knowledge and comfort related to discussing sex, such as development of an HIV tool kit with sermon guides that addressed HIV testing and parent-child communication about sex (Berkley-Patton et al. 2013). A study of Black faith leaders in Flint, MI who had been trained to provide HIV risk reduction to youth, found that after training, their comfort discussing sexual health topics increased (Pichon et al. 2012), and more than three-quarters were willing to make condoms available to youth (Pichon, Williams, and Campbell 2013). Few of the faith leaders in that study who were surveyed, however, were pastors, and it is unclear how many of the pastors were willing to discuss sexual health in their sermons. In our study, some of the pastors who discussed HIV and sexuality cited their education and professional experience (for example, in health education) as facilitators of this activity.

Pastors also cited concerns about reactions from the congregation and the church hierarchy and administration as a barrier to discussion of sexuality in sermons. The pastor's

autonomy and/or longer tenure of leadership in the church facilitated discussion – perhaps because of the increased knowledge of and relationship with the congregation a longer tenure afforded them. Both of these issues were cited by faith leaders in Philadelphia and Baltimore (Nunn et al. 2012; Cunningham et al. 2011). Despite these concerns, pastors who had preached about sexuality related topics indicated that positive responses tended to outweigh negative reactions. The pastor in our study who had preached about sex indicated that for every one of the (very few) people who was offended by these sermons and left his church, many more joined – perhaps *because* of the controversial sermons and their relevance to people's lives and concerns. Indeed, pastors in our study believed these topics were especially relevant to younger people, and their perception of the relevance of the subject matter increased their willingness to discuss them in sermons.

This study has some limitations. We did not address pastors' views on discussing homosexuality. We chose to restrict the study design to heterosexual behaviors because of many churches' homophobia and resistance to discussing homosexuality (Sutton and Parks 2013; Brooks et al. 2005; Coyne-Beasley and Schoenbach 2000). However, faith institutions' focus on heterosexual risk behaviors alone could have a beneficial health impact; given the high rates of heterosexually transmitted HIV infection in the Southern US, interventions to decrease heterosexual risk behaviors could help reduce the region's racial disparities in HIV infection. Second, the participants were not randomly selected from the general population of pastors, but were interviewed either because they agreed to participate in the larger study about developing sermons related to heterosexual behaviors or because they were recruited by one of the pastors who was participating in this study. They may not be representative of the larger population of pastors in NC. However, the age of the study pastors ranged widely, as did the size of the churches they led. They also expressed a wide range of opinions about some of the topics in the interview, suggesting that despite the study's inherent selection bias, the participants' views may be generalizable to other Black pastors in the region.

In summary, pastors of Black churches in NC had disparate views on discussing human sexuality in sermons. While many would not discuss condom use, almost all were willing to incorporate discussions of the less controversial social aspects of heterosexual behaviors, such as marriage, monogamy, infidelity, and abstinence in their sermons and other group discussions within their congregations. These behaviors affect HIV transmission through their impact on sexual networks. These findings suggest that it is possible for public health practioners and pastors of Black churches to form partnerships to tailor HIV prevention messages that are consonant with pastors' religious convictions and can be delivered to a population that is both difficult to reach and has an elevated risk of HIV.

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