Health seeking behavior in Uganda; are orphans more disadvantaged?

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Abstract

According to Smart (2003) and Kaare (2005), a "*vulnerable child*" is anyone below the age of 18 years who is currently either experiencing or likely to experience lack of adequate care and protection. With the weakening of the family extension system which used to take care of orphans and other vulnerable children, it would not be surprising if orphans were found to have high levels of morbidity and poor health seeking behaviour. Thus the aim of this paper was to find out the relationship between OVCs and health outcomes as well as health seeking behaviour. The source of data was the 2005/6 Uganda household survey, UNHS (UBOS 2006).

Findings indicated that 38 percent of the children had been sick within the last 30 days prior to the survey and malaria was the main cause of illness accounting for 4 in 10 of children reported sick. Orphanhood did not explain morbidity but was a big determinant in health seeking behavior. Type of orphanhood affected a child being reported sick while poverty explained most of the difference in health seeking behavior thus those in urban places having sought services than those in rural areas.

The government should ensure improving the public health system to help the poor as many who did not seek services gave reasons indicating that the services are costly and long distance to health centres.

Key words: *Health Seeking, Orphans and Vulnerable children, Uganda*

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Introduction

According to Oberlander and Elverdan (2000), in health-seeking behaviour it is assumed that something, an unusual sign or any other irregularity is being interpreted as a sickness or a threat to the well-being of a person. Small children together with pregnant women are most vulnerable to falling ill especially in malaria endemic areas of Uganda. To children, the parents or other adults seeing these signs have to decide whether the case is trivial and, if it is not, whether the proper treatment can be sought. Since in the case of children a decision must be made by someone else, then orphaned children are expected to be vulnerable in health seeking practices.

The main driver for the health seeking behavior is the organization of the health care system. In many health care systems, there is tension between the public and private health sector (Shaikh & Hatcher, 2004). The private health sector tends to serve the affluent, thus the public sector resources should be freed for the poor. It has been documented that Orphans and other Vulnerable Children (OVCs) have limited assets in terms of health, education and social capital. Many studies have identified lack of food, nutrition and shelter as the critical survival problems for the Most Vulnerable Children-MVC (Charwe et al, 2004). The death of a mother may leave children vulnerable, even among those who continue to live with their father and who experience no reduction in income (Ntozi 1997). Existing evidence indicates that household expenditure on child-related goods, in particular, healthy foods, is lower when a child's birth mother is absent (Case, Lin and McLanahan 2000) and that mothers invest more than stepmothers in children's health (Case and Paxson 2001). The other evidence is given by Gertler et al (2003), indicating that deaths of fathers and mothers resulted in worse education and health outcomes for Indonesian children. Bishai et al (2003) also found that biological relatedness is an important predictor of the quality of care offered to Ugandan children. A study in Zimbabwe (Mutangadura, 2000) showed that households fostering maternal orphans had sold assets and switched from more expensive to cheaper commodities, and many households, especially in the urban areas, reported decreased food consumption and switched to cheaper foods.

The Zimbabwean Ministry of Health report of 2004 indicated that for all nutrition indicators, orphans were worse off irrespective of age and type of orphanhood. By type of orphanhood, the double orphans were worse off followed by the paternal orphans with maternal being the least affected among orphans. This can be explained by the fact that mothers have the responsibility of preparing and ensuring that children have eaten in a home.

In Africa, children whose parents die are doubly burdened, losing not only the attention, care and advice that a parent gives, but also access to household resources such as housing and land. As a result, orphaned children are deprived of the material, social and psychological support of one or more of their primary caregivers. Orphaned children are thus more vulnerable and potentially at increased risk of poor health (Ayieko 1997, WHO 2006). There are also many children who, though not orphans, are becoming vulnerable as a direct or indirect result of HIV and AIDS (WHO 2006).

Vulnerability and child morbidity and mortality

There are very few studies which analyzed the relationship between morbidity and mortality of orphaned and non-orphaned children. The mortality measure is more complicated because no vital statistics and reports are collected and published. Studies in West and East Africa show that children in non-biological parents' homes have problems. Bledsoe, Ewbank and Isiugo-Abanihe (1988) stated that fostered children among the Mende of Sierra Leone were experiencing higher mortality than other children because they were undernourished and had reduced access to modern medicine. In Uganda, the fostering of young children led to kwashiorkor due to loss of appetite among the Baganda (Gaber and Dean 1955).

Growth may be influenced by many factors. While we inherit our body type and potential size from our parents, lifestyles, nutrition, good health or sickness will also affect ones growth. The first of the Lancet's series on child development in developing countries estimated that more than 200 million children under five years fail to reach their developmental potential, therefore causing a high risk of intergenerational vulnerability (Grantham-McGregor et al as cited in Sanou et al. 2008).

The world Health organization (WHO) estimates that seeking prompt and appropriate care could reduce child deaths due to acute respiratory infections by 20 percent (Chandrashekhar et al 2006). In the same study, findings indicated that mothers were more likely to seek care when they perceived the illness as serious. Anderson et al 2001 cited by Chandrasherkhar et al 2006 states that the factors affecting the family's decision to seek care can be grouped into predisposing factors, enabling factors, health system factors and health beliefs about the childhood illness. Chukwuocha et al 2009 states that the choice of treatment source have been found to be influenced by accessibility, disease type and severity, patients gender and parents' educational level. Attitude towards providers of treatment is also important factor. In many cases, there is always self medication by patients especially if they have to reduce the cost of treatment.

Objective of the study

The main objective of the study was to find out if orphans had higher levels of morbidity than non orphans and the health care seeking behavior for children reported sick within Uganda. Specifically, the study looked at factors affecting child morbidity and health seeking behavior in Uganda.

Methodology

The source of data for this study was the 2005/6 Uganda National Household Survey (UNHS). The UNHS collected data on the illness within the household within the last 30 days prior to the survey and also health seeking practice.

Data was analyzed at three levels. First a description of the type of illness children suffered (morbidity) and if any help was sought (health seeking behavior) in the last 30 days prior to the survey. Secondly, bivariate analysis was run to find out if orphans had higher levels of morbidity and poor health seeking behavior than non-orphans. Other factors were also introduced to see if they could explain fully the differences in morbidity and health seeking behavior. At this level, the Pearson chi-square statistic was used to explain the relationship between the independent factors and morbidity and the health seeking behavior. Thereafter, two logistic regression models were run to predict the determinants of morbidity and health seeking behavior among children. The study considered only persons aged 0-17 years, an age bracket for children.

Results of the study

Child morbidity in Uganda

The 2006 Uganda National Household Survey (UNHS), had questions on illness of members of the household within the last 30 days. Table 1 shows that 38.5 percent of the children below 17 years had been ill within the last 30 days prior to the survey. This figure accounted for over 6 million children out of the 15 million children in the country. On the specific type of illness or symptoms, the results mimic the pattern portrayed by the general Ugandan population (MOH reports) in which the most common illness/symptom was malaria mentioned by more than 4 in 10 among children who were reported ill. Cough was also a big problem which affected 29 percent of the children followed by feeling hot and cold (20%), acute fever (10.4%) and general weakness (10%). The reminder of the symptoms/disease each individually accounted for less than 10 percent of the children who were ill within the last 30 days prior to the survey. Among those which were considered least, diarrhea (8.2%) and vomiting (9.6%) were also high.

Table 1: Sickness in the household within last 30 days and symptoms/disease

Had some illness within 30 days	Number (weighted)	Percent
Yes	6,071,815	38.5
No	9,682,275	61.5
Total	15,754,090	100.0
Symptom/disease		
Malaria	2,549,604	42.1
Cough	1,784,758	29.4
Chills -feeling hot and cold	1,265,325	20.9
Severe headache	863,138	14.2
Fever acute	629,468	10.4
Weakness	610,614	10.1
Vomiting	584,696	9.6
Diarrhea acute	499,139	8.2
Skin rush	474,574	7.8
Abdominal pain	411,001	6.8
Fever recurring	356,415	5.9
Difficulty Breathing	224,555	3.7
Wound	173,281	2.9
Diarrhea chronic	59,079	1.0

Sore throat	57,509	1.0
Fainting	33,774	0.6
Weight loss major	29,311	0.5
Fracture	27,614	0.5
Burn	19,064	0.3
Coughing blood	12,904	0.2
Genital sores	9,532	0.2
Mental disorder	11,375	0.2
Pain on passing urine	7,935	0.1

Morbidity levels by survival status of parents

The objective of the study was to find out if whether orphans had higher morbidity and poor health seeking behavior. Table 2 shows the proportion of children who were ill within the last 30 days by the survival status of their parents and among those who were sick, if some health seeking was sought (consulted someone professionally). Survival status of parents showed that children whose both parents were alive (non-orphans) had the highest proportion (39.5%) of children who were reported having been sick in the last 30 days prior to the study as compared to 33.4 percent among the orphaned children. The findings further show that the maternal orphans had the least proportion of children who were reported sick at (28.2%) followed by the double orphans (28.8%) while paternal orphans were 34.7 percent. It can be seen that irrespective of the type of orphanhood of the child, the proportion of children reported ill was less among the orphans than that among the non-orphaned children. The low proportion of orphans reported sick may be due to bias in reporting suh cases by the caretakers rather than assuming that these children were not sick. It is thus not a surprise that the proportion of maternal orphans who were reported sick were the least as it's the mothers or female caretakers who usually report sickness of the children within the household. However, on the issue of health seeking, a higher proportion of children with at least one of the parents alive sought medical care than the orphaned. Among those who were ill and both parents alive, 88.6 percent sought treatment/consultations. The least proportion of children whose caretaker did not seek consultation were the maternal orphans (82.8%). It therefore appears that health seeking behavior is negatively affected by lack of the mother because it is the mothers who seek health for their children. These findings are in agreement with Chukwuocha

et al (2009). All these findings were statistically significant except for paternal and non-paternal orphans.

Table 2. Parental survivorship by morbidity and consulted provider

	Suffered from illness		**Consulted someone**	
	Number	Percent	Number	Percent
Both alive	18,701	39.5	7,365	88.6
Only Mother dead	703	28.2	198	81.3
Only Father dead	2,016	37.1	743	88.6
Both parents dead	822	28.8	237	84.0
	p=0.000		p=0.002	
Non-Orphan	18,701	39.5	7,365	88.6
Orphan	3,541	33.4	1,178	86.4
	p=0.000		p=0.031	
Mother alive	20,722	39.3	8,108	88.6
Mother dead	1,525	28.5	435	82.8
	p=0.000		p=0.000	
Father alive	19,434	38.1	7,573	88.4
Father dead	2,840	34.7	981	87.5
	p=0.000		p=0.380	
Total	22,274	38.6	8,554	88.3

Morbidity by selected characteristics of the child

Table 3 displays data on morbidity of children by other selected characteristics of the child namely: age, sex, region, rural-urban residence and migration status. Although survival status of the parents was important in reporting whether the child was sick and whether the health provider was consulted, parental survivorship could be the only factor affecting child morbidity and health seeking behavior. It was important to look at the other characteristics of children which affected morbidity. According to the table, reported cases of sickness among children reduced by increasing age of the children. The proportion of children reported sick was highest among children aged 1 year at 66.5 percent. This reduced steadily to 24.5 percent among those aged 17 years. Similarly, the proportion of children whose caretakers sought health consultations decreased with increasing age. For the young children, 93.1 percent indicated that they consulted someone. This reduced to 83.2 percent among those aged 11 years. Also

observed was that a small proportion of children aged 6 years consulted someone. This needs explanation as this is the official age of primary one entry in Uganda.

By sex of the child, the proportion of girls (88.0%) and boys (88.6%) sick was almost the same so was to health seeking behavior. It is therefore possible that there is no discrimination in health seeking behavior in Uganda among children by sex.

There were regional variations on the sick children. Eastern region had the highest proportion of children who were sick with almost one in two within the last 30 days having reported sick. This may be so since the common form of disease was malaria and Eastern region is a malaria endemic area than any other regions in Uganda. On the other hand, the Western region which is a low malaria endemic area had the least proportion of children who were sick within 30 days preceding the survey. With these results, one can conclude that geographical factors dictate disease distribution in Uganda as indicated by MOH reports (2009). The most prominent form of sickness was fever/malaria and sickness within the last 30 days of the survey carried out during both the dry and wet season can be used to explain which areas are more malaria prone than others.

By rural-urban, children in the rural areas had a higher proportion of those who were sick compared to those in the urban areas but had lower proportion of those who sought consultation. These differences were significant. This implies that sickness and consultation are inversely related. Whereas more children in rural areas were reported sick, the health seeking behavior shows that still those in the rural areas were disadvantaged.

The last characteristic studied was the migration status of children. Migrant children had a very low proportion of those who were sick within 30 days preceding the survey. The reason for this low proportion may be because most of the migrant children were old and as seen above, the proportion sick reduced with increasing age of the child. However, there was no difference between migrant and non-migrant children on seeking for health services.

Table 3: Morbidity by child characteristics

	Suffered from illness		Consulted someone	
Age				
0	1,451	58.7	849	93.1
1	1,392	66.5	922	92.1
2	1,427	55.4	790	90.5
3	1,318	50.8	670	89.0
4	1,280	44.7	568	88.6
5	1,478	42.6	627	86.8
6	1,326	37.9	503	85.7
7	1,284	33.1	422	90.3
8	1,257	33.1	413	86.7
9	1,199	31.5	375	87.2
10	1,364	29.2	396	86.9
11	1,151	30.2	345	83.2
12	1,298	27.3	352	84.9
13	1,217	26.6	321	85.1
14	1,064	27.7	294	85.0
15	1,097	25.1	274	86.1
16	894	28.2	252	86.1
17	849	24.5	208	85.6
	p=0.000		p=0.000	
Sex				
Male	11,140	38.4	4,261	88.6
Female	11,206	38.7	4,320	88.0
	p=0.655		p=0.345	
Residence				
Central	5,828	37.5	2,183	84.4
Eastern	6,209	46.1	2,849	86.8
Northern	5,045	38.8	1,942	90.7
Western	5,264	30.6	1,607	93.5
	p=0.000		p=0.000	
Urban	4,378	34.17	1,490	90.6
Rural	17,968	39.61	7,091	87.8
	p=0.000		p=0.002	
Migration status				
Migrant	1,466	26.64	401	86.5
Non-migrant	20,880	39.41	8,180	88.4
	p=0.000		p=0.256	
Total	22,346	38.54	8,581	88.3

Reason for not seeking medical attention

Table 4 displays data on the distribution of children by reason for not seeking consultation. The most common reason given for lack of consultation was caretakers saying that the illness was mild mentioned by about half of those who did not seek consultation. Usually severity of illness is one of the proximate determinants in conceptual frameworks of health seeking behavior (Anderson et al 2001 cited by Chandrashekhar et al 2006). However, more than one in four did not make consultation because of cost. This is in agreement with what Ntozi (1997) found out that the greatest problem of orphaned children or caring households faced was lack of money. It should also be noted that though small, 8.5 percent did not seek consultation because the distance to the health facility was too far. Other reasons included: unavailability of drugs (3.0%), long waiting time, too busy caregivers (1.1%) and hard to get to facility (0.3%). These findings if studied further can explain the way different categories of vulnerable children are attended to in their families and households.

Table 4: Reason for not seeking consultation

	Number	Percent
Illness mild	492	48.1
Available facilities are costly	280	27.9
Facility too far	85	8.5
Drugs not available	30	3.0
Too busy/long waiting time	11	1.1
No qualified staff present	5	0.5
Hard to get to facility	3	0.3
Staff attitude not good	2	0.2
Facility is closed	2	0.2
Facility is destroyed	1	0.1
Other	83	8.3
Not stated	9	0.9
Total	1,003	100

Logistic regression analysis on the determinants of Morbidity and health seeking

The results from the logistic regression are presented in Table 5. Age was the first variable put in the model. From the table, it was observed that morbidity among

children (those aged 0-17 years) reduced with increasing age. A change in one year of age reduced the probability of one having been sick within the last 2 weeks by 10 percent odds. This would not be surprising since from available literature, it's the first five years of ones life which are most delicate. This drop in the probability of having been sick by age was significant with p=0.000. Similarly, health seeking behavior followed the same trend at low odds. A change of one reduced the probability by 4 percent odds.

On sex of the child, male children had just 1 percent less odds to have been sick compared to the female children and there was 7 percent more odds on health seeking. However, these differences were not statistically significant which confirms what was observed in the bivariate analysis using the chi-square test. This disagrees with some earlier studies like that of Muller et al (2003), Pokhrel et al (2005). However, these findings were consistent with those of Chandrashekhar et al (2006) and Pillai et al as cited Sudharsanam and Rotti (2007) revealed no gender difference in seeking treatment but male children were taken to the alternative system of medicine. This study did not reveal any gender difference in seeking treatment or in the nature of health system approached.

Place of residence showed that children in urban areas were less likely to have been reported ill by 17 percent less odds compared to their counterparts in the rural areas. In the contrary, among those who were reported sick, children in urban areas had 31 percent more odds to have sought services from a health provider. It can therefore be concluded that though higher proportion of children in rural areas get sick, they have poor health seeking behaviours. Schellenberg et al, also reported that there was association between socioeconomic status and health seeking behaviour; with low socioeconomic status people seeking frequently the government health care. Pillai et al have reported the same type of association, which is in agreement with the findings from this study if we take rural –urban residence difference as an explanation to some differences in the socio economic status of individuals. However, Mahendradhata et al (2008), in their study on TB patients in Indonesia found out the differences in health

seeking behavior was mainly determined by the rural-urban difference especially due to poor access to services within rural areas.

Uganda as a country though unofficially, it is divided into four statistical regions. These regions have a lot in common specifically on culture and also geographical proximity. Western region was taken as the reference category. Results show that there was no difference in health seeking behavior for children in Western region compared to their counterparts enumerated in the central region. Meanwhile, children enumerated in the Eastern and Northern had 40 percent and 27 percent more and less odds respectively to have been reported sick. On health seeking, children who were ill from Central and Eastern region had 41 percent and 30 percent less odds to have been taken to health provider respectively. However, children in the northern region had 55 percent more odds to have consulted a health service provider. This is strange in that Northern region is sparsely populated, it suffered a lot of insurgency and had few qualified service providers during the time of the survey. However, the main explanation for those in central and Eastern region not to have sought treatment could probable be due to self medication within the central region and the presence of many small drug shops and private clinics in the central and Eastern regions.

On the migration status of the children, migrant children had 11 percent and 9 percent less odds to have been reported sick or having sought services from health provider respectively. These differences were not statistically significant. According to the Research brief (2005) on migration and globalization and poverty, although migration may be negative for the health of migrants and their families, there is also the possibility of migration promoting well-being. In particular, remittances can help to shore up incomes and so allow access to drugs. It may also build social relations, enabling better care of the sick. This may include investment in health insurance and other forms of health protection by migrants. Migrants may move to healthier environments, where they can earn higher incomes and achieve higher levels of life expectancy. These findings in these have showed no differences hence migration was not a determining factor.

Table 5: Determinants of health seeking behaviour

	Morbidity			Health seeking		
	Coef.	Odds Ratio	P>z	Coef.	Odds Ratio	P>z
Age	-0.105	0.90	0.000	-0.046	0.96	0.000
Female						
Male	-0.013	0.99	0.656	0.067	1.07	0.327
Rural						
Urban	-0.192	0.83	0.000	0.269	1.31	0.006
Central	0.006	1.01	0.885	-0.532	0.59	0.000
Eastern	0.338	1.40	0.000	-0.359	0.70	0.000
Northern	-0.314	0.73	0.000	0.439	1.55	0.001
Western						
Married	0.162	1.18	0.602	1.133	3.11	0.183
Not married						
Migrant						
Non-migrant	-0.114	0.89	0.089	-0.093	0.91	0.580
Only mother dead	-0.071	0.93	0.429	-0.328	0.72	0.091
Only father dead	0.286	1.33	0.000	0.185	1.20	0.146
Both parents dead	0.177	1.19	0.045	-0.094	0.91	0.638
Both Parents surviving						
Spouse	1.225	3.40	0.002	0.508	1.66	0.543
Son/daughter	0.205	1.23	0.339	0.558	1.75	0.230
Grandchild	0.072	1.07	0.741	0.364	1.44	0.438
Step child	-0.059	0.94	0.814	0.349	1.42	0.526
Sister/brother	0.041	1.04	0.865	0.509	1.66	0.345
Nephew niece	-0.110	0.90	0.629	0.299	1.35	0.545
Other relatives	-0.044	0.96	0.846	0.506	1.66	0.315
Servant	-0.256	0.77	0.508	-0.157	0.85	0.849
Constant	0.257		0.254	2.041		0.000

It has been documented that orphans are the most vulnerable children among all children. However, the vulnerability of orphans varies with the type of orpanhood. Findings from this study may confirm some of the studies.

All the above variables were put into the model to predict factors that affect a child having been reported sick and health seeking behaviour of the children who were sick.

Conclusion

The morbidity and health seeking behavior analysis produced consistent and similar results. The claim that orphans were the most vulnerable children in terms of morbidity did not arise based on these findings. Although not significant, maternal orphans were slightly worse off than paternal orphans. The analysis further found that poverty seemed to be the leading cause of poor health outcomes in terms of high morbidity and poor health seeking behaviour.

Morbidity levels were found not to be homogeneous across the different socio-economic characteristics of the children. For example, orphanhood did not make children more vulnerable to disease than non-orphanhood. However, good health seeking behavior depended much on the survival status of mothers.

Although rural areas had higher levels of children reported sick, they had low proportion of the sick who sought services of a professional health provider

Recommendation

The results from the study point to the fact that poor maternal knowledge of the danger signs of childhood illness warrants the need for a complementary introduction of community based integrated management of childhood illness programmes to improve family's care seeking behavior and their ability to recognize danger signs of childhood illness. There is also need for the Ugandan public health system to be designed to help the poor especially those in the rural areas.

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