



HHS Public Access

Author manuscript

Violence Against Women. Author manuscript; available in PMC 2023 May 01.

Published in final edited form as:

Violence Against Women. 2022 May ; 28(6-7): 1483–1504. doi:10.1177/10778012211019054.

Perspectives of Women Living With HIV on Addressing Violence and Use of Alcohol During HIV Services: Qualitative Findings From Fishing Communities in Uganda

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Abstract

The syndemic relationship between harmful alcohol use, intimate partner violence (IPV), and HIV is well established across international settings. Less is known about how these health issues are perceived by women living with HIV (WLWH), who are disproportionately affected by these intertwined epidemics. A qualitative study was undertaken with 20 WLWH in Rakai, Uganda, to assess their perceptions of how these issues have affected their lives and their communities and to assess the acceptability of integrating a screening and brief intervention for alcohol use and IPV into HIV posttest counseling. Recommendations for intervention programming arising from the results are discussed.

Keywords

HIV; alcohol use; intimate partner violence; screening and brief intervention; Uganda

Introduction

Uganda is home to a generalized HIV epidemic with a national prevalence of 6.2% and elevated prevalence concentrated in geographical “hotspots” such as fishing communities along Lake Victoria, including those in the Rakai region that have a median HIV prevalence of 42% (Chang et al., 2016). The burden of HIV infection is greater in women than men, as nearly half (49%) of the women in Rakai’s fishing communities are living with HIV (Chang et al., 2016). Women in the region’s fishing communities also experience high

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Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

rates of intimate partner violence (IPV; Sabri et al., 2019), defined as physical, sexual, or verbal/psychological violence from a current or former intimate partner (World Health Organization, 2007). Almost 60% of women in Rakai report lifetime experiences of IPV and one third (33%) report IPV in the past year; among women living with HIV (WLWH), 29.4% report past-year IPV (Kouyoumdjian, Calzavara, et al., 2013; Sabri et al., 2019; Wirtz et al., 2018). The high prevalence of IPV in the region, and sub-Saharan Africa broadly, is driven by a confluence of sociocultural (e.g., gender constructs), economic (low educational attainment, food and income insecurity), and behavioral (e.g., substance use) risk factors (McCloskey et al., 2016).

Patriarchal cultural norms create gendered power disparities in intimate partnerships and marriages, with women having less agency than their male partners (McCloskey et al., 2016). The exertion of dominance (physically, sexually, and verbally) over female partners and the idea that a wife should be subordinate to a husband are hallmarks of traditional masculine ideals, and the acceptability of violence toward wives for disobedient behavior is often reinforced by both genders (Heise, 1998; M. A. Koenig et al., 2003). Evidence from Rakai's fishing communities suggests currently married women have the greatest odds of experiencing IPV and currently married men have the greatest odds of recent perpetration (Sabri et al., 2019). Educational attainment in this setting is also low (Westway et al., 2009). Education is associated with more gender-equitable attitudes and a reduction in controlling behaviors and IPV (Gibbs et al., 2018). There is also qualitative evidence from Uganda that economic and food insecurities can create tension between intimate partners, which can escalate into IPV (Miller et al., 2021). In Rakai's fishing communities, the most lucrative occupation, fishing, is reserved for men and many households rely mostly or completely on the income of the male head of household to support the family, exacerbating unequal gendered power dynamics between intimate partners. Among women who work outside of the household in these communities, many are employed in bars and restaurants, which have been identified as high-risk occupations for alcohol use (Wagman et al., 2020), another risk factor for IPV. Alcohol use, by one or both partners, has been associated with IPV in Rakai's fishing communities and sub-Saharan Africa at large (Greene et al., 2017; Zablotska et al., 2009). A multisite qualitative study comparing cultural understanding of the relationship between alcohol use and IPV in seven countries, including Uganda, found that across sites, participants felt intoxication from alcohol was a culturally acceptable excuse for violent behavior, alcohol use by victims increases risk of violence, the pharmacological effects of alcohol use increase the likelihood violence will occur, and heavy drinking negatively impacts intimate relationships (Holmila et al., 2014).

Uganda's fishing communities are sites of alcohol use and heavy drinking (Chang et al., 2016; Tumwesigye et al., 2012; Wagman et al., 2020). In these communities, a common conception is that the lake's supply of fish is endless, guaranteeing daily earnings (mostly by men) often used to buy alcohol, with the expectation that the money spent will be replenished the following day (Bonnievie et al., 2019). This, coupled with stress and occupational danger related to fishing, and the high risk for HIV infection in these communities, fosters a short-term life outlook and risk-taking and coping behaviors, often enacted through heavy drinking (Breur et al., 2019). Extant literature has described the relationship between alcohol use, IPV, and HIV infection as complex, bidirectional, and

often mutually reinforcing. The study of the substance abuse, violence, and HIV (SAVA) syndemic emerged to better understand the synergistic and co-occurring nature of these issues, which disproportionately burden women (Singer, 1994). A systematic review found that women who experience IPV face greater risk of HIV infection, relative to women in nonviolent relationships, and the prevalence of IPV is higher among WLWH, relative to HIV seronegative women (Kouyoumdjian, Findlay, et al., 2013). IPV can increase risk of HIV infection, both directly (e.g., HIV may be transmitted during forced condomless sex by a partner who is living with HIV) and through indirect pathways (e.g., reduced ability and willingness to negotiate condom use to avoid violence; Stockman et al., 2013; World Health Organization, 2004). In sub-Saharan Africa, evidence indicates that WLWH experience IPV victimization at very high rates (Campbell et al., 2008; Maman et al., 2002; Tenkorang et al., 2020). A meta-analysis of the relationship between IPV victimization and alcohol use among women found IPV victimization was associated with increased odds of subsequent alcohol use possibly as a method of coping with the trauma and IPV-related sequelae (Devries et al., 2014). The evidence base supporting a relationship between alcohol use and risk of HIV infection is also robust.

Alcohol use has been indirectly associated with both incident and prevalent HIV infection in the Rakai regions (Zablotska et al., 2006, 2009). Disinhibition from alcohol use is associated with increased engagement in sexual risk behaviors (i.e., no or inconsistent condom use, casual sex with partners outside of a primary partnership) that increase one's risk of exposure to HIV (Rehm et al., 2017). A new systematic review of IPV against WLWH in sub-Saharan Africa also found perpetrator's alcohol use to be a significant determinant of IPV against WLWH (Tenkorang et al., 2020). A recent study looking at alcohol use and IPV in Rakai's fishing communities also suggests that women's alcohol use is associated with experiencing increased risk of physical and verbal IPV (Miller et al., 2020).

Although there is a growing body of literature on the SAVA syndemic, particularly surrounding increased risk of HIV acquisition and experiencing IPV associated with alcohol use by one or both partners (Fonck et al., 2005; Lopez et al., 2010; Schafer et al., 2012; Zablotska et al., 2006, 2009), less is known about the magnitude and determinants of IPV and alcohol use among WLWH. Qualitative work in Eswatini found an added burden of IPV among WLWH due to acute HIV-related triggers, such as disclosure of HIV-positive serostatus in addition to IPV related to normative stressors (e.g., such as gender norms; Mulrenan et al., 2015). Exposure to violence and use of alcohol or other drugs may exponentially reduce the health and well-being of WLWH and negatively impact their access and adherence to HIV care and treatment. Therefore, it is critical that the perspectives of WLWH be understood to develop tailored, acceptable interventions (Greene et al., 2017).

To address this gap in the literature, we conducted qualitative interviews with 20 WLWH to understand (a) perceptions of alcohol use, IPV, and HIV, and (b) opinions about the acceptability and feasibility of integration of a screening and brief intervention (SBI) to address IPV and alcohol use into HIV posttest counseling services. The overall aim of this work was to determine the perceived need, acceptability, and feasibility of an intervention to address alcohol use and IPV to inform the development of a risk reduction SBI to be pilot

tested during HIV posttest counseling in three Ugandan fishing communities in the Rakai region.

Materials and Methods

Study Setting

This research was conducted in collaboration with Rakai Health Sciences Program (RHSP) in Rakai fishing villages along the shore of Lake Victoria: Malembo, Ddimbo, and Namirembe. RHSP was founded in 1987, and in 1994, RHSP established the Rakai Community Cohort Study (RCCS), an open longitudinal HIV surveillance study that served as the parent study for this work.

Sample and Recruitment

Participants included women who were recruited from RCCS, which has been described in detail elsewhere (Wawer et al., 1999). Briefly, RCCS collects household health data in fishing, trading, and agrarian communities in the Rakai region. Individuals residing in these communities between the ages of 15 and 49 years are eligible to participate. The survey cycle is continuous, and approximately 18,000 individuals participate in the RCCS during each round of data collection. Round 18 of the survey, which served as the sampling population for the present study, included 41 communities. The current study involved RCCS participants who, at the time of enrollment, gave their permission to be re-contacted for future studies.

To recruit a diverse research sample among the three fishing communities included in this study, participants were purposively sampled from a list of RCCS participants who met eligibility criteria. Eligibility criteria included residing in one of the three communities, having a positive HIV diagnosis, and reporting either past-year alcohol use and/or past-year experience(s) of IPV. As needed, physical location of eligible participants was facilitated by the involvement of trained community mobilizers who routinely volunteered their time to help the RCCS research team. Community mobilizers are residents of the community; when involved, they were provided basic information about an individual, such as his or her name, address, and a photograph (taken as part of RCCS enrollment). No personal or confidential information (e.g., HIV status, alcohol use behaviors) about a potential participant was ever shared with community mobilizers.

Data Collection

Written informed consent was obtained prior to initiating each interview. All research activities were conducted by experienced RHSP's Social and Behavioral Sciences department staff who were trained to follow the World Health Organization's ethical and safety recommendations for researching IPV (WHO Department of Gender, 2001).

Interviews followed a semi-structured interview guide. Participants were asked about the perceived need for, and their opinions on the acceptability and feasibility of, an intervention to address alcohol use and IPV in their community. They were asked their opinions about the cultural and social appropriateness of integrating such an intervention into HIV

posttest counseling and whether they had recommendations for maximizing feasibility and effectiveness. Participants were also asked to provide suggestions on their preferences for an alcohol and IPV risk-reduction intervention.

The data presented here were part of a larger qualitative study looking at alcohol use and IPV in the three fishing communities. The data corpus from this study included a total of 15 focus groups and 50 in-depth interviews (IDIs) with men, women, and specific subsets of the population (e.g., community leaders). We were interested in learning about perspectives and experiences around alcohol use, IPV, and HIV among WLWH, so the data set of the present analysis was restricted to the 20 semi-structured IDIs that were conducted with this population. The interviews were audio-recorded, with the permission of each participant, and conducted in Luganda, the local language, in January of 2017. Participants were compensated 10,000 Ugandan shillings, approximately US\$3, at the time of data collection.

After interviews were completed, written notes and audio recordings were used to develop full transcripts of each interview. Interviews were translated into English during transcription. Interview domains included perceptions of alcohol use in the participants' communities and HIV risk behaviors; the perceived relationship (if any) between alcohol use, IPV, and HIV in their community; and the acceptability of receiving IPV and alcohol reduction SBIs during HIV posttest counseling.

Data Analysis

Our primary analytic objective was to assess the need, acceptability, and feasibility of implementing an SBI to address IPV and alcohol use in this setting by exploring WLWH's lived experiences surrounding their diagnosis with HIV, IPV, and alcohol use as well as perceptions of these issues in their community. Recognizing that individuals give meaning to experiences differently, the interpretivist paradigm was adopted. Interpretive thematic analysis, a flexible methodology that can be applied across qualitative research paradigms and theoretical and epistemological approaches, guided the analytic process (Braun & Clarke, 2006). First, an initial list of broad parent codes was developed a priori based on the study objectives and literature, which suggests a relationship between any two of the following variables: alcohol use, HIV, IPV. Additional data-driven codes (both parent and child) based on emergent themes and meanings were added to the codebook. This iterative and collaborative process of developing and refining the codebook based on transcript review was completed by two researchers using Dedoose 8.0 qualitative software. First, a small batch of transcripts (20%; $n = 4$) were coded in parallel and then reviewed; emergent codes and code definitions were added to the codebook. Regular meetings occurred throughout the remainder of the coding process to clarify any questions regarding code application and to ensure consistency of code application. Data analysis and synthesis and manuscript development were led by two trained qualitative researchers with expertise in IPV and RCCS research, APM and WGD, respectively. To strengthen the validity and trustworthiness of our findings, throughout the analytic process the rest of the research team, who have substantial experience on these topics, provided feedback and served as checks

on potential researcher bias through peer debriefing meetings, further supporting the validity and trustworthiness of the findings (Creswell & Poth, 2018).

Human Subjects Research

The study was reviewed and approved by the University of California (UC), San Diego, Human Research Protections Program, UC Los Angeles Human Research Protections Program, the Uganda Virus Research Institute's Research and Ethics Committee, and the Ugandan National Council for Science and Technology.

Results

Description of the Study Sample

Table 1 describes the demographics of the 20 women who participated in the study. All participants were current or former alcohol users and living with HIV. Representation from the three included fishing communities was approximately equal: 35% ($n = 7$), 35% ($n = 7$), and 30% ($n = 6$) were from Ddimo, Malembo, and Namirembe, respectively. The mean age of participants was 31 years and 80% were married at the time the interview took place. The majority (65%) of participants were Catholic and the most common occupations included owning or working in a bar or restaurant (55%) and working as a vendor (25%). Forty percent of participants had completed at least some of secondary school.

Perceptions of How Alcohol Use Is Related to IPV

Participants consistently highlighted how alcohol use, by one or both partners in an intimate relationship, precipitated arguments and IPV. Some women's narratives focused on the community, whereas others featured specific vignettes about friends or personal experiences. In most stories, the male partner's alcohol use was described as the precursor to male perpetration of IPV against a female partner. However, instances of female reciprocation of violence and perpetration of IPV were also mentioned. Some women described their own tendency to quarrel and "seek arguments" while drinking, which they attributed to feeling emboldened by the alcohol:

I can buy some buveeras (sachets of alcohol), sit home and drink. If my husband returns home from the meat butchery, I can start quarreling with him [if] he annoys me. He [may] start wondering what is happening but [it is because] I am already intoxicated or drunk. (32 years, Ddimo community)

The vast majority of IPV experiences described by participants involved male-perpetrated abuse or reciprocal quarreling. Participants largely attributed alcohol-related IPV to impaired judgment and increased hostility and argumentativeness due to intoxication by one or both partners. Participants often described the violence as sequelae to alcohol-related disinhibition and anger associated with spent finances and other past insults:

I always experience violence at home because of alcohol use. If there is no alcohol use at home, there can't be violence. If your husband does not drink, there can't be violence. If he drinks, when he comes home, he begins calling you a dog. You then get angry and call him a rat and a fight begins from there. How can you start

calling me a dog after coming back from drinking? How can he start abusing me yet he has been with prostitutes? We then start fighting. Alcohol is the major cause for violence in relationships. (42 years, Namirembe community)

A recurring theme was alcohol use leading to an inability to de-escalate conflict and violence, which was otherwise possible when sober. Sometimes, these fights were narrated as provoked by an event that occurred while one or both partners was drinking; at other times, violence following alcohol consumption was felt to be unprompted:

Take an example of my husband, if he gets drunk, he returns home and starts beating you because of the mistake you committed maybe yesterday. (25 years, Malembo community)

Instances of IPV as a result of a woman confronting her partner about his drinking were also described. These cases were often related to the financial impact of a partner's alcohol use or suspected infidelity while inebriated:

If a man drinks, they will come smelling [of] alcohol and will not have even a single coin for their families. And when you tell him to first shower before he gets in bed he asks you whether you built the house and that is when you start hitting each other. (40 years, Namirembe community)

Perceptions of How Alcohol Use Is Related to Unsafe Sexual Practices and HIV Acquisition

Participants viewed alcohol use as a facilitator of unsafe sexual practices in their communities. Many attributed this association to alcohol lowering inhibitions and blurring judgment among men and women:

A person who has been protecting him/herself can get drunk and forget to use condoms just because he/she is drunk yet the person he/she is with knows that he/she is sick. At times when you are not drunk, you cannot accept to sleep with someone without using condoms. But when you are drunk, it's very easy. It means that it's very easy to get infected [with HIV] when you are drunk. (33 years, Namirembe community)

Participants identified several specific sexual risk behaviors that people in the community engaged in when under the influence of alcohol. These included concurrent sexual partnerships and decreased likelihood of condom use. Many women shared stories about how their current and past male partners engaged in sexual activity with other women while out drinking, which indirectly increased their own risk for exposure to HIV and other sexually transmitted diseases:

For sure my husband is extremely promiscuous, and he is a typical alcoholic. So, he combines the two and this makes me disgusted and annoys me a lot. (28 years, Ddimmo community)

Participants also described alcohol use among persons living with HIV (PLWH) as increasing the risk of HIV infection among other HIV-negative community members. They narrated that upon receipt of an HIV-positive diagnosis, some individuals increased their alcohol use, both out of resignation that they were going to die and frustration at their

diagnosis. These narratives typically revolved around men who were viewed as “less likely to listen to the advice of health workers”:

Some of them fear to be initiated on ART and they decide to drink even when it means death. They are determined to drink. Mostly men behave in that way because they tend not to obey guidelines for the health workers and decide to behave that way. (31 years, Namirembe community)

Concerns were also voiced around the direct health risks of alcohol use by PLWH, such as delayed treatment or skipped or forgotten doses of antiretroviral drugs (ARVs) due to intoxication. Some women shared how their HIV-positive partner’s alcohol use adversely affected his engagement in HIV care, such as forgetting to take his antiretroviral treatment (ART) when drunk. This provided another example of how alcohol use by a sex partner indirectly increased a woman’s risk for HIV infection (poor treatment adherence precludes viral suppression):

I used to have a husband who was a wasted drunkard, I had to take his medicine to the bar for him to swallow. When they find out that they are HIV positive, they give up on life. They become depressed and wonder to themselves what more there is to life other than death. So they begin drinking. (40 years, Namirembe community)

Some women suggested that receipt of a positive HIV diagnosis could alternatively serve as a potential catalyst for healthy changes in drinking behavior:

... if someone has been diagnosed as HIV positive and he or she drinks alcohol, the same person may avoid drinking at the first time period when he or she has just been initiated on ART provided he wants to live in good health life. There is also another person who would say “I cannot stop drinking alcohol and I’m also ready to die.” (25 years, Malembo community)

Reflecting on their own experience of learning their HIV serostatus, many women reported receiving health education on their alcohol use as part of their HIV posttest counseling and follow-up care visits. While some women said they stopped drinking entirely after diagnosis, and two reported reducing their drinking, about half of the HIV-positive participants reported making no changes to their own alcohol use as a result of their diagnosis. Those who provided explanations for why they reduced or stopped their alcohol use primarily cited concerns about mixing alcohol with ARVs and the side effects they experienced from mixing, such as dizziness and nausea:

What I know that I felt, which caused me to stop drinking when I had just started the drugs, I used to walk and then feel dizziness as if I was going to fall down and sometimes I squat and then I feel relieved. Then I stopped drinking like for a month but [now] I drink a little. (33 years, Namirembe community)

Interviewer: Did you feel motivated to change other behaviors in your life? ... How were you motivated?

Participant: Protecting myself ... Before, I used to drink a lot, but now I only take three bottles or four at most. (36 years, Malembo community)

Others mentioned reducing alcohol intake as part of a package of changed behaviors, including improved diet and reducing their number of sexual partners. Those who reported no change in their drinking indicated that their alcohol use had always been minimal or in moderation. One woman suggested that an HIV diagnosis could inspire a person to do everything possible to prolong their life, including the discontinuation of alcohol as its consumption is associated with many other negative health consequences and poor treatment adherence. Another woman mentioned wanting to take steps to preserve one's health and longevity to provide for their children as a motivation for positive behavior change:

Yes, preparing for the children because when they tell you that you are sick, you start fearing because when you are HIV negative, you can say that you will work in future since you are still alive but since it's HIV/AIDS, you don't know when you will become bedridden. So when you are the person who drinks a lot, you can reduce on the quantities you were taking so that you can save money and prepare for the children. (39 years, Malembo community)

Acceptability of Introducing Alcohol and IPV Interventions Into Fishing Communities

In response to the question, "Would you refer family or friends with an alcohol problem to a program if it existed?" participants were receptive to the idea of an alcohol intervention being introduced to their community. Many expressed willingness to refer friends, family, and community members who drank heavily to such a program if it were available locally:

I would recommend him or her because I would like that person to stop drinking. There are people who drink and cause violence in their homes. Others drink and waste all the money they have. They spoil people's things and have to compensate them highly. So, I would like them to participate if such a program is brought in the community so that they can reduce [their] drinking. (22 years, Malembo community)

While most participants felt an alcohol SBI was both acceptable and needed, some expressed skepticism that participation in an intervention would effectively prompt behavior change, despite the harms of heavy alcohol use. Some mentioned that despite alcohol use already being addressed by providers and counselors at HIV care and treatment appointments, especially in the context of ARV therapy, many HIV-seropositive individuals continue to drink:

A person who already drinks alcohol cannot stop because of being diagnosed HIV-positive. If [a] person is aware of the right time to take medication, he thinks that it is enough and when time for treatment is due, he takes it. Personally, I see it [will have] no effect to an extent that if a person is HIV-positive, he will stop taking alcohol. Health workers talk about it every time but there is no person who has ever stopped taking it because of being HIV-positive. (28 years, Ddimu community)

An IPV intervention was viewed as culturally appropriate and acceptable by most. Many felt that given the connection between IPV and alcohol use, interventions for these issues should either contain overlapping messaging or be combined into a single intervention. However, some participants perceived an IPV intervention as inappropriate because IPV was a personal family matter that should be resolved privately within the household.

Perceived Acceptability of Integrating the Interventions Into HIV Posttest Counseling

Most participants felt HIV counselors were acceptable and appropriate implementors of an alcohol intervention. It is not current practice for HIV-testing counselors to provide education on the harms of alcohol use during posttest counseling, but some participants recalled receiving counseling on other matters after their diagnosis and found the counseling to be comforting and informative:

I felt good. They gave me examples and advised me. They made me feel strong. They told me that in case of anything, I should not get scared but adhere to the treatment as it will help me live a longer life and see my children grow up. I really felt strong inside my “heart.” I really felt helped and that was good. (42 years, Namirembe community)

Most participants agreed they would have been willing to discuss their alcohol use with an HIV counselor when they were diagnosed. Given that providers were already providing alcohol use education at later visits in the care continuum, many felt an intervention at the time of diagnosis could simply be an extension of current HIV care and treatment practices. The fact that counselors are typically not members of the fishing communities themselves was also viewed as an advantage because they were perceived as less likely to breach participants’ privacy and confidentiality.

Participants suggested that the “time of diagnosis” was an opportune moment to intervene on harmful alcohol use and many women asserted that helpful guidance at the critical moment of diagnosis could affect someone’s life trajectory. Participants felt a conversation around alcohol use at the time of diagnosis could capitalize on participants’ receptivity to lifestyle changes at this juncture:

If he/she needs to live and feels that what they have advised him/her to do is right, then he/she will adhere to what the health workers have told him/her, but [not] if [they are] not interested in living for longer periods. (35 years, Ddimbo community)

Participants also concurred that the implementation of an IPV intervention by HIV counselors at the time of HIV diagnosis was an appropriate approach and time for the intervention because (a) counselors are rarely available outside of this context and (b) IPV was viewed as something that often occurs when one or both partners have been drinking and should therefore be covered as part of any intervention on alcohol use. While many participants felt the counselors were appropriate individuals to implement the IPV intervention, some worried that the counselors would not be available outside of the clinic to resolve disputes as they arise. For this reason, some mentioned that a local council member or elder might be the best person to handle IPV-related issues because they are a constant presence in the community:

I can [talk freely about IPV with a counselor], but the [HIV] counselor is not easily available and approachable like the community elder. In case there is an argument, I need someone that is nearby and can be approached there and then. And the elder is nearby; I can run there any time. (36 years, Malembo community)

One participant expressed concern that IPV should be discussed at a later time (and not at the time of diagnosis) because IPV may have played a role in a woman's HIV acquisition and may be retraumatizing:

Uhm, that I don't know [that it is an appropriate time] because (respondent laughs softly) someone might have contracted HIV as a result of those problems, so it may not feel comfortable to make him/her remember [what] he/she has gone through lately. (33 years, Ddimmo community)

Suggestions for the Intervention Messaging and Implementation

As alcohol use was viewed as a driver of violence, participants felt alcohol and IPV reduction efforts should be combined into an integrated intervention, involving counseling sessions for both partners:

Because if they come and counsel me alone without counseling my partner, this will leave me informed when for him he is ignorant. If we are counseled together we all benefit together. (23 years, Malembo community)

Participants also suggested that the intervention should include other messaging related to the harms of mixing alcohol and ARVs, risk of HIV reinfection, and the social and economic harms of spending one's money on alcohol:

Reduction of alcohol consumption so that people can have some savings in their finances. Budgeting issues should be talked about. They should tell people to reduce alcohol consumption so that they can provide and help their families. They should educate people about wasting their future if they continued drinking. They should also talk about violence at home as it is mostly caused by alcohol use. They should also teach people that when one drinks, his or her health is put at the risk of getting HIV. A drunkard person has high chances of getting HIV. (22 years, Malembo community)

Some additional topics suggested explicitly for "women who drink too much" included addressing what was viewed as indecent dress and behavior while under the influence. Participants were split on whether the intervention should be one or multiple sessions. Some women worried a single session would be insufficient to prompt behavior change or effectively reduce risk for IPV and/or harmful drinking:

It should involve regular visits because one visit is not enough and it changes nothing. You can come and talk to me and I do not follow what you have told me but if you continuously talk about it, time reaches and you change. (28 years, Ddimmo community)

Discussion

In Rakai's fishing communities, which experience a high burden of HIV and IPV, the narratives of WLWH described a complex and mutually reinforcing relationship between HIV, IPV, and harmful alcohol use. Across the three fishing communities, participants overwhelmingly attributed experiences of IPV to alcohol use. Participants described, both through personal narratives and general anecdotes, that receipt of a positive HIV diagnosis

often prompted reflection and behavior change. For this reason, addressing alcohol use at the time of diagnosis was identified as an important and modifiable target for intervention. This was widely viewed as acceptable and considered to be a useful extension of current HIV care counseling. Given the interrelated nature of alcohol use and IPV, participants felt these topics could best be addressed through a single integrated intervention delivered during posttest counseling. Some of our findings were consistent with prior research, whereas others were exploratory and filled gaps in the existing literature. Suggestions generated from these findings are applicable to other highly mobile populations in sub-Saharan Africa and are not limited to fishing communities in Uganda.

The co-occurring HIV, IPV, and alcohol use syndemic is well supported in the global literature and has been replicated by recent findings from qualitative work with men in the same communities (Bonnievie et al., 2019). In this study, participants reported that violence transpired as a direct result of one or both partners being inebriated and indirectly as a consequence of behaviors and decisions that occurred while under the influence of alcohol (e.g., infidelity). Specifically, participants believed that alcohol use led to unnecessary fights and escalated existing disagreements into verbal and/or physical violence. Although heavy alcohol use (and subsequent violence) is often attributed to men, it is worth noting that some women in our study reported levels of alcohol consumption akin to binge-drinking (i.e., more than four drinks in a single sitting). In addition, some women reported instigating and seeking out fights with their partners while under the influence and much of the confrontation was framed as being reciprocal. Although it is known that alcohol use can increase aggression among women as well as men (Deering et al., 2014), less is known about the motivations or consequences of such behaviors among women or how it affects their risk of experiencing IPV, warranting additional exploration and research.

Due to the pervasiveness of heavy alcohol use and IPV, participants in each community felt that these two issues warranted addressing. Participants indicated that no current programming existed to address either problem. In reflecting on their own experiences at the time of HIV diagnosis, participants recollected that the counseling they received (which did not cover alcohol use) was informative and comforting. Some of them reported wanting to implement positive health and behavior changes at that time to preserve their health. For this reason, time of diagnosis was identified as an opportune time to integrate the alcohol use intervention for anyone receiving a positive diagnosis. Many felt receipt of an HIV diagnosis could be labeled a “teachable moment,” referring to a health event that motivates an individual to adopt risk-reducing health behaviors (McBride et al., 2003), such as alcohol reduction or cessation. Women felt that the introduction of alcohol counseling at this first step of the HIV care continuum would be beneficial and that they would have been receptive to discussing such topics with their HIV counselor. Providing counseling on alcohol use at this critical juncture could also prevent destructive behaviors following a positive HIV diagnosis (i.e., heavy drinking, casual sex, not disclosing HIV status, condomless sex). Participants also expressed a willingness to refer loved ones to an intervention for alcohol use outside of the context of HIV posttest counseling, if such a resource existed in their community, suggesting a recognition of need for such an intervention. Given that alcohol use was recognized as a driver of sexual risk-taking and HIV infection, integrating alcohol programming into HIV prevention programming could be beneficial in this setting.

Participants provided a number of suggestions for intervention implementation; three will be highlighted here. First, due to the overlap of IPV and alcohol use in their communities, participants felt both topics could most effectively be addressed together in a combined intervention. Although most participants were comfortable with combining the IPV intervention with the alcohol use intervention and its integration into HIV posttest counseling, some concern arose that the inclusion of IPV counseling at the time of diagnosis could be traumatic if a woman is currently experiencing violence, especially if it potentially played a role in her infection. This is closely linked with one challenge to adopting the second suggestion voiced by nearly all participants, which is that partners should be included in the intervention as well.

Although not explicitly mentioned in our interviews, an important consideration for the inclusion of partners in HIV posttest counseling is that disclosure of violence during an intervention that includes partners could lead to additional subsequent instances of IPV (L. J. Koenig & Moore, 2000). Similarly, disclosure of an HIV-positive diagnosis could be a catalyst for violence and therefore a reason for delayed disclosure or nondisclosure of status to partners (Tam et al., 2015). One way to reduce the risk of violence in the implementation of an IPV intervention integrated into HIV-testing services would be to offer it universally to all individuals who received testing, regardless of HIV status or reported experiences of violence. This would offer a platform for IPV intervention while protecting the privacy of an individual's serostatus. Interviews with men from the same fishing communities in Rakai demonstrated receptiveness for IPV counseling and a preference for inclusion of the partner. However, it was suggested that counseling should take a neutral approach and not assume perpetration by either partner (Bonnevie et al., 2019). Offering such counseling universally could reduce defensiveness.

Finally, there was disagreement among participants about whether the intervention should be conducted in one session or include follow-up sessions. To date, the bulk of combination HIV-intervention programming has focused on HIV prevention and long-term approaches, addressing alcohol use and IPV along with other HIV risk factors over multiple sessions aimed at prompting awareness and behavior change. Gender-transformative HIV- and IPV-intervention programming is one example of such an approach. Gender-transformative interventions are typically implemented over many sessions to gender-stratified groups, with the aim of shifting gender norms and addressing hallmarks of traditional masculinity associated with HIV risk, such as violence perpetration and heavy substance use. A global systematic review of gender-transformative programming found reduced HIV incidence and gender-based violence perpetration among intervention participants in the majority of the studies. (Dworkin et al., 2013). One gender-transformative intervention in rural South Africa, One Man Can, which was primarily implemented with Black men, found through IDIs that male participants were more willing to get tested and prioritize retention and adherence in HIV care and treatment as a result of participating in the intervention, suggesting this type of intervention can improve health outcomes among PLWH as well (Fleming et al., 2016). Although these interventions show promise at prompting behavior change and reducing IPV and HIV risk, limitations to such extensive multifaceted approaches include the cost and infrastructure required for implementation, which is not

sustainable or scalable in all settings, and that their primary focus is behavior change among men.

A handful of interventions have been carried out in Uganda to concurrently address HIV and IPV risk. We would like to highlight two of the most relevant and impactful here. First, the Safe Homes and Respect for Everyone (SHARE) Project, an ecological framework developed to intervene against contributors to IPV and HIV transmission, utilized four preexisting randomized clusters of communities enrolled in the RCCS. All who were enrolled ($n = 11,448$) were offered routine HIV prevention and treatment services (including HIV testing and pre- and posttest counseling, and referrals); those randomly selected into the intervention group received the SHARE violence-reduction intervention and screening and a brief intervention to reduce IPV related to HIV disclosure. The program was found to reduce self-reported incidents of physical and sexual IPV and HIV incidence (Wagman et al., 2015). The second, SASA!, which is also an ecological framework, is an ongoing community mobilization intervention that aims to change attitudes, norms, and behaviors at the individual and community levels to reduce inequity, violence, and HIV-related vulnerabilities. A cluster randomized trial of SASA! in Kampala, Uganda, found that the SASA! model was associated with reduced experiences of emotional, physical, and sexual IPV, and HIV-risk behaviors in men and at the community level (Abramsky et al., 2014, 2016). SASA! and SHARE are both examples of comprehensive, combination HIV and IPV prevention efforts implemented over time to promote behavior change at the community level in Uganda. Despite their promise, such interventions are time-consuming and involve many resources, including physical infrastructure and large numbers of people (both interventionists and participants). Such resources are difficult to obtain or maintain within certain regions and populations. In the context of fishing communities, which are remote, have limited existing infrastructure and monetary resources, and highly mobile and migratory populations, such interventions would be difficult, if not impossible, to implement with fidelity. Instead, brief interventions that can be integrated within the limited existing infrastructure for HIV counseling may be the most feasible and appropriate option for promoting behavior change related to the existing relationships between HIV, IPV, and alcohol use.

There is a dearth of data from alcohol SBIs in Uganda, but one SBI that was integrated into HIV care and treatment at an urban clinic in Kampala saw an overall reduction in alcohol consumption among participants; however, the mean change in drinking did not differ by treatment arm (Wandera et al., 2017). Although there is evidence globally of alcohol reduction SBIs having success in other populations (O'Donnell et al., 2014; Vasilaki et al., 2006), these studies have been conducted among non-HIV-positive persons or persons with unknown HIV status; similar evidence of effectiveness among PLWH in a generalized epidemic are lacking. PLWH face unique circumstances and challenges that may warrant more extensive and ongoing intervention. However, if the SBI could be coordinated with the content covered in ongoing HIV care and treatment (i.e., existing counseling of alcohol use at HIV care appointments), there is potential for integration of a multi-session intervention into the HIV care continuum, which could rely on existing infrastructure and health workers. This model would take advantage of existing health services and HIV counseling infrastructure by initiating the alcohol counseling at an earlier stage in the care

continuum: point of diagnosis. Furthermore, this would also provide a space for ongoing counseling around IPV; relationship turnover is high in this setting and it may be inadequate to address IPV in a single session. The feasibility of such an intervention and its benefits and disadvantages compared with an SBI in this setting warrant additional research.

This study has several limitations. Questions did not generate rich responses around whether experiences of IPV affects alcohol use, precluding our ability to look at the bidirectionality of the relationship between IPV and alcohol use. Similarly, probing around experiences of IPV following HIV diagnosis disclosure did not occur; this information would have been useful for IPV SBI development and understanding whether IPV-prevention programming should be built directly into HIV care. Certain groups of women at particularly high risk of IPV, HIV, and heavy alcohol use in this setting, such as sex workers or women who engage in transactional sex, may have been underrepresented. While it is possible and likely (given the pervasiveness of these practices in this setting) that sex workers and women who engage in transactional sex were included in the study sample, we did not seek out representation of these subgroups or ask questions about these experiences and their relationship to HIV, alcohol use, or IPV. All narratives around sex work, HIV, and alcohol use were secondhand and, as such, may not accurately depict the experiences of sex workers. In addition, we did not include the perspectives of HIV counselors, which could have strengthened our findings by providing additional narratives surrounding individuals' receptiveness to behavior change at the time of diagnosis. Despite these limitations, this article fills an important gap in the evidence by highlighting the experiences, perspectives, and recommendations of WLWH in Rakai, a vulnerable population that is disproportionately burdened by IPV and heavy drinking.

Conclusion

This study adds the voices and perspectives of WLWH who live in Uganda to the evidence base on the relationship between IPV, HIV, and alcohol use. Their perspectives, built on both their lived experience and what they have observed in their communities, offer valuable insight into how IPV and alcohol use can best be addressed in Rakai's fishing communities. Additional qualitative data are needed to better understand how alcohol use relates to HIV and IPV among women who engage in transactional sex or sex work in these communities, as their intervention needs may differ from those of other women in the community. Additional mixed-methods work is needed to develop, adapt, and pilot an integrated SBI and to determine whether linkage with existing counseling services within the HIV-care continuum is feasible and practical.

Acknowledgments

We would like to thank the WLWH of the Ddimo, Namirembe, and Malembo fishing communities who participated in this study and shared their perceptions and experiences with us. Without them, this research would not have been possible. We would also like to thank Lena Zinner for her assistance with data coding and Eunhee Park for her administrative assistance; the Rakai Health Sciences Program research team—the Social and Behavioral Sciences and HIV Counseling Departments in particular; and the participants of the Rakai Community Cohort Study.

Funding

This work was supported by the National Institute on Alcohol Abuse and Alcoholism (NIAAA) under Grants K01AA024068 and F31AA028198; National Institute of Allergy and Infectious Diseases (NIAID) under Grants R01AI110324, U01AI100031, U01AI075115, R01AI110324, R01AI102939, and K01AI125086-01; National Institute of Mental Health (NIMH) under Grant R01MH107275; Eunice Kennedy Shriver National Institute of Child Health and Human Development (NICHD) under Grants RO1HD070769 and RO1HD050180; the Bill and Melinda Gates Foundation under Grant 08113, 22006.02; the Johns Hopkins University Center for AIDS Research (CFAR) under Grant P30AI094189; President's Emergency Plan For AIDS Relief (PEPFAR) through Centers for Disease Control and Prevention (CDC) under Grant NU2GGH000817; the Henry Jackson Foundation and U.S. Department of Defense (DOD) under Grant W81XWH-07-2-0067; the World Bank; and Doris Duke Charitable Foundation.

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References

- Abramsky T, Devries KM, Kiss L, Nakuti J, Kyegombe N, Starmann E, et al. (2014). Findings from the SASA! study: A cluster randomized controlled trial to assess the impact of a community mobilization intervention to prevent violence against women and reduce HIV risk in Kampala, Uganda. *BMC Medicine*, 12, Article 122. 10.1186/s12916-014-0122-5 [PubMed: 25248996]
- Abramsky T, Devries KM, Michau L, Nakuti J, Musuya T, Kyegombe N, & Watts C (2016). The impact of SASA!, a community mobilisation intervention, on women's experiences of intimate partner violence: Secondary findings from a cluster randomised trial in Kampala, Uganda. *Journal of Epidemiology & Community Health*, 70(8), 818–825. 10.1136/jech-2015-206665 [PubMed: 26873948]
- Bonnevie E, Kigozi G, Kairania R, Ssemanda JB, Nakyanjo N, Ddaaki WG, et al. (2019). Alcohol use in fishing communities and men's willingness to participate in an alcohol, violence and HIV risk reduction intervention: Qualitative findings from Rakai, Uganda. *Culture, Health & Sexuality*, 22, 1–17. 10.1080/13691058.2019.1587002
- Braun V, & Clarke V (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. 10.1191/1478088706qp063oa
- Breur C, Bloom B, Miller AP, Kigozi G, Nakyanjo N, Ddaaki W, Nalugoda F, & Wagman JA (2019). "The bottle is my wife": Exploring reasons why men drink alcohol in Ugandan fishing communities. *Social Work in Public Health*, 34, 657–672. 10.1080/19371918.2019.1666072 [PubMed: 31570062]
- Campbell JC, Baty ML, Ghandour RM, Stockman JK, Francisco L, & Wagman J (2008). The intersection of intimate partner violence against women and HIV/AIDS: A review. *International Journal of Injury Control and Safety Promotion*, 15(4), 221–231. 10.1080/17457300802423224 [PubMed: 19051085]
- Chang LW, Grabowski MK, Ssekubugu R, Nalugoda F, Kigozi G, Nantume B, et al. (2016). Heterogeneity of the HIV epidemic in agrarian, trading, and fishing communities in Rakai, Uganda: An observational epidemiological study. *Lancet HIV*, 3(8), e388–e396. 10.1016/s2352-3018(16)30034-0 [PubMed: 27470029]
- Creswell J, & Poth C (2018). *Qualitative inquiry and research design* (4th ed.). SAGE.
- Deering KN, Amin A, Shoveller J, Nesbitt A, Garcia-Moreno C, Duff P, et al. (2014). A systematic review of the correlates of violence against sex workers. *American Journal of Public Health*, 104(5), e42–e54. 10.2105/AJPH.2014.301909
- Devries KM, Child JC, Bacchus LJ, Mak J, Falder G, Graham K, et al. (2014). Intimate partner violence victimization and alcohol consumption in women: A systematic review and meta-analysis. *Addiction*, 109(3), 379–391. 10.1111/add.12393 [PubMed: 24329907]

- Dworkin SL, Treves-Kagan S, & Lippman SA (2013). Gender-transformative interventions to reduce HIV risks and violence with heterosexually-active men: A review of the global evidence. *AIDS and Behavior*, 17(9), 2845–2863. 10.1007/s10461-013-0565-2 [PubMed: 23934267]
- Fleming PJ, Colvin C, Peacock D, & Dworkin SL (2016). What role can gender-transformative programming for men play in increasing men's HIV testing and engagement in HIV care and treatment in South Africa? *Culture, Health & Sexuality*, 18(11), 1251–1264. 10.1080/13691058.2016.1183045
- Fonck K, Leye E, Kidula N, Ndinya-Achola J, & Temmerman M (2005). Increased risk of HIV in women experiencing physical partner violence in Nairobi, Kenya. *AIDS and Behavior*, 9(3), 335–339. 10.1007/s10461-005-9007-0 [PubMed: 16133903]
- Gibbs A, Jewkes R, Willan S, & Washington L (2018). Associations between poverty, mental health and substance use, gender power, and intimate partner violence amongst young (18-30) women and men in urban informal settlements in South Africa: A cross-sectional study and structural equation model. *PLOS ONE*, 13(10), Article e0204956. 10.1371/journal.pone.0204956 [PubMed: 30281677]
- Greene MC, Kane JC, & Tol WA (2017). Alcohol use and intimate partner violence among women and their partners in sub-Saharan Africa. *Global Mental Health (Cambridge)*, 4, Article e13. 10.1017/gmh.2017.9
- Heise LL (1998). Violence against women: An integrated, ecological framework. *Violence Against Women*, 4(3), 262–290. 10.1177/1077801298004003002 [PubMed: 12296014]
- Holmila M, Beccaria F, Ibanga A, Graham K, Hettige S, Magri R, et al. (2014). Gender, alcohol and intimate partner violence: Qualitative comparative study. *Drugs: Education, Prevention, and Policy*, 21(5), 398–407. 10.3109/09687637.2014.911245
- Koenig LJ, & Moore J (2000). Women, violence, and HIV: A critical evaluation with implications for HIV services. *Maternal and Child Health Journal*, 4(2), 103–109. 10.1023/a:1009570204401 [PubMed: 10994578]
- Koenig MA, Lutalo T, Zhao F, Nalugoda F, Wabwire-Mangen F, Kiwanuka N, et al. (2003). Domestic violence in rural Uganda: Evidence from a community-based study. *Bulletin of the World Health Organization*, 81(1), 53–60. <https://www.ncbi.nlm.nih.gov/pubmed/12640477> [PubMed: 12640477]
- Kouyoumdjian FG, Calzavara LM, Bondy SJ, O'Campo P, Serwadda D, Nalugoda F, et al. (2013). Risk factors for intimate partner violence in women in the Rakai Community Cohort Study, Uganda, from 2000 to 2009. *BMC Public Health*, 13, Article 566. 10.1186/1471-2458-13-566 [PubMed: 23759123]
- Kouyoumdjian FG, Findlay N, Schwandt M, & Calzavara LM (2013). A systematic review of the relationships between intimate partner violence and HIV/AIDS. *PLOS ONE*, 8(11), Article e81044. 10.1371/journal.pone.0081044 [PubMed: 24282566]
- Lopez EJ, Jones DL, Villar-Loubet OM, Arheart KL, & Weiss SM (2010). Violence, coping, and consistent medication adherence in HIV-positive couples. *AIDS Education and Prevention*, 22(1), 61–68. 10.1521/aeap.2010.22.1.61 [PubMed: 20166788]
- Maman S, Mbwambo JK, Hogan NM, Kilonzo GP, Campbell JC, Weiss E, & Sweat MD (2002). HIV-positive women report more lifetime partner violence: Findings from a voluntary counseling and testing clinic in Dar es Salaam, Tanzania. *American Journal of Public Health*, 92(8), 1331–1337. <https://www.ncbi.nlm.nih.gov/pubmed/12144993> [PubMed: 12144993]
- McBride CM, Emmons KM, & Lipkus IM (2003). Understanding the potential of teachable moments: The case of smoking cessation. *Health Education Research*, 18(2), 156–170. 10.1093/her/18.2.156 [PubMed: 12729175]
- McCloskey LA, Boonzaier F, Steinbrenner SY, & Hunter T (2016). Determinants of intimate partner violence in sub-Saharan Africa: A review of prevention and intervention programs. *Partner Abuse*, 7(3), 277–315. 10.1891/1946-6560.7.3.277
- Miller AP, Pitpitan EV, Nabukalu D, Nalugoda F, Nakigozi G, Kigozi G, et al. (2020). Transactional sex, alcohol use and intimate partner violence against women in the Rakai Region of Uganda. *AIDS and Behavior*. 10.1007/s10461-020-03069-9

- Miller AP, Ziegel L, Mugamba S, Kyasanku E, Wagman JA, Nkwanz-Lubega V, et al. (2021). Not enough money and too many thoughts: Exploring Perceptions of mental health in two Ugandan districts through the mental health literacy framework. *Qualitative Health Research*, 31, 967–982. 10.1177/1049732320986164 [PubMed: 33451275]
- Mulrenan C, Colombini M, Howard N, Kikvi J, Mayhew SH, & Integra I (2015). Exploring risk of experiencing intimate partner violence after HIV infection: A qualitative study among women with HIV attending postnatal services in Swaziland. *BMJ Open*, 5(5), Article e006907. 10.1136/bmjopen-2014-006907
- O'Donnell A, Anderson P, Newbury-Birch D, Schulte B, Schmidt C, Reimer J, & Kaner E (2014). The impact of brief alcohol interventions in primary healthcare: A systematic review of reviews. *Alcohol and Alcoholism*, 49(1), 66–78. 10.1093/alcalc/agt170 [PubMed: 24232177]
- Rehm J, Probst C, Shield KD, & Shuper PA (2017). Does alcohol use have a causal effect on HIV incidence and disease progression? A review of the literature and a modeling strategy for quantifying the effect. *Population Health Metrics*, 15(1), Article 4. 10.1186/s12963-017-0121-9
- Sabri B, Wirtz AL, Ssekasanvu J, Nonyane BAS, Nalugoda F, Kagaayi J, et al. (2019). Intimate partner violence, HIV and sexually transmitted infections in fishing, trading and agrarian communities in Rakai, Uganda. *BMC Public Health*, 19(1), Article 594. 10.1186/s12889-019-6909-8 [PubMed: 31101045]
- Schafer KR, Brant J, Gupta S, Thorpe J, Winstead-Derlega C, Pinkerton R, et al. (2012). Intimate partner violence: A predictor of worse HIV outcomes and engagement in care. *AIDS Patient Care and STDs*, 26(6), 356–365. 10.1089/apc.2011.0409 [PubMed: 22612519]
- Singer M (1994). AIDS and the health crisis of the U.S. urban poor; the perspective of critical medical anthropology. *Social Science & Medicine*, 39(7), 931–948. <https://www.ncbi.nlm.nih.gov/pubmed/7992126> [PubMed: 7992126]
- Stockman JK, Lucea MB, & Campbell JC (2013). Forced sexual initiation, sexual intimate partner violence and HIV risk in women: A global review of the literature. *AIDS and Behavior*, 17(3), 832–847. 10.1007/s10461-012-0361-4 [PubMed: 23143750]
- Tam M, Amzel A, & Phelps BR (2015). Disclosure of HIV serostatus among pregnant and postpartum women in sub-Saharan Africa: A systematic review. *AIDS Care*, 27(4), 436–450. 10.1080/09540121.2014.997662 [PubMed: 25636060]
- Tenkorang EY, Asamoah-Boaheng M, & Owusu AY (2020). Intimate partner violence (IPV) against HIV-positive women in sub-Saharan Africa: A mixed-method systematic review and meta-analysis. *Trauma, Violence, & Abuse*, 1524838020906560. 10.1177/1524838020906560
- Tenkorang EY, Asamoah-Boaheng M, & Owusu AY (2020). Intimate partner violence (IPV) against HIV-positive women in sub-Saharan Africa: A mixed-method systematic review and meta-analysis. *Trauma Violence Abuse*. Advance online publication. 10.1177/1524838020906560
- Tumwesigye NM, Atuyambe L, Wanyenze RK, Kibira SP, Li Q, Wabwire-Mangen F, & Wagner G (2012). Alcohol consumption and risky sexual behaviour in the fishing communities: Evidence from two fish landing sites on Lake Victoria in Uganda. *BMC Public Health*, 12, Article 1069. 10.1186/1471-2458-12-1069 [PubMed: 23231779]
- Vasilaki EI, Hosier SG, & Cox WM (2006). The efficacy of motivational interviewing as a brief intervention for excessive drinking: A meta-analytic review. *Alcohol and Alcoholism*, 41(3), 328–335. 10.1093/alcalc/agl016 [PubMed: 16547122]
- Wagman JA, Gray RH, Campbell JC, Thoma M, Ndyanabo A, Ssekasanvu J, et al. (2015). Effectiveness of an integrated intimate partner violence and HIV prevention intervention in Rakai, Uganda: Analysis of an intervention in an existing cluster randomised cohort. *Lancet Global Health*, 3(1), e23–e33. 10.1016/s2214-109x(14)70344-4 [PubMed: 25539966]
- Wagman JA, Nabukalu D, Miller AP, Wawer MJ, Ssekubugu R, Nakowooya H, et al. (2020). Prevalence and correlates of men's and women's alcohol use in agrarian, trading and fishing communities in Rakai, Uganda. *PLOS ONE*, 15(10), Article e0240796. 10.1371/journal.pone.0240796 [PubMed: 33125397]
- Wandera B, Tumwesigye NM, Nankabirwa JI, Mafigiri DK, Parkes-Ratanshi RM, Kapiga S, et al. (2017). Efficacy of a single, brief alcohol reduction intervention among men and women living with HIV/AIDS and using alcohol in Kampala, Uganda: A randomized

- trial. *Journal of the International Association of Providers of AIDS Care*, 16(3), 276–285. 10.1177/2325957416649669 [PubMed: 27215561]
- Wawer MJ, Sewankambo NK, Serwadda D, Quinn TC, Paxton LA, Kiwanuka N, et al. (1999). Control of sexually transmitted diseases for AIDS prevention in Uganda: A randomised community trial. Rakai Project Study Group. *Lancet*, 353(9152), 525–535. <https://www.ncbi.nlm.nih.gov/pubmed/10028980> [PubMed: 10028980]
- Westway E, Barratt C, & Seeley J (2009). Educational attainment and literacy in Ugandan fishing communities: Access for All? *Maritime Studies*, 8(2), 73–97.
- World Health Organization. (2004). Intimate partner violence and HIV/AIDS.
- World Health Organization. (2007). Primary prevention of intimate-partner violence and sexual violence: Background paper for WHO expert meeting. http://www.who.int/violence_injury_prevention/publications/violence/IPV-SV.pdf
- WHO Department of Gender. (2001). Putting women first: Ethical and safety recommendations for research on domestic violence against women.
- Wirtz A, Nakyanjo N, Wagman J, Gray R, Ssekasanvu J, Serwada D, et al. (2018, July 25). The effects of intimate partner violence on HIV care and ART use in Rakai [Conference session]. Uganda International AIDS Conference, Amsterdam, Netherlands.
- Zablotska IB, Gray RH, Koenig MA, Serwadda D, Nalugoda F, Kigozi G, et al. (2009). Alcohol use, intimate partner violence, sexual coercion and HIV among women aged 15-24 in Rakai, Uganda. *AIDS and Behavior*, 13(2), 225–233. 10.1007/s10461-007-9333-5 [PubMed: 18064556]
- Zablotska IB, Gray RH, Serwadda D, Nalugoda F, Kigozi G, Sewankambo N, et al. (2006). Alcohol use before sex and HIV acquisition: A longitudinal study in Rakai, Uganda. *AIDS*, 20(8), 1191–1196. 10.1097/01.aids.0000226960.25589.72 [PubMed: 16691071]

Table 1.

Descriptive Characteristics of Study Sample.

Sociodemographic Characteristics	<i>n</i> (%)
Residence	
Ddimbo	7 (35)
Malembo	7 (35)
Namirembe	6 (30)
Religion	
Catholic	13 (65)
Muslim	3 (15)
Protestant	4 (20)
Marital status	
Married	16 (80)
Not married	4 (20)
Educational attainment	
No formal schooling	1 (5)
Primary education	11 (55)
Secondary education	7 (35)
University	1 (5)
Occupation	
Bar/restaurant owner or worker	8 (40)
Housewife	2 (10)
Other occupation	5 (25)
Vendor	5 (25)
<i>Mean</i> age (range)	31 (20–42) years