Sexual Health Interventions for Black Women in the United States: A Systematic Review of Literature

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Abstract:

**Objective:** The purpose of this systematic review was to identify and evaluate approaches used in sexual health interventions targeting Black women in the United States. **Methods:** We conducted a review of 15 sexual health intervention studies for Black women published between January 2000 and May 2017 in the United States. **Results:** Each intervention focused on HIV/sexually transmitted infection prevention, incorporated an asset and deficit-based approach, primarily used individual-level assets, and was effective in achieving the stated sexual health-related outcomes. **Conclusions:** Comprehensive sexual health interventions require further development and refinement to include more community and institutional-level assets to improve long-term sustainable change and empower Black women.

**Keywords:** Sexual health | intervention | Black women | assets

Article:

**Introduction**

Sexual stereotypes and HIV risk in the United States

Black women have been stereotyped as promiscuous, “Jezebels,” and sexual delinquents (Hicks, 2009). The view that Black women’s sexuality is problematic and they are promiscuous has been presented by many great philosophers and thinkers (Smedley & Smedley, 2005; West, 2002). Since slavery, Black women’s sexuality has been policed by Western standards of sexual behaviors and limited in the ways it could be expressed with the autonomy of their bodies in others’ control (Staples, 2006). Even religion, an important staple within the Black community, placed restrictions on women’s sexual expression, labeling it as “sinful” (Staples, 2006). Lorde supported this by stating that “sexual hostility against Black women is practiced not only by
white racist society but implemented in our Black communities as well” (Lorde, 1984, p. 119). Black women are often presented in cultural images as “fast” and hypersexualized beings (Davis & Tucker-Brown, 2013a). The views of Black women’s sexuality being “problematic” and “risky” and White women’s sexuality being “pure” has continued in the discourse of sexual health (Fasula, Carry, & Miller, 2014; Hargons et al., 2018), with interventions targeting individuals’ “risky” sexual behaviors (Baird & Walters, 2017), such as interventions that aim to reduce the number of sexual partners (Wingood et al., 2013). For Black women, the focus on individual risk can reinforce negative sexual stereotypes that may influence how Black women view themselves, contribute to increased sexual risk behaviors, and in turn, increase HIV risk (Davis & Tucker-Brown, 2013a).

HIV/STI epidemic among Black women in the United States

Despite great strides made in the United States (U.S.) in the prevention and treatment of HIV and other sexually transmitted infections (STIs), Black women continue to be disproportionately affected. The HIV infection rate among Black women over the age of 13 is 20 times higher than it is among White women (Centers for Disease Control and Prevention, 2016a) and in 2017, Black women made up 59% of new HIV infections among women (Centers for Disease Control and Prevention, 2019b). Black women also have a disproportionate number of diagnoses of gonorrhea, chlamydia, and syphilis with rates 10.7 times, 5.7 times, and 9.2 times higher than White women, respectively (Centers for Disease Control and Prevention, 2016b).

Factors contributing to HIV/STI vulnerability

Although individual factors such as age, condom use, drug use, types of sexual behavior, partner characteristics, and risk behaviors of partners contribute to HIV/STI risk (El-Bassel, Caldeira, Ruglass, & Gilbert, 2009), other factors (e.g., social-structural factors) also affect risk for acquisition (Blankenship et al., 2000). Social-structural factors take into account what it is like to be Black in the United States by considering the historical and cultural influences on health, including cultural norms and values, laws and policies, individual and neighborhood socioeconomic status (Blankenship et al., 2000), as well as discrimination, racism, unemployment, and poverty (Bowleg et al., 2017). The context in which many Black women live differs from most White women when it comes to income, education, housing, political power, and sexual oppression (Davis & Tucker-Brown, 2013b). Research has shown that a focus on individual factors alone does not account for the health disparities that exist between Black women and White women (Aholou, Murray, & Sutton, 2016; Frew et al., 2016; Higgins, Hoffman, & Dworkin, 2010; Hosek et al., 2012) given that Black women’s sexual risk behaviors do not differ markedly from White women (Tillerson, 2008). For instance, in a review of 16 studies across the U.S. condom use among Black women did not differ from White women during vaginal or anal sexual activity (Tillerson, 2008). Social-structural factors both directly and indirectly affect HIV-related risk. For instance, factors such as poverty in already racially segregated neighborhoods can lead to limited access to health-care and testing and treatment for HIV/STIs, which directly increases potential exposure and susceptibility to HIV (Friedman, Cooper, & Osborne, 2009). This also indirectly affects Black women’s HIV risk as dense sexual networks means that sexual interactions with an untreated partner also increases their potential for HIV exposure (Friedman et al., 2009). Yet, interventions to address sexual health
targeted individual-level sexual risk behaviors rather than social-structural factors (Hawkes, 2008).

Sexual health interventions

Interventions that solely focus on individual-level factors reinforce the stereotype that Black women’s bodies and sexuality are problematic (Baird & Walters, 2017). The historical and ongoing exploitation of Black women’s bodies has contributed to HIV vulnerability and should be a focus when addressing factors relating to risk among Black women (Davis & Tucker-Brown, 2013b). Thus, a more comprehensive understanding of Black women’s sexuality, with a focus on both assets and deficits, is a crucial step in reducing HIV infections in the Black community (Staples, 2006). Accordingly, this review examined existing interventions designed to promote Black women’s sexual health to assess the use of asset- and deficit-based approaches.

We categorized asset-based approaches using Morgan and Ziglio’s (2007) asset definition:

Any factor (or resource), which enhances the ability of individuals, groups, communities, populations, social systems and/or institutions to maintain and sustain health and well-being and to help to reduce health inequities. (p. 18)

Assets were then categorized as individual (i.e., gender and ethnic pride), community (i.e., neighborhood, family, networks, religious cohesion), or institutional level (i.e., mental or social services, employment, political involvement; Antony Morgan & Ziglio, 2007). For example, an assets approach would use the religious cohesion of the community to create an intervention that uses the principles of the religion in the intervention itself (Wingood et al., 2013). We categorized deficit-based approaches by using the following definition: “focus is mainly on risk factors for disease” (Hornby-Turner, Peel, & Hubbard, 2017). The interventions using a deficit-based approach focused on factors such as behavioral risks (e.g., condomless sex, drug use, etc.) that contribute to negative health outcomes (Hornby-Turner et al., 2017).

The focus on risk reduction in sexual health is important for preventing the transmission of HIV/STIs. However, an individual focus may be insufficient for addressing sexual health disparities. Currently, the majority of the Centers for Disease Control’s “Diffusion of Evidence Based Interventions” (DEBIs) for sexual health are based on individual-level risk reduction (Baird & Walters, 2017). These interventions focus on increasing condom use and instilling a sense of responsibility for participants’ sexual decision making. The existing DEBIs focus on “high-risk” women who were Black, drug users, low-income, and young. Interventions that focus on social-structural factors are more limited given the challenges with evaluation (e.g., time to evaluate outcomes).

Purpose of the systematic review

Given the sexual health disparities that exist in the U.S., the purpose of this review was to assess sexual health interventions created specifically for Black women. The objectives of this review were to (1) examine the sexual health outcomes for interventions catered to Black women and (2) identify the approaches used in these interventions.
Methods

We conducted a systematic review of the literature to identify sexual health interventions for U.S. Black women from 2000 to 2017 to capture the epidemiological trends. In the 1990s, the Centers for Disease Control and Prevention (CDC) recognized women as a vulnerable population for HIV/AIDS and began surveillance data on women (CDC, 1993, 1995). Accounting for the time surveillance data was collected, research that was conducted, and the initial interventions that were implemented, our intervention range was from the year 2000 to 2017 to get the scope of published work. We examined interventions designed to promote sexual health or reduce adverse sexual health outcomes. We included interventions that targeted at least one of the six sexual health domains created by Hogben, Ford, Becasen, and Brown (2015): (1) knowledge (e.g., sexual health knowledge around HIV and STIs); (2) attitudes, norms, intentions, and self-efficacy (e.g., condom use intentions, attitudes around condom use, and self-efficacy in sexual communication and proper use of condoms); (3) negotiation and communication (e.g., condom negotiation and sexual communication skills); (4) health care use (e.g., sexual health care seeking); (5) sexual behaviors (e.g., condom use); and (6) adverse health outcomes (e.g., STIs and unintended pregnancy; Becasen, Ford, & Hogben, 2015; Hogben, Ford, Becasen, & Brown, 2015). This framework was used as it includes a comprehensive and holistic definition of sexual health drawn from the CDC’s consultation on public and sexual health (Hogben et al., 2015).

The literature review was limited to peer-reviewed, English language journal articles. Four online databases were used to search for published sexual health interventions: EBSCO, PubMed, PsycINFO, and Google Scholar because of their access of scholarly journals and a wide range of topics, including sexual health. Databases were searched from 2000 to 2017, in an effort to review an adequate amount of interventions and follow recent epidemiological trends in sexual health. Each database was searched using the following terms and keywords (MeSH terms for each keyword were included in the searches): (Black OR African American OR African-American) AND (women OR female), AND (STI OR HIV OR sexual health) AND (intervention OR program).

Inclusion and exclusion criteria

Given the burden of STIs that exist among Black women and adolescents (youth between the ages of 15 to 24 account for half of new STI diagnoses (Centers for Disease Control, 2017a; Centers for Disease Prevention and Control, 2016) in the U.S., our target population was Black women over the age of 14. Our review included only U.S.-based interventions due to the potential differences in perceptions of Black women’s sexuality in other contexts. Because most interventions did not differentiate between native-born or immigrant Black women, we included all interventions that identified their population as Black women. Interventions that did not focus solely on Black women were excluded from this review.

The literature search identified 122,122 articles focused on sexual health among Black women. Searches were reviewed manually by two people, separately, then reviews were discussed together. The review process in its entirety occurred over several months. Articles with relevant titles (n = 89) were examined further through an abstract review then saved in an online storage
application. After reviewing titles and abstracts, 66 articles were identified as intervention focused, written in English, and conducted with women 14 and over. The full-text articles were reviewed to determine if they met the inclusion/exclusion criteria, resulting in 31 articles included in this review (Figure 1). Articles were excluded if the intervention did not target any of the previously mentioned sexual health domains (n = 10); the intervention did not focus solely on Black women (n = 12); there was a vague description of the intervention that did not provide enough information for analysis, such as articles that did not describe the intervention components (n = 4); the study only reported baseline data (n = 4); and/or the intervention was completed before (published after) 2000 (n = 4). Articles with the same intervention were combined (n = 14); thus, 15 unique interventions were identified and analyzed (Figure 1).

Data extraction & classification

An abstraction form was used to document intervention information, including name, qualitative or quantitative design, data collection method, participants, sexual health-related outcomes/sexual health domains, and intervention design. Study results as well as the descriptions of specific components, modules, and sessions were also documented. Intervention components were classified as using an asset-based approach, a deficit-based approach, or both, based on the components of the interventions (not the outcome of the intervention). The determination of the study approach was based on the description of the components identified in the interventions or what the authors reported as the main focus of each component. Other resources such as the CDC compendium and other published articles (that were cited by the studies) were consulted to ensure that the focus stated in the articles and the description of the component in the compendium matched.

Results

Overview of interventions

The 15 interventions occurred across the U.S., in the following cities and regions: Atlanta, GA, Birmingham, AL, Pittsburgh, PA, San Francisco, CA, an unspecified region of NC, and unspecified large Mid-Atlantic, Southeastern, and Northeastern cities. Most interventions were conducted at community-based organizations (n = 6) or community clinics (n = 4), other locations included churches (n = 1) and participant’s homes (n = 2). Interventions were delivered in multiple formats (e.g., video, focus groups, web-based, discussions, and individual phone interventions).

All the interventions were experimental designs. Twelve of the interventions were randomized control trials (RCTs), one was a two-arm comparative effectiveness trial, one was a comparative trial with three arms, one was a group-randomized wait-list, and one was an open-label pilot trial. The sample sizes ranged from 41 to 848 participants, with four studies having over 500 participants. The majority of the interventions (n = 13) utilized a convenience sample, with two interventions using snowball sampling as the main recruitment strategy. Attrition rates were between 4% to 50%. Seven interventions reported attrition rates at or under 20% with follow up times at 1 and 4 months, at 3 months, 6 months, and 6 and 12 months. Five reported attrition rates of 22% to 50%, with follow up times at 3 months, 3 and 6 months, and 6 to 36 months.
Two interventions did not report attrition because the intervention only conducted an immediate posttest. Primary reasons for attrition included loss of contact at follow up, participants dropping out of the study, or participants passing away.

Intervention participants

All interventions provided evidence targeting Black women as being at elevated risk for HIV/STI acquisition; one intervention labeled their sample as high-risk, defined as “having multiple male sexual partners in the past 2 months or inconsistent condom use over that same time frame with a man who was HIV positive, was an injection drug user, had concurrent sexual partners, or had not been tested for HIV since the onset of the sexual relationship” (Billings et al., 2015, p. 1266). One intervention targeted individuals who inject drugs and two interventions targeted individuals who use crack cocaine. All 15 interventions targeted sexually active women with seven interventions targeting women who had recently (e.g., in the last 3 months) had condomless sex. Nine of the interventions targeted women over the age of 21 and six interventions specifically targeted adolescents (14 to 21).

Intervention component/session strategies

To assist in the understanding of the ways in which the identified interventions used asset- and deficit-based approaches, we provide a brief description of the components provided in the articles and other publications and identify the aligned sexual health domain of the intervention outcomes. For more details, the intervention materials and original articles should be consulted. These results are organized to provide an overview of the asset and deficit-based approaches and then give examples through each of the six sexual health domains (Hogben et al., 2015). Table 1 summarizes the sexual health interventions and includes the intervention participants, intervention components, intervention approach, sexual health domains, and the overview of relevant results.

Asset-based approach

All the interventions included components that were health assets. The majority of the interventions addressed individual-level health assets (n = 12), three focused on community-level assets, and none focused on institutional-level assets.

Interventions using individual-level health assets. The 12 interventions that included individual health assets focused on gender and ethnic/cultural pride and empowerment. These interventions provided sessions and modules that allowed the participants to engage in culturally relevant activities (e.g., African rites of passage), incorporated the achievements of Black women, identified Black women role models, empowered Black sexuality, and provided feedback on how to achieve goals set by the women.

Interventions using community-level health assets. Three of the interventions incorporated community-level assets focused on religious cohesion and supportive networks specifically within church settings; recruitment of community members to disseminate HIV/STI information; and the use of friendship networks for supportive prevention efforts.
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<td>1. AFIYA + HIV PMI (Sales, DiClemente, Davis, &amp; Sullivan, 2012b)</td>
<td>A one 5-hr RCT HIV prevention followed by 18 personalized telephone PMI sessions targets toward African American adolescent females. The modules include addressing cultural and gender pride issues, HIV/STI knowledge, HIV prevention strategies and skills, sexual communication and refusal skills.</td>
<td>African American female adolescents 14–20 years old</td>
<td>Individual-level asset (e.g., cultural and gender pride) Deficit (e.g., risk assessment)</td>
<td>Increase in sexual health knowledge and/or prevalence of adverse health outcomes</td>
<td>Depression was associated with sexual risk behaviors such as sexual sensation seeking and unprotected sex, and prevalent STIs (all p &lt; .001). Adolescents with depressive symptoms who reported any substance use (i.e., marijuana, alcohol, Ecstasy) were more likely to report engaging in sexual risk behaviors such as sexual sensation seeking and unprotected sex, and have an incident STI over the 36-month follow-up (all p &lt; .05)</td>
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<td>2. Healthy Love (Diallo et al., 2010)</td>
<td>A single 3–4 hr RCT safe sex intervention for African American women. Modules include knowledge of HIV/AIDS and STI, condom negotiation skills, positive outlooks on sex/sexuality, and self-efficacy on HIV and STI prevention strategies.</td>
<td>African American women, 18–69 years old</td>
<td>Individual-level asset (e.g., positive outlooks on sex/sexuality) Deficit (e.g., risk assessment)</td>
<td>Increase in sexual health knowledge and/or prevalence of adverse health outcomes</td>
<td>Sexually active women at the 3-month follow-up, HLW participants were more likely than comparison participants to report a reduction of sexual risk behavior such as condoms during vaginal sex with any male partner or with a primary male partner and to have used condoms at last vaginal, anal or oral sex with any male partner. At the 6-month follow-up: HLW participants were more likely to report a reduction of sexual risk behavior such as condom use at last vaginal, anal or oral sex with any male partner, and having an HIV test and receiving their test results HLW participants reported significance in HIV knowledge</td>
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<td>3. HORIZONS (Brown et al., 2014; DiClemente et al., 2009; Hulland et al., 2015; Jackson, Seth, DiClemente, &amp; Lin, 2015; Mercer Kollar et al., 2016; J. E. Rosenbaum, Zenilman, 2015)</td>
<td>A two 4-hr RCT HIV/STI prevention intervention for African American adolescent females. The modules include addressing cultural and gender pride issues, HIV/STI knowledge,</td>
<td>African American adolescent females, 15–21 years old</td>
<td>Individual-level asset (e.g., cultural and gender pride) Deficit (e.g., risk assessment)</td>
<td>Increase in sexual health knowledge and/or prevalence of adverse health outcomes</td>
<td>Over the 12-month follow-up, lowering incidence and/or prevalence adverse health outcomes included: fewer number of chlamydial infection (42 vs 67; risk ratio [RR], 0.65; 95% confidence interval [CI], 0.42 to 0.98; p = .04) or recurrent</td>
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• Lowering the incidence and/or prevalence of adverse health outcomes | chlamydial infection (4 vs 14; RR, 0.25; 95% CI, 0.08 to 0.83; p = .02).  
• Participants reported reduction of sexual risk behavior such as: a higher use of condoms during sex acts in the 60 days after follow-up (mean difference, 10.84; 95% CI, 5.27 to 16.42; p ≤ .001) and less frequent douching (mean difference, −0.76; 95% CI, −1.15 to −0.37; p = .001).  
• Participants were more likely to report reduction of sexual risk behavior such as consistent condom use in the 60 days after follow-up (RR, 1. 41; 95% CI, 1.09 to 1.80; p = .01) and condom use at last intercourse (RR, 1.30; 95% CI, 1.09 to 1.54; p = .005).  
43.4% of participants did not increase condom use after the intervention and more likely to have an STI at follow-up ($\chi^2 = 4.64, p = .03$).  
• 44% of participants did not increase their condom use from baseline to the 6-month follow-up.  
• The frequency of partner communication was a significant partial mediator of both proportion condom use during sex ($p = .001$) and consistent condom use ($p = .001$). | |
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<td>5. P4 for Women (Wingood, Robinson, et al., 2013)</td>
<td>A two-arm comparative effectiveness trial faith-based adaption of SISTA, an HIV prevention intervention for African American women. Sessions emphasized abstinence and religious social capital.</td>
<td>African American women, 18–34 years old</td>
<td>Community-level asset (e.g., religious cohesion) Deficit (e.g., risk assessment)</td>
<td>• Lowering the incidence and/or prevalence of adverse health outcomes</td>
<td>enhanced ethnic pride, higher self-efficacy to refuse sexual risk behaviors, and were less likely to fear abandonment for negotiating safer sex. During the 12-month follow-up, there were lowered the incidence and/or prevalence of adverse health outcomes with participants less likely to have non-viral incident STIs (OR = 0.62; 95% CI, 0.40–0.96; ( p = .033 )); and incident high-risk HPV infection (OR = 0.37; 95% CI, 0.18–0.77; ( p = .008 )), or concurrent male sex partners (OR = 0.55; 95% CI, 0.37-0.83; ( p = .005 )). Reduction in engaging in sexual risk behaviors with participants reporting being less likely to have multiple male sex partners, more likely to use condoms during oral sex, more likely to inform their main partner of their STI status.</td>
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<td>6. Safe Sistah (Billings et al., 2015)</td>
<td>A web-based RCT HIV prevention intervention that is targeted at providing African American women with skills in HIV prevention, particularly in long-term relationships. Modules included knowledge about High risk African American women,18–50 years old</td>
<td>Individual-level asset (e.g., ethnic pride and gender empowerment) Deficit (e.g., risk assessment)</td>
<td>• Increase in sexual health knowledge • Change in attitudes, norms, intentions, and self-efficacy • Improvement of negotiation and communication skills • Reduction in engaging in sexual risk behaviors</td>
<td>• Increase in sexual health knowledge • Change in attitudes, norms, and self-efficacy • Improvement of negotiation and communication skills • Reduction in engaging in sexual risk behaviors</td>
<td>There were significant effects on sexual communication, sex refusal, condom use after alcohol consumption, and HIV prevention knowledge. Women showed a significant increase in reduction in sexual risk behaviors with condom use,</td>
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<td>7. SAHARA (Wingood et al., 2011)</td>
<td>A two-session hour computer-based RCT HIV prevention intervention targeted for African American women. The sessions include gender and ethnic pride, HIV knowledge, HIV prevention strategies and skills, and sexual communication skills.</td>
<td>African American women, 21–29 years old</td>
<td>Individual-level asset (e.g., gender and ethnic pride) Deficit (e.g., risk assessment)</td>
<td>• Increase in sexual health knowledge  • Change in attitudes, norms, intentions, and self-efficacy  • Improvement of negotiation and communication skills  • Reduction in engaging in sexual risk behaviors</td>
<td>Participants reported an increase in HIV/STI prevention knowledge and at 3-month post-intervention reported higher scores on condom use self-efficacy  • Reduction in engaging in sexual risk behaviors with those who reported a higher percentage of condom use during sex, were more likely to use condoms consistently during vaginal sex, (OR = 5.9; (p &lt; 0.039)) and were more likely to use condoms consistently during oral sex (OR = 13.83; (p &lt; 0.037)).</td>
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<td>8. SiHLEWeb (Sistas Informing, Healing, Living, and Empowering) (Danielson et al., 2013)</td>
<td>A four 4-hr web-based, open-label pilot trial, HIV prevention intervention tailored for African American adolescents. Sessions include ethic and gender pride, HIV prevention strategies such as abstinence, use of condoms and fewer partners.</td>
<td>African American adolescent females, 13–18 years old</td>
<td>Individual-level asset (e.g., ethnic and gender pride) Deficit (e.g., risk assessment)</td>
<td>• Increase in sexual health knowledge  • Reduction in engaging in sexual risk behaviors</td>
<td>Participants reported an increase in HIV/STI risks knowledge and risk reduction behavior knowledge [t (18) = 4.74, (p &lt; .001)]  • There was statically significant increase in condom use self-efficacy, t(16) = 2.41, (p = .03)].</td>
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<td>9. SISTA (Javier, Abrams, Moore, &amp; Belgrave, 2016)</td>
<td>A five 2-hr RCT HIV/STI prevention intervention for African American women to increase condom use. Modules included ethnic and gender pride, HIV/AIDS education, assertiveness skills training, behavioral self-management, and coping skills</td>
<td>African American women, 1824 years old</td>
<td>Individual-level asset (e.g., ethnic and gender pride) Deficit (e.g., risk assessment)</td>
<td>• Increase in sexual health knowledge  • Change in attitudes, norms, intentions, and self-efficacy  • Improvement of negotiation and communication skills  • Reduction in engaging in sexual risk behaviors</td>
<td>At 3-month follow up: There was a change in risk-perceptions also moderated by the relationship between past 30-day marijuana use at baseline and past 30-day marijuana</td>
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<td>10. The Enhanced Negotiation (Sterk, Theall, &amp; Elifson, 2003; Sterk, Theall, Elifson, &amp; Kidder, 2003)</td>
<td>A four-session RCT HIV prevention intervention for African American women who are injecting drug users. The sessions include HIV and substance abuse risk knowledge, HIV prevention strategies, and protective behaviors, and discussion of short and long-term goals.</td>
<td>African American women, 20–54 years old</td>
<td>Individual-level asset (e.g., investment’s in one future and commitment to goals) Deficit (e.g., risk assessment)</td>
<td>Increase in sexual health knowledge, Change in attitudes, norms, intentions, and self-efficacy, Improvement of negotiation and communication skills, Reduction in engaging in sexual risk behaviors</td>
<td>Reduction in engaging in sexual risk behaviors such as; trading sex for drugs or money, having sex while high, and other sexual risk behaviors There were significant decreases in the frequency of crack use ($p &lt; .05$); the number of paying partners; the number of times vaginal, oral, or anal sex was had with a paying partner; and sexual risks, Reduction in engaging in sexual risk behaviors such as significant increases in male condom use with sex partners, and decreases in casual partners’ refusal of condoms ($p &lt; .05$).</td>
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<td>11. The Girlfriends Project (Hawk, 2013)</td>
<td>A one-session HIV prevention intervention for African American women. The session includes HIV testing, HIV information, prevention strategies, and empowerment around sexual decision making.</td>
<td>African American women, 18–65 years old</td>
<td>Community-level asset (e.g., community cohesion) Deficit (e.g., risk assessment)</td>
<td>Increase in sexual health knowledge, Improvement of negotiation and communication skills, Reduction in engaging in sexual risk behaviors</td>
<td>There were statistically significant increases in HIV knowledge scores and reduction in engaging in sexual risk behaviors with an increase in condom use during vaginal sex.</td>
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<td>12. The Healer Women Fighting Disease Integrated Substance Abuse and HIV Prevention Program (Nobles, Goddard, &amp; Gilbert, 2009)</td>
<td>A 10-module RCT HIV and drug prevention intervention targeted for African American women. The modules included Zola Ngolo healing rituals, self-healing, journaling, personal responsibility for HIV/AIDS pandemic, and HIV and substance abuse knowledge.</td>
<td>African American women, 17–45 years old</td>
<td>Individual-level asset (e.g., gender and ethnic pride) Deficit-risk assessment</td>
<td>Increase in sexual health knowledge, Change in attitudes, norms, intentions, and self-efficacy, Reduction in engaging in sexual risk behaviors</td>
<td>There were significant changes among participants from pretest to posttest in: Change in attitudes, norms, intentions with an increase in motivation and decrease in depression Increase in HIV/AIDS knowledge and self-worth, reduction of lower sexual risk behaviors.</td>
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<td>13. The Women’s CoOp for Pregnant African-American Women (Jones et al., 2011)</td>
<td>An RCT HIV prevention intervention adapted from Women’s CoOp target for pregnant African American women. The modules include HIV</td>
<td>African American women, 15–55 years old</td>
<td>Individual-level asset (e.g., empowerment and short and long-term goal planning) Deficit (e.g., risk assessment)</td>
<td>Increase in sexual health knowledge, Change in attitudes, norms, intentions, and self-efficacy, Improvement of negotiation and communication skills</td>
<td>Participants an increase in HIV knowledge, No statistical difference in condom use in the past 90 days</td>
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<td>prevention skills, sexual communication, and condom negotiation skills, HIV and health risks while pregnant knowledge through empowerment theory.</td>
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<td>• Reduction in engaging in sexual risk behaviors</td>
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<td>14. WiLLOW (Klein, Lomonaco, Pavlescak, &amp; Card, 2013)</td>
<td>A one-on-one 4 session RCT HIV secondary prevention intervention for African American women living with HIV. The sessions include gender and ethnic pride, stress management, condom negotiation, and sexual communication skills, and an emphasis on building healthy relationships.</td>
<td>HIV positive African American women, 18–50 years old.</td>
<td>Individual-level asset (e.g., ethnic and gender pride) Deficit (e.g., risk assessment)</td>
<td>• Increase in sexual health knowledge • Changes in self-efficacy • Improvement of negotiation and communication skills • Reduction in engaging in sexual risk behaviors</td>
<td>• Reduction in engaging in sexual risk behaviors with participants reporting a higher use of condoms during sex ($p = .002$) with both HIV-negative ($p = .040$) and HIV-positive ($p = .003$) partners. • They were also more likely to report consistent condom use (OR = 9.67; $p = .03$); fewer unprotected vaginal and anal sex ($p = .002$); significantly greater sexual communication self-efficacy ($p = .004$); and less stress ($p = .012$).</td>
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<tr>
<td>15. Women’s CoOp (Wechsberg et al., 2010)</td>
<td>An RCT HIV prevention intervention adapted from Women’s CoOp target for African American women who are crack cocaine users. The modules include HIV prevention skills, sexual communication, and condom negotiation skills, and risk assessment through empowerment theory.</td>
<td>African American women over the age of 28</td>
<td>Individual-level asset (e.g., empowerment and short and long-term goal planning) Deficit (e.g., risk assessment)</td>
<td>• Increase in sexual health knowledge • Change in attitudes, norms, intentions, and self-efficacy • Improvement of negotiation and communication skills • Reduction in engaging in sexual risk behaviors</td>
<td>• Two groups emerged for the study: Low-risk class—women whose risk behaviors were either eliminated or greatly reduced. High-risk class—women who maintained high levels of risk across multiple risk domains. • Participants were more likely to be in the low HIV risk group than the women in control conditions</td>
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Deficit-based approaches

In addition to incorporating asset-based approaches, all the interventions included deficit-based components. The majority of these interventions examined the individual, group, and/or community risk for HIV/STIs. The sessions in these interventions included modules and activities that included personalized risk assessments that examined individual factors that contribute to risk such as recent unprotected sexual encounters, number of sexual partners, concurrency of partners, and information about the higher risk of HIV/STIs among Black women.

Sexual health domains

The following results are presented by the sexual health domains (Hogben et al., 2015); we omitted healthcare use as none of the interventions included this domain. Because all the interventions included both assets and deficits and may have included more than one sexual health domain, results include overlapping interventions.

Knowledge. Six of the 15 interventions reported a statistically significant increase in sexual health knowledge using individual-level assets (Billings et al., 2015; Danielson et al., 2013; Diallo et al., 2010; Hawk, 2013; H. E. Jones et al., 2011; Nobles, Goddard, & Gilbert, 2009; Wingood et al., 2011). For instance, the Healthy Love Workshop, a group-based HIV prevention intervention, aimed to eroticize safer sex and empower Black women about their sexuality so they do not feel shameful or degraded. The intervention included three modules that provided basic facts on HIV/AIDS and STIs and increased HIV-related knowledge (AMD [adjusted mean difference] = 3.51; 95% confidence interval [CI]: 0.81, 6.20; \( p = 0.01 \)) at 6-month follow-up.

Two of the interventions reported a statistically significant increase in sexual health knowledge using community-level assets (Bangi et al., 2013; Dolcini, Harper, Boyer, & Pollack, 2010; Hawk, 2013). For instance, the in social network intervention—The Girlfriends Project—reported a statistically significant difference between the control and intervention group in HIV-related knowledge (\( t = -2.63; p = 0.012 \)). In the intervention, women hosted “parties” with their social networks in which HIV-related information was provided.

Attitudes, norms, intentions, and/or self-efficacy. Three of the interventions reported statistically significant changes in attitudes, norms, intentions, and/or self-efficacy (Danielson et al., 2013; DiClemente, Wingood, Rose, Sales, & Crosby, 2010; Wingood et al., 2011). In SAHARA, for example, Black women completed a web-based intervention that included positive qualities and accomplishments of Black women, presented correct condom use skills, and allowed participants to select correct condom application through interactive vignettes. The intervention showed an increase in condom use self-efficacy (scores ranged from 9 to 45 with intervention \( M = 30.81 \) [\( SD = 0.52 \)] versus comparison \( M = 28.96 \) [\( SD = 0.51 \); \( p < 0.012 \)]; Wingood et al., 2011).

In this domain, one intervention reported statistically significant changes using community-level assets (Wingood, Robinson, et al., 2013). In the church-based P4 for Women, participants received the intervention with fellow church members and incorporated shared values, beliefs,
and trust among church members to encourage safer sex behaviors. Intervention participants had higher condom-negotiation self-efficacy (M_difference = 2.36; p < 0.001) and condom-use self-efficacy (M_difference = 3.87; p < 0.001) compared to the control group.

**Negotiation and communication.** Three interventions reported statistically significant improvement in negotiation and communication skills using individual-level assets (Billings et al., 2015; DiClemente et al., 2010; Mercer Kollar et al., 2016). For example, women participating in Safe Sistah, a clinic-based HIV prevention intervention, received positive messages of racial identity and gender empowerment. Participants completed a module called “Talking to Your Man,” which provided information about improving safer sexual communication. The study reported a statistically significant increase in sexual communication ($F = 4.735; p = 0.033$) during the entire study among the intervention group compared to the control group (Billings et al., 2015).

Another intervention, WiLLOW, reported statistically significant improvement in negotiation and communication skills using community-level assets (Klein, Lomonaco, Pavlescak, & Card, 2013). Participants engaged in a multimedia intervention that included modules on using social support (community-level asset) to establish pride, goals, and values; relationships and communication; and narratives on different communication styles and types. The study reported that participants increased communication efficacy with partners on HIV risk reduction practices ($M$ difference = 0.60, $F = 3.94; p = 0.05$; Klein et al., 2013).

**Sexual behavior.** Thirteen interventions reported a statistically significant reduction in engaging in sexual risk behaviors (Bangi et al., 2013; Billings et al., 2015; Danielson et al., 2013; Diallo et al., 2010; DiClemente et al., 2009, 2010; Dolcini et al., 2010; Hawk, 2013; Klein et al., 2013; Nobles et al., 2009; Sales, Brown, DiClemente, & Rose, 2012a; Sterk, Theall, & Elifson, 2003; Sterk, Theall, Elifson, & Kidder, 2003; Wechsberg et al., 2010; Wingood et al., 2011; Wingood, Robinson, et al., 2013). For example, in the Enhanced Negotiation intervention, a deficit-based approach was used in which participants were provided information on the multiple behavioral risks (such as drug use and sexual risk behaviors) and the impact of race and gender on HIV risk. The study reported that there was a significantly significant decrease in the frequency of sexual intercourse while intoxicated ($p < 0.05$; Sterk, Theall, Elifson, et al., 2003). HORIZONS also used a deficit-based approach where adolescents participated in intervention sessions that included providing contributors to HIV/STI risk including individual-level factors, such as condom use. Participants were then provided four telephone contacts to reinforce prevention topics discussed within the sessions of the intervention. The study reported that participants were more likely to report condom use at last sexual intercourse compared to the control group (relative risk [RR] = 1.30; 95% CI: 1.09, 1.54; $p = 0.005$) at 12-month follow-up (DiClemente et al., 2009).

**Adverse health outcomes.** Three interventions reported lowering the incidence and/or prevalence of adverse health outcomes (DiClemente et al., 2009; Sales et al., 2012a; Wingood, DiClemente, et al., 2013). For instance, one intervention (name not provided by the authors) used a deficit-based approach where participants were provided with information on HIV/STI risk behaviors. Participants self-administered a vaginal swab at each assessment. The study reported that participants were less likely to have an incident of nonviral STIs (odds ratio [OR] = 0.62; 95%
CI: 0.40, 0.96; \( p = 0.033 \) or an incident of high-risk HPV infection \( (OR = 0.37; 95\% \text{ CI}: 0.18, 0.77; \ p = 0.008) \) compared to the control group (Wingood et al., 2013).

**Discussion**

**Sexual health domains**

In framing sexual health interventions, we choose Hogben et al.’s (2015) definition of sexual health, which included a holistic outlook of sexual health using six domains of sexual health. None of the interventions addressed all six domains; some captured four or five in their measures. All interventions stated that the purpose of the intervention was to reduce the prevalence or incidence of HIV/STIs, yet only three interventions measured their desired outcome. Of the three interventions, reduction of adverse health outcomes occurred only among nonviral STIs with reductions in sexual risk behaviors at all follow-up times. All interventions, regardless of the asset level, reported an increase in knowledge, self-efficacy, and communication. Although they did not provide a follow up to the impact on adverse health outcomes, it is similarly possible that these interventions would in the future. Most interventions operated under the assumption that these domains alone would have a significant impact on the reduction of HIV/STIs.

Interestingly, the one domain that was not included in any of the interventions was healthcare use. Healthcare use includes structural components such as access to care and structural healthcare settings. In addition, all interventions lacked institutional-level assets. The use of institutional level assets can provide advocacy for healthcare access. This brings to light the individualistic nature of most interventions without accounting for and targeting social-structural contributors to adverse health outcomes. Recently, the CDC (2019a) released a list of evidence-based structural interventions, however, none were targeted solely toward Black women. Although this is significant progress in sexual health disparities, more work is needed to ensure a focus on the multiple populations affected by HIV/STIs.

**Utilizing assets approach in interventions**

The findings from this systematic review demonstrate that all the sexual health interventions shown for Black women have used a combination of asset and deficit-based components. Combining these two approaches allows for a disease prevention intervention that enables the individual or community to use their strengths to identify and solve issues (Rotegard, Moore, Fagermoen, & Ruland, 2010). Asset-based approaches are beneficial because they provide the community or individual the opportunity to meet their own needs and use resources already at their disposal, so when the interventionists leave, the community is not left stranded (Minkler, 2012). Using asset models allows researchers to identify risk and protective factors that are often overlooked (Hall & Tanner, 2016). An asset-based approach focuses on health creation and longevity of life, through the use of protective factors such as collectivism and resilience that help individuals overcome challenging situations and provide a foundation for continued behavior (Brooks & Kendall, 2013).
Researchers suggest that interventions targeting Black women should consider their life experiences and culture (Joseph, Keller, Affuso, & Ainsworth, 2017; Latham et al., 2010; Nobles et al., 2009). Black women present assets such as collectivism, ethic to care, religion, virtue of self-sacrifice, kinship, experimental knowledge, ethnic identity, awareness of racism, and activism that can be applied in interventions. (El-Bassel et al., 2009; S. C. T. Jones & Neblett, 2016; Joseph et al., 2017; Kaestle, 2012; Lightfoot, Blevins, Lum, & Dube, 2016; Thomas, Davidson, & McAdoo, 2008). Although all the interventions included an asset, the majority focused on the same one—ethnic and gender pride—and for many, this meant African rituals. Historically, Black individuals in the U.S. are from African descent, specifically West African (Fage, 1969), thus incorporating African culture (e.g., dance, music, religion, etc.) presents a relatable component and represents African culture as an asset. However, the diversity within the U.S. “Black” community includes multiple ethnicities, countries, and cultures, which was not represented in the interventions reviewed. Therefore, more work is needed to incorporate assets that acknowledge the heterogeneity of this population.

Holistic sexual health

The World Health Organization states that sexual health is, “a state of physical, emotional, mental and social well-being in relation to sexuality; it is not merely the absence of disease, dysfunction or infirmity … requires a positive and respectful approach to sexuality and sexual relationships, as well as the possibility of having pleasurable and safe sexual experiences, free of coercion, discrimination, and violence” (World Health Organization, 2006). This criterion suggests that the construction of sexual health interventions be founded on a sex-positive framework. Yet, sexual health interventions are often framed around reducing adverse outcomes through a deficit-based lens and have neglected to focus on more holistic sexual health (Hogben et al., 2015; Morales-Alemán & Scarinci, 2016). Baird and Walters (2017) argued that an approach targeting individual-level factors (i.e individual’s behaviors) places an emphasis on regulating Black women’s sexual behaviors and not actually targeting their vulnerability to HIV. Black women do not engage in higher risk sexual behavior than other racial groups (Baird & Walters, 2017; Tillerson, 2008). As a result, interventions should be holistic, use asset and deficit approaches, target social-structural factors, and support comprehensive sexual health (Buot et al., 2014; Davis & Tucker-Brown, 2013b; Teti, Bowleg, & Lloyd, 2010).

All the sexual health interventions for Black women focused on HIV/STI prevention. Although HIV/STI prevention is necessary to reduce the sexual health disparities that Black women face, including more holistic and asset-based approaches to sexual health, including sexual functioning, sexual satisfaction, and relationship satisfaction (Fortenberry, 2013; World Health Organization, 2006) could be useful in both reducing adverse health outcomes and promoting healthy sexuality (Dailey, 1997; Ford et al., 2017; Kirby, 2008). Studies have shown that incorporating positive aspects such as sexual pleasure promotion, intimacy, sexual desire, and sexual communication can increase contraceptive use and effectiveness (Anderson, 2013). Addressing these positive aspects may also enhance Black women’s overall health including but not limited to their psychological, physical, and emotional well-being (Anderson, 2013; Harden, 2014).

Limitations
The literature review presented was not without its limitations. To minimize a potential limitation, comprehensive literature searches were conducted (e.g., using Black, African American, and African American) to avoid excluding relevant articles. Our review excluded interventions where the research team did not recruit solely Black participants to limit interventions that were not catered specifically to Black women. This may have also unintentionally excluded interventions that were catered toward Black women but still recruited women from other races. However, the exclusion of interventions not solely targeted towards Black women was used to examine implicit bias that may occur in the creation of sexual health interventions which can lead to the reinforcement of sexual stereotypes. Our review was limited to Black women, however, studies did not differentiate between Black (African American, African, or Caribbean descent living within the U.S.). Thus, it is possible that some interventions may be differentially effective for different groups of Black women in the United States. In addition, given the epidemiology of HIV and STIs in the U.S., we limited our search to women ages 14 and up. Our search included interventions under the general term sexual health. Some interventions could have been excluded that incorporated sexual health but did use the term explicitly.

The descriptions of the interventions were at times vague and were limited in providing comprehensive details within their publications. Therefore, the CDC risk reduction evidence-based behavioral interventions and effective interventions were consulted to ensure that the interventions presented in this review provided an accurate description (CDC, 2017b,c). Lastly, because all the interventions included both asset-based approaches and deficit-based approaches, we could not parse out the role of each approach in reaching the interventions’ desired outcomes.

Recommendations

Our review has informed the following recommendations related to the need to incorporate culturally appropriate community and institutional-level assets as well as further examine the effectiveness of these asset-based intervention approaches.

Black women have assets on the community and institutional level. Yet, in our review, there were few interventions focused on community assets and no interventions that included institutional-level assets. Community and institutional-level assets are crucial for long-term and sustainable changes and can include advocacy and political involvement (Missouri Department of Health and Senior Services, n.d.; Rotegard et al., 2010). For instance, an institutional-level asset such as youth civic engagement could include youth lobbying around structural causes of health disparities including HIV/AIDS (Ballard & Ozer, 2016). Another useful intervention (not included in this review as it focused on Black men and women participants) is Your Blessed Health, an HIV/AIDS awareness program that used community-level assets to develop a structural intervention and capitalize on the assets of faith-based organizations within the Black community (Griffith, Pichon, Campbell, & Ober Allen, 2010). Because structural interventions tend to focus on long-term outcomes (Blankenship et al., 2000), the intervention did not see any immediate statistically significant changes in HIV knowledge, self-efficacy, or sexual risk behavior but over the 4 years of implementation, it was able to detect community changes in
HIV knowledge and testing as well as increased community support of HIV and STI reduction efforts (Griffith et al., 2010).

Asset-based approaches that are culturally and historically grounded have implications for risk prevention. The Yes! Program promoted cultural (community) assets (e.g., collectivism) and institutional/policy assets (e.g., activism) to help protect Black adolescent women from the effects of racism (Thomas et al., 2008). The intervention saw statistically significant effects on ethnic identity, racism awareness, collectivism, and liberatory youth activism. The team reported that most research on Black adolescents was from a deficit lens, and less is known about the strengths that they embody such as resilience and perseverance to overcome hardships they may face (Thomas et al., 2008). The use of asset-based approaches for Black women and with other marginalized populations can provide a voice to the community to determine their own solutions.

Understanding the cultural and historical differences between Black women and women from other races is needed to develop interventions incorporating culturally appropriate assets for the appropriate individual/community and environment. Using more community-based participatory research may be more effective in creating or adapting culturally appropriate, assets-based sexual health interventions (Rink, Montgomery-Anderson, & Anastario, 2014). Further, incorporating community as partners, such as lay health workers, allows for the inclusion of lived experiences from the community with research to provide relatable modules for the participants (Rhodes et al., 2012). This type of active partnership will ensure that Black women that have similar life experiences can provide direction and suggestions and in turn cultivate relatable assets (Bowleg et al., 2017). It is also important to have intervention team members that have less social distance from the population targeted by the intervention to ensure that cultural issues within intervention development and implementation are being handled sensitively (Bowleg et al., 2017).

As we were unable to find studies that examined the utility and effectiveness of asset-based approaches compared to deficit-based approaches, we cannot recommend that solely using asset-based approaches is the most effective intervention approach for Black women. More research is needed in this area as extant work and policy highlight the importance of incorporating assets in interventions (Alvarez-Dardet et al., 2015; Brooks & Kendall, 2013; Friedli, 2013; Morgan & Hernàn, 2013; Morgan, 2014; Morgan & Ziglio, 2007; Office of National AIDS Policy, 2015; Oman et al., 2013; Rotegard et al., 2010; Sheiham, Watt, Whiting, Kendall, & Wills, 2012; Thomas et al., 2008). Examining the effectiveness of specific asset-based intervention approaches is needed to understand the utility and advance the use of asset-based approaches in interventions with Black women (Alvarez-Dardet et al., 2015). One method of testing the effectiveness of specific intervention components is the multiphase optimization strategy (MOST), this methodological framework allows researchers to evaluate the contribution of individual intervention components (in this case, asset, deficit, or combined) to produce desired outcomes that are cost-effective (Collins, Kugler, & Gwadz, 2016). MOST has been recommended for disease prevention interventions, including HIV/STI prevention interventions and can be used to create evidence-based interventions using asset-based approaches (Collins et al., 2016).

**Conclusion**
This literature review focused on 17 years of sexual health interventions for Black women. The existing interventions incorporated both asset and deficit-based approaches and were effective in addressing their primary sexual health related outcomes. This review, however, suggests that there is still a need to expand on the use of asset-based approaches in the Black community on a community and institutional-level. We recommend incorporating different levels of assets and more studies that test the effectiveness of asset-based approaches, especially over longer follow-up periods. Black women have unique factors that can affect their sexual health, including social-structural factors, culture, and life experiences. Black women are resilient and have a strong sense of community (Lin, Thompson, & Kaslow, 2009) and these assets can be used to assist in advancing or promoting sexual health. Further, there was a lack of sexual health interventions that focused on more comprehensive and holistic aspects of sexual health including sexual functioning, pleasure, or desire. This illuminates the need for more holistic, asset-based sexual health interventions for Black women to reduce sexual health disparities and promote overall sexual health.

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