

# Relationship of African Americans' Sociodemographic Characteristics to Belief in Conspiracies about HIV/AIDS and Birth Control

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Although prior research shows that substantial proportions of African Americans hold conspiracy beliefs, little is known about the subgroups of African Americans most likely to endorse such beliefs. We examined the relationship of African Americans' sociodemographic characteristics to their conspiracy beliefs about HIV/AIDS and birth control. Anonymous telephone surveys were conducted with a targeted random-digit-dial sample of 500 African Americans (15–44 years) in the contiguous United States. Respondents reported agreement with statements capturing beliefs in HIV/AIDS conspiracies (one scale) and birth control conspiracies (two scales). Sociodemographic variables included gender, age, education, employment, income, number of people income supports, number of living children, marital/cohabitation status, religiosity and black identity. Multivariate analyses indicated that stronger HIV/AIDS conspiracy beliefs were significantly associated with male gender, black identity and lower income. Male gender and lower education were significantly related to black genocide conspiracy beliefs, and male gender and high religiosity were significantly related to contraceptive safety conspiracy beliefs. The set of sociodemographic characteristics explained a moderately small amount of the variance in conspiracy beliefs regarding HIV/AIDS ( $R^2$  range=0.07–0.12) and birth control ( $R^2$  range=0.05–0.09). Findings suggest that conspiracy beliefs are not isolated to specific segments of the African-American population.

**Key words:** African Americans ■ conspiracy beliefs ■ HIV/AIDS ■ birth control

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Numerous news accounts as well as a small but growing amount of public health literature have reported widespread belief in conspiracy theories about the U.S. government and healthcare system among blacks, such as beliefs related to HIV, birth control and genocide.<sup>1–12</sup> In a particularly striking example, Wangari Maathai, the Kenyan ecologist who won the Nobel Peace Prize in 2004, publicly stated that western scientists deliberately created HIV for use as a bioweapon against Africans.<sup>13</sup> Research shows that blacks are much more likely to endorse such beliefs than are whites.<sup>9,14–16</sup>

Researchers have hypothesized that conspiracy beliefs are one manifestation of African Americans' mistrust of the medical establishment, which stems from decades of institutional and interpersonal discrimination in the U.S. healthcare system.<sup>4,7</sup> Such discrimination is well documented and has included the segregation of African Americans into different hospitals, the conducting of unethical research such as the Tuskegee syphilis study, and efforts to control the fertility of African-American women.<sup>17–19</sup> Moreover, considerable numbers of African Americans report experiencing interpersonal discrimination in healthcare in the recent past and in their lifetime.<sup>18,20–22</sup> African Americans who have experienced discrimination or who are aware of historical discrimination in healthcare may be suspicious of public health prevention messages and of information supplied by health professionals and therefore more likely to endorse conspiracy beliefs.<sup>7</sup>

We have previously reported on a national survey of 500 African Americans of reproductive age in which a substantial number of respondents endorsed conspiracy beliefs regarding the origin and treatment of HIV/AIDS; the safety and testing of birth control methods; and the use of birth control to control, limit or eliminate the black population.<sup>1,12</sup> For example, our research indicated that over half of the sample (53%) endorsed the HIV/AIDS conspiracy belief, "There is a cure for AIDS, but it is being withheld from the poor;" and nearly half (48%) believed that "HIV is a manmade virus." Similarly, considerable

proportions of the sample endorsed birth control conspiracy beliefs regarding black genocide, including the belief that “Whites want to keep the numbers of black people down” (33%) and that “The government’s family planning policies are intended to control the number of black people” (22%). Many respondents also agreed with birth control conspiracies regarding contraceptive safety, such as, “Medical and public health institutions use poor and minority women as guinea pigs to try out new birth control methods” (37%).

Our prior research also found that conspiracy beliefs are significantly associated with condom use and contraceptive behaviors. African-American men who strongly endorsed HIV/AIDS conspiracy beliefs were less likely to use condoms consistently, suggesting that belief in conspiracies may be a barrier to HIV prevention.<sup>1</sup> Furthermore, men with stronger conspiracy beliefs about the safety of contraceptives were less likely to be using any birth control.<sup>12</sup> Among women currently using birth control, those with stronger contraceptive safety conspiracy beliefs were less likely to be using methods that must be obtained from a healthcare provider, which are the most effective methods for preventing pregnancy. Whether about HIV/AIDS or birth control, African-American men were more likely than African-American women to endorse conspiracy beliefs.

With the exception of research on gender differences, prior work has not comprehensively examined the characteristics of African Americans who are most likely to endorse a range of conspiracy beliefs in terms of their background and sociodemographic characteristics. Such information would assist health researchers and practitioners in identifying the subgroups most mistrustful of the healthcare system, allowing for more efficient implementation of culturally tailored interventions. For example, to the extent that specific subgroups of African Americans are more likely to endorse conspiracies, targeted prevention messages could be developed for greater effect. In the absence of sociodemographic differences in conspiracy beliefs, culturally tailored prevention efforts directed at African Americans more generally may be appropriate.

A small number of earlier studies have uncovered sociodemographic correlates of medical mistrust as well as conspiracy beliefs. Compared to African-American women, African-American men are more likely to mistrust the healthcare system and medical research and to endorse conspiracies indicative

of black genocide (e.g., that HIV and/or birth control are part of a government plot to wipe out African Americans).<sup>6,7,23</sup> Strong black identification also has been associated with greater belief in conspiracies about HIV,<sup>7</sup> possibly because stronger identification may be related to a greater knowledge of black culture and history with respect to racism in the United States.<sup>24</sup>

The relationship of socioeconomic status (SES) to endorsement of conspiracy beliefs is less straightforward. One study found that black men with a college versus high-school education are more likely to endorse conspiracies.<sup>7</sup> This suggests that individuals who are more educated may be more knowledgeable about the historical problems faced by African Americans and, hence, may more readily endorse conspiracy theories. In contrast, other research has demonstrated that lower levels of education and income are associated with stronger conspiracy beliefs,<sup>9</sup> and that lower levels of educational attainment and unemployment are related to greater mistrust of research and the medical establishment.<sup>23</sup> Researchers have hypothesized that individuals with low SES may endorse conspiracies because they seek a way to explain their alienation and lack of control in society.<sup>14</sup> Thus, belief in conspiracies may serve as a coping mechanism to protect self-esteem by placing blame for disadvantage on an overall, racist system.<sup>15</sup>

In sum, large proportions of African Americans report mistrust of the U.S. healthcare system and conspiracy beliefs related to the government’s role in genocide of African Americans, HIV/AIDS and birth control. A small amount of prior research suggests small and mixed effects of sociodemographic characteristics on the endorsement of conspiracy beliefs. Hence, in the present study, we

**Table 1. Characteristics of respondents (N=500)**

Characteristic	n	%
Age (Years), M=27.4 ± 8.9		
15–20	152	30.4
21–34	223	44.6
≥35	125	25.0
Gender		
Male	174	34.8
Female	326	65.2
Education		
High-school graduate or less	255	51.0
Some college/technical school or college graduate	245	49.0
Currently Working	336	67.2
Annual Household Income from All Sources (n=444)		
<\$35,000	237	53.4
≥\$35,000	207	46.6
Currently Married/Living with Partner	185	37.0
Number of Children		
None	238	47.6
≥1	262	52.4

Fifty-six respondents did not report their income, and 58 respondents did not report the number of people their income supports.

examined the association between sociodemographic characteristics and the endorsement of HIV/AIDS and birth control conspiracy beliefs among a targeted random sample of African Americans in the United States. Knowledge about the variance of such beliefs among African-American subgroups could assist researchers and practitioners in targeting culturally tailored prevention efforts to those individuals who are most mistrustful of HIV and birth control-related information.

**METHODS**

**Sample and Procedures**

A cross-sectional, anonymous telephone survey was conducted with a targeted random sample of African Americans, aged 15–44 years, living in the United States. We have described the sampling frame and procedures in detail in earlier reports.<sup>1,12</sup> Survey Sampling International (SSI; Fairfield, CT) generated a targeted random-digit-dial sample of 19,000 telephone numbers for the study, drawn from exchanges in the contiguous United States with estimated black household densities of ≥27% based on U.S. Census data and estimated to include approximately 50.5% of black listed households in the contiguous United States.

Of the initial 19,000 telephone numbers, 11,315 were disqualified (e.g., nonworking numbers, businesses, fax numbers), and 5,676 were for ineligible households. Of the remaining 2,009 numbers, 689 were unable-to-reach numbers (for 666 of these, 20–25 dial attempts were made), 526 were numbers for which we obtained a refusal prior to completing screening questions, and 794 were eligible based on screening questions. Of these, 68 refused participation, 111 agreed to participate but could not be reached for the interview, 115 partially completed an interview, and 500 complet-

ed an interview. Thus, the full participation rate was 63% (500 complete interviews divided by 794 eligible respondents). The analyses reported in the present article are limited to the 500 respondents with completed interviews; descriptive data on the final sample are presented in Table 1.

The target person in each household was the black or African American (aged 15–44 years) who last had a birthday. To be eligible, potential respondents had to report in response to structured questions: being 15–44 years of age, that they were born in the United States, and that they were either black or African-American. The interviews, which averaged 32 minutes in length, were conducted by Applied Research Northwest (ARN; Bellingham, WA) between September 2002 and March 2003 using a computer-assisted telephone interviewing system.

Procedures were approved by the institutional review boards of Oregon State University, RAND Corp. and Kent State University (where the first author was employed at the time of data collection). Verbal consent was obtained from respondents aged ≥18 years and verbal assent was obtained from respondents aged 15–17 years. All 15–17-year-olds who were eligible and willing to participate were specifically asked if they could speak safely and privately, or if another time would be better. We obtained a waiver of parental consent for child participants.

**Measures**

**Sociodemographic characteristics.** Questions were asked to assess respondents' gender, age; education; employment status (not working/working); annual household income and number of people income supports; and number of children currently living regardless of age, marital status and cohabitation status (i.e., whether they were currently living with a partner). Due

**Table 2. Multivariate sociodemographic predictors of belief in HIV/AIDS conspiracies<sup>a</sup>**

Sociodemographic Factors	Overall (β) (N=433)	Women (β) (n=286)	Men (β) (n=146)
Age (Reference Group ≥35 Years)			
15–20	-0.08	-0.11	-0.06
21–34	-0.01	-0.08	0.06
Male Gender	0.14**	-----	-----
Any Children	0.10+	0.05	0.16
Some College or More	-0.01	0.00	-0.02
Currently Working	-0.05	-0.04	-0.04
Very/Extremely Religious	0.01	-0.03	0.06
Married/Cohabiting	0.06	0.06	0.05
Black Identity	0.11*	0.08	0.17*
Higher Income (≥\$35,000)	-0.13*	-0.14*	-0.11
Number of People Income Supports	0.06	0.15*	-0.06
Model R <sup>2</sup>	0.09	0.07	0.12

+ p<0.10; \* p<0.05; \*\* p<0.01; a: Standardized coefficients (betas) are presented. When income and number of people income supports were deleted from the adjusted multivariate models because of relatively large amounts of missing data, in the overall model, the coefficients for gender (β=0.12, p<0.05) and black identity (β=0.12, p<0.05) remained significant, and having any children became a significant predictor (β=0.13, p<0.05); in the model for women, none of the coefficients were significant; and in the model for men, black identity remained significant (β=0.16, p<0.05).

to small numbers of respondents in some subgroups, educational attainment was collapsed into “high-school graduate or less” versus “some college or more.” Due to nonnormality of distributions, the number of children currently living was dichotomized into “any children” versus “no children,” and income was dichotomized into “<\$35,000” and “≥\$35,000”; age was categorized into 15–20, 21–34, and ≥35 and dummy-coded for analysis. Responses on the items measuring marital and cohabitation status were combined into one variable to indicate whether the respondent was currently married or cohabitating with a partner (“no”/“yes”).

Prior research indicates that sociocultural background factors such as religion and racial/ethnic identification may play an important role in HIV prevention beliefs and behaviors for African Americans. For example, among African Americans, greater religiosity has been linked to lower HIV risk behavior,<sup>25,26</sup> and stronger black identification has been associated with greater belief in HIV/AIDS conspiracies.<sup>7</sup> Thus, we also assessed religiosity and black identity. Respondents were also asked, “How religious are you?” with response options from 1 (not at all religious) to 5 (extremely religious). A dichotomous measure of religiosity was then created (i.e., “not at all to moderately religious” versus “very or extremely religious”). Black identity was assessed with the eight-item racial centrality scale from the Multidimensional Model of Racial Identity;<sup>24</sup> the internal consistency reliability of this measure was 0.60 in the present study. A sample item is: “In general, being black is an important part of my self-image”. Response options were 1 (disagree strongly) to 5 (agree strongly).

**HIV/AIDS and birth control conspiracy beliefs.**

Respondents reported their agreement with 14 statements capturing beliefs in HIV/AIDS conspiracy theories (e.g., “A lot of information about AIDS is being held back from the public”), and 14 statements capturing belief in birth control conspiracy theories (e.g., “Poor and minority women are sometimes forced to be sterilized by the government”), on a scale from 1 (disagree strongly) to 5 (agree strongly). Details of the development of items, construction of the HIV/AIDS and birth control conspiracy beliefs scales, and the frequency of endorsement of the different items are available in earlier reports.<sup>1,12</sup> Briefly, exploratory factor analysis (EFA) using varimax rotation was performed separately on the 14 items assessing HIV/AIDS conspiracy beliefs and the 14 items assessing birth control conspiracy beliefs. One overall 10-item HIV/AIDS conspiracy beliefs scale was created ( $\alpha=0.85$ ;  $M=2.34$ ,  $SD=2.25$ ).

Two birth control conspiracy belief subscales were created. The first subscale consisted of six items that generally capture the belief that birth control and family planning are a means of controlling, limiting or eliminating the black population (“Black genocide conspiracy beliefs subscale;” six items;  $\alpha=0.78$ ;  $M=2.01$ ,  $SD=1.83$ ). Two of the items of this subscale specifically referred to black genocide (e.g., “Birth control is a form of black genocide”), and the remaining four items focused on the role and motivations of the government (e.g., “The government’s family planning policies are intended to control the number of black people”) and whites (e.g., “Birth control is a white plot to eliminate blacks”). The other subscale consisted of four items about the safety and testing of birth control methods

**Table 3. Multivariate sociodemographic predictors of belief in birth control conspiracies<sup>a</sup>**

Sociodemographic Factors	Black Genocidal Conspiracies			Birth Control Safety Conspiracies		
	Overall ( $\beta$ ) (N=433)	Women ( $\beta$ ) (n=286)	Men ( $\beta$ ) (n=146)	Overall ( $\beta$ ) (N=433)	Women ( $\beta$ ) (n=286)	Men ( $\beta$ ) (n=146)
Age (Reference Group ≥35 years)						
15–20	-0.13+	-0.12	-0.18	-0.13+	-0.15	-0.09
21–34	-0.11+	-0.14+	-0.08	-0.07	-0.11	0.02
Male Gender	0.15**	–	–	0.14**	–	–
Any Children	0.04	-0.03	0.13	0.00	-0.11	0.21*
Some College or More	-0.17**	-0.12+	-0.25*	-0.02	-0.00	-0.03
Currently Working	-0.01	-0.03	0.04	-0.06	-0.07	0.01
Very/Extremely Religious	0.04	0.04	0.07	0.10*	0.14*	-0.01
Married/Cohabiting	0.01	0.07	-0.07	0.07	0.08	0.08
Black Identity	0.08+	0.07	0.12	0.05	0.05	0.03
Higher Income (≥\$35,000)	-0.08	-0.18**	0.08	-0.02	-0.06	0.01
Number of People Income Supports	0.01	0.05	-0.08	0.02	0.11	-0.13
Model R <sup>2</sup>	0.08	0.07	0.09	0.06	0.05	0.09

+ p<0.10; \* p<0.05; \*\* p<0.01; a: Standardized coefficients (betas) are presented. When, because of relatively large amounts of missing data, income and number of people income supports were deleted from the multivariate model for black genocidal conspiracies, in the overall model, the coefficients for gender ( $\beta=0.14$ ,  $p<0.01$ ) and education ( $\beta=-0.20$ ,  $p<0.001$ ) remained significant, and the coefficient for age (21–34 years;  $\beta=-0.11$ ,  $p<0.05$ ) became significant; in the model for women, education became significant ( $\beta=-0.17$ ,  $p<0.05$ ); and in the model for men, education remained significant, and age (15–20 years) became marginal ( $\beta=-0.22$ ,  $p<0.10$ ). When the income variables were deleted from the multivariate model for contraceptive safety conspiracies, in the overall model, the coefficients for gender ( $\beta=0.12$ ,  $p<0.05$ ) and religiosity ( $\beta=0.10$ ,  $p<0.05$ ) remained significant; in the model for women, religiosity remained significant ( $\beta=0.14$ ,  $p<0.05$ ), and married or cohabitating with partner became marginally significant ( $\beta=0.10$ ,  $p<0.10$ ); and in the model for men, having any children became marginal ( $\beta=0.17$ ,  $p<0.07$ ).

(“contraceptive safety conspiracy beliefs subscale”; four items;  $\alpha=0.66$ ;  $M=2.69$ ,  $SD=2.50$ ). Three of the items were statements about the extent to which the government and medical and public health institutions can be trusted with respect to assuring and providing information about the safety of birth control methods (e.g., “The government tells the truth about the safety and side effects of new birth control methods”). The fourth item is: “Medical and public health institutions use poor and minority people as guinea pigs to try out new birth control methods.”

## Statistical Analysis

Frequency distributions and descriptive statistics were first generated for the variables of interest. Multivariate linear regressions were conducted for the overall sample and separately by gender to determine the amount of variance explained in scores for each of the three conspiracy beliefs scales by the set of sociodemographic correlates (i.e., age, gender, any children, education, income and number of people income supports, employment, religiosity, black identity). A significance level of 0.05 (two-tailed) was used for all analyses. Samples sizes for analyses varied slightly due to missing data on some of the variables.

Plots of residuals and predicted dependent variable scores for the regression models indicated that the assumptions of normality, linearity and homoscedasticity were met. Mahalanobis distances indicated no significant multivariate outliers, and colinearity diagnostics indicated no evidence of multicollinearity.

The present analyses had adequate power to detect small-to-moderate effects for the set of sociodemographic characteristics. According to effect size conventions outlined by Cohen,<sup>27</sup> 500 participants yield 0.80 power to detect a small-to-moderate effect ( $R^2=0.03$ ) and 1.00 power to detect a small-to-moderate effect ( $R^2=0.07$ ) using the set of sociodemographic variables. A similar analysis for male participants only ( $n=174$ ) has 0.80 power to detect a small-to-moderate effect ( $R^2=0.09$ ), and 1.00 power to detect a medium effect ( $R^2=0.18$ ). For female participants ( $n=326$ ), the corresponding power estimates are 0.80 for a small-to-moderate effect ( $R^2=0.05$ ) and 1.00 for a small-to-moderate effect ( $R^2=0.11$ ).

## RESULTS

### Relationships of Sociodemographic Characteristics to HIV/AIDS Conspiracy Beliefs

In the overall sample, respondents who were male and those who had a strong black identity or lower income held stronger HIV/AIDS conspiracy beliefs in multivariate models (Table 2). Only lower income was a significant multivariate predictor among women, and only stronger black identity was a significant multivariate predictor among men. The set of sociodemographic

characteristics explained 9% of the variance in HIV/AIDS conspiracy beliefs in the total sample, 7% among women and 12% among men.

### Relationships of Sociodemographic Characteristics to Birth Control Conspiracy Beliefs

Multivariate analyses indicated that male gender and lower education were significantly related to belief in black genocidal conspiracies, and male gender and high religiosity were significantly related to belief in contraceptive safety conspiracies in the overall sample (Table 3). Among women, lower income was the only significant multivariate predictor of genocidal conspiracy beliefs, and higher religiosity was the only significant multivariate predictor of contraceptive safety conspiracy beliefs. Among men, only lower education was significantly related to endorsement of genocidal conspiracy beliefs, and parenthood was the sole significant predictor of contraceptive safety conspiracy beliefs. The set of sociodemographic characteristics explained a moderately small amount of the variance in birth control conspiracy beliefs, with  $R^2$ s ranging from 0.05–0.09.

## DISCUSSION

In two articles reporting on the same data set,<sup>1,12</sup> we presented results indicating that a large group of respondents endorsed conspiracy beliefs related to HIV/AIDS and birth control, and conspiracy beliefs were associated with measures of condom use and contraceptive behavior. Those findings suggested that many African Americans have a profound mistrust of the U.S. government and the public health system. We undertook the present analysis to examine whether conspiracy beliefs are more concentrated among some subgroups of African Americans than others, or whether the beliefs are widespread across a broader segment of the African-American population. The present study suggests that conspiracy beliefs may be endorsed by diverse groups of African Americans.

Sociodemographic characteristics as a set had only a small effect on respondents' endorsement of conspiracy beliefs. In accordance with prior research on conspiracies and medical mistrust,<sup>7,9,23</sup> male gender was consistently related to greater belief in conspiracies, and lower SES (i.e., low education or income) and stronger black identity were significantly related to beliefs in conspiracies in some analyses. Although no prior work has examined this relationship for religiosity, higher religiosity was associated with stronger endorsement of birth control safety conspiracies.

We speculate that men may be more likely to endorse conspiracies than women overall, because they may more directly experience racial discrimination. Prior research indicates that African-American men more frequently report discrimination experiences than do African-Ameri-

can women, and that African-American men's greater perceptions of discrimination are predictive of stronger endorsement of conspiracy beliefs.<sup>7</sup> In addition, stronger black identification is related to a greater knowledge of racism in the United States<sup>24</sup> and may therefore lead to greater proclivity to believe in conspiracies regarding racial discrimination by the government and public health system. Moreover, researchers have posited that individuals of lower SES may endorse conspiracies as a way of attributing control over their disadvantaged situation to an external, racist source.<sup>14,15</sup> African Americans with high religiosity who may have a strong external (or low internal) locus of control,<sup>28,29</sup> may similarly be more likely to endorse conspiracies as an external explanation for their lower status in society. Nevertheless, we did not assess locus of control and cannot test these hypotheses with the present data set.

Although we did not assess whether conspiracy beliefs are associated with mistrust of public health messages, our findings may have implications for the framing of such messages within African-American communities. Social psychological research on persuasion indicates that individuals closely attend to messages that are advanced by credible, trustworthy and likeable sources.<sup>30</sup> When sources are not perceived as credible, even a strong, well-argued message may be discounted. Given that conspiracy beliefs most likely represent a general mistrust of government and public health entities, prevention messages advanced by the government and public health institutions may not be effective in African-American communities.<sup>31</sup> Prevention messages that are tailored to African-American communities, in which conspiracy beliefs are openly acknowledged and discussed by respected and credible peers and community sources, may be critical for successful HIV and pregnancy prevention efforts. Peer educators who are recognized as leaders within a community may have more success than educators or other professionals who are perceived as outsiders. Media campaigns that target African-American as well as African markets have shown potential in engaging such communities on healthcare issues.<sup>31,32</sup> For example, health-related shows and advertisements on radio stations with a large African-American audience may be acceptable to wide segments of the population and may help to change beliefs regarding HIV and family planning.

Nevertheless, dispelling conspiracy beliefs may be an unrealistic focus of prevention efforts. Conspiracy beliefs can be seen as understandable in the context of African Americans' longstanding experiences with racism in healthcare.<sup>4</sup> In addition, given the strong belief in conspiracies found in our data set,<sup>1,12</sup> leaders as well as general populations in African-American communities may be equally likely to endorse conspiracies. Indeed, a recent study found that locally elected African-American officials in Louisiana endorsed conspiracy beliefs about HIV/AIDS at similar rates as African-American congressmen in the same state.<sup>33</sup> Thus, those individuals who have

the most credibility in addressing conspiracy beliefs may actually hold the beliefs themselves. A more realistic tactic, therefore, might be to break the linkage between conspiracy beliefs and health behavior. Acknowledging conspiracy beliefs in the context of prevention messages that emphasize the importance of, for instance, using condoms, getting regular check-ups and practicing healthy behaviors, may have more success than attempting to dispel such beliefs directly. The combination of such prevention messages advanced by credible sources may be the most effective means of prevention in African-American communities.

The present study has a number of strengths. In addition to being the first study to examine a comprehensive set of HIV/AIDS and birth control conspiracy beliefs in a relatively large national sample of African Americans, the present analysis had sufficient power to test whether sociodemographic characteristics are related to endorsement of conspiracies. However, several points are important to consider in the evaluation of the results. The goal of the present analysis was to examine the contribution of sociodemographic and sociocultural background factors on endorsement of conspiracies. Thus, we did not include in the analysis social cognitive variables, such as experience with people with HIV or perceived attitudes and norms regarding HIV and healthcare, which may have explained a larger portion of the variance in beliefs. In addition, the sampling frame excluded key segments of the African-American population, such as those who reside in neighborhoods with a <27% density of African Americans as well as those without a landline telephone. The beliefs of individuals who refused to participate in the survey are unknown.

Although the focus of this analysis was on sociodemographic characteristics, we were unable to include four variables that are directly related to the HIV epidemic—sexual orientation, HIV status, geographical area and region/country of origin—and which may be related to belief in HIV conspiracies. We did not have enough variability on sexual orientation for inclusion in analyses (only 10 participants identified as men who have sex with men) and, due to human subjects concerns, we did not directly ask participants to report their HIV status. Further, we did not retain the links of participants' responses to telephone numbers or exchanges in the database, nor did we ask respondents to report their place of residence. Therefore, we could not examine geographical variation in beliefs. In addition, because we limited the sample to those born in the United States, recent immigrants were not included in the sample, and differences between African Americans and those born in Africa or the West Indies could not be examined. In-depth future research is needed to investigate the contributions of these potentially important factors to conspiracy beliefs.

In conclusion, the present findings suggest that conspiracy beliefs are not an anomaly present in a small pock-

et of society. Instead, conspiracy beliefs about HIV/AIDS and birth control are endorsed by African Americans with a range of sociodemographic and sociocultural characteristics. Community-based interventions targeting large segments of African-American communities may create a credible platform on which to disseminate prevention messages to address conspiracy beliefs.

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