A gender analysis is an important planning tool for the development of effective HIV interventions to reach the 95-95-95 targets of the United States President’s Emergency Plan for AIDS Relief (PEPFAR). These goals are that by 2020, 95 percent of all people living with HIV will know their status, 95 percent of all those with diagnosed HIV infection will receive sustained antiretroviral therapy (ART), and 95 percent of all those receiving ART will have viral suppression. Beginning in 2014, PEPFAR guidance for conducting a gender analysis included a focus on these populations key to the epidemic: men who have sex with men (MSM), people who use drugs, transgender people, and sex workers (PEPFAR, 2014).

Mapping to “actionable” programmatic recommendations based on the findings of a gender analysis is arguably the most important and difficult step for PEPFAR operating units. For key populations, gender is but one component of their identity that contributes to social marginalization and increased vulnerability to acquiring the virus. HIV-related interventions for key populations have typically emphasized human rights more broadly, rather than specific gender-related barriers to reaching the targets. For this reason, it can be difficult for PEPFAR teams to design interventions that deal with the gender-related factors identified in their gender analyses. To address this need, MEASURE Evaluation—a project funded by the United States Agency for International Development and PEPFAR—conducted a literature review of HIV interventions acting on a gender-related factor for key populations. This brief summarizes the methods used for the review and presents a table that lists HIV interventions addressing a gender-related factor, organized by key population.

Methods

Databases searched were PubMed and the National Institutes of Health (NIH) Reporter. Publications by Linkages across the Continuum of HIV Services for Key Populations Affected by HIV (LINKAGES)—another USAID- and PEPFAR-funded project—were also reviewed. The search strategy was developed for PubMed and then adapted for NIH Reporter and covered projects that have been funded and are ongoing. Results were restricted to publications in English from January 1, 2000 to September 30, 2017. Reference lists of select studies were manually searched to identify any additional publications or interventions that fit the search criteria. Investigators with ongoing projects identified in NIH Reporter were contacted to identify relevant publications, preliminary results, and project documents that might not have surfaced in the database search.

Study Selection

The search yielded 1,613 documents. Those published before the year 2000 were then excluded, leaving 1,420 publications for further review. These documents were imported into EndNote software. Duplicates and irrelevant studies were removed. Initial review was conducted by one research team member, who found 372 publications that were mainly gender-related. Two independent reviewers then performed a second review of titles and abstracts and reduced the number of publications to 146. These were then classified either as presenting theoretical/descriptive research or as intervention studies. Studies were also classified by the key population they addressed; if more than one, those were documented, as well. An Excel tracking sheet was created to log those studies that met the eligibility criteria and those that did not.
**Results**

Most articles were theoretical or descriptive in nature. Several interventions studies took holistic approaches to the stigma and vulnerability experienced by key populations, but did not specifically articulate gender as an underlying factor in their design or the outcomes they were intended to influence.

Examined by year, the publications showed a clear uptick in focus on gender, key populations, and HIV that began in 2009 (see Figure 1). Most of this work presents theoretical or descriptive analyses that support important relationships linking gender, HIV vulnerability, and HIV service use by key populations. This uptick also aligns with a conceptual shift in gender studies that departs from a binary understanding of gender linked primarily to differences in experience based on male or female sex. Examining the literature over time shows clearly that this is an emerging area of research.

Ten intervention studies directly or peripherally incorporated a gender lens as part of their theoretical basis (see the Bibliography and Table 1). Of these, two focused on female sex workers (FSWs), four on people who use drugs, two on MSM, and two on transgender people. Details about each intervention are provided in Table 1. Common across intervention studies as well as the theoretical/descriptive literature is a call for multilevel interventions that include community mobilization to reduce stigma. The information-motivation-behavior model (Fisher & Fisher, 1992) informed group and individual sessions in several interventions. A focus on the couple-level to reduce intimate partner violence was also a common approach across interventions.

**Conclusion**

The evidence base for interventions to mitigate the influence of gender-related barriers that increase key populations’ vulnerability to HIV and discourage their use of HIV services is limited. Programs must document their work to fill this gap. Moving forward, there should be greater integration of the “human rights lens” currently used by most key population programs and a “gender lens” so that multiple aspects of identity and social vulnerability can be taken into account in HIV programs for key populations.

**Table 1. HIV intervention studies incorporating a gender lens**

<table>
<thead>
<tr>
<th>Author, year</th>
<th>Country, intervention name</th>
<th>Intervention goal, content/format, and evidence of effectiveness</th>
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<tbody>
<tr>
<td><strong>Female sex workers</strong></td>
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</table>
| Beattie, et al., 2016 | India: “Samvedana Plus” | • The goal of this intervention was to prevent physical and sexual violence experienced by FSWs from their intimate partners. To do this, the intervention focused on shifting norms about the acceptability of beating as a form of discipline, gender roles that give men authority over women, and promoting equity in relationships.  
• The multilevel intervention addressed FSWs, their intimate partners, the sex worker community, and the general population. It consisted of workshops and couples counseling for FSWs and their partners. Sex workers were also organized as a collective and engaged with local community leaders, residents and family members through community dialogues, street plays, folk shows, and stakeholder meetings.  
• Ongoing trial  
• Additional information can be accessed here: https://www.whatworks.co.za/documents/project-resources/28-samvedana-plus-brochure/file |
| Urada, et al., 2016 | Philippines: “Kapihan” | • The goal of this intervention was to reduce sexual risk and increase HIV testing among female and male sex workers.  
• The intervention consisted of five group sessions with populations covering the topics of HIV/STI, condom use, and reproductive health rights and laws in the Philippines protecting against violence toward women and children.  
• The intervention was evaluated through a pre-/post-test pilot study that showed improved knowledge of HIV, human rights, reproductive health, ethical rights of participants, and intention to test for HIV among sex workers. |
### People who use drugs

<table>
<thead>
<tr>
<th>Source</th>
<th>USA: “MEN AMERICAN LEGACY EMPOWERING SELF (MAALES)”</th>
<th>Description</th>
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<tbody>
<tr>
<td>Sterk, et al., 2003</td>
<td>USA</td>
<td>The goal of this intervention was to decrease sexual risk behavior related to HIV among black women who inject drugs and/or smoke crack cocaine. This community-based intervention was delivered through four individual sessions informed by the information-motivation-behavioral model. Sessions focused on building motivation and negotiation skills in sexual and drug using relationships. Topics were trauma, abuse, sex exchange, men and male partners, women’s role as mothers, and extended family. The intervention has not been evaluated.</td>
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<tr>
<td>Copenhagen, et al., 2010</td>
<td>USA: “Community-friendly health recovery program”</td>
<td>The goal of this intervention was to reduce HIV-related drug use and sexual risk behavior among PWID who are in drug treatment. The intervention consisted of four 50-minute group sessions based on an information-motivation-behavioral model of skills building. Outcomes of the intervention were shown to be influenced by the sex of the participant, such that men living with their children were more motivated to reduce risk than women living with their children were. This study highlights the importance of parenting on outcomes, and the way that parenting differentially affects outcomes for men versus women because of discrepant parenting roles assumed by fathers and mothers. The intervention was evaluated through a randomized controlled trial that demonstrated improvement in drug-risk reduction skills (e.g., cleaning a syringe) and sexual-risk reduction skills (e.g., applying a female condom) in the intervention compared to control group. Additional information can be accessed here: <a href="https://chipcontent.chip.uconn.edu/wp-content/uploads/2015/11/ChIP/Resources-and-Manual-1-112315.pdf">https://chipcontent.chip.uconn.edu/wp-content/uploads/2015/11/ChIP/Resources-and-Manual-1-112315.pdf</a></td>
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<tr>
<td>Yorick, et al., 2013</td>
<td>Russia and Ukraine: “Mama +”</td>
<td>Three interventions in Russia and the Ukraine were implemented to reduce drug use and sexual risk behavior among women. The first provided assistance to HIV-positive pregnant women and young mothers through extensive case management services that consisted of individual sessions focused on gender dynamics. The delivery of services was tailored to meet childcare and other needs of women. The second focused on similar issues providing re-entry support to women recently released from prison. The third worked with at-risk women through drop-in centers designed to meet childcare needs, where workshops were offered focusing on gender-related barriers and reducing gender-based violence. The interventions have not been evaluated.</td>
</tr>
<tr>
<td>Wechsberg, et al., 2014</td>
<td>South Africa: “Women’s Health CoOp”</td>
<td>The goal of this intervention was to reduce alcohol and other drug use and sexual risk behavior, and to increase HIV testing through risk-reduction planning and linking concepts to gender empowerment for black African women. The intervention consisted of two individual-level counseling sessions and HIV testing and counseling. Sessions educated participants about the risks of alcohol and other drug use and about the women’s gender power. Sessions also covered risk-reduction strategies for condom use and sexual negotiation and violence prevention through role-play, rehearsal, and action plans. Case managers followed up with participants by phone or in person monthly. The intervention was evaluated through a cluster randomized trial with control groups and three follow-up assessments three, six, and 12 months later. Women in the intervention arm were more likely to use a condom, less likely to engage in heavy drinking, and less likely to report all forms of abuse at six-month follow-up. HIV-positive women in the intervention arm were also more likely to have a nondetectable viral load at follow-up.</td>
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### Men who have sex with men

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<tr>
<th>Source</th>
<th>USA: “2gether”</th>
<th>Description</th>
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<tr>
<td>Harawa, et al., 2003</td>
<td>USA: “MEN AMERICAN LEGACY EMPOWERING SELF (MAALES)”</td>
<td>The goal of this intervention was to build skills to address sociocultural issues (racism; sexual discrimination) and reduce sexual risk behaviors among black men who have sex with men and women. The intervention consisted of six group sessions conducted over three weeks, with booster sessions at six and 18 weeks. Sessions focused on past experiences and how they influence HIV-related behaviors, sexual decision making, current HIV-related behaviors, sexual and drug risk reduction, and sustaining behavior change. The sessions are based on empowerment theory, critical thinking, and cultural affirmation. Feelings of oppression, mistrust, and unity were explored. Racism and gender role expectations were examined. Evaluated through a randomized controlled trial with three- and six-month post-intervention follow-up. Participants in the intervention arm reported a reduction in total number of sexual acts and increased condom use with women and female partners. Additional information can be accessed here: <a href="https://www.cdc.gov/hiv/pdf/research/interventionresearch/compendium/rr/cdc-hiv-maales_rr_good.pdf">https://www.cdc.gov/hiv/pdf/research/interventionresearch/compendium/rr/cdc-hiv-maales_rr_good.pdf</a></td>
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<tr>
<td>Newcomb, et al., 2017</td>
<td>USA: “2gether”</td>
<td>The goal of the intervention was to reduce HIV transmission risk and improve relationship functioning among young male same-sex couples. The intervention was informed by the information-motivation-behavioral skills model adapted to relate specifically to primary romantic relationships. It was also informed by the vulnerability-adaptation-stress model that recognizes the influence of social stigma and external stressors related to sexual orientation as impacting behavior within romantic relationships. Gender is an underlying construct influencing these factors. The intervention consisted of four sessions delivered through a hybrid of individual and group sessions. The first two sessions were group sessions attended by couples. The first session focused on healthy relationships, communication, and sexual health information. The second focused on cognitive-behavioral and acceptance strategies for coping with minority stress in relationships. The second two sessions were couple-based. The first of these focused on effective communication and problem-solving for issues specific to the relationship identified by participants. The last session focused on sexual health, sexual satisfaction, and joint planning for sexual risk reduction. The intervention was evaluated through a pre-/post-test pilot study. Participants reported decreases in HIV risk behavior; increases in information, motivation, and behavioral skills related to HIV prevention; and improvement in their relationship.</td>
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</table>
**Transgender people**

| Garofalo, et al., 2012; Reisner, et al., 2016 (USA: “Life Skills for Men (LS4M)” | • The goal of this intervention was to reduce HIV risk behavior among young transgender women and among young transgender men who have sex with men.  
• The intervention consisted of six group-level interventions and one individual-level intervention to develop a personal risk-reduction plan. The first session focused on transgender pride, and within this the links among stigma, self-esteem, and HIV risk. Other sessions focused on partner negotiation, housing, and medical care and a four-step decision making process. Group and individual sessions were facilitated by trained transgender peers.  
• The pilot intervention was evaluated through a pre-/post-test study showing acceptability of the intervention, reduction in sexual risk behavior, and improvements in mental health and internalized stigma. |
| Shaikh, et al., 2016 (India: “Pehchan Programme” | • The goal of this intervention was to increase access to health, social, and legal services through community-based and peer-led social support systems that encourage gender-affirming empowerment.  
• The intervention focused on strengthening the capacity of community-based organizations (CBOs) working with transgender communities. The first area of focus was on strengthening CBO skills in community mobilization, leadership, programming, planning, budgeting, and monitoring. The second area of strengthening focused on capacity to provide HIV prevention services through interpersonal communication. The third area focused on strengthening service provision related to legal support, trauma management, and family support.  
• The intervention was evaluated through pre-/post-intervention cross-sectional design with retrospective analysis of program data. A random sample of transgender beneficiaries from the CBOs who were provided services by these organizations were assessed. Post-intervention, participants reported increases in condom use, increased access to HIV testing and counseling, and increased access to emergency crisis support, legal services, and mental health services. |

**Bibliography**


