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DEVELOPMENT OF A VIDEO-DELIVERED SERIAL DRAMA DESIGNED TO REDUCE COMMUNITY HOMOPHOBIA AND HIV STIGMA, DECREASE SEXUAL RISK BEHAVIOR, AND INCREASE HIV TESTING AMONG BLACK YOUTH

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Abstract

This article describes the development of a video serial drama intervention that was designed to address factors that influence HIV in the United States among Black youth. These include HIV testing, sexual behaviors not protected by condoms, negative attitudes towards sexual minorities, and HIV stigma. Behavior-change principles (social learning theory and education-entertainment) and input from members of the priority audience formed the basis of this 27-episode (3 minutes each) drama for dissemination on multiple platforms, including in public spaces or privately online. The developmental process, specifically involving members of the population of interest and use of behavioral theory, enriched the narrative elements and likely ensured intervention acceptability, enhancing effectiveness. Public health practitioners and prevention programmers may want to consider using this intervention and/or the narrative communication approach when intervening to change behavior.

Keywords

HIV/AIDS; sexual risk prevention; education-entertainment; homophobia; youth; intervention

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INTRODUCTION

Social conditions, such as poverty, poor access to health care, and discrimination contribute to racial disparities in health conditions, including HIV. Black or African American people (hereafter referred to as “Black”) in the United States (U.S.) have and continue to experience disproportionately high rates of HIV as well as numerous other health conditions (M. R. Cullen et al., 2022). In 2020, Black people accounted for 42% of new HIV diagnoses, despite accounting for only 13% of the U.S. population (Centers for Disease Control and Prevention [CDC], 2022). Among gay, bisexual, and other men who have sex with men (MSM), in the years 2015 to 2019, the rate of estimated new infections among Black people has failed to decrease as it has for MSM of other races or ethnicities (CDC, 2019a), and Black MSM continue to be the group with the highest proportion of new infections (CDC, 2019b). Disparities by race and sexual orientation are particularly pronounced among youth (people aged 13–24 years), who accounted for 20% of new HIV diagnoses in 2020. Of these new diagnoses, 54% were among Black people, and 85% were among MSM (compared to 72% among MSM overall) (CDC, 2019b). Moreover, young people are the age group least likely to be aware of their HIV infection (CDC, 2019b).

Poverty, poor access to preventive health services, and discrimination, racism, transphobia, and homophobia (negative attitudes about those who engage in same-sex sexual behavior) are among the factors contributing to this disparity. Homophobic attitudes can cause some MSM to be reluctant to be tested for HIV for fear of their sexual orientation becoming public. Although changing recently (Lewis, 2003), the Black church has historically preached the belief that homosexual behavior is forbidden, contributing to homophobia in the Black community (Heath & Goggin, 2009; Miller, 2007). Related to homophobia is HIV and AIDS stigma, which may be associated with beliefs about immoral behavior, the potential for contagion, and emotions such as general disease-related fear.

CDC recommends universal HIV testing for all people aged 13 to 64 at least once in their lifetime and more frequently for those with increased risk factors for HIV acquisition (Branson et al., 2006; CDC, 2021, DiNenno et al., 2017). Due to the impact that homophobia and HIV stigma can have on accessing HIV testing, many of those with HIV are unaware of their infection, and thus may unknowingly transmit the virus to others. This issue has significant public health implications because over 80% of new HIV transmissions in the United States can be attributed to undiagnosed infections and the lack of viral suppression shortly following infection and diagnosis (CDC, 2019a).

To address the lack of interventions focusing on Black youth, and to use entertainment education as a method of prevention, we developed a community-level intervention designed to affect important factors for HIV prevention among Black adolescents and young adults, ages 13–25. The purpose of this report is to describe the development of an education entertainment intervention, a serial drama titled *Reality Check*, designed to reduce homophobia, HIV stigma, and sexual risk behavior (specifically, condomless sex), and to increase HIV testing among Black youth. The process of selecting target behaviors is described below.

THEORETICAL UNDERPINNINGS OF INTERVENTION DEVELOPMENT

SOCIAL COGNITIVE THEORY

The theoretical basis for *Reality Check* is social cognitive theory (Bandura, 1986), which posits that behavior change can be achieved by (a) observing other individuals obtain valued outcomes as a result of performing the desired behaviors (outcome expectancies) and (b) learning the skills needed to engage in the behavior. One way that skills are developed is by observing others perform the behaviors. Observation is especially effective if the model demonstrating the skills has had to overcome barriers to the execution of the behavior, especially ones requiring much effort. Self-efficacy, the strength of belief in one's ability to successfully execute the behavior, is the strongest predictor of actual behavioral attainment (stronger than previously performed behaviors) (Bandura et al., 1977) and is strengthened by the process of watching the practice of skills by the model (for example, a character in a video), or practicing the skill oneself (Miller-Day & Hecht, 2013; Rader et al., 2021). Sympathetic characters can also be used to vitiate negative attitudes toward them (or the group in which they are members).

ENTERTAINMENT EDUCATION

Entertainment education (EE) is a communication strategy that has been used to affect population-level social and behavioral change for the past half-century (Singhal & Rogers, 2004; Singhal et al., 2004). EE is defined as “the process of purposely designing and implementing a media message to both entertain and educate, in order to increase audience members' knowledge about an educational issue, create favorable attitudes, shift social norms and change overt behavior” (Singhal & Rogers, 2004, p. 13). EE has been used to deliver health education messages by creating dedicated health-focused entertainment content through serial dramas on a variety of platforms including television (Harris, 1993; O'Leary et al., 2007; Sharf et al., 1996), radio (Frazier et al., 2012; Lettenmaier et al., 1993; Sood et al., 2006), the internet (Jones & Lacroix, 2012), comic strips (Ingrand et al., 2004; Whittingham et al., 2009), comic books (K. W. Cullen et al., 1998; Munro et al., 2007), and graphic novels (Eaton et al., 2011); in high- and low-tech games (Gabarron et al., 2012; Hannig et al., 2012); and also by integrating health-related messages into pre-existing forms of entertainment (e.g., creating a health storyline within a popular television program).

The Sabido Methodology (SM) (Poindexter, 2004; Sabido, 2004) was developed by Miguel Sabido while creating telenovelas¹ in the mid-1970s and early 1980s (Poindexter, 2004) that successfully promoted adult literacy classes, gender equality, and family planning methods. Sabido is usually credited with coining the term “entertainment-education,” which he originally called “entertainment with social benefit” (Sabido, 2004). One major precept of the SM is “education does not have to be boring” (Barker & Sabido, 2006, p. 20). The SM utilizes theories from communication, social sciences, and the humanities with empirical social research data collection techniques and data synthesis to create EE (Barker & Sabido, 2006). The SM relies on serial drama (Barker & Sabido, 2006), which allows for continued

¹Telenovelas are “limited run drama serial programming popular in Latin American, Portuguese, Filipino, Spanish and American (Spanish language network) television programming” (Vink, 1988, p. 15). They differ from soap operas in that they do not continue indefinitely; they have a planned, finite number of episodes.

exposure to the health messages. Serial dramas also allow characters to experience setbacks and misgivings as they attempt to change and to model how they overcome these obstacles to achieve the desired behavior.

Typically, in EE, a story is created and then health messaging is retrofitted into it. The SM differs from other methods of EE because it engages the priority audience through focus groups in the formative research and production of the entertainment program. This audience-driven approach ensures that all aspects of the intervention resonate with the priority population, including the look (art and animation style), sound (dialogue and character voices), and feel (tone of drama, humor, level of realism in the story). Focus groups help the creators better understand the need for an intervention and its context (e.g., ascertain current knowledge, behaviors, and beliefs). Writers then create characters that are assigned values and behavioral objectives and develop interactions between these characters that highlight the desired behavioral changes; these interactions then become the basis for plot development that advances the characters toward their behavioral objectives (Barker & Sabido, 2006). Analyses of additional focus group data identify the most important issues that can reasonably be addressed in the entertainment program. The plot is continually updated with information obtained through additional focus groups with the target audience until a final product is created. Steps in the Sabido Methodology are depicted in Figure 1.

PREVIOUS INTERVENTION STUDIES TO REDUCE YOUNG BLACKS' HIV RISK

Due to long-standing inequities, young Black people have had disproportionately higher rates of HIV than youth of other racial and ethnic groups in the U.S. Many risk-reduction interventions (e.g., promoting condom use) have been developed over the years (Crepaz et al., 2009, 2014; Darbes et al., 2008; Henny et al., 2012; Higa et al., 2020; Marshall et al., 2010). Similarly, interventions to increase HIV testing have frequently been deployed. Interventions to reduce homophobia (in the exposed audience and/or community rather than “internalized homophobia” experienced by persons who identify as having same-sex attraction themselves) are not as common. Several have been developed to reduce homophobia among health care providers (see Morris et al., 2019 for a review) and for college students (see Barto et al., 2014 for a review). Two community-level anti-homophobia interventions for young people in predominantly Black neighborhoods have been evaluated. Acceptance Journeys (Hull et al., 2017), a social marketing campaign, and Project CHHANGE (Frye et al., 2019) both used quasi-experimental designs with neighborhoods as intervention and control sites and implemented multicomponent interventions in the chosen neighborhoods. While the former study did find a significant association between intervention exposure and homophobia reduction, neither study obtained any significant differences between intervention and control sites. Thus, no effective, anti-homophobia interventions for the Black community had been identified when the present project was undertaken. There was a lack of these types of interventions for other racial and ethnic groups as well.

ENTERTAINMENT EDUCATION (EE) SERIAL DRAMAS AND HIV PREVENTION

Numerous studies have shown that serial dramas that incorporate behavior-change methods can influence health behavior (Banerjee et al., 2019; Robillard et al., 2020; Simmons et al.,

2021; Singhal et al., 2004; Willis et al., 2018). Unlike other modes of communication, such dramas (1) are intrinsically interesting, (2) generate discussion among viewers, potentially influencing social norms, and (3) allow viewers to identify with or recognize characters who model skills and receive positive outcomes as consequences of desirable behavior. Characters in these dramas can become like people the audience knows, and sympathetic characters can be credible sources of information about the usefulness of positive behaviors.

Some serial dramas have been effective at changing behaviors and attitudes related to HIV. In Tanzania, a radio soap opera called *Twende na Wakati* became very popular and was successful in reducing HIV risk behavior (Rogers et al., 1999; Vaughan & Rogers, 2000; Vaughan et al., 2000). A similar radio program aired in Botswana and was shown to increase HIV testing (Pappas-DeLuca et al., 2008). A very popular American soap opera, *The Bold and the Beautiful*, incorporated an HIV storyline in which a heterosexual male was found to have HIV; his female partner, who was uninfected, convinced him to stay with her, marry, and while honeymooning in Africa, adopt a child who had been orphaned by HIV and AIDS. CDC staff consulted with the writers to ensure the accuracy of the technical aspects and authenticity of the storyline, which was found to generate a record number of calls to the CDC's AIDS Hotline (Kennedy et al., 2004). When the show was later aired in Botswana, evidence suggested that HIV and AIDS stigma was reduced among people who had access to a television set compared to those who did not (O'Leary et al., 2007).

Another narrative intervention video shown in sexually transmitted disease (STD) clinic waiting rooms (Warner et al., 2008) used the strategy of reaching a "captive" audience and appeared to cause a significant reduction in STD reinfection among patients visiting during months when the video was playing, relative to patients visiting during months when it was not playing. Similarly, a narrative intervention that incorporated behavior change principles into an HIV clinic waiting room video also found positive outcomes on treatment initiation and viral suppression (Neumann et al., 2018, 2020). Finally, digital media platforms used to deliver HIV/STD EE interventions have been associated with knowledge, attitudes, behaviors, and behavioral intentions (KABI) consistent with prevention (Jones, 2008; Jones & Lacroix, 2012; Willis et al., 2018).

METHODOLOGY

FORMATIVE RESEARCH

Consistent with SM, we conducted focus groups with members of the priority population to help create the intervention content. We formed three separate community advisory boards (CABs) to generate intervention content and to provide feedback regarding all aspects of the scripts and videos as they were produced. One CAB was a group of adult community representatives. Another consisted of Black youth who were members of a local Boys and Girls Club. Another was formed using male and female clients of an LGBT service organization for youth. This last CAB was especially helpful in generating elements of the storyline related to homophobia and suggested the name "Reality Check" for the intervention. A total of 38 youths participated in the latter two focus groups.

During the focus group sessions, young people played a game called Pathways to Change (Petraglia et al., 2007) during which they generated several barriers to, and facilitators of, change regarding the targeted behaviors. These were used by two writers to generate the storylines. These participants suggested the music-industry theme, rough sketches of the characters, and their behavioral objectives. From this information, intervention content was created to address six behaviors associated with HIV acquisition and attitudes considered key drivers of the HIV epidemic among Black people. Consistent with national guidelines for HIV testing and the relatively high proportion of young people who do not know their HIV status, we sought to increase HIV testing by showing how easy the process is and the effectiveness of HIV antiretroviral treatment. The musical products presented in *Reality Check* were created in response to a publicized hip-hop song contest in Atlanta and were chosen by the director.

The intervention content and storylines were created by CDC staff members (scientific experts in HIV prevention) in collaboration with filmmaker Maurice Madden of Millennium Films and two writers. The filmmaker, who lacked specific expertise on some aspects of the project, felt it very helpful to participate in all the formative activities (e.g., focus groups, CAB meetings, and video viewings) to learn more about the characters' issues and emotions attached to the storyline events. To this end, CDC staff held meetings with the filmmaker and writers to develop characters and plots for the intervention. Two experienced writers who were familiar with aspects of the project such as homosexuality and hip-hop music and urban culture developed scripts. The scripts were then reviewed by CDC staff, public health consultants, the actors, members of the priority audience, and the CABs. They were then adjusted based on the feedback received from all parties involved, especially CABs.

CHARACTERS AND STORYLINES

To achieve these aims, we developed the following characters and storylines, within the theme of the hip-hop music world (see Table 1). Tasha is a performer in her early 20s who has been featured in many music videos. She has had multiple sex partners and has had a sexually transmitted infection (STI) in the past. Thanks to the advice of her friend Deidre, Tasha has decided that she wants to be tested for HIV. Ali is a music producer in his early 20s. He is becoming attracted to Tasha, whose past as a "video vixen" has included several romantic relationships. Ali's behavioral goal is to use condoms during sex. Shondra is Ali's younger sister. She is still in high school, where she is doing well. She aspires to music stardom under Ali's management. She is religious and a virgin; her behavioral goal is to maintain sexual abstinence. Randall is Shondra's best friend; he is also in high school. He has been struggling with feelings for other boys and has started becoming romantically involved with one but has not told his parents. When his parents accidentally find out, they themselves must come to terms with his sexual orientation. They are able to do this after Randall's mother, a school counselor, is approached by a lesbian student who is being harassed; she empathizes with the girl's story and her own attitudes begin to change. Deirdre is Tasha's best friend. She is a single mother who worries about Tasha and advises her to use condoms and get tested for HIV. Dion is a very successful music producer who is interested in Shondra both professionally and personally and wants to become her manager. Ali accompanies Tasha when she goes for her HIV test and learns that while Tasha's test

result is negative, his own test result is positive for HIV. Tasha supports Ali, who overcomes his aversion to HIV treatment, eventually comes to find the treatment nonthreatening, and learns that it is highly effective. The intervention is designed for all characters to struggle with their behavioral objectives but eventually achieve them.

The resulting intervention is a video-based series with 27 3-minute episodes (81 total minutes) during which the characters' storylines are interwoven. Episodes were designed to be short so that they could be played in public spaces where viewers might be exposed for short periods of time (e.g., on public transit). However, they can be combined such that any number of episodes can be made available for viewing at one time.

DISCUSSION/CONCLUSION

In this report we have described all phases of the development of a theoretically driven multitargeted serial drama intervention to reduce the impact of HIV on Black youth. We selected the behaviors and attitudes to be changed, conducted formative research, fashioned storylines, auditioned and selected actors, and filmed the project, all in collaboration with Millennium Filmworks.

It is important that this intervention be evaluated for effectiveness at changing targeted behaviors so that it can be used in the fight against HIV in the Black community. Indeed, *Reality Check* underwent a preliminary evaluation as the dissertation project of a student at the Annenberg School for Communication at the University of Pennsylvania (Chittamuru, 2017; Chittamuru & Jemmott, 2018). In this study, 203 young Black adults aged 18 to 24 were randomized to receive either the *Reality Check* intervention or an attention-control intervention in similar format. Results at 3 months post-intervention indicated that the intervention was effective in reducing the number of occasions of condomless sex, as well as significantly reducing homophobic attitudes and HIV stigma. However, HIV testing was not affected.

While narrative interventions like this can be developed without audience engagement and other significant investments, including members of the population of interest to help design the intervention narrative as well as the look, sound, and feel of the intervention increases acceptability and possibly its success (Miller-Day & Hecht, 2013). It is likely that using this approach increased the acceptability by Black youth and allowed the messages to impact knowledge, attitudes, and beliefs and behavioral intentions in the desired manner. Once developed, such interventions require limited time or resources on the part of implementing partners.

“Intersectionality” refers to the fact that when multiple forms of oppression are directed toward individuals with particular characteristics, for example, being Black and homosexual, neither form should be regarded as operating independently of others or of having solely harmful effects. The characters in this intervention all were exposed to some type(s) of oppression: sexism, homophobia, racism, and HIV stigma. Thus, for these characters to change behavior or attitudes, the multiple forms of oppression had to be handled in realistic ways.

While several interventions to reduce sexual risk behavior created for Black youth have been developed and found to be effective (Crosby et al., 2009, 2014; Robillard et al., 2020; Stanton et al., 1996; Wu et al., 2003), the same is not true of interventions to reduce homophobia. In fact, we were unable to find a single randomized controlled trial of an intervention that reduced homophobia and obtained significant effects among young Black audiences/communities, other than the Chittamaru (2017) and Chittamaru and Jemmott (2018) study of the *Reality Check* intervention (which reduced both condomless sex and homophobia). This suggests that *Reality Check* may constitute an intervention that encourages tolerance for members of the LGBT community. Public health researchers and prevention programmers may want to consider using a narrative communication intervention to change behavior.

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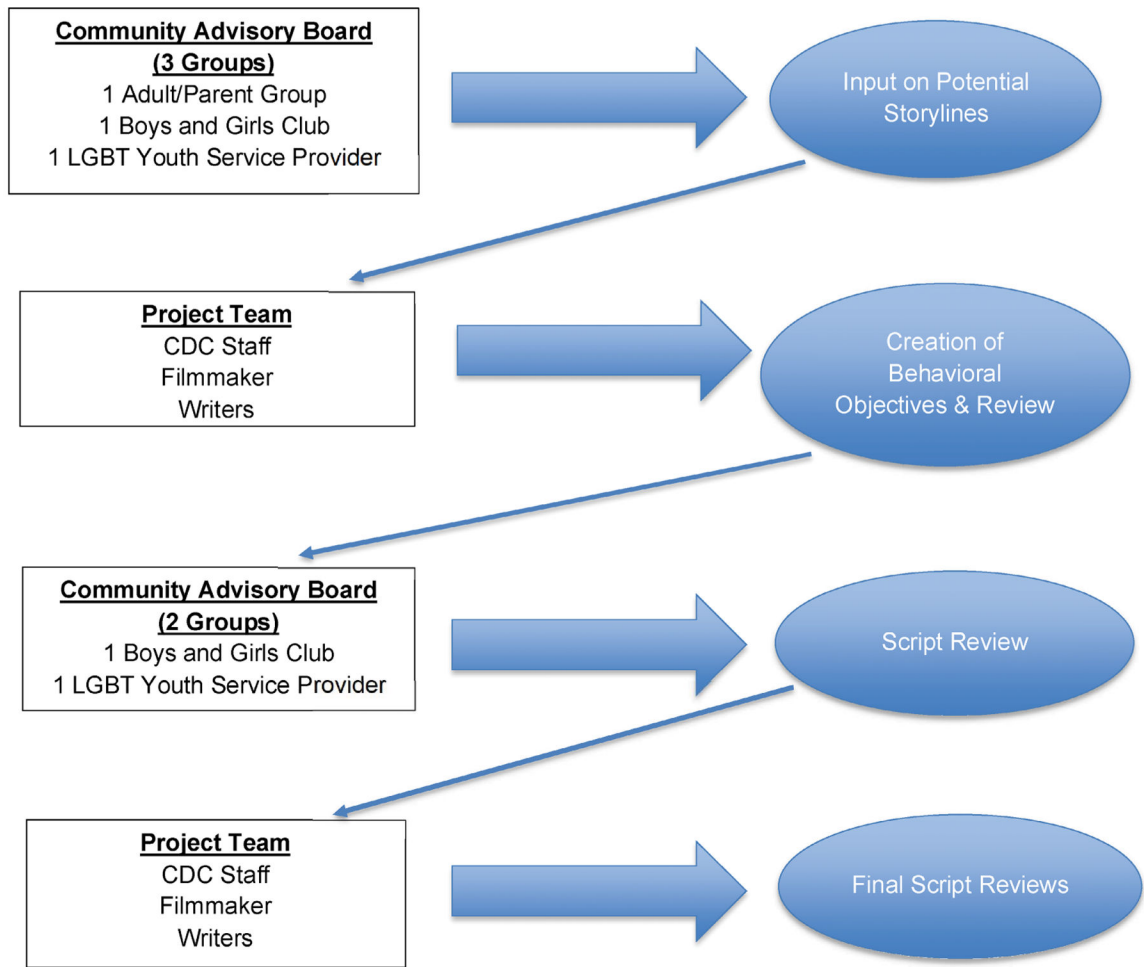


FIGURE 1. Intervention creation process as developed by M. Sabido.

TABLE 1.Character Behavioral Grid for *Reality Check* Series

Character Name	Characteristics	Behavioral Goals	Storyline Events Leading to Goal Attainment
Shondra	Female high school student, religious, wants to be a singing star	Cherishes her virginity for reasons of religion, reputation, and sexual health	Is challenged when an established music producer (Dion) expects sex in return for supporting her career. Her resistance is strengthened when both her brother, Ali, and her best friend, Randall, express dislike and distrust of Dion, and encourage her to focus on her college work (and potential alternative career), which Dion did not.
Randall	Male high school student, gay, and is in fact on the cusp of a relationship with another boy in his class	Concerned that his parents might react negatively to his homosexuality and thus withhold support for his lifestyle makes Randall wish for a way to let them know without causing these effects	Randall's parents learn that he is gay when they accidentally find an email to Randall from the boy.
Darrell and Evelyn	Randall's parents	Are concerned that if Randall is gay, other people will think badly of him, and of them as parents. His mother is also upset by the fact that this may prevent her from having grandchildren. She also expresses pure homophobic stigmatization: "You make me sick right now!"	Evelyn, a high school guidance counselor, is visited by Natina, one of her "favorite" students, a straight-A "scholar." Natina is crying and very upset because a friend of hers had rejected her after learning that she was a lesbian. Natina feared that her parents might "disown" her and alluded to thoughts of suicide. This causes Evelyn to focus on the pain that Randall must be experiencing and the fact that she loves him and doesn't want to lose him.
Ali	Shondra's older brother, a rising music producer, is protective of Shondra, and has growing sexual/romantic interest in Tasha.	Because Tasha has a sexually active past and has had a sexually transmitted infection (STI), Ali's goal is to use condoms with her. Later Ali tests HIV-positive, and his goals become those of adjusting to his new status and deciding to adopt an effective treatment regimen.	Attainment of these goals is facilitated by Tasha's and, more importantly, Shondra's concern for him and dependence on him.
Tasha	Romantically interested in Ali. She has been enjoying a successful career as a "video vixen" in music videos, which has been accompanied by an active social (and sexual) life.	Because of her significant sexual history, including having had an STI, she is encouraged by her best friend, Deidre, to seek an HIV test.	Fear of needles, as well as of the test result. She can overcome these barriers when Ali offers to accompany her to the testing.