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## A Response to Edzi (AIDS): Malawi Faith-Based Organizations' Impact on HIV Prevention and Care

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### Abstract

African faith-based organization (FBO) leaders influence their members' HIV knowledge, beliefs, and practices, but their roles in HIV prevention and care are poorly understood. This paper expands the work of Garner (2000) to test the impact of FBO influence on member risk and care behaviors, embedding it in the Theory of Planned Behavior. Qualitative interviews and quantitative surveys were collected from 5 FBOs (Christian and Muslim) in Malawi and analyzed using mixed methods. Contrary to Garner, we found that the level of power and influence of the FBO had no significant impact on the risk-taking behaviors of members; however, leaders' HIV knowledge predicted members' behaviors. Stigmatizing attitudes of leaders significantly decreased members' care behaviors, but FBO hierarchy tended to increase members' care behaviors. The power of local church/mosque leaders to influence behavior could be exploited more effectively by nurses by providing support, knowledge, and encouragement to churches and mosques.

### Keywords

Africa; HIV; care; prevention; religious organizations

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Sub-Saharan Africa remains the epicenter of the global HIV epidemic with 22.4 million people presently living with HIV (Joint United Nations Programme on HIV/AIDS [UNAIDS], 2009a). In Malawi, a highly impacted Southern African Development Community country, almost one million people are living with HIV out of a total population of 15.4 million for an HIV prevalence rate of 11-13% (United States Agency For International Development [USAID], 2010). In 2009, approximately 51,000 Malawi adults and children died of HIV-related illnesses (UNAIDS, 2009b).

In crafting a response to the HIV crisis, emphasis has been placed on civil society and on the role of faith-based organizations (FBOs) in both prevention and care efforts (Global Health Council, 2005; United Nations Children's Fund [UNICEF], 2003). The purpose of this report is to present a mixed-methods study exploring the strategies used by FBOs in Malawi to prevent the spread of HIV and to care for people living with HIV (PLWH).

## Background

### HIV in Malawi

As elsewhere in the sub-Saharan region, the HIV epidemic occurs in a context of poverty; Malawi remains one of the world's least developed countries, ranked 160 out of 182 countries on the Human Development Index (United Nations Development Programme, 2009). Eighty to 85% of Malawians live in rural areas. Villages are organized around tribes, which have unique and overlapping cultural values and practices that continue to shape the nature of the response to HIV (Msiska, 1995). Poverty contributes to the spread of HIV by decreasing people's educational and economic capacities (McCreary et al., 2008; Norr, Norr, McElmurry, Tlou, & Moeti, 2004).

### Faith-Based Organizations and the HIV Epidemic

FBOs are of particular interest in the struggle for HIV prevention and service delivery because they often provide health related infrastructures reaching into the rural areas. FBOs tend to be the custodians of values influencing members' behaviors. Leaders are frequently accorded respect as opinion leaders in their communities and, in religious ceremonies, have a public platform from which to challenge destructive prejudices that reinforce stigma, while conveying important information concerning HIV prevention and care (Global Health Council, 2005).

However, FBOs also have engaged in harmful teaching and practices that promulgate HIV-related stigma, inaccurate information, and judgmental attitudes and behaviors (Lyle, 2009; Rankin, Lindgren, Rankin, & Ngoma, 2005). Stigma is widely recognized as a major barrier to the success of programs to prevent, diagnose, and treat HIV infection (Alubo, Zwandor, Jolayemi, & Omundu, 2002; Rankin, Brennan, Schell, Laviwa, & Rankin, 2005; Varas-Diaz, Neilands, Malave Rivera, & Betancourt, 2010).

Religions contain many of the psychological, social, and spiritual resources that may help those affected by HIV. For example, Olley and colleagues (2003) found that religion was a coping strategy used by women found to be infected with HIV. Conversely, Rankin and colleagues (2005) found religion to be one of three factors that influenced Malawi women's risk taking behaviors, as churches offered little support to women in their care-giving work, did not encourage HIV prevention education, and reinforced stigma.

The importance of FBOs in buttressing a code of sexual ethics that supports scientifically proven prevention strategies such as delayed sexual debut (abstinence) and partner reduction (fidelity) has not been overlooked by those seeking to slow the epidemic. Studies have found that religious commitment is associated with improved HIV knowledge, the delay of sexual

debut and decreased extra- and pre-marital sex (Agha, Hutchinson, & Kusanthan, 2006; Garner, 2000; Hallett et al., 2007; Rostosky, Regnerus, & Wright, 2003; Sallar, 2008).

While little is known about the African Christian churches' response to HIV, even less is known about the Islamic response to HIV. Studies have found lower HIV prevalence in the Muslim community throughout Africa (Maulana, Krumeich, & Van Den Borne, 2009), but it is unclear whether this is related to the practice of circumcision among Muslims or other factors (Gilbert, 2008; Todd, Nassiramanesh, Stanekzai, & Kamarulzaman, 2007).

Estimates of religious affiliation in Malawi reveal that 77% of the population is Christian and 15% Muslim (Jenkins, 2002). Roman Catholics comprise the largest Christian group, representing about 25% of the population, mainline Protestants (Presbyterian, Methodists, Anglicans, etc.) represent 20%, and evangelical and Pentecostal groups together constitute about 32% of the population. For the purposes of this study, five FBOs were chosen to reflect the breadth of Malawi religious diversity. Three of the groups represented what are traditionally known as mission churches or mainline Christian as categorized by Garner (2000): Roman Catholics, Anglicans, and Baptists. The fourth group was an indigenous Pentecostal church that was started in Malawi in the latter half of the 20<sup>th</sup> century. Because of the importance of Islam to Malawi, and to much of eastern Africa, we also included Muslim groups.

### Theoretical Framework

With the aim of advancing the theoretical understanding of the role of FBOs in HIV prevention and mitigation, we used the Theory of Planned Behavior (TPB; Ajzen, 1991) to examine HIV risk and prevention. A schematic model (Figure 1) is presented with shaded areas illustrating those variables that were examined for this paper. The TPB (Ajzen, 1991) is a derivation of the Theory of Reasoned Action (TRA; Fishbein, 1980) and has been widely used in HIV research, including studies of prevention behavior in the African context (Albarracin, Johnson, Fishbein, & Muellerleile, 2001; Bosompra, 2001). The TRA asserts that an individual's intentions influence overt behavior. Intentions are in turn influenced by the individual's knowledge and attitudes toward the behavior and by the individual's perceptions of social norms. The TPB includes a modification of the original TRA with the addition of a fourth variable, perceived control, meaning the individual's perception of his or her ability to execute the intended behavior. This paper focuses on knowledge, stigma, or attitudes as addressed in the TPB, subjective/social norms, and HIV risk-taking and caregiving behaviors.

### Social Norms as a Function of Power and Influence in Religious Groups

Our study utilized the work of Garner (2000), who identified four non-pejorative categories that reflected the ways that FBOs exerted power and influence over their members: (a) indoctrination, which addressed the ways members learned about their FBO's perspective on the world; (b) religious/subjective experience, which reflected members' perspectives of how FBO services affected their emotions and engagement with the FBO; (c) exclusion, which identified the perceived boundary between FBO members and society at large; and (d) socialization, which reflected the extent that the FBOs influenced members' social lives, including the level of surveillance and control of social activities. Garner (2000) defined power as the extent of an organization's ability to mobilize both numbers of people and levels of commitment and influence to describe the organization's ability to affect behavior.

Garner (2000) ranked four South African Christian churches, one mainline Protestant and three that reflected more Pentecostal/evangelical groups, using his categories and found that churches that ranked high in all four categories exerted more influence over their members,

leading to a reduction in extra- and pre-marital sexual behavior. He concluded that FBO value-laden discourse has the power to affect the sexual behavior of its members. For the study reported here, we used Garner's categories to help us understand the ways each of the five Malawian FBOs exerted power through indoctrination, religious experience, exclusion, and socialization to influence members' HIV risk-taking behavior as well as behaviors that mitigate the effects of the epidemic (e.g., caring for those who are ill, caring for orphaned children).

## Methodology

This study used a mixed-methods, cross-sectional design to describe FBO perspectives on HIV and strategies for prevention of spread and care of those who are affected by HIV. Data encompassed in-depth, semi-structured qualitative interviews and a structured quantitative questionnaire administered to both local religious leaders (identified as leaders of a church/mosque congregation) and their congregational members.

## Sample and Setting

First, a purposive sample of 44 central level FBO leaders was interviewed in-depth. These central leaders then helped with access to 75 local leaders (who directly led churches and mosques), 15 leaders per FBO. We also recruited 8-10 members from each of the 75 churches/mosques for a total of 667 members. All of the local leaders ( $n = 75$ ) completed the quantitative questionnaire and were also qualitatively interviewed. All church/mosque members ( $n = 667$ ) completed the quantitative questionnaire and 1-2 members per church/mosque were randomly chosen for a qualitative interview ( $n = 137$ ). Additionally, 49 PLWHs were qualitatively interviewed (Figure 2). Analysis of central leader data have been addressed elsewhere (Rankin, Lindgren, Kools, & Schell, 2008), and PLWH data are not included in this report. Interviews (both in-depth and quantitative survey questionnaires) were conducted in settings that were convenient and confidential for the respondent. Local leaders were interviewed at their churches or mosques, and members and PLWH were interviewed in rural villages or small trading centers.

The study was approved by a U.S. university institutional review board and the Malawi Ministry of Health Research and Ethics Committee. Information sheets explaining the study and stressing the voluntary nature of participation were given or read to potential participants and verbal consent was obtained. This permitted participants (including those who were semi-literate) to engage in the study without revealing any personal information such as name or other identifying data that might put them at risk concerning sensitive matters.

## Data Collection

Data were collected from 2006-2009 beginning with in-depth qualitative interviews with central leaders. The purpose of these interviews was to identify the central FBO perspective on how they have responded to the HIV epidemic and to explore the FBO structure and how information and policies were disseminated within the organization.

Subsequently, we conducted qualitative interviews and quantitative survey questionnaires with 15 local leaders from each FBO and with some of their members. Research team members conducted qualitative interviews in English and Chichewa, the two official Malawi languages. Semi-structured interviews, lasting from 45 to 90 minutes, were digitally recorded and transcribed verbatim into English by Malawi and U.S. research team members. Malawi college graduates trained in translation and transcription translated qualitative interviews in Chichewa into English. The Malawi project director and interviewer

supervisor initially reviewed every translation for accuracy and spot-checked translations throughout the entire project. Inconsistencies in translation between the research supervisors and the Malawi college graduates were discussed and a consensus was reached on the appropriate translation.

Malawi research leaders translated the quantitative questions into Chichewa and content validity was achieved through cognitive debriefing with Malawi research assistants during their 4-day training session. Quantitative data were collected by our trained Malawi research assistants through face-to-face interviews that lasted 20-30 minutes.

### Qualitative Measurement

Semi-structured interview guides were created to explore Garner's categories and to identify the ways in which the church leaders and members were responding to the HIV epidemic. For example, we asked: How has your community and your church/mosque been affected by the HIV/AIDS epidemic? and What efforts has your church/mosque made in relation to the HIV/AIDS epidemic?

To address Garner categories we asked members: How do you (members) learn about your faith and church/mosque values (probes: preaching, Sunday School, Madrassahs, Bible Study)? (to assess indoctrination); What is it like to be a part of worship at your church/mosque? (to assess religious experience); *How do you participate in village/town activities?* (to assess exclusion); and What kinds of social activities do you do and how much time do you spend with church/mosques members? (to assess socialization).

Our Malawi research team leaders translated the interview guides into Chichewa and linguistic validation was achieved through cognitive debriefing with Malawi research assistants. The U.S. research team guided the research assistants to be sure that the Chichewa questions were capturing the relevant concepts. Initial qualitative interviews were reviewed by both U.S. and Malawi team members to be sure that the participant responses reflected understanding of the questions and modifications were made as needed. The qualitative interview guides evolved based on data collected from central leaders, local leaders, and members to better focus on emerging themes, issues, and concerns.

### Quantitative Measurement

Quantitative data were based on the TPB and the variables tested for this paper represent those areas shaded in Figure 1. With the exception of the power and influence measure that we created, the measures used for this study were chosen because they have been repeatedly used by international, bilateral, and multi-lateral health development agencies in African populations to determine knowledge, attitudes, and behaviors related to HIV. These measures are indexes rather than scales and therefore do not have internal consistency. Scales are composed of items that are manifestations of an underlying hypothetical construct whereas indexes are made up of items that define the construct itself (Streiner, 2003).

**Knowledge about HIV**—Knowledge about HIV was measured using two 7-item instruments that assessed knowledge and misconceptions about HIV including questions about prevention, transmission, and symptoms that we refer to as knowledge of infection and knowledge of prevention. This 2-part questionnaire was developed for South African adolescents ( $n = 3,052$ ) as part of the Study of Transition to Adulthood (The Transitions to Adulthood Study Team, 2004). The questionnaire did not have reliability and validity data published in the report but was consistent with previous questionnaires measuring knowledge in African samples. The questions required subjects to volunteer responses rather

than simply offering a set of answers. Answers were coded *true* or *false*; the true responses were summed to provide the knowledge score.

**FBO power and influence**—This variable, representing the TPB subjective norms concept, was created through careful assessment by the U.S. research team ( $n = 11$ ) all of whom had worked on the project in Malawi. In order to gauge FBO power and influence on their members, the research team coded qualitative data from the questions used to ascertain each FBO's experience of Garner's (2000) four categories (indoctrination, religious experience, exclusion, and socialization), noting similarities and differences within and across FBOs. Once saturation was reached, an in-depth description of each FBO was created and, based on these descriptions, each research team member rated the FBOs in each category. These ratings were then discussed at a team meeting and any discrepancies were collaboratively resolved. This iterative process resulted in FBO rating scores in each of the 4 categories (see Table 1). The power and influence score was then created by totaling the 4 categories for each FBO. Baptists received a score of 16; Pentecostals, 20; Roman Catholics, 13; Anglicans, 9; and Muslims, 15 (see Table 1). Per Garner's conceptualization, the higher the rating, the greater the power and influence an FBO exerted over its members.

Based on analysis of central leader qualitative data, we identified an additional aspect of FBO power and influence that was not addressed by Garner (2000), namely the strength of the FBO hierarchy. Qualitative data indicated that FBOs with a well-defined hierarchical structure were better positioned to disseminate prevention information and care activities throughout the organization than those organizations with a more diffuse hierarchy. Therefore, we added hierarchy to Garner's power and influence schema, strengthening our mixed-methods approach.

**HIV stigma**—Stigma was measured using questions from the MEASURE evaluation (USAID, 2003). Attitudes toward HIV are generally measured using a series of hypothetical questions about men and women with HIV. These were used to measure the attitudes component of the TPB. The questionnaires reflected what people would say they would feel or do in situations involving PLWH. Four questions, answered *yes* or *no*, tapped accepting attitudes and lack of stigmatization toward PLWH. Early analysis of the qualitative central leader data indicated that additional questions needed to be added to capture the fear of stigma related to family, friends, and religious congregations (e.g., If you found out you were HIV positive, would you be afraid to tell your pastor/priest/imam?). From these dichotomous questions, a stigma index (0-10) was created by summing the responses to the stigma questions; a higher score indicated a more stigmatizing attitude toward PLWH.

**Risk-taking and care/mitigation behaviors**—According to the TPB, behavior was predicted by knowledge, attitudes, subjective norms, perceived behavioral control, and behavioral intentions. Risk-taking was determined based on responses to five questions on behaviors that individuals had engaged in over the previous 6 months (USAID, 2003). The four positive behaviors, such as having only one partner, were reverse coded, and then all responses were summed, creating a risk index with a 0-5 score; a higher score reflected greater risk. Care behaviors were based on responses to seven questions, again assessed over the previous 6 months (USAID, 2003). One negative care behavior was reverse coded and then responses were summed to create a care behavior index with a 0-7 score; a higher score reflected more care behaviors.

## Data Analysis

Qualitative description was used to reduce and thematically analyze in-depth qualitative interview data. Qualitative description is a “low inference,” less interpretive analysis, not

requiring a “highly conceptual or abstract rendering of data,” to obtain “unadorned” or “minimally theorized” answers to specific questions (Sandelowski, 2000, p. 335, p. 337). Atlas.ti, a computer software program that facilitates qualitative analysis of large bodies of textual data, was used to aid the analytic process. Research team members read the transcripts and field notes, and open coded the data without regard for relative importance of initial codes. This phase of analysis served as data expansion and allowed for an understanding of the breadth of ideas and concepts expressed in the interviews. Once a critical mass of data was coded in this manner, we moved to focused coding to identify patterns across interviews and develop an understanding and description of salient themes.

Quantitative data collected from local FBO leaders and FBO members enabled a multi-level design that allowed outcomes obtained from FBO members (Level 1) that were clustered within local leader groups (Level 2). Quantitative measurement focused on six variables outlined in Figure 1: HIV knowledge (of infection and prevention), stigma, power and influence of FBO, behavioral control (condom use and communication), behavioral intentions, and past behaviors (risk-taking and care behaviors). However, for the purpose of this analysis, we focused on only three predictors of member risk-taking and care behaviors: (a) knowledge about HIV, (b) the power and influence of the FBO, and (c) stigma attitudes of members and their local leaders.

In this study, the usual assumption of independent errors is violated for participants from the same local FBO. FBO members existed within a hierarchical data structure that included local religious leaders, local religious entities, and central religious leadership. People within such an FBO hierarchy will be more homogeneous than people randomly sampled from the larger Malawi population. Individuals within FBOs tend to share certain characteristics (demographic, geographic, and belief system orientation), so measures from these individuals were not fully independent. Multilevel regression, also referred to as hierarchical linear modeling, was therefore conducted to incorporate this non-independence into the analyses (Hox, 2002; Snijders & Bosker, 1999). We conducted two-level analyses for each of the two quantitative outcomes, with individual observations clustered by local group membership (leaders). The PASW Statistics for Windows™ (version 16) MIXED module was used for these analyses because the data appeared to have normal (or not seriously skewed) distributions. Random intercepts models were examined, using full maximum likelihood (ML).

Hox (2002) provided guidance for power analysis for multilevel regression. We expected the intraclass correlation within clusters to be weak, albeit nonzero. (The intraclass correlation is an appropriate measure of non-independence in this case.) Following guidelines for the definitions of small, medium, and large values for the intraclass correlation, and wishing to err on the conservative side, we estimated the intraclass correlation to be .05 (the small value). With this level of non-independence taken into account for the multilevel logistic regression, a total sample of 504.4 participants would have been required to detect the effect of a single predictor in the multilevel model, or approximately 127 from each FBO. This number required that we obtain eight to nine participants from each of the 15 local groups in each of the five FBOs (75 groups total). We had a total of 667 participants and achieved a power of 0.80 with an alpha of 0.05 with a small effect size.

## Findings

### Qualitative Findings

All of the local leaders interviewed believed that they had significant influence over the behaviors of their members. The key method by which FBO local leaders attempted to

establish power and influence over members was through behavioral exhortations delivered through preaching and teaching.

**Behavioral exhortations**—Eighty-five percent of local leaders stated that they talked about HIV “a lot,” and all local leaders indicated that they had a lot of influence over their members’ behaviors. Most leaders felt that members listened to their preaching/teaching about the dangers of HIV and that “most members that understood the subject would take the advice” and heed these words because they were “the word of God” or “Allah.” As one Pentecostal preacher noted:

Since preaching needs skills, when preaching about HIV/AIDS on the pulpit, you can observe that people are listening to what you are talking about or not. The attention that people have when someone is preaching foretells that they are listening to what is being preached.

Behavioral exhortation took the form of teaching their members that to fear God/Allah and obey his laws/commandments would keep members from “coming near to [contracting] HIV/AIDS.” As one Muslim leader noted:

Well, we start with telling people that they should be God fearing. What that means is that when you fear God it means that there is nothing bad that can happen to you because you become a careful person.

Leaders were aware that the day-to-day experiences of living with the epidemic changed members’ behaviors and bolstered leaders’ exhortations. As one Catholic local leader noted:

It's changing because now people have seen with their eyes how people are suffering. Those remaining are touched in their hearts; they now listen, and deny themselves [unsafe behaviors]. They now know the consequences of their behaviors; there are others in the villages who are infected and people know that because they never listened to [religious] advice, they are suffering.

FBO members, in general, seemed to concur with their local leaders, indicating the impact of behavior exhortation, noting that they listened to the words of God/Allah and the leaders’ advice. The data revealed that both leaders and members felt that the behavioral exhortations set social expectations for members. As one Muslim member commented, not listening to God’s word could have dire consequences:

This mosque has taught us in that it was already said by Allah that because the people do not want to listen, things will change. There will be various diseases like the way it is now.

However, members were less sanguine about how much their local leaders’ preaching and teaching impacted members’ risk-taking behaviors. Although the majority of members stated that they listened to their leaders’ advice, many, especially young members, indicated that they did not necessarily follow the advice of their leaders. Two subthemes emerged from the data that help explain the discrepancy between FBO leaders’ and members’ perspectives on the power and influence of FBOs on members’ behaviors: knowledge transfer and stigmatizing discourses.

**Knowledge transfer**—Behavioral exhortations by leaders were supported by knowledge that was transferred from the leaders to the members during preaching or teaching. However, the impact of the local leader depended upon both quality of knowledge about HIV and willingness to discuss sexual behavior, relationships, and marriage within the context of religious and cultural proscriptions. For many leaders, preaching about HIV meant they talked globally about the “dangerous disease out there” and the need to be



careful and abstain from inappropriate sexual behavior. As one Pentecostal leader noted: “We should preach about abstinence and also telling those that are married to be very faithful to each other because without that there will be problems.”

However, particular information about modes of transmission, getting tested, treatment, and means of protecting oneself beyond abstinence and faithfulness was often poorly addressed. As one Muslim member noted, “they [local leaders] just preach from their knowledge of HIV/AIDS.” However, talking about sexual matters was culturally difficult as one Anglican local leader noted:

The culture of we Malawians makes us uncomfortable to talk about HIV because since our parents, it is difficult to talk about the subject of a baby. We would be told that the baby was brought from the hospital and not that someone gave birth to it. It was assumed as a taboo to tell children that way. If you talk about it in the church, some people will still feel that it is taboo. So when we talk about sexual matters in church in the presence of everyone, including kids, we are very uncomfortable.

There was a wide variation in the extent and quality of the knowledge that was transferred. While every participant (both leaders and members) in the study had heard of HIV, some knew very few particulars. However, some members remarked that they were not getting enough information from any source, including their religious leaders, and needed more, as this Anglican member indicated: “[we tell the youth] we should abstain because there is HIV/AIDS, but we just say that because we heard it from other sources, but we really don't know much about that.”

A particular gap was the lack of knowledge about mother-to-child transmission. Only 28% of local leaders and 16% of members mentioned mother-to-child transmission as a mode of HIV infection on the quantitative survey. As one Catholic member noted: “The church has not spoken about such issues, but people from Malawi Blood Transfusion are the ones that tell the church about such issues, but as for the church, it has not done that.”

Moreover, while religious leaders generally knew that antiretrovirals (ARVs) existed and were helpful, there was a wide range of understanding about the use and application of these medications and limited discussion about them with church/mosque members. Treatment was left to the hospitals and most leaders did not see the importance of encouraging members to access and take ARVs. Only leaders who had family members on ARVs or who had worked with HIV-outreach groups were cognizant of the importance of nutrition and adherence to the medication regimen. Additionally, FBO leaders at times delivered mixed messages about the value of ARVs as treatment for HIV. One Pentecostal PLWH noted:

[The pastor] tells us that we can be taking the ARVs and at the same time we are also praying, or else you can just be praying to God. Interviewer: He tells you that you can choose whether to be praying to God or taking the ARVs? Respondent: Yes.

Although most members and leaders talked about HIV, universally mentioning abstinence and being faithful as key protective behaviors, these terms were used as general exhortations for “good behavior” that is, “showing a good example in society.” Very few specifics were conveyed. However, occasionally, the data revealed that very specific and detailed information had been conveyed by a leader and such instances made a significant impression on members, perhaps having greater influence over behavioral intention and, ultimately, behavior:

He [the pastor] says that if a person has a deep feeling about sex and wants to have sex with a woman, he should make sure that his penis is erect before putting on a

condom. He must also check before putting it on, because you can use the condom without knowing that it has some defects. It will mean you can certainly get HIV.  
(Anglican member)

The generality of local leaders' messages about HIV, coupled with their reluctance to speak about sexual matters, limited the effectiveness of their messages to members. Additionally, the focus on abstinence and faithfulness left little room for disclosure of failure, mistakes, or frank discussion about prevention. It was around issues of condoms, HIV testing, and disclosure that stigmatizing discourses were framed.

**Stigmatizing discourses**—While two leaders stated that they had no members who were infected with HIV, the vast majority acknowledged that they knew members had died from AIDS and they encouraged caring for the sick, regardless of the cause of the illness. We frequently heard from both leaders and members that, “AIDS is just like any other disease, like malaria,” which seemed to have reduced openly discussed discriminatory practices, but some stigmatizing discourses remained.

Under the influence of the ABC (abstain, be faithful, use condoms) rubric propounded throughout Africa, local leaders recognized that condoms had a protective function, however, they only advocated the use of condoms when a person “fails to abstain.” A Baptist member noted: “Our church encourages us on abstinence, this is number one. Another thing is that if one *fails* to abstain, he must use a condom.” Use of a condom or seeking to use a condom defined one as a failure at being a good Christian or Muslim. Failure to abstain could provoke disciplinary action: “They should also abstain from premarital sex; premarital sex is a sin against the will of God. So if we get to know that, we discipline them for either 3 months or 6 months” (Pentecostal local leader).

The struggle that religious leaders confronted in trying, on the one hand, to uphold religious proscriptions about appropriate and moral sexual behavior, and, on the other hand, to recognize the preventive power of condoms in the HIV epidemic, ended up leaving little room for recognition of human weakness or space to guide members to healthier behaviors. An Anglican local leader said, “I talk about this even in the pulpit in the church, that if we fail to abstain from sex, we can use condoms. Because we have failed to abstain from sex, it is not good to be dying of AIDS, but better that we use condoms.”

A number of the local leaders told us that they encouraged their members to go for HIV testing and counseling (HTC) and their members concurred. Indeed, we heard some of the language used by the government to encourage testing such as “know your body status to plan for the future” from both leaders and members. When a local leader was willing to talk openly about HIV testing, the effect could be powerful and non-stigmatizing. One Anglican member noted:

The pastor encourages us to go for HTC to be aware of our status, and if you don't want to go for HTC, he tells us that we should be using a condom. But he emphasizes much on HTC so that we can know what is all about in our bodies.

However, some leaders' perspectives on who should be tested promoted stigma as only those who had not been a good Muslim or a good Christian needed to get tested. One Muslim local leader noted:

We tell them that if from your birth you have observed the law of Allah properly, there is no need for you to go for AIDS test; but if in the face of the truth you know inside your heart that you do a lot of things and are not faithful it is better that you go for HCT so that you reduce the spread of HIV/AIDS.

Another area in which leaders' exhortations impacted behaviors was within the realm of disclosure of HIV status. Members expressed reluctance to reveal their status to their pastors, priests, or imams. All but one local leader told us that none of their members had revealed their status to them, even though they knew members had gone for HIV testing. There were very few instances in these interviews in which members told stories of someone in their church or mosque who had revealed their HIV status.

Members, even those who told the interviewers they had gone for testing, were generally reluctant to tell their pastors or imams their test results, but they were even more concerned about telling other church or mosque members. However, this reluctance was situated within general social norms of keeping one's status secret. Indeed, in instances where personal testimony by a church or mosque member was reflected upon in the interviews, respondents indicated that some congregation members were upset that a member had revealed his or her status.

There was someone who was tested and found positive, he never kept it a secret, he openly said it. Interviewer: What picture did the members have of him?

Respondent: We were staying with him all right, we didn't discriminate him, but others were saying, "Why is he saying that? We thought that was supposed to be a secret." (Muslim member)

Members most feared being "talked about," "gossiping," and "pointing fingers." One member noted that he did not reveal his status to church members, as there was "no secrecy in the way they behave" and that he feared that members would "publicly announce" his status. However, a Baptist member noted that when a church member did stand up and declare his status he was accepted and was not talked about behind his back. Nevertheless, the fear of stigmatization continued to restrict disclosure.

### Quantitative Findings

Tables 2 and 3 report the local leaders' and members' mean scores for risk and care behaviors, knowledge, and stigmatizing attitudes by FBO. No statistically significant differences were found among the five FBOs for the four TPB variables assessed, i.e., attitudes (stigma), social norms (power and influence), risk taking, and care behaviors. However, in our multilevel models, we did find that certain single predictors at the leader level (power and influence, hierarchy, knowledge, and stigma) were significantly associated with members' risk taking and care behaviors.

**FBO power and influence, FBO hierarchy, leaders' knowledge and stigma, and members' risk-taking behaviors**—We found no statistically significant relationship between the variables we created based on Garner's conceptualization of power and influence and members' risk behaviors (see Table 4). However, the trend suggested a relationship opposite to Garner's finding; that an increase in the power and influence of FBOs increased members' risk behaviors. Additionally, we explored the impact of FBO hierarchy on members' risk behaviors but found no statistically significant relationship for this variable. Leaders' knowledge of infection predicted members' risk-taking behaviors ( $p = .003$ ), such that less leader knowledge was associated with more risk-taking behaviors on the part of the members, but leaders' knowledge of prevention had no significant impact on members' risk-taking behaviors (see Table 4). We explored the impact of leaders' stigmatizing attitudes on members' risk behaviors, but found no statistically significant relationship.

**FBO power and influence, FBO hierarchy, leaders' knowledge and stigma, and members' care-taking behaviors**—As Table 4 indicates, the power and influence

variable had no statistically significant impact on members' care behaviors. FBO hierarchy trended toward significantly impacting members' care behaviors. The members of the more hierarchical organizations (the Catholics and the Anglicans) exhibited more care behaviors. Higher leader stigma attitudes decreased members' HIV-related care behaviors ( $p = .039$ ). However, neither leaders' knowledge of infection nor their knowledge of prevention was statistically significant in impacting members' care behaviors.

## Discussion

This study sought to explore the power and influence FBO leaders have over their members' risk-taking and care behaviors within a TPB framework. We expanded upon Garner's (2000) conceptualization of the ways FBOs exert power and influence over their members' risk-taking behaviors, to encompass a wider variety of FBOs and to include exploring the power and influence of FBO leaders on the care behaviors of their members. Consistent with Garner's (2000) work, we found that the Pentecostal group rated highest in power and influence over its members with the Anglicans exhibiting the least. Roman Catholics rated high in indoctrination and moderate in the other areas, but Baptists rated relatively high in all four of Garner's categories, making them look much more like Pentecostals. Interestingly, Muslims rated high in three of the four categories making them somewhat similar to Baptists in terms of power and influence as defined by Garner.

While our qualitative data indicated that the hierarchy of an FBO was an important aspect in the organized dissemination of information and practices within an FBO, the quantitative analysis showed that hierarchy only demonstrated a trend in terms of influencing members' care behaviors. As expected, members from the more hierarchical FBOs (Catholics and Anglicans) exhibited the most care behaviors.

Contrary to Garner (2000), we found that FBO power and influence did not significantly influence the risk-taking behaviors of its members. Additionally, the trend identified in our quantitative data suggested that the members of the FBOs with the greatest amount of power and influence exhibited more risk-taking than those from other FBO groups. This difference could lie in the way risk was measured in our study. Garner used available proxy measures (e.g., illegitimate birth) to determine the sexual risk variable, while we asked explicitly about risk-taking behaviors based upon widely used measures. Additionally, our use of a wider variety of FBOs may have made our sample more heterogeneous than Garner's.

Our qualitative data, however, supported the perspective that FBOs with the most power and influence may have negatively impacted their members' behaviors in particular ways. First, the strong condemnation of condoms because of fear of promoting promiscuity and a discourse that linked condom use with sin may have reduced the likelihood that members had the knowledge, skills, and willingness to use condoms in risky sexual encounters. U.S. based studies with FBOs have shown that strong religious disapprobation of pre-marital sex may delay sexual debut, but when debut did occur, the young person was less likely to use a condom (Rosenbaum, 2009; Rostosky et al., 2003). Second, to remain a member in good standing in a church that exerted more power and influence, the individual had to appear to behave in a proscribed manner or face discipline. Fear of falling out of favor had the potential to positively affect risk-taking behaviors; however, it also constrained disclosure of such behaviors. The fact that there was little room to make mistakes and learn possibly resulted in a de facto lack of influence on member behaviors because it forced people to hide "bad" behavior. Finally, the expectations surrounding being a good Christian or Muslim inhibited open discussions about risky sexual behaviors and condoms as a strategy for HIV prevention (Rankin et al., 2008).

Religious leaders, however, did have influence on the behaviors of members based on the effectiveness of their behavioral exhortations, particularly through knowledge transfer and stigmatizing discourses. Leaders' knowledge about HIV was critically important. Insufficient knowledge made it impossible for the leaders to convey accurate and complete information to their congregants. The gap in knowledge about mother-to-child HIV transmission was a case in point, both among religious leaders and their members. Moreover, as our data showed, when knowledge was transferred in a way that was specific, detailed, and concrete, it was more effectively conveyed to congregation members. However, religious leaders and members alike struggled with socio-cultural taboos that surrounded discussions about sex or even pregnancy and childbirth.

FBO leaders' exhortations impacted members both positively and negatively. Leaders in our study encouraged their members to be tested for HIV and to care for the sick. Data from congregants showed that members took up these messages and acted upon them. However, FBO leaders' stigmatizing attitudes negatively affected members' care behaviors. Quantitative data indicated that as leaders' stigmatizing attitudes increased, members' care behaviors decreased. Therefore, changing FBO leaders' attitudes could improve the community care of PLWH in Malawi.

Qualitative data in our study suggested that fear of stigmatization by FBO leaders and members kept disclosure of serostatus secret, thereby limiting the potential care and support PLWH members could receive from their FBOs. Additionally, when leaders used terms such as "failure to abstain" to designate those who could use condoms, open discussion of behavior choices was severely constrained. Finally, FBOs could use their exhortations to limit harmful behaviors such as gossiping; however, members indicated that they did not trust their FBO leaders or fellow congregants to keep confidential any information about a member's HIV status.

In the final analysis, risk behaviors occurred in private and were kept secret. This secrecy extended to condom use as a means of reducing the spread of HIV in Malawi and disclosure of testing and HIV status. FBO leaders' negative attitudes toward condoms, and mixed messages about HIV testing and condom use exacerbated the situation. Sexual behavior was not an openly discussed topic, either from a cultural or religious perspective, and as such was less amenable to the influence of religious norms. On the other hand, caregiving was a very accepted behavior in African culture and generally fell to the extended family and, indeed, the entire village (Ogden, Esim, & Grown, 2006). Such behavior was also supported by doctrinal texts and religious precepts, both Christian and Muslim, where adherents were enjoined to practice care for the sick and vulnerable. Expansion of community caring practices were well within the purview of FBO leaders' exhortations and more could be done to expand religiously oriented community based care.

### **Limitations**

Our findings may not be generalizable to other sub-Saharan African countries because Malawi's social and religious climates were somewhat more conservative than other countries in sub-Saharan Africa (U.S. Department of State, 2011). The volunteer nature of the interview data may also have influenced our findings.

### **Application to Nursing Practice**

Working with FBOs, both Christian and Muslim, has the potential to affect behavior change at the local level in ways that could both reduce the spread of HIV and increase the mitigation behaviors of community members. Religious leaders have influence on the behaviors of their adherents, but they could do more. FBOs and health care providers need

to ensure that local religious leaders are equipped with accurate and complete knowledge about HIV and are encouraged to communicate this information to congregants regularly and repeatedly. The power of the leader to influence behavior could be exploited more effectively by nurses to promote prevention and care practices among FBO members. For example, speaking out about gossiping by pastors and imams would help to reduce the fear of stigmatization expressed by PLWH, members, and leaders, thereby encouraging testing and earlier treatment for HIV.

Our findings regarding hierarchy also have implications for those who work with these organizations on HIV issues. Groups that lack a well-established hierarchy may benefit from support and assistance in organizing care activities that are targeted at local organizational levels because one cannot expect that information and assistance from central religious leadership will readily diffuse through these groups. Nurses in Malawi are well positioned to provide support, knowledge, and encouragement to churches and mosques.

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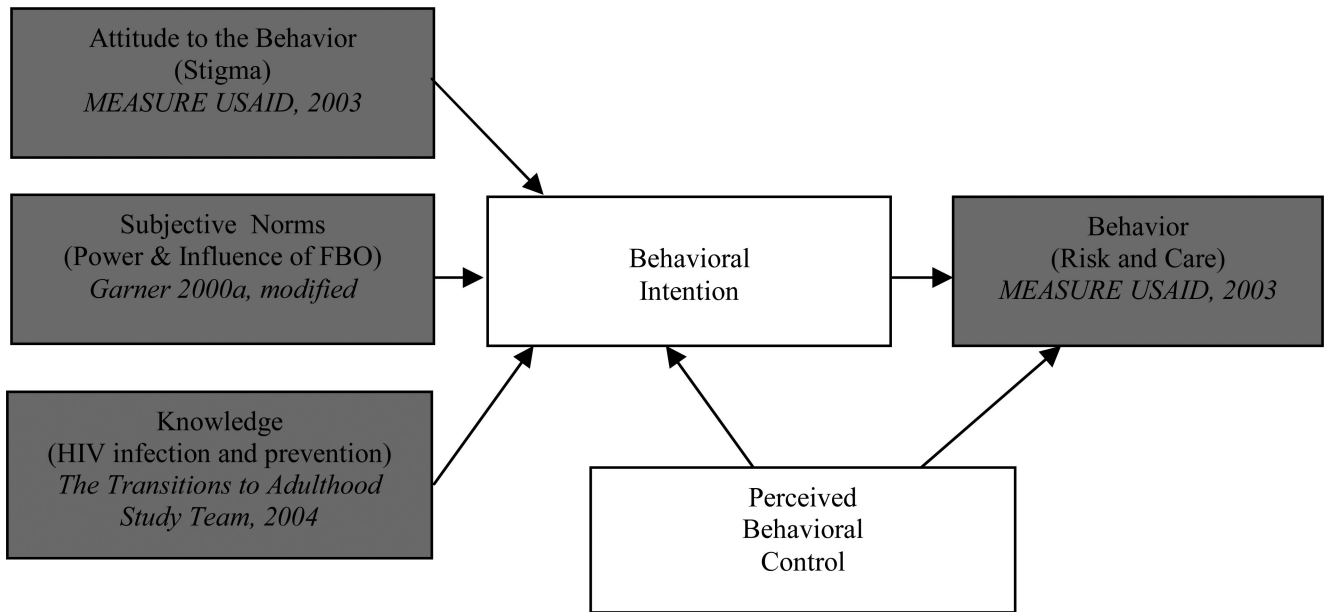
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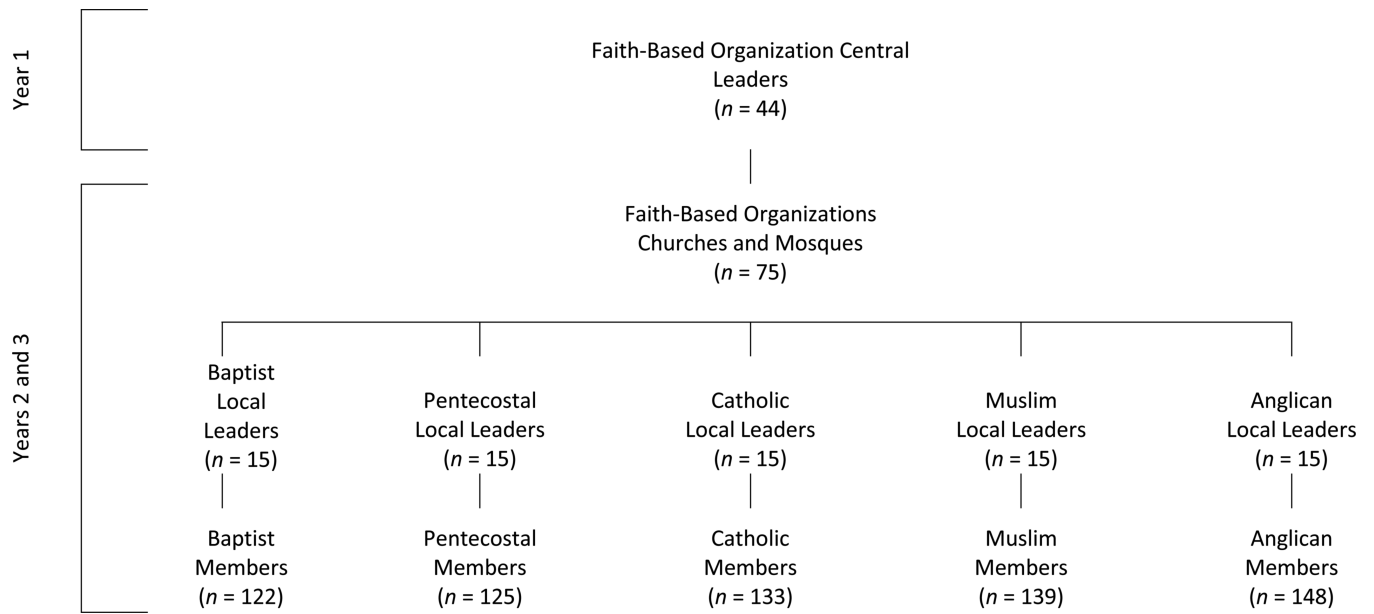


### Clinical Considerations

- Given the power and influence religious leaders have on members' behaviors, nurses working with faith-based organizations have the potential to effect behavioral change at the local level that will reduce the spread of HIV and increase care behaviors of community members.
- Because religious leaders' knowledge of HIV and their modes of knowledge transfer are critical to the delivery of effective HIV prevention and care messages, nurses need to continually educate religious leaders to provide accurate HIV messages to their members.
- Fear of stigma continues to constrain the control and treatment of HIV, but nurses, as respected members of churches and mosques, should continue to work with religious leaders to more effectively develop ways to reduce the secrecy and minimize the consequences of HIV disclosure.
- Further research is needed to develop and test models of effective engagement with religious leaders in the dissemination of accurate HIV messages and the promotion of behavior changes to reduce HIV risk and stigma.



**Figure 1.**  
Based on the Theory of Planned Behavior (Ajzen, 1991).  
*Note.* USAID = United States Agency for International Development; FBO = faith-based organization



**Figure 2.**  
Data collection scheme.

**Table 1**  
Comparative Power of Religious Group Types Over Risk and Care Behaviors of Members

	Baptist	Pentecostal	Roman Catholic	Anglicans	Muslims
Indoctrination	4	5	4	2	4
Religious Experience	4	5	3	3	1
Exclusion	4	5	3	1	5
Socialization	4	5	3	3	5
Total score *	16	20	13		15
Hierarchy **	1	3	5	5	1

*Note.* Theoretical basis of categories from Garner, 2000.

\* The sum of the 4 Garner Categories, the higher the score, the more power and influence

\*\* Range 1-5, higher score indicated more hierarchy

**Table 2**  
Descriptive Statistics for Leaders' Risk Behaviors, Care Behaviors, Knowledge, and Stigma

Leaders (n = 75)	Risk Behaviors (0-5) Mean (SD)	Care Behaviors (0-7) Mean (SD)	Knowledge of Infection (0-7) Mean (SD)	Knowledge of Prevention (0-7) Mean (SD)	Stigma Index (0-10) Mean (SD)
Baptist (15)	2.67 (0.49)	5.67 (1.17)	3.11 (0.99)	2.39 (1.72)	2.53 (1.41)
Pentecostal (15)	2.80 (0.56)	5.20 (1.66)	3.42 (1.14)	1.99 (1.03)	2.73 (1.16)
Catholic (15)	2.73 (0.59)	5.80 (1.21)	2.53 (1.25)	1.66 (0.93)	2.67 (1.59)
Muslim (15)	2.30 (0.72)	5.40 (1.24)	2.68 (1.45)	1.83 (1.13)	2.61 (1.55)
Anglican (15)	2.40 (0.91)	5.93 (1.28)	3.81 (1.25)	2.38 (0.77)	2.80 (1.61)

**Table 3**  
Descriptive Statistics for Members' Risk Behaviors, Care Behaviors, Stigma, and Knowledge

Members (667)	Risk Behaviors (0-5) Mean (SD)	Care Behaviors (0-7) Mean (SD)	Knowledge of Infection (0-7) Mean (SD)	Knowledge of Prevention (0-7) Mean (SD)	Stigma Index (0-10) Mean (SD)
Baptist (122)	2.61 (0.71)	4.70 (1.66)	2.93 (1.19)	1.97 (0.77)	2.99 (1.56)
Pentecostal (125)	2.66 (0.62)	4.78 (1.46)	3.05 (1.08)	1.87 (0.85)	2.81 (1.45)
Catholic (133)	2.65 (0.72)	5.23 (1.60)	3.17 (1.08)	1.96 (0.78)	3.19 (1.60)
Muslim (139)	2.64 (0.72)	4.83 (1.60)	2.76 (1.08)	1.91 (0.73)	2.95 (1.37)
Anglican (148)	2.48 (0.70)	5.13 (1.69)	2.89 (1.15)	2.01 (0.72)	2.70 (1.25)

**Table 4**  
Faith-Based Organization Leader and Organizational Predictors of Members' Risk and Care Behaviors Entered as Single Predictors

<b>Members' Risk Behaviors</b>						
<b>Predictors</b>	<b>Estimate</b>	<b>Std. Error</b>	<b>t-test</b>	<b>CI</b>	<b>P value</b>	
Power and Influence	.015174	.008465	1.792	-.002 to .032	.077	
Leaders' Stigma Attitude	-.023402	.021868	-1.070	-.067 to .020	.288	
Hierarchy	-.017235	.017343	-0.994	-.052 to .017	.324	
Leaders' Knowledge of HIV Infection	-.070263	.023040	-3.05	-.116183-.024342	.003	
Leaders' Knowledge of Prevention	-.003412	.026150	-1.30	>-.055 to .048	.896	
<b>Members' Care Behaviors</b>						
<b>Predictors</b>	<b>Estimate</b>	<b>Std. Error</b>	<b>t-test</b>	<b>CI</b>	<b>P value</b>	
Power and Influence	-.037865	.024358	1.555	-.863 to .011	.124	
Leaders' Stigma Attitude	-.133073	.061134	-2.18	-.249 to -.007	.033	
Hierarchy	.096095	.048704	1.973	-.000 to .193	.052	
Leaders' Knowledge of HIV Infection	.060685	.069658	0.871	-.078 to .199	.386	
Leaders' Knowledge of Prevention	.102522	.072511	1.414	-.042 to .247	.161	