The orphan status of HIV/AIDS infected children in Sokoto, north western Nigeria

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Abstract

Background: Sub-Saharan Africa bears the highest burden of the HIV/AIDS pandemic with most children infected vertically. Some of these infected children bears additional burden of losing one or both parents to the disease- thus, exacerbating a myriad of deprivations.

Objectives: To determine the prevalence, socio-economic and health status of orphans among HIV-infected children in Sokoto.

Methods: A cross-sectional study conducted among HIV-infected children attending the pediatric HIV clinic, UDUTH, Sokoto between June and October, 2018. The socio-economic status was determined using Oyedeji's classification, while the health status of orphans was determined using their history of previous admission in the last 1 year and nutritional status. Data was analyzed using SPSS version 22. Statistical significance was taken at 0.05.

Results: One hundred thirty-eight HIV positive children were studied, 57 (41.5%) were orphans with 30 (52.9%), 18 (32.4%) and 8 (14.7%) being paternal, maternal and double orphans respectively. The modal age was 10 years with 32 (55.9%) of orphans above the age of 10 years. M:F ratio approximately 1:1. Mother was the main caregivers in 25 (44.1%) cases. Forty (32.4%) of the orphans' care givers were of lower socio-economic status (p=0.60). Twenty-three (40.4%) of the orphans had fallen ill warranting admission ≥3 times in the last 1 year (p=0.0001). Twenty-one (36.8%) of the orphans were found to be malnourished (p=0.0001).

Conclusion: The prevalence HIV/AIDS orphan was high and majority was paternal orphans with a poor socioeconomic background and a poor health status. This underscores the need for supportive care especially in our society.

Key words: Orphan, Children, HIV/AIDS, Socio-economic, Health, Status.

Introduction

HIV infection is a public health problem facing the world. The global prevalence of HIV has increased from 31 million in 2002 to an estimated 37.9 million as at end of 2018, of these 1.7 million are children aged less than 15 years. Sub-Saharan Africa bears

the highest burden of the HIV/AIDS pandemic with about 25.6 million with the infection resides in sub-Saharan Africa.[1] Most children in the region get unduly infected following transmission of the virus from their parents. Some of these infected children bears additional burden of losing one or both parents to the disease- thus, exacerbating a myriad of deprivations.

The Joint United Nations Program on HIV/AIDS (UNAIDS) has defined an orphan as a child under 18 years of age whose father (paternal), mother (maternal), or both parents (double) have died as a result of HIV.[2] There are paternal, maternal or double orphan. This is a massive negative impact of HIV/AIDS in adult on the survival of a child. This group of children is vulnerable as a result of loss of a parent. As a result they are prone to several factors which include worsening poverty level, loss of family and identity, inadequate adult support, increased risk of labour and sexual exploitation, fewer opportunities for education, loss of access to health care, under nutrition, and homelessness and vagrancy.[3,4]

Parental death can impact negatively on various aspects of the development of a growing child. The loss of any of the parents can result in loss of shelter, non-enrolment in school or even school drop-out, poor health outcomes, undernutrition, abuse and stigmatization.[4-6] Following a parental death, older children may be expected to take up paid employment and care for younger siblings. The ability of bereaved children to continue in school depends on households' resources and the public support for education.[7] Surveys carried out among orphans in Uganda and Malawi showed that they were more likely to have higher school absenteeism rates than non-orphans.[8]

In 2015, an estimated 13.4 million children and adolescents aged 0-17 years are

orphaned by HIV/AIDS worldwide.[9] More than 80% of these children were living in sub-Saharan Africa with a large percentage in the badly affected by the epidemic such Zimbabwe and South Africa having 74% and 63% of these orphaned children respectively.[9] In the same year, it was reported that approximately 6% of Nigerian children under the age of-18 years had lost one or both parents to chronic illness among adults and the most common cause of parental death was HIV/AIDS.[10,11] The parental death may lead to social and economic vulnerability of their surviving children in addition to healthcare challenges. These children are more prone to ill health than children in more secure circumstances, have less access to health care and miss meals more frequently, and are more likely to be absent in schools.[12,13]

Studies have demonstrated the huge number of orphans from HIV/AIDS and their predicaments but few studies on the orphan status of HIV infected children especially in Nigeria and none in this locale. Prevalent rates of 36.4% and 36.3% were reported by Musa et al[14] and Oladokun et al[15] in Ibadan and Zaria respectively. In a study among children in Zimbabwe, orphans were found to have recently suffered from acute respiratory infections, diarrheal disease and stunting.[6] Girls were found to be especially predispose to sexually transmitted infections through greater physiological susceptibility.[16] Parental loss can distort the physical and psychological development of a child and can leads to sexual and economic exploitation especially among the older children.[17]

No study on orphan status of HIV infected children has been conducted in our locale despite the burden of the disease in the community and the level of poverty and destitute in the locality. Background knowledge of the prevalence of orphaned HIV infected children would help improve

our understanding of the magnitude of the problem in our locale. This would also help in the provision of much needed support to care for them. This study was conducted to document the prevalence, socio-economic and health status of orphans among HIV-infected children seen in Usmanu Danfodiyo University Teaching Hospital (UDUTH), Sokoto.

Methods:

A descriptive cross-sectional study conducted among HIV-infected children attending the Paediatric HIV clinic, UDUTH, Sokoto between June and October, 2018. The hospital is a tertiary health facility located in Sokoto, the Sokoto State capital, Northwest Nigerian. It offers among other health care tertiary services, paediatric HIV care and support services, prevention of mother-to-child transmission services. It serves the people of the state, neighbouring Zamfara, Niger, Kebbi states and Niger and Benin Republics.

Ethical permission was obtained from the ethics and research committee of UDUTH, Sokoto and informed consent obtained from caregivers; additionally assent was obtained from children older than 7 years who participated in the study.

A child is defined as an orphan if he or she has lost either or both parents.[2] Those who lost only the mother, father or both are classed maternal, paternal or double orphan respectively. The educational and occupation status of the caregivers, history of ill health or hospital admission in the last 1 year, weight and length (those aged 2 years or less) or height (those aged more than 2 years) were documented. The socio-economic status was determined using Oyedeji's classification[18] and the nutritional status was determined using WHO[19] classification of malnutrition. The weight-

for-length/height-z-score tables were used for under - 5s and BMI tables for those above five years. Wasting was defined as weight for length/height < -2SD/z-score and severe wasting as weight for length/height < -3SD/z-score. The health status of the orphans was determined using their history of ill health in the last 1year and the nutritional status. Data was analyzed using SPSS version 22. Statistical significance was taken at 0.05.

Results:

A total of 138 HIV positive children were studied. There were 93 (67.4%) and 45 (32.6%) with 94 (68.1%) from lower socio-economic status as shown in Table 1. fifty-seven of these HIV infected were 57 orphans giving a prevalence of 41.5%. The mean age of the orphans was 8.3 ± 3.8 years (age range of 15 months – 15 years). The modal age was 10 years with 32 (55.9%) of the orphans above the age of 10 years. There were 30 (52.9%) males and 27 (47.1%) females with a M:F ratio of approximately 1:1 as shown on figure 1. The paternal orphans were 30 (52.9%), maternal orphans 18 (32.4%), and double orphans were 8 (14.7%) as shown in figure 2. Twenty-five (44.1%) of these orphans were cared for mainly by the mother, 20 (35.3%) by the members of the extended family and 12 (20.6%) by the father as depicted on Table II. Forty (70.2%) of the care givers were of lower socio-economic status as shown on Table 1. All the orphans studied were enrolled in school. Twenty-three (41.2%) of the orphans had fallen ill warranting hospital admissions in the last one year but none reported current illness or sexual abuse. The causes of ill health were malaria in 15 (65.2%), diarrhoeal disease in 7 (28.1%), severe acute malnutrition and pneumonia in 5 (21.7%) orphans each. Twenty-one (36.8%) of HIV infected orphans were

found to be malnourished with severe form seen in 5 of the orphans (see Table 2).

Table 2: Demographic Characteristics of Orphans among HIV-Infected Children in UDUTH, Sokoto.

Characteristics	Number (%)
Age (years)	
≤ 5	8 (14.1)
5.0 – 10.0	17 (29.8)
10.1 – 15.0	32 (56.1)
Socio-economic Status	
Upper	1 (1.8)
Middle	16 (28.1)
Lower	40 (70.1)
School Enrolment	
Secondary	17 (29.9)
Primary	40 (70.1)

Table II: The Caregivers of Orphans among HIV-Infected Children in UDUTH, Sokoto.

Caregivers	Number (%)
Mother	25 (43.8)
Extended family	20 (35.1)
Father	12 (21.1)
Total	57 (100)

Table 3: Nutritional Status of Orphans among HIV-Infected Children in UDUTH, Sokoto.

Nutritional Status	Number (%)
Normal	36 (5.9)
Obese/Overweight	-
Moderate Undernutrition	16 (14.7)
Severe Undernutrition	5 (70.6)

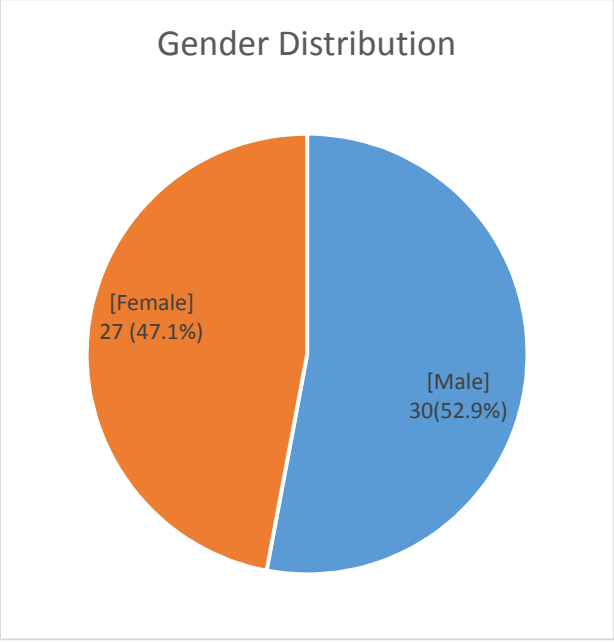

Figure 1: Gender Distribution of Orphans among HIV-Infected Children in UDUTH, Sokoto.

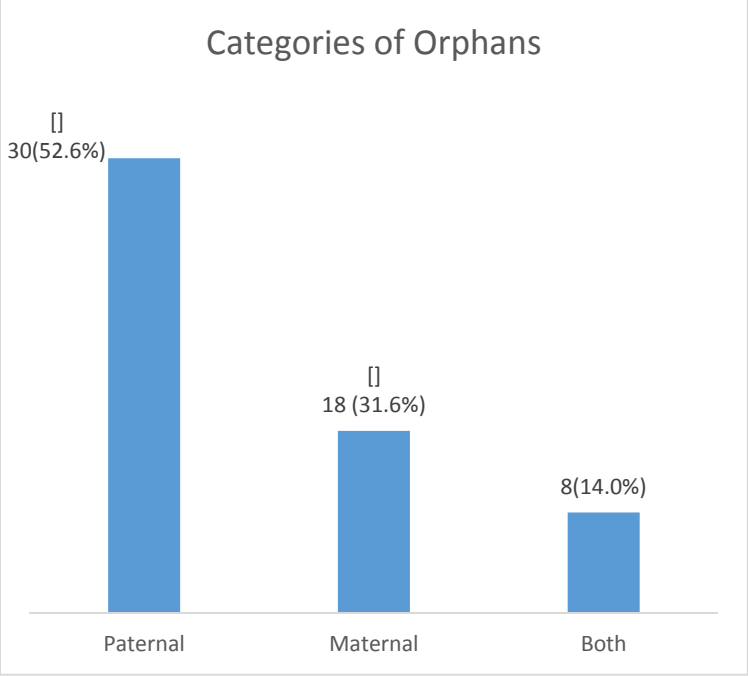

Figure 2: Categories of Orphan among HIV-Infected Children in UDUTH, Sokoto.

Discussion

The study has demonstrated the pattern, socioeconomic and health statuses of orphans among HIV infected children in Sokoto. The prevalence this study is 41.5%. This is similar to that reported by Kamali et al[20] and Bhattacharya[21] and colleagues among Ugandan and Indian HIV infected children where the prevalence rates were 43% and 49.3% respectively but however higher than those reported from Zaria[14] and Ibadan,[15] Northwest and Southwest Nigeria respectively. This shows the effect of the HIV pandemic on different aspect of human endeavours. The rate of orphan implies the high level of mortality among the adult population of the community and socio-economical and health vulnerabilities of these children. This also poses a challenge or threatens the child's survival.

Majority of orphans in our study were paternal orphans, maternal and double orphans accounted for 32.4% and 14.7% respectively. This is similar to a study by Musa et al,[14] in Zaria, Nigeria, Kamali et al[20] in rural Uganda, Vermaak et al[22] in South Africa and Bhattacharya[21] and colleagues in India but in contrast to Oladokun[15] and colleagues in Ibadan who reported more maternal orphans. This suggests the head of family is lost to the epidemic in this series. This poses socio-economic challenges to the orphans and left the mother to have to source for a means of living and support for the family. The children may end up dropping out from schools, loose their shelter and may have to be engaged in trading so as to support the family for survival. The intervention at reducing their predicaments will include early diagnosis, access to effective and regular antiretroviral medications by the parents.

A higher prevalence of HIV orphans was observed among adolescents with no history

of sexual abuse or child labour documented. This is in contrast to earlier reports in the literature.[20-22] This is encouraging but call for proper and adequate plan for support for them so as not to fall prey of the perpetrators. Their sheer numbers reflects the need for disclosure, sexual health counselling and commencement of transitional care services in our study area. In some settings, adolescent girls face a risk of sexual violence and rape due to gender disparities and sexual and social norms.[23] They also carry a large burden of care. While adolescents have similar needs for housing, food, social support, and education as other young children, they have important developmental tasks which may be particularly challenging for those who are vulnerable.[23] The interventions, such as community programs, peer education, and health services, aimed at addressing the needs of vulnerable adolescents should be delivered through sex- and age-appropriate interventions aimed at increasing support and reducing risk.[23,24]

The low socio economic status among HIV infected orphans is comparable to other reported studies.[14-22]This may be related to the level of poverty and illiteracy prevalent in the society and the loss of the breadwinner of the family. This may results in household food insecurity, inability to access healthcare facilities and the children more vulnerable. This may explain the poor nutritional status and health status observed among orphans in addition to the effect of HIV infection. Although the HIV status can explain the recurrent febrile illness in them but poor nutritional status can results in nutritional acquired immunodeficiency syndrome (NAIDS) which can also worsen immunosuppression.[25,26] This can result in recurrent or protracted illnesses and hence the poor health status observed among the studied orphans. All these observations underscore the need for robust evaluation of

the burden of the problem and establish support framework for these group of vulnerable children.

The orphans in this study were being taking care of within the family system, majorly by the mother, as the living parent, then members of the extended family and the father. Other studies from other parts of Africa have reported similar findings.[15,20,22,27] The extended family system is typical of African settings and has helped in absorbing some of the social impacts HIV pandemic. It functions as social support or coping systems in times of need. However with the HIV/AIDS epidemic, the system is becoming overwhelmed with the increase in number

of HIV orphans and dwindling economic fortunes or poor socioeconomic situations of the members of the family. The care of orphans within the family networks, through the extended family, foster families and adoption, is the most preferred by a quite a number of workers.[28,29] It is believed that this set up will help in meeting the child's psychological and emotional needs as compared to other alternatives such as children's villages, orphanages and drop-in centers.[30]

Conclusion

In conclusion, the study has showed a high prevalence of orphans among HIV infected children, who are paternal orphans and majority of whom have a poor nutritional and poor socio-economic status. These underscore the need for more studies to evaluate the burden of this problem in this environment which will in making adequate provision of psychosocial and economic support to HIV/AIDS orphans and their care givers in our locale. The educational and economic development requires high and long-term investments; the government will play an essential role in establishing and

coordinating a nationwide scheme that will help in ameliorating this problem which can be a time-bomb waiting to explode.[24]

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Conflict of interest: Nil