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Social Science & Medicine

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Nothing can defeat combined hands (*Abashize hamwe ntakibananira*): Protective processes and resilience in Rwandan children and families affected by HIV/AIDS

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ARTICLE INFO

Article history: Available online 23 July 2011

Keywords: Rwanda HIV/AIDS Children and adolescents Mental health Resilience

ABSTRACT

In Rwanda, the dual vectors of HIV and legacy of the 1994 genocide have had devastating consequences for children and families. In this and other low-resource settings, extreme poverty, poor access to services, family conflict, and other adversities put children and families affected by HIV/AIDS at increased risk of mental health problems. However, even in the face of tremendous hardship, many children and families demonstrate better than expected outcomes. To design interventions that harness these natural sources of resilience, greater knowledge of local protective processes is needed. This study used free listing exercises (N = 68) and key informant interviews (N = 58) with adults and children (ages 10-17) to investigate strengths and sources of resilience in Rwandan children and families at risk for psychosocial difficulties due to HIV/AIDS. Clinician key informants (N = 10) were also interviewed. Five forms of protective resources emerged through this research: perseverance (kwihangana); self-esteem/selfconfidence (kwigirira ikizere); family unity/trust (kwizerana); good parenting (kurera neza) and collective/communal support (ubufasha abaturage batanga). Operating within individual, family, and collective/ community systems, these resources support children at multiple ecological levels. Study evidence suggests that these protective processes provide "leverage points" for strengths-based interventions designed to increase resilient outcomes and prevent mental health problems. This information on culturally-appropriate practices for building resilience, along with input from local community advisory boards and the government, has informed the development of a Family Strengthening Intervention, which has broad applications to many forms of adversity and trauma.

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Introduction

Negative developmental consequences resulting from adverse life experiences such as poverty, violence and life-threatening illness in the family have been well documented in children in both high and low-resource settings (Garbarino, Kostelny, & Dubrow, 1991; Mary Jane Rotheram-Borus, Draimin, Reid, & Murphy, 1997; Werner & Smith, 1982). In recent years, research

has focused on how protective processes operating at the individual, familial and community levels (such as self-esteem, social support and community social capital) contribute to resilient psychosocial outcomes in children and adolescents. However, most studies on this topic have focused on higher-resource settings, and very little information is available on these processes in low-resource settings (Ungar et al., 2007), with a particular lack of information from sub-Saharan Africa (SSA). As a result, it cannot be assumed that the protective constructs as defined in high-resource settings in the global north are an appropriate framework for understanding individual, family and community resources and their protective functions in other cultural settings such as SSA.

Recent years have brought improvements in global child health with two exceptions: regions affected by HIV/AIDS and regions

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affected by armed conflict (UNICEF, 2008a,b). Because negative vectors for child health and development are particularly concentrated in low-resource settings, it is imperative that counterbalancing efforts are made to document individual, family, community and societal strengths contributing to resilient developmental outcomes in children despite such formidable risks. The need for these efforts is underscored by the small, but growing literature on psychosocial risks and resilience among HIV/AIDSaffected children in developing countries (Atwine, Cantor-Graae, & Bajunirwe, 2005; Cluver & Orkin, 2009; Fang et al., 2009; Forsyth, Damour, Nagler, & Adnopoz, 1996; Skovdal, Ogutu, Aoro, & Campbell, 2009). This recent research suggests that the presence of protective processes - and not simply the severity of disease or hardship — might predict psychosocial outcomes among HIV/AIDSaffected youth. For instance, Hong et al. (2009) found that the level of perceived social support among children affected by AIDS in China was "significantly and positively associated with psychosocial wellbeing", even when adjusting for the influence of orphan status, age, gender, and family socioeconomic standing. In the South African Young Carers study, Cluver et al. found that social support among HIV/AIDS orphans was associated with lower levels of mental health problems, in particular posttraumatic stress (Cluver, Fincham, & Seedat, 2009). As evidenced by these studies, investigation of protective processes provides researchers with a greater understanding of the interplay between risk factors, psychosocial problems, and mitigating factors. In this paper, we use the example of HIV/AIDS-affected children and families in postgenocide Rwanda to explore conceptualizations of protective processes contributing to positive developmental and mental health outcomes in children and adolescents.

Rwanda presents an important example of compounded adversity where the legacy of the genocide, severe poverty, and HIV/AIDS have had devastating consequences for the functioning of families and the larger community (Bachmann & Booysen, 2003; Bauman et al., 2006; Doku, 2009; Lester et al., 2010; Murphy, Greenwell, Mouttapa, Brecht, & Schuster, 2006). As in other regions of SSA, people affected by HIV/AIDS in Rwanda contend with social ostracism and community stigma, problems which interrupt social processes that allow an extended community network to provide support for families facing adversity (Abebe & Aase, 2007; Duffy, 2005; Feldman, Friedman, & Des Jarlais, 1987; Keogh, Allen, Almedal, & Temahagili, 1994; Miller, Gruskin, Subramanian, & Heymann, 2007; Simbayi et al., 2007; Spaar et al., 2010). In addition, while the estimated HIV prevalence rate in Rwanda is 2.9% among adults and 1.6% among young people (lower than average rates in SSA), the loss of nearly one million people during the genocide of 1994 has left the social fabric that normally supported healthy child rearing deeply torn. In the light of the genocide and HIV/AIDS, Rwanda has one of the highest rates of orphanhood in all of Africa and an abundance of child headed households (UNICEF, 2011). Research to date has demonstrated high rates of psychosocial distress in adolescent heads of households and also poorer developmental outcomes among younger children under their care (Betancourt, Fawzi, Bruderlein, Desmond, & Kim, 2010; Boris et al., 2008; Thurman et al., 2008).

A number of programs have now been launched in Rwanda to better address the medical needs of HIV/AIDS-affected families, such as universal access to free anti-retroviral treatment and innovative mobile technology systems for monitoring treatment adherence (Rwandan Ministry of Health, 2007). However, much remains to be done to attend to the psychosocial consequences of chronic illness and traumatic loss in families. Furthermore, very little research has examined processes of resilience contributing to healthy outcomes despite risk. This study is the first of its kind to understand how local protective processes manifest themselves in

children and families facing adversity due to HIV/AIDS in Rwanda. In addition to providing important data on these potentially modifiable protective resources, this research contributes to a larger program of social science research intended to provide a foundation for developing and testing family strengthening interventions for HIV/AIDS-affected children and families.

Methods

The research built on a prior qualitative study that examined common mental health problems and unmet mental health needs among children affected by HIV/AIDS (Betancourt et al., 2011). In the present study, we used a similar combination of free listing (FL) and key informant (KI) interviews to garner information about local protective processes that may mitigate these mental health problems.

The central research questions were: How do Rwandan families affected by HIV/AIDS manage stress due this chronic illness and its effects on the family? What, if any, strengths and personal or collective resources do they draw from (at the individual, family and community level)? What factors, if any, contribute to more resilient outcomes in terms of family functioning and the mental health and well being of children?

Ethics and community collaboration

This research resulted from collaboration with the Rwandan government and the non-governmental organization (NGO) Partners in Health/Inshuti Mu Buzima (PIH/IMB). Launched in Rwanda in 2005, IMB/PIH works in close partnership with the Ministry of Health (MOH) to comprehensively strengthen the public health system in rural, underserved areas of the country, giving particular focus to HIV/AIDS prevention and care. Data collection was completed by a team of local research assistants who spoke English and the local language, Kinyarwanda, and who received training in ethical interviewing techniques and data management. FL and KI exercises were completed in 2009 and 2010. All ethical protocols were approved by the Rwandan National Ethics Committee (RNEC).

Participants

Throughout the study, maximum variation sampling was used to identify participants representing a range of age and gender. Participants in the FL exercises were 68 HIV/AIDS-affected children aged 10–17 and caregivers (54% female). Participants were considered "HIV/AIDS-affected" if they were HIV-positive themselves, had an HIV-positive family member, or had lost a family member due to AIDS. With the help of community health workers, we were able to sample patients, as well as their family members. Snowball sampling allowed us to identify other participants in the community who were not necessarily receiving direct care from IMB/PIH.

KI participants were 37 adults (57% female) and 19 children (42% female) identified as particularly experienced in helping HIV-affected families. KIs were nominated by staff of IMB/PIH and by FL participants, in addition to some recruitment through snowball sampling. Because KIs were nominated as people knowledgeable about issues of resilience in general, they were not necessarily HIV/AIDS-affected (about half of the KI sample was). In addition, 10 clinician KIs (social workers, psychologists, and medical doctors) were enrolled for their expert opinion on matters related to HIV/AIDS-affected children and families.

Free listing exercise

FL exercises among adults and children ages 10-17 employed local terms for common mental health problems (Betancourt et al., 2011) to investigate the individual, family and community supports available to HIV/AIDS-affected families struggling with these problems. FLs began with "grand tour" questions such as: "What do HIV/AIDS-affected young people do to help themselves and avoid problems such hopelessness (kwiheba), worry (guhangayika), deep sorrow (agahinda kenshi), irritability (umushiha), and conduct problems (uburara)? What do families do to help HIV/AIDS-affected children and avoid them developing such problems? What do community people do to help HIV/AIDS-affected children and families avoid developing such problems?" Interviewers probed for as many protective factors as possible, asking for a brief description of each. Local research assistants (RAs) met with the study PI and leadership staff to review and discuss their field notes and select the most commonly used cover terms for locally-relevant protective processes. These data were used as a jumping off point for KI interviews.

Key informant interviews

KI interviews sought further description of the conceptual categories identified during FLs. For example unity or trust within the family (*kwizerana*) was repeatedly mentioned during FL as an important protective construct. In KI interviews, RAs therefore asked: "People around here told us that when families have problems, *kwizerana* may help families to get through them. Can you tell us more about *kwizerana*?" A series of probes were then used to explore the construct more fully; for example: "In a family with kwizerana, how do people think about themselves or others? In a family with kwizerana, how do people feel about each other? In a family with kwizerana, how do people behave with one another?" As the study progressed, KI interviews explored the descriptions provided by earlier KI respondents, enriching our understanding of each protective process and contributing to saturation of the data

set. All KI interviews were audio recorded, transcribed in Kinyarwanda, and then translated to English.

Data analysis of KI data

KI interviews were analyzed through category construction informed by Grounded Theory (GT) (Strauss & Corbin, 1998) and Thematic Content Analysis (TCA). Using these methods, common indicators of overarching constructs were identified given saturation in the KI interviews. For example, KIs repeatedly described how families with *kwizerana* manifest their unity through "cooperation" and "living together in harmony". These processes, which emerged frequently in the data, were subsequently considered indicators of the general construct of *kwizerana*. All data analysis was conducted in conjunction with bilingual local staff.

Results

Study findings suggest that five important protective processes promote positive development in HIV/AIDS-affected children in Rwanda. These include individual resources patience/perseverance (kwihangana) and self-esteem (kwigirira ikizere) - as well as family and community supports - family unity/trust (kwizerana), good parenting (kurera neza), and communal/social support (ubufasha abaturage batanga). Interestingly, this range of resources reflects an ecological or multilevel model of resilience, in that children adjust to stressors caused by HIV/AIDS or other hardships by accessing different levels of protective resources, including social, communal, familial, and individual strengths (Bronfenbrenner, 1979). This framework of ecological stress-adjustment underscores the extent to which environment and social networks shape a child's individual skill set and ability to cope in Rwanda (Betancourt & Khan, 2008; Bronfenbrenner, 1979; Lazarus & Folkman, 1984), and support recent theory on child resilience despite extreme hardship (Cluver & Gardner, 2007; Fang et al., 2009; Ungar et al., 2007, 2008; Skovdal et al., 2009).

Table 1 Kwihangana (perseverance).

| Indicator | | # KIs reporting (%) N = 44 |
|---|--|----------------------------|
| Interacts with peers (i.e. spending time together, talking, etc.) | Asabana n'abandi bagenzi be | 23 (52%) |
| Does not lose hope Is not easily discouraged | Ntajya yiheba Ntacika intejye | 19 (43%) |
| ^a Plays with others | Akina n'abandi | 16 (36%) |
| ^a Is well-behaved Is characterized by goodness | Yitwara neza Arangwa n'ibyiza | 16 (36%) |
| Does not isolate himself/herself | Ntiyigunga | 14 (32%) |
| Goes to pray Prays and feels good | Ajya gusenga Arasenga akumva ameze neza | 14 (32%) |
| Accepts help and advice | Yemera gufashwa no kugirwa inama | 10 (23%) |
| Works hard despite personal problems Has a will to work | Akora uko bisanzwe n'iyo afite ibibazo Afite morale | 9 (20%) |
| ^a Is calm | Aratuje | 8 (18%) |
| Is good-hearted | Kugira umutima mwiza | 2 (5%) |
| ^a Remains constant, centered | Ashyira umutima hamwe | 2 (5%) |

^a Agreed upon by less than 50% of experts.

Table 2Kwigirira ikizere (self-esteem/confidence).

| Indicator | | # KIs reporting (%) N = 35 |
|---|---|----------------------------|
| ^a Thinks of his/her future | Atekereza kubuzima bwe bw'ejo hazaza | 17 (49%) |
| Feels he/she will live Feels he/she must survive ^a Feels life will continue | Yumva akamaro ko kubaho Yumva ashobora gukomeza kubaho Yumva ashobora gukomeza kubaho | 16 (46%) |
| Feels strong Is always strong at heart (Tough) | Yumva akomeye Ahora akomeye mu mutima | 15 (43%) |
| ^a Is not scared (of things that people have reason to fear) Does not fear being around other people | Ntajya atinya Ntatinya aho abandi bari | 10 (29%) |
| Feels able to do many things | Yumva ashobora gukora ibintu byinshi | 9 (26%) |
| Feels like he/she has no problems | Yumva nta kibazo afite | 7 (20%) |
| Enjoys the company of others Understands others | Barashyikirana Imyumvikane | 4 (11%) |
| Takes care of his/her health | Yita kubuzima bwe | 3 (9%) |

^a Agreed upon by less than 50% of experts.

Table 3 Kwizerana (family unity/trust).

| Indicator | | # KIs reporting (%) N = 36 |
|--|---|----------------------------|
| They converse They talk to reach agreement | Baraganira Baraganira bagahuza | 19 (53%) |
| They cooperate They work together/have a common understanding They work together complementarily | Barafatanya Bashyira hamwe/Barumvikana Baruzuzanya | 16 (44%) |
| ^a They live together in harmony or in peace They live together well | Babana mu mahoro Babana neza | 15 (42%) |
| They are unified in thought (agree) They have unity in the family They feel like they don't want to be separated There is no division between family members They have a unified heart | Bahuza ibitekerezo Bagira ubumwe Bumva batatandukana Nta macakubiri bagira Bahuza umutima | 14 (39%) |
| They do not hide things They are not suspicious of each other | Ntibahishanya Nta rwicyekwe bagirana | 9 (25%) |
| ^a They are happy They sit and laugh together They are always joyful | Baranezerwa Baricara bagaseka Bahora bishimye | 9 (25%) |
| ^a They respect each other | Barubahana | 9 (25%) |
| They are characterized by love | Barangwa n'urukundo | 8 (22%) |
| They do not conflict They do not have conflict within the home | Ntibashwana Nta makimbirane bagira mu rugo rwabo | 7 (19%) |
| They interact | Barasabana | 7 (19%) |
| They share secrets They keep secrets | Babwirana amabanga Babikirana amabanga | 6 (17%) |
| They are honest They do not lie | Bavugisha ukuri Ntakubeshyana | 5 (14%) |
| Parents do not cheat on one another | Ababyeyi ntibacana inyuma | 5 (14%) |
| They understand each other | Barumvikana | 4 (11%) |
| They do not stigmatize anyone within the family | Ntibahana akato | 3 (8%) |
| ^a They comfort | Barahumurizanya | 2 (6%) |

^a Agreed upon by less than 50% of experts.

Table 4 Kurera neza (good parenting).

| Indicator | | # KIs reporting (%) N = 37 |
|--|--|----------------------------|
| ^a Teach good discipline Teach children to obey Teach children to converse with other people | Kugira ikinyabufura Kubatoza kumvira Kwigisha abana kuganira n'abantu | 27 (73%) |
| Training a child (to be open-minded, have life-skills, give them advice) Provide teachings | Gutoza umwana kujijuka Kubahugura | 21 (57%) |
| Provide resources (food, water, clean clothes, school fees) | Kubaha ibikenewe (Ibyo kurya, amazi, imyenda ifite isuku, amafaranga y'ishuri) | 15 (41%) |
| ^a Express or show love Speak with love | Kwerekana urukundo Bavugana urukundo | 12 (32%) |
| Be close to children (emotionally) Do not decide to separate from children Draw close and correct children | Kubaba hafi Kutitandukanya n'abana Kwegera abana no kubakosora | 11 (30%) |
| Provide advice | Kubagira inama | 11 (30%) |
| Converse with children | Kuganira n'abana | 10 (27%) |
| To not undermine or disrespect children To respect children | Kudasuzugura abana Kubaha abana | 8 (22%) |
| Interact with children | Gusabana n'abana | 6 (16%) |
| Listen to children | Gutega amatwi abana | 5 (14%) |
| ^a Parents are happy | Kuba ababyeyi bishima | 5 (14%) |
| Parents treat all children equally | Gufata abana bose kimwe | 4 (11%) |
| Parent for the country | Kurerera igihugu | 4 (11%) |
| ^a Parents are calm | Gutuza kw'ababyeyi | 2 (5%) |
| ^a Parents are humble | Ababyeyi bicisha bugufi | 2 (5%) |
| Socialize with children | Guhyikirana n'abana | 1 (3%) |

^a Agreed upon by less than 50% of experts.

At the individual level, patience/perseverance (kwihangana) and self-esteem (kwigirira ikizere) were identified as important contributors to resilience in children. Descriptors of kwihangana were more behavioral and included the active maintenance of social ties, "interacting with peers", and "playing with others". One KI described how children with kwihangana "think about how they will live in the future, studying, and getting a job...they accept their problems because they know they are not the first nor the last to encounter those problems." (Female, 16, Cyabajwa) KIs also stressed that these behaviors are reflective of children's ability to self-motivate. Children with kwihangana were portraved as "wellbehaved", "hard-working", "good-hearted" and "calm". A willingness to "accept help and advice" was strongly associated with the construct, and engagement in "regular prayer" was also viewed as an indicator. Kwihangana has been observed and described previously in a population of women and girls who survived genociderelated rape in Rwanda: among that population, kwihangana included the ability to express problems, connect with others, and distill meaning from problems (Zraly & Nyirazinyoye, 2010). Similarly, in our sample, HIV/AIDS-affected children with kwihangana were described as prosocial, interacting readily with peers, family and community members (See Table 1).

Kwigirira ikizere was less associated with behaviors and described primarily as a positive cognitive style that reframes experiences with a future orientation and a sense that "life will continue" despite present difficulties. One KI commented that,

"kwigirira ikizere is manifested in having a sense of purpose and a belief in a bright future, including goal direction, educational aspirations, achievement motivation, persistence, hopefulness, optimism." (Female, child) Often, kwigirira ikizere was associated with feelings of strength and toughness, and "having a strong heart". Children with kwigirira ikizere were described as having courage in the face of challenges and as possessing a sense that they can "do many things". Many KIs also suggested that "feeling one must survive" was an important indicator of kwigirira ikizere (See Table 2).

In addition to kwihangana (patience/perseverance) and kwigirira ikizere (self-esteem), evidenced at the individual level, participants identified two protective constructs operating at the family level: kwizerana (family unity/trust) and kurera neza (good parenting). Both constructs were described as critical to surviving difficult times. Participants described families with kwizerana as those that "talk together to reach agreements", live together "in harmony", are "unified", and "cooperate". Mutual respect and enjoying each others' company were also discussed as characterizing families with kwizerana. One father KI explained that "[kwizerana] is manifested in the way you live as a family...not fighting and [being] fond of children helps to build a good family " (Male, 42, Ruyonza) Additionally, clinician KIs emphasized that "working together", being "faithful to and honest" with one another, "lacking suspicion", and "sharing advice" were important traits of kwizerana (See Table 3).

Caregivers who demonstrate good parenting (kurera neza) toward their children were described as strong disciplinarians who teach children useful life-skills, provide for basic resources (food, water, clean clothes, school fees), and draw close to children to express their love. "Conversing with" and "listening to" children emerged as important indicators of kurera neza. Additionally, "parenting for the nation" was cited as an important trait of *kurera* neza, indicating that in Rwanda, caregivers are responsible for raising children who represent the country's values and contribute to their communities. In describing indicators of good parenting, one KI commented that, "[kurera neza] means taking care of children so [they] grow without any problem while [at the same time] respecting elderly people and living in harmony with others." (Male, 17, Ruyonza) Another commented that good parents, "have healthy conversations with their kids...[the kids] are then able to tell them of whatever affliction they may have." (Male, 17, Nkondo) (See Table 4).

Finally, participants also discussed *ubufasha abaturage batanga*, a protective process operating at the community/societal level. This construct translates to "support from others". Participants indicated that *ubufasha abaturage batanga* is demonstrated by a community's

willingness to provide help when able, and includes positive social contact such as "visiting" others, "conversing," helping those in need to "get out of isolation or despair" and taking care of to those who are sick. One KI described how community members will "go to visit [HIV/AIDS-affected] families and when they find them lacking in anything, they may bring it to them... When they do not have anything to give them, they may decide to help them by going to fetch some water for them, or to just interact with them." (Female adult) Another KI discussed the importance of community organizing, commenting that, "[organizations help children and families by] visiting...and when they find that you're not in a good situation, they get you out of it...like if they found you in a house that is leaking, they build you a house or they give you some money for buying food, and it may help you for days." (Female adult)

Participants explained that communities characterized by strong *ubufasha abaturage batanga* "gather people together to discuss problems", "provide resources to those in need" and "assist in securing jobs for the unemployed". Communities strong in *ubufasha abaturage batanga* do not discriminate against HIV/AIDS-affected families; rather, they "provide comfort", "offer advice", and "understand and help solve problems" (See Table 5).

Table 5Ubufasha abaturage batanga (collective/communal support).

| Indicator | | # KIs reporting (%) N = 38 |
|--|--|-------------------------------|
| They get close to each other (are available to one another) They don't discriminate | Bababa hafi Ntibabaha akato | 21 (55%) |
| ^a Reassure Provide comfort | Barabahumuriza Barabihanganisha | 21 (55%) |
| Visit | Barabasura | 21 (55%) |
| Provide help when able | Babafasha uko bashoboye | 15 (39%) |
| ^a Take care of people who are sick Take people in need to health facilities | Babitaho barwaye Babajyana kwa muganga | 12 (32%) |
| Converse | Barabaganiriza | 12 (32%) |
| ^a Help those in need to get out of isolation or despair Assist those in need with coping | Babafasha kuva mu bwigunge Babafasha kwiyakira | 11 (29%) |
| Listen | Babatega amatwi | 11 (29%) |
| ^a Provide advice | Babagira inama | 10 (26%) |
| ^a Provide resources (food, clothing, shelter) | Babaha ibyo bakenye (ibyo kunywa, imyenda, kububakira) | 8 (21%) |
| Express love Show love | Babereka urukundo Babagirira impuhwe | 7 (18%) |
| Provide school materials to those in need Follow up on children's studies or schoolwork ^a Encourage school enrollment | Babaha ibikoresho by'ishuli Bakurikirana amasomo yabo Babashishikariza kujya kwiga | 6 (16%) |
| ^a Gather people together in one place to discuss problems Gather people together (just to be together) | Babahuriza hamwe ngo baganire ku bibazo Babahuriza hamwe mu busabane | 5 (13%) |
| ^a Understand and help solve problems Know people's problems | Babafasha kumva no gukemura ibibazo byabo Bamenya ibibazo byabo | 5 (13%) |
| They cultivate for them Assist with work | Barabahingira Babafasha mu mirimo | 5 (13%) |
| Assist in securing employment ^a Help others to advance in life | Babashakira akazi Babafasha kwiteza imbere | 5 (13%) |
| ^a Train others to be disciplined | Babatoza ikinyabupfura | 1 (3%) |
| ^a They have meetings and trainings | Babakorera amahuguwa amanama | 1 (3%) |

^a Agreed upon by less than 50% of experts.

Discussion

As is evident from these findings, children affected by HIV/AIDS draw upon a range of protective resources to counterbalance the negative effects of compounded adversities. Importantly, our results also show that each of these discrete protective resources has mutually-beneficial effects on the others. For example, fostering family trust and unity (kwizerana) was described as a priority of high-functioning Rwandan parents who wish to teach their children values and good discipline (kurera neza). These parents were also described as working with their children to solve problems and plan for the future, thus equipping their offspring with the ability to accept, process, and face life challenges (kwihangana, kwigirira ikizere). In turn, community support (ubufasha abaturage batanga) and close relations with extended social networks were thought to promote healthy family functioning and provide children with positive opportunities for social contact.

One KI illustrated the interrelatedness of these protective factors, explaining that:

"...a good caregiver will be a role model for their child, and they will not just let their children be involved in quarreling — this can be seen if the parents do not quarrel among themselves. They will also care for all the children, including those that do not belong to them but are in their custody. In addition to positive verbal communication, parents also can express acceptance and affirmation by showing physical affection and being good listeners, which makes children feel important and cared about as individual... A good caregiver knows that this child will grow up in the future and maybe he can even become the president of the country. In the end the child will say, 'Yes my parents raised me up well and they took me to school and it is why it is important that I reward them for the work they did well since now they are in their old age." (Female adult)

As demonstrated by this quotation, resilient outcomes in HIV/ AIDS-affected Rwandan children may be achieved through apt utilization and augmentation of resources at multiple ecological levels. Such a model of stress-adjustment has important implications for intervention design in this and other low-resource settings, where little attention has been paid to existing protective resources that may be leveraged by mental health or psychosocial programs (Atwine et al., 2005; Cluver & Orkin, 2009; Fang et al., 2009; Forsyth et al., 1996; Hong et al., 2009; Skovdal et al., 2009). For instance, interventions aimed at improving a family's ability to openly discuss illness, death, and feelings of shame, sorrow and confusion, may strengthen family unity (kwizerana) and caregivers' ability to provide guidance and support (kurera neza) (Bauman et al., 2006; Brouwer, Lok, Wolffers, & Sebagalls, 2000). In turn, this improved family environment may encourage children to adopt more adaptive coping patterns (kwihangana; kwigirira ikizere), as opposed to conduct-related "delinquent" behavior or silence and withdrawal (Beardslee & Gladstone, 2001; Betancourt et al., 2011; Fang et al., 2009; Wood, Chase, & Aggleton, 2006). Additionally, engagement of the community in interventions, either through community advisory boards or dissemination events, may help to address social stigma and general misunderstanding, thus improving children's access to stigma-free places to interact with peers (Bureau of Population Refugees and Migration, 2010b; Cluver et al., 2009; Cluver & Gardner, 2007; Cluver, Gardner, & Operario, 2008; United Nations High Commissioner for Refugees, 2010). Such interventions which holistically address a child's social ecology may be applicable to many populations facing adversity, especially if built upon the growing global evidence base on individual coping mechanisms (G. A. Bonanno, 2004; George A. Bonanno & Mancini, 2008), family cohesion and parenting skills (Bureau of Population Refugees and Migration, 2010a), and social environments challenged by compounded adversities (Panter-Brick, Goodman, Tol, & Eggerman, 2011).

An important limitation of the present study was that all participants lived in a catchment area where HIV care is readily available. Although we have no reason to believe that the protective resources discussed here would not be applicable to other forms of adversity, their protective potency may be much more limited in the context of untreated illness. Additionally, the data presented here came from rural areas and protective processes may operate differently in urban settings. In particular, qualitative research in other parts of rural Rwanda has indicated that collective constructs like community support are less robust in urban areas (Betancourt et al., under review). Finally, although this research deepened our understanding of five common protective processes relevant to HIV/AIDS-affected families, the findings presented here remain exploratory rather than exhaustive. There may be other forms of protective processes in operation among Rwandan families in addition to those described here. Nonetheless, the resources discussed here were readily identified, common and triangulated across multiple forms of qualitative data and multiple informants, and are thus seen as particularly salient in this rural Rwandan setting.

Across cultures, research has shown that a range of protective processes from individual coping to strong parent-child relationships and social support can help to offset the risk of mental health problems in caregivers and children facing adversity (Brouwer et al., 2000; Schüssler, 1992). In the specific context of HIV/AIDSaffected populations in Rwanda, similar connections between family unity/trust, healthy parental functioning, and navigation of community relationships were strongly evident. These findings suggest that opportunities to increase good parenting (kurera neza) and family trust and unity (kwizerana) by strengthening Rwandan families' communication, resource navigation and stress management skills, may improve children's capacity for perseverance (kwihangana) and self-esteem (kwigirira ikizere) and may combat the onset of mental health problems. In addition, such families may better elicit and navigate formal and non-formal community supports (ubufasha abaturage batanga). This research provides the foundation for subsequent stages of this work in which these locally-relevant protective processes will be targeted as the "active ingredients" of a Family Strengthening Intervention for HIV/AIDSaffected Rwandan children and families (Betancourt, 2011). In previous family-based preventive interventions, researchers have found that promoting healthy communication, problem-solving skills and providing psychoeducation about chronic illnesses such as HIV/AIDS or depression to vulnerable family members can increase resilience and offset the risk of mental health problems in children (Beardslee, Gladstone, Wright, & Cooper, 2003; Brennan, Le Brocque, & Hammen, 2003; D'Angelo et al., 2009; S. S. Luthar, 2006; Patterson, 2002; Riley et al., 2008; M. J. Rotheram-Borus et al., 2003; Sandler et al., 2003; Walsh, 2003). Our findings demonstrate synergy with many of the protective resources targeted in these studies. Because of these similarities, we anticipate that strengths-based intervention programs have great potential in the context of families affected by HIV/AIDS in Rwanda. An additional dimension of intervention for HIV/AIDS-affected Rwandan families must address larger community dynamics, which are important for providing a multi-layered nurturing and protective environment for children (Ungar et al., 2008). We intend to build on ubufasha abaturage batanga by inviting community members to participate in intervention design and development through ongoing community advisory groups (Ellis, Kia-Keating, Yusuf, Lincoln, & Nur, 2007; B. A. Israel, Schulz, Parker, & Becker, 2001; B.A. Israel, Schulz, Parker, Becker, & Allen, 2003), and also by considering the place for community consultations or community level discussions about stigma and its dangers (Wiley-Exley, 2007; Wood et al., 2006). To ensure feasibility and sustainability of this intervention, we intend to pilot the program in the Rwinkwavu Hospital catchment area, where we have cultivated strong working relationships with PIH/IMB and hospital staff. Eventually, we anticipate building upon our collaborations with the Ministry of Health to support the development of plans for national scale up of preventive mental health services for families.

The resources presented in this paper characterize qualities of the individual, the family and the community that are interrelated and important in the process of resilience, defined as the dynamic progression toward positive adaptation in the face of adverse life events (S. Luthar, Cicchetti, & Becker, 2000). There is more to be learned about resilience in HIV/AIDS-affected families in Rwanda; however, our findings represent a first step toward unpacking this complex and dynamic process. Future research could make great contributions by exploring the interactive pathways by which protective factors and processes lead to outcomes such as positive adjustment, coping, or competence (Boyden & Mann, 2005; Fergus & Zimmerman, 2005; Layne et al., 2008; Masten & Powell, 2003). Future work is needed to further examine the links and interdependencies between protective resources and how they can be enriched to promote healthy family functioning in HIV/AIDSaffected households.

Acknowledgements

An outstanding team of collaborators made this work possible. We are endlessly grateful to the local research assistants who carried out these interviews: Morris Munyanah, Kenneth Ruzindana, Mary Tengera, Claire Gasamagera Tuuvishime, Theotime Rutaremerara, Yvonne Asiimwe Murebwayire, Francoise Murebwayire, Fredrick Kanyanganzi, and Anatole Manzi. We are also grateful to Inshuti Mu Buzima/Partners In Health for their collaboration and dedication, and to the Peter C. Alderman Foundation, the Harvard University Research Enabling Grants Program, and the Julie Henry Family Development Fund for their support of this research. This publication was also made possible by Grant #1K01MH07724601 A2 from the National Institute of Mental Health and by the Francois-Xavier Bagnoud Center for Health and Human Rights. Additional Thanks go to Jim Yong Kim, Maggie Alegria, Glenn Saxe, Brandi Harless, Laura Khan, Pamela Scorza, Ryan McBain, Natalie Stahl, Justin Berk, Ali Solange Nyirasafari, Jacqueline Umugwaneza, and Robert Gakwaya for their input on the project and/or their review of the data.

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