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# Perceptions about the use of direct cash-transfers to increase housing stability and HIV services utilization among street-connected young women in Western Kenya

Ashley Chory<sup>1,2</sup>, Reuben Kiptui<sup>3</sup>, Sheila Kirwa<sup>3</sup>, Becky Genberg<sup>4</sup> and Lonnie Embleton<sup>1,2\*</sup>

\*Correspondence:

Lonnie Embleton

lonnie.embleton@mssm.edu

<sup>1</sup>Arnold Institute for Global Health, Icahn School of Medicine at Mount Sinai, 1216 Fifth Avenue, 5th Floor, New York, NY 10029, USA

<sup>2</sup>Department of Global Health and Health System Design, Icahn School of Medicine at Mount Sinai, New York, NY, USA

<sup>3</sup>Academic Model Providing Access to Healthcare, Eldoret, Kenya

<sup>4</sup>Bloomberg School of Public Health, Division of Infectious Diseases Epidemiology, Baltimore, MD, USA

## Abstract

Addressing homelessness is a critical component of HIV prevention; in high income countries, unconditional cash-transfer (CT) programs have been implemented for housing support with youth populations. Here we describe a pilot unconditional CT program for street-connected young women in western Kenya and stakeholder and beneficiary perceptions of its feasibility, acceptability, appropriateness, implementation and sustainability. Interviews were conducted with 17 participants, of which 9 were street-connected young women (median age 22 years) and 8 were key informants (policymakers, healthcare workers and community organization workers in two counties). Almost all street-connected young women were strongly in support of the CT program, citing numerous potential benefits, including general wellbeing and safety, improved community perceptions secondary to housing related cleanliness, the potential to create businesses and generate independent income, and finally HIV-related adherence benefits. In general, stakeholders were also supportive, with some indicating additional programmatic considerations were necessary related to the CT monetary amount, disbursement procedures, and sustainability and expansion. The CT program was found to be highly feasible, appropriate and acceptable; participants provided additional input on implementation and sustainability approaches.

**Keywords** Cash-transfer, Homeless youth, Housing, HIV, Kenya

## 1 Introduction

Globally, and especially in sub-Saharan Africa, despite the tremendous progress in expanding access to antiretroviral treatment (ART) as prevention for HIV over the previous decade, youth populations are still disproportionately acquiring HIV and continue to experience substantial barriers to engagement in care [1, 2]. Among young people, there are also inequities in HIV prevention and treatment. Young people who live and/or work on the streets, termed street-connected youth (SCY) are a population at high risk of acquiring HIV and having poor treatment outcomes [3–7]. The experiences that lead



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to unstable housing, coupled with the challenges of living on the street, result in substantially higher risks of HIV acquisition, as evidenced by HIV infection rates that are three to nine times higher than those with stable housing [8]. Housing instability acts as both a contextual and environmental influence that facilitates risk-taking behavior, like substance use and sex work, and that perpetuates experiences of physical and sexual violence [8]. Individuals experiencing homelessness or living in unstable housing are more likely to delay initiation of HIV care, have poorer engagement in care, are less likely to receive ART, and are less likely to have ideal medication adherence [8]. These challenges are the result of competing needs while living on the street, including but not limited to, difficulties storing medications, challenges engaging in and navigating the health system, and experiences of stigma and discrimination [9].

In western Kenya, in 2019, the seroprevalence of HIV among SCY was 4.4%; 2.7% among males and 8.9% among females [3, 10]. However, the seroprevalence among street-connected young women increases substantially with age to 10.8% among females aged 15 to 24 and 26.8% among females 25–29 years [3], which is substantially higher than other at-risk youth populations in western Kenya [4, 5]. SCY experience considerable inequities that place them at increased risk of acquiring HIV, such as street-initiation processes (a ritual, or ‘rite of passage,’ often involving physical and sexual violence, that is required for acceptance into a community) [11], engagement in transactional sex [6, 12], gender inequities and experiences of gender based violence [11, 13, 14], engagement in sex under the influence of drugs and alcohol [15], and engagement with multiple sexual partners [16] with inconsistent condom use [6, 17]. SCY maintain a highly stigmatized identity that when paired with diagnosis of a stigmatized health condition, greatly influences their ability to access, engage, and re-engage with the health system [18, 19]. Furthermore, SCY living with HIV may not be accessing HIV treatment services adequately, marked by considerable mortality and morbidity attributed to HIV related causes [20, 21].

Addressing homelessness is a critical component of HIV prevention, early enrollment and consistent engagement in HIV care, improving treatment outcomes, and reducing HIV-related morbidity and mortality [22]. Housing First models [23, 24] take an evidence-based approach to addressing housing instability by providing immediate access to subsidized and permanent housing without pre-conditions or other barriers to entry [25, 26]. This strategy, implemented in high-income contexts and with adults, has demonstrated success in addressing health needs [27] and has now been adapted for use with youth populations [24, 28]. In low- and middle-income settings like Kenya, there are limited policies and social supports for young people experiencing housing instability, and no previous application of a Housing First model for this vulnerable population. In this setting, to address poverty, a cash-transfer to orphaned and vulnerable children (CT-OVC) has been implemented, but this program remain inaccessible to SCY who are typically no longer living with a caregiver [29, 30].

Cash-transfer (CT) programs have been implemented globally [30–41] as a social protection and poverty reduction strategy and in response to humanitarian emergencies [42–44]. Conditional cash transfer programs provide money to individuals with stipulations for behavior; for example, cash may be provided to a family if they bring their child to primary care, well visits [45]. Unconditional cash transfer programs remove this barrier and provide funds without behavior requirements. Many studies [44, 46–52] have

explored the impact of cash-transfers on health and wellbeing, consistently reporting beneficial impacts, including improvements in access to care, fostering economic autonomy, improvements in child school attendance, empowerment of women and improvements in health service usage [53, 54]. Cash-transfer strategies are a suitable approach as they offer more flexible benefits than direct provision of food, goods, or other services, and can be implemented more rapidly, often with more transparency [44, 47]. In the context of HIV, a systematic review of data from 42 countries found that cash-transfer programs were associated with lower sexually transmitted infections (STIs) among females, increased HIV testing, a reduction in new HIV infections, and improvements in both ART coverage and AIDS-related deaths [53]. In high-income settings like the United States and Canada, cash-transfer programs have been implemented with youth populations and specifically for housing supports [28, 55–57]. Criticisms around cash-transfer interventions include concerns around misuse of funds, possible discouragement of work incentives and that it might not address the root causes of poverty without additional supports [28, 55–57].

The objective of this paper is to describe a pilot direct unconditional cash-transfer program for street-connected young women in western Kenya; through in-depth interviews with healthcare providers, policymakers, community stakeholders and young women enrolled in the program, we highlight the perceptions regarding its feasibility, acceptability, appropriateness, implementation and sustainability.

## **2 Methods**

### **2.1 Study setting**

This study was conducted in Eldoret town and Huruma Estate located in Eldoret, Uasin Gishu County and in Kitale town, Trans-Nzoia County, both of which are located in western Kenya, and within catchment areas for the Academic Model Providing Access to Healthcare (AMPATH) Kenya. AMPATH is a long-standing academic partnership between Moi University, Moi Teaching and Referral Hospital, the Government of Kenya, and a consortium of universities jointly working together to improve the health of communities across western Kenya [58]. These sites in Kenya were selected for several reasons. First, SCY are prevalent in Eldoret, Huruma and Kitale [3, 59]. Second, there is evidence that young women connected to the streets in this region of Kenya experience several risk factors for acquiring HIV, including homelessness, unstable/inadequate housing, and sexual and gender-based violence [11, 14, 60–62]. Third, the prevalence of HIV among street-connected young women in this region of Kenya exceeds that of the general population, and research suggests that a lack of stable housing decreases medication adherence in this setting [3, 7, 9].

### **2.2 Research team and reflexivity**

The study team have built a participatory and rights-based programme of research with street-connected children and youth in western Kenya through AMPATH over the course of 15 years. During the Peer Navigator (PN) and cash-transfer projects, the international principal investigator Dr. Paula Braitstein (Epidemiologist) and local principal investigator Prof. David Ayuku (Psychologist) passed away, leading to delays and challenges in implementation of the project. Despite these unfortunate circumstances and losses, the remaining project team were committed and able to carry on the study

given their strong existing relationships with the street community and the research and care infrastructures at AMPATH. The remaining team consisted of four Peer Navigators (PNs), one young man and three young women, who are formerly street-involved, a male Kenyan Research Coordinator, female Data Manager, and female Research Intern. A female international co-investigator (LE) with expertise in conducting research with SCY in Kenya and population and public health who has a history of collaborating with the Kenyan study team joined the project to support its implementation and analysis. Additionally, a female international co-investigator (AC) with expertise in conducting research with adolescents living with HIV in Kenya joined the project to support data analysis. Finally, a female international epidemiologist (BG), joined the team as a co-investigator to support data analysis and interpretation. The male Kenyan Research Coordinator (with a bachelor's in science in Biomedical Sciences) and Female Research Intern (with a degree in Social Work and Sociology) conducted the qualitative interviews with participants and stakeholders given their local knowledge, existing relationships with the street community, and language and logistical considerations.

### **2.3 Study design**

The CT pilot study was implemented from June 2023 to December 2023 and embedded in an existing Peer Navigator Project to support SCY [63, 64]. From August to October 2023 we conducted baseline qualitative interviews as part of a hybrid type 1, non-randomized clinical trial [65] testing the implementation of an unconditional cash-transfer of 2000 KES/month (~ \$15.00 USD) to eligible street-connected young women aged 16–29 years to improve housing stability and HIV service utilization. The baseline qualitative research sought to investigate the acceptability, feasibility, and appropriateness of an unconditional cash-transfer intervention.

#### **2.3.1 Peer navigator project**

The Peer Navigator Project (PNP) aims to adapt and scale an existing intervention [7, 63, 64] to increase the uptake and effectiveness of HIV testing, prevention and treatment services among SCY ages 16–29 years in Canadian (London, ON, Toronto ON, and Montreal, QC) and Kenyan (Eldoret and Huruma in Uasin Gishu County, and Kitale in Trans-Nzoia County) settings. Through qualitative inquiry with key stakeholders (street youth, healthcare workers, and community partners), the peer navigator model was perceived to be highly acceptable in all sites [66], and guided the requirements for a PN, including that the PN themselves have lived experience of homelessness, be aged 18–29, and be of any HIV status but willing to disclose it. The PNP also identified that a lack of basic material needs, most notably housing, prevents SCY from accessing HIV services and healthcare more broadly [64]. These data were used to inform the subsequent cash-transfer intervention. For the purposes of this analysis, the peer navigator project represents the 'parent study' for which the cash-transfer intervention was layered; the peer navigator project has been described and published elsewhere [66].

#### **2.3.2 The cash-transfer intervention**

The cash-transfer intervention was layered into the PNP and tests the implementation of an unconditional cash-transfer to eligible SCY. The PN approached all street-connected young women enrolled in the PNP study ( $n=254$  across Eldoret, Huruma, and Kitale

sites) and assessed their housing status using a standardized tool. Eligible and enrolled participants received 2000 Kenyan shillings per month (~\$15.00 USD) for 6 months; a research team member managed disbursement directly to participants. The PN provided on-going support, information, and referrals as needed to the participant.

#### **2.4 Sampling considerations and study participants**

The study assessed the feasibility, acceptability, appropriateness, implementation and potential sustainability of the cash-transfer intervention through key informant interviews with healthcare providers, policymakers, community stakeholders and street-connected young women beneficiaries. Key informants were eligible to participate if they had worked with SCY for at least 3 months at the time of the interview. SCY were eligible to participate in the interview if they were female and enrolled in the cash-transfer intervention; findings reported here are from baseline interviews at the beginning of the cash-transfer intervention.

#### **2.5 Sampling, recruitment, enrolment**

All participants in this study were purposively sampled, however; we used different recruitment strategies across categories of participants (SCY vs. community stakeholders). SCY participants were recruited and enrolled through the PN program. A purposive sample of street-connected young women enrolled in the CT study from Eldoret and Huruma were recruited to participate in interviews pre-implementation. Community stakeholders were purposively sampled through existing relationships and networks and contacted in person or by phone to explain the purpose of the study and invite them to voluntarily participate; they were consented and interviewed in their respective offices when feasible, otherwise participants were invited to MTRH or Moi University offices to undergo informed consent and participate in interviews. In other counties, participants were consented and interviewed in their offices and places of employment.

#### **2.6 Ethical considerations**

This study received ethics approval from the MTRH Institutional Research Ethics Committee, the University of Toronto Research Ethics Board and the Icahn School of Medicine at Mount Sinai Institutional Review Board. Written informed consent was obtained from all stakeholder participants. The study received a waiver of parental consent for minors and followed an established process for conducting ethical research with SCY [67]. SCY were asked to provide documented verbal assent (those aged 15–17 years) or consent (those aged 18–24 years) to participate. All participants were made aware that their interviews would be audio-recorded. Participants were compensated for their time with 1000 Ksh (~ \$8.00 USD).

#### **2.7 Data generation**

Two separate interview guides were designed and pre-tested by a local team of investigators: one for SCY and one for stakeholder participants. Interview guides were developed by the study team and informed by a long-standing partnership with the study population, from previous identified needs, and by the global literature on cash-transfer interventions; the interviews were tailored to probe topics relevant to each participant group. SCY were asked broadly about their housing specific needs, including preferences for

types of housing, the items and structures needed to ensure adequate and appropriate housing, experiences accessing housing and related supports, and facilitators and barriers to maintaining housing. SCY participants were also asked their perspectives on the CT intervention, including its' feasibility and acceptability, the appropriate financial amount to be given, and any foreseeable benefits, challenges, and concerns. For stakeholders, additional questions in relation to the sustainability and implementation of the intervention were included. The interviews focused solely on housing and the cash-transfer intervention; the interviews did not include questions related to the broader Peer Navigator Project.

Interviews were conducted in private rooms in the clinical setting; some stakeholders were interviewed in their private offices. No field notes were collected during interviews and no external observers were present. Interviews were audio-recorded, transcribed, and interviews conducted in Kiswahili were translated into English for analysis. Data were triangulated from multiple sources (e.g. interviews with different types of participants in different locations) to enhance the reliability and validity of the data and reach saturation [68]. The study Research Coordinator and Research Intern conducted 17 interviews with 17 participants: 14 women, 3 men.

## 2.8 Qualitative data analysis

A mixed deductive and inductive thematic analysis was led by two researchers (LE and AC) based on an initial coding framework derived from the interview questions. Each interview guide question was reviewed for its' intended area of inquiry and to identify its' intended correlated code; these codes were used as an outline for the initial codebook. The researchers independently extracted and analyzed data using the qualitative software program ATLAS.ti 24 and generated initial themes independently before comparing results and reaching a consensus. In phase 1, the researchers independently reviewed transcripts per the initial codebook, expanding on and adding codes as new concepts and themes arose. In phase 2, a series of interpretive meetings were held where the researchers discussed analytic notes and further defined and refined themes. For this analysis, using the Implementation Outcomes Framework, findings were situated into major implementation science themes related to intervention acceptability, appropriateness, feasibility, implementation considerations, and sustainability as well as 'service' related outcomes, such as perceived benefits of the intervention (effectiveness) and potential unintended consequences (safety) [69].

## 2.9 Implementation outcomes framework and definitions

We situate our findings within the conceptual framework for types of outcomes in implementation research [69] spanning implementation and service outcomes domains, including (1) acceptability and feasibility; (2) appropriateness; (3) implementation considerations; (4) sustainability; (5) perceived benefits of the intervention (potential effectiveness); and (6) potential unintended consequences of the intervention (safety). Within each of these domains, we generated major themes and sub-themes.

Acceptability [69] is the perception among implementation stakeholders and target population that a given treatment, service, practice, or innovation is agreeable, palatable, or satisfactory. Appropriateness [69] is the perceived fit, relevance, or compatibility of the innovation or evidence based practice for a given setting, provider, or consumer;

and/or perceived fit of the innovation to address a particular issue or problem. “Appropriateness” is conceptually similar to “acceptability,” and the literature reflects overlapping and sometimes inconsistent terms when discussing these constructs. We preserve a distinction because a given treatment may be perceived as appropriate but not acceptable, and vice versa.

Feasibility [69] is defined as the extent to which a new treatment, or an innovation, can be successfully used or carried out within a given agency or setting [70]. Typically, the concept of feasibility is invoked retrospectively as a potential explanation of an initiative’s success or failure, as reflected in poor recruitment, retention, or participation rates. While feasibility is related to appropriateness, the two constructs are conceptually distinct. Sustainability [69] is defined as the extent to which a newly implemented treatment is maintained or institutionalized within a service setting’s ongoing, stable operations.

### **3 Findings**

#### **3.1 Participants**

The study included 17 participants, of which 9 were SCY (100% female, median age 22 years) and 8 were key informants. Key informants included policy makers, healthcare workers and community organization workers in Uasin Gishu and Trans Nzoia counties; SCY participants resided in either in Uasin Gishu and or Trans Nzoia counties.

#### **3.2 Acceptability and feasibility**

Corresponding to the domains of acceptability and feasibility, our analysis produced major themes associated with these implementation outcomes constructs, including overall acceptable, intervention unacceptable, and general feasibility of the intervention. Participants were divided about the intervention’s acceptability for SCY. Some key informants and SCY indicated that the intervention was acceptable because of the impact that it could have on SCY, including from improving housing stability, to the way that someone looks and is viewed in society, and to experiencing dignity and respect (Table 1). Key informants were more likely than the SCY participants to indicate that the cash-transfer intervention was unacceptable. Key informants expressed concern around the inappropriate use of cash, especially noting that SCY may use it to buy and use substances. Key informants questioned the sustainability and long-term impact of the intervention, noting that a housing-only model, without additional social supports, would not appropriately address the complex needs of SCY.

In association with acceptability, participants debated at length the acceptability of the amount of money for the the cash-transfer, which we captured as a sub-theme (Table 2). Participants shared their perspectives on the acceptable amount of money to be provided monthly by the cash-transfer intervention. The cash-transfer intervention, as described to participants allocated an unconditional payment of 2000 ksh (~\$16 USD) to SCY each month. Some participants indicated that 2000 ksh (~\$16 USD) was a sufficient monthly amount to cover the cost of housing and in some settings still have funds remaining to purchase food or other necessities. SCY participants more commonly indicated that 3000 ksh (\$24 USD equivalent) a month or more would be more acceptable, as it would allow for additional funds to be spent on income generating activities, purchasing of food, and household supplies. Interestingly, some key informant participants

**Table 1** Acceptability of the cash-transfer program and representative quotes

Overall acceptable	<p>Yes, it's a good thing to the street people. Like right now if it wasn't good, we would not have changed to this extent. But it is good it has made us change and we now look like people. – Female, SCY, aged 17 years</p> <p>I see many people's lives changing. Now one can save. One can pay for the house. If you are living in a house that you pay 1000 (~\$8USD), you can use that to pay the house and the other 1000 (~\$8USD) you can start our own work. It is something good. Most of them now do not sleep outside like they did. The ones in the streets are few. – Female, SCY, aged 16 years</p> <p>I: Does it meet your approval? R: Yes. Because, okay, there is nothing that would make us happier than to see these kids comfortable. We would have wanted to give them all shelter, to give them all a home, to give them all everything they deserve, but we cannot reach the standards that, you know. And these kids, they are too many. So, you cannot change everybody. If you can do it, why not? We are 100% behind you. – Female, Stakeholder 4, Uasin Gishu</p> <p>God bless cash transfer first. It has helped us a lot. I myself had nowhere to stay. I used to stay in town. Yes, it is good. When they go round town, they are looking for that money. If there is somewhere they are planning to find it, they relax waiting for it. – Female, SCY aged 26 years</p>
Intervention Unacceptable	<p>I: Does it meet your approval? R: Unfortunately, no. There's a lot of what-ifs... All these things can happen. Yes, it can go well. And I pray it goes well. Trust me, I do. Because these girls need as much help as they can. But with the financial help comes a lot. We are working with girls here who are using bhang, are using other drugs, and they're breast-feeding. That's why sometimes even with supper, with getting their food, we have to pay the hotel directly for them just to go pick the food. Because we don't want to give them money. Because we know what they'll do with the money. And here, you're giving them 2000 (~\$16 USD). Some of them have never handled 2000 (~\$16 USD) in their whole life. So, you can imagine the excitement and the dangers that come with that. – Female, Stakeholder 1, Trans-Nzoia</p> <p>I: Does it meet your approval? R: If it is sustainable I would say it is at some level, not 100% though. Because the cash transfer might cater for one or two factors but might not cater for all because it might look into the aspects of the well-being but health issues is also different there are others that need referrals and support, the external support but yeah fine to me it can support to some level. – Male, Healthcare provider 3, Trans-Nzoia</p>

expressed the idea that the amount of funds provided should cover housing costs, but should not be provided in excess, sharing concerns that that would make SCY 'too comfortable'

Overall, participants viewed the cash-transfer intervention as feasible in the setting but stressed the importance of appropriate intervention procedures and ensuring beneficiaries are adequately informed and understand the intended use of the cash-transfer and time-limited duration. Key informant participants shared that feasibility may be dependent on intervention procedures, including how and to who the funds would be disbursed to ensure protection against money being stolen as explained by one healthcare provider:

*Yeah [it is feasible] depending on how it is utilized. Because when you say that probably you are giving a street family 2000 shillings (~\$16 USD) and tell them go and pay rent, to me it is not making sense, because I give her 2000 (~\$16 USD) and even before she goes to, before she gets to town, already the rest will have taken that money away. So, for me it is feasible, yes, but depending on how it shall be dispensed.*  
– Female, Healthcare provider 2, Uasin Gishu.

Other feasibility considerations stressed by participants included ensuring that participants are well informed about the cash-transfer as stated by a male healthcare provider:

**Table 2** Acceptable amount of money for the cash transfer

2000 ksh	<p>So, I think for the basics in a house, yeah, 2000 (~\$16 USD) is good. Because at least it's not too much that will make them too comfortable and it's also not too little that they will feel like, I am too confined, or this is too little. – Female, Stakeholder 1, Trans-Nzoia</p> <p>2000, I think it's fair. Because one, number one, in Kitale, for that kind of lifestyle, I think they can be able to afford a decent place and still have something aside maybe for clean water and even electricity tokens. – Female, Stakeholder 1, Trans-Nzoia</p> <p>Nowadays the cost of living is very high. But when you go to the slums, of course, you will still get a house like 1000 (~\$8 USD). You can get around 1200, 1300, which is not bad for a street family who has just gotten out of the street and gone to the house. So, if you give that 1200 house and then the 800 to start and organize what they will eat, then for me it will not be bad. – Female, Healthcare provider 2, Uasin Gishu</p>
3000 ksh	<p>When they increase it for the youth, that can be good. If it is increased to 3000 per month, that will be better. – Female, age 16</p> <p>I think the amount of 2000 should be increased to 3000 (~\$24 USD). The 2000 when you pay rent, is over. They should increase it to 3000 at least. From there you can pay for the house and do a little house shopping to eat. – Female, age 24</p> <p>If they can increase it to a month 3000 (~\$24 USD), they can get a meaningful house for 1500 (~\$12 USD). The 1500 one can save and start his own job. – Female, age 22</p>
4000 ksh+ (\$USD)	<p>For you to take a house? 30,000 (~\$240 USD) for you to take everything. Every month? 10,000 (~\$80 USD). R: When you get that, this month you can take a house for 2000 (~\$16 USD). After that you buy a mattress and some few things. The next month you will buy what you didn't and put up a business. – Female, age 19</p> <p>R: Housing only. Or housing is including food and everything? I: Yes, as a package. R: I think 2000 (~\$16 USD) is little. I thought 2000 is just for rent and the upkeep. I can say at least 4000 (~\$32 USD) will be enough. I: Why 4000? R: Because there is food, there is things like electricity, of course you pay the house, everything. So, to me I thought 2000 is just for the rent. – Female, Stakeholder 1, Trans-Nzoia</p> <p>They should increase from 3000 to 5000 (~\$24–40 USD). If they increase it to 3000, the two were for the house. The three you can buy food and clothes to wear. – Female, age 22</p>

*Yeah of course it is feasible, if it is done well and it reaches [the participants], and it's understood as to why it is been provided. So, if the information comes from the start and it's practicability done I think it is as much feasible.*

*– Male, Healthcare provider 3, Trans-Nzoia.*

### 3.3 Appropriateness

Participants were asked to consider the appropriateness of the proposed cash-transfer intervention, and we generated two major themes, appropriate and appropriate with considerations for additional supports (Table 3). Overwhelmingly, participants thought the proposed intervention was appropriate for SCY, that it was a good fit for Eldoret and Kitale towns, and that it was suitable to address the day to day needs of the vulnerable population. Some key informants indicated that the intervention was appropriate but required additional considerations for other social supports to meet their basic needs, including food, household material goods, substance use prevention, and linkage and referrals for health services.

### 3.4 Implementation considerations

Our analysis produced several sub-themes pertaining to implementation considerations, including eligibility criteria, disbursement procedures, and length of intervention time (Table 4). In association with eligibility, key informant participants shared ideas around the idea of welfare and dependency on the program, the potential for fraudulent enrollment, and who is deserving of support. Participants noted a number of proposed

**Table 3** Appropriateness of the cash-transfer program and representative quotes

Appropriate	Of course it's [cash transfer intervention] appropriate for the street youths, it would help them to get an alternative for their normal day-to-day lives compared to what they are getting from the streets. It's a good fit for this location. So, providing them with that cash transfer will help them to meet their needs. Be it food that they might need in the streets, be it some clothing that they might need again, be it the grooming aspect. It makes them meet their needs. – Male, Healthcare provider 3, Trans-Nzoia It is appropriate. Yeah. It will help them. This is a good cause. You are aiming to change their lives. So definitely. Langas [informal settlement] is their backyard. So, if this location, this is the perfect location because they are here. They were all chased from town, and they are all in Langas. – Female, Stakeholder 4, Uasin Gishu
Appropriate with considerations for additional supports	It is a good thing, but now people [program leadership] have to sit and agree on how it should be done. Not just to take it like for an orphan or a vulnerable child who is seated in a family or who is in a community or who is under a caregiver. This is a very different person in the society. They are in their own world, they are using drugs, they are doing anything with them. So sometimes probably another knows you have given this one 2000 shillings (~\$16 USD), the first thing they will hit them up and then they will die even. – Female, Healthcare provider 2, Uasin Gishu Only for the ones who are age appropriate. You don't want to be in the hands of the government, and they say this is a 16-year-old in a house that you gave her money for. – Female, Stakeholder 1, Trans-Nzoia So. I think it is appropriate to the extent that the individuals targeted have been supported to manage the fund. Not independent. It's a suitable intervention and for the girls and the women we have said that housing is priority but we also adding that there should be other range of programs or interventions to support the sustainability. – Male, Policymaker 1, Uasin Gishu Yeah, whereas the money is good, but the value may not really be adequate to deal with their immediate needs. So, besides the money there could be also other support, other linkages. The support and linkage to the government facilities that may be available. – Male, Policymaker 1, Uasin Gishu

eligibility criteria for the cash-transfer, including being over the age of 18, having no traceable family, a willingness to engage in skills-building for income generating activities, and an implementation assessment of the length of time a person had previously lived on the street so as to better assess their comprehensive needs.

The conditionality and method of cash disbursement was a topic that participants had varied perspectives on, with some stating that cash should be paid directly to landlords for rent or for children's school feeds, whereas others noted the definition of unconditional, that the money disbursed should not be subject to any conditions such as paying to a landlord and that youth would gain independence from managing their own finances. Regardless of which disbursement procedure was supported, participants consistently expressed the importance of transparency in procedure—that SCY should be well-informed on how funds would be provided.

Nearly all participants expressed that a 6 month cash-transfer was not a long enough time for participants to achieve housing stability and independence and that the length of intervention time should be extended. Participants suggested the length of the cash transfer intervention should be tailored to each individuals' needs, while others suggested a timeline of up to a year. Notably, all participants stressed the importance of transparency with the payment timeline to ensure that beneficiaries would know the timeline and end date for support.

### 3.5 Sustainability

The sustainability of the cash-transfer intervention was discussed with participants, and the following sub-themes were generated: collaboration and partnerships, scaling,

**Table 4** Implementation considerations and representative quotes

Eligibility criteria	<p>We must come up with an assessment of who qualifies. One, such a person should be without any traceable family connection. Such a person should be willing to get out of the street and start independent living. Such a person should be willing also to acquire skills that would make them self-reliant. We should not come up with a program [where] we think we can take care of street children the entire of their lives. I think the approach would be how can we support the social dynamics around the street children or the street families so that they can get an alternative way of life. – Male, Policymaker 1, Uasin Gishu</p> <p>18, strictly 18 years and above. Even if you are 17, you are a baby. You are a minor. According to our laws, you are a minor. – Female, Stakeholder 1, Trans-Nzoia</p> <p>We should be able to know whether it is true that they have been in the street and for what duration. If for example, someone has been in the street. for like more than 5 years, then I am thinking at this level we will also have to think on a different perspective; it could be very difficult to reintegrate this one back to the family. I think the best way is to categorize them based on what duration they have stayed in the street. – Female, Healthcare provider 2, Uasin Gishu</p>
Disbursement procedures	<p>If they wanted to help girls who use drugs, they should go with them personally. They also pay their house or request for the landlords' number. The money that is left, if the house is 1000 (~\$8 USD), they pay for her and the 1000 that is left, they then buy her food. – Female, SCY aged 27 years</p> <p>You give them the cash because we're talking about independence. Yours is non-conditional. So, if it's non-conditional and you pay to the landlord then it no longer becomes non-conditional. You see a non-conditional cash is that you give me money I manage my money. That's how non-conditional money works. – Male, Policymaker 1, Uasin Gishu</p> <p>The ones representing us, everyone has their own day to bring their people; everyone should be brought the same day, same time and receive it the same day even if it will take the whole day. They should get it at the same time. – Female, SCY aged 18 years</p>
Length of intervention time	<p>Six months, I would say a year would be better. – Male, Policymaker 1, Uasin Gishu</p> <p>Yes. I have got it and it is true I have paid for the house. I pray they should increase it to at least 8 months. – Female, SCY, aged 26 years</p> <p>Past the 6 months. One thing I think really works with them is transparency. As long as you communicate, just don't ambush them with anything new. At least when you're registering them, you're taking them into this program, you make them aware that this is only running for 6 months. You see, like communicate with them. – Female, Stakeholder 1, Trans-Nzoia</p>

expansion beyond cash, and the inclusion of boys and young men (Table 5). To support sustainability, collaboration with stakeholders, including government, community-based organizations, and other non-governmental organizations was recommended by several participants to enhance the likelihood of sustainability of the intervention. Policymakers suggested that to ensure sustainability, the cash-transfer for SCY should be adopted within government policy as are other social protection cash-transfer programs in Kenya, such as the CT-OVC program. Additionally, participants alluded to that partnerships with other organizations could facilitate the inclusion of other social support programs within the cash-transfer intervention, which would also strengthen sustainability. All participants thought that the intervention should be continued beyond the research period, and that the program should be scaled and expanded beyond just the provision of cash to include other needed social supports. Most participants supported the inclusion of street-connected young men into a cash-transfer program. However, some street-connected young women disagreed with the inclusion of older boys and young men who are the perpetrators of violence in the street community.

### 3.6 Perceived benefits of the cash-transfer

Corresponding to the potential effectiveness of the intervention, our analysis produced the major theme of perceived benefits of the cash transfer. Almost all participants alluded to the fact that if SCY have money they will be able to pay rent and be off the street as stated by a stakeholder *"Yeah, it will help them. Maybe someone is in the street*

**Table 5** Sustainability and representative quotes

Collaboration and partnerships	<p>It is sustainable to the extent that we link it up as a government. Any sustainable program must have a government policy backing it. Organizations have temporary life spans, so it should be embedded within the government policy. Just like the cash transfer for the orphans, it is sustainable because it will have funding from the taxes. – Male, Policymaker 1, Uasin Gishu</p> <p>It [CT intervention] should be worked within the existing social support frameworks. So, what does the county government provide? What does the national government provide? Are there organizations providing something beyond the housing? Then a proper linkage is done. So that even after the program there are benefits these persons continue getting. And they are able now to meet their housing needs for themselves as they benefit from other social welfare programs. – Male, Policymaker 2, Trans-Nzoia</p> <p>This is a very good program, but it needs bright minds to come around the table and seek for strategies of how to make it work. So maybe you do a consultative meeting with the street family offices to tell you what you should and what you should not do... That is the most advisable thing. Maybe now you sit with them and ask them. – Female, Healthcare provider 2, Uasin Gishu</p> <p>And maybe leveraging with other partners as a way of improving the sustainability aspect might also be able to help because I believe resources are scarce. And leveraging with one another might also improve some levels. If not for grants, others might also provide them some social improvement. – Male, Healthcare provider 3, Trans-Nzoia</p>
Scaling	<p>I think when they stay longer, we will go far. Because when they are here, every month we get enlightened and progress further. It should continue because it is helping us. – Female, SCY aged 18 years</p> <p>Beyond the life of the study, yes. Because the period to implement this particular kind of intervention might not really be so impactful as how it needs to be. It should permanently remove the child or the youth from the street as they also try to blend in to become better people in life. So if there is a scaling bit of the program that can be adopted, then I think it can improve the sustainability of these children being kept off the streets.— Male, Healthcare provider 3, Trans-Nzoia</p>
Expansion beyond 'cash'	<p>For the girls and women we have said that housing is priority but also adding that there should be other range of programs or interventions to support the sustainability.— Male, Policymaker 1, Uasin Gishu</p> <p>It is sustainable at some level, not 100% though. Because the cash transfer might cater for one or two factors but might not cater for all because it might look into the aspects of the well-being but health issues is also different. There are others that need referrals and external support.— Male, Healthcare provider 3, Trans-Nzoia</p> <p>One thing people tend to think is once there's the financial, then the rest just falls into place. No, but these people need mental support. You see, the change in environment will help. Getting them into a house is easy, maintaining them in the house is what's difficult. And what plays a big role is their mental state. – Female, Stakeholder 1, Trans-Nzoia</p>
Cash-transfer to boys and young men	<p>Yes. Boys too should receive it. Many now are jobless. Boys at the base when they wake up to go to work, they struggle. When they wake up and go with people going for construction, they are told they cannot do such a heavy job. – Female, SCY aged 25 years</p> <p>They should give them [boys and young men] too since it is not girls only who have challenges. Boys too have different challenges. When they explain it to you, you will notice they go through a hard life. – Female, SCY aged 26 years</p> <p>R: They [can] add young boys. I: I mean boys and men? R: Those ones will strangle us on the roadside. They will steal from us. Let them add children. Young boys not men. – Female, SCY, aged 22 years</p> <p>No. Boys should not be included. – Female, SCY, aged 24 years</p>

*due to not being in a position to raise the money. So if she is assured of rent by the end of the month, she won't prefer being on the street”.*

Beyond the ability to pay rent and ascertain/maintain housing, participants expressed many additional benefits of the cash-transfer intervention which were captured as sub-themes (Table 6). SCY participants shared that with the balance left after paying rent that they would be able to create businesses and purchase food, noting the importance of food security for general health and the impact of income generating activities for

**Table 6** Perceived benefits of the cash-transfer and representative quotes

Establishing businesses	<p>They'll say when I was at the base, I wasn't receiving the money and can't do a certain activity. There is one who can sell watermelon. They go pick watermelon worth 200 (~\$1.54 USD) and sell and with that it will push them through. For me I sell roasted groundnuts. When I use all the money from the groundnuts, I start doing menial jobs. So, there are changes. – Female, SCY, aged 27 years</p> <p>Yes, it [financial support] is good since it will help them. Doing businesses and leading themselves how they want it. – Female, SCY, aged 25 years</p>
Food security	<p>Now I can get food. Earlier I could stay from the morning and eat in the evening, or I even fail to eat on that day. Now, since I am doing something like a business, I eat lunch and I eat supper. – Female, SCY, aged 16 years</p> <p>We're very happy that this money has come, for now when you give for rent, you are left with some for food, you experience peace in the house, you feel you are better. – Female, SCY, aged 22 years</p>
HIV related benefits	<p>Yes, I had to take my medication and I did not have food. With the balance, I ground corn and I bought Omena (Silver cyprinid), cooking oil, I survived on that, and I was okay because I knew I had food stock. – Female, SCY, aged 19 years</p> <p>Of course, when you are given that support, the 2000 shillings (~\$16 USD), you will be able to pay that house, you will be able to use your drugs well, you can be able to cook the little food you have gotten. Not like when they are in the street and they have nothing completely. – Female, Healthcare provider 2, Uasin Gishu</p> <p>Having a house will help the street youths to prevent HIV because most will get to know their status. You will counsel someone and they'll agree to get tested for HIV, therefore knowing their status. But when they are in the street, they will be scared to test and of being seen by others. – Female, SCY aged 25 years</p>
Safety	<p>It will help them because it will take them out of the street partially. Partially, it will eradicate the street family from the street. It will give them shelter, it will give them a safe environment at least to stay with their children.— Female, Stakeholder 4, Uasin Gishu</p> <p>It would have helped the girls in the streets, if they get that money, they will rent houses that will protect them from rape, and early pregnancies. – Female, age 16</p>
Cleanliness	<p>It will change a lot. Girls go through lots of problem. If they can get the support, it will help them. For them to bath, they will be in the house. Girls are beauty people. At least the beauty will be visible. – Female, SCY, aged 24 years</p> <p>Many of the girls they are very open [vulnerable] to a lot of things. Girls are more at risk when they are out there. They are not like boy child. Because a girl, if she has stayed in that corridor, where has she showered? Where has she slept? And it's just you will help these girls. You will have protected them from a lot of things. – Female, Stakeholder 4, Uasin Gishu</p>
General outlook	<p>For Kenya today, that is a way out. Let's look at cash transfer as an investment. People look at it as an expense, but as an organization, you look at it as an investment. When you give somebody cash transfer, one, it changes their attitude to life. They live positively. Now it helps them also to start thinking how to expand the amount of money they receive. People who were initially helpless and had given up, start thinking about investing. If you look at the other cash transfer programs, we have people who now have animals in their farms, in their families. We have people who have been able to build houses. We have food stability in the family. – Male, Policymaker 1, Uasin Gishu</p> <p>It has changed me, I am not like I was before, I have changed. The biggest difference is, all the places that I have gone to, I don't know if I lacked the know-how, but now I have a business mind. – Female, SCY, aged 26 years</p> <p>When you come out of town confused, you are back to zero. When they provide food and clothing for you, you go on changing. When you change you forget your past. What is important is food, clothes and being smart. The more you will feel ashamed to use drugs. For 1 year you will be smart and look for a job to continue with. – Female, SCY, aged 19 years</p>

long-term housing stability. With stable housing, participants from both groups indicated that they were more able to take and store their HIV-related medications. Housing was viewed as a mechanism for safety and afforded SCY the ability to maintain cleanliness, an important factor in the way that they were viewed in public. Finally, participants in both groups indicated that with housing stability comes many other benefits that cumulatively improve their general outlook on life.

**Table 7** Potential unintended consequences

Losing Housing and returning to streets	Because if your focus is only giving somebody a house, then it will not work. It may be worse because after 6 months somebody loses a house, it will be worse than the way they were in the beginning. What we are saying is that the intervention of cash should also be with the intervention of the human himself or herself. The mind, the transformation, the support, the linkage to say training, the linkage to capacities of finance management and that kind of thing, some skill. Within 6 months the person being supported ought also to have acquired some skill. And if they had a skill, that skill to be perfected and supported also to be linked to some economic system. – Male, Policymaker 1, Uasin Gishu
Physical violence	The problem I see is just death. When they give you the 2000 (~\$16 USD), boys can gang on you and kill you because of the 2000. Death is the only problem.— Female, SCY aged 18 years When they know you have money, they can attack you and kill you because of the little money you have. – Female, SCY aged 26 years Support for girls can be hard. If she meets her boyfriend and he knows that she has it, they fight. He beats her and takes it.— Female, SCY aged 25 years Maybe you have just received the money and have people you owe attack you and take it. They attack you and take it on the roadside. Because of the debts the money will be taken. – Female, SCY, aged 27 years
Economic violence	Her boyfriend can take it [cash]. He can go drink and the money will not have helped her. – Female, aged 18 years They [street girls] get challenges of the money being forcefully stolen from them. For example, when they give the money to someone to store for them to think of what they will do with it, then when they ask for the money back the person refuses to give them because they know that nothing will be done to them. – Female, SCY aged 24 years Maybe if she has her husband and he is bad. He takes the money from her. – Female, aged 22
Drug and alcohol use	You can give one and go drink alcohol, buy bhang, buy glue and the more they use these things, the more they spoil. Not all. Some are smart.— Female, SCY aged 22 years The first challenge, when one gets this money, she lives on the streets and she uses drugs, this can cause death. The second one, when she is given this money and she uses drugs, she will be the one buying for others. That's a very big challenge that can make this girl even raped. When she is drunk, she won't be able to control herself.—Female, SCY aged 17 years There are others who can buy alcohol with it. There are those who will buy gum. There is one who has lived outside for long and is tired, they will get a house.— Female, SCY, aged 26 years
Increasing street-involvement	One, you are sampling a few of them so you raise the expectation. If not done well it may bring a negative effect of bringing more children to the street so that they can benefit from that kind of money. So, if the design of the program is not well understood and also not well managed it may have a negative effect. – Male, Policymaker 1, Uasin Gishu

### 3.7 Potential unintended consequences

Participants were asked to consider the potential unintended consequences of the proposed unconditional cash-transfer to SCY (Table 7). One policymaker explained the harms and unintended consequences of giving cash for housing alone, that after a time limited period without other supports, SCY would likely lose their housing. Some SCY agreed and brought this up *'if it stops we will go back outside'*, suggesting the need for a transition plan at the end of a time-limited cash-transfer intervention to prevent young people from returning to the streets. Overwhelmingly SCY participants shared concerns of physical and economic violence—in the form of male partners stealing or using the young woman's funds inappropriately, physical attacks from the public or young men to steal the funds, and exploitation. Additionally, concerns related to the misuse of funds by the recipient for drugs and alcohol were shared. Some policymakers, expressed concern

about the potential for the unconditional cash-transfer to enable children's street-involvement, whereby some families may encourage young people to move to the streets to get cash. A minority of participants expressed no concerns of unintended consequences. Unfortunately, beyond recommendations for disbursement procedures, exploration of how to safeguard against these unintended consequences was not discussed.

#### 4 Discussion

The participants in this study primarily found the unconditional cash-transfer intervention to be acceptable, appropriate, feasible, sustainable, and potentially beneficial to improving housing stability and other important health and well-being outcomes for SCY, with a few caveats. Critiques of the program in these domains included concerns related to minors being provided cash, that housing alone is insufficient and should therefore be paired with additional social supports, and that the program should consider collaboration with the government or other organizations to ensure appropriate sustainability. Despite concerns regarding the provision of cash to minors, programs all over the world have implemented and demonstrated success for individuals as young as 10 years, in some cases with adult oversight [71–77]. Programs may especially be effective for children this young if cash for housing is combined with other supports. 'Cash plus' models, in which cash-transfers are paired with supports to address non-financial, structural barriers that influence housing stability, like psychosocial supports [55, 78], food services [55, 79], livelihood trainings and behavioral change interventions [80], access to savings [80] have grown in popularity [55, 78, 81]. In Kenya, additional supports that enable income-generating activities, such as livelihood training, may be a viable approach to integrate with a cash-transfer to improving housing stability for SCY, however previous work indicated that county-level oppressive policies around informal income generation activities impacted SCY and this required additional considerations to support success [82].

Participants in our study shared perspectives on the necessary monetary amounts to be disbursed through the intervention, the length of time individuals receive funds and appropriate disbursement procedures. Some key informants in this study expressed concerns that the cash transfer amount would allow SCY to be 'too comfortable,' a perspective that may be suggestive of stigma and discrimination with respect to this population. Those views are in opposition with the perspectives of SCY, who share that the funds facilitate experiences and stability that provide basic dignity and respect in the community. Importantly, stakeholder participants consistently share perspectives that decision making be made at a county and program leadership level, undermining that inclusion of SCY voices in the process, in alignment with the Convention on the Rights of the Child, General Comment no. 21 on Children in Street situations [83]. Inclusion of SCY voices in the intervention design phase would perhaps limit or prevent approaches that are discriminatory or unacceptable to SCY. In a similar stakeholder study of a cash-transfer intervention in New York City, participants indicated that the program should provide cash for a minimum of 1 year with an annual re-application process, but similarly to our findings, stressed the need for timeline transparency and to understand the 'exit strategy' regardless of length of time [55]. Participants in New York also indicated the importance of being able to choose how payments were made, a component of the cash-transfer program in Kenya, and favored electronic payments when possible to avoid travel to pick

up [55] funds. The length and monetary amount of the cash-transfer ranges significantly across global contexts, with limited formal evaluation.

Concerns related to the unintentional consequences of unconditional cash-transfers are consistent with the literature and included increased susceptibility to financial predatory targeting, theft, coercion from family and friends [55]. Previous studies have also demonstrated concerns about inappropriate use of funds, which extended beyond substance use, and included spending on unnecessary clothes, or other spending on items that were not basic needs and do not directly support long-term housing stability [55]. Despite these shared concerns, the literature shows that concerns that cash assistance will be spent on drugs and alcohol is unfounded, and rather spend them on basic needs [84, 85]. Several evaluations report that cash recipients spent less money on alcohol, cigarettes, and drugs than the noncash control group [47, 86].

Finally, participants highlighted how housing stability influenced their HIV-related experiences, noting that having stable housing was important because it gave them a safe and reliable place to store and take their medications. The impact of housing stability on HIV prevention and treatment is well explored; a review of 152 studies concluded that poor housing is associated with poorer HIV-related outcomes overall, including worse access to and engagement in care, lower adherence to ART, worse general health outcomes and higher rates of HIV risk taking behaviors [71, 87]. For girls and young women in SSA, cash-transfer interventions not only improve health outcomes, but empower and enable them to reduce risky behaviors, like transactional sex and substance use [32, 81]. Cash-transfer interventions therefore having strong implications for the prevention [71] and treatment of HIV, and is a strong first step in addressing housing instability among SCY in settings where social protections for housing are limited.

Interestingly, participants interviewed in this study expressed varied perspectives on the expansion of the cash-transfer intervention to boys and young men, with some noting concerns regarding their propensity for violence. Gender studies around hegemonic masculinity show that men have a 'choice' about whether or not to actively maintain roles of oppression against women [88]. This choice is complicated by societal expectations of masculinity, often ones in which men are expected to provide financially for their families and the complex interpersonal realities when they are unable to do so [89, 90]. We speculate that when boys and young men are provided with the necessary resources to fulfill their masculine role—in this case the receipt of funds to secure stable housing, food and other goods for their family—that the need for control of and violence against women may decrease. We therefore consider the expansion of the cash-transfer intervention to boys and young men a potential strategy for exploring power dynamics and violence against street-connected girls and young women. Finally, key stakeholders expressed the need for collaboration with the local governments and other organizations working with SCY to ensure adequate sustainability of the cash-transfer intervention.

This study highlighted that policymakers, healthcare providers, stakeholders, and SCY perceived that cash alone is insufficient in this context to achieve long-term housing stability, independence, and reduce street-involvement. Future research should consider further developing and rigorously testing a 'Housing First' model in this context with both male and female SCY. Intervention development should extend beyond an unconditional cash transfer with peer navigation to include other social supports that focus on

strengthening livelihoods and economic independence, gender equity, violence, and the inclusion of additional supports for women with children in the streets.

#### **4.1 Strengths and limitations**

This study has limitations. First, data collection was staggered, and some participants were interviewed after receiving a baseline cash payment. Second, the perspectives gathered in this study are from a specific population in western Kenya and may not be generalizable to other regions of Kenya or in SSA or resource-limited settings. Moreover, inclusion criteria for this study required young people to be between the ages of 16 and 29 years at the time of enrollment in the study, which may limit generalizability to other age groups, such as younger SCY. Nevertheless, the present study has strengths. This investigation included SCY and stakeholders living across two counties in Kenya, and it is plausible that the results reflect SCY's perspectives across these geographic locations. In addition, our study engaged a range of individuals, including healthcare providers, policymakers and community members, which provided a breadth of insight into potential contextually relevant perspectives on the use of cash-transfer strategies for SCY.

## **5 Conclusions**

This study demonstrated strong support for a non-conditional cash-transfer intervention to SCY in western Kenya from the perspective of SCY themselves, and with considerations for additional supports from the perspectives of stakeholders. Participants provided insight on key implementation considerations for the intervention, highlighted key challenges and stressed the vulnerability associated with receiving cash. While the transfer of cash is a plausible solution to housing instability for SCY, there is still a critical need for interventions to be paired with other social safety programs that address more comprehensive needs. Social protection program investments in this population, as well as the integration of SCY populations into the national health policy are critically needed.

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#### **Author contributions**

LE joined the project to support its implementation and analysis. AC joined the project to support data analysis. BG joined the team as a co-investigator to support data analysis and interpretation. A mixed deductive and inductive thematic analysis was led by two researchers (LE and AC) based on an initial coding framework derived from the interview questions. The male Kenyan Research Coordinator (with a bachelor's in science in Biomedical Sciences) and Female Research Intern (with a degree in Social Work and Sociology) conducted the qualitative interviews with participants and stakeholders given their local knowledge, existing relationships with the street community, and language and logistical considerations. All authors reviewed the manuscript.

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#### **Data availability**

The datasets generated during and/or analyzed during the current study are available from the corresponding author on reasonable request.

## Declarations

### Ethics approval and consent to participate

This study received ethics approval from Moi University-MTRH Institutional Research Ethics Committee, University of Toronto Research Ethics Board and the Icahn School of Medicine at Mount Sinai Institutional Review Board. The participants were informed about the aim of the study prior to data collection and provided their written consent. Participants were free to participate and withdraw anytime from the study.

### Consent for publication

The authors, on behalf of all contributors, consent to the publication of this manuscript and affirm that the work has not been published previously and is not under consideration elsewhere.

### Competing interests

The authors declare no competing interests.

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## References

1. Enane LA, et al. Traversing the cascade: urgent research priorities for implementing the 'treat all' strategy for children and adolescents living with HIV in sub-Saharan Africa. *J Virus Erad.* 2018;4(Suppl 2):40–6.
2. Green D, et al. Evidence of sociodemographic heterogeneity across the HIV treatment cascade and progress towards 90-90-90 in sub-Saharan Africa - a systematic review and meta-analysis. *J Int AIDS Soc.* 2020;23(3):e25470.
3. Braitstein P, et al. HIV prevalence in young people and children living on the streets, Kenya. *Bull World Health Organ.* 2019;97(1):33–41.
4. Goldblatt A, et al. Prevalence and correlates of HIV infection among street boys in Kisumu, Kenya. *PLoS ONE.* 2015;10(10):e0140005.
5. Braitstein P, et al. Association of care environment with HIV incidence and death among Orphaned, Separated, and Street-Connected children and adolescents in Western Kenya. *JAMA Netw Open.* 2021;4(9):e2125365.
6. Winston SE, et al. Prevalence of sexually transmitted infections including HIV in street-connected adolescents in Western Kenya. *Sex Transm Infect.* 2015;91(5):353–9.
7. Shah P, et al. A pilot study of peer navigators to promote uptake of HIV testing, care and treatment among street-connected children and youth in Eldoret, Kenya. *AIDS Behav.* 2019;23(4):908–19.
8. Wolitski RJ, Kidder DP, Fenton KA. HIV, Homelessness, and public health: critical issues and a call for increased action. *AIDS Behav.* 2007;11(5):167–71.
9. Embleton L et al. If they had a place to live, they would be taking medication: a qualitative study identifying strategies for engaging street-connected young people in the HIV prevention-care continuum in Kenya. *J Int AIDS Soc.* 2023. 26(6):e26023.
10. UNAIDS, Kenya AIDS. Response Progress Report 2014 Progress towards Zero; 2014.
11. Wachira J et al. 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 health behavior, health promotion and society. *BMC Public Health.* 2015. 15(1):569.
12. Woan J, Lin J, Auerswald C. The health status of street children and youth in Low- and Middle-Income countries: a systematic review of the literature. *J Adolesc Health.* 2013;53(3):314–e32112.
13. 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 Negl.* 2008;32(4):439–48.
14. Embleton L et al. An intersectional analysis of socio-cultural identities and gender and health inequities among street-connected young people in Western Kenya. *Int J Homelessness;* 2022.
15. Embleton L, et al. Knowledge, Attitudes, and substance use practices among street children in Western Kenya. *Subst Use Misuse.* 2012;47(11):1234–47.
16. Embleton L et al. Once you join the streets you will have to do it: sexual practices of street children and youth in Uasin Gishu County, Kenya. *Reproductive Health.* 2015. 12(1):106.
17. Kayembe PK, et al. Knowledge of HIV, sexual behavior and correlates of risky sex among street children in Kinshasa, Democratic Republic of Congo. *East Afr J Public Health.* 2008;5(3):186–92.
18. Gayapersad A, et al. Using a sociological conceptualization of stigma to explore the social processes of stigma and discrimination of children in street situations in Western Kenya. *Child Abuse Negl.* 2023;139:104803.
19. Embleton L et al. Exploring patient-provider interactions and the health system's responsiveness to street-connected children and youth in Kenya: a qualitative study. *BMC Health Serv Res.* 2021. 21(1):363.
20. Embleton L et al. Causes of death among street-connected children and youth in Eldoret, Kenya. *BMC Int Health Hum Rights.* 2018. 18(1):19.
21. Kibel M, et al. Standardized mortality ratios between street-connected young people and the general age-equivalent population in an urban setting in Kenya from 2010 to 2015. *Global Health Action.* 2020;13(1):1802097.
22. Embleton L et al. *If they had a place to live, they would be taking medication: a qualitative study identifying strategies for engaging street-connected young people in the HIV prevention-care continuum in Kenya.* *J Int AIDS Soc.* 2023. 26(6):e26023.
23. Gaetz S, Scott F, Gulliver T. Housing First in Canada: supporting communities to end homelessness; 2013.
24. Kozloff N et al. Housing first for homeless youth with mental illness. *Pediatrics.* 2016. 138(4):e20161514.
25. Tsemberis S, Gulcur L, Nakae M, First H. Consumer Choice, and harm reduction for homeless individuals with a dual diagnosis. *Am J Public Health.* 2004;94(4):651–6.
26. Aubry T, Nelson G, Tsemberis S. Housing first for people with severe mental illness who are homeless: A review of the research and findings from the at Home—Chez Soi demonstration project. *Can J Psychiatry.* 2015;60(11):467–74.

27. Bean KF, Shafer MS, Glennon M. The impact of housing first and peer support on people who are medically vulnerable and homeless. *Psychiatr Rehabil J*. 2013;36(1):48–50.
28. Gaetz S, Walter H, Story C. This is housing first for Youth—Part 1—Program model guide. Toronto: Canadian Observatory on Homelessness; 2021.
29. Bryant JH. Kenya's cash transfer program: protecting the health and human rights of orphans and vulnerable children. *Health Hum Rights*. 2009;11(2):65–76.
30. Handa S, et al. The government of Kenya's cash transfer program reduces the risk of sexual debut among young people age 15–25. *PLoS ONE*. 2014;9(1):e85473.
31. Baird SJ, et al. Effect of a cash transfer programme for schooling on prevalence of HIV and herpes simplex type 2 in Malawi: a cluster randomised trial. *Lancet*. 2012;379(9823):1320–9.
32. Pettifor A, et al. The effect of a conditional cash transfer on HIV incidence in young women in rural South Africa (HPTN 068): a phase 3, randomised controlled trial. *Lancet Global Health*. 2016;4(12):e978–88.
33. Fernald LC, Gertler PJ, Neufeld LM. Role of cash in conditional cash transfer programmes for child health, growth, and development: an analysis of Mexico's Oportunidades. *Lancet*. 2008;371(9615):828–37.
34. McCoy SI, et al. Cash vs. food assistance to improve adherence to antiretroviral therapy among HIV-infected adults in Tanzania. *AIDS*. 2017;31(6):815–25.
35. De Walque D, et al. Incentivising safe sex: a randomised trial of conditional cash transfers for HIV and sexually transmitted infection prevention in rural Tanzania. *BMJ Open*. 2012;2(1):e000747.
36. Cluver L, et al. Child-focused state cash transfers and adolescent risk of HIV infection in South Africa: a propensity-score-matched case-control study. *Lancet Global Health*. 2013;1(6):e362–70.
37. Bonilla J, et al. Cash for women's empowerment? A Mixed-Methods evaluation of the government of Zambia's child grant program. *World Dev*. 2017;95:55–72.
38. Mani A, et al. Poverty impedes cognitive function. *science*. 2013;341(6149):976–80.
39. Ivers LC. Food insecurity and public health. Boca Raton: CRC Press; 2015.
40. Haushofer J, Fehr E. On the psychology of poverty. *Science*. 2014;344(6186):862–7.
41. Schilbach F, Schofield H, Mullainathan S. The psychological lives of the poor. *Am Econ Rev*. 2016;106(5):435–40.
42. Lyles E, et al. Multi-purpose cash transfers and health among vulnerable Syrian refugees in Jordan: A prospective cohort study. *PLoS Global Public Health*. 2022;2(11):e0001227.
43. Lassa JA, Nappoe GE, Sulistyio SB. Creating an institutional ecosystem for cash transfer programmes in post-disaster settings: a case from Indonesia. *Jambá J Disaster Risk Stud*. 2022; 14(1):1046.
44. Van Daalen KR, et al. Impact of conditional and unconditional cash transfers on health outcomes and use of health services in humanitarian settings: a mixed-methods systematic review. *BMJ Global Health*. 2022;7(1):e007902.
45. Yoshino CA, et al. Experiences of conditional and unconditional cash transfers intended for improving health outcomes and health service use: a qualitative evidence synthesis. *Cochrane Database Syst Rev*. 2023;3(3):Cd013635.
46. Lagarde M, Haines A, Palmer N. The impact of conditional cash transfers on health outcomes and use of health services in low and middle income countries. *Cochrane Database Syst Rev*. 2009;20094:pCd008137.
47. Doocy S, Tappis H. Cash-based approaches in humanitarian emergencies: a systematic review. *Campbell Syst Reviews*. 2017;13(1):1–200.
48. Owusu-Addo E, Renzaho AMN, Smith BJ. The impact of cash transfers on social determinants of health and health inequalities in sub-Saharan Africa: a systematic review. *Health Policy Plan*. 2018;33(5):675–96.
49. Siddiqi A, Rajaram A, Miller SP. Do cash transfer programmes yield better health in the first year of life? A systematic review linking low-income/middle-income and high-income contexts. *Arch Dis Child*. 2018;103(10):920–6.
50. Pega F, et al. Unconditional cash transfers for assistance in humanitarian disasters: effect on use of health services and health outcomes in low- and middle-income countries. *Cochrane Database Syst Rev*. 2015;2015(9):Cd011247.
51. Hunter BM, et al. The effects of cash transfers and vouchers on the use and quality of maternity care services: A systematic review. *PLoS ONE*. 2017;12(3):e0173068.
52. Owusu-Addo E, Cross R. The impact of conditional cash transfers on child health in low- and middle-income countries: a systematic review. *Int J Public Health*. 2014;59(4):609–18.
53. Richterman A, Thirumurthy H. The effects of cash transfer programmes on HIV-related outcomes in 42 countries from 1996 to 2019. *Nat Hum Behav*. 2022;6(10):1362–71.
54. Francesca Bastagli JH-Z, Harman L, Barca V. Georgina Sturge and Tanja Schmidt, with Luca Pellerano, cash transfers: what does the evidence say? A rigorous review of programme impact and of the role of design and implementation features. Overseas Development Institute; 2016.
55. Morton M, et al. Developing a direct cash transfer program for youth experiencing homelessness: results of a mixed methods, multistakeholder design process. Chicago: Chapin Hall at the University of Chicago; 2020.
56. Kumar SL, et al. An unconditional cash transfer program for Low-income New Yorkers affected by COVID-19. *J Urb Health*. 2023;100(1):16–28.
57. James Riccio CM. New York City's, first conditional cash transfer program. What Worked, what didn't. MDRC; 2016.
58. Mercer T et al. Leveraging the power of partnerships: spreading the vision for a population health care delivery model in Western Kenya. *Globalization Health*, 2018. 14(1):44.
59. Railway, Children. Children on the streets of Kitale: headcount findings 2015; 2015.
60. Embleton L et al. Characterizing street-connected children and youths' social and health inequities in Kenya: A qualitative study. *Int J Equity Health*, 2020. 19(1):147.
61. Embleton L, et al. Once you join the streets you will have to do it: sexual practices of street children and youth in Uasin Gishu County, Kenya. *Reproductive Health*. 2015;12:1–11.
62. Embleton L et al. Eating sweets without the wrapper: perceptions of HIV and sexually transmitted infections among street youth in Western Kenya. *Cult Health Sexuality*. 2016; 18(3):337–48.
63. MacEntee K et al. Using scenario videos with Theatre Testing method to adapt a peer navigation model to improve street-connected youths' access to HIV care in Kenya and Canada. *Front Public Health*. 2022; 10: 975117.
64. Khan M et al. Barriers to and facilitators of accessing HIV services for street-involved youth in Canada and Kenya. *BMC Public Health*, 2022. 22(1):1901.

65. Curran GM, et al. Effectiveness-implementation hybrid designs: combining elements of clinical effectiveness and implementation research to enhance public health impact. *Med Care*. 2012;50(3):217–26.
66. Van Berkum A et al. Exploring the appropriateness and acceptability of peer navigators to increase HIV prevention, testing, and treatment for street involved youth. In: Canadian alliance to end homelessness 2019. Edmonton; 2019.
67. Embleton L et al. Adapting ethical guidelines for adolescent health research to street-connected children and youth in low- and middle-income countries: a case study from Western Kenya. *BMC Med Ethics*. 2015; 16(1):89.
68. Creswell JW, Poth CN. Qualitative inquiry and research design: choosing among five approaches. Sage; 2016.
69. Proctor E, et al. Outcomes for implementation research: conceptual distinctions, measurement challenges, and research agenda. *Adm Policy Mental Health Mental Health Serv Res*. 2011;38(2):65–76.
70. Karsh BT. Beyond usability: designing effective technology implementation systems to promote patient safety. *Qual Saf Health Care*. 2004;13(5):388–94.
71. Stoner MCD, et al. Cash transfers for HIV prevention: A systematic review. *PLoS Med*. 2021;18(11):e1003866.
72. Stacy CP et al. Cash transfers and after-school programs: a randomized controlled trial for young men at risk of violence exposure in Wilmington, Delaware. *J Urb Health*, 2024;101:595–619.
73. Ssewamala FM, et al. Effect of economic assets on sexual Risk-Taking intentions among orphaned adolescents in Uganda. *Am J Public Health*. 2010;100(3):483–8.
74. Jennings L, Ssewamala FM, Nabunya P. Effect of savings-led economic empowerment on HIV preventive practices among orphaned adolescents in rural uganda: results from the Suubi-Maka randomized experiment. *AIDS Care*. 2016;28(3):273–82.
75. Goodman ML, et al. Health and livelihood outcomes associated with participation in a community-based empowerment program for orphan families in semirural kenya: a cross-sectional study. *Vulnerable Child Youth Stud*. 2014;9(4):365–76.
76. Goodman ML, et al. Sexual behavior among young carers in the context of a Kenyan empowerment program combining Cash-Transfer, psychosocial Support, and entrepreneurship. *J Sex Res*. 2016;53(3):331–45.
77. Minnis AM, et al. Yo Puedo—A conditional cash transfer and life skills intervention to promote adolescent sexual health: results of a randomized feasibility study in San Francisco. *J Adolesc Health*. 2014;55(1):85–92.
78. Roelen K, et al. How to make 'Cash plus' work. United Nations; 2017.
79. Ahmed A, Hoddinott JF, Roy S. Food transfers, cash transfers, behavior change communication and child nutrition: evidence from Bangladesh. International Food Policy Research Institute; 2019.
80. Banerjee A, et al. A multifaceted program causes lasting progress for the very poor: evidence from six countries. *Science*. 2015;348(6236):1260799.
81. Pettifor A et al. Cash plus: exploring the mechanisms through which a cash transfer plus financial education programme in Tanzania reduced < scp > HIV risk for adolescent girls and young women. *J Int AIDS Soc*, 2019. 22(S4):e25316.
82. Embleton L, et al. Improving livelihoods and gender equitable attitudes of street-connected young people in Eldoret, kenya: results from a pilot evidence-based intervention. *Health Soc Care Community*. 2021;29(1):227–40.
83. Office of the United Nations High Commissioner for Human Rights, General comment No. 21. on children in street situations. *CRC/C/GC/21*. 2017: Geneva, Switzerland; 2017.
84. Banerjee AV, et al. Debunking the stereotype of the lazy welfare recipient: evidence from cash transfer programs. *World Bank Res Obs*. 2017;32(2):155–84.
85. Evans DK, Popova A. Cash transfers and temptation goods. *Econ Dev Cult Change*. 2017;65:189–221.
86. Change FFS. Foundations for social change: new leaf project: taking bold action on homelessness; 2020.
87. Aidala AA, et al. Housing Status, medical Care, and health outcomes among people living with HIV/AIDS: A systematic review. *Am J Public Health*. 2016;106(1):e1–23.
88. Jewkes R, et al. Hegemonic masculinity: combining theory and practice in gender interventions. *Cult Health Sex*. 2015;17(Suppl 2):S112–27.
89. Gibbs A, Sikweyiya Y, Jewkes R. Men value their dignity': Securing respect and identity construction in urban informal settlements in South Africa. *Global Health Action*. 2015;8(1):1–10.
90. Izugbara C, Tikkanen R, Barron K. Men, masculinity, and community development in Kenyan slums. *Community Dev*. 2014;45(1):32–44.

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