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Eating sweets without the wrapper: perceptions of HIV and sexually transmitted infections among street youth in western Kenya

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Abstract

Street-connected youth in Kenya are a population potentially at-risk of HIV transmission, yet little is known about their perceptions and experiences of sexually transmitted infections (STIs), despite being an HIV endemic region. We sought to elucidate the language and sociocultural factors rooted in street life that impact on street-connected young people's knowledge of and perceptions about the prevention and transmission of STIs, and their diagnosis and treatment, using qualitative methods in western Kenya. We conducted a total of 25 in-depth interviews and 5 focus group discussions with 65 participants aged 11–24 years in Eldoret, Kenya. Thematic analysis was conducted and data were coded according to themes and patterns that emerged until saturation was reached. In general, street-connected young people knew of STIs and some of the common symptoms associated with these infections. However, there were many misconceptions regarding transmission and prevention. Gender inequities were prominent, as the majority of men described women as individuals who spread STIs due to unhygienic practices, urination, and multiple partners. Due to misconceptions, gender inequity, and lack of access to youth-friendly healthcare there is an urgent need for community-based organisations and healthcare facilities to introduce or augment their adolescent sexual and reproductive health programmes for vulnerable young people.

Keywords

street youth; HIV; condom use; sexually transmitted infections; Kenya

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Introduction

Young people aged 15–24 years accounted for 39% of all new human immunodeficiency virus (HIV) infections globally in 2012 (WHO 2013). In Kenya, young people account for over 40% of the population (NASCOP 2014) and in 2012 the national HIV prevalence among youth (15–24) was reported to be 2.1%, with a disproportionate number of infections among young women (NACC 2014). In HIV endemic settings such as Kenya, young people (10–24) face unique sexual health risks, and in the context of abject poverty, orphanhood, social marginalisation, and discrimination, they may be particularly at-risk of HIV transmission and contracting STIs (WHO 2013). Adolescent sexual and reproductive health policy and programmes are being augmented in Kenya (NCAPD 2005; NCPD 2013); however, existing prevention programmes may not adequately reach out-of-school young people (Pitorak et al. 2013) and delivering youth-friendly health services remain a challenge (Godia et al. 2014; Godia et al. 2013). The term ‘street-connected youth’ refers to young people whom the street is a central reference point and plays a significant role in their lives and identity (UNOHCHR 2012). Street-connected youth are a particularly vulnerable and marginalised population and therefore may be a key population at higher risk of acquiring HIV. It has been estimated there are up to 300,000 children and youth connected to the streets in Kenya (IRIN 2007). Violence, urbanisation, abject poverty, abuse, and HIV have contributed to the existence of children on the streets of western Kenya (Ayuku et al. 2004; Sorber et al. 2014).

Street-connected youth face a multitude of health-related risks resulting in an array of morbidities. Street-connected young people in sub-Saharan African are often sexually active and tend to have an early sexual debut (Kayembe et al. 2008; Wutoh et al. 2006; Tadesse et al. 2013; Mudingayi, Lutala, and Mupenda 2011; Anarfi 1997; Winston et al. 2015). Research has revealed a variety of circumstances that place street-involved young people at high risk for contracting STIs including, sexual and gender-based violence, sexual street-initiation rites, transactional and survival sex, multiple concurrent partnerships, and inconsistent condom use (Kudrati, Plummer, and Yousif 2008; Lockhart 2002; Kayembe et al. 2008; Winston et al. 2015; Anarfi 1997; Wachira et al. 2015; Embleton et al. under review). Street-connected young people are also at risk of contracting STIs (Winston et al. 2015; Kayembe et al. 2008; Kaime-Atterhöög et al. 2007; Mandalazi, Banda, and Umar 2013). In Eldoret Kenya, Winston et al. (2015) found street-connected youth had a high prevalence of STIs, with 28% of participants testing positive for at least one STI. Women were disproportionately affected, with over half (56%) of all women testing positive for at least one STI and 15% tested HIV-positive. Only 18% of participants indicated they used a condom at their last vaginal sex, with 59% never using condoms.

Despite this literature, we know little about street-connected young people’s perceptions and experiences of STIs. Therefore, in this study we sought to elucidate the language and sociocultural factors rooted in street life that impact street-connected youths’ knowledge of and perceptions about the prevention and transmission of STIs, and their diagnosis and treatment, utilising qualitative methods from a sample of street-connected young people in Eldoret, Kenya. This information is crucial to help develop future sexual and reproductive health programmes and interventions

Methods

Study Setting

Uasin Gishu (UG) County is one of the 47 counties of Kenya, located in the western part of the country. In 2010, UG County had approximately 894,179 individuals from 202,291 households, of whom 41.5% were aged 14 years or less. Approximately 51.3% of the UG County population lives below the Kenyan poverty line. Eldoret town is headquarters of UG county and has a population of 289,389 (CRA 2011).

Study Design & Participants

This study was conducted between August 2013 to February 2014. Its overall goal was to explore the sexual language and practices of street-connected youth. In-depth interviews and focus group discussion (FGDs) were used to collect data. We aimed to involve street-connected young people aged 11–24 years who had had connections to the street for more than three months. Street-connected youth were defined as individuals who either a) were spending both days and nights on the streets, and had limited-to-no parental/guardian contact or b) were spending a portion or majority of their time on the street and had a parent/guardian/caregiver to whom they returned at night or c) a combination of these situations at different times.

Sampling and Recruitment

Study participants were purposively sampled from three different points: 1) A dedicated study clinic for vulnerable children and youth at Moi Teaching and Referral Hospital (MTRH); 2) Street venues ‘bases/barracks’ (primary locations in which street children reside); and 3) Street youth community-based organisations. An experienced local outreach worker conducted outreach sessions and study sensitisation at each of these sites to establish rapport and trust with street-connected youth. During these sessions, the purpose of the study was explained and children and youth 11–24 years were invited to participate voluntarily in the investigation. Specific sites and areas where street-connected girls were known to live and congregate were specifically targeted to recruit this especially hard to reach population.

Study instruments

Interview guides were developed for in-depth interviews and FGDs and modified for the younger participants (11–13 years) to reflect developmentally appropriate questions regarding sexual activities. An additional interview guide was developed to explore the specific roles among barracks leaders. A series of 10–15 open-ended questions was piloted with street-connected youth in Eldoret for understandability and completeness that guided the development of the individual interviews and FGDs guides. Interview guide domains and questions included: 1) Entry into street life and acceptance in street groups 2) types of relationships established on the streets 3) sexual practices (acceptable and unacceptable) and behaviours 4) language used for sexual acts 5) reproductive health 6) sexually transmitted infections and health 7) sexual abuse and rape and 8) roles and responsibilities of leaders on

the streets. In addition, a set of structured questions to elicit basic socio-demographic information of age, gender, educational level and occupation were incorporated.

Study Procedures

We conducted a total of 25 in-depth interviews and 5 FGDs consisting of 8–12 participants each, stratified by as follows: boys/young men 11–13 years, young men 14–17 years, young men 18–24 years, young women 14–17 years and young women 18–24 years. Table 1 shows the distribution of interview sessions. We were unable to conduct FGDs or in-depth interviews with girls aged 11–13 years due to difficulty in recruitment. Eligible participants were referred to the study clinic at Moi Teaching and Referral Hospital where all interview sessions were conducted in private rooms. The study clinic provided a neutral, safe, and private location where street-connected youth felt comfortable discussing sexual and reproductive health practices. Once written consent or assent was obtained, participants were invited to take part in the FGDs. At the end of each FGD session, the study team invited willing participants to further participate in the in-depth interviews. The individual interviews took an average of 40 minutes while the FGDs took an average of one and half hours. All sessions were audio-recorded and conducted by two of the study investigators in Swahili. For the FGDs, a trained research assistant was present to take notes. Transport reimbursement of 100 KES (~USD=1.15) was provided after the interview sessions. This amount was considered adequate given the cost participants incurred to get to the clinic without being enough to coerce or influence participation in the study.

Data Analyses

Transcripts were transcribed and translated into English from Swahili. Thematic analysis was conducted and data were coded according to themes and patterns that emerged until saturation was reached. The themes were coded into the following categories: common STIs, protection against STIs, perceptions of the spread of STIs, perceptions about condom use, availability of condoms, treatment for STIs. Three research assistants and one study investigator independently coded and identified themes for validation. To ensure the validity of our findings, we conducted respondent validation. We hosted meetings with street-connected youth to determine whether terminology and interpretation of terms and data was correct. This enhanced the reliability and validity of the findings. Finally, concepts from the themes that emerged were used to organise the presentation of the results into STI knowledge, transmission, prevention, and treatment.

Human Subjects Protection

Ethical approval was obtained from the MTRH Institutional Research and Ethics Committee as well as the Indiana University Institutional Review Board. Prior to the interviews, trained research assistants provided street-connected youth with verbal information about the study and sought their participation. Written consent was obtained from willing participants aged 18 years and older. While written assent was required for those aged 11–17 years in addition to written guardian consent from the Uasin Gishu District children's office. Fingerprints were used for children who were unable to sign or write their names. A child psychologist was present during all interviews sessions for children aged 11–17 years, in order to provide counselling in the event of psychological distress during the sessions. All interview sessions

were conducted in private rooms and confidentially was assured at all times. During in-depth interviews and FGD's participants were requested to talk about their general perceptions and observations about sexual activities in the street community and not about their own personal experiences. In addition, participants were asked not to disclose their full names and/or those of others during the sessions. The first names of participants were used to facilitate discussions during the FGD sessions. Pseudonyms are used when quoting participants in our findings.

Finding

In total 65 street-connected youth participated in FGDs and in-depth interviews; 69% were male with a median age of 18 years (IQR: 14–20.5 years). The majority spent days on the streets and nights in a rented shelter with other street peers (51%), with very few returning to a parent/guardian at night (24%). Less than half (43%) of the participants had attained at least an upper primary school (classes 5–8) level of education. Almost all (81.5%) participants indicated they were currently sexually active.

Knowledge & Terminology

In general, street-connected youth knew of STIs and some of the common symptoms associated with these infections. They also discussed not being able to know someone's status when engaging in sex with them, difficulties with disclosure, and had many misconceptions about STIs. Table 2 lists the STIs street-connected youth mentioned, the associated street vernacular used to describe the infection, and a quote referring to the contextual use of this term on the street.

A major concern for both boys and girls highlighted when discussing what they first think of when they hear the word 'sex', was the association with STIs:

When I hear the word sex and I have my girlfriend, I think it is ok. But also when I hear that someone was infected because of sex, I also feel very bad and even when I see my girlfriend I fear having sex with her.

(John, 19)

I get shocked when I hear that word. I get worried because there are so many boys in town that you cannot know if they are sick or not and so if they rape you, you will be worried. And it is shocking because you will find that the ones who are always suspected to be positive are the ones who will come for you.

(Anne, 15)

Perceptions of STI Transmission & Prevention

STI Transmission—Frequently girls were frequently held accountable for the spread of STIs. As one boy explained:

I have come to realise that if I want to have sex, I cannot take a lady from the streets because they are dangerous. When you get infected you will start walking like someone who has just been circumcised. I speak from experience and I never

lie and girls who have sex and don't take a shower cause it. So when she comes, especially the rainy seasons in August, she may have wounds and you have no idea. You sleep with her and she infects you.

(Kelvin, FGD, 18–24)

Girls too discussed hygienic practices as the reason women develop STIs, indicating that misperceptions regarding transmission and prevention of infection due to hygiene practices are widespread:

In women it can be hidden, but in men it must show out. There was a girl who was once raped by group then she took time without having a shower. The girl later became very sick and it was D who took her to hospital. You know when you have that infection and you don't shower, it will develop into a wound and when you meet a man who also has a wound in his private parts (penis), he will be infected.

(Anne, 15)

Another misconception regarding the spread and acquisition of STIs concerned girls' urination practices:

The sickness brought about by girls. She goes and does it (referring to urinating), but we the boys, we are okay, God created us well. We piss when we are standing, but the girls piss while squatting, so when they piss, germs get in when they piss, when the urine hits the ground it hits the soil

(Simon, FGD, 14–17)

Both boys and girls recognised that non-monogamy and having unprotected sex with multiple concurrent partners resulted in the spread of STIs:

These diseases are brought about by, let us say you are a man, and you are unfaithful, you can infect your wife. Or even your wife is unfaithful and you don't know, you just think she is okay because when you got married you got tested and you found out she is okay.

(Brian, FGD, 18–24)

One girl stated that soldiers were responsible for spreading HIV due to the perception that soldiers take on multiple partners due to their mobility. There were also misconceptions associated about HIV transmission that young people brought forward. These included the idea that foreigners were spreading the virus and that being circumcised increased your risk of contracting the disease. As one boy reported: "And others say that if you are circumcised that's when you can contract it - HIV 'Ukimwi'" (Francis, FGD, 14–17 years).

Study participants knew the risks involved in having intercourse without knowledge of someone's status, but identified difficulties with disclosure to an intimate partner:

There are diseases like HIV, you can sleep with a girl and you don't know her status, but she knows she is infected. But she won't tell you, you will just see your body weakening and even if you ask her she won't admit that she infected you.

(Mwangi, 19)

STI Prevention—Faithfulness between partners was discussed as a means to prevent the transmission of STIs. Yet, having one sexual partner on the streets may be uncommon due to the transactional and survival sex that results in multiple concurrent partnerships. Both young men and young women explained that staying together with one partner was a way to prevent contracting an STI:

You can sit down with your wife and advise her to be faithful because if she goes out and messes up you will both be infected. But you cannot ask her to change her ways if you are also messing up so you both have to change your ways.

(Nelson, 20)

Abstaining from sexual relations was another way that street-connected youth reported as a means of protecting themselves from STIs, “You can avoid the issue of women and sex and you abstain” (John, 19). Yet, abstaining is not a common practice on the streets and is therefore not generally used as a means of protection by young people.

Knowing the status of your partner and going to get tested was another means identified as a way to protect yourself against HIV. Young people explained that trust and taking responsibility to get tested as a couple were important ways to prevent infection:

For me, when you find a girl, you must trust each other and go for a test and she should be a girl who can be faithful. You might think you are the only one yet she has other men, and that is how infections spread.

(Stephen, FGD, 18–24)

Boys specifically mentioned inspecting the genitals of their female partners using a flashlight or looking at their panties to see if they were dirty. However, no young women mentioned this as a method for determining if their male partner had any infections; yet, inspecting your partner’s genitals can be an important way to determine if they have an active symptomatic STI.

You know you can be with a girl, yet you don’t know her past. I had a girl and we stayed for a while. I later became sick and I wondered if I got from her or my previous lovers. We stayed for 2 months and I was on medication. I asked her if she infected me, but she said she was not the one. I later saw that she had blisters and she developed a funny walking style. So from that time, before I sleep with a girl I must have a torch to inspect her private parts.

(Collins, FGD, 18–24)

Young people referred to many items similar to condoms that could be used for protection, but appeared unaware that these items would not protect them against acquiring STIs. These protective ‘barriers’ included plastic bags, gloves and polyethylene wrappers.

Others will put on nylon papers (clear thin plastic bags). Some will even put on three for example if they hear that a certain girl has AIDS, *kamchuna*. They will take the black polythene (black plastic bags) when they want to do a *collabo* (gang rape).

(Joyce, Barracks leader, 20)

Street-connected youth were knowledgeable about male and female condoms, their availability, and their ability to protect from STIs. As both boys and girls stated in response to the moderator's questions regarding ways to protect themselves against STIs: "The most effective way is to use a condom so that you will not contract the diseases" (Beatrice, 19). "You use a condom" (Silas, FGD, 11–13).

However, many misconceptions and misuse of condoms were reported and therefore condoms were often not being used appropriately:

Because they say that the condom should not be in contact with oil but it already has oil in it (referring to lubricant). But that is me, I can't advise the others to do as I do because I know the hole that I enter, because it's not like I just get a woman and I enter, so when you find a woman and she tells you to buy a condom, you buy then you go at the base, and because we are known there, we take two polythene bags, we put them on before we put on the condom.

(Dennis, Barracks Leader, 24)

There were also gender differences in preferences for condoms, with boys generally not interested in wearing them, but girls indicating they wanted them to. The lack of pleasure associated with condom use was a major theme that boys brought up in discussion typically using the analogy of eating a sweet: "Some say you can't eat a sweet while it is still wrapped" (Ian, 20). Young men also appeared to have concern regarding the lubricant on condoms that they did not trust: "I don't trust condoms. I don't trust the oil in it - you can even fill a drum full of water in a condom." (Stephen, FGD, 18–24)

Girls discussed using female condoms as a means to prevent unwanted pregnancies and STIs without the knowledge of their partner:

We are usually told that we should use condoms and we can also use family planning drugs. For the family planning drugs, we have to use them because when we lack food, clothing and a place to sleep, we have to sleep with some men so that they can provide for us what we need and you know our boys don't like using condoms. There was a time we were given female condoms, which were very good because if we used them, the man would not know. You would just get the family injection then during sex you put on a female condom because there are some boys who will cheat that they are putting on the condom and then they don't or if you insist to help them put it on, they end up tearing it and you will only realise they didn't have it later when they have finished.

(Anne, 15)

However, there was also misuse of the female condom with one girl describing wearing it for repetitive use:

We use condoms to prevent diseases and family planning injections to prevent unwanted pregnancies. Or the female condoms, you can wear it even for a month, you wash it and put it back on.

(Sharon, FGD, 14–17)

While many street-connected youth indicated they did not want to use condoms, they knew the local places where they could obtain condoms for free and for purchase. Several organisations working in Eldoret were known to distribute condoms at young people's barracks as part of safer sex health promotion activities.

Perceptions about the Diagnosis & Treatment of STIs

Study participants identified various health care facilities and community-based organisations in Eldoret where they could seek treatment for STIs. These included including local hospitals, non-governmental organisations, and traditional herbalists. Seeking STI testing for preventive purposes was generally not practised except with respect to HIV testing through voluntary counselling and testing services (VCT) or provider initiated testing and counseling (PITC). Kenya utilises the WHO syndromic management guidelines for STIs and therefore diagnosis typically occurs only after patients present with active symptoms. Both boys and girls appeared to be knowledgeable about the impact an STI could have on their health and reproductive system and the need to seek medical attention early when symptomatic:

You know for the girls, they will smell very bad then other girls will take her to hospital very fast because we hear that the disease affects the reproductive system. There are some of our members who had the same problem and their reproductive system was affected but they are still having sex. For the boy, it affected him the first time but for the girl it was the second time (it took some time). It is good to see the doctor early because you will be treated or else if you are lucky to give birth, the child will be blind.

(Anne, 15)

Some are taken to traditional birth attendants where they are given herbal medicines. They have all those medications. They give you herbal medicine to drink. If you don't want it to get worse, you visit the traditional birth attendants early for medication. The disease can be tamed early before it spreads further and causes more damage and more rot. What I mean is that it is important to prevent the gonorrhea from spreading further and causing more damage because if it worsens one cannot walk and sit. It's very hard.

(Victor, 13)

Discussion

Our findings have the potential to inform clinical practice and public health interventions in relation to sexual and reproductive health services for vulnerable young people and specifically street-connected youth. In particular, they point to the importance of providing sexual health education on the streets and through healthcare providers as a means of dispelling misconceptions and promoting safer sexual practices. They also highlight the opportunity to empower girls to protect themselves through the use of female condoms and, potentially, pre-exposure HIV prophylaxis due to street girls' involvement in transactional sex and preliminary findings suggesting a disproportionate number of young women on the street are becoming HIV-infected (Winston et al. 2015). Finally, they demonstrate the gender

inequity in relation to sexual practices and health outcomes that needs to be taken into account when implementing programmes and delivering care, especially in terms of condom use.

Our results also demonstrate a number of misconceptions in relation to transmission of STIs, protection from STIs, and condom use that require age and culturally appropriate sexual education as a component of sexual and reproductive health programming. They highlight the need to assist young people in developing the skills to communicate with their sexual partner regarding STIs, protection, condom use, and disclosure. Kenya has recently implemented a national adolescent sexual and reproductive health policy (NCAPD 2005). However, to date there have been challenges in implementing and scaling up adolescent specific programmes (NCPD 2013). In Kenya, sexual and reproductive healthcare for young people is provided through youth-focused centres or integrated into existing services (Godia et al. 2014). However healthcare providers face difficulties in relation to providing appropriate adolescent care (Godia et al. 2013). Adolescents in both urban and rural settings report challenges with accessing care, (clinic hours, staffing, number of centres and location), educational resources, gender-focused care, and the attitude of healthcare providers towards young people in general (Godia et al. 2014). Street-connected youth face additional challenges in accessing healthcare services due to their social marginalisation and low socioeconomic status.

Internationally, there is a dearth of research on actions and interventions to modify risky sexual behaviours among homeless youth (Naranbhai, Karim, and Meyer-Weitz 2008). In Kenya, there may be value in leveraging existing community-based organisations and drop-in centres working with street-connected youth, to disseminate sexual health education and implement health programmes. This may be an effective solution since many of these organisations already have existing rapport with the population. Establishing partnerships between healthcare facilities providing youth-specific services and these organisations may be a viable way of enhancing care.

Girls on the street face unique sexual health challenges due to their need to engage in survival sex, their initiation rites, and the sexual and gender-based violence they sustain (Wachira et al. 2015; Embleton et al. under review). A novel finding in this study concerned the use of female condoms by girls. Street-connected girls in our setting described using them in an empowering (albeit sometimes incorrect) way to protect themselves when they were unable to negotiate male condom use.

Gender inequities are prominent in sexual relations among street-connected youth, and lie at the core of misconceptions related to STI transmission and prevention. Street boys sometimes seek sex for pleasure, power, and dominance in the street social hierarchy (Wachira et al. 2015; Embleton et al. under review). For girls, on the other hand, engaging in sex is a primary means of survival. These different motivations need to be taken into account in future programme development.

This study has strengths and limitations. Its strengths include the fact that it is one of the only studies to document in detail street-connected young people's perspectives on STIs and

condom use. It also gave a voice to some of the most marginalised children and youth in Kenya allowing them to share their stories. Lastly, the inclusion of both young women and young men enables us to shed light on some of the gender dimensions of young people's beliefs and practices. Limitations on the other hand include the non-random recruitment and sampling of participants which is prone to selection bias. Young people who chose to participate in the study may be different than their peers who did not. Furthermore, social desirability biases may have influenced responses to sensitive questions about sexual practices and attitudes. Such an effect we believe was moderated by the strong rapport the research team had with the participants. We were though limited to having one focus group for each stratum of the population, which may have further limited the validity of data, although through in-depth interviews we were able to achieve thematic saturation. Lastly, the absence of younger girls aged 11–13 from the study is a weakness and care should be taken when generalising from the experiences of older cohorts of girls.

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References

- Anarfi JK. Vulnerability to Sexually Transmitted Disease: Street Children in Accra. *Health Transition Review*. 1997; 7(Suppl):281–306. [PubMed: 10169651]
- Ayuku D, Kaplan CD, Baars HMJ, de Vries MW. Characteristics and Personal Social Networks of the 'on' the Street, 'of' the Street, Shelter and School Children in Eldoret, Kenya. *International Social Work*. 2004; 47(3):293–311.
- CRA. Kenya County Fact Sheets: Uasin Gishu County. Nairobi: Commision on Revenue Allocation, Government of Kenya; 2011.
- Embleton L, Wachira J, Kamanda A, Naanyu V, Winston S, Braitstein P. 'Once You Join the Streets You Will Have to Do It': Sexual Practices of Street Children and Youth in Western Kenya. *Under Review*.
- Godia, Pamela M.; Olenja, Joyce M.; Hofman, Jan J.; van den Broek, Nynke. Young People's Perception of Sexual and Reproductive Health Services in Kenya. *BMC Health Services Research*. 2014; 14(1):172.10.1186/1472-6963-14-172 [PubMed: 24731733]
- Godia, Pamela M.; Olenja, Joyce M.; Lavussa, Joyce a; Quinney, Deborah; Hofman, Jan J.; van den Broek, Nynke. Sexual Reproductive Health Service Provision to Young People in Kenya; Health Service Providers' Experiences. *BMC Health Services Research*. 2013; 13:476.10.1186/1472-6963-13-476 [PubMed: 24229365]
- IRIN. U N Office for the Coordination of Humanitarian Affairs. *Youth in Crisis_: Coming of Age in the 21st Century*. 2007.
- Kaime-Atterhög W, Lindmark G, Persson L-Å, Ahlberg BM. Burning 'Centre Bolt': Experiences of Sexually Transmitted Infections and Health Care Seeking Behaviour Described by Street Boys in Urban Kenya. *Child and Youth Services Review*. 2007; 29(5):600–617.
- Kayembe PK, Mapatano MA, Fatuma AB, Nyandwe JK, Mayala GM, Kokolomami JI, Kibungu JP. Knowledge of HIV, Sexual Behavior and Correlates of Risky Sex among Street Children in Kinshasa, Democratic Republic of Congo. *East African Journal of Public Health*. 2008; 5(3):186–92. [PubMed: 19374322]

- Kudrati M, Plummer ML, Yousif ND. Children of the Sug: A Study of the Daily Lives of Street Children in Khartoum, Sudan, with Intervention Recommendations. *Child Abuse and Neglect*. 2008; 32(4):439–48. S0145-2134(08)00034-3 [pii]. 10.1016/j.chiabu.2007.07.009 [PubMed: 18457872]
- Lockhart C. Kunyenga, 'Real Sex,' and Survival: Assessing the Risk of HIV Infection among Urban Street Boys in Tanzania. *Medical Anthropology Quarterly*. 2002; 16(3):294–311. [PubMed: 12227258]
- Mandalazi P, Banda C, Umar E. Street Children's Vulnerability to HIV and Sexually Transmitted Infections in Malawian Cities. *Malawi Medical Journal*. 2013; 25(1):1–4. [PubMed: 23717747]
- Mudingayi A, Lutala P, Mupenda B. HIV Knowledge and Sexual Risk Behavior among Street Adolescents in Rehabilitation Centres in Kinshasa; DRC: Gender Differences. *Pan African Medical Journal*. 2011; 10:23. [PubMed: 22187605]
- NACC. Kenya AIDS Response Progress Report: Progress towards Zero. Nairobi: 2014.
- Naranbhai V, Karim QA, Meyer-Weitz A. Interventions to Modify Sexual Risk Behaviours for Preventing HIV in Homeless Youth. *Cochrane Database of Systematic Reviews*. 2008; (4)
- NASCOP. Adolescents Package of Care in Kenya: A Health Care Provider Guide to Adolescent Care. Nairobi: 2014.
- NCAPD. Adolescent Reproductive Health and Development Policy: Plan of Action 2005–2015. Nairobi: 2005.
- NCPD. Kenya Adolescent Reproductive Health and Development Policy: Implementation Assessment Report. Nairobi: 2013.
- Pitorak, H.; Bergmann, H.; Fullem, A.; Duffy, MH. Mapping HIV Services and Policies for Adolescents: A Survey of 10 Countries in Sub-Saharan Africa. Arlington, VA US: 2013.
- Sorber R, Winston S, Koech J, Ayuku D, Hu L, Hogan J, Braitstein P. Social and Economic Characteristics of Street Youth by Gender and Level of Street Involvement in Eldoret, Kenya. *PLoS One*. 2014 in press. 10.1371/journal.pone.0097587
- Tadesse N, Awoke Ayele T, Birhanu Mengesha Z, Addis Alene K. High Prevalence of HIV/AIDS Risk Sexual Behaviors among Street Youth in Gondar Town: A Community Based Cross Sectional Study. *BMC Research Notes*. 2013; 6(1):234. 1756-0500-6-234 [pii]. 10.1186/1756-0500-6-234 [PubMed: 23767966]
- UNOHCHR. Protection and Promotion of the Rights of Children Working And/or Living on the Street. Geneva: UNOHCHR; 2012.
- Wachira J, Kamanda A, Embleton L, Naanyu V, Winston SE, Ayuku D, Braitstein P. Initiation to Street Life: A Qualitative Examination of the Physical, Social, and Psychological Practices in Becoming an Accepted Member of the Street Youth Community in Western Kenya. *BMC Public Health*. 2015; 20(15)
- WHO. HIV and Adolescents: Guidance for HIV Testing and Counselling and Care for Adolescents Living with HIV: Recommendations for a Public Health Approach and Considerations for Policy-Makers and Managers. Geneva: 2013.
- Winston SE, Chirchir AK, Muthoni LN, Ayuku D, Koech J, Nyandiko W, Carter JE, Braitstein P. Prevalence of Sexually Transmitted Infections Including HIV in Street Involved Adolescents in Western Kenya. *Sexually Transmitted Infections*. 2015; 10.1136/sextrans-2014-051797
- Wutoh AK, Kumoji EK, Xue Z, Campusano G, Wutoh RD. HIV Knowledge and Sexual Risk Behaviors of Street Children in Takoradi, Ghana. *AIDS and Behavior*. 2006; 10(2):209–15. [PubMed: 16365697]

Table 1

Distribution of interview sessions

Category	# of In-depth Interviews Participants	# of FGD's conducted
Barrack leaders	4	0
Male		
11–13yrs	1	1
14–17yrs	6	1
18–24yrs	7	1
Female		
11–13yrs	0	0
14–17yrs	3	1
18–24yrs	4	1
Total	25	5

Table 2

STI terminology used on the streets by SCCY in Eldoret, Kenya

Sexual Terminology	Language used on the street	Context on the streets
HIV/AIDS	Kamchuna, ukimwi, kasondwa, ukimbo, ka wanajeshi, ngwengwe, kaupepo, soya	"...and HIV we say that, ' <i>umeniletea kaugonjwa ka wanajeshi</i> '. It is called a disease of the soldiers because they believe the disease is highly spread among soldiers. Another name for HIV is ' <i>kamchuna</i> '. (Agnes, 21)
Gonorrhoea	Kisununu, kisonono, 'malaria', kuungua, kubanishwa, kisibo	"eeh like 'kisununu', or a girl who hasn't taken a shower you can sleep with her then 'akuchome' (burn)... Your private parts will have puss and you get 'kisununu'... you will see puss coming from your private parts, and feel pain when passing urine." (Mwangi, 19)
General irritation in genital region / scabies	Upele	The street children refer to "upele" to mean the rashes around the private parts. They also use "upele" for the body rash - basically scabies.
Syphilis	Kaswende, 'maziwa'	"' <i>kaswende</i> '... There are those who urinate blood and they have wounds down there... From the penis down to the scrotum" (Simon, 17)
Pubic Lice	Mguu nane	"there is also 'mguu nane'...when you have sex with a boy and one of you or both of you don't usually shower there are small insects which start living in your private parts which look like... lice...lice are small. Like 'viroboto'. It looks like those insects found on cows exactly have you ever had them?...I saw them on someone" (Sharon, Female, 14–17 years)
Genital Warts	Malengelage	'malengelage'...which one is that?...things swell on your private parts. Watery, they look oily...(Daisy, FGD, 14–17)
Chlamydia	Not mentioned but may have the same general symptoms as gonorrhoea and therefore just called the same thing "Kisununu"	
Non-Sexually transmitted Diseases	SCCY discussed other diseases that are not considered STIs. These included: tuberculosis, Ebola, diarrhea, leprosy, and malaria.	One male noted ' <i>malaria</i> ' is sometimes used as a code word for gonorrhea on the streets: " <i>gonorrhea we call it 'malaria'</i> " (Gilbert, Barracks Leader, 22).