

HIV-Related Stigma Among African-American Youth in the Northeast and Southeast US

Jelani C. Kerr · Robert F. Valois · Ralph J. Diclemente · Faith Fletcher · Michael P. Carey · Daniel Romer · Peter A. Vanable · Naomi Farber

Published online: 9 January 2014
© Springer Science+Business Media New York 2014

Abstract HIV-related stigma inhibits optimal HIV prevention and treatment among African-Americans. Regional differences in HIV/AIDS prevalence may be related to stigma among young African-Americans. Baseline data ($N = 1,606$) from an HIV prevention intervention were used to investigate regional differences in HIV-related stigma and knowledge among African-American adolescents in four mid-sized cities in the Northeastern and Southeastern US. Analyses indicated greater HIV-related stigma among adolescents from the Southeast relative to adolescents from the Northeast ($F = 22.23$; $p < 0.0001$). Linear regression indicated a negative relationship between HIV stigma and HIV knowledge ($b = -0.65$; $p < 0.0001$). Addressing HIV/AIDS in high prevalence locales should include efforts to reduce HIV-related stigma.

Keywords HIV · Stigma · Adolescence · Regional differences

Introduction

Racial minorities are priority populations to reduce HIV/AIDS disparities in the United States. As such, there are a number of promising legislative and programmatic initiatives to address HIV prevention among these groups. Prevention approaches encompass a range of proven effective strategies including increasing early HIV testing, improving access to treatment, treatment linkage and retention programs, reducing HIV-associated risk behaviors, and implementing harm reduction strategies. Despite these efforts, HIV-related stigma undermines the optimal execution of these programs and adoption of healthier behaviors [1, 2]. HIV-related stigma is associated with decreased likelihood of HIV testing (particularly in environments where healthcare access is scarce) [1, 2], reducing HIV treatment engagement and maintenance [1], reducing the quality of care for persons living with HIV/AIDS (PLWHA) [3], and reducing the efficacy of HIV

J. C. Kerr (✉)
Department of Sociology, Anthropology, and Criminology,
University of Windsor, 401 Sunset Ave, CHS 50-1, Windsor,
ON N9B 3P4, USA
e-mail: jkerr@uwindsor.ca

R. F. Valois
Department of Health Promotion, Education, and Behavior,
Arnold School of Public Health, University of South Carolina,
Columbia, SC, USA

R. J. Diclemente
Behavioral Sciences and Health Education, Rollins School of
Public Health, Emory University, Atlanta, GA, USA

F. Fletcher
Community Health Sciences Division, University of Illinois at
Chicago, Chicago, IL, USA

M. P. Carey
Psychiatry and Human Behavior, Alpert Medical School, Brown
University, Providence, RI, USA

D. Romer
Annenberg Public Policy Center, University of Pennsylvania,
Philadelphia, PA, USA

P. A. Vanable
Psychology Department, College of Arts and Sciences, Syracuse
University, Syracuse, NY, USA

N. Farber
College of Social Work, University of South Carolina,
Columbia, SC, USA

preventive interventions behaviors (such as condom use) [3].

Young people (age 13–24 years old) account for approximately 26 % of new HIV diagnoses and African-Americans constitute approximately 44 % of new HIV cases annually [4]. Despite concerning disparities, few epidemiological studies have examined HIV-related stigma among African-American youth. Thus, understanding the perspectives of a priority population of African-American youth may have implications for not only the quality of life for PLWHA, but also for HIV testing and prevention goals among this vulnerable population.

Stigma has the potential to devalue or discredit individuals and people who experience HIV-related stigma report greater discrimination and lower quality of life [2, 5]. African-Americans living with HIV report greater perceived stigma and more social rejection than Caucasians [6]. As HIV/AIDS is a prominent health concern among African-Americans, understanding HIV-related stigma can inform the development of interventions that: (1) have potential for greater impact than individually-targeted programming; [7] (2) result in longer-term health benefits; [7] and (3) augment the effectiveness of behavioral interventions by enhancing participants' likelihood to execute HIV-preventive and treatment behaviors [7].

Regional residence may serve as an additional factor affecting HIV/AIDS risk. HIV/AIDS is most prevalent in the South [8]. African-Americans account for the greatest percentage of AIDS cases within both locales but Southern African-Americans comprise the greatest percentage of AIDS cases by region [8]. Despite this disparity, there is little quantitative research examining regional differences in HIV-related stigma among African-Americans. Understanding regional differences in stigma may inform intervention approaches and program targeting among priority groups.

This study addressed existing gaps in research literature by examining HIV-related stigma among African-American adolescents. It utilized data from a multisite study of African-American youth (conducted in four mid-sized cities in the US) [9] to determine differences in HIV-preventive behaviors, attitudes, self-efficacy and intentions from the exposure to mass media in the Southeastern and Northeastern US.

Methods

Study Design

This study utilized baseline data from Project iMPACCS, an adolescent HIV risk reduction intervention conducted in

Macon, GA, Providence, RI, Syracuse, NY, and Columbia, SC [9]. Details from this multi-site study can be found elsewhere [9]. Briefly, this study used a repeated measures randomized control research design to compare the effects of media on HIV risk behavior among African-American adolescents. Data were collected on demographics, HIV knowledge, HIV/STI related attitudes and beliefs, HIV stigma, risk behaviors, STI acquisition, and HIV testing. Cities were selected based on demographic and population variables to yield equivalent, matched pairs ([9] for details). Cities were matched on characteristics of risk behaviors for urban African-American adolescents and for rates of sexually transmitted infections. Data were collected from 1,606 African-American participants between the ages of 14–17 from 2006–2007. After acquiring parental consent and youth assent, participants completed an audio computer assisted self-interview (ACASI) on a laptop computer.

Measures

Demographics

Participants were asked to provide their age, sex, self-described racial identity, and eligibility for free or reduced price school lunch (a proxy for socioeconomic status).

HIV Knowledge

HIV knowledge was assessed using the 18-item HIV-KQ-18 knowledge scale [10]. This scale assesses knowledge of HIV transmission and prevention. Response options for each item are “Mostly True”, “Mostly False”, and “Don't Know.” All “Don't Know” responses were coded as wrong answers. Scores were based on the number of correct answers. This widely-used scale has previously demonstrated an acceptable level of internal consistency (0.73).

HIV Stigma

HIV stigma was assessed using a seven-item version of the AIDS-Related Stigma Scale [11]. This measure assesses stigma associated with various stigma beliefs (i.e. people who have HIV are dirty; people who have HIV are cursed; people who have HIV should be ashamed; it is not safe for children to be around somebody who is infected with HIV; a person with HIV must have done something wrong and deserves to be punished; people who have HIV should be isolated; you do not want to be friends with someone who has HIV). This scale has 6 response options ranging from 1 (strongly disagree) to 6 (strongly agree). This HIV stigma scale had a Cronbach's alpha of 0.84.

Statistical Analysis

Baseline data were used for this study. Mean scores for stigma and HIV knowledge were examined by sex and geographic region (Northeast vs. Southeast). Analysis of Covariance (ANCOVA) was conducted to compare mean scores for stigma and HIV knowledge by region and sex. ANCOVA controlled for eligibility for free or reduced price school lunch. Linear regression (not tabled) was performed to identify relationships between HIV stigma and HIV knowledge (controlling for age, sex, region, and eligibility for free or reduced price school lunch). Subsequent linear regressions were performed to identify relationships between HIV stigma and HIV knowledge by region (controlling for age, sex, and eligibility for free or reduced price lunch). All analyses were conducted using Statistical Analysis Software version 9.2.

Results

The sample included females (60 %) and males (40 %) who self-identified as African-American (98 %). The sample included 14 year olds (36 %), 15 year olds (29 %), 16 year olds (21 %), and 17 year olds (14 %). Approximately half of sample was from the Northeast and half from the Southeastern US. Mean scores for HIV stigma and HIV Knowledge were 16.44 and 9.10, respectively. Mean stigma scores for males (17.82) were higher than scores for females (15.51) ($F = 30.94, p < 0.0001$) and scores for the Southeast (17.30) were higher than the Northeast (15.61) ($F = 22.23, p < 0.0001$) (Table 1). Mean HIV knowledge scores were higher for females (9.36) than males (8.71) ($F = 13.94, p < 0.01$). Mean knowledge scores were 9.23 and 8.96 for participants in the Northeast and Southeast, respectively ($F = 3.23, ns$) (Table 1). Linear regression indicates a negative relationship between HIV stigma and HIV knowledge for the entire sample ($b = -0.65, p < 0.0001$), within the Southeast ($b = -0.65, p < 0.0001$), and within the Northeast ($b = -0.66, p < 0.0001$) (not tabled).

Discussion

This study addressed several gaps in HIV-related stigma research. It utilized a 4-city sample to assess regional differences in HIV stigma among a population of African-American adolescents. HIV stigma scores were higher in the Southeast and there was a negative relationship between HIV stigma and HIV-related knowledge in both regions. The results of this study highlight the importance of focusing on region and gender among African-American

youth for addressing HIV-related stigma. Addressing stigma among these groups has potential for establishing healthier attitudes and behaviors early, greater likelihood for HIV prevention maintenance through the life-course, more effective HIV prevention efforts, longer term PLWHA acceptance, and less discrimination against PLWHA [1, 2].

Southeastern adolescents in this study had significantly greater stigmatizing attitudes compared to Northeastern participants. These findings are concerning because the Southern US has the greatest HIV/AIDS prevalence in the country and African-Americans are disproportionately affected in Southern states. This stigma differential may be partially attributed to less access to care and less emphasis on proven-effective HIV prevention education strategies within school systems in the South. Targeted interventions to address HIV-related stigma, healthcare access policy, and other sociocultural factors in the Southeast may help ameliorate these challenges in this high-risk region.

Addressing HIV-related stigma necessitates the recognition of its intersection with homophobia, racism, and negative attitudes towards drug use and sex work [2]. Prior research found that Southern residents report more negative attitudes towards sexual minorities (e.g. lesbian, gay, bisexual, transgender, queer) than individuals living in other regions of the US [12], and that there is less stigma associated with substance abuse treatment for PLWHA in the Northeast compared to the Southeast [13]. Social norms and attitudes may perpetuate HIV/AIDS stigma in which, in turn, may undermine the effectiveness of HIV prevention and treatment efforts. To adequately address HIV-related stigma in general and the Southeast in particular, multifaceted approaches which consider the intersectionality of social and cultural influences must be employed [1].

African-American PLWHA experience greater levels of stigma than PLWHA of other races/ethnicities [14]. African-American sexual minorities also experience heightened levels of stigma associated with sexual orientation compared to other groups and homosexuality is in conflict with prevalent community norms [14–16]. This compounding of stigma experiences increases the likelihood of engaging in HIV risk behavior and inhibiting treatment engagement. Moreover, this group is often subject to racial discrimination which is associated with risky sex among adolescents [17]. Experiencing these types of stigmas and discrimination may help exacerbate HIV-disparities in African-American communities [18].

HIV knowledge scores were statistically similar by locale despite higher stigma scores in the Southeast. Analyses examining HIV-related stigma employing interactions of knowledge and geographic region did not

Table 1 Mean scores and analysis of variance for stigma and HIV knowledge in a sample of African-American adolescents from four cities in the Southeast and Northeast ($N = 1,606$)

	Stigma ^a			HIV Knowledge ^a		
	Mean	SD	F (<i>p</i> value)	Mean	SD	F (<i>p</i> value)
Sex						
Male ($n = 645$)	17.82	7.51	30.94 ($p < 0.0001$)	8.71	3.87	13.94 ($p < 0.01$)
Female ($n = 961$)	15.51	7.19		9.36	3.71	
Region						
Northeast ($n = 815$)	15.61	7.18	22.23 ($p < 0.0001$)	9.23	3.79	3.23 ($p < 0.07$)
Southeast ($n = 791$)	17.30	7.55		8.96	3.77	
Total	16.44	7.41		9.10	3.79	

^a Models control for age and eligibility for free and reduced price lunch

indicate a significant difference in HIV stigma. Overall, the analyses indicate a negative association between HIV knowledge and HIV-related stigma, thus, adolescents with lower HIV knowledge scores were more likely to have higher stigma scores. Geographically, however, the underlying factors that facilitate stigma likely extend beyond knowledge deficits. Instead, structural and socio-cultural factors may perpetuate stigma in these regions. More research should be conducted to understand the complex interplay of HIV-related knowledge, geographic region, sociocultural factors, and HIV stigma.

Males demonstrated significantly lower HIV-related knowledge and significantly greater HIV-related stigma. Other studies demonstrate that African-American male youth generally have lower HIV knowledge than African-American female youth [19, 20]. As lower HIV knowledge often predicts greater stigma, it is unsurprising that males also exhibit greater HIV-related stigma as well. Such results demonstrate the necessity of improving HIV-related knowledge as well as reducing stigma with targeted interventions towards males.

HIV-related stigma among youth warrant comprehensive anti-stigma interventions in this population. A review of interventions with child, adolescent, and young adult populations indicates that multipronged approaches are necessary to effectively reduce HIV-related stigma [2]. As HIV knowledge is inversely related to HIV-related stigma, these efforts should emphasize knowledge building, communicating essential facts about HIV transmission, prevention, and treatment, and reducing misconceptions that may fuel stigma. Additionally, skill building activities combined with opportunities for youth to engage with relatable PLWHA have demonstrated effectiveness in reducing HIV-related stigma [2]. Providing science-based sexual health and HIV education in schools and communities, augmented with efforts to increase exposure to PLWHA, provides an attractive opportunity to increase

HIV-related knowledge and reduce stigma among this population.

This study had limitations. First, the results focus on a distinct racial/ethnic group of adolescents residing in four mid-size cities in two regions of the US. These findings may not generalize to other locales and populations. Future studies should include a wider age range, more racially/ethnically diverse samples, rural and urban locales, and more regions of the US in order to identify populations that require targeted anti-stigma programming. Second, responses to HIV stigma inquiries may have been influenced by social desirability. To address this, we used ACASI (i.e., self-administered surveys) and identification numbers to increase confidentiality and enhance candid reporting. Finally, because HIV-related stigma can be difficult to measure, we used a previously validated measure to promote an accurate assessment of HIV stigma among African-American adolescents.

Conclusion

This study used data from a multisite study of African-American adolescents to identify differences in HIV-related stigma by region. Greater HIV-related stigma was observed in the Southeast thus highlighting the need for stigma-challenging interventions by geographic region. Stigma reduction holds promise for long-term quality of life improvements for PLWHA as well as for enhancing long-term prevention benefits. We also call for research from a wider array of geographic regions and ethnicities.

Acknowledgments This research was supported by National Institutes of Health-National Institute of Mental Health Grant 1-U01-MH066802, a collaborative project awarded to participating sites: Brown University-Rhode Island Hospital, Emory University, Syracuse University, University of South Carolina, and University of Pennsylvania-Annenberg Public Policy Center.

References

- Mahajan A, Sayles J, Patel V, Remien R, Sawires S, Ortiz D, et al. Stigma in the HIV/AIDS epidemic: a review of the literature and recommendations for the way forward. *AIDS*. 2008; 22(Supplement 2):S67–79.
- Brown L, Macintyre K, Trujillo L. Interventions to reduce HIV/AIDS stigma: what have we learned? *AIDS Educ Prev*. 2003;15: 49–69.
- Prachakul W, Grant J, Keltner N. Relationships among functional social support, HIV-related stigma, social problem solving, and depressive symptoms in people living with HIV: a pilot study. *J Assoc Nurses AIDS Care*. 2007;18(6):67–76.
- Centers for Disease Control and Prevention. CDC fact sheet: new HIV infections in the United States (internet). 2012. <http://www.cdc.gov/nchhstp/newsroom/docs/2012/hiv-infections-2007-2010.pdf>. Accessed 15 June 2013.
- Kelly J, Lawrence J, Smith SJ, Hood H, Cook D. Stigmatization of AIDS patients by physicians. *Am J Public Health*. 1987;77(7): 789–91.
- Swendeman D, Rotheram-Borum M, Comulada S, Weiss R, Ramos M. Predictors of HIV-related stigma among young people living with HIV. *Health Psychol*. 2006;25(4):501–9.
- Blankenship K, Friedman S, Dworkin S, Mantell J. Structural interventions: concepts challenges and opportunities for research. *J Urban Health*. 2006;83(1):59–72.
- Centers for Disease Control and Prevention. HIV and AIDS in the United States by geographic distribution (internet). 2012. <http://www.cdc.gov/hiv/resources/factsheets/PDF/geographic.pdf>. Accessed 15 June 2013.
- Romer D, Sznitman S, DiClemente R, Salazar L, Vanable P, Carey MP, et al. Mass media as an HIV-prevention strategy: using culturally sensitive messages to reduce HIV-associated sexual behavior of at-risk African American youth. *Am J Public Health*. 2009;99(12):1–10.
- Carey MP, Schroder K. Development and psychometric evaluation of the brief HIV knowledge questionnaire. *AIDS Educ Prev*. 2002;14(2):172–82.
- Kalichman S, Simbayi L, Jooste S, Toefy Y, Cain D, Cherry C, et al. Development of a brief scale to measure AIDS-Related stigma in South Africa. *AIDS Behav*. 2005;9(2):135–43.
- Herek G. Heterosexuals' attitudes toward bisexual men and women in the United States. *J Sex Res*. 2002;39(4):264–74.
- Burnam M, Bing E, Morton C, Sherbourne C, Fleishman J, London A, et al. Use of mental health and substance abuse treatment services among adults with HIV in the United States. *Arch Gen Psychiatry*. 2001;58:729–35.
- Whol AR, Galvin FH, Carlos J, Myers HF, Garland W, Witt MD, et al. A comparison of msm stigma, HIV stigma and depression in HIV-positive latino and African American men who have sex with men (msm). *AIDS Behav*. 2013;17:1454–64.
- Brooks RA, Etzel MA, Hinojos E, Henry CL, Perez M. Preventing HIV among Latino and African American gay and bisexual men in a context of HIV-related stigma, discrimination, and homophobia: perspectives of providers. *AIDS Patient Care STDs*. 2005;19(11):737–44.
- Foster PP, Gaskins SW. HIV/AIDS-related stigma among African Americans in the southern United States. In: Liamputtong P, editor. *Stigma, discrimination and living with HIV/AIDS: a cross-cultural perspective*. Dordrecht: Springer; 2013. p. 325–36.
- Stock ML, Gibbons FX, Peterson LM, Gerrard M. The effects of racial discrimination on the HIV-risk cognitions and behaviors of black adolescents and young adults. *Health Psychol*. 2013;32(5): 543–50.
- Radcliffe J, Doty N, Hawkins LA, Gaskins CS, Beidas R, Rudy BJ. Stigma and sexual health risk in HIV-positive African American young men who have sex with men. *AIDS Patient Care STDs*. 2010;24(8):493–9.
- Swenson RR, Rizzo CJ, Brown LK, Vanable PA, Carey MP, Valois RF, et al. HIV knowledge and its contribution to sexual health behaviors of low-income African American adolescents. *J Natl Med Assoc*. 2010;102(12):1173–82.
- Sutton MY, Hardnett FP, Wright P, Wahi S, Pathak S, Warren-Jeanpiere L, et al. HIV/AIDS knowledge scores and perceptions of risk among African American students attending historically black colleges and universities. *Public Health Rep*. 2011;126:653–63.