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Assessment of Emotional Status of Orphans and Vulnerable Children in Zambia

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Key words
Orphans and vulnerable children (OVC), AIDS orphans, OVC caregivers, psychological needs, Zambia, Africa

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Abstract

Purpose: To describe the emotional status of orphans and vulnerable children (OVC) in two communities in Zambia.
Methods: The Health Ed Connect Adaptation Questionnaire (HECAQ) was used to interview 306 OVC and 158 primary caregivers in Zambia in 2010.
Findings: Child participants and caregivers reported evidence of emotional distress behaviors in the majority of OVC.
Conclusions: More research to evaluate the efficacy of intervention programs for loss and grief, normal and abnormal reactions to grief, and positive coping skills is needed to assist both children and their caretakers. In the population studied, caregivers and OVC could benefit from additional support for promoting emotional health and managing emotional distress in vulnerable children.
Clinical Relevance: Healthcare professionals play a key role in promoting the emotional health of OVC through identification of deviant behaviors and the development of interventions to alleviate emotional and psychological distress.

Zambia is one of the world's poorest countries, with 68% of the population living below the international poverty line (World Bank, 2011). In addition to the challenges of poverty, the country is faced with caring for 1.3 million orphans 0 to 17 years of age (United Nations Children's Fund [UNICEF], 2009). With a total population of 12.9 million (UNICEF, 2009) there is one orphan for every nine people.

The people in the Copperbelt Province of Zambia are challenged with the burden of orphaned children as well as major negative social and economic changes in the region. Although once a thriving mining province, the closure of the copper mines in the 1980s, the evaporation of jobs, and the devastation caused by AIDS have left the small communities in the Copperbelt Province struggling to survive. Even though providing the basics of food and shelter for these orphans and vulnerable children (OVC) is a strain on the resources of the community, caregivers express concern about the unmet emotional needs of the children. The challenges and emotional needs of OVC and their caregivers in Chipulukusu and Kasompe, Zambia, have not been well documented. If the status of emotional health and distress were better understood, more efficacious programs and interventions could be developed that are specific for meeting the needs of this vulnerable population.

The purpose of this study was to identify the emotional status of OVC in the communities of Chipulukusu and Kasompe, Zambia. The research questions addressed were: (a) What are the characteristics and background of the OVC in Chipulukusu and Kasompe? (b) How is emotional health expressed by the OVC? (c) What are

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the characteristics of the caregivers? and (d) What are the caregivers' perceptions of the emotional health of the OVC?

For the purpose of this study, an orphan was defined as a child who had lost one or both parents through death. A vulnerable child was defined as a child whose well-being was significantly jeopardized through abandonment, who had a terminally ill parent, or who was living at a high level of poverty. The caregiver was defined as the person living in the same household who was the primary caregiver of the child (Family Health International, 2005).

Evidence of Emotional and Psychological Distress in OVC

Previous studies of OVC have focused almost exclusively on the economic well-being of children orphaned by parents with AIDS. The few studies published on the psychological well-being of OVC found that children orphaned by AIDS displayed symptoms of high levels of anxiety, depression, and anger. The physical care and support given to them was not enough to manage these emotions (Atwine, Cantor-Graae, & Bajunirwe, 2005; Cluver & Gardner, 2007; Li et al., 2008; Murray, 2010; Nyamukapa et al., 2008).

Orphanhood by AIDS has been associated with depression, delinquency, conduct problems, stigmatization, and post-traumatic stress. Some OVC were diagnosed with post-traumatic stress disorder (PTSD) at a rate similar to the PTSD reported in children who experienced war (Cluver, Fincham, & Seedat, 2009). PTSD symptoms, particularly nightmares, were more strongly associated with AIDS orphans than other orphans (Cluver & Gardner, 2007; Cluver, Gardner, & Operario, 2007, 2008).

AIDS orphans suffered more psychological distress than nonorphans in both short-term and long-term studies. Depression, anxiety, and withdrawal from society inhibited the normal grieving process and contributed to greater anxiety and other internal and external symptoms of distress (Li et al., 2008; Nyamukapa et al., 2008).

Common factors that affect the psychological well-being of AIDS orphans have been categorized into the following themes: bereavement, caregiving, new homes, belonging, contact with extended family, abuse, poverty, access to services, school and peers, physical safety, crime, stigma and gossip, and positive activities (Cluver & Gardner, 2007). Cluver and Orkin (2009) and Li et al. (2008) found a particularly strong relationship between negative mental health and poverty. They also identified the following factors that contributed to negative mental health status: food insecurity, AIDS-related stigma, bullying, vulnerability to sexually transmitted diseases, and multiple deaths in the family.

Caregivers who were nurturing lessened the impact of negative factors (Cluver & Orkin, 2009). Many families and community members have indicated a willingness to care for orphaned children but identified the need for assistance with providing food, shelter, education, and physical care, and with addressing the emotional needs of the children (Freeman & Nkomo, 2006).

Conceptual Framework

The "Ten Elements of Mental Health Promotion and Demotion," a conceptual mental health model developed by MacDonald and O'Hara (1998), was used as a guide to identify mental health promoting and demoting factors. This model has been used (Somerville, Illsley, Kennedy, Smillie, & Robbie, n.d.) in the development of interventions to promote mental health for individuals, families, and communities. According to the Ten Element Map (MacDonald & O'Hara, 1998), the mental health of a person of any age is dependent on the balance between elements that promote mental health and elements that are barriers to mental health. Promoting factors include interplay of environmental quality, self-esteem, emotional processing, self-management, and social participation. Demoting factors include environmental deprivation, emotional abuse, emotional negligence, stress, and social alienation. Improvements in mental health can be made by strengthening promoting factors and reducing demoting factors, with the best outcomes resulting from attending to both sets simultaneously (Keleher & Armstrong, 2005).

Methods

Setting and Sample

Surveys of the children and caregivers were conducted in the communities of Chipulukusu and Kasompe in the Copperbelt Province of Zambia. These densely populated communities are primarily composed of small crude-brick homes with tin roofs and dirt or cement floors. Study participants in this convenience sample were selected by the community health workers and teachers at the community schools. The inclusion criteria consisted of (a) caregivers of children interviewed for the study or (b) children 6 to 12 years of age living within a 20-min walk of a free community school in the target communities.

Data Collection

The Graceland University Institutional Review Board approved the study prior to data collection. Gaining access to visit the homes and conduct interviews was facilitated by community leaders and HealthEd Connect,

a nongovernmental organization active in Zambia. Since many of the participants in this study were illiterate, verbal consent was obtained. In low-literacy populations where participants may be unable to read and sign formal documents, verbal consent is acceptable (Family Health International, 2005). Caregivers gave verbal consent for children to participate in the study. All interviews took place in the participants' homes over a 4-day period in June 2010. Each interview took approximately 1 hr to conduct.

Two U.S. World Service Corps (WSC) volunteers organized and supervised the data collection. The WSC volunteers solicited local interviewers from a group of respected community health workers who were the first to recognize the needs of the OVC in the communities. The WSC volunteers met with the local volunteers in community churches for 2-hr training sessions. Role play was used to demonstrate ways to establish rapport, obtain consent, avoid bias, and fill out questionnaires. Immediately following the training, local volunteers formed teams of two or three and walked to a neighboring home to conduct their first interview. Upon completion of the pilot interview, the process and findings were critiqued. When satisfied with the pilot interview, each team of volunteers returned to the field to conduct additional interviews.

Measurement

The Health Ed Connect Adaptation Questionnaire (HECAQ), was based on the Strengthening Community Participation for the Empowerment of Orphans and Vulnerable Children (SCOPE-OVC) questionnaire and the Scope and Family Health International Quantitative (SFHIQ) interview (Family Health International, 2005). The SFHIQ questionnaire was developed by an international research team and pilot tested in Lusaka, Zambia. Reliability and construct validity of the instrument were not published in the report (Tembo & Banda, 2002). Permission to adapt the questionnaire was granted by Family Health International-Arlington (I. Kabore, personal communication, May 24, 2010). For the current study, the internal consistency of the 12 items measuring the child's emotional health status was analyzed and Cronbach's α was .75. The fifteen items measuring caregivers' perception of child emotional health status also has an acceptable internal consistency, with Cronbach's α of .76. Construct validity was evidenced through a known group comparison in this study. Boys reported significantly more feelings of unhappiness or sadness and more difficulty making friends than girls ($p < .01$). These findings were consistent with study results from Cluver et al. (2007) in that girls reported more depression and anxiety than boys, whereas boys reported more delinquency and conduct problems than girls.

The HECAQ used in this study consists of 43 questions answered by the child and 38 questions answered by the caregiver. The children's four-part survey addresses demographics and the child's perceptions of his or her emotional distress. The caregivers' survey asks about demographics and includes an 18-item checklist that measures their perception of the child's emotional well-being.

Data Analysis

Statistical analyses were conducted using SPSS version 17.0 software package for Windows (SPSS, Inc. Chicago, IL, USA). Demographic data and background related to caregivers and children were analyzed using descriptive statistics. Psychosocial issues and perceived psychological or emotional status were examined.

Results

OVC Characteristics

The convenience sample of children in this study consisted of 156 boys (51%) and 150 girls (49%), with ages ranging from 6 to 12 years. Many of the children interviewed did not know or report their age. This is not uncommon in developing countries, where birth records are frequently nonexistent. When the exact age of a child could not be determined, the interviewers based eligibility on child's size and language ability. The primary language spoken by 73% of the participants and used in the survey was ChiBemba, commonly referred to as Bemba.

Most OVC were living with their widowed mother or grandmother (73%) and facing the daily reality of poverty. Ninety-two (37%) of OVC reported having only one meal a day for 2 to 3 days prior to the interview; five OVC reported having no meals recently. Fifty-four (21%) of OVC, although of school age, had never attended school, and an additional 47 (18%) who had once attended school were not currently attending. The primary reason given for not attending school was the death of a parent or guardian **(Table 1)**.

OVC Emotional Distress

The top five areas of emotional distress experienced by OVC "often" and "sometimes" included acting angry (85%), having scary dreams (71%), worrying (71%), feeling unhappy or sad (71%), and preferring to be alone (67%). Many OVC (62%) also reported they refused to eat "often" or "sometimes." Questions to determine reasons for refusal were not included in the survey. Areas

Table 1. Demographic Variables of Orphans and Vulnerable Children in Kasompe and Chipulukusu

	Frequency	Percentage
Age (years)		
6–9	85	27
10–12	102	33
Not known	88	29
Missing	31	11
Gender		
Male	156	51
Female	150	49
Have been in school		
Yes	206	79.5
No	53	20.5
Currently in school		
Yes	221	81.9
No	47	17.4
Reasons for not attending school		
Awaiting exam results	13	14.8
Death of parents	38	43.2
Death of guardians	14	15.9
Financial problems	15	17.0
Lack of support	2	2.3
Other	6	6.8
Recent frequency of meals/day		
None	5	2.0
1 meal	92	37.1
2 meals	119	48.6
3 meals	30	12.2
Relationship to guardian		
Mother	143	52.6
Father	37	13.6
Aunt	22	8.1
Uncle	2	7.0
Grandmother	54	19.9
Grandfather	6	2.2
Others (sister/cousin)	7	2.5

of least distress reported "often" or "sometimes" included running away from home (17%) and difficulty making friends (33%). **Table 2** summarizes the psychological and emotional distress frequency and percentage for the OVC.

Caregiver Characteristics

The convenience sample of caregivers in this study consisted of 42 men (28%) and 109 women (72%). The majority of caregivers (62%) were women struggling to support an average of four children per household. **Table 3** illustrates demographic data and characteristics of caregivers. Caregivers primarily ranged in age from 25 to 50 years and reported themselves to be heads of the household. The majority of caregivers were self-employed, for example, selling bananas, small bags of laundry soap, charcoal, and day-to-day necessities. Some were supported by institutions and relatives, with the support being primarily food (56.5%) and finances (31.9%). Caregivers reported the biggest challenge in everyday life to be resources (64.2%) and that caring for additional children placed economic stress on the family.

Caregiver Perceptions of OVC Emotional Distress

Overall the caregivers' perceptions corroborated the reports of the child participants' reports of psychological and emotional distress (**Table 4**). Caregivers reported 81% of the OVC were "often" or "sometimes" angry and 78% "often" or "sometimes" had scary dreams. While caregivers reported the OVC as having frequent episodes of scary dreams and displaying anger, they also reported them as being disobedient at home, crying, and stating that they were unhappy or worried.

Discussion

Emotional distress among the OVC was expressed through a number of socially deviant behaviors. These findings are consistent with previous studies reporting emotional distress and behavioral symptoms in orphans (Cluver & Gardner, 2007; Li et al., 2008).

The similarity between the children's and caregivers' perception of the child's behaviors and the child's feelings is noteworthy. Both groups indicated anger was the most frequently exhibited behavior and running away was the least frequently observed behavior. Only one category, fighting, had a significant difference between perceptions, with 75% of the caregivers compared to 55% of the children indicating the behavior occurred "often" or "sometimes." This difference may be accounted for by a difference in perception of fighting. The caregivers may have viewed fighting as any type of disagreement that occurred among or between children, while the children may have differentiated between playful disagreements and more serious ones. Another difference in perceptions between children and their caregivers related to the ability of the caregiver to detect the child's mood. Children reported being unhappy more often than the caregivers observed. Unhappiness is not always manifested in an outward behavior, so caregivers may not have always known how the children were feeling. In spite of the everyday pressures to feed, clothe, and care for the children, the caregivers were also perceptive and aware of the signs and symptoms of the children's emotional distress.

Many of the OVC's behaviors identified by this study may be unrecognized signs and symptoms of depression and anxiety developed in response to a loss. These signs and symptoms should be measured in greater

Table 2. Orphans' and Vulnerable Children's View of Their Psychological and Emotional Status

Indication of Psychological or emotional status[a]	Often		Sometimes		Rarely or never	
Fighting	36	(13.2%)	113	(41.6%)	122	(45%)
Being unhappy or sad	33	(12.5%)	154	(58.7%)	75	(28.6%)
Worrying	27	(9.8%)	175	(63.8%)	72	(26.2%)
Preferring to be alone	18	(6.7%)	160	(60.3%)	87	(32.8%)
Acting angry	18	(6.3%)	223	(78.2%)	44	(15.4%)
Having nightmares	12	(4.3%)	182	(66%)	80	(29%)
Difficulty making friends	8	(2.6%)	85	(28.1%)	172	(56.9%)
Refusing to eat	6	(2.1%)	165	(59.7%)	105	(38%)
Running away from home	5	(2.6%)	28	(14.7%)	157	(82.6%)

[a]OVC and caregivers were asked different questions.

Table 3. Demographic Variables of Caregivers

	Frequency	Percentage
Age (years)		
< 25	6	3.8
25–50	67	47.4
> 50	8	5.1
Not known	42	26.5
Missing	35	22.2
Head of household		
Yes	114	74.5
No	38	24.8
Marital status		
Married	36	25.0
Single	19	13.2
Divorced or separated	40	27.9
Widowed	49	34.0
Education completed		
Primary	71	60.7
Secondary	34	29.1
Postsecondary	3	2.6
Other	4	3.5
Gender		
Male	42	27.6
Female	109	71.7
Financial status		
Self-employed	81	56.6
Family member working	26	18.2
Institutional support	13	9.1
Support from relatives	23	16.1
Caregiver challenges		
Discipline	21	17.1
Shortage of finances	79	64.2
Sickness	4	3.3
School requirements	9	7.3
Adjusting to situation	5	4.1
Recent frequency of meals/day		
None	9	8.2
1 meal	46	41.8
2 meals	42	38.2
3 meals	13	11.8

Note. Some variables do not add up to 100% due to incomplete surveys.

detail to form a basis for interventions. Community health workers and caregivers should be trained to recognize problems in the early stages and work with the community to plan and implement interventions.

Kumakech, Cantor-Graae, Maling and Bajunirwe (2009) found that support groups were successful as interventions in decreasing psychological distress among OVC in Africa. Support groups share common factors that help facilitate therapeutic change and empowerment while encouraging social participation and reducing social exclusion as a means of promoting mental health. These factors include the instillation of hope and a sense of universality through contact with others who have survived similar situations. Therapeutic groups provide socialization and support. Catharsis, the safe ventilation of feelings, is encouraged, allowing the person to feel accepted. Through interpersonal learning and imitative behavior, individuals learn how others have resolved situations similar to their own. Therapeutic groups also provide group cohesiveness, allowing individuals to develop a sense of belonging (Kumakech et al., 2009; Ten Element Map of Mental Health Promotion, n.d.; American Group Psychotherapy Association, 2007).

Education regarding normal and abnormal reactions to loss is critical for OVC and their caregivers. Caregivers need to be assured, for example, that anger is a normal reaction to loss and can be expressed in nondestructive ways (Varcarolis & Halter, 2010). Interventions through school or community programs must be implemented to enhance culturally appropriate coping skills in OVC. Educating OVC and their caregivers could diminish the demoting element of emotional negligence while also increasing self-esteem and encouraging emotional processing (MacDonald & O'Hara, 1998).

Further research is needed to determine the impact of caregiving on the caregivers' psychological well-being. Symptoms such as depression, anxiety, feelings of stigmatization, and shame related to a child's or spouse's death

Table 4. Caregivers' View of Orphans' and Vulnerable Children's Psychological and Emotional Status

Indication of psychological/emotional status	Often		Sometimes		Rarely or never	
Acting angry	20	(13.6%)	99	(67.3%)	28	(19.1%)
Fighting	18	(13.6%)	81	(61.4%)	33	(25%)
Disobedient at home	17	(11.6%)	91	(61.9%)	39	(26.5%)
Worrying	16	(11.7%)	87	(63.5%)	34	(24.8%)
Disobedient at school	15	(11.7%)	44	(34.4%)	69	(53.9%)
Preferring to be alone	15	(11.7%)	71	(55.5%)	42	(32.8%)
Crying	15	(11.0%)	90	(66.2%)	31	(22.8%)
Refusing to eat	15	(10.2%)	85	(57.8%)	47	(32%)
Being unhappy/sad	13	(9.4%)	89	(64.5%)	36	(26.1%)
Refusing to go to school	11	(8.2%)	69	(51.5%)	54	(40.3%)
Having nightmares	9	(6.3%)	102	(71.8%)	31	(21.8%)
Difficulty making friends	7	(5.5%)	30	(23.6%)	90	(70.9%)
Running away from home	6	(5.3%)	15	(13.3%)	93	(81.4%)
Being bullied	4	(2.9%)	46	(33.6%)	87	(63.5%)

caused by AIDS should be assessed. Careful assessment and accurate diagnoses make it easier to identify and implement appropriate early interventions (Varcarolis & Halter, 2010).

Findings from this study support previous findings of a strong relationship between negative mental health status and poverty or food insecurity (Atwine et al., 2005; Cluver et al., 2007; Cluver & Orkin, 2009). Lack of food was a major concern, with 37% of OVC and 42% of caregivers reporting having only one meal per day. Ways to improve access to nutritional resources need to be identified for this group. By fulfilling basic needs, the demoting element of emotional deprivation would be reduced (MacDonald & O'Hara, 1998).

Limitations

The findings of this study need to be interpreted with limitations. Based on Zambian government requirements that all schools teach English and ChiBemba, both languages were represented on the questionnaire. The survey instruments were translated from English to ChiBemba by a professional translator. However, they were not back-translated, which would have verified accuracy of translation (Editorial Team, 2011). In addition, data collection revealed that a number of primary languages, other than Bemba, were spoken among interviewees, which could have limited their understanding of the questions and compromised the findings. Close proximity and open-air housing construction, as well as the caregivers' presence in some instances, precluded the maintenance of privacy, which may have influenced OVC's answers. Many of the OVC did not know how old they were, which made it impossible to maintain a pure cohort age group. Generalization of the findings is limited since the convenience sample was not random. Despite these limitations, this study provides valuable insights into the emotional status of OVC in the two communities surveyed.

Conclusions

Findings from this study provide a valid foundation for further research and interventions. Documentation of the emotional status of OVC was necessary before appropriate interventions could be implemented to alleviate reported distress. This research provides clarity on the real problems and a basis for appropriate responses to the emotional status of OVC in Kasompe and Chipulukusu, Zambia. Once interventions are identified and implemented, they must be evaluated for effectiveness and revised as appropriate.

The World Health Organization recommends that every country have policies and agencies with financial backing in place to address mental health issues (Skolnik, 2008). Collaboration and support among local, national, and international resources are needed to address these complex issues. Nursing education has an obligation to nurture nurses who have interests and skills to work in developing countries. Nurses should provide leadership in mentoring colleagues in other countries and in leading efforts that empower grass-roots initiatives. As a result of this study, members of the two communities studied have requested training to organize small support groups to address the needs of OVC. It is essential that sustainable follow-up measures be instituted immediately to capitalize on the new awareness and concern voiced within the communities themselves.

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Clinical Resources

- HealthEd Connect: www.healthedconnect.org
- UNICEF Data on Orphans by Region to 2010 in Children and Youth in History, item #293: http://chnm.gmu.edu/cyh/primary-sources/293
- U.S. Department of State, Background Note: Zambia (April 11, 2011): http://www.state.gov/r/pa/ei/bgn/2359.htm

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