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Intervention Program Needs for Older Adults Living with HIV Who Are Childhood Sexual Abuse Survivors

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Abstract

Objectives: Childhood sexual abuse (CSA) prevalence estimates range from 8–11% among older adults and may range from 16 to 22% among older adults living with HIV (OALH). CSA experiences can still impact the quality of life of older adults. To the best of our knowledge, however, there are no CSA-focused interventions tailored for OALH. Using a qualitative approach, this study characterized the desired components of a trauma-focused intervention for OALH who are CSA survivors.

Methods: Twenty-four (24) adults ≥ 50 years of age who were living with HIV and had experienced CSA were recruited from a large HIV immunology center in South Carolina. Participants completed in-depth, qualitative, semi-structured interviews. We iteratively examined verbatim transcripts using thematic analysis.

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Results: Three main themes emerged: program format and modality, program content, and program coordinator. Most participants expressed a desire for a trauma-focused intervention program in which the CSA experience was addressed and they could talk to someone either individually, as a group, and/or both.

Conclusion: A trauma-focused intervention addressing CSA may be helpful for OALH who are CSA survivors. Future research should focus on designing and implementing age-appropriate interventions addressing the CSA experience, increasing resilience, and developing adaptive coping skills.

Introduction

At present, older adults make up more than half (51%) of people living with HIV in the US (Centers for Disease Control and Prevention, 2020). People with HIV live longer because of the availability of more efficacious antiretroviral therapies and improved clinical care. Therefore, HIV is a national public health crisis and a global one too; approximately 6 million people 50 years of age and older are living with HIV worldwide (Autenrieth et al., 2018). Older adults living with HIV (OALH) may be susceptible to a wide range of adverse outcomes and may experience a higher prevalence of trauma compared to those without HIV as traumatic or stressful experiences are prevalent among people living with HIV (PLWH) and may range from major illness or injury to sexual abuse (Reif et al., 2011).

Childhood sexual abuse (CSA) is defined as engaging a child in sexual acts such as fondling, raping, or exposing a child to other sexual activities (Putnam, 2003). CSA is a global and national public health issue, with the World Health Organization estimating that 73 million boys and 150 million girls were subjected to sexual violence (World Health Organization, 2014). Approximately 3 to 17% of males and 8 to 31% of females under 18 reported sexual abuse in a global meta-analysis (Barth, Bermetz, Heim, Trelle, & Tonia, 2013). In the US, estimates show that 11% of girls and 2% of boys report sexual abuse annually (Finkelhor, Shattuck, Turner, & Hamby, 2014), while 25% of girls and 8% of boys experience CSA at some point during their childhood (Prevention, 2021).

Despite CSA occurring during childhood, its impacts may last a lifetime (Draper et al., 2008; Sachs-Ericsson, Medley, Kendall-Tackett, & Taylor, 2011). CSA has been linked to HIV/STI diagnosis via mental health disorders and behavioral outcomes (Brown et al., 2017; Latack et al., 2015) and may be a potential barrier to antiretroviral therapy (ART) adherence (Willie, Overstreet, Sullivan, Sikkema, & Hansen, 2016). Indeed, CSA is two to four times as high among populations living with HIV compared to populations without HIV (Phillips et al., 2014; Sikkema et al., 2008). CSA prevalence estimates range from 8 to 11% in older adults living without HIV (Choi, DiNitto, Marti, & Choi, 2017; Chou, 2012) and, therefore, may range from 16 to 22% among older adults living with HIV (OALH). Older CSA survivors are more likely to have poorer physical and mental health, such as medical illnesses, poor physical functioning, pain (Talbot et al., 2009), and internalizing disorders (Sachs-Ericsson et al., 2010). Indeed, interventions that build coping skills and personal capacity, and improve social support may improve the health-related quality of life among OALH (Fang et al., 2015) who are CSA survivors.

The link between CSA and living with HIV is complex. One study showed that among 9,136 children with HIV/AIDS, 26 experienced CSA with potential or confirmed exposure to HIV (Lindegren et al., 1998), depicting a rate of 285 per 100,000 population. However, CSA may also be associated with maladaptive coping such as condomless anal sexual intercourse, serodiscordant condomless anal sexual intercourse (Mimiaga et al., 2009), substance abuse (Brown et al., 2017) or other HIV risk behaviors such as multiple sexual partners, substance use with sexual activity, or sex work (Tomori et al., 2016), which may put individuals at risk for HIV via behavioral mechanisms. Indeed, CSA has shown a direct link to contracting HIV (Mimiaga et al., 2009).

There is a growing base of scientific literature on HIV-related interventions for older adults. For example, a systematic review found that interventions geared towards older adults targeted HIV-negative older adults as well as OALH (Negin, Rozea, & Martiniuk, 2014). Those geared towards HIV-negative older adults focused primarily on improving knowledge of HIV (Altschuler, Katz, & Tynan, 2004; Orel, Stelle, Watson, & Bunner, 2010; Rose, 1996; Small, 2009). Interventions geared towards OALH focused on decreasing HIV risk behaviors (Illa et al., 2010; Lovejoy et al., 2011), improving referral for care (Ruiz & Kamerman, 2010), coping (Heckman et al., 2006; Heckman et al., 2001; Heckman et al., 2011), and strength and functional capacity (Souza et al., 2008; Souza, Jacob-Filho, Santarém, Zomignan, & Burattini, 2011). Another systematic review focused on psychosocial interventions for OALH (Bhochhibhoya et al., 2020). Most studies focused on reducing depression or depressive symptoms (Brennan-Ing, 2017; Frain & Chen, 2018; Heckman et al., 2006; Heckman et al., 2013; Heckman et al., 2011; Ownby & Acevedo, 2016; Shah et al., 2016; Veeravelli et al., 2016). Interventions were also delivered to improve cognitive functioning (Frain & Chen, 2018; Ownby & Acevedo, 2016), health-related quality of life (Heckman et al., 2001; Shah et al., 2016), and perceived social support (Heckman et al., 2001).

Trauma-informed interventions have also been crucial for people living with HIV. Two of these include: The Living in the Face of Trauma (LIFT) and the Improving AIDS Care after Trauma (ImpACT) interventions. LIFT is an evidence-based intervention promoted by the Centers for Disease Control and Prevention (CDC) for adults living with HIV with CSA histories (Centers for Disease Control and Prevention, 2015). LIFT uses a group approach and consists of 15 90-minute sessions with same-gender groups. LIFT has demonstrated efficacy in reducing traumatic stress and avoidant coping in adults living with HIV with CSA histories (Sikkema et al., 2013). ImpACT is contextualized for women in South Africa with sexual abuse histories. ImpACT reduced avoidance and post-traumatic stress disorder (PTSD) arousal symptoms and improved antiretroviral therapy adherence at three months follow-up. However, there was no difference in adherence to ART and care engagement at six months follow-up (Sikkema et al., 2018). These interventions, however, did not focus on OALH.

One theoretical framework that may help understand trauma-informed interventions is the transactional model of stress and coping (Lazarus & Folkman, 1984). When a person undergoes a stressor (such as CSA), the first stage is primary appraisal (how an individual perceives the stressor). The next step is the secondary appraisal, where the person evaluates

their abilities and resources to handle the stressor. Coping efforts then regulate the issue. Problem management is usually used when strategies are aimed at changing a stressful situation, i.e., the person has control over a situation. In emotional regulation, strategies tend to focus on changing one's thoughts or feelings towards the stressor as there is little control over the situation. Meaning-based coping represents processes that may induce positive thoughts and feelings, which may help to sustain coping.

Study Rationale and Aims

To date, trauma-informed interventions have not focused on OALH who experienced CSA. That said, OALH is a unique and potentially highly vulnerable population in that they age with HIV and may have unresolved childhood sexual trauma combined with challenges of aging with HIV. Unresolved CSA may manifest as depression and maladaptive coping among older adults (Gagnon & Hersen, 2000). In addition, there is a lack of studies examining the health needs of OALH who have experienced family abuse, including CSA. Therefore, this qualitative study sought to identify intervention program needs (content, format, and delivery) for OALH who experienced CSA. Study findings may inform intervention programs for OALH with CSA histories and inform public policies by determining at-risk populations in need of trauma-informed programs. The findings are also relevant socially and academically due to the focus on populations aging with HIV and the lack of studies focused on trauma, especially childhood sexual trauma, among this population.

Methods

Setting and Participants

A purposive sample of older CSA survivors living with HIV presenting at an HIV clinic in South Carolina was recruited through fliers and clinic staff approaching potential participants. Study inclusion criteria were (1) living with HIV, (2) ≥ 50 years of age, (3) self-reported CSA experiences before age 18, and (4) lack of severe cognitive impairment as defined by a six-item cognitive impairment test (6CIT) (Brooke & Bullock, 1999). A total of 55 individuals expressed interest in the study and were screened for eligibility. Thirty (30) potential participants were ineligible due to no CSA experiences and/or being younger than 50 years of age (54.5%). One participant did not show up for the data collection appointment. The final sample in this study consisted of 24 participants ages 50 to 67 years with a mean age of 58.5 years. Participants were 12 males (50%), one transgender female (4%) and 11 (46%) females. Sixteen (16; 67%) participants identified as Black, six (25%) White, one (4%) as Native Hawaiian/Pacific Islander, and one (4%) as American Indian/Alaskan Native. Only one participant (4%) identified as Latinx/Hispanic.

Interview Questions

Interview questions were created by a multidisciplinary team with expertise in public health, sociology, HIV, adverse childhood experiences, and epidemiology. Question topics included experiences among older adults living with HIV, HIV interventions, childhood sexual trauma, general/overall health, aging with HIV, coping, social support, barriers and facilitators of ART adherence, CSA experiences and their impacts on aging with HIV, and

their views on “U=U” (Undetectable=Untransmissible). A semi-structured interview guide was used to administer the questions. Interviewers used probe questions such as “tell me more about that” and repeating the last few words of a participant’s statement to encourage participants to offer more detail or description. Examples of questions asking participants’ perspectives about an intervention program were: Overall, do you think you have a hard time coping with your experience with childhood sexual abuse? If yes: Do you think a program that improves coping with this experience would be helpful to you? If no: Do you think a program that enhances coping with this experience would be helpful for others who may have had a similar experience? What do you think are important issues to address in this program? Probe: Why do you think these issues are important?

Data Collection

Clinic staff aided in participant recruitment by informing potential participants of the study. If a participant expressed interest, an appointment was scheduled for the informed consent process, eligibility screening, and the conduct of the interview. Interviews were conducted in a private setting, face-to-face, in English, and audio-recorded. Interview times varied, ranging from 16–62 minutes with an average time of 31 minutes. Interviews were conducted by team members (TJ and AK) who were trained in qualitative interviewing techniques. Each participant was assigned a unique ID to assure confidentiality. Participants were compensated with a $20 gift card. Data were collected pre-COVID (i.e., from October 2019 to February 2020).

Data Analysis

Interviews were transcribed using otter.ai (Los Altos, CA). Data were analyzed using the thematic analysis approach (Saldana, 2015). To assure methodological rigor, data analysis commenced by reviewing the transcripts to ensure they accurately represented the participants’ statements. Two team members independently crosschecked the accuracy of the transcripts. Then four team members independently coded the interviews using line by line coding. The research team met weekly during the coding process to reconcile any differences between identified codes through discussing initial thoughts, assumptions, and understandings of key concepts. The four authors independently collapsed the codes into overarching subthemes and themes; and met to reconcile the individually identified subthemes and themes, discuss the relationships between themes, and how well the themes reflect the participant’s views of intervention program needs. The reporting of this study was guided by the Consolidated Criteria for Reporting Qualitative Research (Tong et al., 2007). The University of South Carolina Institutional Review Board approved the current study.

Results

Three themes emerged from the data: (1) program format and modality, (2) program content, and (3) program coordinator, each of which is described below. With respect to program format and modality, subthemes included: preference for one-on-one intervention only; preference for group intervention only; preference for both one-on-one and group interventions either sequentially or simultaneously; and preference for format being dependent on the individual’s choice. Subthemes for program content included:

tackling CSA experience, psychologically based intervention; addressing intrapersonal and interpersonal factors; and opportunities to develop adaptive coping skills.

Program Format and Modality

As interviews progressed, participants were asked for their preference for a one-on-one or group intervention to address CSA. Six participants stated that they preferred a one-on-one intervention only, while two preferred group interventions only. Four participants preferred both types of intervention, with the one-on-one intervention occurring before the group intervention, while two suggested they occurred simultaneously. Two participants mentioned that the preference for either one-on-one or the group depended on an individual's preference.

Preference for one-on-one intervention only.—Some participants felt that having a one-on-one intervention would help with confidentiality, trust and the overall relationship with the interventionist.

> "That means have a sponsor, you know, things like that, because, you know, you don't feel comfortable telling a group of people, you know what's going on, which is that you can have …one somebody that you can talk to…"
>
> (50 year old Black Female)

> I think one-on-one, you get a better…depending on your chemistry with that person, you get a better mental status because you're trusting them and you're relating to them really important information and hopefully, their comments back to you [are] helping you…But the key point is you've got to have that chemistry…you know, trust is everything.
>
> (60 year old American Indian/Alaskan Native Male)

Preference for group intervention only.—Some participants felt that having a group intervention would provide feedback from more than one person and could help others to remember that they are not alone in their experiences.

> "It is my opinion…collaboratively in groups… young people or others, how they do… what the awareness may be. Yeah, I think it is better in group. But it's okay for individual character. Some people can't talk in front of others, but my opinion is group.
>
> (53 year-old Black female)

> "I would like a group program, you can get so much more feedback and other suggestions, and people talking. There's more there to listen to and you can relate to other people maybe."
>
> (61 year-old White male)

Preference for both one-on-one and group interventions.—Some participants preferred to have one-on-one and group interventions either sequentially or simultaneously. They highlighted the advantages of both formats where you could work on challenges with

the interventionist while having the opportunity to obtain feedback from others who have been through similar experiences.

> "[I] would like to try one-on-one first and then move on to group."
>
> (53 year old Black male)

> "I guess it would depend on the people in the group, where they're at in their journey with it [dealing with CSA]. Does that make sense? It's like I mean, it's been so long for me, a lot of it's kind of still buried. I don't know if being in a group… It would probably [be] better starting with one-on-one and then moving to a group setting."
>
> (54 year-old White female)

> One-on-one and group. Once you do the one-on-one, I feel that once you can have a one-on-one counselor, talk to him visual, okay, and then they get them to the point where they can speak in front of other people. Okay. Yeah. Okay. I think that would benefit everybody. Yeah. So because he can pass his experience on to somebody else and that makes [it easier to talk about] a past experience. Okay. And that's when you get the groups"
>
> (57 year-old Native Hawaiian/Pacific Islander male)

> "You can do like if they have group once a week, make sure you go to group but also you can have your private doctor too. In the sense of like I said some things you don't want to say out in the open to people, with other people there, you just want a one-on-one person with your own therapist, your own counselor, your psychiatrist, you know, psychologists whatever. Then there's something that you open up in a group setting where you feel, some most likely people feel like they isolated, like they…is the only one. But then when you come in a group setting and you hear other people's stories, you realize, well, I'm not the only one. I'm not the only one that feel this way. I'm not the only one that went through this. So, both settings will be helpful for hurting people.
>
> (50 year-old Black female)

> "Both [one-on-one and group], sometimes people want to say stuff but don't want to say it in front of people. So, a one-on-one that's where that comes in. Because some people are embarrassed. Some people are ashamed, some people are scared of what, of people other people judging them. So that's where a one-on-one come in. And then where a group come in is to let the person know that they're not the only one. They're not the only one out here suffering. They're not the only one that went through the experience 'cause there's other people that go through [that experience]."
>
> (50 year-old Black female)

Preference of either one-on-one or group is dependent on the person's preference.—Some participants stated that the format of the intervention was dependent

on the individual as some individuals may be comfortable in group environments while others may prefer one-on-one sessions.

> "I can't say [which one] because this is dependent on that person."
>
> (50 year-old Black female)

> "I think you may have to judge that by the individual because some people may be comfortable talking in a group environment, and some people may not. So, you may have to judge by each person. But this is like with a support group like I used to facilitate an HIV support group. So sometimes people want to talk, sometimes they don't. So, it depends on their level of comfort."
>
> (50 year-old Black male)

Program Content—There were many suggestions on program content with four subthemes emerging: (1) Addressing the CSA experience; (2) Psychologically-based interventions; (3) Addressing intrapersonal and interpersonal factors; and (4) Opportunities to develop adaptive coping skills.

Tackling CSA experience—There was some evidence of self-blame for the CSA experience. Majority of participants suggested that the intervention should also address potential challenges for older adults with a CSA history, and how it affects them even as they get older.

> "The programs on depression, more talk about what went on with you, more talk about getting them demons out of you, you know something like that
>
> (52 year-old Black female)

> "Knowing the part that you play and really understanding your value and where you want, where you want to go. Don't just let the event be the only thing the [total] of who you are.
>
> (54 year-old Black male)

> "What we are targeting I guess is the whole subject matter is about sexual abuse, and how it's affected your life. So I have nothing else to say. I mean, the issues that we're talking about is something that can be targeted in a group, is the sexual abuse, how it affects them as they get older, is it still a problem for them"
>
> (61 year-old White male)

> "Why could it have happened? … Learning not to blame yourself.
>
> (51 year-old White female)

Psychologically-based intervention—of participants also believed that addressing one's mental health should be an integral component of the interventions where a therapist was available.

> "So I guess well the mental health, the mental health part mostly 'cause umm that's where everything started what you, what you are thinking, that's where everything start at."

(53 year old Black male)

"Make sure they get…therapy…they talk to someone and let them know that it wasn't their fault"

(50-year-old Black male)

Addressing intrapersonal and interpersonal factors—Self-love and staying positive were also important factors for the participants. In addition, a few participants believed that these interventions should address parenting skills to prevent opportunities for exploitation of children.

"Other issues that I think that are important, just self-loving…loving yourself, staying positive. Working through your own issues and traumatic experiments is, day by day knowing that you know, nothing's perfect, no one's perfect and then remembering that you know, to love yourself.

(52 year-old Black male)

"Better parenting, be able to know what your kids are doing at a young age and raising them certain way. Keep them in positive areas and stuff like that."

(57 year-old Native Hawaiian/Pacific Islander male)

Opportunities to develop adaptive coping skills.—The majority of participants felt that the intervention addressing CSA should also be an opportunity to develop coping skills to improve their overall quality of life.

"I think one of the most important things is expressing how you feel, expressing how these traumatic experiences affect your life. And what you can do or certain coping skills that you can have to improve your life so that you can get past or help you get past them.

(52 year-old Black male)

"There needs to be a program [to] develop a coping mechanism."

(51 year-old White female)

"I will like to say coping skills, make sure people have good and strong coping skills to deal [with what they have been through]."

(50 year-old Black male)

Program Coordinator

Many participants felt that counselors and/or mentors should be delivering the intervention. This opportunity would allow for help with depression and traumatic stress symptoms.

"Do they need to see a counselor? Open up opportunities for people to see a counselor."

(61 year-old White male)

"Well, when I'm depressed, I'm having flashbacks. I think it would be beneficial for me to be able to talk someone because even at 51 you do feel scared and just…as hard to describe, feel violated…Yeah, I think like a mentor. Yeah, I think that will be really good."

(51 year old White transgender male-to-female)

"Some people do need help, need somebody they can talk to, to help get pass stuff."

(53 year-old Black male)

Discussion

The primary findings from this study include: (1) the preference for one-on-one versus group interventions varied among participants; (2) intervention content should include addressing the CSA experience, be psychologically-based, address intrapersonal and interpersonal factors and developing coping skills; and (3) the intervention should be delivered by counselors and/or mentors (peer counselors).

The most common format of interventions for older adults living with HIV seems to be individual or teleconference/home-based (Bhochhibhoya et al., 2020). The latter may be advantageous for older adults who have mobility or transportation issues and may help to extend the reach of care to older adults, especially during the ongoing COVID-19 pandemic. However, difficulties may also arise for older adults who do not have access to the internet or may not be internet-savvy. Group sessions and computer-based interventions were also common (Bhochhibhoya et al., 2020). Participants in the current study were interested in individual, group-based and/or a combination. There are advantages and disadvantages to each format. Individual sessions may be more conducive to discussing sensitive topics while in the group format, participants are able to hear other participants' experiences for them to know that "they are not alone". Sikkema's trauma-informed intervention LIFT was group-based (Sikkema et al., 2013). There were 15 sessions, with 83% attending at least one session while 49% attended 11 or more sessions. ImpACT was a combination of four individual and then three group sessions (Sikkema et al., 2018). For ImpACT, fidelity for individual sessions was high, while attendance for group sessions was poor. This finding could be due to participants preferring individual sessions to discuss and work through their trauma. Other reasons could be due to scheduling and transportation challenges (Sikkema et al., 2018).

Participants also articulated the belief that the intervention should address the CSA episode specifically and the psychosocial challenges associated with the event. These findings suggest that, even though the traumatic event occurred several years prior, coping with the trauma was still a challenge for some participants. Childhood abuse, whether physical, sexual or emotional, has been linked to health problems among older adults including diabetes and physical disability (Sachs-Ericsson et al., 2011). One potential link between CSA and its effects on older adults is through negatively impacting childhood development or promoting reliance on maladaptive coping strategies, which may lead to dysfunction in older adulthood (Gagnon & Hersen, 2000). Addressing mental health, through therapy and other issues such as self-love and coping, was also important to current study participants.

Sachs-Ericsson and Medley found that self-efficacy may be a potential mediator between childhood abuse and health challenges among older adults (Sachs-Ericsson et al., 2011). Trauma-informed interventions tend to focus on improving adaptive coping and reducing maladaptive coping (Sikkema et al., 2013). However, the current study suggests that enhancing coping strategies should be a priority among CSA survivors irrespective of their current age.

With respect to interventionists, participants expressed their desire to have a counselor or therapist or mentor (peer counselors), especially for one-on-one sessions. Previous trauma-informed interventions have used lay providers with supervision from a clinical psychologist (Sikkema et al., 2018) or experienced mental health care providers with social work or clinical psychology degrees (Sikkema et al., 2013). Using lay providers may be more beneficial and feasible in resource-limited settings (Sikkema et al., 2018). Other interventions geared towards OALH have used a mixture of formats, including a care manager (Brennan-Ing, 2017), masters-level facilitators with experience in HIV and aging (Heckman et al., 2001), and co-therapists with Masters or PhD qualifications (Heckman et al., 2013). For clinic settings from which participants in the current study were recruited, it may be more beneficial to have facilitators or interventionists with experience in trauma *and* HIV and aging.

With respect to interventions, to our knowledge trauma-focused interventions geared towards improving adherence among older adults are lacking. However, a systematic review on interventions geared towards improving adherence among older adults in SubSaharan Africa found cognitive, behavioral and affective-focused interventions, which included text messaging, counseling and patient education, home visits or multi-pronged approaches (counseling and home-visits. The studies reviewed found mixed findings with respect to improvements to adherence with adherence improving irrespective of being in the intervention or standard of care group (Coker et al., 2015), or significant differences in adherence between intervention and control groups (Maduka & Tobin-West, 2013). Some studies did not find an improvement in adherence, however (Mbuagbaw et al., 2012). Nevertheless, these studies did not have a trauma-focused component, which may be crucial when considering effective interventions for older populations who have been exposed to trauma and have unresolved challenges.

Study findings should be considered in the context of limitations. All study participants were linked to HIV care, and their views may not be representative of OALH out of care. In addition, participants were recruited from South Carolina, and there may be different cultural factors to be considered for views on what is desired in interventions for other aging populations. Selection bias may also be a concern as participants in this study were willing to self-report their CSA history. Therefore, their perspectives may differ from other older adults living with HIV who may have been survivors but were not willing to report their CSA history. Participants in the study were also in the younger age categories (age range: 50–67) and may not be reflective of the adults in the older ages. Interview times varied widely from 16 to 62 minutes. This finding may be related to interview style and suggests that some participants may have provided more thoughtful responses than others. As a result,

the findings may reflect those who chose to participate and expound on their experiences with sexual trauma and their perspectives on intervention format and content.

Conclusion

Study findings showed that interventions are warranted for OALH, who are CSA survivors. Even though trauma-focused interventions have been highlighted in the literature, they are not tailored to OALH. There were varied preferences for one-on-one and group-based interventions or a combination of both, with 25% preferring one-on-one sessions. Participants also desired interventions to address the CSA event, include therapy, and address related psychosocial challenges. Participants also preferred having a counselor, especially for one-on-one sessions. Future research should evaluate intervention design and/or adaptation, and determine the feasibility of implementing trauma-focused interventions for OALH who have survived CSA. For example, the LIFT intervention addresses most of the content area suggested and could be adapted to a one-on-one format and include more specific content around OALH. However, a newly designed e-health intervention may also be beneficial for this population. Indeed, previous research has also suggested interest in e-health populations for OALH (Tan, Nguyen, Tabrisky, Siedle-Khan, & Napoles, 2018). These interventions for older adults may address cognition (Vázquez et al., 2018), engagement in HIV care (Tan et al., 2018), including adherence to ART, and reducing risky sexual behavior (Negin et al., 2014). Specifically, e-health interventions for OALH who have experienced CSA may improve coping, posttraumatic stress and depression associated with their history of trauma. Addressing these challenges may also help to improve ART adherence. As the data were collected pre-pandemic and the pandemic may affect older persons' coping and management of traumatic events, future research can address this population's coping styles and strategies before vs. during the pandemic.

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