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A Qualitative Study of Mental Health Problems among Orphaned Children and Adolescents in Tanzania

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Abstract

Low- and middle-income countries (LMIC) have a high number of orphans, many of whom have unmet mental health needs. Effective mental health interventions are needed; however, it is necessary to understand how mental health symptoms and needs are perceived locally in order to tailor interventions and refine measurement of intervention effects. We used an existing rapid ethnographic assessment approach to identify mental health problems from the perspective of orphans and guardians to inform a subsequent randomized controlled trial of a Western-developed, evidence-based psychosocial intervention, Trauma-focused Cognitive Behavioral Therapy (TF-CBT). Local, Kiswahili-speaking interviewers conducted 73 free list interviews and 34 key informant interviews. Results identified both common cross-cultural experiences and symptoms as well as uniquely described symptoms (e.g., lacking peace, being discriminated against) not typically targeted by the intervention or included on standardized measures of intervention effects. We discuss implications for adapting mental health interventions in LMIC and assessing effectiveness.

Keywords

Qualitative; Cross-cultural; Assessment; Trauma-focused Cognitive Behavioral Therapy; Child and adolescent; Grief; PTSD; Mental Health; Global Mental Health

Over 132 million children worldwide are estimated to have experienced the death of one or both parents (United Nations Children's Fund, 2008). The majority of orphans live in low- and middle-income countries (LMIC), with over 55 million in sub-Saharan Africa (UNICEF, 2012). A growing literature documents adverse experiences associated with the

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DISCLOSURES

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death of a parent and the high prevalence of unaddressed mental health needs (Cluver and Gardner, 2007; Whetten et al., 2011a; Wilde, 2001). Orphans are exposed to additional stressors from the life changes associated with the death of the parent, including separation from siblings, child labor, abuse, loss of social support, and instability in the new living situations (Foster et al., 1997; Urassa et al., 1997). They also experience potentially traumatic events beyond the death of the parent, including family violence and abuse, and compared to non-orphans, may experience greater subsequent negative psychological impact with trauma exposure (Whetten et al., 2011a). Compared with non-orphaned youth, orphans have higher rates of childhood maladaptive or complicated grief, posttraumatic stress symptoms (PTS), depression, suicidal thoughts, and anxiety (Cluver et al., 2009; Cluver and Gardner, 2006; Cluver and Gardner 2007; Makame et al., 2002).

Currently, few children residing in LMIC have access to mental health treatment to address these problems, creating a substantial mental health treatment gap. Although the gap is as high as 78% for adults (Kohn et al., 2004), the treatment gap for children is even greater, with a median of only .16% of children with mental health need receiving any treatment (World Health Organization [WHO], 2010). Access to mental health interventions that can effectively treat mental health problems is needed. Ideally, the selection of appropriate interventions and intervention tailoring is grounded in an understanding of how mental health problems are viewed locally, including identification of mental health issues that are common and experiences that lead to or exacerbate mental health symptoms (Bolton, 2001; WHO, 2008). Communities also may differ in their beliefs on the importance of mental health-related issues, relative to other difficulties. In areas where income generation, food scarcity, and educational costs can be daily challenges, addressing mental health problems may or may not be prioritized or well-received (e.g., McDaid et al., 2008). Even when viewed as a priority, communities may diverge in how they feel mental health problems should be addressed.

When considering intervention selection for orphans specifically, the broader literature suggests that targeting depression, PTS, grief, and anxiety may be indicated, particularly if the intervention addresses potentially traumatic events as well as life changes resulting from parental death (e.g., Cluver and Gardner, 2007; Murray et al., in press; Whetten et al., 2011a). The majority of the available research, however, has predominantly relied on quantitative assessment using western conceptualizations, which may result in missing important cultural syndromes or symptoms that differ from those in high-income/western contexts (e.g., Hinton et al., 2012; Kleinman, 2004). Qualitative methods, which take an open-ended, exploratory approach, are particularly important for mental health research in LMIC. Very few studies (fewer than 10%) on child mental health were conducted in LMIC, with only a small fraction focused on children and adolescents, despite the fact that 90% of children worldwide reside in LMIC (Kieling et al., 2011). A greater focus on mental health for children in LMIC is necessary overall, with a specific need for qualitative and ethnographic research to supplement quantitative methods. In other research taking such an approach, clear prioritization of specific mental health issues has emerged (e.g., Murray et al., 2006), and in some studies, unique local mental health syndromes have been identified (e.g., Betancourt, Speelman, Onyango, & Bolton, 2009; Bolton, 2001). To our knowledge, qualitative studies exploring the local perspectives on mental health-related issues of

orphans in LMIC, from the perspective of both children who have been orphaned and from their guardians, are unavailable.

Purpose of the Study

The current study involved conducting a qualitative investigation to better understand mental health problems of children orphaned in the Moshi, Tanzania area who were being cared for in family homes (vs. in institutions). The study goal was to explore local perceptions of mental health issues for these orphaned children. Specifically, we hoped to identify signs and symptoms of mental health problems, experiences that contribute to mental health problems, prioritization of mental health among other problems for orphans (e.g., educational needs, food scarcity), and the appropriateness of counseling interventions to address mental health problems. Results from the study would also be used to inform: a) additional tailoring of a counseling intervention designed to address mental health problems subsequent to the death of a loved one (i.e., Trauma-focused Cognitive Behavioral Therapy; TF-CBT; Cohen, Mannarino, & Deblinger, 2006) and b) measurement of intervention effectiveness.

Background and Setting

This study was conducted in Moshi, Tanzania. Tanzania's adult population has an HIV prevalence of around 5.1%; there have been approximately 3 million children orphaned, including 1.3 million orphaned by AIDS (United Nations Children's Fund, 2012). Mental health services for children and adolescents in the area, other than case management in situations of child safety, were very limited. Our team conducted a feasibility study of TF-CBT in Moshi and the surrounding rural areas from 2009–2012 (O'Donnell et al., 2014). TF-CBT was selected for initial feasibility piloting because it targets mental health symptoms and experiences broadly identified as common among orphans (see Whetten, 2011a) and had substantial empirical support in high-income countries (e.g., Dorsey, Briggs, & Woods, 2011). TF-CBT has a grief-specific application when the traumatic event is death (Cohen et al., 2004a; Cohen et al., 2004b) and can be delivered individually or in groups. The intervention uses cognitive behavioral strategies (e.g., psychoeducation, emotion regulation skills, cognitive processing techniques, exposure) to treat PTS, depression, behavioral problems, and maladaptive grief. Prior to the initial pilot study, some adaptations were made based on focus group feedback and input from local, bilingual Tanzanians trained to be TF-CBT counselors (O'Donnell et al., 2014). These included calling the intervention a "class/program" (and not a mental health intervention), incorporating local stories and analogies, simplifying language, and providing extra, informal time for tea and participant-group leader interaction before groups. Feasibility outcomes were positive—counselors delivered the intervention with fidelity, youth and their guardians attended, and child outcomes improved by end of treatment and were maintained at 3- and 12-month posttreatment follow-ups (see O'Donnell et al., 2014). Before undertaking the next stage of our research testing TF-CBT as an intervention approach in a large randomized controlled trial of TF-CBT (NIMH-funded, R01 MH96633), our team believed that it was important to better understand the local context for mental health-related issues of orphans.

Ethics

The study was approved by the Duke University Institutional Review Board (IRB) and the local IRBs: Kilimanjaro Christian Medical Centre (KCMC) and the National Institute for Medical Research, Tanzania (NIMR).

Methods

We used a rapid ethnographic assessment developed by the Applied Mental Health Research (AMHR) Group at Johns Hopkins University (Bolton, 2001; AMHR, 2011) that involves employing individuals from the community to collect and analyze qualitative data in the local language (i.e., Kiswahili, for this study) over a period of approximately two weeks. We employed module one of their *Design, Implementation, Monitoring, and Evaluation (DIME) Procedures* (AMHR, 2011). Two qualitative interviewing methods were used, Free Listing (FL) and Key Informant (KI) Interviewing (described in more detail in subsequent sections). Our local research partners in Moshi, the Tanzania Women Research Foundation (TAWREF), hired 18 Tanzanian interviewers from the local community – 16 were college students or recent graduates and two were current employees of TAWREF on other research projects who served as both interviewers and supervisors (5 males, 13 females). All interviewers were bilingual in Kiswahili and English. Three additional TAWREF staff members who were counselors in the TF-CBT feasibility study served as additional supervisors for the interview teams.

Interviewers and supervisors received two days of training in qualitative interviewing skills by the first and second authors. Training focused on research ethics, qualitative open-ended interviewing, probing and using non-leading questions, maintaining neutral reactions, and verbatim note taking. Interviewers also gained skills in how to lead relaxation exercises in the event that a child became upset during the interview and in safety procedures (i.e., make immediate contact with their supervisor in cases of concern about child well-being). Training used a combination of didactics and practice of skills followed by feedback from the trainers, supervisors, and fellow interviewers. An additional half-day of training focused specifically on KI interview procedures was provided immediately prior to starting KI interviews.

For both FL and KI interviews, the 18 interviewers were split into 9 interview dyad teams, overseen by the five supervisors. One interviewer in each pair led the interview while the other took verbatim notes and ensured quality control by interjecting if the interviewer forgot something (e.g., to probe for more information). The second interviewer also provided constructive feedback as the interviewers reviewed their notes together at the end of each interview. All interviews were conducted in Kiswahili. To compensate for interview time, guardians received 1 bar of laundry soap and 1 kilogram of sugar, and children received 5 school exercise books.

Free Listing Interviews

Free Listing (FL) was used to generate a list of perceived problems of orphans from the perspective of local community members. TAWREF staff contacted local organizations,

school wards, and community leaders to obtain lists of contact information for guardians and orphans (ages 7–13) who might be willing to talk to the research team. Recruitment aimed for variance in child age, sex, and location (urban/rural). Adult participants included 36 guardians of orphans (32 women and 4 men; 16 from rural areas and 20 from urban areas). Child participants included 37 children ages 7–13 years who were single or double orphaned (18 female and 19 male; 16 from rural areas and 21 from urban areas). Each child and guardian FL participant was asked the following question: “What are the different problems that children who are orphans in this community might experience?” Participants were probed for a list of problems and a brief description of each problem. Interviewers were trained to identify problems that were related to feelings, thoughts or behaviors and thus possibly related to mental health issues. For each possible mental health issue identified by the interviewers, participants were asked if they knew people in the community who were knowledgeable about these types of issues and who could serve as possible KIs, and this information was recorded. Interviewers also asked if the participants knew any other orphans or guardians who might be interested in being interviewed (i.e., snowball sampling) to continue building the list of possible participants.

Key Informant Interviews

In all, 34 adult KIs were interviewed (23 female; 11 male). KIs were predominantly community leaders, mothers, and teachers. KIs included anyone whom children or guardians considered “local experts” on the specific mental health issues for orphans in the Moshi area. Professional mental health workers or foreign aid workers were excluded. Following the DIME model, these exclusion criteria were used to ensure that the problems were understood based on experience in the community, rather than on professional training.

Interviewers, supervisors, and the trainers collaboratively reviewed the FL analysis together and agreed on three potential mental health-related local experiences/symptoms of orphans to explore further with KIs: *unyanyasaji* (mistreated/abused), *kutopendwa* (not feeling loved), and *msongo wa mawazo* (stress/overthinking). These problems were selected for follow-up because they were mentioned frequently and/or required more understanding or operationalization to inform intervention tailoring and measurement of intervention effects. Interviews were designed to corroborate and expand upon the three mental health issues identified for follow-up from the FL interviews. The additional half-day of training before KI interviews focused on KI procedures and goals, modeling, and role-play practice of how to ask the specific KI questions and how to probe with open-ended questions.

KI interviews took place over 3 days. Interview transcripts were reviewed by the interviewing pair at the end of the interview and by a supervisor at the end of each interview day for additional areas to probe. Interviewers were instructed to return to KIs for multiple interviews to probe until KIs had no new information to share.

KIs were asked the following questions (in Kiswahili):

1. “What happens to children when *unyanyasaji* (mistreatment/abuse) happens? What do people do to help children with these feelings and behavior? What should they do to help with these feelings and behavior?”

1. Possible probes: How does it make the child feel? How would this affect the child? What would the child do? How do guardians or adults help children with this problem?
2. “What happens to children when kutopendwa (not feeling loved) happens? What do people do to help children with these feelings and behavior? What should they do to help with these feelings and behavior?”
 1. Possible probes: How does it make the child feel? How would this affect the child? What would the child do? How do guardians or adults help children with this problem?
3. “Tell us more about msongo wa mawazo (stress/overthinking). What causes this? What do people currently do about it? What should people do about it?”
 1. Possible probes: How do they feel/behave/look when they have msongo wa mawazo?

Data Analysis

Supervisors and interviewers were trained in qualitative data analysis. All analyses were done in Kiswahili by the local interviewers and supervisors immediately following the interviews.

Domain analysis techniques were used to explore the FL and KI data. Transcripts were reviewed by interviewers and supervisors to create consolidated lists. Problems they concluded had the same meaning were grouped into one list (e.g., “kunyimwa matumizi ya shule/not given school needs” and “Kukosa ada/lacking school fees”). Corresponding participant ID numbers were included to obtain a count of frequency for each problem reported. The group then chose the respondent wording they felt most clearly described each group of related problems to serve as the “cover term” for each list (see Tables 1 & 2 for composite lists). After analysis was completed, the interviewers and supervisors discussed and translated the cover terms into the best fitting English. All Kiswahili terms remained in the original wording of the respondents.

Results

Free Listing Results

Seventeen different problems were endorsed by two or more guardian respondents (see Table 1). The most commonly endorsed issues were lacking school needs (83% of guardians) and food scarcity (55% of guardians). Being mistreated/abused, a mental health issue, was the third most commonly reported problem (47% of guardians). Overall, 6 out of 17 listed problems were identified by the interviewers and trainers as potential mental health issues either because the problem was related to thoughts, feelings or behaviors (our screening definition) or because the problems were negative experiences that commonly resulted in mental health or psychosocial problems that could be impacted by a psychosocial intervention. In addition to being mistreated/abused, the other mental health-related problems included the experience of not having basic rights (36%; e.g., not valued by

father's relatives, not cared for by their guardians, not given security), bad behavior (36%; e.g., not listening to the remaining parent, stealing, truancy/leaving school), psychological problems (33%; e.g., afraid to explain their thoughts, lonely, lack of peace, losing hope, hurt in the soul, not happy), discrimination (22%; e.g., stigmatized, isolated, not accepted by the community), and gender-based violence (8%; e.g., raped and getting infections, forced to live with men).

Twenty common problems of orphans were endorsed by two or more child respondents (see Table 2). The most commonly listed problem was an experience likely related to mental health: being mistreated/abused (78%). The second and third most commonly endorsed problems were not mental health related: not given school needs (62%) and lack of good clothes (40%). Of the remaining 17 problems, 9 were identified as potentially related to mental health. These included the experience of being isolated by the community (27%), a range of behavioral problems listed individually (roaming around the street: 24%; theft and smoking marijuana: 16%; escaping school: 11%), not feeling loved (19%), stress and overthinking (13%); being given a lot of work (8%), being beaten (8%) and lacking basic rights (5%).

Key Informant Results

Unyanyasaji (Mistreated/Abused)—KIs described orphans who were mistreated/abused as having both behavioral (e.g., running away from home, stealing, prostitution, drinking alcohol, associating with bad peer groups) and emotional problems, including being unhappy, lacking a feeling of peace, grieving, being stressed, losing hope, feeling lonely, and not having self-confidence. KIs also noted that orphans experiencing mistreatment/abuse may see themselves as not having rights, may isolate themselves, and may not develop cognitively. Representative respondent statements included, “The child can run away from home because of humiliation,” and “The child can be a thief because she/he didn't get the thing she/he wants.”

Among the things KIs reported that people *currently do* to help children with mistreatment/abuse were: have community volunteers take care of them, be close with the child, give information to local government and orphanages, and educate the surviving parent or caregiver. When asked what people *should do* to help orphans with these problems, KIs suggested that community members and Non-Governmental Organizations should start centers to help orphans, educate the community, give them basic rights, and show them love.

Kutopendwa (Not Feeling Loved)—KIs described the impact of not feeling loved as predominantly manifesting in emotional difficulties and some behavioral problems (e.g., roaming, stealing, joining bad peer groups, using alcohol, violence, escaping from home). Among the emotional difficulties listed were a lack of peace, feeling discriminated against, increased feelings of hate, being affected psychologically, feeling lonely, suicidal thoughts, not feeling valued or respected, and losing hope. Representative respondent statements included: “A child who doesn't feel loved is not happy, is sad, does not have self-esteem about what he or she does.”

To help orphans with these problems, KIs reported that *currently*, people identify these children and give them proper care, sit and talk to the children and guardians, and give them equal rights like other children. They reported that other things people *could do* to help would be to identify more families with orphans, give counseling, and talk to their families.

Msongo wa Mawazo (Stress/Overthinking)—KIs most commonly reported that stress and overthinking were caused by lacking basic rights and good care, experiencing humiliation or a bad condition of life, and lacking parents. KIs described the effects of stress and overthinking as primarily emotional, including being humble, unhappy, worrying, feeling lonely, lacking peace, forgetting, crying, having fear, and grief. Other related problems were isolating themselves, having poor health, staying quiet, becoming crazy, escaping from home, not understanding in class, becoming a petty thief, and swallowing poison, among others. One KI said, “a child experiencing stress/overthinking cannot find harmony, is not happy...”

KIs said that to help children with stress/overthinking, *currently* people counsel them, take them to school, help provide clothes and food, and allow them to play with their friends. In terms of other things that *should* be done, KIs said that people should establish child clubs that can help children open up, not discriminate against them, and provide them with an education and other important services.

Discussion

The primary goal of the current study was to explore local perceptions of mental health issues for children and adolescents orphaned in the Moshi, Tanzania area who are residing in family homes to further inform tailoring of an evidence-based intervention (TF-CBT) to the local context and measurement of the intervention’s impact. Reflecting prior research documenting mental health problems of orphans in LMIC (e.g., Cluver et al., 2007; Whetten et al., 2011a), children and guardians did identify potentially mental health-related issues among overall problems encountered by orphans. These included experiences that negatively impact feelings and behavior, such as mistreatment/abuse, discrimination, and isolation, as well as specific emotional and behavioral problems (e.g., escaping school, stress/overthinking). Of the problems listed, we explored three that required more understanding in greater detail, using a key informant approach: 1) mistreatment/abuse, 2) not feeling loved; and 3) stress/overthinking.

Synthesizing findings from in-depth interviews for these three problems suggests that orphans are exposed to unequal and unfair treatment following the death of one or both parents, and that some may require intervention. Mistreatment/abuse was the second most frequently mentioned problem across guardian and orphan reports. Looking at the range of experiences subsumed under mistreatment/abuse, it appears that children who have been orphaned often are treated unfairly, reflecting findings from other studies in which orphans were viewed as “second class citizens” (Messer et al., 2010; Murray et al., 2006; Whetten et al., 2011b). Mistreatment/abuse was associated with a range of mental health-related symptoms that overlap substantially with those addressed by the proposed intervention, TF-CBT, and included on standardized measures assessing children’s mental health (and thus,

intervention impact). These included various behavioral problems, sadness, grief, loneliness, losing hope and stress. Other unique symptoms not traditionally targeted by TF-CBT or included on standardized measures were also mentioned, such as feeling a lack of peace and losing self-confidence, among others. Our exploration about the experience of not feeling loved indicated that the impacts were predominantly emotional (e.g., lonely, losing hope) and similar to those for mistreatment/abuse, as well as some symptoms with a potentially greater impact on the child's sense of self (e.g., not feeling valued or respected, feeling discriminated against).

A few unique symptoms—not typically targeted by TF-CBT or included on western measures—were also identified (e.g., increased feelings of hate). The final problem for which we conducted in depth interviews was stress/overthinking (mentioned by 13% children). The causes and effects of stress/overthinking for orphans overlap with mistreatment/abuse and not feeling loved (lonely, lacking peace, grief), with the addition of concentration challenges and health problems. In comparison to some studies using the DIME methodology (e.g., Meyer, Robinson, Chhim, & Bass, 2014), we did not identify unique syndromes.

Taking these findings together, results suggest that identified symptoms predominantly overlap with TF-CBT intervention targets and that the primary goals of TF-CBT, as found in our pilot, provide a good fit for orphans with mental health needs and their guardians. TF-CBT includes education and affect regulation skills for addressing the identified mental health problems of feeling lonely, sad, and experiencing grief. Guardians learn behavior management skills to deal with problematic behavior (“tabia mbaya”). Including skills for addressing problematic behavior seems particularly important for any intervention targeting mental health needs of orphans, given that behavioral problems were mentioned frequently. TF-CBT allows for flexibility in the application of skills to a variety of client-specific symptoms, allowing for inclusion of the unique symptoms identified. Evidence of this flexibility comes from our pilot and other studies in Africa (i.e., Zambia, Democratic Republic of Congo) demonstrating both acceptability of TF-CBT (Murray et al., 2014) and positive outcomes from treatment (McMullen et al., 2013; Murray et al., 2013; Murray et al., in press; O’Callaghan et al., 2013; O’Donnell et al., 2014).

Findings further highlighted the potential importance of guardian and/or community-focused work to address the often-reported experience of mistreatment/abuse, and the less common child-identified problem of not feeling loved. TF-CBT includes a substantial focus on strengthening and improving the guardian-child relationship and teaching skills for providing support to children around trauma and grief-related mental health symptoms (Cohen et al., 2006). Relevant TF-CBT activities include teaching guardians the same coping skills taught to children so that they can support children in using the skills at home, building positive time between the guardian and child, and assisting guardians in hearing and responding supportively and empathetically to children's experiences of the parent's death and other distressing death-related events. Based on the findings from this study, we included the locally identified problems in both the psychoeducation component for children and guardians and as example thoughts (e.g., “nobody loves me”) in the cognitive restructuring component.

With regard to prioritization of mental health problems, the overall findings point to the substantial range of problems experienced by orphans. However, based on quantitative frequency of mention, mental health problems do appear to be important to local people (i.e., a priority). This finding suggests that even in the context of substantial unmet basic needs, addressing mental health needs may still be important to the local community. Notably, the range of child and guardian reported problems, both general and mental health-related, overlapped substantially, with some difference in prioritization. Finally, when asked what is done or should be done to help orphans with the identified mental health problems, responses included providing support, showing love, and even included specific mention of counseling. These responses suggest a counseling intervention for these problems may be acceptable, with acceptability an important aspect of intervention implementation efforts (Proctor et al., 2011).

With respect to the aim of refining measurement, findings from this qualitative study reflect those of other orphan-focused studies, demonstrating that a number of mental health symptoms are common and relevant cross culturally (e.g., Hinton et al., 2013; Patel, 2001). These similarities suggest that existing standardized measures can be a viable option—allowing for capitalizing on rigorous measure development. However, following the DIME approach (AMHR, 2011), standardized measures were selected that assessed the majority of the identified symptoms, and were then supplemented with questions assessing local symptoms not already covered (see Bolton, 2001). The present study was also intended to identify the best local wording for mental health problems to be used for translating study assessment measures into the local vernacular. As this study was designed to inform measurement for a subsequent randomized controlled trial (RCT), it provided an opportunity to obtain the most appropriate Kiswahili translation from the participant population for cross-culturally relevant items on selected, relevant standardized measures (e.g., Child Behavior Checklist, Achenbach, 1991).

Findings reinforced the value of this rapid ethnographic approach, in that it supported the relevance of many of the TF-CBT intervention targets and the intervention approach while also identifying some unique mental health symptoms and experiences. However, a few limitations should be noted. First, interviewers used handwritten notes rather than transcribing recorded interviews. This provided greater privacy and trust from the participants as well as more efficient analyses, but carried a higher risk of inaccuracy. Second, the decision to focus KI interviews on only 3 problems is a limitation of the study. With more time and resources, it would certainly have been beneficial to ask KIs about more problems mentioned in FL (e.g., isolated by the community). Third, the ethnographic approach taken in the current study does not rule out the possibility of category fallacy, in which categories of symptoms (e.g., disorders) do not have the same meaning cross-culturally (Kleinman, 1977; 1987). The current DIME qualitative work begins with an open-ended question about “problems” and focuses on symptoms versus diagnostic categories, which lessens the risk of category fallacy (Jacob et al., 1998) but does not eliminate it entirely. Finally, our study focused only on orphans in family homes, and findings cannot necessarily be generalized to those who are homeless or residing in institutions.

In conclusion, findings from this study supplement existing research suggesting that orphans have adverse experiences and mental health symptoms that warrant treatment. Problems related to mental health were prioritized and current and recommended future approaches were mostly in line with interventions like TF-CBT that offer support to children and guardians in terms of skill development to help them overcome sadness and grief and that improve the child's relationship with their guardian. The DIME rapid ethnographic approach taken here provided valuable formative information prior to undertaking a large scale RCT of the intervention. Although RCT results will be needed to determine intervention effectiveness, these initial steps help ensure that intervention targets and quantitative assessment of outcomes are informed by local perceptions.

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Table 1Problems of Orphans Identified from Free Listing Interviews of Guardians of Orphans (*N*=36).

Cover Term	Included Terms	Total FL Respondents <i>N</i> (%)
Lacking school needs	Lack education, lacking money to send them to school, fail to study and lacking good services, lack school uniforms	30 (83%)
Lack of food	Lack nutrition, food services is poor, food is not enough	20 (55%)
*Mistreated/Abused	Humiliated, beaten, treated unfairly/badly, not getting wealth and inheritance, not given food, difficult work	17 (47%)
Problem with clothing	Lack of clothes, poor clothing	16 (44%)
Poor care	Lack of care, lack of morals, involved with stealing, lose direction	15 (42%)
No money for medical treatment expenses	Lack money for medical treatment, lack bus fair in order to get medical treatment	14 (39%)
Not having basic rights	Lack important rights, not valued by father's relatives, not getting aid from step fathers, lack of one parent love, isolated, do not have love of their mother or guardian, involve themselves with difficult work compared with their age, not cared for by their guardians, not given security, not respected, basic needs	13 (36%)
Lack a place to live/bedding	Lack of shelter, poor shelter, lack of money to lend house, do not have a place to sleep, live in the street and abandoned houses, live difficult life	13 (36%)
Bad behavior	Stealing, smoking marijuana, joining bad peer groups, becoming street children/homeless, not listening to the remaining parent, escaping from school	13 (36%)
Psychological problems	Have worries of explaining their thoughts, difficult to express themselves when having problems, lonely, complaining, crying alone, lack of peace, hurt in the soul, losing hope, not having direction, become coward, not happy	12 (33%)
Health problems	Diseases, dirty, lacking safe environment, raped and getting infections, infected with HIV	9 (25%)
Discrimination	Stigmatized, isolated, not accepted by the community	8 (22%)
Gender-based violence	Raped and getting infections, raped and homosexual abuse, forced to live with men	3 (8%)
Life is too hard	Difficult environment	2 (5%)
Lack of money for helping them	Lack of money	2 (5%)
No caregiver	Remaining parent may run away from children due to hard condition of life	2 (5%)
Cheated, lied to	Cheated, lied to (e.g., man gives chocolate to child for sex)	2 (5%)

* Chosen for Key Informant interviews

Table 2Problems of Orphans Identified from Free Listing Interviews of Orphans between the ages of 7–13 ($N=37$).

Cover Term	Included Terms	Total FL Respondents <i>N</i> (%)
*Mistreated/Abused	Humiliated by stepfather and stepmother, not allowed to greet their relatives, not given freedom, sent to fetch water every time, not allowed to walk with their fellow children, their shoes and things are stolen, beaten and shouted at in an angry way, teachers do not like them, beaten and thrown away from home, not given food, beaten without doing any mistakes, given a lot of work, abused	29 (78%)
Not given school needs	Lacking school fee, not going to school, lack school uniforms, not studying,	23 (62%)
Lack of good clothes	Clothes are not good and eaten by rat, not buying of clothes, lacking money to buy them clothes	15 (40%)
Lacking food	Lacking nutrients, lacking proper food	14 (38%)
Isolated by the community	Discriminated, ignored, lack of cooperation, teachers are very biased in giving out marks, stigmatized	10 (27%)
Roaming around the street	Becoming street child, humiliated in the street, take food from garbage	9 (24%)
Lack of proper care	Lack people to bear them, migrate/move due to lack of care, roaming	8 (22%)
Lack of shelter	Sleeping outside, lack of place to sleep, sleeping in dirty place	8 (22%)
*Not feeling loved	Ignored/undermined, not listened to, not secured, not loved, not giving out their thoughts to their parents	7 (19%)
Theft and smoking marijuana	Steal, smoke marijuana as a small child	6 (16%)
Diseases	When sick they are not sent to the hospital to be treated, poor health, lack money to send the child to the hospital	6 (16%)
*Stress/Overthinking	Stress, sadness, loneliness, lack of self-freedom, lack of happiness, feel bad	5 (13%)
Escaping (i.e., leaving) school	Not going to school	4 (11%)
Given a lot of work to do	Cleaning kitchen utensils, washing clothes, clean house, washing their own clothes	3 (8%)
Beaten	Beaten by teachers and their guardians, beaten by mother	3 (8%)
Killed	Given poison, hanged without doing any mistake	2 (5%)
Beggars	Beggars	2 (5%)
Lacking basic rights	Not given their rights	2 (5%)
Difficult environment	Mother do not have anything to do	2 (5%)
Dirty	Playing with dirty water	2 (5%)
Employed	Child labor	2 (5%)

* Chosen for Key Informant interviews