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Age Matters: Determinants of sexual and reproductive health vulnerabilities amongst young women who sell sex (16–24 years) in Zimbabwe

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ABSTRACT

Introduction: Female sex workers bear a disproportionate burden of HIV and other poor sexual and reproductive health (SRH) outcomes which has led to the tailoring of SRH interventions to mitigate risk. Understanding of the SRH vulnerabilities of young women who sell sex (YWSS) (16–24 years) in Southern Africa is under-represented in research which may result in a mismatch in current SRH interventions and service design.
Objective: This paper is based on a sub-analysis of a qualitative study investigating the SRH of young women who sell sex (16–24 years) in Zimbabwe. We explored the differences in dynamics of SRH vulnerability amongst YWSS within the 16–24 year age band.
Methods: In-depth interviews (IDIs) were conducted amongst key informants (n = 4), health care providers (n = 5), and peer educators (n = 16). Amongst YWSS, we conducted IDIs (n = 42) and focus group discussions (n = 30). Transcripts were inductively coded for emergent themes and categories.
Results: Age and life stage determinants led to key differences in SRH vulnerabilities between younger (16–19 years) and older YWSS (20–24 years). These determinants emerged in the following ways: 1) distancing of younger participants from a "sex worker" identity leading to difficulties in identification and limiting intervention reach, 2) inexperience in dealing with clients and immature cognitive development leading to greater exposure to risk, and 3) the subordinate social position and exploitation of young participants within sex worker hierarchies or networks and lack of protective networks.
Conclusions: We highlight the presence of a diverse group of vulnerable young women who may be missed by sex worker programme responses. In future intervention planning, there is need to consider the age-related needs and vulnerabilities within a spectrum of young women involved in a wide range of transactional relationships to ensure that services reach those most vulnerable to poor SRH outcomes.

Author contribution

Tamaryn Crankshaw: Conceptualisation, Methodology, Project administration, Investigation, Software, Formal analysis, Writing – original draft, Supervision; Samantha Chareka: Project administration, Investigation, Formal analysis Writing - Review & Editing; Pemberai Zambezi: Project administration, Investigation, Formal analysis Writing - Review & Editing; Nana Poku: Conceptualisation, Methodology, Writing – review & editing, Supervision.

1. Introduction

Despite growing efforts to improve the sexual and reproductive health (SRH) of young people (10–24 years), the SRH needs and challenges of young key populations (10–24 years) in east and southern Africa (ESA) are neither well characterized nor understood. This deficiency is in large part due to the ethical complexities in researching adolescents (<18 years) and securing the requisite approvals (Dayton et al., 2017). For research amongst adolescent and young people who are also members of key populations, country laws that criminalize sex work and/or homosexuality and that are often enforced punitively (Huang and Pan, 2014; Sanders and Campbell, 2014) add another layer of

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complexity in terms of ability to reach these consequently hidden populations (Silverman, 2011).

"Young key populations" (YKP) is an umbrella term describing young sex workers of all genders, young men who have sex with men, young women who have sex with women, young people who inject drugs, young intersex and transgender people and young people in prisons and other forms of detention, between the ages of 10–24 years (World Health Organization, 2016). There are, however, definitional complexities regarding young sex workers since anyone under the age of 18 years "who receives money or goods in exchange for sexual services, either regularly or occasionally", according to the technical definition of sex work (UNAIDS, 2002), is considered to be a sexually exploited child under article 34 of the Convention on the Rights of the Child (World Health Organization, 2015). The term "sex worker", therefore, only applies to young women 18 years and over. While this is a critical distinction to continue to make, it also renders young women <18 years who are engaged in selling sex largely invisible, resulting in lack of understanding of their unique vulnerabilities and needs (Silverman, 2011). In recognition of the presence of young people <18 years engaged in the economies of sex and the need to mobilise an appropriate response, the World Health Organization has coined the term "young people who sell sex" (which encompasses children (10–17 years) who are considered sexually exploited as well as adult sex workers (18–24 years) (World Health Organization, 2015).

Despite the move towards more inclusive definitions, young people who sell sex (10–24 years) are not well differentiated in terms of age groupings and remain under represented in research globally (Busza et al., 2014, 2016; Silverman, 2011), although there is indication that they may have amplified and overlapping vulnerability to poor SRH outcomes compared to their peers who are not engaged in selling sex and to older sex workers (Delany-Moretlwe et al., 2015; World Health Organization, 2015). A small body of research, focussed predominantly in the Asia Pacific region, suggests that young women who sell sex (YWSS) may have a greater number of sexual partners than older female sex workers and that early age of entry into selling sex may be linked to greater difficulties in negotiating condom use and earlier drug injection use (Goldenberg et al., 2012). Those aged 10–17 years may have less control over number of clients, lack negotiating experience and be more susceptible to violence than adult sex workers (Sarkar et al., 2008). Sex workers across the world face high levels of violence and poor SRH outcomes, especially in contexts in which sex work is criminalized (Bhattacharjya et al., 2015; Deering et al., 2014; Footer et al., 2016; Shannon et al., 2015). However, young people who sell sex are at particular risk of experiencing intimidation, extortion, harassment and sexual and physical violence from law enforcement officials and clients, more at risk of poor SRH outcomes and less likely to access health services (Conner et al., 2014; Cowan et al., 2017; Silverman, 2011).

In Zimbabwe, there are relatively good age disaggregated data for female sex workers, which suggests the presence of high numbers of YWSS below the age of 25 years (Cowan et al., 2014, 2017; Elmes et al., 2013; Mtetwa et al., 2015; Mwashita, 2017). HIV prevalence was found to be 36% among sex workers aged 18–24, rising to 55% among those 25–29, 69% among those 30–39, and 77% among those older than 40 (Cowan et al., 2014). Young female sex workers (age 18–24) were found to be 4.2 times more likely to be living with HIV than young women (20–24) who do not sell sex in Zimbabwe (Cowan et al., 2014; PEPFAR, 2016). In another study, prevalence of herpes simples virus 2 was high amongst young women selling sex (from 50% amongst those <20 years rising to 80% by the age of 25) (Cowan et al., 2005). Treatment cascades for sex workers in Zimbabwe reveal significant gaps that are particularly pronounced for young sex workers (18–24 years of age) (Napierala et al., 2018). While 69% of sex workers living with HIV (≥25 years) know their status, just 39% of YWSS (18–24 years) do. Further, while 48% of sex workers living with HIV (≥25 years) are on treatment and 37% are virally suppressed, just 21% of YWSSs (18–24 years) are on treatment and only 13% are virally suppressed (Napierala et al., 2018). Zimbabwe has a national sex worker prevention and treatment programme, called "Sister with a Voice" (Sisters), which provides clinical services, health literacy and community mobilization and is supported by implementing partners (Busza et al., 2016). Despite successes in engaging adults, reaching YWSS through the Sisters programme has proved challenging although efforts have been made to increase reach (Busza et al., 2016).

Scholars have documented how the ongoing economic hardships in Zimbabwe have catalysed a shift in the shape of the sex trade, with an increase in informal transactional sexual exchanges amongst predominantly young women situated in a variety of contexts throughout the country (Elmes et al., 2017; Kadzikano et al., 2015; Mwashita, 2017; Wekwete and Manyeruke, 2012). With the reality of ever younger women and girls participating in the economies of sex as a means of survival, the contexts and determinants of entry into formalised "sex work" are arguably becoming increasingly complex and the dynamics of vulnerability amongst a more diverse and less well characterised group, as we will argue, not adequately considered in intervention and service design. This paper presents a sub-analysis of a qualitative study investigating the SRH of YKPs (16–24 years) in Zimbabwe. With a focus on YWSS in the context of the primary study, clear differences in terms of vulnerability and exposure to poor SRH outcomes emerged between the different age categories, with younger participants (16–19 years) exposed to particular risk due to developmental and life stage determinants in ways that were fundamentally different to the situation of older participants (20–24 years). We conducted a sub-analysis of the data to determine the nature of difference and dynamics of vulnerability within and between the ages 16–24 years. We also highlight the implications of these findings for current SRH intervention and service design.

2. Methods

2.1. Study design

This paper is based on a sub-analysis of our primary dataset. The task of the primary study was to explore the pathways of SRH risk and vulnerability and the gaps in associated service provision, legislative and programmatic support for YKPs (16–24 years) in Zimbabwe. Within the context of the primary study, key differences in age-related dynamics and consequent vulnerabilities emerged between younger (16–19 years) and older (20–24 years) women who sell sex, which required further analytic attention in light of existing HIV prevention interventions for sex workers. A sub-analysis of the data was implemented, guided by the following question: What is the nature of vulnerability amongst the different ages of YWSS (16–24 years) and how does this impact on appropriateness of current SRH intervention design?

2.2. Setting

The study was carried out in urban and peri-urban areas of Harare and Bulawayo in Zimbabwe. Harare is the capital and most populous city in north-eastern Zimbabwe in the country's Mashonaland region. Bulawayo is the second largest city in the western part of Zimbabwe and the largest city in the country's Matabeleland region.

2.3. Data generation

The study was carried out between February 2019 and September 2019. We conducted four key informant interviews (NGO sector ($n = 1$), multilateral agency ($n = 1$) and government stakeholders ($n = 2$)) as well as in-depth interviews with health care providers ($n = 5$) and peer educators ($n = 16$). We further conducted 30 focus-group discussions (FGDs; $n = 15$ Harare, $n = 15$ Bulawayo) and 42 in-depth interviews ($n = 22$ Harare, $n = 20$ Bulawayo) amongst YWSS (16–24 years). Participants for the in-depth interviews did not take part in the FGDs. FGDs consisted on average of 5–7 participants and, as much as possible, split between those aged 16–19 years and those aged 20–24 years. In total,

198 YWSS participated in the FGDs ($n = 99$ YWSS 16–19 years; $n = 99$ YWSS 20–24 years). The median age of participants was 19.5 years of age (IQR 18–22). Women aged 16–24 years who self-identified as being involved in selling sex were recruited from urban and peri-urban locations in Harare and Bulawayo, Zimbabwe. In Harare, YWSS participants were recruited from 14 different locations both within the central business district and the outskirts and as far as 56 km outside the city, extending as far as Nyabira, Epworth, Chitungwiza, Hopely and Juru. In Bulawayo, YWSS participants were recruited from the city centre and the surrounding peri-urban areas up to 30 km from the city centre extending as far as eSipezeni and Nyamandhlovu areas. YWSS were initially recruited from the street where they were soliciting for clients, from bars, and/or lodges. We followed a snowball sampling method. We asked participants who we had already recruited, who lived in one area but did not work there, to assist with recruitment of YWSS who worked in these areas. In this way, we sought to avoid recruitment competition between seed participants and inclusion of friends from the same network while still expanding our recruitment sites. Participants who assisted with recruitment were compensated USD5 for their time/airtime (phone credit) and transport to the study site. All YWSS who participated in the in-depth interviews or FGDs were compensated USD10 for transport and refreshments.

Interviews were conducted in the local languages (Shona in Harare and Ndebele in Bulawayo). The in-depth interviews for YWSS were guided by an interview guide consisting of semi-structured questions focussing particularly on participants reproductive health histories. This included exploring life circumstances leading to entry into sex work, knowledge of reproductive health issues and contraception, use of contraceptive methods, pregnancies and pregnancy outcomes, other SRH concerns and access to SRH services. The FGDs were led following an interview guide adapted from the Diagonal Interventions to Fast Forward Enhanced Reproductive Health (DIFFER) research project (https://cordis.europa.eu/project/rcn/100516/reporting/en), which drew on a free listing and ranking approach. Free listing allowed the researcher to have as broad a discussion as possible over the SRH challenges experienced by YWSS and ranking allowed participants to independently prioritise their challenges. The FGDs began with the question: What do you understand by the term 'sexual and reproductive health'? A discussion over the definition of SRH then ensued, ensuring that issues related to HIV, pregnancy, abortion, STIs, gender-based violence, and risky sexual behaviour were raised in some form in the discussion so that there was a common understanding amongst the group. Through a ranking exercise, participants were able to highlight their top SRH challenges. All SRH challenges introduced at the beginning of the focus group were systematically discussed during the course of the FGD to understand the nature of challenges experienced by YWSS. For both the IDIs and FGDs the research team sought to understand the nature of differences between young and older women who sell sex and asked participants if they believed the respective reproductive health challenges differed between younger and older peers, and if so, why.

2.4. Ethics

Ethics approval for the study was obtained from the Biomedical Research Ethics Committee, University of KwaZulu-Natal and the Medical Research Council, Zimbabwe. All participants provided written informed consent to participate in any component of the study and additional written consent to be audio recorded. Parental waivers were granted and written informed consent only was required for participants aged 16 and 17 years because they were considered 'emancipated minors'. Such was the case for adolescents who were parents or expecting parents, married or living in a marital union, and/or are living separate or apart of their parents. Inclusion criteria for participation into study were being female, self-identifying as selling sex and being between the ages 16–24 years. Those who did not meet one or more of these criteria or who were less than 16 years of age were not recruited into the study.

2.5. Data analysis

All interviews were audio-recorded, transcribed, and translated into English and, through thematic analysis by the first author (TC), collated and coded for themes and sub-themes. Data analysis was an ongoing and dynamic process throughout the data collection phase, so that the analysis guided and optimized the quality of information as it was being collected. Themes and sub-themes were inductively derived through a coding process as laid out by Corbin and Strauss (Corbin and Strauss, 2008). The codes and categories helped disaggregate the data and allowed questions to be framed around it (Charmaz, 1990). In this way, the codes and categories move from mere description to building up an analysis.

Iterative readings of the data in the analysis stage were carried out as well as constant comparisons of emerging concepts and categories. Negative cases were also sought to help refine the analysis process. Reflexivity was applied to both the interviewers and the analyst. The interviewer was a young Zimbabwean female (SC) aged 27 years who had extensive qualitative research experience; the interviewer spoke Shona and English fluently. In Bulawayo, the interviewer was supported by a Zimbabwean male (PZ) aged 40 years who was fluent in English, Shona and Ndebele (the local language of Bulawayo). The first author (TC) participated in a number of FGDs in both Harare and Bulawayo as the analysis evolved and was supported by a translator.

A process of open, axial and selective coding was followed (Corbin and Strauss, 2008). Open coding permitted the inductive emergence of codes, which were organized into themes. A random selection of transcripts was independently analysed by the second author (SC) and third author (PZ). A discussion ensued to compare emergent codes and themes, and consensus reached on categorization and organisation of data. Axial coding allowed for the articulation of major categories and selective coding allowed for a picture to emerge over the nature of the difference between younger and older participants and the dynamics of vulnerability to poor SRH outcomes.

Relevant quotations were included in the memos to retain participants' own words and illustrative quotations were identified to support the propositions. Guba's four criteria for trustworthiness (credibility, transferability, dependability, confirmability) were addressed to ensure the trustworthiness of the findings (Guba, 1981) Techniques for establishing these four criteria during data analysis included prolonged engagement, methodological and investigator triangulation, peer debriefing, negative case analysis, thick description and reflexivity, external audits and ensuring an audit trail. Data were managed using Nvivo Software version 12.

3. Results

Our findings revealed distinct differences in nature of vulnerabilities to poor SRH outcomes amongst very young participants (16–19 years) compared to older YWSS (20–24 years). For very young participants, the determinants of vulnerability emerged in the following ways: 1) the distancing from a "sex worker" identity leading to difficulties in identification and limiting intervention reach, 2) immature cognitive development and inability to take protective measures leading to greater exposure to risk, and 3) the subordinate social position and exploitation of young participants within sex worker hierarchies or networks and lack of protective networks. These determinants amplified vulnerabilities for very young participants (<20 years) in terms of exposure to violence and poor sexual and reproductive health outcomes and highlight a potential mismatch in current service and intervention design and reach.

3.1. Elusive identities within the economies of sex

All study participants engaged in a continuum of economies of sex for transactional reasons. However, compared to older participants (>19/

20 years) who more openly identified as a sex worker within their communities, young participants (<18/19 years) tended to conceal their engagement in selling sex from their community, as well as from peer education outreach and tailored service efforts.

3.1.1. Fluid boundaries in the economies of sex

All ages of participants described different types of transactional sexual relationships, which highlights the complexity and fluidity around the economies of selling sex. In addition to once-off paying clients (solicited at bars, lodges, sports grounds), study participants were simultaneously involved in any combination and number of relationships with "sugar daddies" (older, often married men), romantic boyfriends, "regulars" (regular clients with whom they form a friendship/attachment), and other transactional partners (sex in exchange for a service e.g. transport, medical care).

> At times we will not have bus fare, so we get combi's (local commuter omnibus/public transport) there for free and then pay the drivers and conductors in kind. (17-years old, PID38, IDI, Harare)

Participants described preferred transactional relationships (e.g., sugar daddies were the most generous and least demanding), different forms of emotional attachment (e.g., regulars becoming friends and confidante's, or with whom a marital future was desired), and experiences and perceptions of sexual risk between different types of clients.

> A sugar daddy will go out with you … even to the lake with his friends. He loves moving around with me because I will be looking much better in appearance as a young girl compared to his wife. Every time he goes out he wants to go with me. He can request to go out with you, then you ask for money to pay rent and buy food. He gives you money and when he brings you back he gives you money again. You get more than you were supposed to get from short time [sex]. (17-years old, Participant 4, FGD12H, Harare)

Familiarity with regular clients also meant that condoms were often not used:

> l only have unprotected sex with my regular customers. If you are not a regular customer then we use a condom. (19-years old, Participant 3, FGD19B, Bulawayo)

Yet, even so, participants made it clear that they viewed all sex to be transactional, as the above participant went on to clarify:

> Even if you are a regular customer, you still have to offer me a lot of money for me to have unprotected sex with you. When it comes to sex, there are no relatives or friends, so you have to pay me more for us to have unprotected sex.

Further, not all participants sold sex on a daily basis. Some only "hooked up" with men on weekends and others only periodically when household income was low or an unanticipated expense had arisen. Some participants supplemented their income with other income-generating activities, such as hairdressing, sewing of clothes or selling vegetables. Notably, the dynamics between the different types of partners posed differing levels of sexual risk to these young women, as the following FGD participants shared:

> In the month of June, I do not go to the bar because there is not much business. A few people just come to watch soccer and leave for their houses. To be honest, I have three boyfriends and in June I can find at least one of them for a night and next morning they can pay me even at least $20 [bond]. The next day I do the same with the other and so on. But because I lead each one of them to believe that they are my only boyfriend I am forced to engage in unprotected sex with them as a way of reassuring them. (22-years old, Participant 5, FGD11H, Harare)

3.1.2. Entry into selling sex

Participants shared a variety of reasons for their involvement/entry in selling sex, with motivations and needs differing across the life stage. For some of the very young participants (16–18/19 years), youthful age and peer pressure, as well as consumptive needs, resulted in initiating selling sex, often at an early age. The following participant started selling sex when she was 16-years old:

> My friends were doing it so I decided to join them. Most of my friends have an 'I don't care attitude' and they are freaky. We used to go out on weekends. (17-years old, PID17, IDI, Harare)

However, for the majority of young participants, survival-based needs underpinned their entry into selling sex for several reasons, including dissolution of early marriages, abusive relationships, orphanhood, and general household poverty. At the time of the interview, the following 16-year-old was an orphan living with her grandmother:

> My grandmother is too old. This year I think she is turning 89 years. … most of the time she is sick. Instead of her looking after me I had to look after her. (16-years old, PID 20, IDI, Harare)

Pregnancy, in particular, was a key push factor for first entry into selling sex for many participants. The following young woman was 14-years old at the birth of her child:

> At that time, I was living together with my former partner …. we separated when I was 6 months pregnant. It is from that time onwards that I began sex work until the day that I had the child. (19-years old, Participant 3, FGD10H, Harare)

Another participant in the same focus group, had her first child at 16 years of age and shared a similar experience:

> At that time, my mother was ill from cervical cancer and my sister was in boarding school and so she needed school fees. I could not land [obtain] any housekeeping work because of the pregnancy, so I was left without an option but to engage in sex work. I began sex work when I was 3 months pregnant until I was 7 months pregnant and I managed to make a lot of savings. After giving birth I returned to sex work. (19-years old, Participant 5, FGD10H, Harare)

3.1.3. Clandestine sexual activities and concealed identities

During the FGDs, YWSS (16–19 years) engaged in very up front discussions around their involvement in selling sex, referring to themselves variously as *mahure* (sex workers), *mahubla* (slang for sex worker), *Semahure echidiki/Mahure echidiki* (young sex worker), "bitches"/"sex workers" (they used these terms in English) and described themselves as engaged in *kutengesa stonyeni/kutengesa nyama* (slang for "selling vagina"). These were the same descriptions that older sex workers (20–24 years) used to characterise themselves. In addition, the lived experiences of the very young participants shared in the FGDs pointed to direct involvement in solicitation of clients for sex in exchange for money. However, given that matters related to sex are taboo in Shona and Ndebele communities, overlaid by conservative social norms around youth, sex and sexuality, it is perhaps not surprising that, outside of the anonymity and confidentiality of the research setting, the younger, adolescent participants sought to conceal their involvement in *any* sexual activity, in the first instance, and selling sex, in the second. As the following participant shares:

> I do not do [sell sex] in my community. I am a different person when I am in my community. We do not want everyone to know that is what we are doing. (17-years old, PID 17, IDI, Harare)

Some went to significant lengths to hide their involvement in selling sex in certain spaces or from certain people:

Interviewer: You said that you worked in your neighbourhood but your mother doesn't know about it. Are you then not scared of your neighbours?

Participant: They see me sometimes but I give them money to keep quiet. (17-years old, PID15, IDI, Harare)

The need to conceal one's involvement in selling sex has direct implications for outreach activities and health service design. Peer educators expressed frustration in trying to reach out to YWSS (<18 years) who proved elusive to peer education efforts:

,if you approach them they do not acknowledge that they are sex workers. They will just say they are hanging around, but you will see that they are sex workers because they will be selling sex. She does not want to be labelled as a sex worker, that's the issue. You know, young sex workers are different from other sex workers! (22-years old, Peer Educator, PID32, Bulawayo)

In both Harare and Bulawayo, peer educators reported difficulties in accessing very young populations (<18 years) for intervention purposes.

Basically, these are the hardest groups to interact with! They will ask you: "Who told you that I am a sex worker?" They will never accept that they are sex workers, and this is the major challenge that we face as Peer Educators. (43-years old, Peer Educator, PID30, Bulawayo)

That age group (12–14 years) does not open up. For example, you might stay in the same neighbourhood and you know that they are sex workers but they do not open up to you, so you cannot discuss [SRH] issues with them. (22-years old, Peer Educator, PID36, Harare)

Often YWSS<18/19 years were unaware of existing sex worker tailored services and, on asking, information regarding health services was sometimes deliberately withheld by older sex workers (>24-years old). However, there was an indication that even if they were aware, YWSS<18 years may choose not to access these services because of confidentiality concerns:

If I bump into someone there, they will spread the news in the neighbourhood that they saw me at a sex worker clinic. I would rather go to a normal ordinary clinic. (17-years old, PID 17, IDI, Harare)

3.2. Vulnerabilities associated with very young age

Our analysis also highlighted that compared to older participants (20–24 years), younger participants (16–19 years) had greater exposure to risk due to several overlapping factors, including developmental determinants, inexperience with selling sex, gender and age power differentials, and use of substances, often deliberately used as a way to reduce shyness and increase confidence while selling sex.

3.2.1. Immature psychological development

Youthful age leading to impulsive behaviours, combined with inexperience in soliciting clients, increased the levels of vulnerability for very young girls in a number of ways. As the following 17-year-old participant who had been selling sex for a year explains:

… most young sex workers act rashly. They take every client that comes to them. They do not even consider what the person looks like and where he has been. You are supposed to have a decent conversation laying out the terms of engagement before you go anywhere with a client. But young sex workers do not even question anything, they just go with whomever. (17-years old, PID 15, IDI, Harare)

An 18-year-old participant who started selling sex at age 14 shared the difficulties in "learning the trade", that is, how to separate her social and emotional needs versus her economic needs with clients in the early days.

When I began sex work, I could not properly charge clients for short time, I also could not put on a condom. I used to develop relationships with people, I loved consuming alcohol and dancing. These days I understand what life means, because back then I could not pay rent but now I can also buy my own clothes, I can now protect myself and have a fuller knowledge of life processes in general because I encountered a lot of problems in the journey. (18-years old, Participant 4, FGD9H, Harare)

Being new to sex work combined with age and gender power dynamics also meant that younger women were more at risk of being exploited or abused by older male clients:

They are different. The younger ones are more abused by men because they are young. Some are beaten up whilst some clients will remove the condom because they know they are too young to defend themselves and so they take advantage of them. The older sex workers do not come across these challenges as often as the young ones. (22-years old, Peer Educator, PID36, Harare)

3.2.2. Substance use as a coping mechanism

Participants in both Harare and Bulawayo described using an illegal and potent alcohol called *musombodiya* (diluted ethanol or methanol), other spirits or beer, cannabis, cocaine and/or "bronco" (a cough syrup that is banned in Zimbabwe). In Bulawayo, participants spoke about the injecting drug use practice called "blue tooth", where young women inject themselves with blood drawn from an already high user in an effort to share the effects of the drug. For very young, and often inexperienced, participants (<19 years), one of the reasons for use of these substances was to remove feelings of inhibition in soliciting clients:

You feel shy to be open that you are a sex worker whilst you are sober. It's difficult to stand on *touchline* (area where they solicit clients) whilst you are sober. Myself, where I come from, I was also taught good manners so it's difficult for you to do sex work whilst you are sober. (17-years old, Participant 4, FGD12H, Harare)

The following 22-year-old participant in Bulawayo echoed what several other young women shared with the research team, how deeply difficult it was to appear naked in front of a client, with young age and inexperience in dealing with male clients amplifying these feelings:

The young sex workers are the ones who get drunk most of the times. For them to be able to strip naked in front of the clients, they must drink alcohol to gain courage because when they are sober, they may be shy to do so. (22-years old, Participant 2, FGD16B, Bulawayo)

A health care provider in Harare confirmed that YWSS were particularly targeted for substance use interventions given their reliance on substances to cope with when soliciting clients:

We also focus on risk reduction for young female sex workers because they are susceptible to drug abuse because they think that they will have the confidence to do sex work after taking drugs. Unlike older sex workers who are working for their kids, young sex workers need a pivot so they end up abusing drugs. (HCP02, IDI, Harare)

However, a combination of substance use and young age also meant that very young women were vulnerable to being exploited and susceptible to experiencing violence:

If you work under the influence of alcohol, you risk people taking advantage of you. For example, you may be drugged and forced to have unprotected sex. In some cases, you may be even dumped

anywhere by your client. (18-years old, Participant 4, FGD10H, Harare)

Importantly, the same feelings of shyness and embarrassment were also a barrier to young women accessing services. As one peer educator remarked:

Most of the girls are very shy. Only a few girls seek treatment at these clinics. For instance, a 14-year-old girl would be embarrassed to go to the clinic to seek STI treatment. That is why they opt for herbal medicine; it is easier for them to get herbs from traditional healers than going to the clinics. People who seek treatment at these [NGO name] clinics are mostly 20 and above; only a few young girls go there. (26-years old, PID35, IDI, Harare)

3.3. Subordinate social status of adolescents in the sex worker hierarchies

Finally, younger participants (<18/19 years) generally occupied a subordinate social status within the sex worker hierarchies, which contributed to their increased vulnerability to exploitation and violence.

3.3.1. Exploitation due to age and seniority

During the course of the FGDs, participants were asked clarify what they meant when they made distinctions between "younger" and "older" sex workers. It emerged that age was not the main criteria for descriptions of what constitutes "young" sex workers. Length of time in selling sex was an important marker of seniority in sex worker hierarchies. According to participants, a younger woman who has been in the sex trade for some time is viewed as senior to someone who has been in the sex trade for a short time, even if that person is older in age than the "senior". Peer educators and key informants described a social landscape where younger, and generally less experienced, girls and women may be recruited by seniors and taught the trade. While these young women may benefit from shelter and other protections including food and health care, the seniors reportedly transact with clients on their behalf. This topic was not discussed in the focus group discussions amongst participants but there appeared to be various forms of transactional relationships between older/more experienced women versus those who were younger/less experienced. For instance, some participants indicated that depending on client requests, payment was often expected in cases when one sex worker introduced a client to another sex worker or where another sex worker engaged with another sex worker's previous client.

The older sex workers are also troublesome, they ask you to pay tribute. If you go out with a client they can come and claim money from you. That's what normally happens in sex work. (18-years old, Participant 2, FGD12H, Harare)

In a climate of fierce competition for well-paying clients, general harassment by older sex workers towards younger women was also common.

We mainly fight with older sex workers because we are in a competition and they will not have the market. Men want younger women. (17-years old, PID38, IDI, Harare)

3.3.2. Competition for clients

Participants of all ages consistently reported high levels of competition and poor relations between younger and older women who sell sex.

We are not in good relations with them … they know that you are getting money that could be theirs. So even if you do anything small and simple to them [by mistake] they may just beat you up. (18-years old, PID11, IDI, Harare)

A combination of younger women having the larger market share and who reportedly charged less and therefore "undercut" older sex workers meant that conflict between the two groups was common.

… if you try to get into [venue], the older sex workers [will] tell you to stand outside and bully you. It will be very cold outside and you will be looking for a warm area. (18-years old, Participant 6, FGD12H, Harare)

Compared to the older sex workers (≥20 years), our research suggests that YWSS (<20 years) operate largely in isolation and do not have the peer networks that older FSWs have established and which outreach health care services often leverage. As the following 16-year-old in Harare shared:

I don't have many friends. My only friends are the girl who introduced me to sex and her friend, making us three. (PID20, IDI, Harare)

Participants widely reported that younger and older women who sell sex typically did not mix or work together and, as a result, younger women were often outside of sex worker networks and occupied a subordinate position in the established sex worker hierarchies.

Some of them [older sex workers] are actually jealous of us and how we are popular on the market and making money. Sometimes we don't even talk. (17-years old, PID19, IDI, Harare)

Even some young women over 19 years of age reported avoiding mixing with older sex workers.

Usually, relationships are formed within similar age groups. I would not want to move around with an older sex worker because if clients then hook up with me more, she may get jealous. But if I am with people of the same age group, we stand a more or less equal chance of being hooked up with. (20-years old, Participant 3, FGD9H, Harare)

While older sex workers formed protective networks amongst each other, often working together in managing violent or non-paying clients, younger participants suggested this was not the case for themselves or their peers:

As *mahure echidiki* [young sex workers] we also do not trust each other. We are afraid of leaving money with a colleague who may run away with your money or fabricate excuses for it, leading to conflict. So it is better not to leave money with any of them. (19-years old, Participant 6, FGD10H, Harare)

However, some younger sex workers had formed friendships or quid pro quo business arrangements with younger men who were often involved in other criminal activity. These young men were typically referred to as the "mafia" and who provided protections to some young participants against violent customers (and often their wives) and older sex workers.

Competition within sex worker hierarchies or networks has direct implications for service design. Older sex workers reportedly refused to share information on clients who were known to be abusive and thus to be avoided and were reluctant to offer health care advice to young women. As the following 20-year-old shared:

It is a strained relationship, very difficult to forge, because they say we young girls are taking their clients. So it's not an easy relationship. Even when you consult them sometimes [for advice on a health issue], they will tell you it's not *siki* [an STI] because of the jealousy and hatred. (PID1, IDI, Harare)

A 24-year-old sex worker confirmed this:

It has even gotten to a point where you don't even let them [the younger ones] know that the customer they have has a record of abusing women and you just let them find out on their own because she is rude. (PID6, IDI, Harare)

High levels of distrust were expressed by younger participants towards older (>30 years), adult peer educators who were also sex workers themselves:

> Most older sex workers who are peer educators here are the same older sex workers we work with at the bars. They choose each other there. Because we are still young, we have more clients. They try to affect how clients look at you by claiming that you are HIV-positive. The peer educators claim that they are the ones who give people medication. (22-years old, Participant 9, FGD3H, Harare)

Participants described actively avoiding some peer educators, one of whom was known to openly observe HIV testing processes and who posed threat to confidentiality of HIV status. With the exception of one peer educator who was <18-years old herself, the age range of peer educators interviewed was between 22- and 52-years old.

4. Discussion

Our research draws attention to some of the unique constellations of exposure to risk and vulnerability amongst a sample of self-identifying YWSS (16–24 years) in Zimbabwe. Specifically, we highlight some key age-related and socio-developmental differences between populations of YWSS located within a wide age band that is often treated as a homogenous group because they are involved in selling sex. The consequent differences in characteristics and vulnerability between the age groups 16–19 years and 20–24 years has direct implications for SRH programming and service design in several important ways. Firstly, while adolescent participants all self-identified as "sex workers" within the confidential, and thus safe, space provided by the research setting, our findings suggest that they may seek to avoid being identified as such within their respective communities, especially if still living in households with family members who are unaware of their activities and/or are still attending school. The distancing from a sex worker identity may also prove a barrier to access to tailored sex worker services currently on offer, with very young participants often expressing a preference for public sector clinics, which may offer anonymity, and therefore ensure confidentiality of selling sex status. Accessing tailored, sex worker services, arguably, carries the risk of young girls being labelled as a "sex worker" by association or occupying the same, and possibly hostile or paternalistic, space as older sex workers. Our findings around a lack of clearly defined sex worker identity helps explain other research in Zimbabwe, which found that very young women who sell sex don't appear to be part of the sex worker social networks, are less likely to engage with targeted services for fears of disclosure and/or are unaware of services or reluctant to use them (Busza et al., 2016; Chiyaka et al., 2018; Hensen et al., 2019).

While there may be several reasons why adolescent girls do not wish to be identified as selling sex, the fluidity of partner and relationship types challenges the value of adhering to binary distinctions between young women engaged in "commercial sex work" as opposed to young women engaged in "transactional sex" (TS) in Zimbabwe. TS has been defined specifically as non-commercialised and strong argument has been made that TS is categorically distinct from commercial sex work (Stoebenau et al., 2016). However, a situation where young women move seamlessly between "once-off" paying clients and "romantic boyfriends" who provide material support, complicated by the presence of "regulars" who are both clients and friends, presents a reality requiring further scholarly debate. The fact that young women under 18-years old engaged in these economies of sex are also considered to be sexually exploited children further challenges definitional boundaries. Earlier research has noted the diversity of identities and needs amongst women engaged in the economies of sex and the implications this will have for service design (Busza et al., 2014; Desmond et al., 2005; Hansen et al., 2002). Recent research amongst YWSS (18–24 years) in Zimbabwe found that women who didn't identify as female sex workers (FSWs) shared the same risk factors associated with acquiring HIV as those identifying as FSWs; however, they were less likely to access services (Hensen et al., 2019).

Youth, combined with the fluidity around the economics of transactional sex and associated identities helps explain why younger participants (<19 years) may operate largely in isolation compared to the older sex workers (>20 years) who have established social networks (Chiyaka et al., 2018) and who outreach efforts often leverage. Further, our findings and previous research amongst adult sex workers (18 years and over) in Zimbabwe (Cowan et al., 2017; Elmes et al., 2017) highlights the age politics and high levels of competition between younger and older women selling sex. Peer education programmes that rely on older sex workers to locate very young women at risk may have limited reach, not only due to definitional challenges but also due to age differentials and levels of hostility that often existed between younger and older women selling sex. This situation fundamentally challenges the concept of "sisterhood" through peer education, which has been an effective way of reaching adult sex workers through the national sex worker programme in Zimbabwe (Busza et al., 2016). Thus, a case may be made for matching peer educators, as much as possible, with the age of intended beneficiaries. However, this also poses key ethical challenges for programmers given the social hierarchies amongst sex workers and an indication of exploitation of younger, less experienced girls by more experienced and/or older peers.

Finally, our data highlighting feelings of shyness and lack of confidence amongst adolescent participants is a sombre reminder of the emotional, cognitive and developmental immaturity of adolescent populations that is not generally seen in populations >19/20 years. Immature cognitive development has been flagged as an area of concern in terms of accentuating vulnerability of YKPs (Dayton et al., 2017) and how this can play out was highlighted by our research findings, with evidence of shyness and embarrassment leading to reliance on substance use as a way to cope with the psychological and physical demands of selling sex. Sexual risk-taking and co-occurrence of substance use are often found amongst adolescents (Ewing et al., 2016), but these dynamics take a very particular form amongst, and amplify risk of, young girls selling sex in Zimbabwe, as evidenced by our research findings. A recent review found that young key populations tend to initiate substance use at an earlier age, engage in polysubstance use and progressively increase their substance use as they grow older compared to their peers from the general population (Delany-Moretlwe et al., 2015). Of additional concern are the negative effects of abuse and neglect on brain development during adolescence (Teicher et al., 2003) and how this impacts the long term mental health and well-being of these very young women. The fact that depression often emerges during adolescence, coupled with exposure to violence, hardship and (poly)substance use, may predispose these young women to poor mental health and maladaptive behaviours and poor SRH over their life span. Importantly, this same shyness and embarrassment, characteristic of youth, also posed a barrier to accessing care for sexually transmitted infections amongst young participants and speaks to the importance of health care workers being sufficiently trained in youth-friendly provision of care. Obtaining skills to gain the confidence to use clinical services has been requested by research participants in previous research amongst YWSS in Zimbabwe (Busza et al., 2016).

Our findings provide insight into some of the nuances between the different age groups, in what is a very wide age band of youth, at the socio-economic level, behavioural level, and service level. Previously, there has been a call to disaggregate YKP data to better describe the differences between those under 18-years old, adolescents (10–19 years) and older youth (20–24 years) (Dayton et al., 2017). Our findings add support to this call but also highlight key intervening social determinants, irrespective of age, on risk, such as length of time in selling sex, coping strategies and social support networks. The most recent findings related to the DREAMS (Determined, Resilient, Empowered, AIDS-free, Mentored and Safe) Partnership lend further weight to this

call, reporting clear differences in perceptions of intervention benefits between adolescent girls and young women in Kenya, Malawi, and Zambia (Population Council, 2020). Across the three countries, young women perceived benefit in accessing skills, training and resources linked to securing livelihoods compared to adolescent girls who perceived benefits related to building social networks and gaining knowledge. Further interrogation of the conceptual and definitional boundaries amongst YWSS is required to ensure the reach and effectiveness of SRH interventions.

4.1. Limitations

There were several limitations to the study. While we sought to separate older and younger participants in the FGDs, the sometimes unavoidable presence of an older, adult sex worker or a young participant who was considered a "senior" in the sex worker hierarchies may have inhibited or shaped the sharing of information or created social desirability bias. Not all focus group discussions included a clear "senior" but when present, these participants also often dominated the FGDs. Frequent and active intervention on the part of the facilitator to create space for the rest of the group, as well as sequentially asking each participant to contribute to an issue being discussed proved a successful strategy to manage any domination of the discussion. In addition, if a previous participant had assisted with recruitment, that participant was not permitted to sit in or take part in any subsequent FGD. Including participants from different locations in the FGDs proved a successful way of reducing tensions around the high levels of competition often found amongst young women from the same locales.

5. Conclusions

Our research highlights the presence of a diverse group of vulnerable young women who are not only defined in multiple ways but, themselves, actively resist identification as a key population member and so may be missed by young key population programme responses. In planning for services targeted to YWSS 16-24-years old, there is need to consider the age-related needs and vulnerabilities across the spectrum of young women involved in a wide range of transactional relationships in order to ensure that services reach those most vulnerable to poor SRH outcomes. Investments in strengthening public sector health systems, with a strong focus on SRH services that are sensitive to the disposition and needs of young clientele may have an overall greater beneficial impact than specifically tailored services for young women who sell sex. Ongoing efforts to reduce vulnerability with social protection strategies and other structural interventions to promote the sexual and reproductive health and well-being of at risk young populations is required.

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