Original Report: HIV and African American Women

"IT HAD A LOT OF CULTURAL STUFF IN IT": HIV-SERODISCORDANT AFRICAN AMERICAN COUPLES' EXPERIENCES OF A CULTURALLY CONGRUENT SEXUAL HEALTH INTERVENTION

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Objective: The increased life expectancy of people living with HIV has brought about an increase in serodiscordant couples, in which there is risk of HIV transmission. Therefore, interventions that promote sexual health and reduce risk are critical to develop for these couples. Given the disproportionate burden of HIV among populations of color, it is also critical that these interventions are culturally congruent. The EBAN intervention for African American serodiscordant couples recognizes the centrality of culture in shaping sexual behaviors and helps couples develop intimacy and positive prevention behaviors. The analytic objective of our study was to examine the knowledge and awareness gained by participants in the intervention.

Participants: Participants (n=17) who completed at least half of the eight intervention sessions.

Methods: Brief post-implementation semistructured interviews were conducted between January 1, 2016 and December 31, 2016. Team-based, targeted content analysis focused on knowledge and awareness gains.

Results: Participants described learning about sexual health, expanded sexual options, and sexual communication. The "EBAN café," a component that gives couples a menu of options for safer sex behaviors, was particularly popular. Participants also noted the value of learning how to communicate with one another about their sexual health-related concerns and preferences. They appreciated the "cultural stuff" that was infused throughout the sessions, including the emphasis on learning from one another as couples.

Conclusions: Couples at risk for HIV transmission benefit from strengthening skills and knowledge related to healthy sexual-

INTRODUCTION

HIV continues to be a major global health problem. In the United States, the HIV epidemic is particularly problematic among the African American population, with 17,528 new diagnoses reported in 2016.^{1,2} This figure accounted for 44% of the country's overall HIV incidence. Among heterosexual African Americans, women bear the higher number of new HIV diagnoses in the United States; 91% of HIV transmission among African American women

ity. A behavioral intervention that aligns with cultural values and imparts culturally congruent sexual health information appeals to couples who seek ways to enhance their intimacy and sexual options while also reducing risk. *Ethn Dis.* 2020;30(2):269-276; doi:10.18865/ed.30.2.269

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³ Center for the Study of Healthcare Innovation, Implementation, & Policy, VA Greater Los Angeles Healthcare System, Los Angeles, CA was due to heterosexual contact.³ With continued biomedical treat-

ment advancements in its management, HIV is now classified as a chronic illness and people living with HIV (PLHIV) are able to live longer and maintain healthy lives. The increased life expectancy of PLHIV has brought about an increase in serodiscordant relationships; where one partner is living with HIV while the other partner is sero-negative.⁴ Serodiscordant sexual relationships can be seen as high-risk relationships wherein HIV transmission is highly likely.

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Address correspondence to Alison B. Hamilton, PhD, MPH; Department of Psychiatry and Biobehavioral Sciences, University of California Los Angeles, 760 Westwood Plaza, Box 175919, Los Angeles, CA. 310.570.7411; alisonh@ucla.edu However, PLHIV who are virally suppressed because they adhere to antiretroviral therapy are considered to pose a lower risk of transmission.⁵ In an effort to estimate expected cumulative HIV risk, Lasry and colleagues argue that using multiple barrier methods, for example consistent condom use in conjunction with ARVs, could keep risk for transmission down to <10% over a 10-year period.⁶ Therefore, even though serodiscordant relation-

The goal of our research analysis was to examine the sexual knowledge and awareness gained by individuals who participated in an EBAN implementation/ effectiveness trial in community-based treatment settings.²⁵

ships pose a higher risk of HIV transmission, the use of multiple barrier methods can significantly reduce the risk of HIV transmission over time.⁶ Targeted HIV prevention intervention strategies should focus on positive prevention within the context of serodiscordant sexual relationships.^{7,8}

Interventions with individuals in serodiscordant relationships may

target the infected partner, the uninfected partner, or both.9 In prevention interventions with heterosexual serodiscordant couples, rates of HIV transmission have been reduced by monitoring and counselling to increase PrEP adherence,¹⁰ HIV testing, and counselling to improve condom use.¹¹ Group psychoeducation has been effective in reducing depression and anxiety and in increasing marital satisfaction.¹² However, although partners play a key role in sexual behavior and disease transmission, and couples-focused interventions stand to reduce the elevated rates of HIV transmission in long-term relationships,13 HIV prevention interventions with couples, particularly serodiscordant couples, remain underutilized,^{14,15} particularly outside of Africa. Furthermore, interventions tend to place more emphasis on reducing risk rather than heightening sexual pleasure and creativity.

In their systematic review of sexual health interventions for the adult population, Hogben and colleagues suggest that sexual intimacy is an inherent part of overall health.¹⁶ Factors contributing to the success of interventions include cultural congruence, communication and skills building for sexual health, intimacy, negotiation, and decision-making around sexual health (eg, condom use). Cultural congruence, an oft-neglected component of HIV risk reduction for serodiscordant couples,^{15,17} yields positive health outcomes through meaningful, sustainable change more so than interventions that emphasize behavior change only.¹⁸ Interventions other than those focused on biomedical treatment should consider the cultural setting of participants, as well as the cultural constructs that govern health care behaviors, sex, and sexuality.² Intervention efforts should always be culturally specific and sensitive, and they should include a collaborative approach wherever possible.¹⁹ Specific to African American communities affected by HIV, a culturally congruent approach should aim to build self-efficacy to protect oneself, one's partner, and the community from HIV/AIDS and to reduce stigma and social isolation experienced by HIV serodiscordant couples.²⁰

Communication about sexual health is often difficult for couples dealing with chronic illness.²¹ To manage the impact of chronic illness, couples are encouraged to communicate openly and discuss fears, frustrations and other issues.²² According to Rose and colleagues,²⁰ behavioral interventions should focus on condom use, negotiation of safer sex practices, and disclosure of HIV status to sex partners. Behavioral interventions should also equip participants with cultural and gender-specific concepts, such as collectivism and interconnectedness. Burton et al urge that "future couples-focused interventions for HIV prevention must be based on a stronger conceptual and theoretical understanding of the relationship dynamics that might contribute to sexual risk behaviors among couples, including gender roles, power, communication, intimacy, fidelity, reproduction goals, and family responsibilities. These factors are likely to be culturally determined and tied to norms around gender and sexuality."13

The EBAN HIV risk-reduction

intervention for African American serodiscordant couples is an evidencebased intervention that addresses these key constructs.²³ EBAN was developed to address the disproportionate rates of HIV/AIDS in African Americans,³ and in recognition of the importance of working with both partners for HIV prevention in serodiscordant relationships^{14,15} and the centrality of culture in shaping sexual behavior and acceptable options for behavior change.²⁴

EBAN is an eight-session intervention that encourages the development of intimacy and positive-prevention. The goal is to impart skills that enable couples to exert protective self-control, and through role plays and practice, equip them with skills for effective communication, safersex negotiation, and correct condom use, while drawing on lived experiences of African Americans and using familiar and culturally relevant language and examples. EBAN is interactive and activity-based and includes rapport- and trust-building activities, informative teachings, and video segments that serve as role modeling and triggers for discussion. The intervention provides information on types of infections, modes of transmission, local counselling, care and treatment options, increasing condom use, and strengthening the positive and reframing the negative aspects of what it means to be a partner of an individual living with HIV.

The goal of our analysis was to examine the sexual knowledge and awareness gained by individuals who participated in an EBAN implementation/effectiveness trial in community-based treatment settings.²⁵

METHODS

Organizational Contexts and Overview of Study Design

Community-based organizations (CBOs; n=10) in Los Angeles and Alameda Counties agreed to serve as sites for this study. These CBOs expressed particular interest in offering services to couples because they did not provide such services.²⁶

Study Participants

As reported elsewhere, we used community outreach and marketing to recruit and screen African American, HIV-serodiscordant heterosexual couples (see Hamilton et al²⁵ for detailed eligibility criteria). Participants were eligible to participate in the qualitative interview if they had completed at least half of the eight intervention sessions and were reachable post-implementation.

Procedures

All individuals completed written informed consent, and then were asked to complete a computerized baseline and follow-up survey comprising demographic questions as well as several standardized measures.²⁵ A subset of participants were invited to participate in a brief, audio-recorded "exit interview," focused on perceived reasons for drop-out among their peers, likes and dislikes about the study, aspects of the study that were relatable, what was learned, what should be changed about the intervention, and whether the couple was still practicing what they had learned. Interviews took place between January 1, 2016 and December 31, 2016. All interviews were professionally transcribed. All procedures were in accordance with the ethical standards of the responsible committee on human experimentation (institutional and national) and with the Helsinki Declaration of 1975, as revised in 2000. Informed consent was obtained from all participants included in the study.

Data Analysis

All members of the analysis team (six investigators, five of whom were mentees of the second author, an anthropologist and qualitative methods expert) independently read and wrote memos about each transcript. Each analyst independently prepared a draft code list after reviewing the transcripts; these code lists were compared and compiled to develop a parsimonious list of codes that were derived by consensus. Four of the analysts applied the codes using ATLAS.ti; all coding was reviewed by a secondary coder. Output of each code as well as code combinations were reviewed by the analysis team, who identified key themes related to sexual knowledge and awareness gained. This analysis focuses on what was learned regarding sexual health, and how knowledge was gained in the context of a culturally congruent intervention. Two senior team members reviewed the analysts' interpretations and concurred with the results presented below.

RESULTS

Sample Characteristics

Seventeen EBAN participants (nine women and eight men) completed the exit interview. Participants were an average age of 53 at baseline (women, mean age of 50; men, mean age of 56). More than half (59%) had a high school education. Most (88%) were unemployed; 100% of the women participants were unemployed. Most (82%) were unmarried. More than half (53%) had a history of incarceration (33% of women and 75% of men).

Overview of Qualitative Findings

Overall, participants described the knowledge that they gained about sexual health (eg, condom use), sexual activities (beyond intercourse), and sexual communication that enhanced intimacy and awareness of their partners' preferences. Participants were typically able to identify specific aspects of the intervention (eg, the EBAN Café) that "resonated" with them. They emphasized the value and importance of learning about sexual health via an intervention that aligned with their cultural beliefs and values. These results will be described further below, using illustrative quotations. Some tied these benefits together in their narratives about their experiences in the intervention.

Knowledge of Sexual Health

When asked about what they learned in EBAN sessions, participants noted condom use, including female condoms. This heightened knowledge of condom use was associated with becoming "more responsible" for safe sex. For example, one participant said she learned to "use protection for whoever, everybody no holds barred." Similarly, another participant explained that her partner did not like using condoms. She used tools that she learned to convince him to use them, including being straightforward in telling him, "You don't use condoms, you don't get nothing." When asked later if she was still practicing what she learned she responded, "Yes...it's still 'you don't use them, you don't get none." They also learned how to use condoms properly: "They showed us how to put a condom on a dildo correctly. (Okay.) And how to use female condoms."

Knowledge gained was not only technical in nature; it also related to "pleasure" and "fun":

"[The study was] about sex and making it more fun when using a condom. (Which parts do you remember the most when you think about it?) About being open about protecting yourself, about using condoms, protection from female condoms, male condoms. And, you know, every week we had an array of condoms for people to take freely. (Yes. Okay.) And, you know, remember we went into the different types of condoms for the different sex acts. Some people had never even seen the female condom before."

Similarly, a participant shared that he "picked up a lot of practices from the study and all. It's about sex and making it more fun when using a condom. And foreplay and all that and so I enjoyed it." They described learning about the importance of preparation and of avoiding alcohol and drug use during sexual encounters:

"I can take what I learned from the study to the new relationship. I could talk to them without being, like, discouraged about talking about sex and condoms and different condoms and how we can make it enjoyable and playful...Like, when, you know, you're having sex always be prepared for your sex activity that you're getting ready to have. Have everything out, like the condom, the female condom and the male condom and make sure you're not under the influence of no kind of alcohol and no kind of drugs before you start getting involved into sex. Make sure you have all your condoms right there."

Expanding Sexual Activities

The EBAN Café was frequently noted as an eye-opening aspect of the intervention because it expanded participants' ideas about what they could do sexually and "broadened horizons," particularly beyond intercourse: "(So what did you learn?) I learned a lot...The Café opened my eyes to different little things that I can do with my partner." Similarly, a participant shared about the value of having a "menu" of options that included condoms: "For me, the session where we talked about things you can do that aren't sexual, like massage with your partner. You know, just the whole idea of having like a menu of things that you can do that you can have sex or not have sex, how to incorporate using condoms. (The EBAN Café?) The Café, yeah, the Café was really good." Another participant said that she "loved the different things-that you don't have to be having sex all the time. You could have a massage and different stuff like

that." Per several participants, the Café "gave you the variety of choices of things that you could choose from." They described learning about "other things that you can bring into a relationship other than just sex" and "getting with your partner without having to have sex all the time."

Enhancing Sexual Communication

Participants described learning how to communicate with their partners, about both sexual health and other health issues. For example, a participant shared:

"What I like most about the study is I was able to relate more with my partner that I was with. And to discuss the health issues and stuff that was challenging for sex and all that...At one time I was-it was hard for me to talk to my sex partner, my mate at the time, about using condoms because I was scared to bring it up like they was thinking that I might be cheating and stuff. So, I wouldn't really bring it up. So, I was like nervous about it, but now since I took the study and all that I'm more relaxed about letting them know I need to use condoms to protect myself and protect you at the same time."

Participants described enjoying the time they spent together in sessions:

"I liked actually spending time with my significant other and learning really about each other...I guess when we would go over the different little activities, it was just, like I said, a learning experience for the both of us about each other...I know we did some things around active listening and that was really a good learning tool for me."

When asked if they are still using what they learned, one participant said, "Yeah. We still talk on the subject and utilize the subject quite well. We sometimes talk on maybe having sex certain ways."

Even beyond sexual communication, participants noted that the intervention helped them to understand and move beyond stigma. For example, an HIV-negative participant shared:

"I found out, you know, that the people with HIV and which I am negative, she's positive, and there's no difference between that person or me or anyone else. Because they say it's HIV, you know, what's the difference?...They're human and I'm human. You know what I'm saying? I'm sitting next to you, you're human. I'm going to give you the same love, the same love that I give her or him."

An HIV-positive participant shared,

"For the negative person, it really impacted him. (Tell me about that.) It really did. He became more conscious of stuff. He became more conscious of his health. Really, it was good, okay? And he became more conscious of seeing things through somebody else's perspective. Even though he had a medical, technical background, he was very uneducated as far as STIs, STDs, however you want to call them...So, it made him exercise that part of his intellect."

Communication was strengthened by the group-based approach, with couples sharing the experiences: "I learned to be open, and not be afraid. Because the other couple has the same issue that we have, so maybe I can relate to that level. I enjoyed it, especially getting my other half just to listen."

Some noted that communication was hard to maintain once they left the context of the groups: "(So what was most challenging for you and your partner?) Learning how to communicate, how to listen. Man, she can do it here, but not at home." Similarly, a participant shared, "It was getting her to answer the questions when we wasn't in the session. It was easier when we were in session to answer the questions...[At home] it was very difficult. I couldn't get her to focus."

Value of a Culturally Congruent Approach

In addition to gaining knowledge and awareness of sexual health, activities, and effective communication, participants noted the value of the cultural orientation of the intervention, particularly the Seven Principles of Kwanzaa:

"(What parts of the study resonated with you and your partner?) The idea, well, the Seven Principles of Kwanzaa and the idea of just having some kind of culture example to use to kind of keep us grounded. So the Seven Principles were great. And also the music." Similarly, a participant described enjoying "when we was doing the singing, because we know the words."

Intersecting Knowledge, Awareness, and "Cultural Stuff"

When asked what they liked about participating, some participants combined the elements described above in powerful ways. The participant quoted below notes the cultural aspects, the knowledge she gained about safe sex, and the broader understanding she gained about stigma related to HIV:

"(What did you like most about participating in the study?) I really liked it all. I liked the way you tied the records and stuff and the themes, I call them inspirational... in the beginning, like, the poems and stuff. I liked that. (So, tell me what you learned?) I learned how to avoid-sorry-I learned how to disarm tense situations pertaining to sexual protocol, as far as safe sex is concerned, and things of that nature. I've learned to not say anything sometimes. I learned to take a silent position, which at times, was not easy. I've learned a lot. Personally, I learned a lot. I really liked the EBAN Café. In fact you all needed to take that for all men and make it wallet-sized! But I enjoyed the study. It had a lot of cultural stuff in it. It had a lot of the concept of EBAN, the unity, the mojo, I really liked that. The collectiveness, I can't think of how you say that. I enjoyed it. And I enjoyed the presenters. For a person that has never dealt with

HIV it's very informative. It's very open-minded. Because some of the things that normally a person that doesn't have it wouldn't even think about the way another person who has it thinks. They would all stigmatize that person or label them a little bit, so it breaks a lot of that down."

DISCUSSION

The EBAN HIV risk reduction intervention increases condom use among HIV-serodiscordant, heterosexual African American couples via a culturally congruent group- and couples-based approach that emphasizes skill-building and problem-solving related to communication about sexual risk and sexual health.²³ Previous work has demonstrated that, in addition to effective risk reduction, participants appreciated the cultural congruence of the intervention.²⁷ Our present analysis investigated participants' qualitative experiences of the intervention, particularly with regard to the knowledge and awareness they gained about sexual health, sexual activities, and sexual communication in the context of culturally congruent intervention content.

Participants expressed appreciation for technical knowledge about condom use, including use of the female condom, and about learning how to assert the importance of condom use in an HIV-serodiscordant relationship. The value of assertive communication in sexual risk reduction interventions has been noted,²⁸ particularly for interventions designed for African American women.^{29,30} Participants also emphasized that they learned to associate condom use with "fun" and "enjoyment," which are concepts that historically have been absent from educational messages about condom use. Of particular appeal, the EBAN Café expanded participants' awareness of sexual activities that did not necessarily involve intercourse; massage and other forms of intimacy were perceived to be viable and enjoyable ways of connecting with one's partner, and participants liked learning

Participants shared that the intervention enhanced their communication about sexual health and other health and social issues, including stigma associated with HIV.

about—and using—these options.

Relatively little research has examined how HIV-serodiscordant couples achieve sexual intimacy and pleasure. A notable exception is the "Connection Café Menu" in the evidence-based Project Connect couples-based intervention.³¹⁻³³ Given that people living with HIV are living longer, it will be critical for HIV risk reduction behavioral interventions to address sexual intimacy, including intimacy among older adults.³⁴

Participants shared that the intervention enhanced their communication about sexual health and other health and social issues, including stigma associated with HIV. They appreciated spending time and "relating" with their partners and with other couples of similar HIV status, particularly in the context of sessions that contained "cultural stuff" such as songs, poems, and relevant spiritual principles. This interconnectedness is one of the three pillars of the Sexual Health Model, which is rooted in the context of African American historical and cultural experiences.²⁴ The sharing that occurred could represent a shift toward "alternative masculinities" and "gender-transformative safer sex interventions" that highlight African American men taking responsibility for safer sex or sexual exclusivity.35 Using the EBAN intervention as part of positive-prevention efforts may also facilitate improved treatment adherence of PLHIV and PrEP use by the seronegative partner.

Limitations

This study has notable limitations, including the convenience sample. Participants had varying intervention completion; perspectives may have been more cohesive if the sample had been limited to those who had completed the intervention. Furthermore, given that the intervention was designed for couples, it would have been useful to interview couples, possibly using dyadic interviewing techniques,³⁶ about their mutual experiences in the intervention. However, it was challenging to locate individuals for the interviews, and many couples had broken up since participating in the intervention. Finally, not all participants remembered their experiences in detail, in some

cases due to active substance use. This may have curtailed the insights we were able to glean about the impact of the intervention on sexual knowledge, practices, and communication.

CONCLUSION

A decade ago, Williams and colleagues called for culturally congruent HIV prevention interventions for African Americans,³⁷ and Kennedy & Jenkins noted the need for "culturespecific strategies" to reduce HIV risk among African Americans.³⁰ Since that time, evidence has accumulated about the importance and impact of culturally tailoring interventions, for example to address African American women's sociocultural stress in an effort to reduce unprotected sex.38,39 This analysis further demonstrates that HIV-serodiscordant couples benefit from strengthening skills and knowledge related to healthy sexuality, particularly in the context of a behavioral intervention that aligns with cultural values and imparts culturally congruent sexual health information. The EBAN intervention appeals to couples who seek ways to enhance their intimacy and sexual options while also reducing risk.

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Conflict of Interest

No conflicts of interest to report.

AUTHOR CONTRIBUTIONS

Research concept and design: Hamilton, Milburn, Wyatt; Acquisition of data: Hamilton, Wyatt; Data analysis and interpretation: Mthembu, Hamilton, Milburn, Sinclair, Mkabile, Mashego, Manengela; Manuscript draft: Mthembu, Hamilton, Milburn, Sinclair, Mkabile, Mashego, Manengela; Statistical expertise: Mthembu; Acquisition of funding: Hamilton, Wyatt; Administrative: Mthembu, Hamilton, Milburn, Sinclair, Mkabile, Mashego, Manengela, Wyatt; Supervision: Hamilton, Milburn, Wyatt

References

- Centers for Disease Control and Prevention. HIV Surveillance Report, 2016; vol 28. Last accessed Jan. 27, 2020 from https://www.cdc. gov/hiv/pdf/library/reports/surveillance/cdchiv-surveillance-report-2016-vol-28.pdf
- Harawa NT, Williams JK, McCuller WJ, et al. Efficacy of a culturally congruent HIV risk-reduction intervention for behaviorally bisexual black men: results of a randomized trial. *AIDS*. 2013;27(12):1979-1988. https:// doi.org/10.1097/QAD.0b013e3283617500 PMID:24180003
- Centers for Disease Control and Prevention. *HIV Surveillance Report*, 2017.vol 29. Last accessed Jan. 27, 2020 from https://www.cdc. gov/hiv/pdf/library/reports/surveillance/cdchiv-surveillance-report-2017-vol-29.pdf
- Wilton J. HIV prevention within serodiscordant couples: A changing paradigm. *Toronto: CATIE (Canadian AIDS Treatment Information Exchange)*. 2015.
- Suzan-Monti M, Lorente N, Demoulin B, et al; ANRS-VESPA2 Study Group. Sexual risk behaviour among people living with HIV according to the biomedical risk of transmission: results from the ANRS-VESPA2 survey. J Int AIDS Soc. 2016;19(1):20095. https://doi.org/10.7448/IAS.19.1.20095 PMID:26750379
- Lasry A, Sansom SL, Wolitski RJ, et al. HIV sexual transmission risk among serodiscordant couples: assessing the effects of combining prevention strategies. *AIDS*. 2014;28(10):1521-1529. https://doi.org/10.1097/ QAD.0000000000000307 PMID:24804859
- Hallal RC, Raxach JC, Barcellos NT, Maksud I. Strategies to prevent HIV transmission to serodiscordant couples. *Rev Bras Epidemiol.* 2015;18(suppl 1):169-182. https:// doi.org/10.1590/1809-4503201500050013 PMID:26630306
- Nakiganda LJ, Nakigozi G, Kagaayi J, et al. Cross-sectional comparative study of risky sexual behaviours among HIV-infected persons initiated and waiting to start antiretroviral therapy in rural Rakai, Uganda. *BMJ Open*. 2017;7(9):e016954. https://doi.org/10.1136/ bmjopen-2017-016954 PMID:28893749

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- Solomon SS, Solomon S. HIV serodiscordant relationships in India: translating science to practice. *Indian J Med Res.* 2011;134(6):904-911. https://doi.org/10.4103/0971-5916.92635 PMID:22310822
- Haberer JE, Baeten JM, Campbell J, et al. Adherence to antiretroviral prophylaxis for HIV prevention: a substudy cohort within a clinical trial of serodiscordant couples in East Africa. *PLoS Med.* 2013;10(9):e1001511. https://doi.org/10.1371/journal.pmed.1001511 PMID:24058300
- Allen S, Tice J, Van de Perre P, et al. Effect of serotesting with counselling on condom use and seroconversion among HIV discordant couples in Africa. *BMJ*. 1992;304(6842):1605-1609. https://doi.org/10.1136/ bmj.304.6842.1605 PMID:1628088
- Pomeroy EC, Green DL, Van Laningham L. Couples who care: the effectiveness of a psychoeducational group intervention for HIV serodiscordant couples. *Res Soc Work Pract.* 2002;12(2):238-252. https://doi. org/10.1177/104973150201200203
- Burton J, Darbes LA, Operario D. Couplesfocused behavioral interventions for prevention of HIV: systematic review of the state of evidence. *AIDS Behav.* 2010;14(1):1-10. https://doi.org/10.1007/s10461-008-9471-4 PMID:18843530
- Mashaphu S, Burns JK. Couples-based interventions in the context of HIV discordance. *S Afr J Psychiatr*. 2017;23(1):1009. https:// doi.org/10.4102/sajpsychiatry.v23i0.1009 PMID:30263183
- Mashaphu S, Burns JK, Wyatt GE, Vawda NB. Psychosocial and behavioural interventions towards HIV risk reduction for serodiscordant couples in Africa: A systematic review. *S Afr J Psychiatr.* 2018;24(1):1136. https:// doi.org/10.4102/sajpsychiatry.v24i0.1136 PMID:30263215
- Hogben M, Ford J, Becasen JS, Brown KF. A systematic review of sexual health interventions for adults: narrative evidence. J Sex Res. 2015;52(4):444-469. https://doi.org/10.1080/ 00224499.2014.973100 PMID:25406027
- Jiwatram-Negrón T, El-Bassel N. Systematic review of couple-based HIV intervention and prevention studies: advantages, gaps, and future directions. *AIDS Behav.* 2014;18(10):1864-1887. https://doi.org/10.1007/s10461-014-0827-7 PMID:24980246
- Airhihenbuwa CO, Ford CL, Iwelunmor JI. Why culture matters in health interventions: lessons from HIV/AIDS stigma and NCDs. *Health Educ Behav*. 2014;41(1):78-84. https://doi.org/10.1177/1090198113487199 PMID:23685666
- Patel AH. D. E. Culture in clinical psychology: adapting treatments. In: Hofmann SG, ed. *Clinical Psychology: A Global Perspective*. Hoboken, NJ: Wiley; 2017:399-411.
- 20. Dawson Rose C, Gutin SA, Reyes M. Adapt-

ing positive prevention interventions for international settings: applying U.S. evidence to epidemics in developing countries. *J Assoc Nurses AIDS Care*. 2011;22(1):38-52. https://doi.org/10.1016/j.jana.2010.04.001 PMID:20538491

- Lyons KS, Winters-Stone KM, Bennett JA, Beer TM. The effects of partnered exercise on physical intimacy in couples coping with prostate cancer. *Health Psychol*, 2016;35(5):509-513. https://doi.org/10.1037/hea0000287 PMID:26462060
- D'Ardenne P. The couple sharing long-term illness. Sex Relationship Ther. 2004;19(3):291-308. https://doi.org/10.1080/1468199041000 1715427
- El-Bassel N, Jemmott JB, Landis JR, et al; NIMH Multisite HIV/STD Prevention Trial for African American Couples Group. National Institute of Mental Health Multisite Eban HIV/STD Prevention Intervention for African American HIV Serodiscordant Couples: a cluster randomized trial. *Arch Intern Med.* 2010;170(17):1594-1601. https:// doi.org/10.1001/archinternmed.2010.261 PMID:20625011
- 24. Wyatt GE. Enhancing cultural and contextual intervention strategies to reduce HIV/ AIDS among African Americans. Am J Public Health. 2009;99(11):1941-1945. https://doi.org/10.2105/AJPH.2008.152181 PMID:19762666
- Hamilton AB, Mittman BS, Williams JK, et al. Community-based implementation and effectiveness in a randomized trial of a risk reduction intervention for HIV-serodiscordant couples: study protocol. *Implement Sci.* 2014;9(1):79. https://doi.org/10.1186/1748-5908-9-79 PMID:24950708
- 26. Hamilton AB, Mittman BS, Campbell D, et al. Understanding the impact of external context on community-based implementation of an evidence-based HIV risk reduction intervention. *BMC Health Serv Res.* 2018;18(1):11. https://doi.org/10.1186/s12913-017-2791-1 PMID:29316922
- NIMH Multisite HIV/STD Prevention Trial for African American Couples Group. Eban HIV/STD risk reduction intervention: conceptual basis and procedures. *J Acquir Immune Defic Syndr*. 2008;49(suppl 1):S15-S27. https:// doi.org/10.1097/QAI.0b013e318184255d PMID:18724186
- Mercer Kollar LM, Davis TL, Monahan JL, et al. Do as I say: using communication role-plays to assess sexual assertiveness following an Intervention. *Health Educ Behav.* 2016;43(6):691-698. https:// doi.org/10.1177/1090198116630528 PMID:27164847
- Brown DL, Blackmon S, Shiflett A. Safer sexual practices among African American women: intersectional socialisation and sexual assertiveness. *Cult Health Sex*. 2018;20(6):673-

689. https://doi.org/10.1080/13691058.2017. 1370132 PMID:28922093

- Kennedy BR, Jenkins CC. Promoting African American women and sexual assertiveness in reducing HIV/AIDS: an analytical review of the research literature. *J Cult Divers*. 2011;18(4):142-149. PMID:22288212
- El-Bassel N, Witte SS, Gilbert L, et al. HIV prevention for intimate couples: A relationshipbased model. *Fam Syst Health*. 2001;19(4):379-395. https://doi.org/10.1037/h0089467
- El-Bassel N, Witte SS, Gilbert L, et al. The efficacy of a relationship-based HIV/STD prevention program for heterosexual couples. *Am J Public Health*. 2003;93(6):963-969. https://doi.org/10.2105/AJPH.93.6.963 PMID:12773363
- 33. Lyles CM, Kay LS, Crepaz N, et al; HIV/AIDS Prevention Research Synthesis Team. Bestevidence interventions: findings from a systematic review of HIV behavioral interventions for US populations at high risk, 2000-2004. *Am J Public Health.* 2007;97(1):133-143. https://doi.org/10.2105/AJPH.2005.076182 PMID:17138920
- Smith TK, Larson EL. HIV sexual risk behavior in older black women: a systematic review. Womens Health Issues. 2015;25(1):63-72. https://doi.org/10.1016/j.whi.2014.09.002 PMID:25442363
- Bowleg L, Heckert AL, Brown TL, Massie JS. Responsible men, blameworthy women: black heterosexual men's discursive constructions of safer sex and masculinity. *Health Psychol.* 2015;34(4):314-327. https://doi.org/10.1037/ hea0000216 PMID:25822050
- Morgan DL, Ataie J, Carder P, Hoffman K. Introducing dyadic interviews as a method for collecting qualitative data. *Qual Health Res.* 2013;23(9):1276-1284. https:// doi.org/10.1177/1049732313501889 PMID:23925406
- Williams JK, Wyatt GE, Wingood G. The four Cs of HIV prevention with African Americans: crisis, condoms, culture, and community. *Curr HIV/AIDS Rep.* 2010;7(4):185-193. https://doi.org/10.1007/s11904-010-0058-0 PMID:20730512
- Boekeloo B, Geiger T, Wang M, et al. Evaluation of a socio-cultural intervention to reduce unprotected sex for HIV among African American/Black women. *AIDS Behav.* 2015;19(10):1752-1762. https:// doi.org/10.1007/s10461-015-1004-3 PMID:25645327
- Prather C, Fuller TR, King W, et al. Diffusing an HIV prevention intervention for African American Women: integrating afrocentric components into the SISTA Diffusion Strategy. *AIDS Educ Prev.* 2006;18(4)(suppl A):149-160. https://doi.org/10.1521/aeap.2006.18. supp.149 PMID:16987096