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Religiosity and Risky Sexual Behaviors among an African American Church-based Population

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Abstract

African Americans are disproportionately burdened by STDs and HIV in the US. This study examined the relationships between demographics, religiosity, and sexual risk behaviors among 255 adult African American church-based participants. Although participants were highly religious, they reported an average of seven lifetime sex partners and most inconsistently used condoms. Several demographic variables and religiosity significantly predicted lifetime HIV-related risk factors. Taken together, findings indicated that this population is at risk for HIV. Future research should continue to identify correlates of risky sexual behavior among African American parishioners to facilitate the development of HIV risk reduction interventions in their church settings.

Keywords

African American; Church; HIV; Religiosity; Sexual behavior

Introduction

Sexually transmitted infections (STIs) and human immunodeficiency virus (HIV) in African American communities continue to be a major public health problem. Although African Americans make up only 13 % of the US population, they incur approximately 55 % of STIs and account for approximately 49 % of HIV cases (CDC 2007, 2009; US Census Bureau 2010). Moreover, studies have shown that people infected with STIs are at greater risk for contracting HIV, which further compounds the burden of STI and HIV morbidity among African Americans (CDC 2007).

Several individual, social, and environmental factors exist that put African Americans at risk for STIs/HIV. Individual and social factors include having unprotected sex with a partner who is considered to be at high risk for HIV transmission (e.g., men who have sex with men [MSM], those who engage in injection drug use [IDU]; Laumann and Youm 1999), being unaware of sex partners' STI/HIV status, and living in poverty (CDC 2007). Other individual and social factors include, but are not limited to, inconsistent condom use, drug and alcohol use, several lifetime partners (Corneille et al. 2008; Cornelius et al. 2000), and lack of disclosure of bisexuality (McNair and Prather 2004). Environmental factors are primarily associated with low-income communities and include lack of access to health care (Elifson et al. 2003), unstable housing or homelessness, limited access to HIV prevention

education, and high density of STI and HIV infections in many communities of color (Barrow et al. 2008; McNair and Prather 2004).

Conversely, a global *protective* factor that has been shown to be inversely related to sexual risk behaviors in the African American community is religiosity (Levin et al. 2005). Religiosity is often defined as an individual's level of church attendance, religious practices (e.g., prayer, meditation, scripture reading, devotion), and/or engagement in religious activities (e.g., praise and worship, various ministries, discipleship courses) (Chatters 2000; Hatcher et al. 2008; Musgrave et al. 2002). A related term, spirituality, is often defined as an acknowledgement of something greater than oneself (Musgrave et al. 2002; Hill and Pargament 2003). In other words, spirituality tends to be a more subjectively defined term. As a result, religiosity is the main focus of the current paper.

Religion has been found to be particularly important among African Americans. Specifically, 79 % of African Americans have reported that religion is *very important* compared to 56 % of the general population (Pew Forum 2009). This finding is reinforced by the fact that the Black Church has been a long-standing, influential cornerstone within the African American community (Lincoln and Mamiya 1990). It serves diverse congregations representing those of all ages, SES, and sexual orientation (Berkley-Patton et al. 2010). Given African American churches' reach within diverse congregations and the communities they serve, they may be an ideal setting to learn more about HIV risk and protective factors in underserved populations. However, only one study has identified relationships between church membership, religious background and behaviors, and HIV risk behaviors among adult African American parishioners in a church-based study. A study by McKoy and Petersen (2006) examined sexual risk among African American young adult female parishioners ($N = 142$) from 14 churches and found that 92 % were in a sexual relationship, 82 % had a history of STDs, 98 % had 1–3 partners within the past year, and 15 % had greater than 10 lifetime sexual partners. In addition, 81 % of parishioners inconsistently used condoms and 13 % never used condoms during the previous year.

Many studies have substantiated the protective impact that religion has on various aspects of health within African American youth populations. Although some studies have found mixed results (e.g., Jarama et al. 2007; McKoy and Petersen 2006), many more have found that highly religious African American youth tend to engage in fewer risky sexual behaviors (e.g., Bachanas et al. 2002; Ball et al. 2003; Hardy and Raffaelli 2003; McCree et al. 2003; Miller et al. 1997). However, limited research exists on religiosity as a protective factor against risky sexual behavior among African American adults. Fewer studies have reported on relationships between religiosity and HIV-related risk behaviors among African American church-affiliated adults. The current study sought to explore the following in an adult African American church-based population: (a) the degree to which participants engaged in risky sexual behaviors; (b) relationships between demographic variables and risky sexual behaviors; and (c) whether religiosity is a protective factor against risky sexual behaviors.

Methodology

Participants

A cross-sectional sample of African American church and community members ($N = 345$) from nine African American churches in the Kansas City metropolitan area participated in this survey-based study. The selection criteria for participants in the current study included the following: (a) they had to be at least 18 years of age and (b) they had to be either a member of, or affiliated with (i.e., use church outreach services), an African American church in the Kansas City, Missouri or Kansas metropolitan area that participated in the

Taking It To the Pews (TIPS) project (a church-based HIV education and screening project; Berkley-Patton et al. 2010). Since the current study explored sexual risk behaviors, only participants who reported *ever having sex* were included in analyses. Of the 345 participants who completed surveys, 25 reported they have never had sex and 22 did not respond to this question, resulting in a final sample size of 297 participants.

Procedure

The current study was approved by the University of Missouri-Kansas City Institutional Review Board. Participants were consented and informed about the voluntary nature of the study, their right to choose not to participate, and ability to withdraw at any time. The paper and pencil survey was administered to adult participants' at respective churches. The TIPS project is coordinated by Calvary Community Outreach Network (CCON), a faith-based organization that serves the greater Kansas City metropolitan area by facilitating the development of health ministries. CCON provided a \$5 reimbursement to each participant for completing the survey.

Survey Measures

Demographics

Participants were asked to report their age, sex at birth, ethnicity, sexual identity (e.g., heterosexual, homosexual), level of education, and marital status. Participants were asked whether they had medical insurance and their average monthly income. Participants also reported their church denomination and years of church membership.

Religious Beliefs and Behaviors

The current study assessed participants' religious behaviors during the past year using a 7-item shortened version of the Religious Beliefs and Behaviors survey (RBB; Connors et al. 1996) that assesses God consciousness (i.e., ones' belief in God, thoughts of God, and engagement in prayer) and formal religious practices (i.e., meditation, church attendance, scripture reading, experiences with God). This measure has been shown to be a reliable and valid measure of religious beliefs and behavior in both the original and shortened forms (Cronbach's alpha = .76 and .81, respectively; Connors et al. 1996). In the current study, participants were first asked to select the term that best describes their God consciousness religious beliefs: (a) atheist; (b) agnostic; (c) unsure; (d) spiritual; or (e) religious. Participants were also asked how often they engaged in God consciousness and formal practice activities consisting of: (a) thought of God; (b) prayed; (c) meditated; (d) attended a worship service; (e) read scriptures or holy writings; and (f) had religious experiences with God. These items were endorsed on an 8-point Likert scale with end points of *never* (0) and *more than once a day* (7). Factor subscale scores were sum scored (highest possible scores for God consciousness and formal practices are 18 and 28, respectively) and used for subscale scores and for an overall religiosity score (highest possible score is 46).

HIV Behavioral Risk Assessment

The HIV Behavioral Risk Assessment (BRAT) is an adapted version of the Behavioral Risk Assessment Tool (BRAT 2000). This assessment consists of 13 checklist items (*Yes/No/Not Sure*) on lifetime sexual practices (e.g., condom use and number and gender of partners), injection and other drug use (e.g., needle-sharing practices), and other HIV-related risk factors (e.g., trading sex for drugs, sex under the influence of substances, homelessness, incarceration). A BRAT-checklist sum score was calculated.

Participants also were asked three lifetime sexual behavior questions. If they ever had vaginal, oral, or anal sex (*Yes* = 1/*No* = 0), the number of male and female sex partners

(reports of one to five = 1 and six and above = 2), and how often they have used condoms or barriers (*always* = 0, *usually* = 1, *sometimes* = 2, *occasionally* = 3, or *never* = 4). A BRAT-sex only sum score was calculated with these questions with a highest possible score of seven.

Analysis Plan

All data were analyzed with SPSS 18.0. First, descriptive statistics were used to examine demographic characteristics (e.g., age, gender, level of education, marital status) and primary study variables of interest (i.e., RBB, BRAT). Bivariate nonparametric analyses were utilized to examine correlations between BRAT and demographic characteristics and BRAT and RBB. Multiple regression analyses were conducted to examine the significant demographic and RBB correlates as predictors of sexual risk.

Assumptions of normality were tested prior to data analysis. RBB and BRAT data were positively and negatively skewed, respectively. Transformations did not sufficiently normalize the data; therefore, untransformed data were used. In addition, BRAT items that were significantly different for men and women (e.g., been in drug or alcohol treatment; paid for sex with money, drugs, or shelter; had sex against your will) were *z*-scored to aid in interpretation of data, but this did not improve interpretation. Finally, BRAT items were dichotomously recoded into low versus high groups; however, this approach also failed to improve interpretation. As a result, the original data were used.

Results

Descriptive Results

The initial sample included participants of various ethnicities ($N = 297$). However, given the current study's focus on African American parishioners and significant ethnic differences in responding to the primary study variables (i.e., BRAT-checklist, BRAT-sex only), analyses were limited to African American (96.5 %, $n = 246$) and multiracial participants (part African American, hereafter referred to as African American; 3.5 % [$n = 9$]), for a total of 255 participants. On average, non-African American participants ($n = 18$; Caucasians, American Indian/Alaska Natives, Asian/Pacific Islanders) scored significantly higher on the BRAT-checklist ($M = 3.58$, $SE = .75$) than African American participants ($M = 1.02$, $SE = .11$); $t(18.74) = -3.40$, $p < .01$, which represented a large effect ($r = .62$). Moreover, on the BRAT-sex only, non-African American participants reported significantly more risk ($M = 17.43$, $SE = 4.55$) than African American participants ($M = 6.57$, $SE = .62$); $t(13.49) = -2.36$, $p < .05$, which represented a large effect ($r = .54$).

Demographic Characteristics—As shown in Table 1, participants' ages ranged from 18 to 82 years (Mean = 46.3, $SD = 13.9$). Most were female (69.4 %) and heterosexual (83.9 %). Most of the participants also completed high school or beyond (71.0 %) and had private insurance (75.7 %). Half of the participants (50.2 %) earned more than \$2,501 per month and 44 % percent were married. Participants were primarily Baptist (80.3 %) and had been members of their respective churches for an average of 16.9 years ($SD = 15.9$, range = 1–64).

Religious Beliefs and Behaviors (RBB)—On average, participants scored 16.99 ($SD = 1.72$, range 6–18) on the God consciousness subscale and 20.27 ($SD = 5.29$, range 2–28) on the formal practices subscale, resulting in an overall average RBB sum score of 37.26 ($SD = 6.37$, range 14–46). Internal consistency of the RBB was acceptable and comparable to the original published level of internal consistency ($\alpha = .74$ and $\alpha = .81$, respectively) (Connors et al. 1996).

HIV Behavioral Risk Assessment (BRAT)—On the BRAT-checklist, participants scored an average of 1.02 (SD = 1.70, range 0–10; highest possible score = 13). Risk behaviors reported with the greatest frequency in this section included the following: having sex while high on drugs or alcohol (25.1 %); being diagnosed with a sexually transmitted disease (16.9 %); being homeless (12.5 %); having sex against their will (11.0 %); and being in drug or alcohol treatment (7.8 %). BRAT-checklist risk behaviors among men ($M = 1.41$, $SE = .24$) were significantly higher than women ($M = .84$, $SE = .11$); $t(110.23) = -2.16$, $p < .05$, which represented a small effect ($r = .20$). The internal consistency of the BRAT-checklist was acceptable; however, there is no previously published level of internal consistency ($\alpha = .75$).

On the BRAT-sex only items, participants had an average risk score of 4.60 (SD = 1.47, range = 2–7, highest possible score = 9). Two percent of women reported having sex with women ($M = .13$, $SD = 1.85$, range = 0–14) and 9.0 % of men reported having sex with men ($M = .39$, $SD = 1.66$, range = 0–10). On average, participants had seven sex partners (SD = 8, range = 1–55). Men had significantly more sex partners ($M = 10$, $SD = 10$, $SE = 1.48$, range = 1–50) than women ($M = 5$, $SD = 7$, $SE = .62$, range = 1–55); $t(64.19) = -2.61$, $p < .05$, which represented a medium effect ($r = .31$). Overall, 40 % reported never using condoms and 15.3 % always used condoms.

Bivariate and Regression Results

Relationships between Demographic Variables and BRAT—To explore the relationships between demographic variables and the BRAT-checklist sum score, nonparametric correlational analyses were conducted. As shown in Table 2, age and average monthly income were significantly negatively correlated with the BRAT-checklist. Gender (i.e., being male) and having medical insurance were significantly positively correlated with the BRAT-checklist. To predict the BRAT-checklist sexual risk behaviors, age, gender, average monthly income, and medical insurance were entered into a regression. The resultant regression model (Table 3) was significantly predictive of sexual risk; $R = .39$, $R^2 = .15$, adjusted $R^2 = .13$, $F(4, 214) = 9.48$, $p < .001$. Medical insurance uniquely predicted 5.3 % of the variance. Average monthly income uniquely predicted 2.3 % of the variance in sexual risk and gender uniquely predicted approximately 2.0 % of the variance. Age did not predict any of the variance.

To explore relationships between demographic variables and the BRAT-sex only scores, nonparametric correlational analyses were run. As shown in Table 3, marital status (i.e., being in a monogamous relationship) was significantly negatively correlated with the BRAT-sex only, and age was significantly positively correlated. To predict BRAT-sex only risk behaviors and produce the β , marital status and age were entered into a regression. The regression model, as shown in Table 3, was significantly predictive of sexual risk; $R = .43$, $R^2 = .19$, adjusted $R^2 = .17$, $F(3, 134) = 10.20$, $p < .001$. Marital status and age uniquely predicted 9.0 and 4.0 % of the variance, respectively.

Relationship between the RBB and the BRAT—To explore the relationship between the RBB and the BRAT, nonparametric correlational analyses were conducted. The RBB sum score was not correlated with the BRAT-checklist ($p = .37$), the BRAT-sex only ($p = .08$), or the overall BRAT sum score ($p = .33$), as shown in Table 4.

Given that exploring the relationship between religiosity and sexual risk was a primary study objective, the RBB subscales (i.e., God consciousness and formal practices) were examined in association with the BRAT components (i.e., BRAT-checklist and BRAT-sex only). As shown in Table 4, there was only one significant relationship; God consciousness was

significantly positively correlated with BRAT-sex only risk behaviors. As a result, to produce the β for BRAT-sex only, the God consciousness subscale was entered into a regression. The resultant model (Table 5) was significantly predictive of sexual risk; $R = .25$, $R^2 = .06$, adjusted $R^2 = .06$, $F(1, 187) = 12.10$, $p < .001$. God consciousness predicted 6.0 % of the variance.

Discussion

The current study examined the sexual risk behaviors, relationships between demographics and sexual risk behaviors, and relationships between religiosity and sexual risk behaviors in an African American church-based population. Descriptive analyses indicated that participants were highly religious, which was primarily evidenced by their daily engagement in thoughts of God, prayer, direct experiences with God, and reading of scripture. Notably, participants also reported attending church twice per week. This finding is consistent with other studies that have reported on the importance of religiosity in African American communities (e.g., Musgrave et al. 2002; Pew Forum 2009).

The first objective of the current study was to examine the extent to which participants engaged in risky sexual behaviors. Overall, 12.5 % of participants had more than 10 lifetime sexual partners, and 17 % of participants had a history of STDs. Although national reports of STDs among African Americans (approximately 55 %) are higher than the current study, and the McKoy and Petersen (2006) found more risky behaviors among its church-based female population, taken together with the current study's findings, church-based populations are clearly not immune to sexual risks.

In the current study, male participants engaged in more risky sexual behaviors than females, which is consistent with the literature on the general population (McNair and Prather 2004; Myers et al. 2003). For example, males reported more lifetime sex partners than females and more BRAT-checklist behaviors. Studies have shown that African American males high-risk behaviors may increase African American females susceptibility to sexual risks (CDC 2009; Jarama et al. 2007; Laumann and Youm 1999; McNair and Prather 2004). Furthermore, studies have shown that although African American women generally engage in low-risk behaviors, they are at high risk for HIV and other STDs (Laumann and Youm 1999). One factor contributing to this paradox may be that due to limited social/sexual networks in many Black communities. For example, African American women with low-risk may have increased exposure to African American men with high-risk HIV profiles (e.g., men who have sex with men, incarceration, drug use) (Laumann and Youm 1999).

Overall, only 15 % of participants reported consistent condom use. Furthermore, 25 % had sex while high on drugs or alcohol, 11 % had sex against their will, and 7 % had been in a correctional facility. Each of these risky behaviors could adversely impact consistent and proper condom use (Payne 2008; Schroder et al. 2001). Previous research has found that condom use is often impacted by relationship status (e.g., as relationship length increases, condom use tends to decrease) (Corneille et al. 2008; Elifson et al. 2003), the sex ratio (e.g., fewer available men for available women), and gender roles (e.g., power differentials and men often being dominant in relationships) (McNair and Prather 2004; Jarama et al. 2007). However, no research exists on African American church populations' decisions on whether to use condoms and under what circumstances. Perhaps, this can partially be attributed to the sensitivity of discussing condom use in church settings. There is a need for future research not only to explore condom use among religious African Americans but also on how this topic can appropriately be addressed in churches.

The second objective of this study was to examine associations between demographic and BRAT variables. Consistent with previous research on African American males' engagement in risky sex behaviors, this study found that being male was associated with higher BRAT-checklist risk behaviors primarily due to their history of having sex while using drugs or alcohol, homelessness, and paying for sex with money or drugs (CDC 2007, 2009), which puts them at increased risk for STDs and HIV. This is the only study to report on church-based adult African American males sexual risk behaviors. However, recently increased attention has been given to understanding how to reach heterosexual African American men with HIV prevention and screening interventions (CDC 2007; Grants 2010; NIH Guide 2010; MMWR 2008). The African American church may be an appropriate setting for the recruitment and retention of African American males to STD/HIV prevention intervention studies.

Findings showed that having a lower income was associated with greater BRAT-checklist risk. In general, previous research has clearly demonstrated that lower levels of education, SES, and access to quality health care are factors that increase risk for STDs and HIV (CDC 2007; Elifson et al. 2003; Hogben and Leichter 2008; McNair and Prather 2004). Current findings suggest that religious venues may have good potential to reach underserved church and community members who use church outreach services with HIV services.

Current findings also revealed a positive relationship between age and the BRAT-sex only. National HIV surveillance data report increasing HIV infection rates among African Americans aged 40–49 years and older African Americans (CDC 2007, 2009). Also, as of 2007, HIV was the leading cause of death in men aged 35–44 years and the leading cause of death in women aged 25–34 years (CDC 2007). As people age they might be at increased risk, in part, from having more sexual partners and more unprotected sex across their lifespan. Current findings also indicated that being in a committed relationship was associated with lower scores on the BRAT-sex only. This finding is consistent with other studies that have found that being in a stable, committed relationship reduces the likelihood of HIV risk (McNair and Prather 2004). Considering that our study was conducted with a church-based population and promoting monogamy is consistent with the doctrine of most fundamentalist churches, future studies should further explore how churches can strengthen fidelity among couples and how use of the ABC model (A = be abstinent, B = be faithful (monogamous), and C = use a condom) (Ecumenical Advocacy Alliance 2009) might assist in these efforts.

The third objective of the current study was to examine the relationship between religiosity (RBB) and the BRAT. The God consciousness RBB subscale was positively associated with the BRAT-sex only (e.g., lifetime sexual partners, condom use). Further research is needed to fully examine religiosity and sexual behaviors among religious African Americans possibly by using more expanded measures of religiosity, including religious coping, and God control beliefs related to sex. In addition, future research should employ use of focus groups to offer additional insight on reasons for engagement in risky sexual behaviors. Limited research exists that explores lifetime religious and sexual behaviors among African Americans using a longitudinal design. Additional research is needed to clarify how maturation from adolescence to adulthood impacts religiosity and how engagement in risky sex might change over time.

Implications

The current study on religiosity and risky sexual behaviors among an African American church population demonstrated that this population is at risk for STDs/HIV—which has had very limited published research on this topic. As efforts to reduce HIV health disparities

continue to expand to nontraditional settings, understanding how African American church-affiliated populations may be at risk for STDs and HIV is imperative for extending the reach of HIV services. Examination of factors that make this population most vulnerable to risky sexual behavior (e.g., age, income, selection of sexual partners) might serve to inform the optimal design of church-based HIV interventions.

Limitations

Although this study contributes to a limited base of research regarding risky sexual behaviors and religiosity among an African American church population, several limitations exist. First, there was a limited representation of males. However, the representation of males in our sample is comparable with other health studies in African American churches (e.g., Lincoln and Mamiya 1990; Musgrave et al. 2002; Pew Forum 2009), which have found that women customarily make up two-thirds of the Black churches' membership. Second, it is possible that participants were socially responding by reporting fewer risky sexual behaviors than they actually engage in due to the sensitivity of the questions and their completion of the survey in church settings. Related to this, despite the anonymity of the study design, it is important to recognize that all data were self-reported so the data may not accurately reflect their actual behavior. Furthermore, both the checklist and sex only portions of the BRAT asked about lifetime risk behaviors. As a result, the current study was unable to shed light on how recently participants engaged in risky sexual behaviors. Future research studies should employ longitudinal studies across the lifespan in order to better understand the relationship between religiosity and sexual risk behaviors among church-affiliated African Americans over time. Another limitation was that RBB and BRAT data were not normally distributed. This might be the case given that participants were church-based and reported high levels of religiosity on the RBB, and participants generally reported low levels of risky sexual behavior as evidenced by scores on both portions of the BRAT. This nonnormality might have impacted regression findings with the RBB and BRAT, which produced a minimally statistically significant relationship. Assessment of these measures with larger, less homogenous samples might reduce the skewness of data in future studies. However, this study was primarily interested in understanding a church-based population. Future church-based research might produce more heterogeneous samples by including more community members who use church outreach services, such as church-based food programs and daycare services. In addition, including a qualitative component to better explore reasons and circumstances for engagement in risky sexual behaviors would enrich findings. Finally, it is important to recognize that despite the current study's limitations, this is only the second study that has reported on sexual behaviors among an adult African American church-based population.

Conclusion

Findings from this study with a church-based African American population indicate that although this community appears to be highly religious, they are still at risk for STDs and HIV. This study offered additional important insight into religiosity, sexual risk, and correlates of sexual risk in this important understudied population. Age, gender, marital status, socioeconomic status, medical insurance, and God consciousness appeared to be the most important correlates of risky sexual behavior. Taken together, future research should continue to further examine risky sexual behavior in adult African American church-affiliated populations in order to inform the design of religiously and culturally appropriate HIV interventions in church settings.

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Table 1Demographic variable descriptives ($N = 255$)

Variable	Mean \pm SD or % (n)
Age ^a	46.26 \pm 13.87; 18–82
Gender	
Female	69.4 ($n = 177$)
Male	30.6 ($n = 78$)
Ethnicity	
African American or Black	96.5 ($n = 246$)
Multiracial (part Black)	3.5 ($n = 9$)
Sexual orientation	
Heterosexual	83.9 ($n = 214$)
Homosexual	1.6 ($n = 4$)
Bi-sexual	2.4 ($n = 6$)
Other	2.0 ($n = 5$)
Chose not to answer	10.1 ($n = 26$)
Marital status ^b	
Single	27.1 ($n = 68$)
Committed relationship	3.2 ($n = 8$)
Married	44.2 ($n = 111$)
Separated	3.2 ($n = 8$)
Divorced	17.1 ($n = 43$)
Widowed	5.2 ($n = 13$)
Level of education	
Eighth grade or below	.4 ($n = 1$)
Some high school	5.9 ($n = 15$)
High school degree/GED	22.7 ($n = 58$)
Post-high school training/some college	34.5 ($n = 88$)
College degree	19.2 ($n = 49$)
Graduate courses	6.3 ($n = 16$)
Graduate degree	11.0 ($n = 28$)
Average monthly income	
\$0–\$1,000	9.0 ($n = 23$)
\$1,001–\$2,000	14.5 ($n = 37$)
\$2,001–\$2,500	12.5 ($n = 32$)
\$2,501–\$3,000	18.4 ($n = 47$)
More than \$3,000	31.8 ($n = 81$)
Do not know	3.9 ($n = 10$)
Declined to answer	9.9 ($n = 25$)
Insurance ^c	85.8 ($n = 218$)
Private	75.7 ($n = 165$)

Variable	Mean \pm SD or % (n)
Medicare	17.0 (n = 37)
Medicaid	6.4 (n = 14)
Other	8.7 (n = 19)
Church denomination ^b	
Baptist	80.3 (n = 204)
Nondenominational	9.4 (n = 24)
Church of God and Christ	5.1 (n = 13)
Methodist	<1 (n = 2)
Pentecostal	<1 (n = 1)
Catholic	<1 (n = 1)
Muslim	<1 (n = 1)
Other	3.1 (n = 8)
Years of church membership ^b	16.97 \pm 15.99; 1–64
Nonchurch members ^c	
Guest	67.6 (n = 25)
Recipient of food services	8.1 (n = 3)
Parent of a child in church	8.1 (n = 3)
Recipient of drug rehabilitation services	2.7 (n = 1)
Other	18.9 (n = 7)
Ever tested for HIV ^b	67.2 (n = 117)

^aOne participant did not report their age

^bMissing participant data

^cPercentages not meant to total 100 % since participants selected all that applied

Table 2

Correlations among demographic predictors and BRAT components

	1	2	3	4	5	6	7	8	9
1. Age	1.00								
2. Gender	-.05	1.00							
3. Education	-.02	-.07	1.00						
4. Marital status	-.08	-.10	-.17**	1.00					
5. Average monthly income	.06	.10	.45**	-.34**	1.00				
6. Medical insurance	-.01	-.12*	.09	-.14*	.35**	1.00			
7. BRAT-checklist sum score	-.13*	.13*	-.05	.09	-.18**	.26**	1.00		
8. BRAT-sex only sum score	.29**	.06	-.12	-.29**	.09	-.01	.09	1.00	
9. BRAT overall sum score	.171*	.15*	-.15*	-.18*	-.04	-.15*	.61**	.81**	1.00

* $p < .05$ ** $p < .01$

Table 3

Regression of BRAT components on significant demographic correlates

	<i>B</i>	<i>SE_B</i>	<i>β</i>	<i>R</i> ²
Predictors of BRAT-checklist				
Step 1				.151 **
Age	-.009	.009	-.063	
Gender	.526	.237	.142 *	
Average monthly income	-.358	.147	-.166 *	
Medical insurance	-1.226	.332	-.252 **	
Predictors of BRAT-sex only				
Step 1				.186 **
Age	.022	.009	.210 **	
Marital status	-.869	.223	-.305 **	

* $p < .05$ ** $p < .01$

Table 4

Correlations among RBB components and BRAT components

	1	2	3	4	5	6
1. God consciousness	1.00					
2. Formal practices	.47**	1.00				
3. RBB sum score	.61**	.98**	1.00			
4. BRAT-checklist	-.03	-.06	-.06	1.00		
5. BRAT-sex only	.18*	.11	.13	.09	1.00	
6. BRAT sum score	.12	.06	.08	.61**	.81**	1.00

*
 $p < .05$ **
 $p < .01$

Table 5

Regression of BRAT-sex Only on God Consciousness RBB subscale

Predictors	<i>B</i>	SE _B	β	<i>R</i> ²
Step 1				.061 **
God consciousness RBB subscale	.210	.060	.246 **	

**
p < .01