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The Effects of a Mass Media HIV-Risk Reduction Strategy on HIV-Related Stigma and Knowledge Among African American Adolescents

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Abstract

HIV-related stigma undermines HIV prevention, testing, and treatment. Multipronged risk-reduction strategies may reduce stigma among African American adolescents. To test the effectiveness of a risk-reduction strategy in addressing stigma, 1613 African American adolescents from four mid-sized cities participated in a randomized control trial. Participants received a sexual-risk reduction [Focus on Youth (FOY)] or general health curriculum [Promoting Health Among Teens (PHAT)]. Two cities received a culturally-tailored media intervention. Participants completed baseline, 3-, 6-, and 12-month surveys to measure HIV-related stigma and knowledge. Analysis of covariance tested for stigma and knowledge differences by media city status and curriculum/media city status (PHAT media vs. PHAT non-media, FOY media vs. FOY non-media; FOY media vs. PHAT media; FOY non-media vs. PHAT non-media) at each measurement. Hierarchical linear modeling (HLM) determined stigma and knowledge differences over time. Media participants demonstrated greater HIV-related knowledge ($p < 0.10$) at 6 months and lower stigma at 3 months ($p < 0.10$). FOY media participants had lower 3-month ($p < 0.05$) and 12-month ($p < 0.10$) stigma scores than non-media FOY participants. FOY media and non-media participants had greater knowledge than PHAT for all intervals after baseline. FOY media had lower stigma than PHAT media after baseline for all intervals after baseline. HLM indicated greater knowledge slopes for the media group ($p < 0.05$). FOY media participants had greater knowledge slopes ($p < 0.05$) relative to non-media FOY participants and media PHAT participants ($p < 0.01$). A combination of a HIV risk-reduction curriculum and culturally-tailored media demonstrated some effectiveness in reducing stigma. Future use of media in HIV-prevention should include and evaluate effects on stigma.

Introduction

HIV/AIDS reduction among African Americans is a priority health concern in the United States. Although this group constitutes approximately 13% of the population, it accounts for 44% of new HIV cases.[1] Mortality rates for African Americans (31.0 per 100,000) far exceed that of white Americans (3.5 per 100,000).[2] Further, 63% of 13- to 14-year-olds with AIDS who die are African American.[3] These data warrant concern not only in terms of HIV prevention, but also for addressing treatment barriers that attenuate survival.

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HIV-related stigma is a significant impediment to combating the HIV/AIDS epidemic. The National Alliance for State and Territorial AIDS Directors and National Coalition of STD Directors (2014) highlight the salience of HIV-related stigma in undermining proven-effective HIV-reduction strategies.[4] Stigma not only impedes preventive behavior,[5,6] it also reduces testing,[5,7] treatment,[5,8] linkage,[9,10] retention,[9,10] and quality of care for persons living with HIV/AIDS (PHA).[11,12] It also increases the risk of negative mental health outcomes (i.e., depression and anxiety) for PHA.[11,12,14] Thus, reducing stigma may be essential to a enhancing survival rates and quality of life for PHA.

Stigma experiences of African Americans may be more challenging than among other ethnoracial groups. African American PHA report greater perceived stigma and more social rejection than other racial/ethnic groups.[15] Moreover, HIV-related stigma conflates with other discrediting attributes experienced by African American populations. For example, Logie et al. (2013) found that experiencing HIV-related stigma and racial discrimination were significantly correlated among black PHA.[16] These interacting stigmas may directly impede HIV-reduction efforts. As noted by Gardezi et al. (2008), black PHA accessing medical care report cultural insensitivity among service providers (i.e., negative remarks about one's ethnic/racial group, discourteous service) thus undermining quality of healthcare among this group.[17] These barriers can undermine effective HIV-reduction approaches in African American communities.

A major factor contributing to stigma is poor knowledge about HIV—especially regarding transmission. Increasing accurate knowledge about HIV transmission reduces unreasonable fear of contagion and allays concerns of contraction through casual contact.[7,18] As such, stigma may be addressed through educational interventions emphasizing medically accurate information on HIV acquisition.[7] Although most educational HIV/AIDS programs have a prevention focus, increasing knowledge about transmission may have ancillary benefits in reducing stigma.[19]

A promising approach to addressing HIV/AIDS is the judicious use of media to demystify HIV disease. Innovative, multifaceted media approaches have increased the visibility of HIV as a health concern and successfully promoted better preventive behaviors.[20,21] Project iMPPACS, a culturally-tailored, multifaceted (radio, television), mass media campaign demonstrated effectiveness in reducing HIV risks among African American adolescents in multiple cities.[21–23] However, stigma and knowledge changes were not examined in this study despite (a) the increase in preventive behaviors, which may have been preceded by knowledge gains, (b) reductions in risk behavior that may signal stigma reduction as greater stigma is associated with more HIV risks behaviors, and (c) stigma reduction that may have been an unanticipated collateral benefit of the culturally-tailored media.

In addition to media, recent findings indicate that HIV-prevention education may reduce stigmatizing attitudes among African American youth.[19] In this study, youth receiving a modified and condensed version of Focus on Youth (FOY),[24,25] a brief, educational HIV-prevention curriculum, had lower stigma scores at 3-month post-test than participants receiving a time-equivalent general health comparison condition (Promoting Health Among Teens—PHAT).[19] However, what is unknown is the longer-term effectiveness of FOY in reducing stigma. Moreover, what are the effects of the concurrent Project iMPPACS media campaign on stigma for FOY participants. In particular, did the media campaign enhance the effectiveness of FOY in reducing HIV-related stigma?

Recognizing these gaps in the research literature, this study has two aims: (1) examine the effectiveness of Project iMPPACS's multisite, multimedia campaign to reduce HIV-related stigma among African American adolescents, (2) determine the longer-term effectiveness of FOY in reducing stigma, and (3) determine the effectiveness of the Project iMPPACS media campaign in enhancing stigma-reduction among participants of the HIV-risk reduction FOY program.

Methods

Study design

This study utilized longitudinal data from an adolescent HIV risk reduction intervention conducted in Macon, GA, Providence, RI, Syracuse, NY, and Columbia, SC (Project iMPPACS). Details can be found elsewhere, but briefly, this study used a repeated measures, randomized-control research design to compare the effects of media on HIV risk among African American adolescents.[21,23] Two cities, one in the northeast and one in the southeast, received a culturally-tailored media intervention (television and radio) that promoted HIV-risk reduction behaviors. Cities were matched by risk behavior profiles and adolescent HIV risk behavior characteristics. These sites were population and regionally balanced. The media campaign was conducted after school and on evening and weekends. Television and radio spots were placed on channels that were popular among youth. Prior research suggests that, on average, between 48–87% of youth in media cities reported exposure to the television campaign and 22–50% to the radio campaign.[22] Ten to 14% of youth in non-media cities (mistakenly) reported exposure to television media and 7% to radio.[22] This level of false recognition is common in advertising.[26] Media messages were disseminated through a 16-month participant recruitment and 18-month follow-up period for Project iMPPACS.

All participants were randomized into either the FOY or PHAT small-group intervention. FOY was implemented among approximately 800 youth in four cities in the Northeast and southeastern US. Details about FOY can be found elsewhere[24,25] but briefly, FOY is a brief, multifaceted behavioral HIV-risk reduction program that has demonstrated success in the US and abroad.[25,27] FOY emphasizes HIV risk reduction through increasing knowledge about HIV prevention and transmission, development of skills to reduce risky behaviors, and practice of these skills to increase self-efficacy. The PHAT program served as an attention-control condition.[28] This culturally-tailored program emphasizes cardiovascular and cancer risk reduction through modification of diet, physical activity, and substance use behaviors. These programs were similar in length (16 h), frequency (2 days), and structure (amount of active learning activities).

Participants were 1613 African American adolescents, ages 14–17. Youth were recruited through direct outreach to partnering community-based organizations (21%), participant referral (29%), respondent driven sampling (15%), referral from adults in the community (14%), and street outreach (9%). Participants completed questionnaires between 2006 and 2009 using an Audio Computer-Assisted

Self-Interview (ACASI) after acquiring parental consent and youth assent. Data used were collected at baseline, and 3, 6, and 12 months. At least 90% of participants were retained at each measurement interval. ACASI procedures have demonstrated effectiveness in collecting accurate data of a sensitive nature.[29,30] ACASI also helps to minimize social desirability response. For the current analyses, data on demographics, HIV-related knowledge, and stigmatizing beliefs were used.

Media messaging

Details about the development and implementation of the culturally-tailored media can be found elsewhere.[21] Briefly, semi-structured in-depth interviews were conducted with 124 youth in intervention cities to inform the development messaging to modify risk behavior.[31] Adult community advisory boards also provided input into media content. Media messages utilizing dramatic narratives were developed and pilot-tested based on this formative research. Media were modified after feedback from adolescents in the target population. Three media themes emerged from these processes: (a) counteract perspectives regarding diminished pleasure associated with condom use and emphasize the condom's benefits of reducing stress associated with the risk of pregnancy and HIV, (b) waiting to have sex indicates mutual respect for one's partner, and (c) condoms should be used consistently. Television and radio spots featuring hip-hop music and African American adolescents were developed around these themes. These spots were implemented during television and radio programming with high uptake among African American adolescents.

Measures

Demographics. Several demographic variables were assessed to describe the sample. Participants were asked to provide their age, sex, racial background (African American/black, white/Caucasian, Asian or Pacific Islander, American Indian or Alaska Native, mixed or multiracial, other), self-described racial identity (African American or Non-African American), and eligibility for free or reduced price school lunch.

HIV knowledge. HIV knowledge was assessed using the 18-item HIV-KQ-18 knowledge scale.[32] This scale assesses knowledge pertaining to HIV transmission and prevention. Response options for this are ''Mostly True,'' ''Mostly False,'' and ''Don't Know.'' All incorrect and ''Don't Know'' responses were coded as wrong answers. An answer key was created and scores were generated based on the number of correct answers. Possible scores range from 0 to 18. This scale has demonstrated acceptable internal consistency (0.75–0.89).[32]

Stigma. HIV stigma was assessed using Kalichman's (2005) seven-item stigma scale.[33] 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).[33] This scale has 6 response options ranging from 1 (strongly disagree) to 6 (strongly agree). Possible scores range from 7 to 42. The scale has demonstrated acceptable internal consistency (Cronbach's alpha of 0.84).

Statistical analysis

Descriptive summary statistics were calculated for demographic variables. Mean HIV-related stigma and knowledge scores were calculated by media city status and small-group condition by media city status. Mean scores were collected at each measurement interval. Analysis of covariance (ANCOVA) was conducted at each measurement interval to compare knowledge and stigma scores between media and non-media cities and small groups within media and non-media cities. Hierarchical linear growth curve modeling (HLM) determined stigma and knowledge differences over the entire study. Models examined differences by media city status and small group intervention by media city status. A two-level hierarchical model determined participants' development with an individual growth trajectory. The trajectory is influenced by measurable individual characteristics (i.e., time and media condition). The parameters (slope and intercept) plus error of the participants' development (level 1) were outcome variables. Parameters vary as a function of the measurable individual characteristics (level 2). All analyses controlled for sex and age. ANCOVA for stigma controlled for knowledge. A proc glm procedure was used for the ANCOVA and proc mix was used for the HLM. All analysis was conducted using Statistical Analysis Software (SAS 9.3).

Results

The sample was principally comprised of African American (98%) youth (60% female) (Table 1). Approximately 51% of the sample resided in media cities, half were in FOY, half were in PHAT, and 74% qualified for free or reduced price lunch.

Mean age of the sample at baseline was 15 years old. Mean knowledge scores for the media group at baseline, and 3, 6, and 12 months were 9.0, 10.7, 10.7, and 10.8, respectively. Knowledge scores for the non-media group were 9.2, 10.5, 10.3, and 10.6 at the comparable measurement intervals (Table 2). ANCOVA detected greater knowledge scores for the media group at 6 months ($p < 0.10$). Differences in knowledge at other measurement intervals were not as pronounced. Mean stigma scores for the media group were 16.3, 14.2, 14.1, and 13.9; for the non-media group, stigma scores were 16.6, 14.9, 14.6, and 14.4 (Table 2). There were no significant differences in stigma scores between experimental groups at baseline, 6 months, and 12 months. However, the intervention (media) group had lower ($p < 0.10$) stigma scores than the control (non-media) at 3 months. Mean knowledge scores for PHAT participants in media cities were 9.0, 10.0, 10.1, and 10.3. Knowledge scores for PHAT participants in non-media cities were 9.1 at baseline, 10.0 at 3 months, 9.7 at 6 months, and 10.1 at 12 months. Stigma scores for PHAT participants were 16.0, 14.7, 14.7, and 14.5 for media cities and 16.5, 14.9, 14.7, and 14.8 for non-media cities. ANCOVA did not detect significant differences in HIV-related knowledge and stigma between PHAT participants in media and non-media cities at any measurement

Table 1. Demographic Characteristics of a Sample of African American Adolescents from Four Cities in the Southeast and Northeast (N = 1613)

	N	*Percent*
Gender		
Male	650	40.3%
Female	963	59.7%
Age at baseline		
14	575	35.7%
15	466	28.9%
16	352	21.8%
17	220	13.6%
Race		
African American	1484	92.0%
White	3	0.2%
Asian/Pacific Islander	1	0.1%
American Indian/Alaska Native	17	1.1%
Mixed/multiracial	73	4.5%
Other	31	1.9%
Identifies as African American		
Yes	1582	98.1%
No	31	1.9%
Media city		
Yes	818	50.7%
No	795	49.3%
Small-group intervention		
PHAT	799	49.5%
FOY	814	50.5%
Free or reduced lunch[a]		
Yes	1186	74.2%
No	250	15.6%
Don't know	163	10.2%

[a]Fourteen respondents did not submit data on free or reduced lunch.

FOY, Focus on Youth; PHAT, Promoting Health Among Teens.

Table 2. 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 = 1613)

	PHAT non-media vs. media		*FOY non-media vs. media*		*Total sample non-media vs. media*	
	PHAT non-media	*PHAT media*	*FOY non-media*	*FOY media*	*Total non-media*	*Total media*
Knowledge						
Baseline	9.1	9.0	9.3	9.0	9.2	9.0
3-month	10.0	10.0	11.1	11.3	10.5	10.7
6-month	9.7	10.1	11.0	11.3	10.3	10.7*
12-month	10.1	10.3	10.9	11.3	10.6	10.8
Stigma						
Baseline	16.5	16.0	16.8	16.5	16.6	16.3
3-month	14.9	14.7	14.7	13.5**	14.9	14.2*
6-month	14.7	14.7	14.3	13.5	14.6	14.1
12-month	14.8	14.5	14.5	13.3*	14.4	13.9

*$p < 0.10$; **$p < 0.05$; ***$p < 0.01$; ****$p < 0.0001$.

FOY, Focus on Youth; PHAT, Promoting Health Among Teens.

interval. Mean knowledge scores for FOY participants were 9.0, 11.3, 11.3, and 11.3 for media cities and 9.3, 11.1, 11.0, and 10.9 for non-media cities. Stigma scores for FOY participants were 16.5, 13.5, 13.5, and 13.3 for media cities and 16.8, 14.7, 14.3, and 14.5 for non-media cities. There were no significant knowledge differences for FOY participants by media status. However, FOY participants in media cities had lower stigma scores at 3 ($p < 0.05$) and 12 months ($p < 0.10$).

ANCOVA indicates similar knowledge scores between PHAT and FOY participants in media cities at baseline (not tabled). Knowledge scores were significantly higher for FOY participants than PHAT participants in media cities at 3 months ($p < 0.0001$), 6 months ($p < 0.0001$), and 12 months ($p < 0.01$). In media cities, stigma scores were similar between FOY and PHAT at baseline, but significantly higher for PHAT participants at 3 months ($p < 0.05$), 6 months ($p < 0.05$), and 12 months ($p < 0.05$). In non-media cities, knowledge scores for PHAT and FOY were similar at baseline, but were significantly higher for FOY participants at 3 months ($p < 0.01$), 6 months ($p < 0.0001$), and 12 months ($p < 0.01$). There were no statistically significant differences in stigma scores between PHAT and FOY in non-media cities at any measurement interval.

The HLM indicates that, for all models, knowledge significantly increased over time while stigma significantly decreased (Tables 3 and 4). There were no significant differences in knowledge by media conditions but persons in media cities had greater rates of increase in knowledge scores over time (slopes) compared to non-media cities ($p < 0.05$). There were no significant differences in stigma scores or rates of increase over time between participants in media and non-media cities. FOY participants in media cities had greater knowledge slopes ($p < 0.05$) than non-media FOY participants. There were no significant differences in knowledge scores, knowledge slopes, stigma scores, or stigma slopes between PHAT participants in media and non-media cities.

HLM suggests that, within non-media cities, FOY participants had greater knowledge scores ($p < 0.05$) and slopes ($p < 0.10$) than PHAT participants (Table 4). There were no significant differences in stigma between PHAT and FOY in non-media cities. FOY participants in media cities had greater knowledge scores ($p < 0.05$) and significantly greater slopes ($p < 0.01$) than PHAT participants in media cities. Stigma scores were statistically similar between PHAT and FOY participants in media cities but slopes were significantly greater for PHAT participants ($p < 0.01$).

Discussion

This study examined the effectiveness of a multisite, multifaceted culturally-tailored media-based HIV prevention strategy on HIV-related knowledge and stigma among African American adolescents. To our knowledge, this is one of few studies to examine the collateral benefits of an HIV risk-reduction intervention in reducing stigma using large-scale HIV prevention messaging, and the first among African American adolescents. Understanding these benefits can help to inform the development of HIV prevention strategies as well as more fully understand the additional benefit for HIV risk reduction approaches. Moreover, implementing effective strategies that reduce negative connotations of sexually transmitted infections (which include HIV) have the potential

Table 3. Hierarchical Linear Growth Curve Modeling for Knowledge and Stigma by Time, Media City Status, and Educational Program Condition

Fixed Effect	*Coefficient*	*SE*	*T-value*
Non-media vs. media			
Knowledge			
Intercept	−1.75	1.25	−1.40
[a]Condition	0.05	0.17	0.27
Time	0.27	0.03	8.34****
Condition[x]Time	0.09	0.04	1.91**
Stigma			
Intercept	26.73	2.21	12.07****
[a]Condition	−0.51	0.33	−1.54
Time	−0.46	0.07	−7.04***
Condition[x]Time	−0.00	0.09	0.05
PHAT Non-media vs. media			
Knowledge			
Intercept	−3.86	1.74	−2.21**
[a]Condition	0.12	0.24	0.49
Time	0.22	0.04	4.88****
Condition[x]Time	0.04	0.06	0.52
Stigma			
Intercept	28.45	3.16	8.99****
[a]Condition	−0.48	0.47	−1.03
Time	−0.41	0.09	−4.48****
Condition[x]Time	0.14	0.13	1.13
FOY Non-media vs. media			
Knowledge			
Intercept	−0.42	1.77	0.24
[a]Condition	−0.01	0.25	−0.06
Time	0.32	0.05	6.92****
Condition[x]Time	0.13	0.06	2.01**
Stigma			
Intercept	24.7	3.10	7.97****
[a]Condition	−0.55	0.48	−1.16
Time	−0.52	0.09	−5.50****
Condition[x]Time	−0.13	0.13	−1.02

[a]Condition: (non-media vs. media).
*$p<0.10$ **$p<0.05$ ***$p<0.01$ ****$p<0.0001$.
FOY, Focus on Youth; PHAT, Promoting Health Among Teens.

Table 4. Hierarchical Linear Growth Curve Modeling for Knowledge and Stigma by Time, Media City Status, and Educational Program Condition Continued

Fixed Effect	*Coefficient*	*SE*	*T-value*
FOY vs. PHAT (media cities)			
Knowledge			
Intercept	−2.47	1.76	−1.41
[a]Program	−0.49	0.24	−2.02**
Time	0.45	0.04	10.76****
Program[x]Time	−0.19	0.06	−3.26***
Stigma			
Intercept	26.81	3.04	8.82****
[a]Program	0.08	0.45	0.17
Time	−0.65	0.08	−7.62****
Program[x]Time	0.38	0.12	3.16***
FOY vs. PHAT (Non-media cities)			
Knowledge			
Intercept	−0.35	1.75	−0.20
[a]Program	−0.59	0.25	−2.36**
Time	0.33	0.05	6.86****
Program[x]Time	−0.11	0.07	−1.63*
Stigma			
Intercept	26.06	3.20	8.13****
[a]Program	−0.03	0.49	−0.06
Time	−0.52	0.10	−5.33****
Program[x]Time	0.11	0.14	0.78

[a]Program:(FOY vs. PHAT).
*$p<0.10$ **$p<0.05$ ***$p<0.01$ ****$p<0.0001$.
FOY, Focus on Youth; PHAT, Promoting Health Among Teens.

to facilitate greater use of sexual health services.[34] The findings highlight the relative effectiveness of media on stigma reduction and HIV knowledge increases.

Although HIV knowledge generally increased for all participants over time, there were differences by the 6-month measurement interval. Moreover, participants in media cities had greater rates of change than non-media participants. It appears that although both intervention and control groups experienced knowledge gains, the media intervention promoted maintenance of these gains over longer periods of time. As reported previously, the media intervention demonstrated favorable outcomes in reducing HIV risk.[21–23] It is likely that knowledge gains bolstered and maintained by media preceded these risk reductions. In terms of stigma, lower HIV-knowledge is associated with higher levels of stigma. It is likely that strategies that increase factual knowledge about transmission risks and prevention methods demonstrate effectiveness in reducing stigma. Therefore, media strategies to reduce stigma should also consider HIV-related knowledge as an antecedent to stigma reduction. Overall, practitioners and researchers interested in addressing HIV disparities may want to include culturally-tailored media in their repertoire of intervention strategies as a means to extend the benefits of education efforts.

Analyses indicate that the media strategy had a modest but significant benefit in addressing stigma for adolescents. Stigma scores were statistically similar at baseline but participants in non-media cities demonstrated greater stigma at the 3-month measurement interval. However, these differences diminished by the 6-month measurement interval. The findings indicated that the media likely facilitated short-term effects in reducing stigma but it did not maintain these effects over longer periods of time. It should be noted, however, that the focus of Project iMPPACS and its media messaging was the promotion of HIV-prevention behaviors (i.e., condom use and delaying sexual encounters). Thus, while changes in stigma are promising, they are not an intended target of the iMPPACS intervention, but rather they are a collateral benefit. Future media-based intervention studies should consider assessing the impact on stigma and explore the mechanisms through which stigma reduction occurs. Understanding these pathways may inform the development of effective stigma-reduction approaches for high-risk groups.

Analysis indicates that FOY participants in media cities had less stigmatizing attitudes compared to non-media FOY youth. HLM suggests that FOY participants in media cities also had greater slopes for knowledge than non-media FOY participants. However, media did not affect HIV-related knowledge and stigma for PHAT participants. It is possible that the media reinforced knowledge gains and stigma-related attitude

modifications that were developed in the FOY intervention. PHAT participants, however, did not have exposure to exercises that reduce stigma; thus the media could not build upon a foundation of themes that ameliorate stigmatizing perspectives. This study suggests that coupling the FOY intervention with a media approach may increase knowledge and reduce stigma more effectively than curricula alone.

Analysis indicates that FOY facilitated long-term knowledge increases in media and non-media cities compared to PHAT. Findings by Barker et al.[19] also indicated HIV knowledge gains and stigma reduction, but only in the short term. However the present study, which compares PHAT and FOY's effect on stigma by media intervention status (whether participants resided in a city where the media was implemented), indicates that FOY was only more effective in reducing stigma than PHAT when aided by media. Thus, FOY, in and of itself, was not significantly effective at reducing stigma. What is encouraging, however, is that coupling FOY with media, even when using a condensed version of the curriculum, can reduce stigma on a more long-term basis.

It may be possible to create media-based interventions that not only reduce HIV risk, but also addresses HIV-related stigma. As mentioned before, previous findings highlight the effectiveness of culturally tailored media in HIV risk-reduction. Augmenting behavioral messaging with potentially effective stigma reduction approaches may amplify the benefits observed in this study. For example, an effective strategy to reduce stigma and increase positive attitudes towards persons living with HIV/AIDS (PHA) is exposure to relatable PHA. A national longitudinal study by Herek and Capitanio (1997) indicates that, among people with the most negative attitudes towards PHA, vicarious contact with an HIV positive celebrity translated into reduced stigma.[35] Utilizing vicarious contact and HIV prevention mass-messaging may prove beneficial in reducing both stigma and risk behavior. Future efforts to innovate HIV prevention strategies and include PHA warrant further development and evaluation.

Limitations of this study should be noted. This study was conducted among a sample of African American adolescents and results may not generalize to other populations. The study also uses self-report data that can be influenced by motivational biases. However, we utilized ACASI procedures to reduce social desirability and elicit more accurate data. Finally, stigma is a multidimensional concept that is difficult to measure. Although there is much progress that should be advanced in this realm, this study attempts to address this by using a validated, widely-used measure of stigma.

This study examined the effects of culturally-tailored HIV-prevention media in reducing HIV-related stigma. HIV prevention messaging had modest short-term effectiveness in reducing stigma and longer-term effectiveness in increasing knowledge. However, complementing a media component with an existing HIV prevention curriculum marginally enhances the effectiveness of curriculum-based health education programs in reducing stigma. Public health professionals should recognize the ancillary benefit of reducing stigma and increasing knowledge of culturally-tailored HIV-prevention messaging. Future approaches utilizing media in HIV prevention should consider inclusion of stigma reduction evaluations and strategies.

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