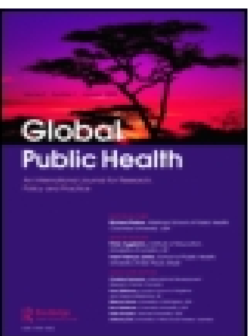

Global Public Health

An International Journal for Research, Policy and Practice

ISSN: (Print) (Online) Journal homepage: https://www.tandfonline.com/loi/rgph20

'So hurt and broken': A qualitative study of experiences of violence and HIV outcomes among Zambian youth living with HIV

Katherine G. Merrill , Jacquelyn C. Campbell , Caitlin E. Kennedy , Virginia M. Burke , Sam Miti , Christiana Frimpong , Michele R. Decker , Elizabeth A. Abrams , Jonathan K. Mwansa & Julie A. Denison

To cite this article: Katherine G. Merrill , Jacquelyn C. Campbell , Caitlin E. Kennedy , Virginia M. Burke , Sam Miti , Christiana Frimpong , Michele R. Decker , Elizabeth A. Abrams , Jonathan K. Mwansa & Julie A. Denison (2021): 'So hurt and broken': A qualitative study of experiences of violence and HIV outcomes among Zambian youth living with HIV, Global Public Health, DOI: 10.1080/17441692.2020.1864749

To link to this article: https://doi.org/10.1080/17441692.2020.1864749

© 2021 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group

View supplementary material

Published online: 11 Jan 2021.

Submit your article to this journal

Article views: 322

View related articles

View Crossmark data

Full Terms & Conditions of access and use can be found at https://www.tandfonline.com/action/journalInformation?journalCode=rgph20

GLOBAL PUBLIC HEALTH
https://doi.org/10.1080/17441692.2020.1864749

'So hurt and broken': A qualitative study of experiences of violence and HIV outcomes among Zambian youth living with HIV

Katherine G. Merrill [a*], Jacquelyn C. Campbell [b], Caitlin E. Kennedy [a], Virginia M. Burke[a], Sam Miti[d], Christiana Frimpong[d], Michele R. Decker[c], Elizabeth A. Abrams[a], Jonathan K. Mwansa[d] and Julie A. Denison[a]

[a]Department of International Health, Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, USA; [b]Department of Community-Public Health, Johns Hopkins School of Nursing, Baltimore, MD, USA; [c]Department of Population, Family & Reproductive Health, Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, USA; [d]Arthur Davison Children's Hospital, Ndola, Zambia

ABSTRACT

Emerging data show associations between violence victimisation and negative HIV outcomes among youth in sub-Saharan Africa. We conducted in-depth interviews with adolescents and young adults living with HIV (aged 15–24 years) in Ndola, Zambia, to better understand this relationship. We purposively selected 41 youth (24 females, 17 males) with varied experiences of violence and virologic results. Analysis used thematic coding. Two-thirds of participants said violence affected their medication adherence, clinic attendance, and/or virologic results. They focused on the negative effects of psychological abuse from family members in homes and peers at schools, which were the most salient forms of violence raised, and sexual violence against females. In contrast, they typically depicted physical violence from caregivers and teachers as a standard discipline practice, with few impacts. Youth wanted HIV clinic settings to address verbal abuse and emotional maltreatment, alongside physical and sexual violence, including through peer mentoring. Violence – especially verbal and emotional forms – must be recognised as a potential barrier to HIV self-management among youth living with HIV in the region. Further testing of clinic, home, and school-based interventions may be critical to reducing levels of violence and improving HIV outcomes in this vulnerable but resilient population.

Trial registration: ClinicalTrials.gov identifier: NCT04115813.

ARTICLE HISTORY
Received 30 March 2020
Accepted 7 December 2020

KEYWORDS
Violence; HIV; adolescent; young adult; Zambia

Introduction

Eighty-eight percent of adolescents living with HIV reside in sub-Saharan Africa (UNICEF, 2020). Although important steps are being taken to reduce the HIV burden among this historically under-prioritised population (UNICEF/UNAIDS, 2018), youth have lower levels of antiretroviral therapy (ART) adherence and viral suppression than adults (Auld et al., 2014). In Zambia, for example, only

CONTACT Katherine G. Merrill kgm@uic.edu Department of International Health, Johns Hopkins Bloomberg School of Public Health, 615 N. Wolfe Street, Baltimore, MD 21205, USA
*Department of Medicine, University of Illinois at Chicago, Chicago, IL, USA
Supplemental data for this article can be accessed at https://doi.org/10.1080/17441692.2020.1864749

© 2021 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group
This is an Open Access article distributed under the terms of the Creative Commons Attribution-NonCommercial-NoDerivatives License (http://creativecommons.org/licenses/by-nc-nd/4.0/), which permits non-commercial re-use, distribution, and reproduction in any medium, provided the original work is properly cited, and is not altered, transformed, or built upon in any way.

a third of youth (aged 15–24 years) have achieved viral suppression compared to roughly three-fourths of older adults (aged 45–59 years) (PHIA, 2016).

Cross-sectional analyses of data from sub-Saharan Africa have identified a range of factors that are negatively associated with youths' ART adherence. These include fear of unintentional disclosure and HIV stigma (Denison et al., 2015b; Mutwa et al., 2013), alcohol use (Denison et al., 2015b; Denison et al., 2018), depression (Denison et al., 2015b; Mutwa et al., 2013), and lack of a support system, including at home (Denison et al., 2015a, 2015b; Mutwa et al., 2013). Addressing these factors may help improve youths' HIV-related health outcomes and reduce HIV transmission. Recent studies have begun to identify violence from members of the home (Cluver et al., 2018; Kim et al., 2017), intimate partners (Kidman & Violari, 2018), and caregivers, teachers, and clinicians (Cluver et al., 2018) as an additional factor associated with incomplete ART adherence among adolescents in the region. These findings align with a body of research among women living with HIV, which has demonstrated a relationship between intimate partner violence and incomplete ART adherence/viral load failure globally (Anderson et al., 2018; Hatcher et al., 2015) and in sub-Saharan Africa (Conroy et al., 2017; Hampanda, 2016; Kosia et al., 2016).

Qualitative methods provide a valuable tool for understanding the contexts in which violence occurs and the ways in which violence victimisation relates to HIV outcomes. Although some qualitative studies have described youths' experiences of violence as a manifestation of HIV stigma (Li et al., 2010; Midtbo et al., 2012; Ramaiya et al., 2016) or a typical occurrence at home or in school (Li et al., 2010; Ramaiya et al., 2016), qualitative studies have yet to explore the intersection between experiences of violence and HIV outcomes among youth in the region. A deeper understanding of this relationship is particularly needed since adolescence and young adulthood represent a unique developmental stage (Sanders, 2013).

In prior analyses of baseline data from a randomised controlled trial (RCT) among youth living with HIV in Zambia, our team found a high prevalence of any past-year physical violence, psychological abuse, or forced sex (72% male, 75% female); over a third experienced overlapping types of violence (39% male, 37% female). Among victims, the most common perpetrators included peers (74% male, 45% female), family members other than a parent/caregiver (41% both sexes), and parents/caregivers (18% male, 32% female) (Merrill et al., 2020b). Furthermore, we identified significant associations between multiple types of past-year violence victimisation and viral load failure (Merrill et al., 2020a). Building on these findings, we present results from in-depth interviews (IDIs) with a sample of trial participants. In this sub-study, we sought to explore the intersection between youths' experiences of violence victimisation and their self-described HIV outcomes, including ART adherence, clinic attendance, and viral load failure.

Methods

Study population and procedures

We conducted one-time IDIs with participants from Project YES! (Youth Engaging for Success), a RCT carried out in four HIV clinics in Ndola, Zambia (Clinicaltrials.gov, October, 2019; Denison et al., 2020). The trial assessed the impact of a peer-mentoring intervention on viral suppression, ART treatment gaps, and feelings of self-stigma among 273 youth living with HIV. Eligibility for the trial included being aged 15–24 years, aware of one's HIV status, an English or Bemba speaker, on ART for at least 6 months, and available for study activities.

We purposively recruited 41 participants (24 female, 17 male) to achieve maximum variation according to youths' experiences of violence (moderate or severe), virologic results (failure or not), sex (male or female), and age group (15–19 or 20–24 years). These characteristics were determined using Project YES! baseline surveys. To group participants according to their experiences of either moderate or severe violence, we drew on World Health Organization (WHO) definitions (WHO, 2005) (Appendix 1). Viral load failure was defined as ≥1000 copies/mL (MOH, 2018;

WHO, 2016). Youth were only eligible to participate in an IDI if they reported at least one act of violence victimisation on the baseline survey.

Three Zambian interviewers, who had previous research experience with youth living with HIV and were not involved in the Project YES! intervention, were hired and underwent nine days of training that drew on WHO ethical recommendations for violence research (WHO, 2001). This training covered the study goals and procedures, qualitative methods, interviewing techniques around violence, non-judgmental and confidential ways of collecting data on sensitive topics, research ethics, and the study's safety protocol. Interviewers were matched with informants by sex, and IDIs were conducted in English or Bemba at study clinics using a semi-structured guide. IDIs took place after the six-month intervention and midline data collection for the RCT were completed.

At the start of the IDI, participants were told that they had been invited because they had reported an experience of violence on the baseline survey. The interviewer began with questions about the participant's living situation and experiences living with HIV, prior to asking about their experiences of violence. Rather than raising the specific acts reported on the survey, the interviewer asked about any time when the participant was: (1) hurt emotionally or mentally, (2) hurt physically, or (3) forced to do sexual things he/she did not want to do. For each type of violence, the interviewer gave probing examples (e.g. being insulted or humiliated) and followed up with questions about how the experience(s) had affected the participant, including his/her HIV self-management (i.e. medication adherence, appointment attendance, and/or virologic results learned during appointments). At the end of the IDI, participants were asked how, if at all, they would like Project YES! to help youth who have experienced the types of violence discussed during the IDI. This question was intended to inform future programme implementation, as the peer mentors were not trained as counsellors to address violence. IDIs lasted 45–90 min and were audio-recorded with permission, translated into English where needed, and transcribed.

Project YES! intervention

The Project YES! intervention consisted of monthly individual and group meetings for adolescents and young adults with a youth peer mentor, alongside three optional group meetings for caregivers, over six months. Trained and paid peer mentors, who were successfully managing their own HIV, addressed topics relevant to HIV self-management (e.g. stigma, HIV disclosure). While peer mentors were not trained as counsellors to address issues of violence, they were equipped with background knowledge about violence and trained to refer youth to designated healthcare providers at clinics as needed, according to the study's safety protocol.

Data analysis

The interviewers and primary author wrote memos throughout data collection and analysis to capture reflections on the interview guide and methodological issues, interpret preliminary findings, document the research process (Tobin & Begley, 2004), and self-reflect on their roles in the research process (Saldana, 2016). Interviewers debriefed with the primary author individually after each IDI and collectively at regular increments to discuss challenges encountered, emerging themes, and areas for probing. The primary author conducted thematic coding, generating deductive codes based on the interview guide and adding inductive codes iteratively based on emergent themes (Braun & Clarke, 2006). Codes were applied to the text using NVivo 11.

Ethics

Informed consent for participation in study activities, including an IDI, was obtained as part of the consent for enrolment in the larger RCT. According to Zambian law ("The National Health

Research Act, 2013," 2013), parental consent and participant assent were obtained from minors (ages 15–17 years). To protect minors who might be experiencing violence from their caregivers, consent forms for caregivers purposefully described the qualitative sub-study research using broad terms (e.g. health, safety) (WHO, 2001). At the start of the IDI, interviewers reminded youth of their consent and ability to stop the interview at any time, provided more details about the nature of the IDI (WHO, 2001), and asked participants to verbally agree before proceeding. Interviewers were trained to bring participants who described severe experiences of violence (e.g. forced sex, physical beating) or suicidal ideation during the IDI to healthcare providers at the clinic according to the study's safety protocol. Providers handled cases in line with clinical practice, local policy, and Zambian law; this included the provision of onward referrals (e.g. to a one-stop gender-based violence centre) as needed (Merrill et al., 2019). The Zambia Ministry of Health through the National Health Research Authority, alongside the ethics review boards at ERES Converge in Zambia and the Johns Hopkins Bloomberg School of Public Health, approved this research.

Results

About three-quarters of interviewees were aged 15–19 compared to 20–24 years. A similar proportion described themselves as perinatally infected and as a single or double orphan. All participants discussed at least one experience of violence victimisation during IDIs except one male, despite his multiple reports of violence to a research assistant on the baseline survey. Mirroring their baseline survey data, most youth in IDIs described experiences of psychological abuse while three-quarters described experiences of physical violence. Only one-fifth of participants – eight interviewees, all female but one – shared experiences of sexual violence. Half of these had not reported the act on the baseline survey. Nine interviewees (five males and four females) had reported but did not discuss acts of forced sex during IDIs.

Two-thirds of those who discussed experiences of violence described negative impacts on their adherence to ART, clinic attendance, or virologic results. Findings centred on four themes: the relationship between youths' HIV outcomes and their experiences of psychological abuse (theme 1), physical violence (theme 2), and sexual violence (theme 3); and youths' ideas for addressing violence in the context of the clinic and Project YES! (theme 4).

Feeling 'broken': How psychological abuse at home and in school negatively influenced youths' HIV outcomes

The predominant theme across IDIs concerned youths' regular experiences of psychological abuse, mostly at home but also in school. This abuse made them feel 'very bad', 'disturbed', 'angry', 'upset', and 'broken'. One participant said of the verbal and emotional abuse from her step-mother, 'It was hell. The treatment was not good.' These experiences did not differ for males and females, or for those aged 15–19 and 20–24 years. Common perpetrators included step-parents (mostly step-mothers), parents, aunts/uncles, and peers, followed by grandparents, step-siblings, and siblings; a few described abuses from in-laws and/or cousins. Almost three-quarters of those experiencing psychological abuse described acts from multiple perpetrators. While some believed they were being targeted for violence because they were living with HIV, most did not believe the violence was due to their HIV status. One exception is in the case of peer violence, in which youth always described being targeted due to their HIV status. Table 1 presents examples of psychological abuse, in the words of the youth.

Half of those experiencing psychological abuse described its harmful effects on their HIV self-management. Although nearly all of these youth had also experienced physical violence, they spoke about the psychological abuse specifically as having harmed their HIV self-management. A male participant, for instance, described being regularly slapped and pinched by his grandfather but pinpointed the regular verbal insults as spurring his refusal to take his medication:

Table 1. Experiences of psychological abuse among adolescents and young adults living with HIV in Ndola, Zambia, in their own words, distinguished by whether the youth believed the abuse was related and unrelated to his/her HIV-positive status.

Related to HIV-positive status based on self-report	Not related to HIV-positive status based on self-report
'I don't like HIV positive people and I don't even want them near me. I don't want to share my things with them.' **(Aunt to female participant)**	*'You should just die … We are finding food for you and you are not contributing. It is better your elder brother, the one who died, if he was the one alive.'* **(Auntie to male participant)**
'You can't stay here because of your HIV status.' **(Sister-in-law to female participant)**	*'Maybe you are not even you father's child … You, I doubt if you will complete school by grade nine. You will fall pregnant … You are a dog … You are a fool.'* **(Step-mother to female participant)**
'If you want to be eating, you should be cooking for yourself like that, and have your own plate.' **(Female friend to female participant)**	*'We did not leave some food for you … You can just stay like that. Today you won't eat.'* **(Female cousin to male participant)**
'[You] should not be using some utensils because [you] will infect [your] siblings.' **(Step-mother to male participant)**	*'Find some other place [to] stay … . This is not your mother's house. This is my house.'* (**Elder brother to male participant**)
'You should feel sorry for yourself. You know how you are.' (**Aunt to female participant**)	*You 'child of a dog … mistake … '* **(Female cousin to female participant)**
'She is becoming a burden.' **(Father to step-mother, overheard by female participant)**	*'She thinks we are related. We don't like her.'* **(Step-siblings with reference to female participant)**
'I am not the one who infected you with HIV … That's why your mom refuses to keep you.' **(Step-mother to female participant)**	*'No, no, that child is a disobedient child. He is spoiled and one day, if I have a gun, I would be able to shoot him.'* **(Sister to mother, in front of male participant)**

> I have been shouted at many times. I felt bad about it. An insult is more than beating you. When you get insulted, it gets to my heart. It's so emotional … When [grandfather] is angry, he would say, "You monkey, you rat," and then I would ask myself, "Am I a rat? Am I a monkey?" So, I was like disturbed and I would ask myself, "Why am being called such things?" He would even say that I should go to my mother's place … because, "Am tired of you and don't even ask for money when you are going to school tomorrow" … It used to affect how I take my medication. I used to tell him that I would not take the medication when grandfather was angry with me. When he forced me, I used to put it in my mouth and go outside and spit.

While verbal abuse – referred to by many as 'talking a lot' – was the most common form of psychological abuse described, experiences of controlling behaviours, especially the withholding of food, also affected HIV outcomes. A female participant described how being denied food by her uncle's wife influenced her medication regimen:

> Her children have eaten. Me, I have not eaten. Just like that. She did not give me food … I used to tell my uncle and he used to think I was lying … I used to take [my drugs] but I felt dizzy because I didn't take any food.

Other controlling behaviours concerned access to ART. A female participant's father prohibited her from starting ART since he wanted her to use herbal remedies. Finally, a few could not pick up their medication from the clinic because of family quarrels at home. A male participant, for instance, described witnessing periodic fights between his parents. When he tried stepping in, his father would lock him out of the house. He was forced to wait for the fighting to stop at his grandmother's house, which disrupted his clinic attendance.

Some youth described feeling depressed and/or having suicidal thoughts due to their experiences of psychological abuse, which also affected their adherence. A female participant was forced to stay in her own room and use her own utensils when visiting her aunt. The verbal abuse she experienced provoked thoughts of suicide and missed medication:

> Sometimes [my auntie] would say, "No, you, you have already died. Don't infect my children." She just used to use those words that are hurtful. When she starts talking, you just start crying … I had depression like that because of what she was saying … I used to reach a point where, it is better I just die … Missing the [ART] drugs, I used to miss. When [my auntie] talks the same day, and it hurts me, then you will not take [the drugs] that same day … By that time the CD4 was 200, low …

A few described instances of forgetting to take their medication because they had consumed alcohol as an immediate reaction to the abuse. Some responded by refusing to eat, even if still taking their ART, which they learned during their clinical meetings affected the drugs' efficacy.

While experiences of verbal abuse and mistreatment were most common at home, many also feared or experienced psychological abuse due to their HIV status from peers, especially at school. Several skipped their medication since they were afraid of being humiliated if their HIV statuses were revealed. A female participant attending boarding secondary school made the 'mistake' of putting her medication in a locker, where a classmate discovered it and told others her status. The resulting psychological abuse from students led her to incomplete adherence and attempted suicide: 'They were pointing fingers at me, so I started feeling out of place and started getting sick. [With my medication] I stopped … I attempted suicide twice at school.'

Beyond the home and school environments, a few female participants described effects of psychological abuse from their intimate partners on their HIV self-management. For instance, one participant's controlling partner prohibited her from having male friends and claimed that only he could accept her given her HIV status. She was 'emotionally distressed' and regularly skipped her medication.

One-time experiences of verbal abuse were not generally perceived as impactful. Several described, for example, experiencing verbal insults from strangers, but these experiences did not affect them 'because in the first place, I don't know that person. It's like they have no value in my life'. Similarly, psychological abuse from teachers, including being shouted at or forced to leave the classroom/kneel down, did not seem to significantly affect the youth since this was considered a standard form of punishment for misbehaviour.

'It is just a normal thing': Youths' experiences of physical violence as discipline, unless accompanied by psychological abuse or sexual violence

Physical violence was most often described as a form of discipline from a caregiver or teacher and a means of 'teaching … the way of life,' which youth did not relate to their HIV status. Standard disciplinary practices included being hit with a ruler or duster on the hands or feet, threatened with a whip, slapped, or having an ear or arm twisted. Youth did not feel their HIV self-management was affected because they considered the violence, even when severe, to be a 'normal' consequence for doing something wrong. This is exemplified by female participants below:

> When they find the class is making noise … the teacher will beat everyone … My class teacher, I used to think of him as my father, because I haven't grown up with my father. So, when he beats me, I just used to brush it off that he is just disciplining me. He is just teaching me to do the right way.

> [Kicking, slapping], that happened several times. I even got used to that … [My grandma] hits you on the face, the back, wherever she feels like it even … She stoned me … on my hand … It is just a normal thing … No, I never used to skip my drugs, I just continued taking them.

Several youth described experiencing severe physical violence which they considered unjustified (typically from someone at home) and facing subsequent challenges with their HIV. Acts of severe physical violence included being kicked in the stomach, punched in the face, or hit with a chair or block, and at times led to injury, such as swelling and, for one participant, a broken nose. In each case, the physical violence was coupled with psychological abuse or sexual violence from the same perpetrator. One participant, for instance, endured constant verbal and physical abuse from his parents, which led him to skip his medication, refuse to eat, and drink alcohol: 'They just want me to die at home.'

Although not a common theme, a female participant described skipping her medication and contemplating suicide when she would 'overthink' about potentially experiencing physical violence or homicide by a future partner if he learned her status: 'I even used to refuse men who proposed, because eventually they would find out or I had to tell them [my status]. They can beat me or kill me.'

'It would be better if I just die': Youths' experiences of sexual violence

Of the female participants experiencing sexual violence, most described forced sex and said the experience had led to their HIV acquisition when they were 5–17 years old. All survivors of forced

sex had battled depression and suicidal ideation, and nearly all described challenges with medication adherence. A participant who self-described as being born with HIV, for instance, was physically forced to have sexual intercourse multiple times over several years by her uncle. He threatened to kill her and stop paying her school fees if she told anyone. When she eventually told her aunt, the uncle denied it and her family blamed her for being promiscuous. Her family eventually reported the uncle to the police and he was placed in custody, only to be bailed out a few hours later. The participant described having suicidal thoughts and stopping her medication because her uncle had not been punished for what he had done:

> [The experiences] even affected taking my medication. I just used to think that, "Ah, it would be better if I just die, instead of me taking this medication. It's just—it's not helping me." I used to skip a lot. Today I take my medication, tomorrow I don't, just like that.

Only one male participant shared an experience of sexual violence. He reported forced sex on the baseline survey and described having been pressured to have sex with a young woman from his church, who told him that he should come by her house. He refused and confronted her the next time in church to say that he did not like her advances. She subsequently stopped attending church. This experience did not affect his HIV self-management.

'How to stay safe in life': Youth want violence addressed in clinic programming

When asked how, if at all, the Project YES! intervention may help young people who have experienced violence, youth highlighted the clinic setting as an important source of support. Several saw potential benefits in discussing and learning about violence during individual or group sessions with peer mentors. They felt that such discussions would provide advice on how to handle situations of violence and help youth realise that experiencing violence is common: 'At least you get to know that you are not the only person that passes through problems' (male participant). The youth said these discussions could also encourage them that 'even if you go through such a [violent] situation, you should not stop taking your [ART] medicine' (female participant).

Some youth wanted clinic providers to ask them about their experiences of violence, including emotional maltreatment, during their routine adherence meetings because 'if you don't talk about it, [youth] won't open up' (female participant). They desired a confidential space where they could talk, for instance, about how they were being treated at home rather than just being told how to eat while living with HIV or how to take their ART drugs. A female participant explained:

> Here are so many that are struggling about how take their drugs, how to stay safe in life … But through this project they can learn a lot … They can be helped through counselling because most of them have not shared. [The violence] always hurts them … . I would like the counselling to be done at the health facility … Just when that person comes for a review, at least they counsel the person so that they know their story.

Several youth believed that the caregiver meetings held at the clinic through Project YES! offered a useful avenue for addressing violence occurring in the home, because 'there are some times where maybe … how the child lives is not okay' (male participant). One participant said that she had begun to experience less verbal abuse at home from her sister after her sister had attended the caregiver meetings.

A couple of participants thanked the interviewers for asking them about their experiences of violence. As a male elaborated, 'You are the first person that have asked to talk about the hurtful experiences that I go through in my life.'

Discussion

Our findings demonstrate the critical need to recognise psychological abuse in the form of verbal insults, emotional mistreatment, and controlling behaviours as a potential barrier to positive HIV

outcomes among both male and female adolescents and young adults. Youth poignantly described these forms of maltreatment as a common occurrence with detrimental effects on their HIV self-management practices and their mental health. These findings echo our quantitative analyses of baseline trial data, in which we observed associations between a high frequency of past-year psychological abuse and viral load failure, adjusting for physical and sexual violence and covariates (adjusted OR: 3.32; 95%CI: 1.26–8.70) (Merrill et al., 2020a).

Importantly, the effect of violence on HIV outcomes differed notably depending on the type of violence experienced. We found that the relatively small proportion of female youth who described experiencing sexual violence – almost always as a precursor to HIV infection – also described harmful effects on HIV outcomes, in line with research conducted among adult women living with HIV (Anderson et al., 2018; Hatcher et al., 2015). These effects were primarily seen through feelings of depression and suicidal ideation, which often co-occur with experiences of violence among youth living with HIV in the region (Dow et al., 2016; Kim et al., 2015; Woollett et al., 2017). By contrast, youth primarily depicted moderate and severe forms of physical violence from caregivers and teachers as disciplinary practices, consistent with results from a study with adolescents aged 10–17 years in South Africa (Meinck et al., 2016). In light of the high co-occurrence of physical violence with psychological abuse in our sample, we must note that the youth may not recognise the harmful effects of the physical violence on their bodies and psyche – particularly when the psychological abuse engenders fear. However, these youth did not describe such physical discipline practices as affecting them or their HIV self-management practices. Taken together, these findings add a strong voice to the recent calls in the literature for greater attention to the health effects of psychological and emotional violence, especially in combination with physical violence, beyond the traditional focus on physical and sexual violence alone (Beres et al., 2020; Jewkes, 2010; Jina et al., 2012; Yoshihama et al., 2008).

Our findings also add important insight into the areas of both conceptual overlap and distinction between experiences of psychological abuse and enacted HIV stigma. Some youth described their experiences of verbal abuse – especially from peers – in terms of enacted HIV stigma and discussed negative effects on their HIV self-management. These findings reinforce existing literature on enacted HIV stigma as a key challenge facing youth living with HIV in the region (Bond et al., 2003; Li et al., 2010; Ramaiya et al., 2016). A growing body of research among youth from sub-Saharan Africa shows that experiences of HIV stigma are related to mental health difficulties (Ashaba et al., 2018; Dow et al., 2016; Pantelic et al., 2017), which are risk factors for ART non-adherence (Denison et al., 2015b; Dow et al., 2016) – and that non-adherence can even be a method of 'slow suicide' (Willis et al., 2018). However, more often, youth said that the verbal abuse and emotional maltreatment they were experiencing was unrelated to their HIV status but still negatively affected their HIV care and treatment practices. These findings demonstrate the importance of further assessing the relationship between enacted HIV stigma and HIV outcomes but also highlight the need to examine psychological abuse as a distinct concept, which is likely to be intertwined with the youths' perceptions of self and acceptance of their HIV status. Focusing on enacted HIV stigma alone will provide an incomplete picture of how verbal and emotional forms of mistreatment affect youths' HIV outcomes.

Repeated insults and other forms of verbal abuse were especially prominent in the home, supporting research on the key roles that families and home environments play in youths' health and ART adherence (Denison et al., 2015a; Li et al., 2010; Midtbo et al., 2012; Mutwa et al., 2013; Woollett et al., 2017). The home is often the primary setting where youth manage their HIV (Denison et al., 2015a) but can exacerbate challenges of living with HIV. Some youth, for instance, lack supportive relationships or are given less food than others at home (Bond et al., 2003; Denison et al., 2015a; Mutwa et al., 2013; Woollett et al., 2017). A few qualitative studies have described youths' feelings of depression or distress stemming from verbal abuse by family members at home (Li et al., 2010; Ramaiya et al., 2016). Importantly, our research extends these findings by revealing the negative effects of these chronic insults and abuse, not only on general

wellbeing, but also ART adherence and virologic results. Some forms of emotional maltreatment the youth described, such as being denied food and being made to feel unimportant in their homes, could be considered forms of neglect (Zolotor et al., 2009). A few youth also described having witnessed IPV alongside being abused themselves, which has been identified as a risk factor for HIV (Goodman et al., 2017). These forms of violence merit additional exploration, since they were not the focus of our study.

Youth in our sample expressed an overwhelming desire for clinical settings to better address verbal abuse and emotional maltreatment, alongside physical and sexual violence. They highlighted value in discussing such experiences with a peer mentor to help youth recognise the commonality of violence and learn how to navigate violent experiences. We note that although the Project YES! peer mentors were trained to refer youth to healthcare providers for violence, they were not trained as counsellors. Nevertheless, these findings strengthen calls for further testing of peer-mentoring approaches (Denison et al., 2015a; Denison et al., 2020; Willis et al., 2018), which have shown promise in supporting ART adherence in clinic settings (Strasser & Gibbons, 2014; WHO, 2013) and increasing awareness about violence services among youth outside the clinic (Merrill et al., 2018). The Zambian government has taken important steps to address sexual and gender-based violence (EU, 2019), building on its passage of the continent's most comprehensive act on gender-based violence in 2011 (Anti-Gender-Based Violence Act, 2011). While our findings support increasing access to these services among youth, they also highlight the need for further investment into clinic-based initiatives which help youth cope with the psychosocial challenges they face, such as verbal abuse, unhealthy relationships, stigma, and family dynamics (Casale et al., 2019; Strasser & Gibbons, 2014; Willis et al., 2018). Screening for experiences of psychological abuse, along with physical and sexual violence, could help to identify and link to care youth who are at greatest risk of violence and incomplete ART adherence (Espino et al., 2015; Raissi et al., 2015). In line with the desires of youth in our study, counselling on topics of verbal abuse and physical/sexual violence could be integrated into routine adherence meetings. These initiatives would go a long way in moving beyond the traditional focus on physical and sexual violence to address the harmful effects of verbal and emotional forms of abuse.

It is also important to further test home- and school-based interventions to reduce levels of verbal abuse, mistreatment, and sexual violence, given that these were the primary settings where youth in our sample described violence in relation to their HIV outcomes. Schools have been identified as key settings for delivering HIV education to youth (WHO, 2013), and one intervention in Uganda successfully reduced levels of school violence within general populations of youth (Devries et al., 2015). We recommend delivering anti-violence messaging to students regardless of their HIV status. Such messaging should address the harmful effects of emotional violence (particularly as a manifestation of HIV stigma) alongside physical and sexual forms of violence. It should also acknowledge both lifetime and recent experiences of violence which students may have endured, given that female interviewees in this study described how forced sex had resulted in their HIV infection at varying ages. Home-based interventions could integrate similar messaging into existing programmes which target the primary caregivers of youth living with HIV (Bhana et al., 2014). Approaches seeking to reduce violence at the community level – for instance, through community mobilisation interventions like SASA! (Abramsky et al., 2014) – may also help to engage hard-to-reach household members who perpetrate violence and change norms around violence, which could help reduce its prevalence (Heise, 2011). These study implications support other research from the region highlighting the need for enhancing family, peer, and community support services for youth living with HIV (Casale et al., 2019; Willis et al., 2018).

Social desirability bias may explain the discrepancies we observed in reports of sexual violence on the baseline surveys and in the IDIs – particularly among males. Only one male out of six who had reported forced sex to a research assistant during the baseline survey discussed his experience in the IDI. Conversely, four female interviewees described acts of sexual violence during the IDI which they had not reported on the survey, suggesting that they may have felt more comfortable disclosing

such a highly stigmatised experience in a context in which they could explain what happened rather than simply answering a yes/no question. These findings support existing literature showing that the method used to collect sensitive data may influence self-reports (Kelly et al., 2013). More broadly, they underscore the complexity around reporting experiences of sexual violence (Hamby, 2014) and the need for further research into this area among both male and female youth living with HIV.

Study limitations should be noted. Youth were attending HIV clinics in urban settings, and most self-described themselves as perinatally infected. This may limit the transferability of findings to those not in care, who live in rural settings, or who have acquired HIV through other means. However, purposive stratified sampling allowed us to include a variety of experiences with violence and viral load, strengthening the transferability of our findings to youth with similar characteristics in Zambia and regionally.

Conclusions

This study offers novel findings on experiences of violence victimisation – particularly verbal and emotional forms of abuse – and their deleterious impacts on HIV outcomes among adolescents and young adults living with HIV in Ndola, Zambia. This is an area which has yet to be fully explored in qualitative studies and is only beginning to gain attention in quantitative studies in the region (Cluver et al., 2018; Kidman & Violari, 2018; Kim et al., 2017). Our findings should inform policy and practice in HIV clinics, and home- and school-based interventions. Future research should expand on our findings to strengthen our understanding of how the relationship between violence and HIV outcomes varies according to the type of violence among both male and female youth living with HIV in other settings in Zambia and throughout sub-Saharan Africa. Such research is critical to improving virologic outcomes, reducing onward transmission of HIV, and meeting the needs of this at-risk but resilient population.

Acknowledgements

We would like to thank the youth participants for their openness in sharing their stories with us, the Project YES! team in Zambia for their support with data collection, and the Project YES! healthcare providers for their partnership on the safety protocol. Special thanks to Kayayi Chibesa, Able Hang'andu, and Gift Musenga for conducting the youth interviews and for providing valuable support on the interpretation of findings.

Disclosure statement

No potential conflict of interest was reported by the author(s).

Funding

Funding was provided by Project SOAR, a six-year cooperative agreement funded by the U.S. President's Emergency Plan for AIDS Relief (PEPFAR) and the U.S. Agency for International Development (USAID) [grant number AID-OAA-A-14-00060] and the Johns Hopkins Center for AIDS Research [grant number P30AI094189]. KGM was supported by the National Institute of Mental Health of the National Institutes of Health [grant number F31MH116821-01A1].

Disclaimer

The content is solely the responsibility of the authors and does not necessarily represent the official views of PEPFAR, USAID, the National Institutes of Health, or the U.S. Government. The funders had no role in the study design, data collection and analysis, decision to publish, or preparation of the manuscript.

ORCID

Katherine G. Merrill http://orcid.org/0000-0001-5308-4154
Jacquelyn C. Campbell http://orcid.org/0000-0003-3689-4547
Caitlin E. Kennedy http://orcid.org/0000-0001-6820-063X

References

Abramsky, T., Devries, K., Kiss, L., Nakuti, J., Kyegombe, N., Starmann, E., … Watts, C. (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*(1), 122. https://doi.org/10.1186/s12916-014-0122-5

Anderson, J. A., Campbell, J., Glass, N., Decker, M., Perrin, N., & Farley, J. (2018). Impact of intimate partner violence on clinic attendance, viral suppression and CD4 cell count of women living with HIV in an urban clinic setting. *AIDS Care*, *30*(4), 399–408. https://doi.org/10.1080/09540121.2018.1428725

Anti-Gender-Based Violence Act. (2011). https://www.zambialii.org/zm/legislation/act/2011/1/Anti-Gender-Based_Violence_Act%5B1%5D.pdf

Ashaba, S., Cooper-Vince, C., Maling, S., Krukundo, G., Akena, D., & Tsai, A. (2018). Internalized HIV stigma, bullying, major depressive disorder, and high-risk suicidality among HIV-positive adolescents in rural Uganda. *Global Mental Health*, *5*(e22). https://doi.org/10.1017/gmh.2018.15

Auld, A. F., Agolory, S. G., Shiraishi, R. W., Wabwire-Mangen, F., Kwesigabo, G., Mulenga, M., Hachizovu, S., Asadu, E., Tuho, M. Z., Ettiegne-Traore, V., Mbofana, F., Okello, V., Azih, C., Denison, J. A., Tsui, S., Koole, O., Kamiru, H., Nuwagaba-Biribonwoha, H., Alfredo, C., … Ellerbrock, T. V. (2014). Antiretroviral therapy enrollment characteristics and outcomes Among HIV-infected adolescents and young adults compared with older adults — seven African countries, 2004–2013. *Centers for Disease Control and Prevention: Morbidity and Mortality Weekly Report*, *63*(47), 1097–1118.

Beres, L. K., Merrill, K. G., McGready, J., Denison, J. A., Schwartz, S., Sikazwe, I., & Decker, M. R. (2020). Intimate partner violence polyvictimisation and HIV among coupled women in Zambia: Analysis of a population-based survey. *Global Public Health*, *15*(4), 558–570. https://doi.org/10.1080/17441692.2019.1686532

Bhana, A., Mellens, C., Petersen, I., Alicea, S., Myeza, N., Holst, H., & McKay, M. (2014). The VUKA family program: Piloting a family-based psychosocial intervention to promote health and mental health among HIV infected early adolescents in South Africa. *AIDS Care*, *26*(1), 1–11. https://doi.org/10.1080/09540121.2013.806770

Bond, V., Chilikwela, L., Clay, S., Kafuma, T., Nyblade, L., & Bettega, N. (2003). *Kanayaka "The light is on": Understanding HIV and AIDS related Stigma in Urban and Rural Zambia*. Lusaka, Zambia.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*(2), 77–101. https://doi.org/10.1191/1478088706qp063oa

Casale, M., Boyes, M., Pantelic, M., Toska, E., & Cluver, L. (2019). Suicidal thoughts and behaviour among South African adolescents living with HIV: Can social support buffer the impact of stigma? *Journal of Affective Disorders*, *245*, 82–90. https://doi.org/10.1016/j.jad.2018.10.102

Clinicaltrials.gov. (2019, October). Project YES! Youth Engaging for Success (Project YES!), ClinicalTrials.gov Identifier: NCT04115813. https://clinicaltrials.gov/ct2/show/NCT04115813

Cluver, L., Meinck, F., Toska, E., Orkin, F., Hodes, R., & Sherr, L. (2018). Multitype violence exposure and adolescent antiretroviral nonadherence in South Africa. *Aids (London, England)*, *32*(8), 975–983. https://doi.org/10.1097/QAD.0000000000001795

Conroy, A., Leddy, A., Johnson, M., Ngubane, T., Van Rooyen, H., & Darbes, L. (2017). 'I told her this is your life': Relationship dynamics, partner support and adherence to antiretroviral therapy among South African couples. *Culture, Health & Sexuality*, *19*(11), 1239–1253. https://doi.org/10.1080/13691058.2017.1309460

Denison, J., Banda, H., Dennis, A., Packer, C., Namakau, N., Stalter, R., & McGCarraher, D. (2015a). "The sky is the limit": Adhering to antiretroviral therapy and HIV self-management from the perspectives of adolescents living with HIV and their adult caregivers. *Journal of the International AIDS Society*, *18*(19358), 1–6. https://doi.org/10.7448/IAS.18.1.19358

Denison, J., Burke, V., Miti, S., Nonyane, B., Frimpong, C., Merrill, K., & Mwansa, J. (2020). Project YES! youth engaging for success: A randomized controlled trial assessing the impact of a clinic-based peer mentoring program on viral suppression, adherence and internalized stigma among HIV-positive youth (15-24 years) in Ndola, Zambia. *PLos One*, *15*(4). https://doi.org/10.1371/journal.pone.0232488

Denison, J., Koole, O., Tsui, S., Menten, J., Torpey, K., Praag, E., … Bangsberg, D. (2015b). Incomplete adherence among treatment-experienced adults on antiretroviral therapy in Tanzania, Uganda and Zambia. *AIDS*, *29*(3), 361–371. https://doi.org/10.1097/QAD.0000000000000543

Denison, J., Packer, C., Stalter, R., Banda, H., Mercer, S., Nyambe, N., … McCarraher, D. (2018). Factors related to incomplete adherence to antiretroviral therapy among adolescents attending three HIV clinics in the Copperbelt,

Zambia. *AIDS & Behavior*, *22*(3), 996–1005. https://doi.org/10.1007/s10461-017-1944-x doi:10.1007/s10461-017-1944-x

Devries, K. M., Knight, L., Miriembe, A., Child, J. C., Nakuti, J., Jones, R., … Naker, D. (2015). The good school Toolkit for reducing physical violence from school staff to primary school students: A cluster-randomised controlled trial in Uganda. *Lancet Global Health*, *3*(7), E378–E386. https://doi.org/10.1016/S2214-109X(15)00060-1

Dow, D., Turner, E., Shayo, A., Mmbaga, B., Cunningham, C., & O'Donnell, K. (2016). Evaluating mental health difficulties and associated outcomes among HIV-positive adolescents in Tanzania. *AIDS Care*, *28*(7), 825–833. https://doi.org/10.1080/09540121.2016.1139043

Espino, S., Fletcher, J., Gonzalez, M., Precht, A., Xavier, J., & Matoff-Stepp, S. (2015). Violence screening and viral load suppression among HIV-positive women of color. *AIDS Patient Care & Stds*, *29*(1), S36–S41. https://doi.org/10.1089/apc.2014.0275

EU. (2019). *European Union-Zambia Development Partnership: Factsheet 2018/19*. https://eeas.euoropa.eu/sites/eeas/files/factsheet_2019_final.pdf

Goodman, M., Raimer-Goodman, C. C., Grouls, A., Gitari, A., Gitari, S., & Keiser, P. (2017). Testing and testing positive: Childhood adversities and later life HIV status among Kenyan women and their partners. *Journal of Public Health*, *39*(4), 720–729. https://doi.org/10.1093/pubmed/fdw135

Hamby, S. (2014). Intimate partner and sexual violence research: Scientific progress, scientific challenges, and gender. *Trauma, Violence & Abuse*, *15*(3), 149–158. https://doi.org/10.1177/1524838014520723

Hampanda, K. (2016). Intimate partner violence and HIV-positive women's non-adherence to antiretroviral medication for the purpose of prevention of motherto- child transmission in Lusaka, Zambia. *Social Science & Medicine*, *153*, 123–130. https://doi.org/10.1016/j.socscimed.2016.02.011

Hatcher, A., Smout, E., Turan, J., Christofides, N., & Stockl, H. (2015). Intimate partner violence and engagement in HIV care and treatment among women: A systematic review and meta-analysis. *Aids (london, England)*, *29*(16), 2183–2194. https://doi.org/10.1097/QAD.0000000000000842

Heise, L. (2011). *What works to prevent partner violence? An evidence overview*. https://www.oecd.org/derec/49872444.pdf

Jewkes, R. (2010). Emotional abuse: A neglected dimension of partner violence. *Lancet*, *376*(9744), 851–852. https://doi.org/10.1016/S0140-6736(10)61079-3

Jina, R., Jewkes, R., Hoffman, S. N., Dunkle, K., Nduna, M., & Shai, N. (2012). Adverse mental Health outcomes associated With emotional abuse in young rural South African women: A Cross-sectional study. *Journal of Interpersonal Violence*, *27*(5), 862–880. https://doi.org/10.1177/0886260511423247

Kelly, C., Soler-Hampejsek, E., Mensch, B., & Hewett, P. (2013). Social desirability bias in sexual Behavior reporting: Evidence from an interview mode experiment in rural Malawi. *International Perspectives on Sexual and Reproductive Health*, *39*(1), 14–21. https://doi.org/10.1363/3901413

Kidman, R., & Violari, A. (2018). Dating violence against HIV-infected youth in South Africa: Associations with sexual risk behavior, medication adherence, and mental health. *JAIDS Journal of Acquired Immune Deficiency Syndromes*, *77*(1), 64–71. https://doi.org/10.1097/QAI.0000000000001569

Kim, M., Mazenga, A., Yu, X., Ahmed, S., Paul, M., Kazembe, P., & Abrams, E. (2017). High self-reported non-adherence to antiretroviral therapy amongst adolescents living with HIV in Malawi: Barriers and associated factors. *Journal of the International AIDS Society*, *20*(21427). https://doi.org/10.7448/IAS.20.1.21437

Kim, M., Mazenga, A., Yu, X., Devandra, A., Nguyen, C., Ahmed, S., & Sharp, C. (2015). Factors assocaited with depression among adolescents living with HIV in Malawi. *BMC Psychiatry*, *15*(264), 2–12. https://doi.org/10.1186/s12888-015-0649-9

Kosia, A., Kakoko, D., Semakafu, A., Nyamhanga, T., & Frumence, G. (2016). Intimate partner violence and challenges facing women living with HIV/AIDS in accessing antiretroviral treatment at Singida Regional Hospital, central Tanzania. *Global Health Action*, *9*(32307). https://doi.org/10.3402/gha.v9.32307

Li, R., Jaspan, H., O'Brien, V., Rabie, H., Cotton, M., & Nattrass, N. (2010). Positive futures: A qualitative study on the needs of adolescents on antiretroviral therapy in South Africa. *AIDS Care*, *22*(6), 751–758. https://doi.org/10.1080/09540120903431363

Meinck, F., Cluver, L., Boyes, M., & Loening-Voysey, H. (2016). Physical, emotional and sexual adolescent abuse victimisation in South Africa: Prevalence, incidence, perpetrators and locations. *Journal of Epidemiology & Community Health*, *70*(9), 910–916. https://doi.org/10.1136/jech-2015-205860

Merrill, K., Burke, V., Abrams, E., Mwansa, J., Miti, S., Frimpong, C., & Denison, J. (2019, December 2–7). *Implementation of a safety protocol within a randomized controlled trial to support HIV-positive adolescent and young adult victims of violence in Ndola, Zambia*. Paper presented at the International Conference on AIDS and STIs in Africa, Kigali, Rwanda.

Merrill, K., Campbell, J., Decker, M., McGready, J., Burke, V., Mwansa, J., … Denison, J. (2020a). Past-year violence victimization is associated with viral load failure among youth living with HIV in Zambia. *AIDS & Behavior*, https://doi.org/10.1007/s10461-020-02958-3

Merrill, K., Campbell, J., Decker, M., McGready, J., Burke, V., Mwansa, J., … Denison, J. (2020b). Prevalence of physical and sexual violence and psychological abuse among adolescents and young adults living with HIV in Zambia. *PLos One*, *15*(6), https://doi.org/10.1371/journal.pone.0235203

Merrill, K., Merrill, J., Hershow, R., Barkley, C., Rakosa, B., DeCelles, J., & Harrison, A. (2018). Linking at-risk South African girls to sexual violence and reproductive health services: A mixed-methods assessment of a soccer-based HIV prevention program and pilot SMS campaign. *Evaluation and Program Planning*, *70*, 12–24. https://doi.org/10.1016/j.evalprogplan.2018.04.010

Midtbo, V., Shirima, V., Skovdal, M., & Daniel, M. (2012). How disclosure and antiretroviral therapy help HIV infected adolescents in sub-Saharan Africa cope with stigma. *African Journal of AIDS Research*, *11*(3), 261–271. https://doi.org/10.2989/16085906.2012.734987

MOH. (2018). *Zambia consolidated guidelines for treatment and prevention of HIV infection*. http://www.hivst.org/files1/Final-Zambia-Consolidated-Guidelines_2018-Print.pdf

Mutwa, P., Van Nuil, J., Asiimwe-Kateera, B., Kestelyn, E., Vyankandondera, J., Pool, R., … Boer, K. (2013). Living situation affects adherence to combination antiretroviral therapy in HIV-infected adolescents in Rwanda: A qualitative study. *PLos One*, *8*(4). https://doi.org/10.1371/journal.pone.0060073

The National Health Research Act, 2013. (2013). *National Assembly of Zambia*. http://www.parliament.gov.zm/sites/default/files/documents/acts/Health%20%20Research%20%20Act%202013.pdf

Pantelic, M., Boyes, M., Cluver, L., & Meinck, F. (2017). HIV, violence, blame and shame: Pathways of risk to internalized HIV stigma among South African adolescents living with HIV. *Journal of the International AIDS Society*, *20*(21771). https://doi.org/10.7448/IAS.20.1.21771

PHIA. (2016). *Zambia population-based HIV impact assessment (ZAMPHIA), 2015-16. Summary sheet: preliminary findings*. https://phia.icap.columbia.edu/wp-content/uploads/2017/11/FINAL-ZAMPHIA-First-Report_11.30.17_CK.pdf

Raissi, S., Krentz, H., Siemieniuk, R., & Gill, M. (2015). Implementing an intimate partner violence (IPV) screening protocol in HIV care. *AIDS Patient Care & Stds*, *29*(3), 133–141. https://doi.org/10.1089/apc.2014.0306

Ramaiya, M., Sullivan, K., O'Donnell, K., Cunningham, C., Shayo, A., Mmbaga, B., & Dow, D. (2016). A qualitative exploration of the mental health and psychosocial contexts of HIV-positive adolescents in Tanzania. *PLos One*, *11*(11). https://doi.org/10.1371/journal.pone.0165936

Saldana, J. M. (2016). *The coding manual for qualitative researchers* (3rd ed.). Sage Publications Ltd.

Sanders, R. (2013). Adolescent psychosocial, social, and cognitive development. *Pediatrics in Review*, *34*(8), 354–359. https://doi.org/10.1542/pir.34-8-354

Strasser, S., & Gibbons, S. (2014). The development of HIV-related mental health and psychosocial services for children and adolescents in Zambia: The case for learning by doing. *Children and Youth Services Review*, *45*(150-157). https://doi.org/10.1016/j.childyouth.2014.03.032

Tobin, G., & Begley, C. (2004). Methodological rigour within a qualitative framework. *Journal of Advanced Nursing*, *48*(4), 388–396. https://doi.org/10.1111/j.1365-2648.2004.03207.x

UNICEF. (2020). *Turning the tide against AIDS will require more concentrated focus on adolescents and young people*. https://data.unicef.org/topic/hivaids/adolescents-young-people/#.

UNICEF/UNAIDS. (2018). *All In to End Adolescent AIDS in Eastern and Southern Africa: Catalysing the HIV Response for Adolescents*. https://www.unicef.org/esa/media/126/file/ALL-IN-in-Eastern-and-Southern-Africa-2018.pdf

WHO. (2001). Putting women first: Ethical and safety recommendations for research on domestic violence against women. https://www.who.int/gender/violence/womenfirtseng.pdf

WHO. (2005). WHO multi-country study on women's health and domestic violence against women: summary report of initial results on prevalence, health outcomes and women's responses. https://www.who.int/reproductivehealth/publications/violence/24159358X/en/

WHO. (2013). HIV and adolescents: Guidance for HIV testing and counselling and care for adolescents living with HIV. https://www.who.int/hiv/pub/guidelines/adolescents/en/

WHO. (2016). Consolidated guidelines on the use of antiretroviral drugs for treating and preventing HIV infection: Recommendations for a public health approach. http://apps.who.int/iris/bitstream/handle/10665/208825/9789241549684_eng.pdf?sequence=1

Willis, N., Mavhu, W., Wogrin, C., Mutsinze, A., & Kagee, A. (2018). Understanding the experience and manifestation of depression in adolescents living with HIV in Harare, Zimbabwe. *PLos One*, *13*(1). https://doi.org/10.1371/journal.pone.0190423

Woollett, N., Cluver, L., Bandeira, M., & Brahmbhatt, H. (2017). Identifying risks for mental health problems in HIV positive adolescents accessing HIV treatment in Johannesburg. *Journal of Child & Adolescent Mental Health*, *29*(1), 11–26. https://doi.org/10.2989/17280583.2017.1283320

Yoshihama, M., Horrocks, J., & Kamano, S. (2008). The role of emotional abuse in intimate partner violence and Health Among women in Yokohama, Japan. *American Journal of Public Health*, *99*(4), 647–653. https://doi.org/10.2105/AJPH.2007.118976

Zolotor, A. J., Runyan, D. K., Dunne, M. P., Jain, D., Péturs, H. R., Ramirez, C., … Isaeva, O. (2009). ISPCAN child abuse screening tool children's version (ICAST-C): Instrument development and multi-national pilot testing. *Child Abuse & Neglect*, *33*(11), 833–841. https://doi.org/10.1016/j.chiabu.2009.09.004