Aids-Orphanhood and Human Capital Development in Nigeria

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Abstract

This study employs the descriptive method of analysis and growth rate to determine the effect of high number of AIDS Orphans on human capital development in Nigeria. The available facts reviewed and the result of the analysis revealed that the growth rate of the number of orphans, occasioned by the pandemic, has continued to be positive since 1990 till date. AIDS Orphans as a percentage of children within the 0 and 14 has been on the increase, from 0.03%, in 1990, to 2.1%, in 2000, and has extended further to 3.78%, in 2009. Enrolment figures, as well as the rates of school dropouts among the orphans and vulnerable children, clearly indicate that the negative impact of increase in AIDS Orphans on human capital would be substantial if this trend remains unchecked. Therefore, it is imperative for governments at all levels to set better policy measures to support these orphans. Such measures could focus on free and compulsory education, shelter, clothing, medical services and food. Communities, which provide safety nets for the children should be empowered and encouraged with proper financial assistance. In addition, there's a clear need for specific legislation against the growing trend of all forms of exploitations and child-abuse, particularly on girls.

Keywords: AIDS Orphans; Human Capital; HIV/AIDS; Orphans and Vulnerable Children; School Enrolment; Nigeria.

Introduction

The menace of the dreaded HIV/AIDS disease continues to assume different dimensions in the economies of African countries. Aside from the high prevalence of deaths and the great number of persons living with the disease caused by the pandemic, another negative aspect has emerged. The disease leads to an ever- increasing the number of orphans in Africa. According to Skyward Journey (2011), there are about 143 million to 210 million orphans globally and an estimated no. of 5,760 children become orphans every day, which translates into 2.102.400 orphans annually. The agency further confirms that in Africa every 15 seconds a child becomes an AIDS orphan and about 14 million AIDS Orphans exist in the Sub-Saharan Africa (SSA) alone. It is noted that the number of AIDS Orphans was supposed to reach 18 million by 2010. Furthermore, it points out that 8 out of every 10 children orphaned by AIDS live in SSA while approximately 250.000 children are adopted annually.

Foster & Williamson (2000) observe that out of the total no. of children orphaned by AIDS globally, 95% of them live in Africa where a continuing increase is expected, reaching 40 million by 2010. These observations have remained true and today's statistics are witnesses to their validity. While in its 2010 report on the global AIDS epidemic UNAIDS reported that the spread of the disease has been halted and also begun to rescind, available statistics from the

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agency on the status of the pandemic have shown that out of the 33.3 million people living with the disease in 2010, about 22.5 million were from the SSA. This figure comprised 12.1 million women and 2.3 million children (an increase from the 2001 figure of 1.8 million children). Prevalence among adults between 15 and 49 years ranged around 5% while the number of AIDS deaths stood at 1.3 million. Orphans due to the pandemic in the region were estimated at 14.8 million out of the global figure of 16.6 million orphans. In fact, the UNAIDS (2011) report on the global status of the disease and the information provided by the US Global Health Policy (2011) stated that at the end of 2010, an estimated number of 34 million people were still living with the disease worldwide, which translates in an increase of about 17% compared to the 2001 figure. Although the report states that the annual new infection rate of the pandemic fell by 21% between 1997 and 2010, the statistics of persons living with the virus are still on the high side. This means that many new infections continue to occur, influencing directly the number of orphans connected to the disease in the nearest future, with the SSA countries being at the highest risk.

Until recently, Nigeria has been trailing many countries whereas the HIV/AIDS prevalence was concerned, but currently it has overtaken most of them. In fact, the country globally occupies the second position after South Africa (see UNGASS, 2010) in terms of the number of persons living with the virus. UNAIDS (2010) reports that in 2009, Nigeria alone accounted for about 3.3 million of persons living with HIV/AIDS, which were further subdivided into 1.7 million women, 1.24 men, and 360,000 children. The number of AIDS deaths in the country in 2009 was estimated at 220,000 while the average national prevalence rate was 4.6%. It is very difficult and worrisome to note that Nigeria leads globally in terms of HIV/AIDS induced orphans, at 2.5 million in 2009. This puts an additional burden to the increasing menace of other communicable diseases such as malaria and tuberculosis with their attendant and concomitant implications for human capital development, both at household level and national level. This is a serious problem that called for considerate urgent attention.

This work sets out to analyze the impact of AIDS induced orphans on human capital formation in Nigeria. The rest of the work is organized as follows: section two brings some detailed facts about Nigeria and the HIV/AIDS situation in the country, section three reviews the literature, section four provides a brief methodology, section five dwells on analysis and results, while section six focuses on summary, conclusion and policy recommendations.

Background

Nigeria is the most populous country in Africa. While the 2006 national population census reported that a total of 140 million people lived in the country, the National Agency for the Control of AIDS (NACA) in 2008 gave an estimate of about 152.6 million people. The Nigeria's 2010 National Literacy Survey reported that the nation's population stood at 154.77 million. According to the CIA's World Facts (2012) estimate, the country's population would have reached a record of 170,123,740 by July 2012. The variations in the figures notwithstanding, the nation's population is currently well above 150 million persons with its growth rate given by the Federal Republic of Nigeria Official Gazette (2007) as 3.2%. Nigeria has about 250 ethnic groups, with two major religions of Christianity in the South and Islam in the North. Currently, it comprises 36 states with the Federal Capital Territory located in Abuja.

Nigeria is well endowed with natural and human resources. According to Momoh (2010), the nation is the 6th largest producer of petroleum in the world and the 8th largest exporter with the 10th largest proven reserves. In spite of all these, the country remains overburdened with high rates of poverty, crime, disease prevalence, and so on, as indicated by available health, macroeconomic, development and others indicators in the economy. The literacy rate in the country as at 2010 was 57%. However, the rate differs among the different states and the six geopolitical zones (North-Central, North-East, North-West, South-East, South-South, and South-West) the country is divided into. The table below provides information on adult literacy rates by the six geo political zones in the country.

Table 1: *Adult Literacy Rate in English by Geo-Political Zone, 2010*

Geopolitical Zone	LITERACY IN ENGLISH		
	Male	Female	Both Sexes
North Central	65.1	47.3	56.4
North East	49.8	33.4	42.0
North West	39.7	23.2	31.7
South East	80.7	67.5	73.8
South	81.1	66.7	74.0
South West	75.5	62.6	69.1
National	65.1	50.6	57.9

Source: National Bureau of Statistics (2010). The National Literacy Survey/ National Bureau of Statistics, Abuja.

As the table shows, literacy rate in the country is higher among males as compared to the rate among females. Of the six zones, the rate is highest in the South-South zone, given as 81.1% for male, 66.7% for females and 74.0%for both sexes. This is followed by the South East zone with 80.7% for male, 67.5% for females and 73.8% for the two sexes. The zone with the least literacy rate is the North-West recording 31.7% for both sexes. Generally, the northern part of the country is less educated (Western Education implied here) and therefore communication in English is very difficult among the illiterates. This is understandable since most of the people living in that part of the country are Muslims with more preference for Islamic education than Western education.

Evolution and Fact of HIV/AIDS in Nigeria

The first HIV/AIDS case in Nigeria was reported in 1986 and since then, the country has continued to experience a surge of the prevalence rate and of both the number of persons living with the disease and of related-deaths as well as an increasing number of orphans resulting from the pandemic. In an estimate provided by the UNAIDS (2010), about 590.000 Nigerians were living with the disease in 1990. By 2001, it had increased to 2.700.000, while the figure estimated for 2009 was 3.3 million and that of 2010 stood at 3.1 million people. Table 2 provides information on the projected HIV population in each state of the six geo-political zones in the country, including the federal capital territory, from 2002 to 2008, while Table 3 gives the prevalence of the disease in the same geo-political zones, in 2001, 2003, 2005, and 2008.

Table 2: *Projected HIV Population by Selected States in Nigeria in Thousands, 2002-2008*

STATE	2002	2003	2004	2005	2006	2007	2008
Benue	207.8	177.3	187.5	197.8	155.3	135.5	265.6
C/River	182.3	228.7	175.8	120.7	180.8	189.1	121.1
Ebonyi	97.5	85.8	87.4	89.0	66.4	54.3	55.5
Gombe	136.7	129.6	113.7	96.9	104.1	98.2	72.6
Kaduna	105.7	114.4	112.7	110.8	113.7	114.5	227.7
Lagos	74.8	89.6	77.7	65.3	70.9	70.9	69.5
FCT	169.6	160.1	142.8	124.6	128.0	119.1	62.0

Source: Compiled by the Author from the 2009 Social Statistics Bulletin of the National Bureau of Statistics, Nigeria.

From consulting Table 2, we can notice that the State of Benue, which is in the North Central, had the highest number of persons living with the disease in 2008, given as 265.634, followed by the State of Kaduna State, a North West Zone. Both states have witnessed persistent increase in the number of persons living with the pandemic since 2002 till date, as it can be seen from the table. The least is in the South East, put at 55.457 persons in the State of Ebonyi. The figures in the federal capital territory have been on a decline.

Table 3: *HIV/AIDS Prevalence by Selected States (2001, 2003, 2005 and 2008)*

State	2001	2003	2005	2008
Benue	13.5	9.3	10.0	10.6
C/River	8.0	12.0	6.1	8.0
Ebonyi	6.2	4.5	4.5	2.8
Gombe	8.2	6.8	4.9	4.0
Kaduna	5.6	6.0	5.6	7.0
Lagos	3.5	4.7	3.3	5.1
FCT	10.2	8.4	6.3	9.9

Source: Compiled by the Author from the 2009 Social Statistics Bulletin of the National Bureau of Statistics, Nigeria.

From consulting the table above, it is obvious that the prevalence of HIV/AIDS disease in various states in the country is quite high. In fact, they have reached a generalized epidemic of 1% and above. The State of Benue still leads in terms of prevalence, which has remained double digits since 2005. In 2001, this state had the highest prevalence. It recorded 13.5% prevalence in 2001, while the 2008 figure remained at 10.6%. Cross River took over Benue State in 2003, when it recorded a 12% prevalence. In 2008, Benue regained its leadership with a prevalence of 10.6% followed by the federal capital territory with approximately 10% of prevalence. It is worthy to note that while the States of Ebonyi and Gombe have been experiencing a steady decline in terms of prevalence of the disease from 2001 till date, other states continue to record high prevalence data. Cross River State, for instance, which had 8% prevalence in 2001, suddenly recorded a 12% rate in 2003, then a decrease to 6.1% in 2005, and finally went back to an increase up to an 8% rate in 2008.

The Concept of Orphans and AIDS Orphanhood

The literature is filled with different definitions of the word "orphan". According to UNICEF (2009), an "orphan" is that child who has lost one or both parents. While some literature, organizations and countries define children as persons under age 15, others define them as persons within the age bracket 0 to 17 years. Article 1 of the 1989 United Nations Convention on the Rights of the Child states that the word child refers to every human being below 18. Based strictly on this definition, it can be said that conceptually, any person under age 18, who has lost either or both parents, is an orphan. This is in line with the definition given by the NPC and ICF Macro (2009) in the Nigeria's 2008 Demographic and Health Survey, that an orphan is a child under age 18 with one or both parents deceased. On the basis of these and other definitions of the "child", an "orphan" could be referred to as a child below age 15 or 18 as the case may be, who has lost either or both parents. In addition, some authors consider as being an orphan the child who has lost not only his/her parents but also his care givers. Table 4 presents definitions of the word "orphan", by country.

Table 4: *Orphan Definitions by Countries*

Botswana	A child under 18 years of age who has lost one (single parents) or two (married couple) biological or adoptive parents.
Ethiopia	A child under 18 years of age who has lost both parents, regardless of how they died.
Namibia	A child under the age of 18 who has lost either a mother, a father, or both parents – or a primary caregiver – due to death, or a child who is in need of care.
Rwanda	A child who has lost one or both parents.
Uganda	A child under the age of 18 years who has lost one or both parents.

Source: Smart, Heard & Kelly (2006). An Education Policy Framework for Orphans and Vulnerable Children

This study adopts the definition of the orphan given by the UNICEF, UNAIDS and USAID as any child of age 0 to 17 whose mother (maternal orphans) or father (paternal orphans) or both (double orphans) are dead. In view of this, any child who falls within this age bracket and has lost either mother or father or both to AIDS disease is an AIDS orphan or child orphaned by AIDS. As noted

earlier, there is a new trend emerging from the menace of HIV/AIDS, which is the increase in the number of orphans caused by the disease. The trend is on the increase particularly in the SSA of which Nigeria belongs. This has a lot of implications not only for the child, but also for the economy. The figure below gives an estimated number of children under 18 orphaned by AIDS in SSA from 1990 to 2007.

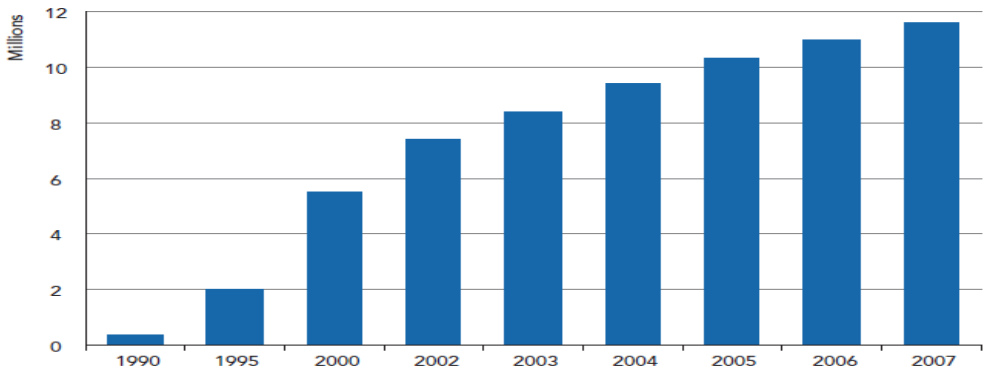

Figure 1: *Estimated Number of Children under 18 Orphaned by AIDS in Sub-Saharan Africa (1990–2007).*
Source: UNAIDS (2008) Report on the global AIDS epidemic.

Figure 1 above reveals that since 1990 till 2007, the number of orphans due to the AIDS pandemic reaching a record of more than 11 million in 2007. In fact, the UNAIDS (2010) report indicated that the number of orphans caused by AIDS in 2009 was 14.8 million. This further confirms that this problem is actually that of the SSA countries.

Children Orphaned by AIDS in Nigeria

The Abiye Orphanage (2011) reports that about 13% of people infected with HIV/AIDS in Africa alone are Nigerians with 72% of all infections found among adults below age 40. Momoh (2010) has reiterated that Nigeria alone accounts for the largest burden of orphans globally, amid weak social protection systems. This is further aggravated by the scourge of the HIV/AIDS pandemic. As a matter of fact, the number of orphans resulting from AIDS in Nigeria has continued to increase over the years. Available statistics provided by the Encyclopedia of Nations (2011) revealed that, in 1990, Nigeria occupied the 9th position in terms of the number of children orphaned by AIDS, put at 12,000, after countries such as Burkina Faso, Kenya, Malawi, Zimbabwe, Rwanda, Tanzania, Zambia, and Uganda. Uganda topped the table in 1990. By 1995, Nigeria had moved to the 4th position and since 2000 till date, the country has taken over from all other countries to become the nation with the highest number of children orphaned by AIDS. UNAIDS (2010), Index Mundi (2011), Avert (2012) and Encyclopedia of nations (2011) put the 2009 figure for the country at 2.5 million orphans. The 2009 M&E[2] plan for OVC[3] response in Nigeria reported that as at 2008, about 17.5 million (24.5%) of the Nigerian children are orphans and vulnerable. This is an alarming situation that calls for urgent policy attention. Table 5 below gives the figures of AIDS induced orphans in Nigeria from 1990 to 2009.

From Table 5, it is obvious that the number of AIDS induced orphans in Nigeria has continued to witness very substantial increases since 1990 till 2009. About 12,000 orphans were caused by the dreaded disease due to the death of either or both parents in 1990. By 1995, the figure had increased by 100 % and by 2009, it had reached an alarming figure of 2.5 million orphans from the disease.

[2] Monitoring and Evaluation
[3] Orphans and Vulnerable Children

Table 5: *Children Orphaned by AIDS in Nigeria in Thousands (1990-2009)*

YEAR	AIDS INDUCED ORPHANS
1990	12
1995	240
2000	1.100
2005	2.100
2009	2.500

Source: UNAIDS (2010). UNAIDS Report on the Global AIDS Epidemic.

Response Programmes to AIDS Orphan Problems in Nigeria

Response activities to the problems of AIDS Orphans in Nigeria are undertaken at community and national levels, thus including agencies and civil society groups. According to the FMWASD[4] (2007), the communities provide the initial safety net to the OVCs outside of their immediate families. But as pointed out by the ministry, the responses have been inadequate because they have been limited in scope and size, and largely driven by NGOs, with gaps in the quality and consistency of care. The nation's 2009 M&E Plan for OVC Response stated clearly that an appreciable number of bodies are now involved in response programs addressing the OVC phenomenon in Nigeria. Such stakeholders and players include: Ministries, Departments and Agencies (MDA); Civil Society Organizations (CSO); Faith Based Organizations (FBO); Private Sector and Development Partners with the FMWASD as the coordinating agency. There is a table below showing notable actions taken so far to address issues relating to OVC in Nigeria.

Table 6: *Some Notable National Level OVC Responses*

February 2004	National OVC Conference
June – August 2004	Rapid Assessment, Analysis and Action Planning Process, and Development of draft action plan
September 2004	Establishment of the OVC Unit in the Federal Ministry of Women Affairs
March 2005	Inauguration of the National Steering Committee on OVC
April 2005	Inauguration of the National OVC Stakeholders Forum
September 2005	Inauguration of the National OVC Plan of Action Task Team
October – November 2005	Zonal Consultation workshops to develop the National OVC Plan of Action (2006 - 2010)
November 2005	Development of the National M&E Framework for the National OVC Plan of Action
January – February 2006	Costing workshop for the National OVC Plan of Action (2006-2010)

Source: Federal Ministry of Women Affairs and Social Development (2007). National Guidelines and Standards of Practice on Orphans and Vulnerable Children.

In addition to the ones mentioned above, a National Plan of Action (NPA) on OVC was developed for the period 2006 to 2010 to provide a single framework for OVC response. According to the 2009 M&E Plan for OVC Response in Nigeria, the NPA for OVC is a five-year plan that focuses on areas such as survival, protection, participation, development, care, and support needs of OVCs in the country. The plan has the following as thematic areas: protection, psycho-social support, education, health, household care and economic strengthening, advocacy and social mobilization, legal and environment policy (Federal Ministry of Women Affairs, Nigeria, 2009).

Review of Related Literature

AIDS Orphans and the Household: What Impact?

The scourge of the dreaded HIV/AIDS disease has continued to have a lot of consequences at the household front, particularly in African countries. The statement made by Mermin et al. (2005) cited

[4] Federal Ministry of Women Affairs and Social Development

by PEPFAR[5] (2006) implies that the death of a parent as a result of the AIDS disease would make the child three times more likely to die, even when the child is HIV negative is not an understatement. This is because "when HIV/AIDS enters a household by infecting one or both parents, the very fabric of a child's life falls apart" (UNICEF, 2004, p. 67). Starting from the period when the parent is sick, most of the burden would start to fall on the child even when the parent is still alive. The child becomes the one to take care of the parent either directly or indirectly. As a matter of fact, as soon as the parents develop HIV related symptoms, children begin to shoulder new responsibilities such as cooking, cleaning, fetching water, "laundry, care giving activities such as feeding, bathing, toileting, giving medication, and accompanying relatives for treatment, agricultural or income generating activities and childcare duties" (Foster & Williamson, 2000, p. S278).These extra and weighty activities further compound the problem of the child. In addition, the scourge of the pandemic has also created children care givers whereby nine-year-old children are now acting as parents for younger siblings, "grandmothers caring for the children of their children, children and youth living on the street – all with limited resources and no hope for a better tomorrow" (MacDonald & Moore, 2006, p. 331). This is very pathetic.

The implication of this is that such a child may become inconsistent in school in terms of attendance or he or she may withdraw or even begin to look for either a part-time or full time job in order to take care not only of the sick parent but also to make provisions for the family, since most infected people in developing countries are poor. As a matter of fact, the child begins to suffer as soon as the parent(s) gets infected in terms of the provision of food, caring, education and even psychologically. PEPFAR (2006) has maintained that HIV/AIDS caused orphans to face high risk of death, stigmatization, rejection, and a lack of love and care, emotional distress, malnutrition, lack of health care, and poor or no access to education. In addition, the agency reiterates that such orphans are faced with high risk of labour exploitation, sex trafficking, homelessness, and exposure to HIV. These are some of the problems most orphans face in developing countries, with Nigeria inclusive. To corroborate these, it has been reported that orphans are confronted with a number of vulnerabilities such as "stigmatization, discrimination, malnutrition, sexual violence, child labor, dropping out of school, lack of access to parent's properties, trafficking and even death" (Momoh, 2010, p. 1). Momoh further observed that with little or no social protection systems in place, it has been very difficult for the children to cope with these risks.

In the SSA countries such as Nigeria, where the prevalence of HIV/AIDS disease is high, most households live in abject poverty. In actual fact, the effect of the pandemic on children and families is further compounded because many families live in most communities, "which are already disadvantaged by poverty, poor infrastructure, and limited access to basic services" (Foster & Williamson, 2000, p. S278). This has grave consequences on children orphaned by AIDS because a good number of them find it difficult to continue in school; even food becomes a problem. As a matter of fact, some of them become household heads and street beggars; other engage in criminal activities while some of the girls could turn to prostitution for subsistence.

In a study carried out by McGaw & Wameyo (2005) for the African Office of the World Vision International on violence against children affected by HIV/AIDS in Uganda, it was discovered among other things that children who are affected by the disease, either infected or orphans, face a lot of violence, in form of stigma, discrimination, psychological abuse, neglect, child labor, and sexual abuse. For instance, out of the 16 orphans that were interviewed, 14 agreed that they faced all forms of stigmatization and discrimination, with examples to support their claims while in another group of 32, 29 attested to the fact that discriminations against them were some of the problems they faced. The study further reported that about 98% of guardians discriminate against orphans in their care. In addition, resource limitation in the communities where orphans were cared for also reduced such care and most of these orphans appeared uncared for "with poor clothing (often without a school uniform) and poor health and hygiene shown by the presence of lice, jiggers (flea larvae) or symptoms of AIDS" (McGaw & Wameyo, 2005, p. 8). In fact, most AIDS Orphans appeared not to be treated as well as other children. Some of them would be abused, beaten up, called insulting names, belittled, and compared negatively to other children. The study reported that discrimination

[5] President's Emergency Plan for AIDS Relief

could be noticed in the words used, tone of voice, non-verbal gestures, failure to provide sufficient food, clothing, bedding, educational opportunities, health care, protection from harm, undertake of excessive and age-inappropriate household tasks, sexual abuse, primarily of girl orphans, and so on.

Atwine, Cantor-Graae & Bajunirwe (2005) analyzed the psychological distress among AIDS Orphans in rural Uganda, using 123 children aged 11-15 years who became orphans as a result of AIDS pandemic and 110 children of similar age bracket and gender who were living with their parents in the same neighborhood. The findings revealed that orphans had greater risk than non-orphans for higher levels of anxiety, depression and anger. In addition, it was found that orphans had significantly higher risk to develop vegetative symptoms, feelings of hopelessness, and suicidal ideation.

In the same vein, Mishra & Assche (2008) in their study on OVC in High HIV Prevalence Countries in Sub-Saharan Africa discovered that OVC are disadvantaged in schooling compared to non-OVC, while orphans are disadvantaged in the area of mosquito nets, which made them more vulnerable than non-orphans in terms of the morbidity and mortality associated with malaria. In addition, they reported based on their findings that only few primary caregivers of children make arrangements for succession plan and most OVC and their families are not receiving the necessary care and support. When the HIV/AIDS pandemic hits any household particularly in Africa, the household income tends to decrease, since there is always the tendency to be absent at work either both for the infected person and by whoever needs to stay by him or her while expenditures tend to increase in the household, which all together could bring about a reallocation of the money meant for school expenses to be expended on basic necessities and health requirements.

Orphans also tend to be engaged in demeaning activities, while others are forced to undergo child labor activities such as the under-aged engaged in street trading and so on. Unfortunately, in the African context some still believe that some of these activities rather than destroy the child could assist to make him/her and also prepare him/her to be fit in the society and become independent. Others also see it as a way of augmenting the income of the household as most farmers see children as blessings as long as they can assist them on farming works and daily chores. Even without HIV/AIDS problem, most poor households in Africa still engage their children in various activities such as street trading, farming, helping as shop attendants in family business, apprenticeship and so on, while they are schooling. Most would do that after closing hours or on Saturdays and Sundays. These activities are always rampant among fostered children, orphans, and the rest.

Impact of AIDS Orphanhoodon Education and Health

It has been established by literature that education, health and training are very germane for human capital development in any society. Dauda (2011, p. 211) has noted that "the human capital components in man are the skills, knowledge, capabilities, attitudes, and the experiences, which are developed through education, health, on-the job training, and other means". The roles of education, health and training in human capital development cannot be overemphasized, considering the quantum of leaps they have contributed to the growth and development of advanced countries in our contemporary days. Therefore any factor that tends to impact negatively on this process must be squarely addressed. The increase in the number of orphans as a result of the AIDS pandemic seems to be a major blow to human capital development mostly in African countries, which are already suffocated under a thick cloud of problems such as poverty, high crime rate, critical rates of communicable diseases, and so on.

HIV/AIDS menace has a lot of adverse implications for the child's education. When a member of the household gets infected, the immediate impact is felt on the household income even before the death of the person. This is as a result of increased medical expenses, which also leads to a re-allocation of financial resources from other household commitments such as schooling, clothing and other health care provision. The inability of parents to meet the child's schooling could result to absenteeism as well as a complete drop out of school. In actual fact, the child's performance in school could begin to dwindle as psychological trauma of the happenings at home tends to weigh him down and eventually, the demise of the infected person could further aggravate the problem.

Table 7: *School Attendance among Ages 10 to 14 Years Old in Sub-Saharan Africa*

	% Non-Orphans (Children Living with at Least one Parent) Attending School	% Double Orphans Attending School	Double Orphan/ Non-Orphan School Attendance Ratio
WEST AFRICA			
Benin	N/A	N/A	N/A
Burkina Faso	32	35	1.09
Cape Verde	N/A	N/A	N/A
Côte d'Ivoire	67	56	0.83
Gambia	68	58	0.85
Ghana	81	65	0.79*
Guinea	33	38	1.13
Guinea-Bissau	50	51	1.03
Liberia	N/A	N/A	N/A
Mali	37	39	1.04
Mauritania	N/A	N/A	N/A
Niger	N/A	N/A	N/A
Nigeria	77	55	0.64*
Senegal	54	40	0.74*
Sierra Leone	50	35	0.71
Togo	78	74	0.96
CENTRAL AFRICA			
Cameroon	85	83	0.99
Central African Republic	54	49	0.91
Chad	61	59	0.96*
Congo	N/A	N/A	N/A
Congo, Democratic Rep. of the	70	50	0.72
Equatorial Guinea	89	85	0.95
Gabon	N/A	N/A	N/A
Sao Tome and Principe	N/A	N/A	N/A
Sudan	70	67	0.96
EAST AFRICA			
Burundi	65	46	0.70
Comoros	60	37	0.59*
Djibouti	N/A	N/A	N/A
Eritrea	N/A	N/A	0.83
Ethiopia	43	26	0.60
Kenya	92	88	0.95
Madagascar	80	61	0.76
Rwanda	80	64	0.80
Somalia	21	14	0.65
Tanzania	90	73	0.82
Uganda	93	88	0.95
SOUTHERN AFRICA			
Angola	81	73	0.90
Botswana	93	92	0.99
Lesotho	91	79	0.87
Malawi	90	87	0.97
Mauritius	N/A	N/A	N/A
Mozambique	78	63	0.80
Namibia	90	83	0.92
South Africa	96	91	0.95
Swaziland	87	79	0.91
Zambia	78	73	0.92
Zimbabwe	92	90	0.98

Source: Compiled by the Author from UNICEF (2006).

* signifies that the proportion of double orphans attending school was based on less than 50 children.

UNICEF (2003, p. 27) observed that "orphans are less likely to be in school and more likely to fall behind or drop out", which compromise their abilities and prospects. It further reported that in Tanzania while school attendance rate for non-orphans was 71%, the rate for double orphans was only 52%. In fact, the burden exacted on household incomes as a result of HIV/AIDS could affect school fees and procurement of school uniforms and other related expenses may pose barriers to school attendance if orphans' caregivers struggle to afford these costs, which could make AIDS orphaned children to miss out on school enrolment, have their schooling interrupted or poorly perform poorly in school as a result of their situation (Avert, 2012), which portend danger for human capital development, not only on the part of the children but for the economy as a whole.

Citing Bicego et al. (2003), Pullum & Greenwell (2009, p. 2) reported based on findings from five SSA countries that orphans were less likely to be in the expected grade level, especially at younger ages, compared to non-orphans and that although "the loss of both parents was most detrimental to educational attainment, the loss of the mother had a stronger negative effect than the loss of the father." They further cited Ainsworth et al. (2005) who carried out a household survey in Tanzania and discovered that school enrollment was delayed for maternal orphans in Tanzania, and for girls already attending school, the number of hours in school diminished sharply immediately after losing a parent.

Mishra et al. (2007) examined how school attendance and nutritional status differ between orphans and fostered children, and between children of HIV-infected parents and non-HIV-infected parents in Kenya focusing on 2.756 children age 0-4 years and 4.172 children age 6-14 years. They discovered that orphans and fostered children (age 6-14 years) were significantly less likely to be attending school than non-orphans and non-fostered children of HIV-negative parents. Furthermore, it was reported that "children of HIV-infected parents were significantly less likely to be attending school, more likely to be underweight and wasted, and less likely to receive treatment for ARI and diarrhea than children of non-HIV-infected parents" (Mishra et al., 2007, p. 383).

Table 7, above, shows school attendance among children ages 10 to 14 years old in SSA. A cursory look at the information contained in the table, reveals clearly that a very wide margin exists between school attendance of orphans and non-orphans in the SSA. With the exception of Guinea and Guinea-Bissau where orphans' school attendance was slightly higher than non-orphans living with their parents, all other countries witnessed lower school attendance among orphans than non-orphans. All the information contained in the table point to the fact that human capital development will be jeopardized in these countries if efforts are not put in place not only to reduce and eradicate HIV/AIDS disease, but also to provide adequate education for the high number of orphans the disease has added to the already bloated number of orphans in the SSA countries.

Human capital development is not limited to school attendance alone. As a matter of fact, health and nutrition are other vital components of human capital formation, without which it will be impossible to develop the teaming human resource based of the economy. The increase in number of orphans caused by the AIDS menace in most SSA countries, which are already groaning under the heavy weight of poverty, coupled with the fact that the disease is rampant among the low income earners, have continued to be a major concern. A higher percentage of the household incomes in this part of the world have been diverted to treating HIV/AIDS related problems, living little or almost nothing for proper feeding and good nutrition. Most of these orphans have difficulties to properly feed themselves because of the income limitation. The fact that most household heads are poor with some being too old or even under aged children further aggravates the problem. UNICEF (2003) has noted that households affected by the HIV/AIDS pandemic, which lack community support, would have their food consumption reduced by more than 40 per cent. The agency cited a research conducted in the United Republic of Tanzania, which indicated that the loss of either parent and the death of other adults in the household would worsen the child's height for age and increase stunting. Furthermore, it reported the findings of a study conducted in Western Kenya indicating that orphans appear to be disadvantaged compared to non-orphans when the weight-for-height measure was used. In addition, the 2003 nutritional survey for Zimbabwe, which weighed and measured nearly 42.000 children, including 1,760 orphans, reported a higher percentage of

orphans being malnourished than non-orphans. Accordingly, it might be impossible for these children to develop to their full physical and intellectual capacity. Besides, the agency reiterated that the increasingly weakened state of health-care services occasioned by the HIV/AIDS menace in most SSA countries might act to worsen and deteriorate the nutritional, health and survival prospects of orphans.

Although the study conducted by Mishra et al. (2007) cited earlier found no clear pattern of relationship between orphanhood and nutritional status of children, it however revealed that fostered children were more likely to be stunted, underweight, and wasted, than children of HIV-negative parents. In the same vein, they noted that children whose parents were HIV/AIDS positive were significantly more likely to be underweight and wasted.

Foster & Williamson (2000, p. S281) argued that it is probable that the health of the orphans whom are taken care of by elderly and adolescents could worsen compared to that of other children, as substitute care givers might be "uninformed about good nutrition, oral rehydration treatment for diarrhea, and the recognition of serious illness". Reporting the findings of some studies in Zambia and Kenya, Foster & Williamson (2000) assumed that younger orphans in rural Zambia were more likely to have frequent illnesses than non-orphans while orphans were significantly more malnourished than non-orphans in an urban slum in Nairobi, Kenya.

AIDS Orphanhood and Human Capital Development: The Case of Nigeria

The surge in the number of orphans caused by the HIV/AIDS epidemic seems to be reversing the clock of human capital in Nigeria. This is evident from the school enrolment difference between the non-orphans and orphans in the country. Data enclosed in Table 7 above revealed that in 2005, the percentage of non-orphans attending school in Nigeria stood at 77%, whereas the rate shown for orphans was 55%.

From table 8, it is clear that the adverse impact of HIV/AIDS on children's schooling is more marked in the North Central, North East, and South East than other regions of Nigeria. While about 13% of respondents in the North Central zone agreed that children in the community could not attend school as a result of parent's or guardian's sickness or death due to HIV/AIDS, 10.2% and 12.6% agreed to this fact in the North East and South East zones respectively. The lowest is recorded for the South West region, which had just 1.1 percentage point.

Information provided in the Nigeria's 2008 Demographic and Health Survey (NDHS) published by the NPC[6] & ICF Macro (2009) revealed that orphans and vulnerable children could drop out of school as a result of inability to pay school fees or for the purpose of helping with household labor or even in order to be able to assist sick parents or younger siblings. The result of the survey doesn't confirm this totality as it was discovered generally that orphans and vulnerable children (OVC) were more likely to be attending school than non-OVC children. In fact, the figure revealed that about 80% of OVC were attending school compared to the 73% rate of non-OVC children with double orphans having 84% school attendance compared to 72% of children with both parents alive. These results aren't shocking in reality for the following reasons. Firstly, the survey focused on "only orphans and vulnerable children living in households; children who are living in institutions or other non-household settings, including children living on the street, are not included in the 2008 NDHS OVC results" (National Population Commission, 2009, p. 285). Secondly, the number of sampled OVC was by far lower than that of non-OVC. While the OVC number and double orphans sampled stood at 2,593; the number of non-OVC stood at 15.459. Furthermore, there's the possibility that these group of OVC and double orphans benefit from better attention and assistance because of the available care services compared to the non-OVCs who were living with their parents, and since most households in this part of the world are living below the poverty line, it is possible that many don't have the financial possibility to send all their children to school.

[6] National Population Commission

Table 8: *Effects of HIV/AIDS on children's schooling*

% Distribution of Parents/Guardians By Whether Children in the Community and Children in the Household Do Not Attend School Because Their Parents / Legal Guardians Are Sick or Died of HIV/AIDS, By Background Characteristics, Nigeria Education Data Survey (NEDS), 2010									
	Children in the Community Do Not Attend School Because Parent or Guardian Died or is Sick Because of HIV/AIDS				Children in the Family Do Not Attend School Because Parent or Guardian Died or is Sick Because of HIV/AIDS				
Background Characteristics	**Yes**	**No**	**Don't Know/ Missing**	**Total**	**Yes**	**No**	**Don't Know/ Missing**	**Total**	**Number of Parents/ Guardians**
Sex									
Male	7.7	87.5	4.8	100.0	2.4	96.3	1.3	100.0	13,037
Female	6.9	87.9	5.2	100.0	1.7	96.8	1.5	100.0	13,595
Residence									
Urban	5.8	88.8	5.4	100.0	1.6	96.8	1.5	100.0	8,449
Rural	8.1	87.1	4.8	100.0	2.3	6.4	1.3	100.0	18,185
Region									
North Central	12.8	83.5	3.7	100.0	3.7	96.1	0.3	100.0	3,831
North East	10.2	83.6	6.2	100.0	4.9	92.6	2.6	100.0	3,606
North West	5.3	89.5	5.2	100.0	1.3	96.5	2.2	100.0	6,759
South East	12.6	85.2	2.2	100.0	2.7	96.8	0.5	100.0	3,226
South	7.2	81.5	11.3	100.0	1.1	97.2	1.7	100.0	3,843
South West	1.1	96.9	2.1	100.0	0.4	98.9	0.7	100.0	5,369
Economic Status Quintile									
Lowest	6.4	88.0	5.6	100.0	2.8	95.1	2.1	100.0	5,614
Second	7.1	88.1	4.7	100.0	2.2	96.4	1.4	100.0	75,376
Middle	9.8	85.6	4.6	100.0	2.2	96.6	1.2	100.0	5,471
Fourth	8.3	87.3	4.4	100.0	1.9	96.8	1.3	100.0	5,077
Highest	4.9	89.3	5.7	100.0	1.3	97.9	0.8	100.0	5,095
Total	**7.3**	**87.7**	**5.0**	**100.0**	**2.1**	**96.5**	**1.4**	**100.0**	**26,634**

Sources: NPC[7], FMOE[8], USAID[9] and ESSPIN[10] (2011)

The 2009 M&E plan for OVC response in Nigeria indicated that most Nigerian OVCs actually live in deplorable conditions and are also exposed to neglect, exploitation, and abuse and are deprived of basic human rights. The plan also revealed that in Nigeria about 29% of all children between 6 to 17 years are engaged in child labor, 20.3% are not attending school regularly, 15% lack access to health facilities; more than 20% have no birth certificates while

[7] National Population Commission
[8] Federal Ministry of Education
[9] United States Agency for International Development
[10] Education Sector Support Programme in Nigeria

17.8% are victims of sexual abuse. It further noted that the situation of OVC in the country is deplorable, which is in turn compounded by HIV and AIDS epidemic.

Furthermore, in the area of basic material needs, such as shoes, clothes, and blankets, the survey found out that these needs were met for every 7 out of 10 children aged 5 -17. It was further discovered that in the case of OVC's, only 66% were likely to have these basic needs fulfilled compared to the 69% of the non-OVC. The situation is worst in the rural areas, where the survey discovered that only 61% of the OVCs were likely to have all three of the basic material needs met as compared to 77% of non-OVC. In addition, differences also exist among the six geo-political zones in the country. While 55% of the OVC in the North East have their basic needs fulfilled, the South West zone recorded about 94%, the highest figure in the country. This could be due to the high level of Western education as well as a relatively better economic status of the zone. Whereas nutritional status is concerned, while 28% of the OVC under age five were underweight, 27% was observed among the non-OVC, with the South East zone having the lowest proportion of underweight OVC, precisely 11% and the North East having the highest rate of 40%. All the above issues have severe consequences on the human capital development and will surely affect the individuals and the whole economy unless nothing is done to ameliorate the situation.

Methodology

This work is merely descriptive. It additionally employs growth formula to analyze the rate at which AIDS Orphans increases in Nigeria. The growth rate of HIV/AIDS induced Orphans is given as

$$H_n = \frac{(H_t - H_{t-1})}{H_{t-1}} . \frac{100}{1}$$

Where: H_n = Growth rate of HIV/AIDS induced orphans

H_t = Number of HIV/AIDS induced orphans in current year

H_{t-1} = Number of HIV/AIDS induced orphans in previous year

Data Sources

This study employs data from the UNAIDS[11], UNDATA (2011), Index Mundi and Encyclopedia of Nations.

Brief Results and Discussions

The growth rates of the number of AIDS Orphans in Nigeria analyzed in table 10 above revealed a continuous and positive growth from 1990 to 2009. Between 1990 and 1991, in just one year, the figure shows a 100% rise. By 1992, the growth rate declined slightly to 91.67%. Although the rates over the years have been positive, one promising thing is that the rate has been on a decline as could be seen from the table. In 1995, a 60% increase was registered, but by 2000, the rate fell to 25% and in 2005, it further reduced to 10.53%. The 2009 rate stood at 4.17% indicating that the number of orphans determined by AIDS pandemic has continued to decrease. This is very encouraging. Figure 2 below shows a graphical representation of the growth rates of AIDS Orphans in Nigeria from 1990 to 2009 allowing for a better visual appreciation. From the figure, it is easily observable that the rate continued to decline sharply and consistently from 1990 to 2009. This is closely connected to the increase in awareness of the deadliness of the disease, which has contributed to the decrease the number of deaths caused by the pandemic.

[11] Joint United Nations Program for HIV/AIDS

Table 9: *Growth Rate of AIDS Orphans and AIDS Orphans as a percentage of Children Aged 0-14*

YEAR	Growth Rate of AIDS Orphans (%)	AIDS Orphans as a percentage of Children Aged 0-14 (%)
1990		0.03
1991	100.00	0.05
1992	91.67	0.10
1993	84.78	0.18
1994	76.47	0.32
1995	60.00	0.50
1996	50.00	0.73
1997	38.89	1.00
1998	36.00	1.33
1999	29.41	1.68
2000	25.00	2.06
2001	18.18	2.39
2002	15.39	2.69
2003	13.33	2.98
2004	11.75	3.25
2005	10.53	3.51
2006	4.76	3.58
2007	4.55	3.66
2008	4.35	3.72
2009	4.17	3.78

Source: Computed by the Author

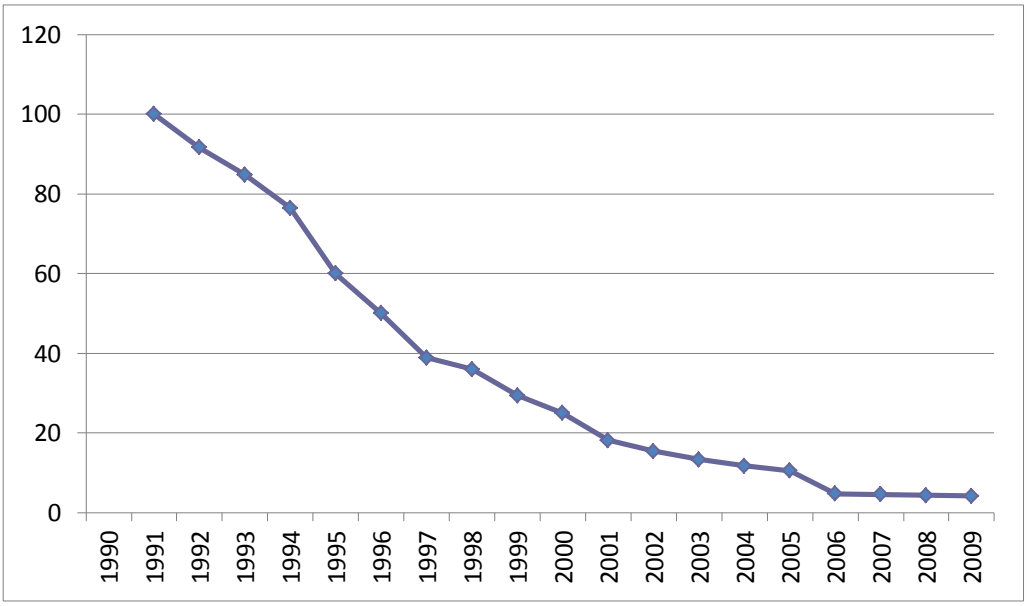

Figure 2: *Growing Rate of AIDS Orphans (%).*
Source: Generated by the Author

Contrary to the above, the percentage of AIDS Orphans aged between 0 to 14 shows an increasing trend. A rapid look at the figure reveals a consistent increase since 1990 till date. While 0.03% of children aged 0-14 were orphan in 1990, the rate rose to 0.5%in 1995, and it has increased to 2.1% by 2000. This trend continued until reaching a record of 3.5% in 2005 and by 2009, it has extended to 3.78%. Figure 3 below provides a better graphical analysis of this fact. From the graph, it can be easily seen that the trend is rising, which is not at all good for the country considering the ugly plight of most orphans in this part of the world, where the

majority of them live in deplorable conditions, neglected, exploited, abused, and deprived of basic human rights as revealed by the 2009 M&E plan for OVC response in Nigeria.

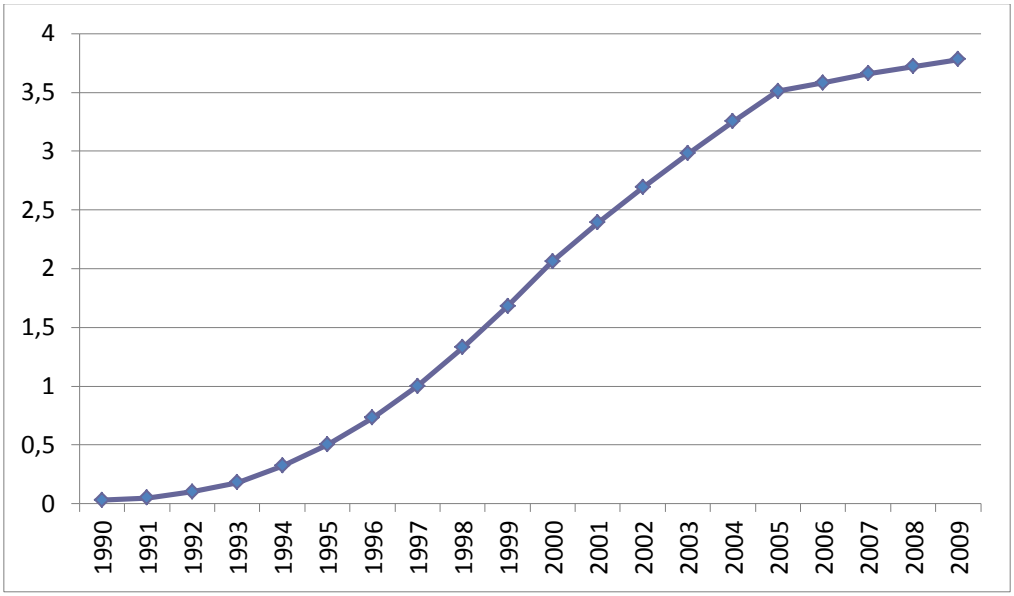

Figure 3: *AIDS Orphans as a percentage of Children Aged 0-14 (%).*
Source: Generated by the Author

Summary, Conclusion and Policy Recommendations

This study considers and analyzes how the increasing numbers of AIDS Orphans in Nigeria would affect the households, the lives of the orphans themselves as well as the economy over the years, in terms of welfare, educational attainment as well as health and nutrition status, which will jointly have impact on the level of human capital at micro and macro levels. The review of a number of related literature and the states of Orphans and Vulnerable Children in Nigeria as well as the policy response programs revealed that there is still much to be done.

The results of the few analysis which have been carried out revealed that the growth rate of the number of orphans occasioned by the dreaded disease has continued to be positive since 1990. Furthermore, AIDS Orphans as a percentage of children in the age bracket 0 to 14 has been increasing on national level. In fact, the increase of this figure is quite alarming, shifting from 0.03% in 1990 to 2.1% in 2000 and further to 3.78% in 2009. Enrolment figures as well rates of school dropout among the OVCs are clear indicators that the impact on human capital of the increasing number of AIDS Orphans will be substantial.

The above findings suggest that there should be better policy programs spearheaded by the various governments in Nigeria focusing on the welfare of these children who are orphans as a result of the AIDS pandemic. This study recommends that at least fundamental education should be free and compulsory for these children. Medical services should also be freely provided to them until they graduate from university and have better employment opportunities. Government should also provide them shelter, clothing, and food. Those who currently live as street traders or the ones sleeping under the bridges should be provided accommodation. Communities providing safety nets for these children should be empowered and encouraged with proper financial assistance. In addition, funds meant for the upkeep of these orphans should be judiciously used solely for this purpose and must not be diverted for private usage. Proper legislation against all forms of exploitation and abuse, especially of the girls, should be provided. Finally, religious organizations should be encouraged and empowered to cater for these children since their leaders are usually highly respected by the society.

References

1. ABIYE Orphanage (2011). HIV/AIDS, Nigeria. Retrieved August 5, 2011, from http://www.mosthighministries.com/osogbo_nigeria.htm.

2. Atwine, B., Cantor-Graae, E., & Bajunirwe, F. (2005). Psychological distress among AIDS Orphans in rural Uganda. *Social Science Medicine*, 61(3), pp. 555-564. http://dx.doi.org/10.1016/j.socscimed.2004.12.018

3. AVERT (2012). Sub-Saharan Africa HIV & AIDS Statistics. Retrieved January 1, 2012, from http://www.avert.org/africa-hiv-aids-statistics.htm.

4. CIA's World Factbook (2012). Africa-Nigeria. Retrieved March 13, 2012, from https://www.cia.gov/library/publications/the-world-factbook/geos/ni.html.

5. Dauda, R. S. (2011). Health as a Component of Human Capital Formation: Does it Matter for the Growth of the Nigerian Economy? *Canadian Social Science*, 7(4), pp. 207-218. http://dx.doi.org/10.3968/j.css.1923669720110704.185

6. Encyclopedia of the Nations (2011). HIV/AIDS Orphans 0-17 Years Currently Living-Development Outcomes-African Development Indicators. Retrieved January 3, 2012, from http://www.nationsencyclopedia.com/WorldStats/ADI-hiv-aids-orphans-0-17-living.html.

7. Federal Ministry of Women Affairs and Social Development (FMWASD) (2007). National Guidelines and Standards of Practice on Orphans and Vulnerable Children. Federal Ministry of Women Affairs and Social Development, Child Development Department, Abuja. Retrieved November 15, 2011, from http://www.ovcsupport.net/s/library.php?ld=1078.

8. Federal Ministry of Women Affairs, Nigeria (2009). Monitoring and Evaluation Plan for the Orphans and Vulnerable Children (OVC) Response in Nigeria. Retrieved October 5, 2011, from http://www.ovcsupport.net/s/library.php?d=1079.

9. Federal Republic of Nigeria (2007). *Official Gazette*, 94(60), Federal Government Printer, Lagos.

10. Foster, G., & Williamson, J. (2000). A Review of Current Literature of the Impact of HIV/AIDS on Children in Sub-Saharan. *AIDS*, 14(supplement 3), pp. S275-S284.

11. MacDonald, N., & Moore, M. (2006). AIDS 25 Years Later: The Ongoing Tragedy for Children (Editorial). *Paediatre Child Health*, 11(6), pp. 331-332.

12. Indexmundi (2011), AIDS Orphans. Retrieved August 5, 2011, from http://www.indexmundi.com/nigeria/aids-orphans.html.

13. McGaw, L., & Wameyo, A. (2005). *Violence against Children Affected by HIV/AIDS: A Case Study of Uganda.* World Vision International, Africa Office, Nairobi.

14. Mishra, V., Arnold, F., Otieno, F., Cross, A., & Hong, R. (2007). Education and Nutritional Status of Orphans and Children of HIV-Infected Parents in Kenya. *AIDS Education and Prevention.* 19(5), pp. 383-395. http://dx.doi.org/10.1521/aeap.2007.19.5.383

15. Mishra, V., & Assche, S. B. (2008). Orphans and Vulnerable Children in High HIV Prevalence Countries in Sub-Saharan Africa. *DHS Analytical Studies*, 15, Calverton, Maryland, USA: Macro International Inc.

16. Momoh, G. (2010, June 28-30). *Social Protection for Children orphaned by AIDS in Nigeria – Challenges and Prospects.* Paper presented at Promoting Resilience through Social Protection in Sub-Saharan Africa Conference, Dakar.

17. NACA (2008). Scope of Work for the Impact of the National Response on the HIV/AIDS Epidemic Study, the Socioeconomic Impact Studies of the AIDS Epidemic on Households, and Selected Sectors in Nigeria. *National Agency for the Control of AIDS-Federal Republic of Nigeria*, Abuja.

18. National Bureau of Statistics (2009). Social Statistics in Nigeria. *National Bureau of Statistics*, Abuja. Retrieved August 5, 2011, from http://www.nigerianstat.gov.ng/ext/latest_release/ssd09.pdf.

19. National Bureau of Statistics (2010). The National Literacy Survey. *National Bureau of Statistics*, Abuja. Retrieved November 10, 2011, from http://www.nigerianstat.gov.ng/uploads/latestRelease/de4f17834ea0c57a9e1f440d029aebaa460863d0.pdf.

20. National Population Commission (NPC) & ICF Macro (2009). Nigeria's 2008 Demographic and Health Survey. National Population Commission, Abuja and ICF Macro, Calverton, Maryland. Retrieved October 12, 2011, from http://pdf.usaid.gov/pdf_docs/PNADQ923.pdf.

21. NPC, FMOE, USAID & ESSPIN (2011). Nigeria Demographic and Health Survey (DHS). Retrieved December 19, 2011, from http://www.randaedu.com/randaedu/themes/classic/files/NEDSREPORT2010.pdf

22. President's Emergency Plan for AIDS Relief (PEPFAR) (2006). Orphans and Other Vulnerable Children Programming Guidance for United States Government In-Country Staff and Implementing Partners. Retrieved January 17, 2012, from http://www.pepfar.gov/documents/organization/83298.pdf.

23. Pullum, T.W., & Greenwell, K.F. (2009, 27 September - 2 October). *Orphanhood, Household Composition and Child Outcomes in Sub-Saharan Africa*. Paper presented at the International Union for the Scientific Study of Population Meeting, Marrakech, Morocco.

24. Skyward Journey (2011). Orphan Statistics. Retrieved December 19, 2011, from http://skywardjourney.wordpress.com/orphan-statistics.

25. Smart, R., Heard, W., & Kelly, M.J. (2006). An education policy framework for orphans and vulnerable children. UNESCO. Retrieved January 25, 2012, from http://www.unesco.org/iiep/PDF/TR_Mods/HIV_Mod15.pdf.

26. UNAIDS (2008). Report on the Global AIDS Epidemic. Retrieved October 14, 2011, from http://www.unaids.org/en/media/unaids/contentassets/dataimport/pub/globalreport/2008/jc1510_2008globalreport_en.pdf.

27. UNAIDS (2010). UNAIDS Report on the Global AIDS Epidemic. Retrieved August 16, 2011 from http://www.unaids.org/GlobalReport/Global_report.htm.

28. UNAIDS (2011). UNAIDS World AIDS Day Report. Retrieved January 8, 2012, from http://www.unaids.org/en/media/unaids/contentassets/documents/unaidspublication/2011/jc2216_worldaidsday_report_2011_en.pdf

29. UNGASS (2010). UNGASS Country Progress Report, Nigeria. Retrieved May 27, 2011, from http://data.unaids.org/pub/Report/2010/nigeria_2010_country_progress_report_en.pdf

30. UNICEF (2004). The State of the World's Children 2005: Children under Threat. Retrieved August 5, 2011, from http://www.unicef.org/sowc05/english/sowc05.pdf.

31. UNICEF (2003). Africa's Orphaned Generations. The United Nations Children's Fund. UNICEF: New York. Retrieved August 5, 2011, from http://www.unicef.org/sowc06/pdfs/africas_orphans.pdf.

32. UNICEF (2006). Africa's Orphaned and Vulnerable Generations. Children Affected by AIDS. Retrieved August 5, 2011, from http://www.unicef.org/publications/files/Africas_Orphaned_and_Vulnerable_Generations_Children_Affected_by_AIDS.pdf.

33. UNICEF (2009). Orphan. Retrieved January 10, 2012, from http://www.unicef.org/media/media_45279.html

34. United Nations (1989). Convention on the Rights of the Child. Retrieved August 7, 2011, from http://www.ohchr.org/en/professionalinterest/pages/crc.aspx.

35. United Nations Statistics Division - UNDATA (2011). AIDS Orphans (one or both parents). Retrieved January 4, 2011, from http://data.un.org/Data.aspx?d=MDG&f=seriesRowID%3A622.

36. US Global Health Policy (2011). People Living with HIV/AIDS (Adults and Children) Data from most recent year available. Retrieved September 6, 2011, from http://www.globalhealthfacts.org/data/topic/map.aspx?ind=1.