Strategies for Improving the Nutrition of Children Orphaned by HIV/AIDS in the Rural areas of Abia State, Nigeria

BY

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ABSTRACT

Introduction

With poverty and harsh economic policies in developing countries, there is need for nutritional inputs in intervention programmes for orphans. Most families hardly have a meal in a day. Some extended family members are illiterates and lack adequate knowledge of nutrition, water and food safety precautions. Leaving care of orphans to them could expose orphans to malnutrition and/or infections.

Study aimed at using locally acceptable methods to improve orphan nutrition and survival strategies.

Method

Nutrition and hygienic assessments were done using questionnaire, interview guide, checklist and spot observation. Sample was 120 purposively selected orphans. To compliment nutrition intervention, 30 Caregivers were trained on hygienic, food and water safety measures including HIV/AIDS prevention.

Results

Pot-logging ensured food security and augmented nutrient requirements of 17(29.3%) malnourished, and wasted orphans.

Conclusions

Protein energy malnutrition contributed 29.3% hospital admissions of sample. Community members are encouraged to advance activities that increase food security , child survival and HIV prevention.

Key words: malnutrition, food security, Caregivers, assessment, Nigeria

Introduction

With poverty and harsh economic policies in Nigeria, there is need for nutritional inputs in intervention programmes for orphans. Extended family system, which cares and supports orphans in times of difficulties has been eroded due to unfavourable economic policies. Most families now hardly have a meal in a day as they struggle continually to fight hunger, ill health and deepening poverty. Some of the extended family members who play the role of Caregivers are illiterates and they lack adequate knowledge of benefits of good nutrition, water safety, and also hygienic conditions. Leaving care and support of orphans to them could expose the orphans to malnutrition and/or infections. Studies have shown that children orphaned by AIDS especially in sub-saharan Africa face increased vulnerability because HIV/AIDS disrupts food security, saps local and community economies, undermines community capacity, and also devastate health and education [1]. There is growing recognition that focus on children's well-being is crucial to winning the fight against HIV/AIDS [2,3].

The needs to build up the skills of family members in other to enable them understand various indigenous methods to care and support for orphans should not be overemphasized. Caregivers should be empowered through training so as to equip them with skills to protect orphans from HIV infection as well as worst effects of poverty. Studies have shown the importance of minimizing risk behaviours capable of exposing orphans to HIV/AIDS by paying attention to income support programmes as means of preventing devastating effects of HIV/AIDS [4].

Several recent studies have reported HIV/AIDS as increasingly associated with issues of food, nutrition and malnutrition [5-7] and that food insecurity may force households to adopt lifestyles that increase the risks of HIV infection [8.9]. The need to encourage community responses in care and support of orphans is advocated [10]. The critical question is what cost-effective indigenous welfare programmes would be used to increase the survival of orphans in the rural areas.

Study aimed to use locally acceptable methods to contribute to reduction of hunger, and malnutrition among orphans in the rural areas. It also aimed to improve sanitary conditions of the orphans. This would be achieved by using ranges of relevant strategies to scale up Caregivers' skills to transmit essential knowledge to enhance the physical and psychosocial well-being of orphans so as to move them from surviving to thriving.

This study was carried out to complement efforts of Unicef and other world bodies in the crucial services they render to improve children's well-being in the fight against HIV/AIDS so as to reduce mortality. Study is therefore appropriate and responds to the clarion call by Unicef and other world bodies on the crucial need for more organizations to focus on children's well being in the fight against HIV/AIDS to minimize deteriorating health and higher mortality over time.

Method:

This is a community-based study. It used indigenous methods to improve food and nutrition as well as the hygienic environments of orphans in the rural areas. In the process, food recall assessment of the orphans was conducted for 5 days. Five days was used to enable orphans and/or Caregivers remember types of food consumed. To compliment nutrition intervention, counseling and training of 30 purposively selected Caregivers were carried out. Caregivers were trained on food and water safety measures. Teaching centered on moral values, maintaining adequate nutrition and hygienic environments. This strategy of training Caregivers was to ensure maximum benefit and sustainability of the interventions provided to orphans. In addition, large-scale campaigns for water and food safety precautions were organized at community and village levels during the period of study. In all, three seminars were conducted for Caregivers. Also, discussions were held with Community Chiefs and the discussions centered on need to involve members of the community to argument protein requirements of orphans.

A sample of 120 purposively selected orphans, between the ages of 4 months and 18years was studied. The sampling frame was got through community leaders.

Two instruments for data collection, questionnaire and interview guides were used for the study. In addition, checklist was used to assess hygienic conditions of orphans. Data were analysed both qualitatively and quantitatively using simple percentages.

For this study, orphans refer to children who have lost either of the parents by death.

Results :

Background information of the orphans:

The orphans studied consisted of **72**(60%) males and 48 (40%), females. The Caregivers of 84(70 %) of orphans were females while that of 36(30%) were males. The ages of the orphans were varied. About 12 (10%) of them were between the ages of 4months and 1year, 18(15%) were between 2-5 years, 22(18.3%) 6-9 years, 19 (15.8%) 10-13 years, and 49(40.9%) 14-18 years. For means of livelihood, 20(16.7%) of the orphans confirmed that they assisted their Caregivers to make a living by working as hired labourers to others in the communities. These orphans stressed that they worked under conditions of slavery or semi-slavery, which is viewed as capable of posing traits to their survival and physical development. Also some of the Caregivers complained of lack of meaningful means of livelihood. In terms of education, 24(20%) of the orphans were in primary school, 39(32.5%) in secondary school, while 27(22.5%) of others who were supposed to be in school were not. Reasons for not being in school were sought. The commonest reason the orphans gave for not being in school was lack of money. Table 1 contains other reasons the orphans gave.

Table 1: reasons orphans gave for not being in school.

Reasons	**Frequency of response** **N= 27**
Lack of money	**16(59.3%)**
No admission	**9(33.3%)**
No guardian	**5(18.5%)**
Not interested	**8(29.6%)**
No school of interest close	**6(22.2)**
No time to attend school	**6(22.2)**
Caregiver did not support	**7(29.8)**

+++ Multiple choice

Result of food recall assessment:

Findings on food recall assessment of orphans for a period of 5 days showed that carbohydrate was the major food consumed. Garri, (cassava product), which is the staple food was the main food commonly consumed by 74(61.7%) of the orphans on daily basis.

Table 2 shows details of food items orphans consumed**.**

Table 2: Food recall assessment of the orphans

Food assessment	**Frequency of response**
Rice	16(15%)
Yam	34(28.3%)
Coco yam	29(24.2%)
Water yam	32(26.7%)
Plantain	12(10%)
Bread	8(6.7%)
Beans	9(7.5%)
Garri	74(61.7%)
Foo foo (fermented cassava)	45(37.5%)
Tapioca (boiled cassava)	**31(25.8%)**
Pap (corn flour)	38(31.7%)
Milk	10(8.3 %)
Fruits (oranges, paw paw, pineapple etc.)	14(11.7%)
Nuts (palm kernel, coconut etc.)	24(20%)
Vegetables	28(23.3%)
Meat	33(27.5%)
Fish	37(30.8%)

+++ multiple choice

Realizing that only limited number of orphans included fish, meat and other proteins as part of their protein intake, the community members through the Chiefs were encouraged to contribute food items to augment food intake of the orphans. This practice, made some community Chiefs and others to contribute food items, clothing materials and other items for the upkeep of orphans. These donations were done with ease.

Further finding revealed that 58(48.3%) of the orphans had had one form of ailment or the other, which occasioned admission. Further finding showed that severe fever 20(34.5%) and protein energy malnutrition (PEM) 17(29.3%) constituted the main causes of admission of orphans. Table 3 contains other reasons for orphans' admission**.**

Table 3 reasons for orphans' hospital admission

Reasons	**Frequency of response N=58**
Severe fever	20(34.5%)
Stomach pain	5(8.6%)
Vomiting	4(6.9 %)
Watery stool	9(15.5%)
Protein energy malnutrition	17(29.3%)
Injury	4(6.9%)
Burns	3(5.2%)
Measles	8(13.8%)

Sanitary conditions and/or social amenities available to orphans:

Study observed that the sanitary condition of the orphans in the rural areas was very low. About 42(35%) of the orphans live in concrete houses with asbestos. The surrounding environment of 46(38.3%) of orphans was overgrown with grasses. For social amenities, finding showed that orphans had limited social amenities available to them. The commonest social service available to **85(70.8%)** of the orphans was patent medicine store. Also 61(50.8%) of the orphans cook and sleep in the same house. Table 4 contains the hygienic conditions and/or social amenities available to orphans in the rural areas.

Table 4: sanitary conditions and/or social amenities of orphans

sanitary conditions of orphans' environment	**Frequency of response**
Types of houses orphans live in:	
Mud house with roof thatches	14(11.7%)
Mud house with zinc roof	23(19.2%)
Concrete house with roof thatches	12(10%)
Concrete house with zinc roof	29(24.2%)
Concrete house with asbestos roof	42(35%)
Neatness of the surroundings:	

Grasses overgrown	46(38.3%)
Grasses trimmed and/or surroundings weeded	21(17.5%)
Littered with empty cans, bottles, stick papers and disused materials	38(31.7%)
Clean and tidy	36(30%)
Social amenities available :	
Types of Water Supply:	
Well	6(5%)
Borehole	10(8.3%)
Rain water	33(27.5%)
Stream	59(49.2%)
Pond	18(15%)
Kitchen facilities:	
No kitchen	19(15.8%)
Kitchen available but in same house	61(50.8%)
Kitchen available but detached	57(47.5%)
Toilet Facilities:	
No toilet	9(7.5%)
Pit latrine	97(80.8%)
VIP latrine	9(7.5%)
Water system	5(4.2%)
Education:	
Primary school	64(53.3%)
Secondary	56(46.7%)
Tertiary	0(0%)
Health care facility:	
Hospital	0(0%)
Health center and/or maternity homes	15(12.5%)
Patent medicine stores	85(70.8%)
Herbal homes	52(43.3%)
Prayer homes	71(59.2%)
None	5(4.2%)

***** multiple choice**

Discussion :

This study had four main findings. Poor nutrition, repeated hospital admission, unhygienic conditions and limited social amenities affected the well being of orphans. The fact that 74(61.7%) of the orphans ate mainly 'gari' (cassava product) on daily basis shows the extent to which the orphans' nutrition was balanced. It also estimates the extent to which the growth processes of the orphans are at risk. Sufficient and/or correct nutrients are essential for the orphans' survival. This finding is supported by the fact that during the study, a good number of the orphans 58(48.8%) was on admission for repeated severe and/or chromic infections. Also the finding is supported by the fact that 20 (16.7%) of orphans who worked as hired labourers said they worked under conditions of slavery and/or semi-slavery. The finding calls for adequate

intervention for the orphans. The suggestion for intervention for orphans agrees with the recommendations of [1,5]. Infections like malaria, measles, and others that lead to decrease food intake or failure of appetite could interfere with nutrition and growth, and could negatively affect survival of orphans.

Sanitation conditions of the orphans were very poor. Some of the orphans had no toilet facilities. They reported that they toilet in nearby bushes. About 61(50.8%) of the orphans slept and cooked in the same place. In Africa where people in the rural areas cook with firewood, cooking and sleeping in the same room could expose orphans to respiratory tract infections (RTIs) like asthma, pneumonia and others. The potential role of good drinking water in overall survival of orphans has been overlooked by most researchers [7], who stress more on income and poverty. In this study, a good number of orphans, 110(97.2%) had their drinking water from untreated water sources like streams, ponds, rainwater, and others. This condition could be responsible for the percentage of orphans who underwent hospital admissions for enteric diseases. The finding that most drinking water sources in rural areas are from untreated water sources agrees with the findings of [6] and explains the extent to which children in the rural areas are at risk of water borne infections.

In this study, several strategies were employed to improve the orphans' nutrition and survival. Foremost among the strategies used was a local technique (Pot-logging) where individuals donated food and other items through a common point. Pot-logging was of great strength to the study. It helped to care, support and augment orphan nutrition in the rural areas especially that of those who were malnourished. The technique of pot-logging motivated a good number of individuals in the community to donate food items, clothing materials, and others for the upkeep of orphans. Pooling the donated items together helped to minimize waste of resources, as there was less duplication of materials during donations. It also ensured availability of materials as individuals including some religious groups regularly donated food and other materials willingly. This observation is in agreement with that of [5]. This technique proved useful to Caregivers especially the old and frail Caregivers who had difficulty in providing two meals a day.

Another strategy used was the training of 30 orphan Caregivers on water and food safety measures including HIV/AIDS. Training Caregivers helped to enlighten them on factors that could increase orphan survival.

Conclusion:

Poor sanitary conditions of most social amenities in the rural areas accounted for increased hospital admissions of the orphans and are a powerful predictor of their survival variations. Pot-logging yielded positive results and ensured food security for the orphans.

Therefore, community members should be regularly involved in activities that encourage food security and child survival so as to advance orphans from surviving to thriving thereby minimize risk behaviours orphans are exposed to.

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Written approval of the authors

The author, out of her concern for the well-being of orphans in the rural areas, undertook to use locally acceptable methods to improve the survival strategies of orphans . The author funded the research. There is no conflict of interest and the work has not been submitted in part or full to any other journal.

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