MEASURING IMPACT THROUGH A CHILD PROTECTION INDEX

REPORT OF PILOT STUDY KIZIBA CAMP, RWANDA

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EXECUTIVE SUMMARY

Background and objectives

Measurement methods to assess the strength of child protection systems in humanitarian settings are lacking. Creating an evidence base for protection programming for children, including SGBV, is difficult. Traditional impact assessment methodologies are often not feasible or appropriate in humanitarian or displacement contexts. A lack of rigorous and robust methods and tools to measure the outcomes

associated with child protection programming in humanitarian settings limits the ability to measure the results of UNHCR's programming and the impact of its new strategies.

In response to these challenges, and in recognition of the need to develop and pilot assessment approaches and measurement methods for child protection in humanitarian settings, UNHCR, the CPC Network, and AVSI Rwanda collaborated on this pilot study, "Measuring Impact through a Child Protection Index." This report presents the methodology, findings and key learnings of the pilot study in Kiziba camp, Rwanda. Kiziba Camp was established in December 1996, and currently has a population of 16,314, including 8,163 children aged 0-17 years old (3,993 boys and 4,170 girls).

The specific research objective that was addressed in this pilot study in Rwanda was:

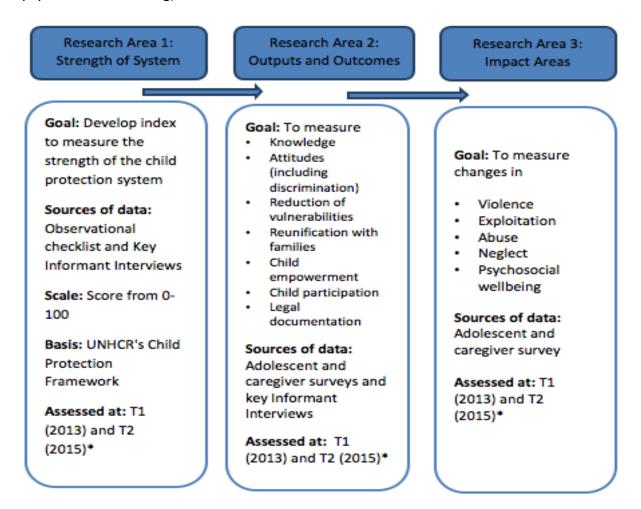
What is the strength of the child protection system in Kiziba Camp, Rwanda, and how is it linked to violence, exploitation, abuse, neglect and psychosocial wellbeing of adolescents?

The findings in relation to this research question are discussed in subsequent sections of this report.

Methodology

Researchers developed a Child Protection Index [CPI], an adolescent survey and a caregiver survey to address the central research questions and objectives in this pilot study. The methodology of this study seeks to two aspects of child protection: firstly, at the systems level, the strength of the child protection framework, and secondly, at the level of individual outcomes for adolescents, child protection risks and psychosocial wellbeing. The CPI is designed to measure the strength of the system, while the surveys are intended to measure the outcomes for adolescents. The current study, conducted at one time point, provides a snapshot of the strength of the child protection system and the current levels of protection risks and psychosocial wellbeing. When this study is conducted again in Rwanda, at a later time point, the data will be able to show linkages between systems strength and outcomes for adolescents. The figure below displays the theory of change that goes along with this research: that the strength of the system is

related to outputs and outcomes (knowledge, attitudes, empowerment), which is in turn related to impacts on adolescents (changes in violence, exploitation, abuse, neglect and psychosocial wellbeing).



The study in Rwanda was intended as an overall pilot of the methodology and its instruments, and therefore included methods that enabled revision of instrument during fieldwork, as well as feedback from respondents regarding the survey questions. These methods included an in-depth pilot study, involving 35 households, and use of cognitive interviewing techniques.¹

¹ Cognitive interviewing is a method to improve survey design and reduce response error in surveys, through asking respondents questions about how they arrived at the answer for a question or how they understand the question, so as to gain insight into how respondents understand the questions and if the questions are clear to respondents.

The CPI was based on the benchmarks of UNHCR's Framework for the Protection of Children, and the long-version piloted in this study included 141 questions, with a combination of objective and subjective questions. Data for the CPI was collected from 11 key informant interviews. Interviews were conducted in the capital, Kigali, Kibuye, the town nearest to Kiziba Camp, and Kiziba Camp.

Extensive literature review and exploration of existing measurement instruments was conducted in order to select appropriate measures of exposure to violence, exploitation, abuse and neglect and psychosocial wellbeing for the adolescent survey. The caregiver survey included measures of knowledge of and attitudes towards child protection and child protection services, as well as caregiver depression and anxiety. Researchers developed a measure of socio-economic status based on employment status, household hunger and ownership of relevant household items. This measure shows the *relative* level of socio-economic status, with high socio-economic status indicating a higher level in relation to other refugees in the camp, rather than an absolute high level of socio-economic status.

The first stage of data collection included a pilot test of 35 households, with substantial revisions to the adolescent and caregiver instruments conducted based on findings from the pilot test. Cognitive interviewing techniques were used to ascertain the ways in which respondents understood and responded to the questions in the survey.

Selection of households for the full study was conducted via an adapted systematic sampling approach, ensuring that all villages and *quartiers* were adequately represented in the final sample of 129 adolescent and caregiver pairs. Ethical considerations included obtaining permission for adolescents' participation from a caregiver, informed consent, and training for data collectors on response to distress.

The research team was selected and hired by AVSI Rwanda, who provided all local support. AVSI's team of volunteers in the camp also supported the research team in various ways, including guiding data collectors around the camp. UNHCR Rwanda provided access in terms of availability of key informants and orientation to the camp.

Findings

Cognitive interviewing successfully identified a number of key issues in the survey instruments, and pilot testing resulted in substantial revisions of the adolescent and caregiver survey instruments.

Results from the CPI (short-version) indicate moderate child protection system strength in Kiziba Camp. Areas for improvement include service utilization of reporting mechanisms for abuse and violence, service utilization for adolescents who have experienced violence and abuse, provision of age-appropriate complaints mechanisms, and processing of BIDs.

Results from the adolescent survey provide insight into various aspects of wellbeing and protection of adolescents in Kiziba Camp. 7% of adolescent respondents had lost both parents, and 15% of respondents who have one biological parent alive reported not living with a biological caregiver. However, the majority of adolescents reported that their primary caregiver is their biological mother (79%) or father (20%). Psychosocial concerns identified were that 27% of adolescents had a high score on the anxiety measure, and 12% of adolescent report high emotional difficulties. 14.7% of adolescents reported high levels of hope and future orientation, while 10% of adolescent reported high resilience levels. The vast majority of adolescents (97%) reported higher rejection than acceptance from caregivers, indicating need to explore this issue further.

A high proportion (72%) of adolescents reported having witnessed shouting and yelling in the home. A smaller, yet still significant, proportion of adolescents reported having seen physical violence in the home (18%). Direct experiences of violence in the home were commonly reported, including being pushed, grabbed or kicked (11%), being hit, beaten or spanked (19%) and being beaten with a belt, paddle, a stick or other object (11%). Exercise as a form of punishment was reported by 10% of adolescents in the sample. 4% of adolescents reported forced intercourse in the past year, 1.5% reported being pressured or persuaded to have sex in the past year, and 8% reported unwanted sexual touching in the past year. Low rates of reporting of abuse and violence, and utilization of services after experiencing violence or abuse, were reported. High levels of knowledge of available services and community-based child protection mechanisms

were reported, however, relatively low utilization of community-based child protection mechanisms was evident.

20% of adolescents reported feeling unsafe in their home in the past week. Perceptions of lack of safety at home were higher than that of locations outside the home, for example, at the market (10%) or in other places in the camp (10%). A high proportion of adolescents reported having been injured at some point while walking around the camp (29%).

Interviews with caregivers provided insight into the socio-economic status of households, with the socio-economic scale developed for this study indicating that 9% of households in the sample have low socio-economic status, 54% have medium and 28% have high socio-economic status, relative to other refugees in the camp. 67% of respondents reported not having worked in the past 7 days, and 33% reported having no income, with 26% of respondents reporting that their primary source of income is from selling food rations from WFP. Based on the Household Hunger Score, 69% of households experience moderate hunger and 11% experience severe hunger.

As was the case for adolescents, there is varied knowledge of the different community-based child protection mechanisms. Knowledge of specific community-based child protection mechanisms was similar to that of the adolescent sample, where the most commonly known structures were Nkundabana (95%) and Abarengerabana (92%), both of which are mechanisms that engage volunteers to conduct outreach for vulnerable children in the camp.

70% of caregivers in the sample reported a high level of depressive symptoms, 69% for anxiety. Overall, 74% of the sample can be classified as emotionally distressed, a substantial proportion that is comparable or higher to levels of depression and anxiety amongst other conflict-affected, displaced populations.

There are a number of relationships between caregiver wellbeing and adolescent wellbeing that proved to be relevant. Adolescents with caregivers with high levels of depression were more likely to have high levels of anxiety symptoms. Another

relationship that was significant was that adolescents with lower socio-economic status were more likely to have experienced forced sex.

Recommendations

Recommendations are addressed to UNHCR Rwanda, CPC Network researchers, and UNHCR Geneva and researchers together.

Recommendations for UNHCR Rwanda:

- Share and discuss these findings with key stakeholders, including refugee leaders, in order to i) discuss validity of the findings and ii) generate suggestions as to concrete actions to address gaps in the child protection system
- Explore and identify barriers to reporting violence and abuse, and provide information to households on range of appropriate reporting methods, including messaging directed to adolescents
- Promote range of services available to children and adolescents broadly, and work with community-based child protection mechanisms to encourage vulnerable children and adolescents to utilize appropriate services
- Identify and implement approaches to improve safety of adolescents within the home
- Identify and address causes of injuries around the camp
- Identify and implement effective interventions to promote caregiver mental health
- Explore the potential of implementing previously developed and tested psychosocial interventions in this context, for example, sociotherapy or family discussions

Recommendations for CPC Network researchers:

- Consider revisions to exclusion of mandatory reporting, particularly in the case of suicidal ideation
- Select size of data collection team based on goal sample size, maintaining a 6:1 ratio of data collectors to researchers to enable appropriate support and data quality
- Investigate possibility of hiring refugees as data collectors

- Follow established research protocol for translation and back translation, including use of expert and refugee focus groups to inform translation process
- Utilize cognitive interviewing, as used in this study, to improve translation and comprehension during piloting of the instruments
- Conduct mapping of the research site for the purposes of sampling, including
 mapping which households contain adolescents. If future research sites include
 population of urban refugees, ensure that appropriate sampling methods are
 available and utilized
- Revise CPI based on findings from this pilot study, reducing number of questions, removing subjective questions and revising questions that rely on information or knowledge that is difficult for researchers or key informants to obtain
- Retain piloting phase for future phases of research, to ensure that questions are comprehensible and relevant for the population
- Pilot additional approaches to eliciting responses about adolescents' experiences
 of violence and abuse
- Test and validate the socio-economic status measure developed for this study in other future studies
- Identify and pilot alternative measures of caregiver-adolescent relationship

CPC Network and UNHCR Geneva:

- Allocate additional time for fieldwork, for meetings with key stakeholders, instrument revisions, translation and mapping the camp, for sampling purposes
- Create an advisory board of practitioner and measurement experts to solicit input and strengthen the next iteration of tool development.
- Ensure that future research sites have supportive local UNHCR offices and a child protection focal point or child protection implementing partner to provide further support
- Ensure transport options, travel time and access to camp, and weather are taken into account when selecting a site

INTRODUCTION & BACKGROUND

Background and rationale for the study

In 2012, UNHCR started to roll out newly drafted strategies on child protection, sexual and gender based violence [SGBV] and education in a selected number of target countries. These strategies are intended to inform UNHCR's interventions at country level for a five-year period, as reflected in country-based strategies. Measurement and assessment of the impact of these strategies on child protection outcomes is an important aspect of implementation of the strategies.

The Framework for the Protection of Children articulates the centrality of child protection to UNHCR's protection mandate, stating that UNHCR will act to promote child protection by "protecting and advocating against all forms of discrimination; preventing and responding to abuse, neglect, violence and exploitation; ensuring immediate access to appropriate services; and ensuring durable solutions in the child's best interests." The six primary goals in the Framework are:

- 1. Girls and boys are safe where they live, learn and play
- 2. Children's participation and capacity are integral to their protection
- 3. Girls and boys have access to child-friendly procedures
- 4. Girls and boys obtain legal documentation
- 5. Girls and boys with specific needs receive targeted support
- 6. Girls and boys achieve durable solutions in their best interests

For each of these goals, the Framework specifies objectives and benchmarks towards achieving those objectives.

Creating an evidence base for protection programming for children, including SGBV, is difficult. Traditional impact assessment methodologies are often not feasible or appropriate in humanitarian settings. Many research approaches focus on evaluating the impact of specific activities. Moreover, a number of studies focusing primarily or solely on specific outcomes, such as mental health, rather than the range of child

protection outcomes that are central to child protection actors. These challenges leave child protection actors without robust evidence on the patterns and trends of violence, exploitation and abuse against children, as well on the impact of interventions that attempt to prevent and respond to these concerns. This lack of rigorous and robust methods and tools to measure the outcomes and impact associated with child protection programming in humanitarian settings limits the ability to measure the results of UNHCR's programming and the impact of its new strategies.

In response to these challenges, and in recognition of the need to develop and pilot assessment approaches and measurement methods for child protection in humanitarian settings, UNHCR, the CPC Network and AVSI collaborated on this pilot study, "Measuring Impact through a Child Protection Index," as a first step towards developing tools that can measure change on key indicators of interest in the field of child protection. This pilot study sought to assess, at one time point:

- the strength of the child protective system, including a package of key UNHCR child protection interventions, based on the UNHCR Framework for the Protection of Children
- intermediary outcomes such as knowledge, attitudes, resilience, empowerment
- the current status of key measures of impact, including violence, exploitation, abuse, neglect and psychosocial wellbeing of adolescents.

Based on data from this pilot study, this research seeks to test the hypothesis that a good child protection environment is associated with lower levels of exploitation, violence and other child protection concerns and higher levels of psychosocial wellbeing. This pilot study is embedded within a larger collaboration, which seeks to pilot and develop these instruments in subsequent studies in two additional humanitarian settings in 2014, and in addition to conduct follow-up studies in Rwanda and the additional sites in order to be able to track trends and relationships between systems strengthening and impact on adolescents over time.

There are several primary goals of this pilot study. This data will serve as a baseline for future research. Findings from the pilot will suggest areas for improvement and systems strengthening in the specific context of Kiziba Camp, Rwanda. During the second phase of data collection (planned for 2015), changes in system strength and associations with

outcome and impact indicators will be measured. Qualitative data will supplement the quantitative findings to help understand the factors that may have led to observed changes. This pilot study is step one of a two step assessment: the first, this pilot study, measuring strength of the child protection system, and outcomes for adolescents at a single time point, and the second, conducted a year after the pilot study, indicating changes in system strength, changes in outcomes for adolescents, and therefore ascertaining how changes in outcomes for adolescents may be associated with the strength of the child protection system.

Moreover, this pilot assessment is the first step in a larger effort to develop a methodological approach and related tools to assess the impact of UNHCR's child protection strategies and its approach to systems building in refugee settings. As such, this assessment aims to:

- Pilot a methodological approach that assesses key areas of impact violence, exploitation, abuse, neglect and psychosocial wellbeing
- Pilot the Child Protection Index [CPI], a measure that can be utilized across
 UNHCR operations to assess the strength of the child protective environment
- Ensure ethical supports and referrals are in place for children when interviewing on sensitive and difficult topics
- Assess validity and reliability of the instrument in measuring key variables of interest
- Inform future activities for this project, including developing measurement instruments for a rigorous prospective impact assessment, possibly with comparison groups, or comparing levels and quality of interventions, to assess the impact of UNHCR and its partners' child protection activities

The over-arching research goal of this on-going project is to address the question: **How** do changes in the child protective environment impact children's safety and wellbeing?

The specific research objective that was addressed in this pilot study in Rwanda was: What is the strength of the child protection system in Kiziba Camp, Rwanda, and how is it linked to violence, exploitation, abuse, neglect and psychosocial wellbeing of adolescents?

The data in this study indicate the strength of the child protection system and provide a snapshot of adolescent's exposure to violence, exploitation, abuse, neglect and psychosocial well-being. The extent to which strength of the system and adolescents' outcomes are linked cannot currently to answered with the data from this pilot study. Changes in system strength and changes in outcomes for adolescents, which will be assessed at Time 2, as well as qualitative data collected to explore these mechanisms of change, will indicate the linkages between system strength and adolescent outcomes. Moreover, data collected in two different locations at two different time points will provide comparative data to shed light on the over-arching research objective of the study.

Measurement of child protection

Assessment, monitoring and evaluation of child protection activities and systems in humanitarian settings are a relatively new field. In comparison to measurement and evaluation in areas such as health or nutrition, research methodologies are neither well-developed nor standardised. The evidence-base for child protection in humanitarian settings can best be described as nascent.

Some research has assessed components of child protection in humanitarian settings. For example, a case study approach has been used to identify factors facilitating child protection assessments in four humanitarian settings, bringing to light issues of coordination, capacity and timeliness of assessments (Ager, Blake et al. 2011). One of the most commonly implemented interventions in humanitarian settings is child-friendly spaces, with dual objectives to improve child protection and psychosocial wellbeing (Wessells and Kostelny 2013), however, there are significant gaps in the literature on child-friendly spaces and few rigorous assessments that ascertain the impact of child friendly spaces on child protection outcomes (Ager and Metzler 2012). Recent efforts to develop appropriate methodologies and rigorous studies on the impact of child-friendly spaces have generated evidence on the impact of child-friendly spaces in Ethiopia and Uganda, using outcomes measures assessing psychosocial wellbeing, developmental assets and literacy (Metzler, Kaijuka et al. 2013; Metzler, Savage et al. 2013). A recent review details early response interventions for children living outside of family care,

noting that effective interventions for children affected by conflict and disaster include family tracing and reunification, general supports that aim to promote a sense of "safety, normalcy, self and community-efficacy, connectedness and hope," and education activities (Boothby, Wessells et al. 2012).

Studies of interventions to respond to SGBV in humanitarian settings have noted that multi-disciplinary prevention and response is needed, including addressing the reproductive health implications of SGBV, as well as "care of survivors' health, psychological, social, security, and justice needs" (Marsh, Purdin et al. 2006). However, evidence of the effectiveness of interventions in reducing violence or addressing impacts of violence is limited. For example, a systematic review of studies of mental health and psychosocial interventions for survivors of SGBV in humanitarian settings identified only seven studies describing an evaluation of relevant interventions, indicating that robust conclusions based on the evidence as to which interventions are effective are currently unavailable (Tol, Stavrou et al. 2013). A review of interventions to prevent and reduce SGBV found a larger evidence base, though quality of outcome studies was low and only three studies were able to demonstrate reduction of violence as a result of interventions (Spangaro, Adogu et al. 2013). Recent studies that have explored the role of safe shelters in addressing SGBV in displacement settings have taken a qualitative approach, interviewing shelter staff, shelter residents and key informants, and recommending further evaluation of the impact of these interventions, in order to assess the outcomes for shelter residents in terms of protection and psychosocial wellbeing (Human Rights Center 2013). These studies have not specifically focused on children and adolescents, and therefore the applicability of findings to the child protection sector may be limited.

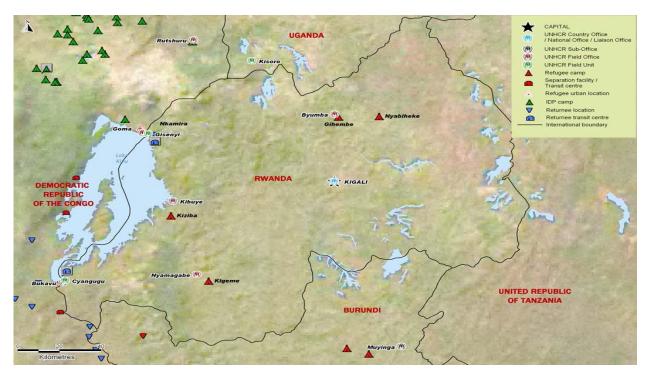
In its current form, the evidence-base is lacking in multiple areas. The focus of research has primarily been on specific interventions, rather than taking a systems-approach to child protection. The UNHCR Framework for the Protection of Children takes such an approach, seeking to engage the national child protection system and community-based child protection systems, with UNHCR supplementing, supporting and strengthening these systems; however, there are currently no established or tested approaches to measuring the strength of child protection systems. Moreover, the research has often been focused on measuring prevalence of child protection concerns, including adverse

mental health and psychosocial outcomes (Catani, Schauer et al. 2009; Panter-Brick, Eggerman et al. 2009; Betancourt, Brennan et al. 2010; Catani, Gewirtz et al. 2010; Reed, Fazel et al. 2012). These studies have provided substantial insights into the relationship between exposure to adversity and mental health and psychosocial wellbeing in humanitarian settings, as well as highlighting feasible, rigorous measurement methods. However, these prevalence studies are largely disconnected from studies of the impacts of activities and approaches aiming to improve child protection systems in humanitarian settings. Studies of the impact of interventions have primarily focused on mental health and psychosocial interventions, some of which are more specialised (Bolton, Bass et al. 2007) or more comprehensive (Tol, Komproe et al. 2008; Jordans, Komproe et al. 2010) than are commonly found in humanitarian contexts. There is a substantial gap in the literature and evidence-base around the *impact* of child protection activities on a combination of child protection outcomes, indicating a need to explore, develop and pilot methodologies that combine rigor and feasibility, assessing a package of key child protection interventions and a range of outcomes in a single, holistic and integrated approach.

Kiziba Camp, Rwanda

The pilot study was conducted in Kiziba Camp, Rwanda. According to UNHCR, there are currently 72,856 refugees living in Rwanda, the majority of whom are from the Democratic Republic of Congo [DRC] (UNHCR 2014). Children aged 0 to 17 make up 55.5% of the total population. The armed conflict and the violence in DRC between 1996 and 1998 generated large-scale population movement from DRC to Rwanda. Fighting in North Kivu 2004 and 2007, the fighting between rebel forces and the Congolese national military in November 2008, and ethnic tensions and inequitable access to land in 2012 have led to renewed violence in the east and north-east DRC, resulting in displacement inside the country and into neighboring Rwanda and Uganda.

Map of Rwanda showing the location of refugee camps



Source: UNHCR

Kiziba Camp

Kiziba Camp was established in December 1996 following the closure of Umubani Transit Camp near Gisenyi, in order to cope with the large numbers of refugees arriving from eastern DRC. According to UNHCR statistics for January 2014, the population of Kiziba Camp is 16,314, including 8,163 children aged 0-17 years old (3,993 boys and 4,170 girls). Children make up over half of Kiziba's population.

Kiziba Camp is located in a relatively isolated position, on a hill around 2000m above sea level and overlooking Lake Kivu. It is around 15 kilometres from Kibuye town, Karongi District, in Rwanda's Western Province. Kiziba Camp is divided in 10 *quartiers* and 54 villages. Each village has average of 75 families. Houses are semi-permanent mud structures with thin log frames. They are small homes with little space for privacy. Some homes have sufficient outdoor space for small gardens and for wooden cages for raising small animals like rabbits, as was the case in some homes.²

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² The kitchen garden and rabbits are provided part of NGO initiatives

Education

In Kiziba Camp there are the following educational structures supported by the education Implementing Partner, Adventist Development and Relief Agency [ADRA]:

- 1 Nursery school
- 3 Primary schools
- 1 Secondary school (secondary level 1-3)

Children registered in education, Kiziba Camp, February 2014

Level	Male	Female	Total	Location	
Nursery school	374	385	759	Kiziba Camp	
Primary school	1,988	2,089	4,077	Kiziba Camp	
Lower secondary school (senior 1 to 3)	659	632	1,291	Kiziba Camp	
Upper secondary school (senior 6) scholarships ³	0	35	35	Outside the camp	
Total	2,463	3,141	6,127		

Source: ADRA, February 2014 (Nursery, Primary and Secondary Education)

There are also 4 Early Childhood Development [ECD] centres, which are a refugee-led initiative with the support of AVSI. A total of 49 boys and 91 girls attend ECD activities. There is a private funder for ECD activities, Global Help to Heal. The Lillian Foundation supports eight children with disabilities in Kiziba Camp.

In addition to those recorded in the data above, children study outside the camp in various Rwandan public and private secondary schools, in particular those who are in the final years of secondary school. These children are not supported through the formal system, and are therefore not captured in the table above.

³ Supported by ADRA through a donation from Howard Buffett, a private donor

Economic activities

Refugees from Kiziba Camp buy and sell goods in the Mubuga, Bwishyura and Rubengera markets in Karongi District. In the camp there is an association called *Mawenderewo*, which buys and re-sells rations and brings good from outside the camp to resell within the camp. This association also runs a taxi bus service from Kiziba to Kibuye town. There are also 'tontine' associations in which people pool their savings on a weekly or monthly basis and take turns distributing the funds to individual members. Some people work in income-generating activities such shoe repairs, carpentry and tailoring, while some have paid work in the camp as teachers, gardeners, and NGO staff.

In addition, Africa Humanitarian Action [AHA] provides vegetables and livestock to supplement the diets of families. 330 households have vegetable kitchen gardens and 153 households have small rabbits. The primary beneficiaries are families with children under 5 years.

Structure and Organization

Kiziba Camp is managed by the Ministry of Disaster Management and Refugees [MIDIMAR], the Rwandan government's authority on matters involving refugees, in coordination with UNHCR.

At the community level, camp committees are the administrative body. Committee members are elected by community members and liaise with national and international level partners as the primary representative of refugee concerns. Camp committees are composed of seven members from the community including President (or Chief), Vice President (or Vice-Chief), Secretary, and members in charge of Gender, Education, Youth, and Security). Committees exist at camp level, at *quartier* level and at village level.

Other key organizations and structures in the camps include:

United Nations Agencies:

• UNHCR: Works with the Government of Rwanda and several international NGOs. It collaborates with World Food Programme [WFP] to provide food rations in the

camps and transit centres and with United Nations Children's Fund on child protection. UNHCR Protection Officers work in the camps.

- WFP: Provides food assistance
- UNICEF: Supports child protection through implementing partner, Associazione Volontari per il Servizio Internazionale (AVSI)

International NGOs:

- Adventist Development and Relief Agency [ADRA]: Supports formal education at primary and secondary until the third year of secondary school for all children in Kiziba Camp
- American Refugee Council [ARC]: Supports medical services, shelter and construction, water and sanitation, prevention and response to SGBV, and environmental protection in Kiziba Camp
- African Humanitarian Agency [AHA]: supports medical services at Kiziba Camp
- AVSI: Responsible for child protection monitoring and coordination in Kiziba;
 coordinates the community-based child protection committees

Rwandan NGOs:

Association Rwandaise Pour La Defense Des Droits De L'Homme [ARDHO]:
 Provides support for legal aid

Rwanda Government Institutions:

- Police (there are no police officers directly located in Kiziba, the police are in the process of constructing a base at Kiziba Camp)
- Immigration and migration
- Gender and Family Protection Unit at the district level
- Courts

Maison d'Accès à la Justice (MAJ),⁴ including Chambe de mineurs (children's courts)

⁴ The Rwandan government's main strategy for decentralizing justice is the establishment of a Maison d'Accès à la Justice (MAJ) in every district throughout the country. They are limited to only offering legal advice without actual representation in the criminal courts of Law.

Child protection in Kiziba Camp

There are a number of child protection committees in Kiziba Camp. Save the Children, the previous child protection implementing partner, established these committees. They were managed by AVSI until end of 2013. AVSI added *Ijwi ry'abana*, resulting in a total of four types of child protection structures. Each structure has a specific mandate. They are:

- Nkundabana (I like children): Volunteers support children who lack appropriate
 parental care in the camp communities, for example children in foster care,
 child-headed households, and neglected and abandoned children. Nkundabana
 members are selected by children and foster families themselves and keep an
 eye on members of this particularly vulnerable group through mentoring and
 helping them to access the services available.
- *Ishuri inshuti z'abana* (Early Childhood Development, ECD): A community initiative, supported by AVSI, aiming to prevent harms against young children by providing safe spaces where children aged 2-6 years old are cared for by community volunteers while their parents are working.
- *Ijwi ry'abana* (Voice of Children): A forum aiming to allow children to participate in decision-making. Forums at village, *quartier* and camp level involve six children, including marginalised groups such as children with disabilities. These forums aim to raise children's awareness of their rights, roles and responsibilities, ensure child participation in child abuse reporting, and represent and advocate for other children.
- Abaregerabana (Protect Children): Community volunteers (at least three in each quartier) who monitor children's rights enforcement and abuses and report cases to relevant structures in charge, including AVSI and the Child Protection Forum. Abaregerabana members identify vulnerable children, investigate issues that can affect the wellbeing of children, such as the selling or 'renting' of ration meal cards. The aim is that children are able to report problems to Abaregerabana members in their neighbourhoods.

A recent study of knowledge and attitudes towards child protection in refugee camps in Rwanda included findings from Kiziba Camp, which showed high levels of communal knowledge of the main child protection concerns, as well as knowledge of the child protection committees and international organizations (AVSI and InfoAid 2013). However, the study also identified a number of direct and indirect risks for violence and abuse against children, including use of physical violence as punishment, lack of access to adequate, quality education and food insecurity. Lack of access to basic needs was identified as a potential cause for protection risks, for example, lack of income generating activities resulting in use of child labor and lack of adequate space in the home resulting in violence against children in the home. The study also identified gaps in complaints and reporting mechanisms, detailing barriers to reporting abuse, provision of multi-sectoral responses for children who are vulnerable to abuse or survivors of abuse, and appropriately addressing violence and abuse that occurs within the family and community.

The 2013 participatory assessment in Kiziba Camp, conducted as part of UNHCR's approach to Age, Gender and Diversity Mainstreaming, identified concerns in the refugee population relating to child protection, including lack of opportunities for secondary education resulting in delinquent youths in the camp forming gangs, lack of trust in the volunteer security team in the camp, parents imposing difficult work, such as gathering firewood, on children, and impunity of perpetrators of violence and abuse. Research conducted in Kiziba and Gihembe refugee camps in Rwanda in 2013 identified four harms present for children: children out of school, delinquency, early pregnancy and prostitution (CPC Learning Network and AVSI Rwanda 2013).

METHODOLOGY

In order to address the key research questions for this study, researchers developed a methodological approach that includes a number of measurement instruments and utilization of various data sources. The approach included data collection methods and procedures that sought to generate data to provide insight into the child protection environment in Kiziba camp, Rwanda, as well as to assess the current level of psychosocial wellbeing and experiences of child protection risks amongst adolescents, and knowledge and attitudes towards child protection amongst adolescents and caregivers. Moreover, the study included piloting methods and revisions of measurement instruments during fieldwork in order to maximize the learnings from this pilot study. Below, the specific methods employed in this study are described, as well as the key data sources and the data collection procedures. Finally, ethics procedures utilized during fieldwork are described. This methodology was developed to address the key research questions and goals of this phase of research, and thus the findings from piloting these instruments will be used to inform future revisions to and refinement of this methodological approach.

Measurement instruments

Child protection index

Researchers developed a Child Protection Index [CPI], a tool to assess system strength across a range of key areas of child protection. The index was developed in line with the benchmarks included as part of the UNHCR Framework for the Protection of Children, and included questions for key informants, adolescents and caregivers in the following areas, which are listed here under the UNHCR Framework for the Protection of Children objectives:

Goal 1: Girls and Boys are safe where they live, learn and play:

- Standard Operating Procedures
- Community-based child protection mechanisms
- Child-friendly spaces and communal spaces for adolescents
- Safe learning environment

- Codes of conduct and staff training for teachers, police and community leaders
- Advocacy and remedial programmes dealing with female genital mutilation
- Child-friendly and confidential complaints mechanisms (including in schools)

Goal 2: Children's participation and capacity are integral to their protection:

- Child-specific participatory assessments
- Clubs and committees for children and adolescents
- Sports and recreation initiatives which are inclusive and bearing in mind age, gender diversity and disability

Goal 3: Girls and boys have access to child-friendly procedures

- Training on communication with children and adolescents
- Child protection focal points
- Communication materials are child-friendly
- Interview rooms are child-friendly
- Decisions communicated to children in a language and manner they understand

Goal 4: Girls and boys obtain legal documentation

- Birth registration procedures in place for newborns and late registration, data on birth registration
- · Obstacles to birth registration identified and addressed
- Refugee children receive refugee ID cards

Goal 5: Girls and boys with specific needs receive targeted support

- BIA/BID processes functioning
- Family tracing and reunification services
- Alternative care
- Vulnerable children/families
- Children with disabilities
- Information management system for individual cases established

Goal 6: Girls and boys achieve durable solutions in their best interest

BIA/ BID guidance followed

- Sufficient BIA/ BID staff
- Legal, administrative and policy frameworks governing durable solutions include specific considerations for children's needs
- Children at risk, including UASC, are promptly referred for resettlement consideration if in their best interests
- Impact of statelessness on children assessed

In addition to these areas derived from the benchmarks in the UNHCR Framework, an additional section – "General laws and policies" – was added, in recognition of the potential impact on child protection of national laws and policies. Questions in this section included whether Rwanda is a signatory of the Convention, has laws and policies that act to improve the protective environment for children, and whether refugee children have access to national education, health and welfare systems.

The index seeks to assess the current strength of the child protective system, and provide insight into activities, interventions and mechanisms that currently operate in Kiziba camp. However, the ultimate goal of the index is that it can be applied in UNHCR operations globally. The initial index draft included both objective (e.g. Is there a code of conduct for teachers that has been signed by teachers? Yes/No) and subjective questions (e.g. What is the quality of referral pathways for children and adolescents who have experienced violence? Low quality, Medium quality, or High quality?), with the majority of questions for key informants designed to be objective assessments of current activities and systems.

The version of the index used in this pilot study included 141 questions, with multiple sub-questions. The index also included both subjective and objective questions. Based on findings from utilizing this long-version of the CPI, major revisions, including reducing length and removing subjective questions, are recommended (discussed further in *Key Lessons* and *Discussion and recommendations*). As such, the data presented in the *Results* section is based on the proposed revised short-version of the CPI. The full data set collected using the long-version of the CPI is available upon request. Appendix 1 presents the short-version CPI, and Appendix 2 details the decision-making process regarding which questions to include in the short-version of the CPI.

Adolescent survey instrument

Researchers developed a survey instrument in order to assess adolescents' exposure to violence, exploitation, abuse and neglect, current psychosocial wellbeing, and knowledge of and attitudes towards child protection systems and activities. This measure sought to assess some of the key area of impact of child protection activities – violence, exploitation, abuse, neglect and psychosocial wellbeing, as well as intermediary outcomes that are part of the key research objectives in this study, such as knowledge of services, attitudes towards child protection, resilience and empowerment.

The description of the survey here, and for the caregiver survey, below, is a description of the instrument prior to piloting, and therefore does not reflect the final instrument that was utilized to collect data for this study. The changes made to the instruments as a result of piloting the instruments in Kiziba Camp are detailed in *Findings*.

The adolescent survey instrument included the following sections:

Demographics

This section included items assessing length of time living in Kiziba camp, whether the adolescent lives with biological parent(s), marital status, whether the adolescent has biological children, level of education completed and school attendance;

Psychosocial wellbeing

This section included a number of scales to assess various aspects of psychosocial wellbeing. Scales were selected to address key components of psychosocial wellbeing that researchers hypothesize would be impacted by child protection activities. These include emotional distress, anxiety, hope/ future orientation, and resilience. The scales that were selected to measure these outcomes were: the Birleson Depression Self-Rating Scale; the 5-item Screen for Child Anxiety Related Emotional Disorders [SCARED], aspects of the Strengths and Difficulties Questionnaire [SDQ]; the Children's Hope Scale; and the Child and Youth Resilience Measure [CYRM].

These scales were selected following extensive literature review, focusing on which scales had been used previously in similar settings (refugee camps, displaced and conflict-affected populations) or for similar purposes. Scales were also assessed for their brevity, straightforwardness and clarity, given the importance of these factors in a cross-cultural field study.

The Birleson Depression Self-Rating Scale is a measure of depression with 18 items such as "I look forward to things as much as I used to", "I feel like running away" and "I feel very lonely", scored on a 3-item scale of "mostly," "sometimes," and "never." The scale has been used in international research with conflict-affected children in Indonesia (Tol, Komproe et al. 2008) and Nepal (Jordans, Komproe et al. 2010). The SCARED has also been used in a number of international studies (Kohrt, Jordans et al. 2008; Tol, Komproe et al. 2008; Berger and Gelkopf 2009), and validation and testing of the scale has shown that the 5-item version adequately captures the various components of anxiety (Birmaher, Brent et al. 1999). The SDQ measures non-clinical psychological distress, with five separate sub-scales – emotional symptoms, conduct (behavioral) problems, hyperactivity/ inattention, peer relationships and pro-social behavior. The measure has been used in a number of studies, including a recent evaluation of child friendly-spaces in a refugee camp in Ethiopia (Metzler, Savage et al. 2013). The emotional symptoms sub-scale is reported on here. The Children's Hope Scale is a 6item measure of hope, which is defined in this scale as the combination of agency thoughts (the perception that children can begin and continue action towards a certain desired goal), and pathway thoughts (children's perceptions of their own capability to meet these goals) (Snyder, Hoza et al. 1997). Similar to the other scales, it has been used to assess psychosocial wellbeing of children in conflict-affected populations. Finally, resilience was assessed using the Child and Youth Resilience Measure (Resilience Research Centre 2009). This measure was developed in recognition of the culturallyspecific components of resilience, with researchers noting the limitations of established theories of resilience in illuminating processes of resilience and protective factors in non-Western contexts, and that many instruments that measure resilience reflect Western perspectives on normal child functioning and healthy behaviors that may not be relevant or informative in vastly different contexts (Ungar 2006; Ungar 2011). Resilience is defined and assess as a dynamic interaction between an individual and their social environment, and takes into account access to resources such as social

support, rather than being conceptualized as an attribute that an individual either does not does not have. The CYRM was developed using mixed methods research in 11 countries, and encompasses aspects such as relationship with community, access to resources, social competence and quality of parenting (Ungar, Liebenberg et al. 2008).

Other scales that were considered for inclusion at the instrument development stage were the Child Behavior Checklist, the Revised Manifest Anxiety Scale, the Moods and Feelings Questionnaire and the Children's Depression Inventory. Further discussion in *Findings* and *Key Lessons* indicates proposed revisions to psychosocial wellbeing measurement for future phases of research.

Exposure to violence and abuse

This section assessed adolescents' exposure to violence and abuse in the home, verbal abuse, physical abuse, intimate partner violence, sexual violence, violence in school, violence in the community and goods exchanged for sex. All questions asked respondents to report whether an event had happened in the past 12 months.

Alcohol and substance use

This section assessed alcohol and substance use, focusing on frequency and amount of alcohol use.

Relationship with caregiver

This section utilized the Parental Acceptance-Rejection Questionnaire [PARQ] (short version) in order to assess parental behavior and adolescent reported relationship with a caregiver. This version of the PARQ asks adolescents to report on the degree of acceptance, rejection and behavioral control they receive from their primary caregiver. The PARQ is based on parental acceptance-rejection theory, which has found that acceptance from a caregiver is central to children's psychosocial wellbeing and development, and that children who do not receive acceptance from a caregiver may be anxious, insecure, hostile, dependent or emotionally unstable. Low acceptance from caregivers can also result in low self-esteem, depression and behavior problems, such as alcohol and drug use (Rohner, Khaleque et al. 2008). The PARQ is a self-report questionnaire, with 24-items such as "[My caregiver] lets me know I am not wanted," "[My caregiver] lets me know he/ she loves me," and ["My caregiver"] pays no attention

to me as long as I do nothing to bother him/her," with response categories of: almost always true, sometimes true, rarely true, and almost never true.

Exploitation – child labor

This section asked about adolescents' experience of work, including hard physical labor, and work earning money for the household, in the past 12 months.

Services and interventions

This section sought to assess adolescents' knowledge of different services in the camp, including services for those who have experienced or are experiencing violence and abuse, problems at school, problems at home and health problems. Adolescents were asked to report whether they knew a place to get help for these problems, and to name that place. Adolescents were also asked to report if they knew of the various child protection committees in the camp, and to report their perception of the role of the child protection committee. Adolescents were also asked to report knowledge of other organizations working in the camp, and if they knew of a place to make a complaint. Finally, this section assessed participation in, and reasons for non-participation in, activities such as structured recreation activities, clubs and committees, non-formal education and life skills training.

Attitudes towards violence against children

This section presented a number of scenarios and asked adolescents to respond whether it is right for a caregiver to beat children in the given scenario. Scenarios included if the child is disobedient, if the child talks back to the parent, if the child steals and if the child refuses to get married.

Safe environment

This question addressed the question of safety in the camp, and asked adolescents if they have ever felt unsafe in a number of locations, including home, school, at the market, and on the way to school.

Social support

The social support measure selected for the adolescent instrument was the Multidimensional Social Support Scale, a 12-item measure of perception of social support systems, including family and friends. Adolescents were asked to strongly disagree, disagree, agree or strongly agree with statements such as "[t]here is a special person who is around when I am in need," "I get the emotional help and support I need from my family," and "I can count on my friends when things go wrong."

Caregiver survey instrument

Demographics

The demographics section asked questions such as country of birth, length of time living in Kiziba Camp, level of education, marital status, household size, and birth registration and documentation for any children.

Caregiver wellbeing

The instrument measured caregiver wellbeing using the Hopkins Symptoms Checklist 25, a measure of depression and anxiety that has been used in a number of international settings. The measure asks respondents to report frequency of feelings and emotions over the past week, such as feeling "suddenly scared for no reason," "trembling," "faintness, dizziness or weakness," and "spells of terror or panic." In order to generate categorical variables (i.e. depressed or not depressed), the widely used cut-off of an average of 1.75 (out of 4) for depression, anxiety and total score was used for analysis. This cut-off has not been validated in this setting, so these findings should be read with some caution and further analysis is required to assess the appropriate cut-off for this population.

Attitudes towards children and child protection issues

This section assessed caregivers' attitudes towards adolescents, knowledge of child protection committees in the camp and the role of those committees, attitudes towards harsh punishment of children, and attitudes towards reporting of abuse and violence against children.

Household socio-economic status

This section used questions from Demographic and Health Surveys, including questions focused on household income, employment and frequency of work, and source of drinking water. In order to develop a scale of ownership of household items, data collectors asked respondents to list all the items the household owned during the pilot test, in order to develop questions for the full study that would allow for indicators of household socio-economic status. This section also includes the Food and Nutrition Technical Assistance [FANTA] Household Hunger Scale, a measure that includes three

questions and three measures of frequency in order to assess household hunger and allow for estimation of prevalence of households affected by 1) little to no household hunger, 2) moderate household hunger; and 3) severe household hunger. Finally, questions assessed use of health services and reasons for not utilizing health services for children who needed it in the past 12 months.

In order to generate meaningful categories of socio-economic status for this context, researchers explored the data from the survey of 129 caregivers to identify appropriate cut-offs for low, medium and high socio-economic status in this context. The socio-economic status scale developed includes employment status, household food security, and ownership of household items.

- Employment status: A binary measure of whether or not the respondent has worked in the past seven days;
- ii. Household food security: Categories of little to no hunger; moderate hunger, or severe hunger, based on the FANTA measure;
- iii. Ownership of household items: Pilot test had indicated 11 household items that were appropriate to include in the survey. Based on the data, it was evident that there was little or no variation in the ownership of some of these items (bicycle, cooking pot, jerry can, basin and mat/ blanket), meaning these items were excluded from the socio-economic status scale as the lack of variation indicated that they would not be good predictors of differences in socio-economic status. The household items included in the scale, as they showed variation in ownership, were a watch, cellphone, table, chair or stool, radio, and any type of livestock.

Households were categorized as follows:

L = low

M = medium

H = high

	Severe hunger		Moderate hunger		Little hunger	
Worked in past 7	No	Yes	No	Yes	No	Yes

days?						
Ownership of						
household items						
0-1 items	L	L	L	M	M	Н
2-3 items	L	L	М	M	Н	Н
4-6 items	L	М	М	Н	Н	Н

- 1. Low socio-economic status: 0-1 items, not having worked in past 7 days and severe household hunger OR 2-3 items, not having worked in past 7 days and severe hunger OR 2-3 items, having worked in past 7 days, and severe hunger; OR 0-1 items, moderate hunger and not having worked in past 7 days; OR 4-6 items, severe hunger and not having worked for the past 7 days
- 2. Medium socio-economic status: 0-1 items, moderate hunger and having worked in the past 7 days OR 2-3 items, moderate hunger and not having worked in past 7 days OR 2-3 items, moderate hunger and having worked in past 7 days OR 4-6 items, severe hunger and having worked in past 7 days OR 4-6 items, moderate hunger and not having worked in past 7 days
- 3. High socio-economic status: 0-1 items, little hunger and having worked in the past 7 days OR 2-3 items, little hunger and not having worked in the past 7 days OR 2-3 items, little hunger and having worked in the past 7 days OR 4-6 items, moderate hunger and having worked in the past 7 days OR 4-6 items, little hunger and not having worked in the past 7 days OR 4-6 items, little hunger and having worked in the past 7 days

These categories indicate a relative level of socio-economic status, entailing that high socio-economic status is relative to other refugees in the camp, as socio-economic status is measured and defined in the context of the refugee community.

This measurement approach is based on pilot testing and analysis of the data generated in this specific context, however, requires further testing and development to assess its strength as a measure of variation in socio-economic status in other humanitarian settings. Statistical analysis can indicate whether expected relationships between this predictor variable and other outcome variables is supported, for example, whether low

socio-economic status is associated with higher depression in caregivers, or whether high socio-economic status is associated with higher resilience and hope in adolescents.

Safe environment

This section asked caregivers to assess the safety of children in various locations in the camp, including in public places and at school.

Data sources

Key informant interviews

Key Informant Interviews were conducted in order to elicit data to populate the CPI. For each interview, researchers selected the questions that were relevant to the key informants' expertise and role in child protection activities in Kiziba Camp or nationally. Key informant interviews were conducted in Kigali with a staff member of UNICEF, a staff member of the International Committee of the Red Cross [ICRC], and staff members of UNHCR based in Kigali (child protection officer, resettlement manager, legal protection officer). In Kiziba Camp and in Kibuye, where implementing partners and UNHCR have branch offices, key informant interviews were conducted with a staff member of Adventist Development and Relief Agency (implementing partner for education in Kiziba), Africa Humanitarian Action (implementing partner for health in Kiziba), AVSI (implementing partner for child protection in Kiziba), and UNHCR (child protection focal point, resettlement expert). All interviews were conducted in English.

Interviews with adolescents and caregivers

As noted, the CPI draws on data collected from key informants, as well as selected items from within the adolescent and caregiver surveys. The surveys were administered to 129 adolescents (between the ages of 13-17) and caregivers in Kiziba camp. Further details of data collection procedures as they pertain to sampling and ethics procedures are discussed below.

Data collection procedures for adolescent and caregiver surveys

Pilot testing

The adolescent and caregiver survey instruments were piloted in 35 households, over the course of five days of data collection. The primary objectives of the pilot test phase of research were:

- Assess average length of interview in order to determine whether the survey instruments needed to be reduced;
- Assess the flow of data collection procedures, including administering informed consent and asking permission of caregivers;
- Assess respondents' understanding of the questions and ascertain if there were necessary changes in wording of questions or specific sections; and
- Improve data collectors' skills and capacity to collect high-quality data

The pilot test used cognitive interviewing techniques to ensure that the questions are clear and understandable, and that interviewers are able to complete the interviews after one-week of training. Cognitive interviewing includes asking respondents "Can you repeat the question in your own words," or "How did you arrive at that answer," so as to gain insight into how respondents understand the questions and if the questions are clear to respondents. The results of cognitive interviewing allow for researchers to understand where certain questions or areas may be ambiguous, inappropriate for this cultural setting, or difficult for respondents to understand. The pilot test used verbal probing techniques of cognitive interviewing, including:

- Comprehension probes asking respondents to explain what they understand certain terms to mean, for example, "What does non formal education mean to you?"
- Paraphrasing asking the respondent to repeat the question in their own words to ensure that they understand the meaning as it is intended;
- Recall probes asking respondent to explain how they recalled the specific
 information, for example "How do you remember that the event happened in
 the past 12 months?" This type of probe can enable researchers to understand if
 the time periods being asked about are short enough for respondents to be able
 to recall the relevant information; and

 Specific probes – asking why the respondent answered the question in a certain way, for example, "Why do you think it is OK for parents to beat their children if they wet the bed?"

Data collectors received training on cognitive interviewing, and researchers directed data collectors towards particular types of cognitive interviewing questions most relevant for specific sections of the instruments in the course of pilot testing.

Researchers spent considerable time with data collectors following each household interview, discussing procedures, skip patterns and logic in the survey, and the results of cognitive interviewing. Discussions were conducted with data collectors individually and as a group as to suggested changes to the surveys, including wording of questions, ordering of questions, and response types.

Sampling

The study aimed to use a systematic sampling approach to generate a random, population-based sample in Kiziba camp. There are numerous challenges in following this approach, which are discussed in the Key Lessons section. The systematic sampling approach planned involved generating a sampling interval, by dividing the number of households in the camp by the number of planned interviews, and selecting households in each village and cluster throughout the camp based on that interval. Researchers obtained the number of quartiers (blocks), villages in each block, and households in each village from UNHCR data. In order to address the challenges in following this sampling plan and reaching sample size in the data collection period, some adjustments were made after a few days of data collection. Researchers modified the sampling plan to allow data collectors to select the neighboring household or household after that if the designated household did not contain an adolescent. That is, if the designated household was Household 18, and did not contain an adolescent, data collectors could visit Household 19 or Household 20 to see if these households were eligible. This was somewhat successful in increasing the yield of interviews and reducing time spent searching for eligible households, and resulted in a sample that included at least two households per village in every quartier.

The sample size was dictated by the timeframe and resources available to conduct the pilot study, and is too small to draw conclusions on some associations that may be evident in a larger sample. Researchers plan to include a larger sample of the population in subsequent studies.

Ethical considerations

This study employed a number of ethics procedures based on best practices for conducting research on sensitive topics with adolescents. Data collector training included a focus on all ethics procedures — explaining the study, obtaining permission from the caregiver, obtaining informed consent from the caregiver, stopping the caregiver interview if suicidality was expressed, obtaining informed consent from the adolescent, and checking in with the adolescent after the interview. Permission was obtained from caregivers so that caregivers did not have a negative perception of the interview. While acknowledging that a caregiver may be a perpetrator of violence against the adolescent, this approach was used as human subjects research ethics standards require that a caregiver give some form of permission for a child to participate in research, with exceptions only made in extreme circumstances. Data collectors were trained to be aware of the effects that questions may have on the respondent and how best to respond, based on the respondent's level of distress. They were instructed, however, not to provide any counseling, but instead to inform respondents of services available and how to access those services if needed.

AVSI and UNHCR Rwanda agreed to exempt researchers and data collectors from any existing mandatory reporting policies of abuse and violence. When a case was identified, the respondent was informed of services, and asked if s/he would like assistance in accessing those services.

Upon entering a selected household, the data collectors identified the primary caregiver, in order to provide a short introduction to the study and obtain permission to interview an adolescent aged between 13-17. Data collectors were trained to present the survey as an opportunity to learn more about the health and life experiences of male and female adolescents and youth in the camps, emphasizing that the survey is both confidential and voluntary. While this explanation did not fully present the content of

the survey, which included questions about sexual violence and violence in the home, this approach was seen as justified as a description of the study which included all components of the survey could potentially reduce caregiver permission and therefore exclude adolescents from the survey who are at-risk or in vulnerable situations. The data collector then sought informed consent from the caregiver, to participate in the caregiver survey, and then subsequently sought informed consent from the adolescent, to complete to adolescent survey. The adolescent survey was only conducted if a caregiver was present to give permission. In households where the caregiver was an adolescent, the adolescent and caregiver surveys (without the wellbeing measure) were both administered to the adolescent caregiver. All informed consent and permission was obtained through a written form that data collectors read to respondents. Informed consent forms explained to respondents that information they provided was confidential, and that their decision regarding participation was voluntary and would have no bearing on their access to health or relief services or to their family's access to these services. Data collectors signed informed consent forms after they read the form out loud to the respondent and the respondent agreed to participate in the study.

Data collectors ensured that the interview took place in a private setting, to protect confidentiality and enable respondents to feel comfortable responding to sensitive questions. Data collectors found that the most private space to conduct the interview was in the respondents' home, with the caregiver leaving the house during the adolescent interview, and vice versa.

After completion of the interview with an adolescent respondent, data collectors asked respondents the following post-survey screening questions: "I know this discussion might have been difficult for you. How are you feeling right now? Would you like to discuss any of these issues further with someone else?" Respondents were offered information about services in the camp that they could access if they wished. In the caregiver survey, if the respondent endorsed the suicidality question in the Hopkins Symptoms Checklist, (says "sometimes" or "often" to "thoughts of ending my life") the data collectors stopped the interview so that the respondent did not have to answer further questions about emotions and feelings which may be difficult for them.

For the purposes of following up with respondents in subsequent research, the study collected identifying information, including name and address of respondents. Each survey contained a top sheet collecting the identifying information, filled in by hand by the data collector. The identifying information has been entered into an Excel spreadsheet, which is kept on a password-protected computer not connected to any shared folders or drives. The top sheet has since been destroyed, and the identifying information database is stored separately to the data collected in the survey, so none of the responses can be matched with the name or address of any respondents. The survey data has been entered into an Epilnfo database, using Study ID numbers so as to be fully de-identified.

FINDINGS

Pilot test results

35 interviews conducted during five days of pilot testing provided researchers with substantial information from which to base revisions of survey instruments. Results from cognitive interviewing, as well as structured discussions with data collectors about their experience conducting the pilot interviews, informed the decisions regarding changes to the survey instruments, which are presented in detail below. Pilot testing also resulted in substantial changes in translation from English to Kinyarwanda in both the caregiver and adolescent surveys.

Changes made to survey instruments

Adolescent survey:

Following pilot testing, the question "Do you have any plans to return to the country you were born in during the coming year?" was cut from the demographics sections, as this proved to be a complicated question in this context. Respondents described wanting to go back if there is peace, but not having any concrete plans. A simple "yes/no" response choice was not appropriate. A more complicated version of the question, with several types of responses or different sub-questions may have captured the question more fully, however, given time constraints for the interview, researchers decided to remove this question.

A significant number of the changes made to the adolescent survey instrument were due to the length of the original survey. Data collectors found that administering the full survey took around 1.5 hours, which needed to be reduced to a maximum of one hour. Therefore, the full depression measure in the psychosocial wellbeing section (18 questions) was cut. Intimate partner violence (14 questions) was cut from the section on exposure to violence and abuse, as no adolescents had reported being in a relationship or living with a partner in the pilot test.

The alcohol and substance-use section was also removed. This was partly due to length considerations, and also due to concerns about validity of self-reporting of alcohol and substance-use. Questions in the alcohol and substance use section relied on a standard

meaning of what constitutes "one drink" in this setting. However, it was not possible to obtain a clear "standard measure" drink in this context, as there are many different types of alcohol, with different alcohol content and in different containers. Without further in-depth research, a clear definition of a standard drink could not be obtained for this study. Finally, while social support is a useful construct to measure for this study, the section on social support (the Multi-dimensional social support measure) was removed due to time constraints. Some of the other sections, including parental acceptance and rejection and resilience included aspects of social support.

Results of cognitive interviewing and discussions with translators indicated a need to change the wording of a number of the psychosocial wellbeing scales. For example, the following item: "I get really frightened for no reason at all: 1) Not True or Hardly Ever True; 2) Somewhat True or Sometimes True, or 3) Very True or Often True," was originally introduced prior to the section by the data collector, with an explanation that the respondent should respond in relation to the past three months. This was changed to: "In the past three months, I have gotten really frightened for no reason at all. Is this...1) Not True or Hardly Ever True, 2) Somewhat True or Sometimes True or, 3) Very True or Often True?" The use of first person statements was described as confusing and led some respondents to believe the data collectors were referring to themselves. The item "I think I am doing pretty well," with the instructions to respond if this is true "1) none of the time, 2) a little of the time, 3) sometimes 4) a lot of the time or 5) most of the time," was altered from the first person to second person, so that the question changed to: "You think you are doing pretty well. Is this true...1) None of the time, 2) Some of the time, 3) Most of the time or 4) All of the time?" Some items were removed from psychosocial scales as they were judged to be inappropriate or inapplicable to this context. For example, the items "I am proud of my ethnic background," "I enjoy my family's traditions," and "I enjoy my community's traditions," were removed from the resilience measure, given the context and possible sensitivity of a question about ethnicity, and that some respondents reported not practicing family or communal traditions.

Some words were changed to ensure that the meaning in Kinyarwanda matched the intention of the question – for example, the question "I feel I belong at my school" was translated and changed to "You feel *comfortable and happy* at school." For some items,

it was necessary to provide further description in Kinyarwanda. For example, "you feel safe from danger when you are with my family/caregiver(s)" required the additional explanation, "For example, you are safe from people threatening you or hurting you."

In the section on child labor, some items were not endorsed by any respondents in the pilot study, and did not appear to be undertaken by adolescents in the camp. Therefore, the items "hard work on the farm (including swamp farming, burning the bush, etc)" and "break or carry stones" were removed.

Overall, the pilot phase of the adolescent survey resulted in substantial reduction of length, with removal of two whole sections and some sub-sections, rewording of confusing items and questions, clarification of terms within questions, and reordering of the sections, as well as changes in translation from English to Kinyarwanda.

Caregiver survey:

The question "Do you have any plans to return to the country you were born in during the coming year?" was also cut from the demographics sections, for the same reasons as described above. A number of questions in the section on attitudes towards children and child protection were identified as confusing or repetitive, and the following questions asking respondents to strongly disagree, disagree, agree or strongly agree with the statement were removed: "children should be kept busy with work and study at home and at school," "children learn best by doing things themselves rather than listening to others," "children must be carefully treated early in life or their natural impulses will make them unmanageable," "the most important thing to teach children is absolute obedience to their parents," "once a child is in school, the school has the main responsibility for her or his education," "children generally do not do what they should unless someone sees to it," and "children should not question the authority of their parents." Additional questions in the attitudes section that were cut focused on attitudes towards fostering children and discrimination towards sub-groups of children (for example, do you agree or disagree that it is better to send one's own children to school than to send other children (not my own biological children) in the house, or do you agree or disagree that it is better to send boys to school than to send girls). These questions were primarily cut for the sake of reducing the length of the survey, as the original version of the survey proved to be nearly an hour during the pilot test. Two

additional possible responses were added to the question on the role of child protection committees, based on responses that caregivers gave during the pilot interviews: protect children from violence and abuse, and teach children good behavior and give them advice.

The pilot test resulted in some useful changes to the section on socio-economic status. For example, options were added for the question "What is your main source of income": selling food from World Food Programme, money from family member or friend, and no income, as the existing response choices (farming, wages, business activities and food/ cash from international organizations) did not adequately capture the responses in this context. The questions "Do you receive any money from family members or friends not living in your home," and "If yes, does this family member live outside the camp?" The question "Who provides the majority of the income in the household," which only allowed for a single response, was also changed, to "Who in the household provides income for the household," as some respondents reported that many individuals provided income, and it was difficult to determine who provided the majority. In order to develop an index of ownership of household items, during the pilot test, data collectors asked respondents to list all the items they owned. Therefore, questions were developed that asked about ownership of the following items: cellphone, table, cooking pot, jerry can, basin, mat/ blanket, chair/ stool, radio, and livestock.

Pilot testing also resulted in moving the order of the sections in the survey. The original version had the depression and anxiety measures near the beginning, after demographic measures, and upon further consideration, researchers decided to move this to be the final section, so that data collectors were able to build a rapport with caregiver respondents prior to asking difficult questions about depression and anxiety. The specific question on suicidal intentions in the Hopkins Symptoms Checklist was also moved to be earlier in the list of questions, so that the interview would be stopped sooner for respondents who expressed suicidal intention, as per the ethics protocol.

Overall, the translations in the caregiver survey were significantly improved during pilot testing, the length of the survey was reduced based on findings that some sections were repetitive or imprecise, response categories were added based on commonly given responses, reducing the number of "other" category responses that may have been

given in the full study, and the order of the measures within the survey instrument was changed.