A comparison of the behavioral and emotional disorders of primary school-going orphans and non-orphans in Uganda

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Abstract

Background: This study investigated the emotional and behavioral problems of orphans in Rakai District, Uganda, and to suggest interventions. Studies, elsewhere, have shown orphans to have high levels of psychological problems. However, in Uganda such studies are limited and no specific interventions have been suggested.

Methods: The study employed a cross-sectional unmatched case control design to compare emotional and behavioral problems of 210 randomly selected primary school-going orphans and 210 non-orphans using quantitative and qualitative methods employing standardized questionnaires, Focus Group discussions and selected Key Informant interviews. All children were administered Rutter's Children's Teacher Administered Behavior Questionnaire to measure psychological distress and a modified version of Cooper's Self-Report Measure for Social Adjustment. Standardized psychiatric assessments were done on children scoring > 9 on the Rutter's Scale, using the WHO-ICD-10 diagnostic checklists.

Results: Both orphans and non-orphans had high levels of psychological distress as measured using Rutter's questionnaire but with no significant statistical difference between the two groups (Rutter score > 9; 45.1% & 36.5% respectively; p= 0.10) and no major psychiatric disorders such as psychotic, major affective or organic mental syndromes. Psychological distress was associated with poor academic performance (p=0.00) in both groups. More orphans, than non-orphans had more common emotional and behavioral problems e.g. more orphans reported finding "life unfair and difficult" (p=0.03); 8.3% orphans compared to 5.1 % of the non-orphans reported having had past suicidal wishes (p=0.30) and more reported past "forced sex / abuse" (p=0.05). Lastly, the orphans' social functioning in the family rated significantly worse compared to the non-orphans (p= 0.05). Qualitatively, orphans, compared to non-orphans were described as " needy, sensitive, isolative with low confidence and self-esteem and who often lacked love, protection, identity, security, play, food and shelter." Most lived in big poor families with few resources, faced stigma and were frequently relocated. Community resources were inadequate.

Conclusion: In conclusion, more orphans compared to non-orphans exhibited common emotional and behavioral problems but **no** major psychiatric disorders. Orphans were more likely to be emotionally needy, insecure, poor, exploited, abused, or neglected. Most lived in poverty with elderly widowed female caretakers. They showed high resilience in coping. To comprehensively address these problems, we recommend setting up a National Policy and Support Services for Orphans and Other Vulnerable Children and their families, a National Child Protection Agency for all Children, Child Guidance Counselors in those schools with many orphans and lastly social skills training for all children.

Key words: Orphan; caretaker; psychological distress; HIV / AIDS
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Introduction

The Uganda AIDS Commission Statement of 2001 reported that there were over 1.7 million children orphaned by AIDS in Uganda. Worldwide, studies have consistently shown orphans to have higher rates of emotional and behavioral problems than non-orphans. In a 1982 follow up study of 105 children aged from 2-17 years who had lost a parent Van Eerdewegh and colleagues noted that by 1 month, 77% of the bereaved children showed symptoms of depressive disorder as compared to 34% in the control group. In addition to symptoms of depression, they also noted these children to have poor school performance and bed-wetting. By one year, however, there was a lessening of the depressive symptoms and the associated bed wetting although the disinterest in school continued (Van Eerdewegh et al, 1982). Gregory et al (1958 and 1965) and Worden (1996) reported the psychological disorders often found in the bereaved children as being depression, delinquency, antisocial personality, psychoneurosis (anxiety), and even overt psychotic disorders. Other researchers have

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reported similar findings elsewhere (Kemme, 1994; Hunter, & Williamson,,1997).

In two earlier studies, Minde (1975), and Minde and Musisi (1982) investigated factors associated with emotional problems of school going children in Uganda. They reported significant psychological distress amongst children due to disruptions of their earlier attachment systems consequent to a variety of causes including parental loss, urban locality, multinuclear families (polygamous homes), family break up due to divorce, desertion, or death. Dunn et al (1991) reported that orphaned children had a tendency to acquire juvenile delinquent traits such as petty theft, poor socialization and rebelliousness. In these earlier studies, no attempt was made to delineate the actual and specific psychological disorders suffered by the orphans and as such no specific treatments were suggested.

The AIDS epidemic has been said to have 3 phases: the infection phase, the death phase and the orphan phase (Wakhweya et al, 2002). Rakai District in Uganda is now in this third phase of orphans .This massive orphan problem in Uganda, which has developed over a short period of time, appears to have overwhelmed the traditional safety net provided by the extended family system and has led to various psychological problems in the affected children. Dunn et al (1991) postulated that it was leading to the growth of numerous psychosocial problems such as the street children phenomenon, teenage pregnancy and prostitution. Nekesa (1994), in her study of survival strategies of street children in Eastern Uganda, noted that 35% of the street children respondents she interviewed were orphans.

In a 2003 study, Musisi and Kinyanda reported higher than normal rates of psychological and behavioral disorders in HIV infected adolescents, 97% of whom were orphaned. These disorders included anxiety disorders (58.5%), depression (42%), somatisation (18%), psychosis (30%) and suicide attempts (20%). Six percent of their sample had been sexually abused and 52% performed poorly at school. Stigma, discrimination, poor medical care and inadequate guardian support were the children's most cited social difficulties.

The *Situation Analysis of Orphans in Uganda* reported a number of psychosocial problems faced by HIV/AIDS orphans (Wakhweya et al., 2002). This analysis called for information on specific psychological, emotional, and social disorders encountered by these orphans in order to guide the formulation of possible intervention strategies.

This study aimed to define the specific emotional and behavioral disorders orphans face in Rakai District, Uganda, the factors associated with these disorders, their impact on the children's schooling, social functioning, their coping mechanisms and finally to suggest interventions to improving the orphans' welfare.

Methods and materials

The study was conducted in the Rakai District of Uganda, purposively selected because it has had the longest, severest and biggest scourge of the AIDS epidemic in Uganda (UNAIDS, 2000). It employed a comparative analytical method, using the unmatched case-control study design. The cases were 210-orphaned primary school children and the controls were 210 non-orphan children in the same schools. Two schools were studied namely: Kibale Primary School, a funded Non-Governmental Organization (NGO) school and Hope Learning Center, a government-supported school under the Universal Primary Education (UPE) program.

In each school a registry of all the students in primary classes 3 to 7 was obtained and the children were then divided into two groups; the orphan group and the non-orphan group. The children were aged $\geq$ 10 years. The two groups (orphans and non-orphans) were then each assigned numbers from 1 to the last child in each group. Using a table of random numbers, the required number of orphans and non-orphans in each school was then recruited. The sample size was determined using EPI-INFO computer software for unmatched case-control studies.

The study was ethically and scientifically cleared by the Uganda National Council Of Science and Technology (UNCST). Permission to conduct the research was obtained from the Rakai District Administrative authorities and from the respective school authorities, the latter who also arranged the most appropriate times for the interviews. Letters of invitation to participate in the study were sent out to all the parents/guardians of the children in the two schools . Those parents / guardians who responded to the invitation were explained the purpose and details of the study. Voluntary assent to participate in the study was then obtained from those children whose parents/guardians had voluntarily consented for them to participate in the study.

Quantitative and qualitative data were collected. During quantitative data collection, a two-stage interview procedure was used consisting of a screening interview and a diagnostic interview. First, the Teacher Administered Rutter Screening Children's Questionnaire was used for the assessment of emotional and behavioral problems (psychological distress) in the child (Rutter, 1967). Then a diagnostic interview

was carried out by the investigating psychiatrists on any child scoring above 9 on the Rutter's scale for specific diagnostic assessment using a questionnaire based on ICD-10 Research Diagnostic criteria using the standardized ICD 10 symptom checklists for specific psychiatric disorders. Demographic data was obtained from all children by the research psychologists who also administered a caretaker questionnaire to collect the data on the caretakers' characteristics. The children's social functioning was assessed using a modified version of Cooper's Self Report Measure of Social Adjustment scale (Cooper et al, 1982). This instrument has 38 items which are sub-divided into 6 sub-scales denoting functional adjustment/getting along with; school, housework/ work at home, social and leisure activities, parent/ guardian, siblings and the family unit. The possible responses for each item were; 'occasionally, not at all', 'about half of the time,' 'all the time,' which were scored as; 0, 1, 2 respectively in this study. The average sub-scale scores were obtained by totaling together the scores for the individual items in a sub-scale and then dividing this by the number of items in that sub-scale. The total social adjustment score was calculated by adding up all the mean scores of the different sub-scales and dividing this by the number of sub-scales (6) with the possible total scores of between 0-76. This instrument was modified for children by substituting adjustment to "work" with adjustment to "school".

Psychological distress in the children for this study was assessed using the Rutter's Teacher Administered Children's behavioural questionnaire for completion by teachers (Rutter's, 1967). This questionnaire has 26 items with the possible responses being; 'doesn't apply,' 'applies somewhat' and 'certainly applies' scored as; 0,1,2 respectively. This is a teacher administered questionnaire with scores of 9 and above suggestive of significant psychopathology with the possible total scores of 0-52.

The specific psychiatric diagnoses in the respondents were assessed using ICD-10 Research Diagnostic Criteria. These criteria are derived from the standardized symptom checklists for the International Classification of Mental and Behavioral Disorders –Version 10 (WHO, 1992. Geneva, Switzerland). These checklists provide for the specific WHO internationally agreed upon criteria for defining/describing specific psychiatric disorders and give specific cut off points for diagnosis of each psychiatric disorder. They have been used extensively widely in psychiatric research in different cultural settings worldwide.

The qualitative part of the study involved both key informant interviews and focus group discussions (FGD). For the key informant interviews, the following persons were interviewed; head teachers, health workers from the local dispensary, district education officer and district child probation and welfare officer. Focus group discussions were held with the following groups: teachers, children (both orphans and non-orphans but in separate groups), caretakers and parents. The purpose of the qualitative information was to gain an understanding of the general contextual factors associated with the psychological problems of the orphans, the coping mechanisms as well as their day to day needs.

Quantitative data was analyzed using EPI_INFO and SPSS computer software. This involved the generation of frequencies, means and cross tabulations using the Chi Square Test, Fischer's Exact Probability Test and t-tests. Multivariate analysis and logistical regression was used to assess for associations and correlations. The outcome variable was Rutter's psychological distress score of ≥ 9. The level of significance was set at a p-level of = 0.05. Pair-wise comparisons were done for the two groups. Qualitative data was analyzed using the thematic approach to identify general trends.

Results

The socio-demographic characteristics of the children

The interviewed children in both groups were between the ages of 10-13 years and most,(54%), were girls. In the orphan group. paternal orphans were 49.7%, double orphans 31.5% and maternal orphans 18.8%.

Amongst the orphan group, the reported causes of death of the parents for the father and mother included; confirmed AIDS/ presumed AIDS (41.9% & 43.2% respectively); Non-AIDS illness (17.5% & 9.1%, respectively); accidents (6.2% & 2% respectively) and undetermined causes (34.4% & 55.5% respectively). More orphans were in the upper school classes (primary 5 to 7) compared to the non-orphans who were mostly in the lower school classes of primary 1 to 4 (51.5% and 38.8% respectively, p = 0.02) Lastly; the orphans were generally older (>14 years = 22.8% & 15.2%, respectively, p=0.07).

Most of the caretakers of the orphans were between the ages of 20-40 years (55.2%) and so were the parents of non-orphans (61.4%). There were however significantly more elderly caretakers (above 60 years) for the orphans than for non-orphans (16.0%, & 4.0% respectively, p=0.03). Also, significantly more of the caretakers for the orphans were widowed compared to those for the non-orphans (44.3%, & 4.6%,

Table I:The socio-demographic characteristics of the children

Variable	Orphan		Non-orphan		χ^2	p-level
	Number	%	Number	%		
Age (years):	(N=197)		(N=164)			
10-13	152	77.2	139	84.8	3.31	0.07
14-18	45	22.8	25	15.2		
Gender:	(N=194)					
Male	89	45.5	74	45.7	0.01	NS
Female	105	54.1	88	54.3		
Orphan-hood:	(N=197)		(N=164)			
Paternal	98	49.7	-	-		
Maternal	37	18.8	-	-	-	-
Both	62	31.5	-	-		
None	-	-	164	100		
Living With:	(N=192-)		(N=135)			
Both parents	0	0	92	67.6		
Single Parent	94	49	22	16.2	180.8	0.00*
Relatives	83	43.2	3	2.2		
Non-relatives	6	3.1	1	0.7		
Institution	9	4.7	17	12.6		
Mother's cause of death (n=99)						
Aids/presumed AIDS	43	43.2				
Non-Aids	9	9.1	-	-	-	-
Accidents	2	2.0				
Undetermined	55	55.5				
Father's cause of death (n=160)						
Aids/presumed AIDS	67	41.9				
Non-Aids	28	17.5	-	-	-	-
Accidents	10	6.2				
Undetermined	55	34.4				
Present Class:	(N=194)		(N=160)			
≤ Primary 4	94	48.5	98	61.2	5.79	0.02*
≥ Primary 5	100	51.5	62	38.8		
Tribe:	(N=194)		(N=162)			
Baganda	153	78.9	123	75.9	8.98	NS
Non-Baganda	41	21.1	39	24.1		
Religion:	(N=194)		(N=162)			
Catholic	84	43.3	82	50.6		
C.o.U.	34	17.5	26	16.0	4.48	NS
Moslem	10	5.2	13	8.0		
Born Again	66	34.0	41	25.3		

* Statistically significant difference, P£0.05

respectively, p<0.00), the latter were mainly married or cohabiting (79.6%). There were significantly more female caretakers for the orphans compared to those for non-orphans, (75%, & 57.1%, respectively, p=0.00). Lastly, more caretakers of orphans than those of non-orphans did not have any formal education (18.3%, & 8.8% respectively, p=0.04). The majority of the caretakers in both categories were employed as peasant farmers (71.2% & 65.5% respectively, but p=0.90).

The emotional and behavioral problems in the children

The emotional and behavioral problems, as well as the specific psychiatric disorders and major psychiatric psychopathology, of the orphans and non-orphans were compared. Tables III and IV below show these findings.

Table II: Emotional and behavioral problems in the children (Rutter Scores)

Variable	Orphan		Non-orphan				
Emotional & behavioral problems	**Number (N=176)**	**%**	**Number (N=123)**	**%**	**X^2**	**df**	**p-value**
Restlessness, running about or jumping up and down	51	28.8	37	30.1	0.06	1	0.81
Truant from school	32	18.1	24	19.5	0.10	1	0.75
Squirmy, fidgety	58	32.8	34	27.6	0.90	1	0.34
Often destroys own or other's belongings	33	18.6	31	25.2	1.86	1	0.17
Frequently fights with other children	33	18.6	26	21.1	0.29	1	0.59
Not much liked by other children	52	29.4	41	33.3	0.53	1	0.47
Often worried, worries about many things	70	39.5	49	39.8	0.00	1	0.96
Tends to do things on his own-rather solitary	91	51.4	66	53.7	0.15	1	0.70
Irritable	71	40.1	50	40.7	0.01	1	0.93
Often appears miserable, unhappy, tearful or distressed	74	41.8	53	43.1	0.05	1	0.83
Has twitches, mannerisms or tics of the face or body	34	19.2	25	20.3	0.06	1	0.81
Tends to be absent from school for trivial reasons	51	28.8	46	37.4	2.45	1	0.12
Is often disobedient	33	18.6	25	20.3	0.13	1	0.72
Has poor concentration or short attention span	93	52.5	59	48.0	0.61	1	0.44
Fearful of new things or new situations	82	46.3	64	52.0	0.95	1	0.33
Fussy or over particular	37	20.9	20	16.3	1.02	1	0.31
Often tells lies	60	33.9	39	31.7	0.16	1	0.69
Has stolen things on one or more occasions	8	4.5	6	4.9	0.02	1	0.89
Has wet or soiled self at school this year	15	8.5	13	10.6	0.38	1	0.54
Often complains of pain or aches	90	50.8	68	55.3	0.57	1	0.45
Has tears on arrival at school or refused to enter building	22	12.4	15	12.2	0.001	1	0.95
Stutters or stammers	18	10.2	6	4.9	2.76	1	0.10
Has other speech difficulty	18	10.2	6	4.9	2.76	1	0.10
Bullies other children	23	13.0	13	10.6	0.40	1	0.53
Rutter's mean score	7.99 (SD=5.70)	7.96 (SD=5.32)			t=0.05		0.96
Rutter Caseness (score > 9)	80	45.1	45	36.5	2.73	1	0.10

Table III: Specific psychological problems/disorders in the children

Variable	Orphan Number	%	Non-orphan Number	%	X^2	Df	p-level
Psychiatric diagnoses	**(n=72)**		**(n=49)**				
Depression	5	6.9	1	2.0	0.60	1	0.43
Anxiety	12	16.7	6	12.2	0.45	1	0.50
Somatisation	12	16.7	8	16.3	0.00	1	0.96
Epilepsy	2	2.8	0	0.0	-	-	-
Use of alcohol	5	6.9	1	2.0	0.63		0.43
Personality disorder							
Conduct disorder	1	0.6	0	0.00			1.00[t]
Oppositional defiant personality disorder	13	1.4	3	2.5	3.32	1	0.07
Ever had an episode of unusual or bizarre behavior (psychosis)	4	2.3	4	3.3	0.02	1	0.88
Other psychological Problems							
Finding life unfair, difficult	49	28.2	21	17.2	4.76	1	0.03*
Ever had suicidal wishes	14	8.3	6	5.1	1.09	1	0.30
Have suffered past serious disease	46	26.4	27	22.1	0.72	1	0.40
Currently has a physical complaint	58	33.3	34	27.9	1.00	1	0.32
Have friends who have had sex	47	27.0	24	19.7	2.12		0.14
Have ever had sex yourself	21	12.1	13	10.7	0.14		0.71
Have had past rape or forced sex	(n=21) 5	23.8	(n=13) 1	7.7	0.54	1	0.05*

*Statistically significant difference at p-level ≤ 0.05

As shown in tables II and III above, many, children, both orphans and non-orphans, had significant levels of emotional and behavioral problems. There were more orphans, (but not significantly so) with a Rutter score of >9 than non-orphans (45.1% & 36.5% respectively, p=0.10) indicating psychological distress.. Similarly the orphans seemed to report more depression (6.9% & 2.0%, respectively, p=0.43), anxiety (16.7% & 12.2%, respectively, p=0.50) and use of alcohol (6.9% & 2.0% respectively, p=0.43). The non-orphans were more daring and defiant (1.4% & 2.5%, respectively, p=0.07). All these differences, however, were not statistically significant between the two groups of children. Few children in either of the categories had major psychiatric diagnoses such as psychosis, major affective disorders or organic mental syndromes, and indeed there were no significant differences between the orphans and non-orphans in any of these. However significantly more orphans compared to the non-orphans reported finding "life unfair and difficult" (28.2% and 17.2% respectively, p=0.03) and more reported suicidal wishes (8.3% and 5.1% respectively but p=0.30). Lastly, significantly more orphans reported past sexual abuse (rape) compared to non-orphans (23.8% and 7.7% respectively, p=0.05). The social functioning of the children within their specific families was assessed using a modified version of Cooper's Self Report Measure of Social Adjustment and their mean scores on the various parameters are shown in Table IV below.

Social and school adjustment amongst the children

Functioning within the family unit was the only social domain where the orphans and the non-orphans were significantly different. Using Cooper's Modified Social Adjustment Scale, getting along with other members of the family rated worse in the orphan group compared to the non-orphans (Coopers Mean Score 0.97, SD=1.3 Vs 0.71, SD= 1.21, respectively; p= 0.05).

There were no significant differences between orphans and non-orphans in terms of the individual school classes being attended, although orphans tended to be older and in higher school classes (p=0.09) due to delays caused by mourning interruptions in their schooling. Significantly more orphans than non-orphans played on the school sports teams (p=0.03) and held positions of leadership in the school (p=0.05). The orphans' and non-orphans' academic performance was not significantly different.

The factors correlated with caseness, (defined as Rutter's score > 9), were analyzed using multivariate analysis. The considered factors were age, gender, living arrangements, education level (school class), academic performance and social functioning. Table VI below shows the results.

Table IV: Social functioning (Coopers' Mean Score) and schooling activities in the children

Variables	Orphans	Non-orphans		t-Test	P-value
Social Functioning					
Coping well with:	**Mean Score**	**ST. D**	**Mean**	**ST.D**	
School work	4.41	1.84	4.21	1.62	1.06	0.29
Housework	4.22	1.72	4.22	1.48	-0.02	0.98
Social and leisure	7.28	3.21	7.25	2.58	0.07	0.95
Getting along with:						
Parent /caretaker	9.86	4.05	10.28	3.79	-0.96	0.34
Sibling	5.20	2.69	5.01	1.40	0.80	0.43
Family unit	0.97	1.30	0.71	1.21	1.97	0.05*
Schooling activity						
Class attended						
Primary 3	51	29.3	48	38.7		
Primary 4	34	19.5	26	21.5		
Primary 5	37	21.3	24	19.8	7.96	0.09
Primary 6	31	17.8	18	14.9		
Primary 7	21	12.1	5	4.1		
Plays school sport	151	87.3	102	84.3	0.53	0.47
Is on school team	87	50.3	44	37.3	4.79	0.03*
Leadership position	52	29.9	24	19.7	3.92	0.05*
Academic performance						
Good	133	79.2	87	77.7	0.09	0.77
Poor	35	20.8	25	22.3		
Often misses school	51	28.8	46	37.4	2.45	0.12

* Indicates significant difference at p-level £ 0.05

Factors associated with psychological problems, academic performance or social functioning amongst the children

The children's academic performance, was significantly associated with emotional and behavioral problems. Those children with significant psychological problems fared badly academically in both groups ($P < 0.00$). Scoring above 9 on the Rutter Scale (i.e. Psychological distress caseness) was significantly associated with poor academic performance in both groups of children ($P < 0.00$). There was, however, no correlation between the child's age, gender, class level, or the type of school being attended (UPE or NGO) and having a psychological problem.

In terms of the children's social adjustment, (Cooper's scale scores), the type of school was significantly correlated with social functioning ($p=0.02$) with the non-orphan children in the NGO-sponsored school of Kibale socially functioning better. Playing sports at school was also significantly correlated with the child's social functioning in both the orphan and non-orphan children ($p=0.007$ & $p=0.02$ respectively). Having suicidal wishes was significantly correlated with social functioning ($p=0.01$) with the orphaned children having significantly more suicidal wishes.

In relationship to their caretakers, the following characteristics were not found to be significantly associated with the emotional or behavioral problems in the children: the caretakers' age, gender, level of education, employment status or who was the caretaker they lived with.

Qualitative findings - results of focus group discussions (FGD) and key informant interviews:

These investigated the contextual factors operating in the lives of orphans, the coping mechanisms employed by the orphans, their families, schools, and the community at large as well as the needs of the orphans as perceived by the orphans themselves, their caretakers, teachers or the community at large. Table V below summarizes these findings:

In the qualitative interviews, the results of Focus Group Discussions and Key Informant Interviews, revealed that more of the orphans were generally sad, needy, delicate, isolative and had reduced confidence and often lacking self-esteem. The orphans' identified needs included the need for love and protection, identity, security, play, schooling, food and shelter. These orphan children often lived in big families and faced the additional problems of reduced family resources, material scarcity,

TableV: Summary of focus group discussions (FGD) and key informant interviews:

FGD - group	Item / topic	Orphans	Non – orphans
Children	Mostly living with	Widowed mothers, Other Relatives	Both Parents
	Recalled Happiest Moments	Both parents alive Feast days Getting material things Being praised by teachers	Outings Visitations Parents being around
	Recalled Saddest Moments	Parental death Sibling death Lacking scholastic materials Being excluded/ not belonging	Parental separations Being reprimanded Being ill
	Commonly Encountered Problems	Lack of material necessities Being hungry Reminding of orphan status Changing homes No one to give encouragement	Corporal punishment Fear of Exams Being disciplined / reprimands No problems encountered
	Coping Mechanisms	Self-pity, crying Isolating / Social withdrawal Praying , Self determination Wishing to run away / die Many thoughts / worrying	Playing with friends Trickery Reporting problem to parent.
Teachers	Problems mostly seen	Too sensitive, Cry easy, worry Clinging, Clamour attention Difficult to please / satisfy Often hungry, unkempt Skin infections, No clothes Self-isolate, Often unhappy Poor concentration Daydream Refuse to go home. Studious. Lack scholastic materials Lack parental guidance.	Playful Test limits Defy authority Mostly happy Easy to please
	Suggested solutions	Strong PTA School Counselors & Nurses School Meals (b/fast & lunch) Orphan – child sponsorships Govt. to better fund schools	Parenting education and support
Parents / guardians (caretakers)			
	Identified Problems	Overwhelmed by numbers Always sad, difficult to please Always needy / complaining Lack confidence / self-esteem Easily swayed by outsiders Easily turn delinquent (streets) Need delicate handling No Govt. support	Difficult to raise children these days, but no particular problems. Generally OK. Will listen to parents
	Suggested Solutions	Social Workers & counselors Govt. protection of orphans Financial support to families. Vocational schools for early school leavers Employment & food security	Better funding of schools and better salaries to teachers.

TableV continued

FGD - group	Item / Topic	Orphans	Non – orphans
Key informants	Commonly observed problems	Often neglected, abused and exploited (labor, sex, property) Lack / have elderly caretakers. No basic needs (food, shelter) Need emotional support (love, care & encouragement) Have Increased family poverty Increased stigma Leave school early :Teenage pregnancy, early marriage , street life & delinquency.	School fees problem More funding for education.
	Suggested solutions	Sex & Health education to all children + Social & Vocational skills & for orphans, cultural , identity, moral, & spiritual empowerment. Special Teacher & Parenting / guardianship education . Govt. protection of orphans Govt. support of schools & families with orphans. - Increased community & political awareness of orphan problems	Giving teachers education in child psychology and counseling.

poverty, stigma and frequent relocation from relative to relative. Caretakers found difficulties in looking after orphans, especially without government (financial) support and did not know what to do to make orphans happy. This was all in a context of no or inadequate organized community resources. At school, orphans were often described by their teachers as hungry, with poor hygiene, lacking scholastic materials and tending to isolate and keep to themselves. Despite all these problems, orphans were reported to work hard at their studies and their academic performance was at par with the non-orphans or sometimes better. In contrast to the orphans, the non-orphan children reported common Ugandan school childhood problems such as fear of exams and corporal punishments. However, a good number of them reported having no problems at all.

Discussion

This study found half of the orphans to be paternal orphans, 1/3 to be double orphans and 1/6 being maternal orphans with the most commonly reported cause of death of the parents being HIV/AIDS or presumed AIDS (>40%). These findings are in keeping with other findings in Uganda and point to the reality that most AIDS orphans are being cared for by female guardians/single parents. In this study 75% of the main caregivers of the orphans were female compared to only 57.1% for the non-orphans and who were mostly elderly, widowed women of peasantry occupations. Wakhweya et al, (2002) had similar findings. More orphan caretakers compared to those for non-orphans had no formal education. These factors point to the commonly reported observation that most orphans lived in situations of poverty and hardship.

Our finding of the mean Rutter Score of 7.99 (S.D = 5.70) for the orphans was not significantly different from that of the non orphans with a mean score of 7.96 (S.D = 5.39). However 45.1% of the orphans had a Rutter Score of >9 compared to 36.5% of the non-orphans. This finding showed that both orphans and non-orphans experienced psychological difficulties with no statistically significant difference between both groups. The lack of a significant difference between the orphans and non-orphans in their general psychological distress may be indicative of other factors at play in causing psychological difficulties for both the orphan and non-orphan children; most pointedly was the high level of poverty in this area of rural Rakai District. For example 71.2% of the orphans' caretakers compared to 65.5% for the non-orphans were all peasants by occupation. Studies done in Western countries without a similar confounding factor of poverty showed orphans to always have more psychological difficulties (Van Eerdewegh et al, 1982, Gregory, 1965, Worden, 1996). On the other

hand, other studies done in Uganda showed orphans to engage more in activities of economic survival (because of poverty) e.g. as prostitutes, street children or being involved in petty theft and trade or going into early marriage (Dunn et al, 1991; Nekesa, 1994). Our study was of school going orphans and did not explore those activities of the non-school going orphans who may have been involved in such trades.

In looking at the specific psychiatric diagnoses in the 2 groups of children, some notable differences emerged. First orphans compared to non-orphans had higher rates of psychiatric diagnoses. Although this difference was not statistically significant, the rates of psychiatric morbidity for the non-orphan group were similar to those expected in the general population but those for orphans were generally higher than expected for the general population. For example, the reported prevalence of depression in children in the general population is 2-6% with the higher figure being in adolescents (Fleming, et al 1990). In our study we found a rate of depression of 2% for the non-orphans in keeping with established literature but 6.9% for the orphans, a rate higher than what is expected in the normal population of children. In a recent study of depression in school children in Mukono District, Uganda, Nalugya (2004) reported a rate of depression of 2.7% (for depression and dysthymia). The presence of depressive symptoms in her study was associated with the child's loss of a parent due to HIV/AIDS. Similarly we found high rates for the orphans' use of alcohol at 6.9% compared to 2% for non-orphans. The reported rate of alcohol use for the general population of school children in Mukono District, Uganda was 1.6% (Nalugya, 2004). The trends for psychosis rates were similar for both groups and in keeping with general children population rates. Lastly, the non-orphans had a higher tendency to have oppositional (defiant) personality disorder compared to the orphans (2.5% & 1.4% respectively) suggesting that orphans were least likely to want to defy or question authority figures and were thus more submissive given their humbling situation.

In looking at some specific psychological difficulties, more orphans compared to non-orphans reported finding "life difficult and unfair" and more (8.3%) had had past suicide attempts compared to 5.1% for the non-orphans. Nalugya (2004) reported an attempted suicide rate of 5.6% in her general population of school children.. Our figure for the non-orphans was closer to this but higher in the orphans. There were no significant differences in reports of past or current "serious" physical disease indicating that both our orphans and non-orphans did not have associated major physical illnesses such as being HIV infected or having TB etc. In both the orphan and non-orphan groups, some children reported about friends they knew who had had sexual intercourse (27% & 19.7%) or that they, themselves had had sex (12.1% & 10.7%, respectively). However of the 21 orphans and 13 non-orphans who had had sex, 23% and 7.7% respectively reported having been raped or forced to have sex ($p=0.05$). Sexual and other forms of abuse of orphans have also been reported elsewhere (Musisi & Kinyanda, 2003; Wakhweya, 2002). This finding was also echoed in our qualitative results by key informants.

Various studies suggest that orphans always try to fit in with their new (adaptive) families but they often complain of being excluded, discriminated against and being stigmatized. In this study Coopers Mean score for social maladjustment in the family unit was higher for orphans than for non-orphans. This finding is in keeping with established literature. Finally, this study found that cases who had a Rutter score of >9 (indicating psychological distress) in both orphans and non-orphans, had poor academic performance; the only factor which significantly correlated with Rutter's caseness. This finding agrees with the literature that psychological difficulties or caseness (i.e. Rutter >9 in this case) cause poor academic performance in school children (Early et al, 2002). Being in the materially better provided NGO-school was associated with better social functioning in the children but not better academic performance and it did not protect them against psychological distress. Lastly, in this study, the orphans were found to be quite resilient and their academic performance was at par with the non-orphans and they often engaged in sports and positions of leadership in their schools.

Qualitatively the findings from FGDs and key informants gave the impression of orphans (compared to non-orphans) as an emotionally needy group, rather delicate to handle, lacking self-esteem and confidence and with a tendency to be exploited or abused. They also pointed to the difficulties caretakers and teachers experienced in looking after these orphans due to lack of resources, skills and no government material or financial support. The teachers felt that orphans were often hungry, unkempt, lacked parental guidance and lacked scholastic materials. These findings have also been reported by other researchers elsewhere (Bhargava & Bigombe, 2003; Nyambedha et al, 2003). There were no counselors in the schools to help the children, the teachers or

the families and the children lacked coping skills given the problems. There was a paucity of social support services in the community

Finally, it should be pointed out that the school-going orphans in this study were as physically healthy, as their non-orphan peers and their growth was not stunted. In an earlier study of HIV-seropositive children, 97% of whom were orphans, Musisi & Kinyanda (2003) reported high rates of major psychiatric disorders such as Depression. (41.5%), Anxiety (58.5 %), Psychosis (30.5%), Somatisation (18.3%), Suicide attempts (20%), Seizures (8.5%), Dementia (4.9%) and Mania (1.2%). Those HIV infected children also had many physical illnesses, had stunted growth and poor academic performance. Other researchers have had similar findings in HIV-infected children (Drotar et al, 1987; Epstein et al, 1986, Graham, 1986). Our findings in this study, would seem to suggest that without being HIV infected, orphans generally do not have major psychiatric disorders ,(such as major psychotic, affective or organic mental disorders), but rather psychosocial difficulties in coping with their day-to-day problematic lives. This was a major finding in this study with significant implications for intervention strategies. For example it meant that for intervention purposes, orphans should be divided in two major categories: those with and those without HIV-infection. The intervention strategies in each group would differ markedly i.e. with the HIV-infected orphans needing medical and psychiatric interventions (e.g. ARVs, physical treatments and psychotropic medications) in addition to psychosocial interventions whereas the latter would primarily need only psychosocial interventions both at school and in their families.

Limitations

This study was conducted in school going children between the ages of 10-18 years. It left out younger age groups and those not going to school for a variety of reasons including sickness such as HIV-AIDS itself. However, this served to eliminate confounding factors in the findings e.g. mental problems from the HIV/AIDS illness itself in the child. Lastly, Rakai District was the first and worst hit district by HIV/AIDS in Uganda. Findings here may not reflect the whole country, as other parts may be in the earlier phases of the epidemic.

Conclusions

School-going orphans, compared to non-orphans, reported more dissatisfaction with life and more psychosocial difficulties. They did not, however, have higher rates of major psychiatric disorders such as major psychotic, affective or organic mental disorders,. These orphans were more often likely to be emotionally needy, insecure, materially deprived; more likely to be exploited / abused/ neglected and more of them lived in situations of poverty, big families and hardship. There were no counselors in the schools to help the children in difficulty, or the teachers or the families. There was a paucity of social support services in the community.

Recommendations

The implications of our findings are that at present, there is no established official system to address the orphans' problems in the community and there are no social support services. The orphans' problems were primarily psychosocial and called for a need to establish a National Orphan Policy. This policy should make provisions for an Orphan Registry, for the legal protection of the orphan child, to ensure their schooling and for protection of their rights. It should ensure health care (mental and physical) for the orphans and establish an officially and legally defined child-guardian relationship. The policy should also provide for the setting up of a National Child Protection Agency to address the security needs of vulnerable children including orphans and those in 'trouble or danger' as child abuse/exploitation was quite evident. It should have branches in all the administrative areas of Uganda.

Counseling and Child Psychology should be taught to teachers, health care providers and parents/ guardians. All schools should have a child guidance counselor to help not only the orphans and other vulnerable children but also their caretakers and the teachers in dealing with the children. Families with orphans should be helped in terms of food security, income generation and counseling including information on the Rights of the Child, so as to be able to better look after their orphans.

Lastly there is need for more research to delineate the specific psychological and other problems faced by the caretakers of orphans in Uganda.

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