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## Understanding Locally, Culturally, and Contextually Relevant Mental Health Problems among Rwandan Children and Adolescents Affected by HIV/AIDS

Theresa Stichick Betancourt<sup>a</sup>, Julia E. Rubin-Smith<sup>b</sup>, William R. Beardslee<sup>c</sup>, Sara N. Stulac<sup>d</sup>, Ildephonse Fayida<sup>e</sup>, and Steven Safren<sup>f</sup>

<sup>b</sup>François-Xavier Bagnoud Center for Health and Human Rights at the Harvard School of Public Health, Boston, MA, USA <sup>c</sup>Children's Hospital, Boston, MA, USA <sup>d</sup>Partners In Health, Rwinkwavu, Rwanda <sup>e</sup>Partners In Health, Rwinkwavu, Rwanda <sup>f</sup>Harvard Medical School and Massachusetts General Hospital, Boston, MA, USA

### Abstract

In assessing the mental health of HIV/AIDS-affected children and adolescents in Sub-Saharan Africa, researchers often employ mental health measures developed in other settings. However, measures derived from standard Western psychiatric criteria are frequently based on conceptual models of illness or terminology that may or may not be an appropriate for diverse populations. Understanding local perceptions of mental health problems can aid in the selection or creation of appropriate measures. This study used qualitative methodologies (Free Listing [FL], Key Informant [KI] interviews, and Clinician Interviews [C-KIs]) to understand local perceptions of mental health problems facing HIV/AIDS-affected youth in Rwinkwavu, Rwanda. Several syndrome terms were identified by participants: *agahinda kenshi*, *kwiheba*, *guhanyika*, *ihahamuka*, *umushiha* and *uburara*. While these local syndromes share some similarities with Western mood, anxiety, and conduct disorders, they also contain important culture-specific features and gradations of severity. Our findings underscore the importance of understanding local manifestations of mental health syndromes when conducting mental health assessments and when planning interventions for HIV/AIDS-affected children and adolescents in diverse settings.

### Keywords

Rwanda; HIV/AIDS; children and adolescents; mental health; qualitative research

### INTRODUCTION

In Rwanda, the dual vectors of HIV/AIDS and the legacy of the Rwandan genocide of 1994 have had devastating consequences for families (D. N. Smith, 1998; UNAIDS, 2007; UNICEF, 2006). While available data from as early as the mid-1980s show that Rwanda's HIV prevalence has dropped from 12.8% in 1998 to 3% in 2005 (Institut National de la Statistique du Rwanda & U.S.A.: INSR and ORC Macro, 2006), parental death due to AIDS and the aftereffects of the genocide have contributed to Rwanda's having one of Africa's

<sup>a</sup>**Corresponding Author:** Department of Global Health and Population/François-Xavier Bagnoud Center for Health and Human Rights at the Harvard School of Public Health, Boston, MA, USA, 651 Huntington Avenue, Boston, MA 02115, ph (617) 432-5003, fax (617) 432-4310, Theresa\_Betancourt@harvard.edu.

highest rates of orphanhood (Kayirangwa, Hanson, Munyakazi, & Kabeja, 2006; UNGASS, 2008). Though studies have documented that genocide survivors are at increased risk for mental health problems including depression and post-traumatic stress disorder (Bagilishya, 2000; Dyregrov, Gupta, Gjestad, & Mukanoheli, 2000; Pham, Weinstein, & Longman, 2004; UNGASS, 2008; USAID Rwanda, 2004), little research attends to the numerous ways in which HIV and family loss have affected child development and mental health.

Research shows that HIV/AIDS-affected families are at increased risk of conflict, community stigma, threats to educational attainment, economic insecurity (Bauman, et al., 2006; Boris, Thurman, Snider, Spencer, & Brown, 2006; Doku, 2009; Lester, et al., 2006; Murphy, Greenwell, Mouttapa, Brecht, & Schuster, 2006) and that HIV/AIDS-affected children are at higher risk for developing a range of psychosocial problems (Atwine, Cantor-Graae, & Bajunirwe, 2005; Makame, Ani, & Grantham-McGregor, 2002). However, these mental health needs of children often receive little attention as families struggle to address immediate medical concerns and the economic and social consequences of HIV/AIDS (Bachmann & Booyesen, 2003; Brouwer, Lok, Wolffers, & Sebagalls, 2000; Nampanya-Serpell; Seeley & Russell). Few programs exist to prevent or treat mental health problems in HIV/AIDS-affected children in Sub-Saharan Africa (SSA) despite the region's high HIV prevalence.

It is critical that researchers and service providers respond to the psychosocial needs of children and families affected by compounded adversity. In order for interventions to achieve maximum effectiveness and sustainability, research must be informed by an understanding of how mental health issues are understood locally. Most studies of HIV/AIDS-affected youth in developing countries use instruments based on mental health concepts developed in other cultures or populations such as those defined in the DSM-IV-TR (American Psychiatric Association, 2000). However, research in a number of African settings has underscored the limitations associated with uncritical applications of such an approach. For instance, Carta et al. (1997) demonstrated good sensitivity but poor specificity in their adaptation of the WHO Self-Reporting Questionnaire (SRQ) for studying of mental disorders in Mali. In Tanzania, Kaaya and colleagues found that, while the Hopkins Symptom Checklist (HSCL) served as a useful screening tool for DSM-IV criteria of depression, additional qualitative research would be necessary to identify and integrate additional symptoms relevant to the local context (Kaaya, et al., 2002).

To improve cross-cultural assessment of mental health constructs, researchers have increasingly used qualitative methods to understand local expressions of emotional and behavioral distress. Patel, Simunyu, and Gwanzura (1997) used ethnographic studies to develop a psychometrically strong instrument, the Shona Symptom Questionnaire, for use in epidemiological and clinical research in Zimbabwe. Bolton (2001) used qualitative data on local expressions of grief and depression problems to validate the depression subscales of the HSCL for use among adults in post-genocide Rwanda. Betancourt and colleagues (2009) used a similar approach to construct a scale of locally-recognized depression-like problems that was employed in a trial of interventions for war-affected adolescents in Northern Uganda (Betancourt & Bolton, 2005; Bolton, et al., 2007). Such mixed-methods practices have yet to be applied to the situation of HIV/AIDS-affected children and adolescents in SSA.

The present study sought to identify and explore common mental health problems and their indicators or symptoms among HIV/AIDS-affected youth in Rwanda. While previous research has identified locally relevant terms for some mental health problems among Rwandan adults (Bolton, 2001; Hagengimana & Hinton, 2009; Zraly, Betancourt, & Rubin-Smith, In press), such issues have not been investigated in children and adolescents. To this

end, exploration of common mental health problems in Rwandan children is both lacking and warranted, and of particular importance to HIV/AIDS-affected children.

## METHODS

### Procedures

This study resulted from collaboration between the Harvard School of Public Health (HSPH), Partners In Health (PIH) and *Inshuti Mu Buzima*, PIH's sister organization in Rwanda. Interviews were conducted in the Kinyarwanda language by Rwandan interviewers in December 2007. Interviews to investigate one additional local mental health problem (*ihahamuka*) took place in February 2009. Staff members were trained in interviewing techniques and research ethics and received supervision from study authors. Qualitative methods comprised Free Listing (FL), Key Informant (KI) and Clinician Interviews (C-KIs). All study procedures were approved by the Human Subjects Committee of the Harvard School of Public Health and the Rwanda National Ethics Committee. All interviewees provided informed consent (and/or child assent for those under age 18).

### Problem Free-Listing Exercise

FL interviews began with the question: "What are the problems of HIV/AIDS-affected children in this community?" Interviewers probed for as many problems as possible, asking for a brief description of each. As in prior applications of this approach (Betancourt, et al., 2009), interviews were followed by a review of problem names and descriptions for their relevance to issues of thinking, feeling, or relationships. These "problem themes" were regarded as potential entry points for exploring mental health and psychosocial issues in children.

### Key Informant Interviews

"Problem themes" were further explored via in-depth community key informant (KI) interviews. For example, the problem of *agahinda kenshi* (sorrow or sadness) was mentioned by several participants during FL interviews. This problem term was then selected for further probing whereby KIs were asked open-ended questions such as, "Tell me more about the problem of *agahinda kenshi* among HIV/AIDS-affected children in this community". A series of probes were used to explore the term more fully; examples included: "How does a child with *agahinda kenshi* feel?" "How does a child with *agahinda kenshi* behave?" "How does a child with *agahinda kenshi* think about themselves or others?" Probing sought to identify commonly-recognized "cover terms" that described conditions where several distinct symptoms co-occurred. When similar constellations of symptoms were defined by discrepant cover terms, interviewers probed to understand how these terms were similar or different. When described as interchangeable, the most commonly-used cover term was retained. When local syndrome terms were seen as related, but not the same, we investigated how the two syndrome terms differed.

To ensure quality control, all KI interviewing was done in pairs, with one person serving as lead interviewer and the second person serving as a note taker. To arrive at accurate translations, all Kinyarwanda syndrome terms were projected on a screen and discussed by both the authors and the nine local RAs. English translations were not finalized until a consensus was reached.

### Clinician Interviews

C-KIs were conducted to review the findings of the lay KI interviews and to refine distinctions between syndromes from a clinical perspective. Probing during C-KIs focused on identifying the most distinctive symptoms associated with each cover term and

determining where comorbidity among syndromes may have led to incorrect symptom categorization.

## Participants

Thirty-one adults (42% female) and forty-three children ages 10–17 (47% female) living in seven villages in southeastern Rwanda's southern Kayonza District participated in free list (FL) interviews. For the FL exercise, these study participants were selected based on the principle of “maximum variation” (Guba & Lincoln, 1989) to capture a range of age and gender, as well as HIV serostatus. Most HIV/AIDS-affected individuals were sampled from the waiting area of the Rwinkwavu District Hospital infectious disease clinic.

FL informants were asked to identify local individuals perceived as particularly knowledgeable about psychosocial issues facing HIV/AIDS-affected children and adolescents. These potential key informants (KIs) were then approached by study interviewers. Additional KIs were identified via snowball sampling: KIs who completed an interview recommended others who were also knowledgeable about the relevant topics. In total, 36 adults (31% female) and 38 children (34% female) participated in the 2007 KI interviews; 44 additional participants (41% female) were interviewed in 2009. C-KIs (N=10) were interviewed in 2010, and comprised Rwandan mental health professionals, pediatricians and social work staff (60% women) from two different sites (PIH Rwinkwavu and FXB International in Kigali).

## DATA ANALYSIS

### FL Data Analysis

All analyses of FL interviews were conducted by local staff in Kinyarwanda according to Thematic Content Analysis (TCA) (C. P. Smith, 1992). FL interview responses were sorted by theme and reviewed for conceptually identical responses. Such items were combined and the number of responses tallied along with the corresponding Kinyarwanda terms. When numerous descriptors were used, the most representative terms were selected (See results in Table 1).

### KI Data Analysis

TCA of KI interviews focused on local syndromes described by multiple KIs as “common” among HIV/AIDS-affected youth. The research team counted the number of times each symptom was mentioned in association with its corresponding syndrome (counting only the first occurrence of a symptom if mentioned more than once by a KI). In this way a composite description of each syndrome was developed.

### Clinician Interview Feedback Analysis

TCA of clinician data was cross-referenced with the KI findings. Items with low clinician agreement (less than 50% of clinicians) were dropped from descriptions unless consultation with our Rwandan study team psychologist (Mr. Fayida) indicated that a symptom should be retained for clinical reasons. CIs also reviewed the syndromes for their relationship to true psychopathology rather than to contextual factors. Additionally, they refined and clarified the language used to describe cover terms and symptoms in order to best capture psychopathology in children and adolescents (versus fleeting emotional states). Although the focus of initial data collection was on children affected by HIV/AIDS, clinicians indicated that the syndrome terms identified have a broader applicability to Rwandan children in general.

## RESULTS

### FL Data

The FL exercise revealed a wide range of problems faced by HIV/AIDS-affected children in rural Rwanda, including lack of school fees, hunger, poverty, loneliness, loss of hope, and aggressive behavior. A number of “problem themes” related to mental health arose immediately; for instance, *agahinda* (sadness or sorrow) was mentioned as a problem by 14% of FL participants.

### KI Interviews (including clinician interviews)

Local lay and clinician KIs demonstrated considerable agreement over commonly-used local syndrome terms and their associated symptoms. Analysis of the combined lay and clinician KI interview data resulted in the identification of six local syndrome terms (problem clusters) and their associated symptoms: *guhangayika*, *agahinda kenshi*, *kwiheba*, *ihahamuka*, *uburara*, and *umushiha*.

Clinician KIs indicated that a “natural” progression of the first three syndromes can be observed in children, such that a mild case of *guhangayika*, when left untreated, may develop into *agahinda kenshi*, which can eventually lead to *kwiheba*. *Guhangayika* was described as a state of constant worry or “stress” that comprises both anxiety-like and depression-like symptoms. Both lay and clinician KIs (42% and 80%, respectively) identified “thinking too much”-- frequent rumination without being able to arrive at a solution to problems-- as one of the most distinguishing features of *guhangayika*. KIs reported that children with *guhangayika* are never at ease, don't talk or play with others, cry without reason and isolate themselves (See results in Table 2).

*Agahinda kenshi*, was generally considered more severe than *guhangayika*, and was described as a problem of “persistent sadness or sorrow” by more than 80% of lay and clinician KIs. Key features of *agahinda kenshi* include loneliness, unhappiness, crying and low morale. *Agahinda kenshi* was described as common among children and families affected by HIV/AIDS, loss, or situations of adversity. KIs reported that the more severe syndrome *kwiheba* is often preceded by *agahinda kenshi* (See results in Table 3).

The majority of lay and clinician KIs (88% and 90% respectively) associated *kwiheba* with severe hopelessness. Eighty percent of C-KIs identified suicidal ideation as a crucial indicator of *kwiheba*. Symptoms such as “wishing to die” and “feeling that life is meaningless” were described as distinguishing features. The large majority of C-KIs reported that children with *kwiheba* feel pessimistic or hopeless about life and their future prospects, and that they are often uninterested in interacting with peers or adults (See results in Table 4).

KIs described how similar depression-like symptoms may also be observed in children suffering from *ihahamuka*, a distinct problem cluster that emerges following a traumatic event. Respondents identified *ihahamuka* as a state of shock commonly attributed to acute events such as genocide-related violence or the disclosure of HIV-positive status. *Ihahamuka* was frequently associated with “losing one's mind” or “behaving like a mad person” (35% of lay KIs; 70% of clinicians). Anxiety-like symptoms such as “constantly being afraid” and “thinking a lot” were also considered indicators of *ihahamuka*. Other important indicators included depression-like symptoms including self-hatred, sadness, loneliness, and hopelessness, as well as symptoms such as crying, fighting, and screaming (See results in Table 5).

Persistent irritability or anger was commonly mentioned to describe *umushiha*. Ninety percent of clinicians and 49% of lay KIs observed that children with *umushiha* “talk rudely”; other symptoms included being consistently “annoyed” or “grouchy”, “not appreciating anything”, “quarreling” and “being unkind”. The origins of *umushiha* were linked to stigma and community rejection. Several KIs explained that children who are HIV-positive, or whose caregivers have been affected by HIV/AIDS, must contend with social isolation, mistrust and maltreatment from others. KIs observed that children who experience community rejection can develop intense negative feelings about themselves and others; when internalized, these feelings may lead to *umushiha* (See results in Table 6).

KIs associated the sixth syndrome, *uburara*, with bad or delinquent behavior, including being unruly, roaming about (without purpose), and taking drugs. A majority reported that children with *uburara* “play dangerously” and “roam without purpose”. *Uburara* in children was also described as associated with high-risk behavior such as fighting or precocious sexual activity (See results in Table 7).

## DISCUSSION

The local terms identified by participants reveal a rich understanding of emotional and behavioral problems common among children in rural Rwanda. While considered particularly pervasive among HIV/AIDS-affected youth, almost all of the mental health problems reported were described as relevant to other populations of Rwandan youth. Of the local syndromes our study explored, *umushiha* (persistent irritability/anger) emerged as the most heavily influenced by repeated experiences of loss and stigma due to HIV/AIDS.

While these syndromes are specific to the cultural context of this rural region of Rwanda, many share similarities with disorders outlined by other diagnostic systems of mental illness. For example, several core symptoms found in *agahinda kenshi* (persistent sorrow) and *kwiheba* (severe hopelessness) are captured by DSM-IV criteria for dysthymia [300.4] (e.g., poor concentration, feelings of hopelessness) and major depressive disorder [296.3] (e.g., depressed mood, recurrent thoughts of suicide, somatic complaints without medical cause). The syndromes *guhanyayika* (anxiety/depression) and *ihahamuka* (trauma/anxiety) share similarities with DSM-IV criteria of generalized anxiety disorder [300.02] (e.g., excessive anxiety and worry, constant fear). *Ihahamuka* also bears some resemblance to post-traumatic stress disorder [309.81], whose symptoms include intense fear, irritability, hypervigilance, feelings of detachment, and recurrent distressing recollections of a traumatic event.

*Uburara* (bad/delinquent behavior) shares some similarities with Western conduct (CD [312.89]) and oppositional defiant disorders (ODD [313.81]) (e.g. rule breaking behavior, refusing to comply with requests or rules of adults), but describes manifestations of behavioral problems shaped by the cultural context in Rwanda. For instance, “roaming about without purpose” may be typical of teens in wealthier countries, but was seen as problematic in the Rwandan context.

As indicated earlier, *umushiha* (persistent irritability/anger) appears to be the most specific to the context of HIV/AIDS and to the culture of our study population. While the DSM and ICD systems discuss irritability as an indicator of mood disorders (rather than as a discrete syndrome), our research on *umushiha* supports recent international literature in favor of categorizing irritability as its own disorder (Donovan, et al., 2003; Safer, 2009; Snaith, Constantopoulos, Jardine, & McGuffin, 1978; Snaith & Taylor, 1985).

Our findings echo previous research in Rwanda on mental health problems in adults, but also reveal distinct differences between adult and child expressions of mental health problems. For example, Bolton's study of adult Rwandan genocide survivors (2001)

identified many symptoms of *agahinda* (a depression-like problem), and a recent study on survivors of collective sexual violence observed *ihahamuka* in adult participants (Zraly, et al., In press). However, while the symptoms outlined by these studies are similar to many of those observed among HIV/AIDS-affected youth, the present study highlighted additional indicators specifically relevant to children and adolescents (e.g. performing poorly in school, and not playing with others). These data have informed our ongoing efforts to select, translate and adapt existing mental health measures for use with Rwandan children and, as in the case of *umushiha*, to develop new scales where needed.

These findings are further informative in developing interventions to address mental health problems among HIV/AIDS-affected Rwandan children and adolescents. For instance, syndromes described as resulting from or being exacerbated by HIV-related stigma may be best addressed by group treatment models that deal with isolation, expand peer support networks and build interpersonal and coping skills. In addition, it is important to consider prevention-focused models which identify at-risk HIV/AIDS-affected youth before they develop psychopathology and utilize a strengths-based approach to build resilience. As access to HIV testing and treatment increases in SSA, preventive programs have the potential to be systematically integrated into routine care of HIV/AIDS-affected families (Bell, et al., 2008; Biddlecom, Awusabo-Asare, & Bankole, 2009; Denison, McCauley, Dunnett-Dagg, Lungu, & Sweat, 2009; Messam, McKay, Kalogerogiannis, Alicea, & Hope Committee Champ Collaborative Board). Regardless of the specific intervention model, culturally-sensitive prevention and intervention services that address locally-meaningful problems and build on local strengths will likely be more acceptable, sustainable (Bernal, 2006; Hohmann & Shear, 2002), and have longer lasting treatment effects (Wiley-Exley, 2007).

Some study limitations should be noted. First, the findings presented here are primarily qualitative data. The intention of this study was to lay the groundwork for future quantitative assessments. The diversity of backgrounds, perspectives, and knowledge levels among KIs also raises a question about the expertise of these lay individuals for evaluating syndromes. While several mechanisms were utilized to ensure information quality (e.g. clinician interviews were used to refine information gathered from KIs), one should not interpret our classifications as a formal nosology or diagnostic system, but rather as locally-relevant composites of syndromes and their associated symptoms.

As noted earlier, we adopted a collaborative approach to translation. As such, our translations may differ from versions generated by a single professional translator. In addition, our data indicate significant overlap of symptoms among the six reported syndromes. Numerous studies in Western populations have also found significant comorbidity of mental health problems (de Mesquita & Gilliam, 1994; Kessler, et al., 2009; Kessler, Merikangas, & Wang, 2007). For Western clinicians, symptom overlap between disorders and widespread “true” comorbidity among syndromes contributes to “clouding” of diagnostic differentiation (de Mesquita & Gilliam, 1994). Further research is needed to determine how much of this overlap is due to sharing of symptoms among two or more syndromes as opposed to comorbidity.

In future stages of this project, we intend to build on these data by exploring protective processes related to resilience in HIV/AIDS-affected youth and families. This data collection will inform the development of locally-appropriate assessment measures and preventive interventions to build on local strengths and reduce risks for common mental health problems in HIV/AIDS-affected children and adolescents.



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**Table 1**

Problems of HIV/AIDS-Affected Children and Adolescents Derived from Free Listing Exercises

Theme		# Reporting N =74 (%)
No food / poor feeding habits / hunger	<i>Nta biryo / imirire mibi / inzara</i>	12 (16)
Sorrow	<i>Agahinda</i>	10 (14)
Poor standards of living	<i>Imibereho mibi / kubura ibyangombwa</i>	8 (11)
Isolation	<i>Kwigunga</i>	8 (11)
Dropping out of school / not studying	<i>Kuva mumashuri / kutiga</i>	8 (11)
Hopelessness	<i>Kwiheba</i>	7 (9)
People don't care for them	<i>Abantu ntibabihaho</i>	7 (9)
Stress / worry	<i>Guhangayika</i>	6 (8)
Poverty	<i>Ubukene</i>	5 (7)
Loneliness / stay alone	<i>Kuba bonyine / baribana</i>	5 (7)
No parents / orphans	<i>Kubura ababyeyi / impfubyi</i>	5 (7)
Stigma / not free to express oneself	<i>Akato / kutisanzura</i>	4 (5)
Poor sanitation	<i>Isuku nke</i>	4 (5)
Mistreatment	<i>Gufatwa nabi</i>	3 (4)
Bad manners	<i>Imyitwarire mibi</i>	3 (4)
Often fall sick / sickness / opportunistic infections	<i>Kurwaragurika / uburwayi / ibyuririzi</i>	3 (4)
Don't get medication / don't have medicine	<i>Kubura uko bivuzwa / kubura imiti</i>	2 (3)
Become street children	<i>Kuba ba mayibobo</i>	2 (3)
No strength / no energy	<i>Nta ngufu / nta mbaraga</i>	2 (3)
Not tested	<i>Kutipimisha</i>	2 (3)
Misunderstandings / not cooperating with each other	<i>Ubwumvikane buke n'abandi</i>	1 (1)
Have no homes / don't own land	<i>Kubura aho baba / nta sambu</i>	1 (1)
No means of getting to the hospital / no transport	<i>Kubura uko ugera kwa muganga / kubura itiki</i>	1 (1)

Table 2

## Guhangayika symptoms

Indicator		KI Agreement N=50 (%)
†Is not at ease Is never at ease Is never peaceful Is restless	<i>Afite umutima uhagaze</i> <i>Sinjya ntuzza</i> <i>Sinjya numva mfite amahoro</i> <i>Sintuje</i>	38 (76%)
Is unhappy	<i>Ntiyishimye</i>	28 (56%)
Does not like to interact with others Does not interact with others Never wants to be around others Likes to be alone Isolates himself/herself from others	<i>Ntakunda gushyikirana n'abandi</i> <i>Ntasabana n'abandi</i> <i>Ntajya ashaka kujya aho abandi bari</i> <i>Akunda kuba wenyine</i> <i>Ariheza</i>	25 (50%)
Thinks about future without having solutions to problems	<i>Ahora atekereza ubuzima bwe bw'ejo kandi nta gisubizo abifitiye</i>	21 (42%)
Does not want to play Does not play Does not play with others	<i>Ntashaka gukina</i> <i>Ntakina</i> <i>Ntakina n'abandi</i>	20 (40%)
Is lonely Experiences loneliness	<i>Arigunga</i> <i>Agira ubwigunge</i>	19 (38%)
Does not talk to others Does not like to converse with others Never talks to people Is quiet Does not like to talk to others	<i>Ntavigisha abandi</i> <i>Ntashaka kuvugana n'abandi</i> <i>Ntajya jya avugana n'abantu</i> <i>Aracecetse</i> <i>Ntakunda kuvugisha abandi</i>	16 (32%)
Is irritable Is angry Gets annoyed without cause	<i>Afite umushiha</i> <i>Ararakaye</i> <i>Arakazwa n'ubusa</i>	16 (32%)
†Over thinks about life Has thoughts that are all over the place	<i>Atekereza cyane ku buzima</i> <i>Ibitekerezo bye e biri ahantu hose</i>	14 (28%)
†Cries Cries for no reason Cries out of irritability	<i>Ararira</i> <i>Arizwa n'ubusa</i> <i>Arizwa n'umushiha</i>	9 (18%)
Is weak/Is tired Feels weak Is pale Feels too weak	<i>Arananiwe</i> <i>Yumva ananiwe</i> <i>Afite umwera</i> <i>Yumva ananiwe cyane</i>	8 (16%)
Speaks badly Does not like to talk well (nicely) Says bad words	<i>Avuga nabi</i> <i>Ntashaka kuvuga neza</i> <i>Avuga amagambo mabi</i>	7 (14%)
Loses weight Goes to bed hungry (has no appetite)	<i>Yataye ibiro</i> <i>Ajya kuryama aashonje</i>	6 (12%)
Is disrespectful Does not like to accept advice	<i>Ntiyubaha</i> <i>Ntiyubaha ntiyemera inama</i>	6 (12%)

† Agreed upon by less than 50% of clinicians, but regarded as clinically relevant by local psychologist.

Table 3

## Agahinda kenshi symptoms

Indicator		KI Mention Symptom N=59 (%)
Is sad Has emotional pain	<i>Arababaye</i> <i>Arababaye ku mutima</i>	55 (93%)
Is lonely Experiences loneliness	<i>Arigunga</i> <i>Ahora ari jyenyine</i>	39 (66%)
Is unhappy Has no happiness	<i>Ntiyishimye</i> <i>Nta munezero afite</i>	34 (58%)
Cries Has red eyes Has teary eyes	<i>Ararira</i> <i>Atukuye amaso</i> <i>Afite amarira mu maso</i>	23 (39%)
Is angry Angers easily Makes wrinkled faces	<i>Ararakaye</i> <i>Arakara vuba</i> <i>Azinga umunya</i>	18 (31%)
† Does not interact (with other children) Does not get along well with others	<i>Ntasabana n'abandi bana</i> <i>Ntiyumvikana n'abandi</i>	18 (31%)
Does not want to play	<i>Ntashaka gukina</i>	16 (27%)
Is dark/gloomy	<i>Arijimye</i>	14 (24%)
Is quiet	<i>Aracecetse</i>	13 (22%)
Has low energy Has no morale Feels low	<i>Afite imbaraga nke</i> <i>Nta morale afite</i> <i>Yumva akonje</i>	9 (15%)
Is very forgetful Is absent minded	<i>Yibagirwa vuba</i> <i>Amera nk'aho ari ahandi</i>	8 (14%)
Does not study (despite having the means)	<i>Ntiyiga (n'aho yaba afite ubushobozi)</i>	7 (12%)
Wants to commit suicide	<i>Ashaka kwiyahura</i>	6 (10%)

† Agreed upon by less than 50% of clinicians, but regarded as clinically relevant by local psychologist.

Table 4

## Kwiheba symptoms

Indicator		KI Agreement N=56 (%)
Has lost hope for life Has no hope for life Feels like I have no life and will die soon Has no hope for tomorrow	<i>Yataye icyizere cy'ubuzima Yumva nta Buzima afite azapfa vuba. Nta cyizere cy'ejo hazaza afite</i>	49 (88%)
Is unhappy Is always sad	<i>Ntiyishimye Ahora ababaye</i>	31 (55%)
Is lonely	<i>Arigunga</i>	20 (36%)
†Wants to die Feels life is meaningless Regrets being born Asks himself/herself why he/she is alive Acts as if life and death are the same	<i>Yifuza gupfa Yumva ubuzima ntacyo buvuze Yicuza impamvu yavutse Yibaza impamvu ariho Akora nk'aho ubuzima n'urupfu ari bimwe</i>	19 (34%)
Over thinks /Reflects about his life	<i>Yitekerezaho cyane</i>	18 (32%)
Is quiet Does not talk to others	<i>Aracecetse Navugisha abandi</i>	18 (32%)
Does not like to be around others Is unhappy among people Does not like to be where people gather Does not interact with others	<i>Ntakunda kujya aho abandi bari Ntiyishima iyo ari mu bandi Ntakunda kujya aho abantu bahuriye Ntashyikirana n'abandi</i>	18 (32%)
Asks himself/herself how he/she will survive Does not plan for the future Worries about the future	<i>Yibaza uko abaho Nateganyiriza ejo hazaza Afite ubwoba bw'ejo hazaza</i>	14 (25%)
Thinks of committing suicide	<i>Atekereza kwiyahura</i>	12 (21%)
Cries	<i>Ararira</i>	9 (16%)
Has constant self-pity	<i>Afite amaganya adashira</i>	7 (13%)
Does not play with others	<i>Ntakina n'abandi</i>	6 (11%)
Feels like no one loves him/her Feel like no one cares about him/her	<i>Yumva nta muntu umukunda Yumva nta muntu umwitayeho</i>	6 (11%)

† Agreed upon by less than 50% of clinicians, but regarded as clinically relevant by local psychologist.

Table 5

## Ihahamuka symptoms

Indicator		KI Mention Symptom N=49 (%)
Is lonely	<i>Numva ndi jyeniyine</i>	25 (51%)
Thinks about his/her problems and feels crazy Thinks a lot	<i>Atekereza ku bibazo bye akumva abaye umusazi</i> <i>Aratekereza cyane</i>	22 (45%)
Feels like he/she has lost his/her mind Feels like he/she is not in his/her right mind Has problems within his/her mind Loiters like someone who is crazy	<i>Yumva ameze nk'iwataye umutwe</i> <i>Yumva mu mutwe we hatameze neza</i> <i>Afite ibibazo mu mutwe we</i> <i>Azerera nk'umusazi</i>	17 (35%)
Is hopeless Feels like there is nothing good in life	<i>Yumva nta cyizere afite</i> <i>Yumva nta kintu cyiza kiri mu buzima</i>	14 (29%)
Is sad Always feels sad	<i>Yumva mbabaye</i> <i>Buri gihe yumva ababaye</i>	13 (27%)
<sup>†</sup> Feels like hiding from others Does not like playing with others	<i>Yumva yakwihisha abandi</i> <i>Ntakunda gukina n'abandi</i>	13 (27%)
<sup>†</sup> Does not like to study Feels like studying is useless Fails at school Does not grasp or understand school work	<i>Ntashaka kwiga</i> <i>Yumva kwiga nta kamaro bifite</i> <i>Ndatsindwa ku ishuli</i> <i>Ntanjya afata cg ngo yumve ibyo yiga</i>	8 (16%)
Dislikes interacting with others	<i>Ntakunda gusabana n'abandi</i>	7 (14%)
Feels useless or valueless	<i>Yumva nta gaciro cg akamaro afite</i>	5 (10%)
Feels like crying	<i>Yumva ameze nk'urimo kurira</i>	5 (10%)
Feels like he/she is not based anywhere (does not have a sense of groundedness)	<i>Yumva ntaho ashingiye</i>	5 (10%)
<sup>‡</sup> Is always afraid Is fearful Always has fear	<i>Ahorana ubwoba</i> <i>Agira ubwoba bwinshi</i> <i>Ighe cyose aba afite ubwoba</i>	4 (8%)
<sup>‡</sup> Feels like fighting	<i>Yumva ashaka kurwana</i>	4 (8%)
<sup>‡</sup> Does what he/she feels like doing Does whatever he/she wants to do	<i>Akora ibyo yumva ashaka</i> <i>Akora icyo ashatse gukora cyose</i>	3 (6%)
<sup>‡</sup> Feels like people will cause him/her harm (feels threatened by people)	<i>Yumva abantu bazamugirira nabi</i> <i>(bamuteye ubwoba)</i>	3 (6%)
<sup>‡</sup> Feels uneasy Never feels peaceful Is not at ease	<i>Yumva atamerewe neza</i> <i>Ntajya yumva afite amahoro</i> <i>Ntatuje</i>	3 (6%)
<sup>‡</sup> Feels like screaming	<i>Yumva yavuzza induru</i>	2 (4%)

<sup>†</sup> Agreed upon by less than 50% of clinicians, but regarded as clinically relevant by local psychologist.

<sup>‡</sup> Endorsed by more than 50% of clinicians.



Table 6

## Umushiha symptoms

Indicator		KI Agreement N=55 (%)
Becomes enraged by others (snappy/temperamental) Becomes irritated within the family Becomes annoyed Becomes grouchy Expresses anger or has a mean face	<i>Nisanga nrakakajwe vuba n'abandi</i> <i>Nisanga ntwewe umushiha n'abo mu muryango wanjye</i> <i>Ararakara</i> <i>Azinga umunya</i> <i>Agaragaza uburakari ku maso</i>	48 (87%)
Talks badly Uses bad words Uses bad words when talking Speaks badly	<i>Avuga nabi</i> <i>Akoresha amagambo mabi</i> <i>Akoresha amagambo mabi iyo avuga</i> <i>Avuga nabi</i>	27 (49%)
Quarrels	<i>Aratongana</i>	21 (38%)
Fights	<i>Ararwana</i>	20 (36%)
† Does not talk to others Does not respond to others Does not want to talk	<i>Ntavugisha abandi</i> <i>Ntasubiza abandi</i> <i>Ntashaka kuvuga</i>	14 (25%)
Complains	<i>Arijujuta</i>	14 (25%)
† Does not want to interact with others	<i>Ntashaka gusabana n'abandi</i>	12 (22%)
Insults others	<i>Atuka abandi</i>	12 (22%)
† Always thinks of doing bad things Others consider him dangerous	<i>Buri gihe atekereza gukora ibintu bibi</i> <i>Abandi bamufata nk' umugome</i>	8 (15%)
Has a bad heart (not being kind)	<i>Afite umutima mubi (si umuntu mwiza)</i>	7 (13%)
† Has bad thoughts	<i>Afite ibitekerezo bibi</i>	6 (11%)
† Does not get along with others	<i>Ntityumvikana n'abandi</i>	6 (11%)

† Agreed upon by less than 50% of clinicians, but regarded as clinically relevant by local psychologist.

Table 7

## Uburara symptoms

Indicator		KI Agreement N=47 (%)
Plays dangerously Is delinquent	<i>Akinanana ubugome N'ikirara</i>	32 (68%)
Roams around Moves without a purpose Has no address	<i>Arabungera K Agenda nta mugambi Ntaho abarizwa</i>	29 (62%)
Is unruly Does not want to be ruled Does not want to take advice Is uncontrollable Does not want to be controlled	<i>Ni ikigenge Ntashaka kuyoborwa. Ntashaka kugirwa inama. Ni Umuntu utayoborwa. Ashaka kutayoborwa</i>	23 (49%)
Disappears from home (running away) Sleeps wherever Does not want to live at home	<i>Abura mu rugo (kujya mu gasozi) Aryama aho abonye hose. Yumva ataguma iwabo</i>	21 (45%)
Speaks badly	<i>Avuga nabi</i>	19 (40%)
Engages in fornication/prostitution	<i>Yishora mu busambanyi</i>	18 (38%)
Is undisciplined (impolite)	<i>Ntagira ikinyabupfura</i>	18 (38%)
Steals Thinks about stealing	<i>Ariba Atekereza kwiba</i>	17 (36%)
Fights Becomes violent	<i>Ararwana Ahinduka umugome</i>	17 (36%)
Takes drugs	<i>Gufata ibiyobyabwenge</i>	12 (26%)
Is fearless	<i>Ntatinya</i>	12 (26%)
Is not clean (even if he/she has the means) Does not want to bathe	<i>Nta suku agira. (Naho yaba afite ubushobozi) Ntashaka gukaraba</i>	11 (23%)
Drops out of school (even if he/she has the means to go)	<i>Ava mwishuri(Naho yaba afite ubushobozi)</i>	10 (21%)
Feels hopeless	<i>Yumva yarihebye</i>	7 (15%)
Has bad thoughts	<i>Ntiyumvikana n'abandi</i>	7 (15%)
Engages in bad behaviors	<i>Yishora mu ngeso mbi</i>	6 (13%)