

**ASSESSMENT OF THE IMPACT OF ANTI-RETROVIRAL TREATMENT ON  
PHYSICAL DEVELOPMENT OF THE ORPHANED AND VULNERABLE  
CHILDREN LIVING WITH HIV/AIDS.**

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**A DISSERTATION SUBMITTED IN PARTIAL FULFILLMENT OF  
REQUIREMENT FOR THE AWARD OF MASTER DEGREE IN SOCIAL  
WORK AT THE OPEN UNIVERSITY OF TANZANIA,**

**2013.**

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I have read and hereby recommend that this work has met the requirements of the Open University of Tanzania as it was Titled that, ‘Assessment of the impact of ARVs on physical development of the orphaned and vulnerable children living with HIV/AIDS’ A case study of PASADA, being an award for the partial fulfillment of Masters degree of Social work at Open University of Tanzania.

.....

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**DEDICATION**

My sincere dedication for this work is extended to my beloved family of Mr and Mrs Jordan Haule and my very beloved wife Editha Roman Mkoba. Above all, this work is dedicated to all social work professionals who in one way or another take time to serve the marginalised population including the children, the elderly, the disabled, the widows and widowers and those have lost hope to their lives including prisoners and the mentally sick persons.

## **ACKNOWLEDGEMENT**

I would like to foremost acknowledge my respondents for their vital and meaningful contribution that provided me with fundamental information toward accomplishment of my study. Likewise, I would sincerely like to acknowledge PASADA's Executive Director Mr. Simon and other staff of PASADA for Great Corporation they had shared with me during data collection process. This is due to the fact that without their corporation as an organization I couldn't be able to accomplish my study with time limited schedule as well as the quality information that I was demanding. I also acknowledge my beloved kinfolks for their valuable financial support that necessitated my school fees payment and other costs incurred during my study. Lastly and most, my acknowledgement is extended to all Open University Lecturers who in one way or another contributed to the skills based argument building as well as research competences in terms of knowledge and theory building .

## **ABSTRACT**

Despite diverse problems experienced by Orphans and vulnerable children, HIV/AIDS remains the most dangerous suffrage that terrifies the children lives. Care and treatment for OVC living with HIV/AIDS has been the concern of the government of Tanzania with other actors like NGOs, FBOs, and CBOs. With all fundamental efforts to support OVC, there have been unresolved challenges associated with ARVs consumption for children. However, the purpose of this study was to assess the impact of antiretroviral treatment on the physical development of the orphaned and vulnerable children living with HIV/AIDS. Data collection methodologies deployed in the study based on primary and secondary sources in which interview was applied during focus group discussion with OVC and questionnaire were administered for the staff. Sampling techniques used by the researcher were purposive sampling techniques whereas doctors, nurses, social workers, counsellors and clinicians were purposively selected while convenience sampling technique was used to select OVC who attended clinical treatment regularly and thus they were conveniently selected to represent the larger OVC population. Theories used in this study include personality theory, trait theory, humanistic theory, psychodynamic theory and self theory all explaining the state of orphaned and vulnerable children in relation to ARVs consumption. Data analysis and presentation was in chapter four whereby tables, pie charts and graphs were used to analyse data and thus making both qualitative and quantitative data collection methods to be employed in this study. The analysis part showed that 42% of the respondents said ARVs cause body swelling and deterioration to some OVC, 33% of them indicated that the impact of ARVs is that help the decrease of opportunistic infections, while 17% indicated that ARVs help the relaxation of the body while 8% said ARVs cause pain and discomfort hence resulting into poor drug adherence to OVC who are on ART.

Chapter five of this study comprised of summary of findings, conclusion and recommendations whereas the government, families, civil society organizations and drug suppliers have recommended to assures quality care and services for the orphaned and vulnerable children. Conclusively, the study has out with suggestions that need to be taken to improve the lives of the orphaned and vulnerable children.



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## ABBREVIATIONS

ARVs	Stands for Antiretroviral Viruses
ART	Stands for Antiretroviral Treatment
MVC	Stands for Most Vulnerable Children
MVCC	Stands for Most Vulnerable Children Committee
MSC	Stands for Multi-Sectoral Committee.
NCPA	Stands for National Costed Plan of Action
OVC	Stands for Orphans and Vulnerable Children
PASADA	Stands for Pastoral Activities and Services for AIDS
	People Dar Dare es Salaam
PSS	Stands for Psychosocial Support
REPSSI	Stands for Regional Psychosocial Support Initiatives
TACAIDS	Stand for Tanzanian Commission for AIDS

## **CHAPTER ONE**

### **1.0 INTRODUCTION AND BACKGROUND TO THE STUDY**

#### **1.1 Introduction**

This chapter involved the introductory part, back ground of the problem, statement of the problem, definitions of concepts, conceptual frame work, study objectives, research questions, significance of the study, limitations of the study and their interventions. Basically the study was assessing the impact of antiretroviral treatment on the physical development of the orphaned and vulnerable children living with HIV/AIDS and who are on ART at PASADA. The nature of this study is medical doctrine as far as antiretroviral treatment is concerned but basing on social perspective the study intended to assess the social and psychological aspect as caused by the treatment of AIDS viruses. In regard to this study and its current use, the researcher looked on the physical impact caused by ARVs consumption among orphaned and vulnerable children.

#### **1. 2. Back Ground to the Problem**

Human immunodeficiency virus infection / acquired immunodeficiency syndrome (HIV/AIDS) is a disease of the human immune system caused by infection with human immunodeficiency virus (HIV). During the initial infection, a person may experience a brief period of influenza-like illness. This is typically followed by a prolonged period without symptoms. As the illness progresses, it interferes more and more with the immune system, making the person much more likely to get infections, including opportunistic infections and tumors that do not usually affect people who have working immune systems (Sepkowitz KA (June 2001). Around 1.6 million people are living with HIV in Tanzania - six percent of the population. Although this number has

recently fallen slightly, the epidemic's severity differs widely from region to region, with some regions reporting an HIV prevalence of less than 2 percent (Arusha) and others as high as 16 percent (Iringa). (TACAIDS 2008, November). The HIV epidemic on Tanzania mainland is described as generalized, meaning it affects all sectors of the population. Heterosexual sex accounts for the majority of infections (80 percent) on Tanzania mainland. On the semi autonomous island of Zanzibar the HIV prevalence is far lower among the general population (0.6 percent) and the epidemic is more concentrated, primarily affecting female sex workers, men who have sex with men and injecting drug users (UNGASS/TACAIDS 2010).

A study published in 2005, using evidence drawn from Kenya and Tanzania, exposed findings which challenged some widely held assumptions about the effects of HIV and AIDS. The study found that generally the highest prevalence of HIV was found amongst the wealthiest households, particularly affecting wealthy women, as opposed to poorer and rural households. (Shelton, JD et al. 2005, Sept 24 – 30th). Since the study, academics have suggested various reasons for this phenomenon: wealthier people tend to have the resources which lead to greater and more frequent mobility and expose them to wider sexual networks, encouraging multiple and concurrent relationships. They also tend to have greater access to HIV medications that prolong their lives and are more likely to live in urban areas, which have the highest prevalence. However, the HIV prevalence gap between wealthier urban groups and poorer rural communities is slowly closing. A 2008 study found that knowledge of sexually transmitted infections was 'alarmingly low' in rural Tanzania and associated with low condom use and HIV infection. AIDS MAP (2008, July 18th)



The latest statistics of the global HIV and AIDS epidemic were published by UNAIDS, WHO and UNICEF in November 2011, and refer to the end of 2010. Children living with HIV/AIDS in 2010 were estimated to be 3.4 million. Likewise, 21 million people have died of AIDS since the 1980s, over 75 per cent of them in sub-Saharan Africa. More than 13 million children have been orphaned by AIDS, and that figure may reach 30 million before the end of the decade. AIDS is having a serious impact on many societies and economies, destroying the hard-won development gains that have been made in recent years. (UN reports 2001). National Orphan Population estimates and projections of the percentage of children who are orphans (losing one or both parents due to all causes, including HIV/AIDS) are high – 10.1 percent (1995), 12.0 percent (2001), and 11.6 percent (2010, projected) by *Children on the Brink* 2002; 8.5 percent (1996) by the Demographic and Health Survey (DHS); and 8.7 percent (1999) by the Reproductive Health Survey (RHS). Despite a slight decrease in the percent of children projected to be orphaned between 2001 and 2010, the number of orphans in Tanzania is likely to increase throughout the decade and surpass 2 million by 2010 (*Children on the Brink* 2002).

Given the above statistics, in sub-Saharan Africa, AIDS is the leading cause of death among adults ages 15–59, 3 and as one consequence, an estimated 12 million children ages 0–17 have lost one or both parents to AIDS. As a result, the total number of children orphaned from all causes in sub-Saharan Africa is expanding and reached 48.3 million at the end of 2005. Although the total number of orphans from all causes in Asia and in Latin America and the Caribbean has been decreasing since 1990, the number of orphans has risen by more than 50 per cent in sub-Saharan Africa compared

to Asia, and Latin America and the Caribbean, where 6 per cent are orphans, 12 per cent of all children in sub-Saharan Africa are orphans. ([www.google.com](http://www.google.com))

This means the Sub-Saharan regions are extremely facing the miserable challenges caused by HIV pandemic as both young and adult populations are impacted by the pandemic. This is due to the fact that HIV develops very rapidly among infants and children and orphanage and vulnerability are becoming the predominant life threatening state among children. In 2010, there were 250,000 AIDS-related deaths in under-15s, most of which could have been prevented through early diagnosis and effective treatment.<sup>2</sup> In many high-income countries, children who were infected with HIV at birth in the 1980s and 1990s are now entering adulthood as a result of access to antiretroviral treatment. However, although the number of children receiving antiretroviral therapy (ART) has increased significantly in recent years, at the end of 2010 only 23 percent of the 2.02 million children in need of ART in low- and middle-income countries were receiving it (WHO/UNAIDS/UNICEF 2011).

Basing on the above facts, HIV/AIDS pandemic has been a challenge to many regions as attributed continuous sexual behaviors among social groups whereby the epidemiological situation of HIV/AIDS/STDs in Tanzania occurs mainly through heterosexual contact beginning in the early teen years and peaking before the age of 30. Since 1983, when the first three AIDS cases in Tanzania were reported, the HIV epidemic has progressed differently in various population groups. Early in the epidemic, urban populations and communities located along highways were most affected. According to the NACP HIV/AIDS/STD Surveillance Report No.11, 1996, the epidemic has rapidly spread to rural communities and in 1997, more than 10% of women attending antenatal clinics situated in some rural areas have been found to be

HIV infected. The cumulative AIDS cases as reported from surveillance reports collected by the National AIDS Control Programme (NACP) in Tanzania mainland rose from 25,503 at the end of 1990 to 88,667 in 1996. In relation to HIV progress to various population groups as indicated above, Children are terrified with the pandemic resulting into various extreme challenges to their wellbeing including psychological, social and physical wellbeing from early childhood to adulthood. However, early childhood is a time of remarkable physical, cognitive, social and emotional development. Infants enter the world with a limited range of skills and abilities. Watching a child develop new motor, cognitive, language and social skills is a source of wonder for parents and caregivers. The study of human development is a rich and varied subject. We all have personal experience with development, but it is sometimes difficult to understand exactly how and why people grow, learn and change. Developmental psychology seeks to understand and explain how people grow and change through the entire lifespan. Researchers study the enormous range of influences including how genetics shape a child's development as well as how experiences play a role. (www.google.com)

As a child matures, parents eagerly await important milestones such as learning how to roll over and crawl. Each of these represents a part of physical development. The maturation process happens in an orderly manner; that is, certain skills and abilities generally occur before other milestones are reached. For example, most infants learn to crawl before they learn to walk. However, it is also important to realize that the rate at which these milestones are reached can vary. Some children learn to walk earlier than their same-age peers, while others may take a bit longer but all these processes can be hindered by HIV/AIDS.

Moreover, the child development and HIVS can largely affect each other especially the time when a child especially orphaned and vulnerable children consume ARV drugs while they are undergoing physical change in growth and cognition. For instance as a child grows, his or her nervous system becomes more mature. As this happens, the child becomes more and more capable of performing increasingly complex actions but this can be hindered by HIV/AIDS and even ARV drugs if no proper preparations are done to protect the livelihood of the children. Caregivers frequently fret about whether or not their children are developing these skills at a normal rate and given to increasing HIV progress more questions on children's growth are asked. However, nearly all children begin to exhibit these motor skills at a fairly consistent rate unless some type of disability is present.

Regarding types of motor skills, the ARVs can destroy its function only if dosage and counseling are not considered in the OVC physical development process. Gross (or large) motor skills involve the larger muscles including the arms and legs. Actions requiring gross motor skills include walking, running, balance and coordination. When evaluating gross motor skills, the factors that experts look at include strength, muscle tone, movement quality and the range of movement. Fine (or small) motor skills involve the smaller muscles in the fingers, toes, eyes and other areas. The actions that require fine motor skills tend to be more intricate, such as drawing, writing, grasping objects, throwing, waving and catching.

Likewise, the ARVs consumption by OVC can affect physical development in children follows a directional pattern. Since large muscles develop before small muscles depending on health and environment of a child. Muscles in the body's core, legs and

arms develop before those in the fingers and hands. Children learn how to perform gross (or large) motor skills such as walking before they learn to perform fine (or small) motor skills such as drawing. The center of the body develops before the outer regions; muscles located at the core of the body become stronger and develop sooner than those in the feet and hands. However, these impacts occur in a number of overlapping and interdependent domains, including children's psychosocial development. Some of these effects have been reviewed elsewhere<sup>1</sup> and the main points from these reviews are reiterated here as an introduction to considering the impact of HIV/AIDS on children's development.

Given HIV/AIDS impact on children's development, changes in caregiver and family composition may also affect the child's wellbeing as a result of death and migration, family members, including dependent children; often move in and out of households. Caregivers change and siblings may be split up. Separation from siblings has not only been found to be a predictor of emotional distress in children and adolescents,<sup>5</sup> but children become more vulnerable when they are cared for by very aged relatives due to the conditions of mutual dependency that often exist between adult and child. Death and migration may also result in the creation of child-headed households. These are most likely to form when there is a teenage girl who can provide care for younger children, when there are relatives nearby to provide supervision, and siblings either wish to stay together or are requested to do so by a dying parent. New responsibilities and work for children: Several studies have shown that responsibilities and work, both within and outside of the household, increase dramatically when parents or caregivers become ill or die. In such circumstances, instances of work and responsibility being given to children as young as five have been observed. Responsibilities and work in the

household include domestic chores, subsistence agriculture and provision of care giving to very young, old and sick members of the household. Work outside of the home may involve a variety of formal and informal labour, including farm work and begging for food and supplies in both the community and beyond (S Hunter & J Donahue, 1997)

In connection with the above statement that changes in caregivers and family composition might affect the children, as well Health and nutrition for the Children affected by HIV/AIDS have significant contribution to their physical growth. Once they receive poorer care and supervision at home, may suffer from malnutrition and may not have access to available health services, although no studies have yet demonstrated increased morbidity and mortality among broadly affected children compared to unaffected control groups. In this regard, it has been suggested that the safety nets of families and communities are still sufficiently intact to protect the majority of children from the most extreme effects of the epidemic; 12 or alternatively, that orphans may not be worse off than peers living in extreme poverty. Indeed, with high levels of ambient poverty in most high-prevalence communities, it is difficult to ascertain which effects on children's health are attributable specifically to HIV/AIDS.

Apart from health and nutrition as stipulated above, Psychosocial needs and problems of the children especially the OVC must be taken into board. The affected and orphaned children are often traumatized and suffer a variety of psychological reactions to parental illness and death. In addition, they endure exhaustion and stress from work and worry, as well as insecurity and stigmatization as it is either assumed that they too are infected with HIV or that their family has been disgraced by the virus.

Loss of home, dropping out of school, separation from siblings and friends, increased workload and social isolation may all impact negatively on current and future mental health. Existing studies of children's reactions suggest that they tend to show internalizing rather than externalizing symptoms in response to such impacts—depression, anxiety and withdrawal—as opposed to aggression and other forms of antisocial behavior (R Forehand, R Steele, L Armistead, E Morse, P Simon & E Clarke, 2006).

With all mentioned considerations for protecting and increasing Orphaned children wellbeing especially to those children living with HIV/AIDS, the issue of dosing and drug formulations in children should also be taken seriously. The dose of antiretroviral drugs given to children is generally based either on weight or body surface area. Children's bodies are constantly changing and developing and often it is vital that drug doses are altered to ensure that a child is not given too much, or too little, of a drug. The study of how a body reacts to medication is called pharmacokinetics (PK). Pharmacokinetic properties such as absorption, distribution, metabolism and excretion of a drug all influence the efficacy, toxicity and dosing regimen required in a child. Expert guidelines use a variety of ways to calculate doses of pediatric ARVs, so there is no uniform dosing system to follow (Manson E. N. et al. 2006).

Additionally, the issue of ARVs adherence is very important in OVC physical growth milestones. Most children on HIV treatment need to take three or more types of ARVs every day for the rest of their lives. If drugs are not taken routinely at around the same time every day, HIV may become resistant to the therapy, causing it to stop working. Adherence among children varies between and within countries. KIDS-ART-LINC

Collaboration (2008) reported on a review of 17 studies regarding pediatric HIV treatment adherence found adherence ranging from 49 percent to 100 percent. Surprisingly, most of the studies in low- and middle-income countries revealed adherence rates above 75 percent, whereas adherence in high-income countries was generally below 75 percent. Many factors can lead to adherence problems. Some relate directly to the medicine, such as inadequate dosing, high pill burden, reluctance among young infants to take syrups and powders due to their unpleasant taste, dietary restrictions, and toxic side effects of drugs. The child's social context can also have dramatic effects on whether they adhere to ARVs, with adherence affected by factors such as the socioeconomic status of the child, whether or not a child's status has been disclosed and medical fees (Fennel, L 2010)

The other item apart from the mentioned is consideration of drug resistance in children. This is happening when the Human Immunodeficiency Virus becomes resistant to certain antiretroviral, making them ineffective against the virus. It is something that infants and children living with HIV are especially at risk of. One review of studies in low-income countries found that 90 percent of children experiencing treatment failure had one or more drug-resistant strains of the virus (Sigaloff K. et al (2011). Various factors can worsen the risk. Many countries still administer single-dose nevirapine for PMTCT, despite the WHO recommending that this be phased out. The drug is less effective at PMTCT than other regimens, and infants that still become infected when their mother has taken single-dose nevirapine are at high risk of drug resistance. After the child is born, treatment doses may need to be modified in line with changes to their age and weight. However, a lack of suitable pediatric formulations and doses may



increase the risk of developing drug resistance, as a result of bad adherence and incorrect dosing (WHO (2010).

Another effort which is to consider is all about preventing opportunistic infections to OVC. The opportunistic infections, which take advantage of weak immune systems, are a serious threat to children living with HIV. Tuberculosis (TB) and PCP (a form of pneumonia) are major causes of illness and death among infected infants. Due to their weak immune systems, children living with HIV are very vulnerable to opportunistic infections, and need to be provided with preventative treatment (drug prophylaxis) to prevent such illnesses. For example, prophylaxis against PCP (one of the most common opportunistic infections in children living with HIV) is recommended for all children born to HIV-positive mothers, starting from about one month after birth (Paediatric European Network for Treatment of AIDS (PENTA 2009). For children who have no access to ARVs, treatment for opportunistic infections may delay the need for antiretroviral treatment.

However, basing on the mentioned backgrounds and considerations for children living with HIV/AIDS, nations around the world have taken various measures to ensure all groups impacted by HIV/AIDS pandemic are supported with the close eye to the children who are orphaned and vulnerable. Africa like other many continents of the world has seriously been fighting for HIV/AIDS in collaboration with international agencies and bilateral corporations. The World Health Organization was slow to respond to the emerging HIV/AIDS epidemic in Africa as it contended that AIDS was not the primary healthcare concern in the region (Denis and Becker (eds) (2006) 'The HIV/AIDS epidemic in sub-Saharan Africa in a Historical Perspective).

The WHO Global Programme for the Fight against AIDS was swiftly put into action and aimed to raise \$1.5 billion a year by the end of the decade to help prevention and educational efforts, with priority to Africa (The New York Times 1986).

This fight against HIV/AIDS however, has for so long since the first HIV cases to be reported been initiated by different nations all over the world. Hence, In 1996 the effective combination therapy known as HAART became available for those living with HIV in rich countries. The new drugs were so effective that AIDS death rates in developed countries dropped by 84% over the next four years. This led scientists to declare, "Aggressive treatment with multiple drugs can convert deadly AIDS into a chronic, manageable disorder like diabetes (The Los Angeles Times (1996) 'Studies of combined HIV drugs promising; Health: experts at AIDS conference unveil early results showing treatment involving certain medications reduces virus to undetectable levels.

But the discovery of HAART, did not consider the dynamics of orphanage as the number of newly orphaned children, or orphan incidence, reflects the magnitude and current impact of the crisis. While orphan prevalence estimates include all children ages 0–17 who have lost one or both parents over their lifetime, incidence reflects only those who have lost a parent during the past year. Likewise, the age of orphans and their age when they were orphaned have significant implications for planning a response that meets children's needs at varying developmental stages. Older orphans may be at risk of missing out on education, being subject to exploitative labor, and being exposed to HIV and other sexually transmitted infections.

In a nutshell, the HIV/AIDS since its history has been a thorn to lives of various populations including the children, the women, youth and elderly people. Hence, various social institutions including families, government, religious institutions and international corporations must come together to in the fight of this war. Likewise, households that receive orphans or vulnerable children need to be supported in terms of provision off basic necessities such as food, medical care, housing, clean and safe water, clothing, and protection for the purpose of promoting the physical and social development of the OVC.

### **1.3. Statement of the problem**

Africa disproportionately bears the burden of the HIV/AIDS pandemic. Although only 11% of the World's population lives in Africa, roughly 67% of those living with HIV/AIDS are in Africa. The increasing number of HIV/AIDS infection has brought tremendous impact to all groups including the children, the elderly and the women who suffer much from extreme poverty. Orphanage rate has also been tremendously increasing in Africa and Tanzania being one of the Sub-Saharan regions, is experiencing the same burden and today Tanzanian children are vulnerable and orphaned in rural and urban communities. Despite various efforts taken by the government of Tanzania to ensure that children are receiving maximum care, protection and support as stipulated in the child development policy of 1996, health policy that provides under 5 years children free health service, and HIV/AIDS policy of 2008, no clear programmes designed for orphaned and vulnerable children. Therefore, OVC have been left out of the priority in all government policies. As well researchers do little on issues of orphaned and vulnerable children particularly in the area of HIV/AIDS and health.

With this situation, HIV positive OVC are dying despite receiving ARVs and other immeasurable supports and this leaves the question why increasing number of deaths among HIV positive OVC while health researches, various interventions, policies and health programs are done and exist. This question propelled the researcher for this study to fill in the gap by now assessing whether the ARVs provided to orphaned and vulnerable children living with HIV have any impact to their physical development in relation to the stipulated basic needs by the government in the child development policy, National costed plan of action and HIV/aids policy and various social science researchers. The researcher therefore, expected to get the sounding results to see why OVC who are on ART are sometimes getting to worse condition while some are improving to better. Is it because of ARVs and dosage, or there are other reasons patterning to this. All these would be found out through the study of this nature. And thus, researchers had put their efforts to studying the needs for and challenges experienced by OVC and their self actualization but less was done on the issue of ARVs and HIV/AIDS among OVC as it was done by the recent researcher.

#### **1.4. The Study Objectives**

##### **1.4.1 General Objectives**

1. To assess the impact of antiretroviral treatment on physical development of the orphaned and vulnerable children living with HIV/AIDS.

##### **1.4.2 Specific Objectives**

The specific objectives of the study are three, namely;

- (a) To explore the adverse impact of ARVs consumption to OVC living with HIV/AIDS.

(b) To identify the physical challenges faced by the orphaned and vulnerable children when using ARV drugs.

(c) To come out with strategies on how the orphaned and vulnerable children who are on ART can be supported to improve their physical development.

### **1.5 Research Questions**

The following are the key questions which the study attempted to answer, they include the following;

(a) What is the adverse impact of ARVs use on physical growth of the orphaned and vulnerable children?

(b) Are there any challenges caused by ARVs in relation to the physical development of the OVC living with HIV/AIDS?

(c) What is the impact of ARVs on physical development of the orphaned and vulnerable children using it?

(d) What strategies can be initiated to promote better physical development of the HIV positive OVC who are on antiretroviral treatment?

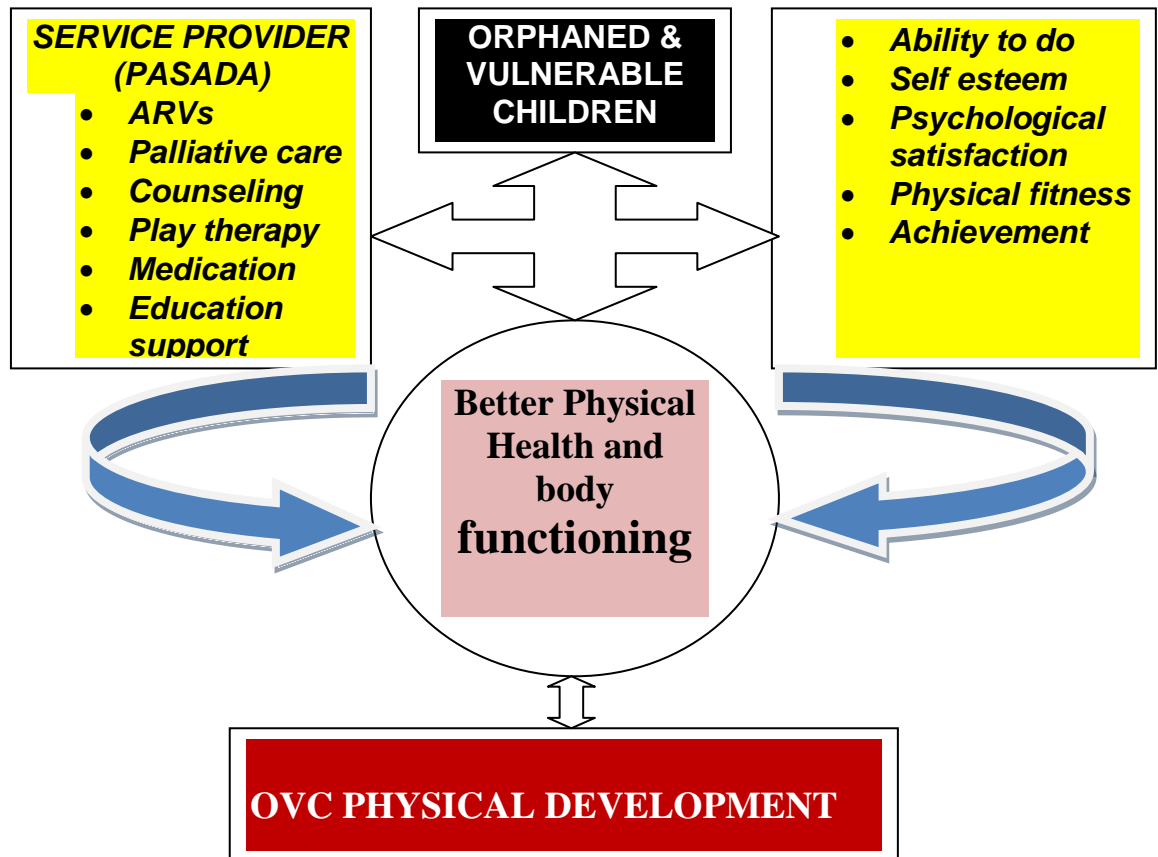
### **1.6. Significances of the Study**

- ❖ To the researcher, this study has been done for the purpose of accomplishment of Master of Arts in Social Work at Open University of Tanzania; hence this study has encompassed such significance since it has been done as a partial fulfillment for the academic award intended by the researcher and which has been designated by the Open University of Tanzania.
- ❖ Likewise, the study has helped the researcher to fill in the knowledge gap which practically enabled application of classroom research knowledge into practical

orientation. For instance understanding of data collection methods, data analysis and presentation have been important components for the researcher knowledge building in relation to this study.

- ❖ To Open University of Tanzania; this study is significant as it can be used as reference for the incoming students admitted in similar programme. Thus through University library, students and other beneficiaries may have interest on the studied subject hence accessing to it as well using it as a document for literature review.
- ❖ Lastly, the study has necessitated the exploration of findings which justify the ARVs related impact on physical development of the OVC living with HIV/AIDS, as well as other relating factors and it has provided the rational recommendations which are necessary for the improvement of OVC wellbeing in the country including adequate care and treatment and actions to be taken by all important institutions such as the government, the family, the community and drug suppliers.

**Figure 1:1 Conceptual Frame Work**



**Source: Researcher 2013**

The conceptual frame work has been developed by the author to conceptualize his study. Basically this conceptual frame work illustrates the connection between the orphaned and vulnerable children, the use of ARVs and acquisition of basic human necessities and how altogether constitute to the development of better physical health of the orphaned and vulnerable children supported by PASADA. It goes further looking whether the ART to vulnerable and orphaned children living with HIV/AIDS or add value to their physical development. The most important is to have insight assessment of the infected OVC on their physical functioning and ability to access to their basic rights such as right to play, education, food acquisition, housing and other provisions

## **CHAPTER TWO**

### **2.0 LITERATURE REVIEW**

#### **2.1 Introduction**

The chapter has involved the introduction, explanations of theories, empirical studies, policies and other past studies relation to this current topic of the study which has assessed the impact of ARVs on physical development of the orphaned and vulnerable children living with HIV/AIDS. This chapter gathered information from different sources especially those of the past experiences from different studies. Literatures, books, journals and magazines provided vital information that has enabled the researcher accomplish his contemporary study which was assessing the impact of antiretroviral treatment on physical development of the orphaned and vulnerable children living with HIV/AIDS.

Around 1.6 million people are living with HIV in Tanzania - six percent of the population. Although this number has recently fallen slightly, the epidemic's severity differs widely from region to region, with some regions reporting an HIV prevalence of less than 2 percent (Arusha) and others as high as 16 percent (Iringa). (TACAIDS (2008, November). The HIV epidemic on Tanzania mainland is described as generalized, meaning it affects all sectors of the population. Heterosexual sex accounts for the majority of infections (80 percent) on Tanzania mainland. On the semi autonomous island of Zanzibar the HIV prevalence is far lower among the general population (0.6 percent) and the epidemic is more concentrated, primarily affecting female sex workers, men who have sex with men and injecting drug users (UNGASS/TACAIDS 2010).



A study published in 2005, using evidence drawn from Kenya and Tanzania, exposed findings which challenged some widely held assumptions about the effects of HIV and AIDS. The study found that generally the highest prevalence of HIV was found amongst the wealthiest households, particularly affecting wealthy women, as opposed to poorer and rural households. (Shelton, JD et al. 2005, Sept 24 – 30th). Since the study, academics have suggested various reasons for this phenomenon: wealthier people tend to have the resources which lead to greater and more frequent mobility and expose them to wider sexual networks, encouraging multiple and concurrent relationships.

Likewise, the study employed some theories relevant with the research topic and some of those theories are such as personality theories, humanistic theory, trait theory and psychodynamic theory by Freud, behavioral theories, delinquency theories, crime theories, cognitive theories, and other sociological and psychological perspectives including child development theory which explain about specific stages the child is undergoing from conception to death. Children who are orphaned are more likely to suffer from detrimental health and nutritional outcomes; orphaned children are more likely to be stunted compared to non-orphans. Additionally, caregivers of double and maternal orphans are less likely to report that the child has been sick in the last 12 months although maternal orphans are more than twice as likely to report being treated worse than other members of the household, compared to non-orphans. (UNICEF 2006)

Although the overwhelming majority of OVC are living with surviving parents or extended family, many of them are being cared for by civil society organizations for children in seriously affected communities; the whole nature of childhood is changing

fundamentally. Children are at increased risk of losing opportunities for school, health care, growth, development, nutrition, and shelter. Moreover, with the death of a parent, children experience profound loss, grief, anxiety, fear, and hopelessness with long-term consequences such as psychosomatic disorders, chronic depression, low self-esteem, learning disabilities, and disturbed social behavior. (Policy July 2003)

Some programs conducted in Tanzania for orphaned and vulnerable children include:

Food and nutrition support: These services have the desired outcomes of food and nutrition security and supporting proper development with appropriate nutrition. Shelter and material care: These services have the desired outcomes of children having protective shelter. Protection: These services have the desired outcomes of eliminating stigma, social neglect, and physical and sexual abuse and exploitation. Health care: These services have the desired outcomes of meeting the preventive and curative health needs of children. Psychosocial support: These services have the desired outcomes of children having the human relationships necessary for normal development. Education and vocational training: These services have the desired outcomes of vulnerable children receiving educational and vocational opportunities. (PACT report November 2008).

However, all the above literatures despite explaining various issues about the orphaned and vulnerable children have not investigating enough on whether services provided to orphans and vulnerable children have measurable impact to their socio-economic and personality development,. Hence my study is expecting to go further beyond other studies by evaluating the quality of life of orphaned and vulnerable children in relation to the services provided by civil society organizations Women in Tanzania are

particularly affected by HIV and AIDS. In 2011, women comprised nearly 60 percent of people living with HIV. Among the 15-24 age groups, prevalence is 2 percent among young women and 4 percent among young men. (UNAIDS Global Report 2012). However, Women tend to become infected earlier, which is partly due to the tendency of women to have older partners or get married earlier. There are 230,000 children living with HIV and 1.3 million children orphaned by AIDS in Tanzania (UNAIDS Global AIDS Report 2012). From the 'Global Report 20 Grandmothers and other relatives often provide invaluable support to orphans but they are still more vulnerable to poverty, sexual abuse and poor nutrition than children who live with both their parents. Caregivers also receive little support from the Tanzanian government: less than 1 in ten receive some type of support (usually school related assistance) while less than 5 percent receive medical or social support (TACAIDS 2008, November).

## **2.2 Financing National Response to HIV/AIDS**

The Government has the responsibility to provide management and financial leadership in the National response to the HIV/AIDS epidemic. The Government has allocating funds to support the fight against HIV/AIDS but this is too minimal to address the extreme overwhelming HIV pandemic especially to the children who seem to be half of the national population. With challenge, no allocations of funds for OVC who are special group rather all these groups are treated like other populations. Funding for HIV and AIDS in Tanzania: The Tanzanian HIV and AIDS response is heavily reliant on foreign funding. Almost all (95 percent) of the funding for HIV and AIDS programmes comes from foreign donors of which more than two thirds is from the Global Fund and PEPFAR.( TACAIDS 2008, February).

HIV and AIDS funding makes up one third of all aid coming to Tanzania. In total, more than \$400 million was committed to HIV and AIDS in 2007/2008. Eighty percent of donor funding does not appear in Tanzania's own government budget and is instead managed by the donor governments or partners. This means that it is not always necessarily aligned with the goals set out in Tanzania's National Policy on AIDS. For example, less than a quarter of PEPFAR and Global Fund money in Tanzania is spent on prevention despite the government inclusion of prevention as the key focus of the National Multisectoral Framework. Tanzania's public expenditure review has expressed concern that the government cannot take the lead role in policy and planning it needs to implement its National Multisectoral Strategic Framework when so much of its HIV and AIDS funding comes from external aid ( TACAIDS Report 2008, February).

Although donor spending on HIV and AIDS in 2009 was not affected by the financial crisis, this is mainly because previous funding commitments are still being honored. UNAIDS (2009, October) 'Tanzania 'Adverse effects of economic hardship in Tanzania such as job losses and budget cuts could affect the provision of antiretroviral and other medical supplies in the future and worsen health worker shortages. Moreover, capping of PEPFAR funding in 2010 and reduced funds available to the Global Fund will likely make it difficult for Tanzania to expand treatment and care services unless the domestic budget for HIV and AIDS is increased.

### **2.3. Child Policy in Tanzania**

The child development policy of 1996 is one of the prevailing policies that intend to protect and promote the development of children both in rural and urban areas. Since independence, Tanzania has been preparing and implementing policies and programmes directed to the development of people. In practice this meant that priority was given to

the provisions of basic services to the people particularly services related to health, education, safe and clean water. The laws in Tanzania provide many and different interpretations of a child but in this policy the child is defined as a person below the age of eighteen. The definition is in accordance with the United Nations Conventions and is the one used to protect the rights and interests of the child particularly in regard to employment and marriage contracts, protection against abuse, punishment, and care by parents or guardians.

But despite all these initiatives, children in Tanzania are much suffering from all forms of abuse including sexual and physical abuse relating to child labor. The implantation of the policy seems to more political than reflecting the reality whereas the suffrages among children is higher particularly those children who are marginalized such as the orphaned and vulnerable children. All rights upon this group are deprived just because they are voiceless and no one to speak on their behalf. And thus, OVC have no access to education, health care, protection, security and quality life.

### **2.3.1. HIV/AIDS policy in Tanzania**

The enactment and implementation of the HIV policy was the result of the huge and diverse impact that people in the societies have been experiencing. It is believed that HIV/AIDS is a major development crisis that affects all sectors. During the last two decades the HIV/AIDS epidemic has spread relentlessly affecting people in all walks of life and decimating the most productive segments of the population particularly women and men between the ages of 20 and 49 years. The increasing number of AIDS related absenteeism from workplaces and deaths reflects the early manifestation of the epidemic leaving behind suffering and grief. Others include lowering of life expectancy,

increasing the dependency ratio, reducing growth in GDP, reduction in productivity, increasing poverty, raising infant and child mortality as well as the growing numbers of orphans. The children under the age of ten years bear the brunt of the impact of AIDS and for them the impact is much longer lasting than for adults.

### **2.3.2 HIV/AIDS and Poverty**

It has been well established that poverty significantly influences the spread and impact of HIV/AIDS. In many ways it creates vulnerability to HIV infection, causes rapid progression of the infection in the individual due to malnutrition and limits access to social and health care services. Poverty causes impoverishment as it leads to death of the economically active segments of the society and bread winners leading to reduction in income or production. The human capital loss has serious social and economic development in all sectors and at all levels. However, OVC families are stuck by extreme poverty that is attributed by incurring costs for the long suffered parents of the children without support. And this means the policy of HIV/AIDS is silent on supporting the marginalized families in the time HIV suffrages as a result children are primarily affected than adults.

### **2.4 National costed plan of action for MVC**

To respond to the existing challenges, the government of Tanzania under the Ministry of Health and Social welfare under the department of Social welfare came out with strategies for improving the wellbeing of the children after seeing the implementation of the existing policies was worse and universal. The specific group in this framework of action was most vulnerable children whose lives seem to be at high risk in relation to lack of basic necessities such as food, clothing, medication, housing and protection.

This approach however, is what so far called NCPA I. The challenge with this strategy therefore, was that no funds were allocated by the government to implement the agreed services including care and protection of the most vulnerable children.

The NCPA I was initiated to cover the period three years starting from 2007 to 2010 with involvement of the government and nongovernmental organizations. Its vision was to see the most vulnerable children grow and develop to their full potential. The Mission was that the NCPA would guide the implementations and expansion of the interventions designed to enhance protection, care, and development of children within the frame work of well coordinated national response program. But with all these fundamental strategies, its implementation failed and has now resulted into NCPA II designed to cover the year 2013 to 2017.

## **2.5. Theories and their validity to the study**

### **2.5.1 Personality theory**

Personality psychology is the focus of some of the best known psychology theories by a number of famous thinkers including Sigmund Freud and Erik Erickson. In this section of the personality study guide, learn more about some of the major theories of personality and the psychologists who developed them. The personality theory looks an individual from the inner and part and outer part that together describes how a person is and how he or she behave like. An individual personality is influenced by a number of factors and some of these include cultural experience, environment, and socialization. However, the validity of this theory to the study is that OVC have different personalities which in most cases are described in different perspectives. To which stigma and prejudice upon them is constructed. Thus, through this theory some behaviors are of children including OVC can be obtained through their personalities

and help understand why they are in the way they are and what make them not grow with rational personalities.

### **2.5.2. Biological Theory**

Biological approaches suggest that genetics are responsible for personality. Research on heritability suggests that there is a link between genetics and personality traits. One of the best known biological theorists was Hans Eysenck, who linked aspects of personality to biological processes. For example, Eysenck argued that introverts had high cortical arousal, leading them to avoid stimulation. On the other hand, Eysenck believed extroverts had low cortical arousal, causing them to seek out stimulating experiences. However, with this theory the researcher managed to set out some questions to OVC during the focus group discussions especially when assessing the impact of ARVs on their physical development. The behavior of poor ARV drugs adherence among OVC seemed to be their predominant traits that distinguish their inner personalities and out personalities. Thus, the deaths among OVC who are on ART are attributed by their personality traits of not being obedient, passive and rational toward what they are addressed to follow and hence dying despite being in the dose.

### **2.5.3. Behavioral Theory**

Behavioral theorists include B. F. Skinner and John B. Behavioral theories suggest that personality is a result of interaction between the individual and the environment. Behavioral theorists study observable and measurable behaviors, rejecting theories that take internal thoughts and feelings into account. This theory as well was very useful in this study as it brought in assessing how environment and interactions affect behaviors of OVC. The OVC who were on ART seemed to have developed self stigma and this



was reinforced the living and school environment where the issue of HIV/AIDS seems to be extra ordinary. The drug taking tendencies among OVC was progressively changing to worse due to the fact that the school pupils and family members were showing high level of stigma to children living with HIV/AIDS and this resulted into dumping out of the ARVS given at the clinic and the behavior spread to other OVC.

#### **2.5.4. Psychodynamic Theory**

Psychodynamic theories of personality are heavily influenced by the work of Sigmund Freud, and emphasize the influence of the unconscious mind and childhood experiences on personality. Psychodynamic theories include Sigmund Freud's psychosexual stage theory and Erik Erickson's stages of psychosocial development. Freud believed the three components of personality were the id, the ego, and the superego. The id is responsible for all needs and urges, while the superego for ideals and moral. The ego moderates between the demands of the id, the superego, and reality. Erickson believed that personality progressed through a series of stages, with certain conflicts arising at each stage. Success in any stage depended upon successfully overcoming these conflicts.

#### **2.5.5. Humanistic Theory**

Humanist theories emphasize the importance of free will and individual experience in the development of personality. Humanist theorists emphasized the concept of self-actualization, which is an innate need for personal growth that motivates behavior. Humanist theorists include Carl Rogers and Abraham Maslow. However, the problems the OVC are encountering in relation to the ARVs impact is sometimes more human than generalization. For example when the researcher tried to assess why some OVC

are so adherent to drugs while few are not, the application of humanistic theory helped in understanding the behavioral patterns of every individual. For instance some children have the personal view on drugs as caused by humanistic behavior and thus not all OVC had the same responses on it.

#### **2.5.6. Trait Theory**

The trait theory approach is one of the largest areas within personality psychology. According to this theory, personality is made up of a number of broad traits. A trait is basically a relatively stable characteristic that causes an individual to behave in certain ways. Some of the best known trait theories include Eysenck's three-dimension theory and the five factor theory of personality. However, the above theories enabled the researcher to understand the existing concepts that reflect human development and how an individual can get satisfaction in the cause of acquisition of basic necessities conducive for the wellbeing and achievement. Through these theories the researcher was able to evaluate the quality of life of the orphaned and vulnerable children in relation to the stated functioning of theories. However, for the case of this study, personality theory was employed, as it is useful in evaluating physical, psychological, cognitive, social and behavioral development of the orphaned and vulnerable children in Tanzania.

#### **2.7 Conclusion**

Orphans and Vulnerable Children are suffering from different socio-economic consequences hence their lives become miserable yearly and yearly. Many studies have been done on issues of children in particular the OVC but still this group of become marginalized and discriminated. The provision free ARVs has a major concern of the

government and other social actors including NGOs but no one is indeed bothered by the deaths of OVC. Although HIV prevalence has fallen in Tanzania over the past decade, tens of thousands of people become infected with HIV every year. Stigma against HIV positive people particularly for OVC becomes higher in our communities.

## **CHAPTER THREE**

### **3.0 RESEARCH METHODS AND PROCEDURES**

#### **3.1 Introduction**

This chapter covers research design and methods applied in this study including study area, study population and sampling procedures. These are fundamental components within which the research was conducted and that was the blue print for the whole research process.

#### **3.2 Study Area**

The study area is Dar es Salaam Region, Temeke District. PASADA being the case study, the researcher was reach of information PASADA is the oldest nongovernmental organizations in providing care and treatment for the people living with HIV/AIDS in Tanzania as it was established as early as 1992. Thus, this study area selected by the researcher provided all necessary data and hence enabled the researcher to accomplish his task very successfully. Another pushing factor toward selecting PASADA as a case study is the fact that it has a huge number of HIV clients with desirable number of over 15000 (fifteen thousands) children including Orphans and vulnerable children as well as the bigger number of adult HIV clients with a desirable number of over 40000 (forty thousands) adult clients. With that big number of clients, the study area is also having the long experienced personnel who could positively meet the needs and challenges of the selected topic of study.

### **3.3. Research Design and Methods**

Research design and methods is the system of collecting data for research project is called research methodology, (Guidance for research India 2010). For the case of my study both probability and non probability methods will be employed in order to collect properly all the required information required for the data analysis. The probability sampling was employed when assessing the impact of ARVs on physical development of the OVC living with HIV/AIDS and who are on ART. Since the children will be picked from the larger group randomly and then ask them the prepared questions. For the purpose of this study, the researcher used purposive sampling and convenience sampling methods to meet the need of the study.

#### **3.3.1 Research Design**

Research design is considered as a "blueprint" for research, dealing with at least four problems: which questions to study, which data are relevant, what data to collect, and how to analyze the results (T Philliber, Schwab, & Samsloss, 1980). The design of my research will be descriptive and explanatory. This is attributed by the facts that some will have some statistical and narrative data and the analysis and presentation of the data will be descriptive and narrative since study is looking to investigate the impact of ARVs on the physical development of the children who are on ART. The descriptive design was useful when putting data into statistics and when analyzing the responses into percentage. Also the narrative design was useful when the researcher was giving explanations to the statistical information which have been presented in the table, pie charts and graphs.

### **3.4 Population Target**

Since the study intended to assess the impact of ARVs on physical development of the HIV/AIDS positive OVC who are also on ART, The researcher preferred the involvement of potential groups in the study process and these groups were that of OVC living with HIV/AIDS and who are on ART at PASADA as well as the potential staff at PASADA including social workers, medical doctors, nurses, counselors and clinicians whom basically managed to provide wanted and quality data during the data collection processes.

### **3.5 Sampling Techniques**

Sampling techniques is referred to as the selection of sample that gives the representative view of the whole target population. According to Kothari (2004), Sample is the number of items to be selected from the universe to represent the entire population such as unit, size, technique and frame. In statistics and survey methodology, sampling is concerned with the selection of a subset of individuals from within a population to estimate characteristics of the whole population. However, for the case of this study the researcher had a representative sample of 120(100%) respondents among whom 60 respondents were OVC living with HIV and who are on ART at PASADA while the other 60 respondents comprised of potentials staff of PASADA who work with children in daily basis.

### **3.6 Sampling Frame**

According to Jan Wretman 2003, sampling frame is the source material or device from which a sample is drawn. For the case of this study sampling frame has been described in the below table as follows;

### 3.1 A table Showing Sampling Frame

RESPONDENTS	NUMBER OF RESPONDENTS	PERCENTAGE
OVC	60	50%
Doctors	10	8%
Nurses	13	11%
Counselors	12	10%
Social workers	15	13%
Clinicians	10	8%
TOTAL	120	100%

**Source: Research findings 2013**

### 3.7 Sampling Methods

Sampling methods are used to select a sample from within a general population. Proper sampling methods are important for eliminating bias in the selection process. (Free online encyclopedia) They can also allow for the reduction of cost or effort in gathering samples. The appropriate methods for this include purposive sampling and convenience sampling methods that determined the essence of the study hence provided easy way for the researcher in collecting data

#### 3.7.1 Purposive Sampling

Purposive sampling, also known as judgmental, selective or subjective sampling, is a type of non-probability sampling technique. Non-probability sampling focuses on sampling techniques where the units that are investigated are based on the judgment of the researcher. This is the general intent of research that is guided by a quantitative research design. The main goal of purposive sampling is to focus on particular

characteristics of a population that are of interest of the researcher. Potentially this sampling method was employed by the researcher in his study following the fact that the nature of the respondents are of different characters. Since the study itself was assessing the impact of antiretroviral treatment on the physical development of the OVC living with HIV/AIDS, the researcher was obligated to be judgmental in his sample selection. And this led to the selection of some medical doctors, nurses, social workers, counselors and clinicians who daily work assignments are abide to OVC with living with HIV thus not every staff was involved in the sample.

### **3.7.2 Convenience Sampling**

According to business dictionary convenience sampling is referred to as a statistical method of drawing representative data by selecting people because of the ease of their volunteering or selecting units because of their availability or easy access. The advantages of this type of sampling are the availability and the quickness with which data can be gathered. However, this method of data collection was very much helpful and useful since it employed during focus group discussion with OVC who are on ART whose attendance at PASADA clinic for ARVs collection is every Tuesday of the week. Through this method the researcher managed to select the OVC conveniently on their clinic day and hence data were collected effectively. The simple way the researcher applied, was to conduct focus group discussion with a small group of 5 OVC in different 6 sessions hence reaching 60 OVC in totality. The chance of OVC for being selected depended on their attendance at clinic on that particular day, and whoever met by the researcher was conveniently appointed and involved in his study.



### **3.8 Data Collection Methods**

Data collection is the process of gathering and measuring information on variables of interest, in an established systematic fashion that enables one to answer stated research questions, test hypotheses, and evaluate outcomes. The data collection component of research is common to all fields of study including physical and social sciences, humanities, business, etc. While methods vary by discipline, the emphasis on ensuring accurate and honest collection remains the same. ( <http://ctb.ku.edu/>). However, the researcher has employed both qualitative and quantitative research design. Also questionnaire and interview as fundamental data collection methods were deployed for the purpose of adding efficiency and timely accomplishment of the research work.

#### **3.8.1. Interviews**

According to Harper Collins 2006 interview is referred to as the conversation in which one person means the interviewer elicits information from another person which is known as the subject or interviewee. However, since the nature of this study applied both quantitative and qualitative methods, the interview conducted sought to explore necessary information from Orphans and Vulnerable children who attend ART clinic at PASADA on how they go about RRVs consumption in relation to the impact they acknowledge when using ARV drugs. This method enabled the researcher to come out with vital facts from children who made it easy in assessing the impact of ARVs and even during data presentation, analysis and discussion.

#### **3.8.2 Questionnaire**

Foddy, W.H.1994, defines questionnaire as a research instrument consisting a series of questions and other prompts for the purpose of gathering information from respondents.

The questionnaire was invented by Sir Francis Galton basing on constructing questions for interview and questionnaire. In other words a question can mean a series of questions asked to individual to obtain statistically useful information about a given topic. For this study, the questionnaires were to great extent closed-ended aiming at restoring the quantitative research method. The usefulness of this method was an ability of the researcher to contact large number of respondents so quickly, efficiently and easily. This method therefore, played a big role in time management and timely accomplishment of research writing.

### **3.9 Sources of Data**

Both primary and secondary data sources were collected to ensure the validity of the study. However, the following were the composition of datum collected in this study;

#### **3.9.1 Primary Data**

This involved surveys, Face to face interviews with OVC living with HIV/AIDS and who are on ART. Also observations and self-administered questionnaire were deployed to capture information from PASADA personnel who were selected to represent the larger population. Primary data collection was fundamental due to the fact that the researcher intended to collect the actual data from the field that would be best in his study and thus direct involvement of OVC and some Staff was predominantly mandatory for accurate data collection.

#### **3.9.2 Secondary Data**

This was data collection technique was deployed and conducted by selecting the information from the diverse source of documents or electronically stored information

from such as internets. Thus, internet was one of source of data collection in this study but also Journals, magazines, books were deployed to easily enable the researcher to collect desired information. Some journals and magazines which were used include AJAAT journals which report on HIV/AIDS issues as well as REPSSI journals which have information about psychosocial wellbeing of the children. Likewise, some annual reports were deployed by the researcher including PASADA's annual reports and the Tanzania Commission for AIDS annual reports and other relevant reports obtained from other actors such as Temeke District hospitals, Government sources such as census, annual budgets and Policy procedures in Tanzania. Both sources enabled the researcher to come out with desirable data which has also provided valid data analysis.

### **3.10 Ethical Consideration**

The ethical standards were highly observed during the whole process of data collection since some of the respondents needed high confidentiality and so this was effectively managed. Hence some ethical considerations included privacy and confidentiality, non judgmental attitudes to the respondents and self determination. Likewise, some cultural practices were also observed e.g. Separation of children and adults during data collection process and gender consideration when conducting interviews and distributing questionnaires to respondents.

### **3.11 Limitations of the Study and Mitigations**

Some OVC were incapable of talking in front of other OVC so this became hindrance toward obtaining information from the. Hence the researcher decided to talk to one child after another instead of talking with a group of at least five people as usually it had been. This approach was employed for those OVC who were shy to express

themselves. Also for those OVC who failed even to share their information one to one, the researcher employed paper presentation whereby OVC were given papers to write their responses in relation to the questions which were being raised by the researcher. This helped much to bring all OVC on board and hence they managed to express their experiences on the impact of ARVs which later provide a better presentation and analysis of data by the researcher.

Also, the respondents delayed to fill in the disbursed questionnaire, hence the researcher managed this challenge by frequently contacting the respondents supported by the respondents register during distribution process of the questionnaire. Apart from that, also there were misplacements of questionnaire by some respondents thus, the researcher managed to print out other questionnaire to enable the process move on so efficiently. Some limitations were due to professional superiority as doctors were asking many questions before filling the questionnaire just because the nature of the study was exploring issues relating to their field of work thus they had such attitude of superiority. Tackling this limitation, the researcher explained clearly the purpose of the study and ethical considerations like observation of privacy and confidentiality.

## CHAPTER FOUR

### 4.0 DATA PRESENTATION, DISCUSSION AND ANALYSIS

#### 4.1 Introduction

This chapter has involved the presentation of the findings through tables, pie charts and graphs. The findings were presented in a descriptive and narrative manner. The analysis was made in figures and then supported by statements. And this is what so far called triangulation.

The analysis has been made into two major categories and thus the respondents have also been categorized into two segments independently; the first category comprises of 60(100%) respondents who are orphaned and vulnerable children who are on ART while the second category comprises of 60(100%) respondents who are doctors, nurses, clinicians, social workers, and counselors. The presentation has been made into pie charts, tables, graphs and both qualitative and narrative approaches have been employed. The percentages and numbers represent quantitative approach while narrations and other explanatory justifications represent quality approach. Therefore, the analysis and presentation of data has started with OVC who are on ART at PASADA and ended up with other staff of PASA

**Table 4:2 Sample Distributions**

RESPONDENTS	NUMBER OF RESPONDENTS	PERCENTAGE
OVC	60	50%
Doctors	10	8%
Nurses	13	11%
Counselors	12	10%
Social workers	15	13%
Clinicians	10	8%
<b>TOTAL</b>	<b>120</b>	<b>100%</b>

*Source: Research findings 2013*

The above table shows the sampling frame which comprises of 50% of OVC, 8% of doctors, 11% of nurses, 10% of counselors, 13% of social workers and 8% of clinicians.

**Table4:3 Respondents' Age Distribution by Groups and Sex**

s/n	Respondents	Age 0-7	Age 8-14	Age 15-19	%
1	Male	2	16	12	50
2	Female	1	19	10	50
	<b>Total</b>	<b>3</b>	<b>35</b>	<b>22</b>	<b>100</b>

*Source: Research findings 2013*

The table above comprises of age distribution of 60(100%) Orphaned and vulnerable children selected conveniently for focus group discussion. Male between ages 0-7 were 3%, male ages 8-14 were 27% and male age 14-19 were 20%. Also female between age 0-7 were 2%, female age 8-14 were 31% while female age 15-19 were 17% and thus making a total of 60(100%) respondents who were involved in focus group discussion.

**Table 4:4 Respondents' Education Levels by Sex**

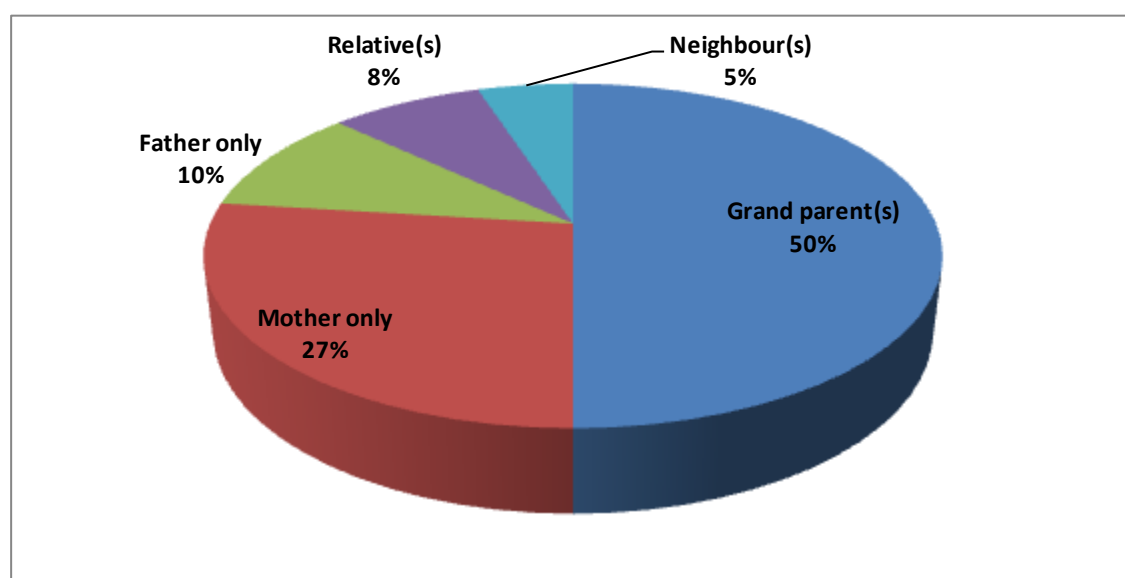
S/n	Education level	Number of respondents		
S/n	Classes	Male	Female	%
1	Standard III		2	3
2	Standard IV	6	4	16
3	Standard V	8	5	22
4	Standard VI	9	7	27
5	Standard VII	4	6	16
6	Form I	1	2	2
7	Form II	2	4	4
	<b>Total respondents</b>	<b>30</b>	<b>30</b>	<b>100</b>

*Source: Research findings 2013*

The table shows the education level of respondents who were conveniently selected representing 60(100%) orphans and vulnerable children. Female OVC were 50% as well as male OVC were 50% making a total of 100% representing the number of sixty respondents selected on clinic day at PASADA.

**Section ‘A’:** This section carries the analysis of data, presentation and discussion basing on the interview questions conducted through focus group discussion between the researcher and Orphans and vulnerable who are HIV/AIDS positive and those who are on ART at PASADA’s clinic. And therefore, the total number of OVC were 60 representing 100% excluding the other 60 adult respondents representing 100% whom their data analysis, presentation and discussion have been shown in section B respectively.

**Figure 4:2. Respondents’ Feedback on their Responsible Caregivers**

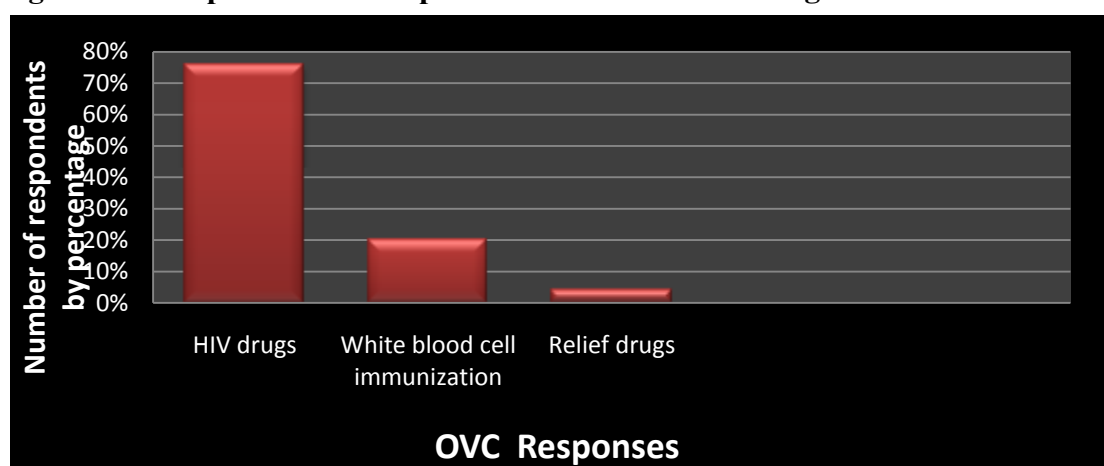


**Source: Research findings 2013**

The above pie chart indicates the responses from 60(100%) respondents. The responses were obtained during the focus group discussion whereas OVC were asked to mention their caregivers in their recent homes; 50% of the respondents said they are cared by their grandparents, 27% of the respondents said they are cared by their mothers only while 10% of them said they are cared by their fathers only, 8% of the respondents said they are living with Relatives and 5% of the respondents said they are living with neighbors. So with this data, the OVC life is at risk since they are scattered in terms of

living patterns and acquisition of basic necessities. With this information therefore, the OVC are cared not by their biological parents hence they are extremely encountering different challenges in regard to their daily use of ARVs. Thus, for the better physical development the orphaned and vulnerable children need care, love, good housing, food and nutrition which together would necessitate the effective use of ARVs that could increase positive physical growth.

**Figure 4:3. Respondents' Interpretations on their Knowledge of ARVs**



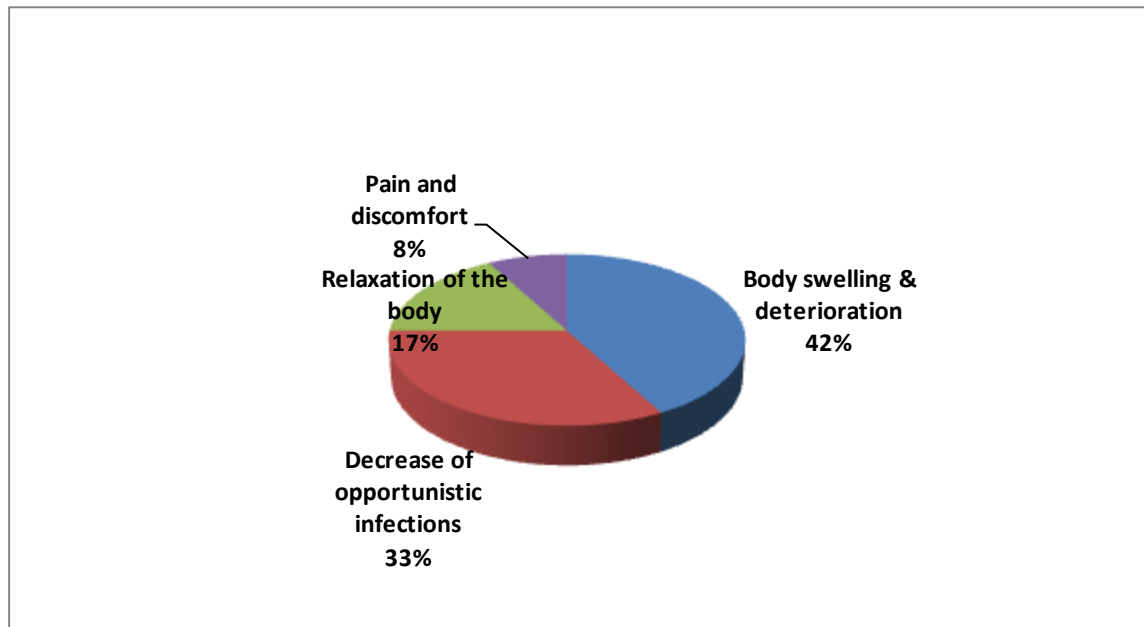
*Source: Research findings 2013*

The above figure shows the responses of 60(100%) OVC who were involved in focus group discussion. Their reactions toward understanding about ARVs were as follows; 66% of the respondents said ARVs are HIV drugs that reduce impact to their bodies, 20% of the respondents said ARVs are white blood cell immunizations while 4% of the respondents said they relief drugs that reduce harm to their bodies from opportunistic infections. However, the OVC are highly knowledgeable about ARVs and the functions in human body as they tried to explain with examples that these drugs are necessary for increase immunes systems in the human body especially for those living with HIV/AIDS. With this information however, there is a need to encourage the proper use of ARVs drugs to children who are on ART since their understanding of ARVs and knowledge of their use might contribute to the improvement of their physical growth.



The necessary support the OVC need is to be mainstreamed and empowered with knowledge and ways of adhering to ART in relation to transparency that might be revealed by health workers on the side effects and other challenges relating to ARV consumption especially for OVC.

**Figure 4:4. OVC Respondents' Comments on their Experience of ARVs Consumption and Physical Impact**

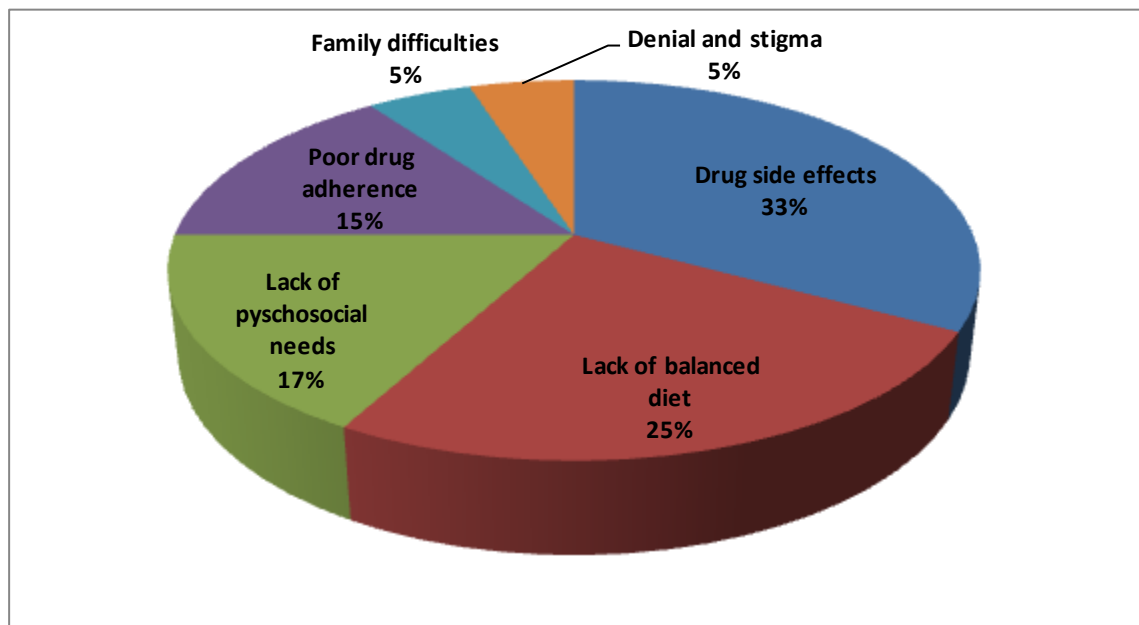


*Source: Research findings 2013*

The pie above shows the responses from 60(100%), OVC who were involved in focus group discussion during the data collection process. Replying to the question which wanted them to explain the impact caused by ARVs toward physical development, the following were their reactions; 42% of the respondents said ARVs cause body swelling and deterioration to some OVC, 33% of the respondents said the impact of ARVs is that help the decrease of opportunistic infections, 17% of respondents said ARVs help the relaxation of the body while 8% said ARVs cause pain and discomfort hence resulting into poor drug adherence to OVC who are on ART. From this analysis there are practical justifications that ARVs have both positive and negative impact which in one way or another contribute to the improvement or deterioration of the physical

growth. With tendency of ARVs, some OVC decide to drop from using the drugs and hence causing resistance of drugs functioning in their bodies as a result they physically become deteriorated. But it is fact that even those OVC adhering to drugs are becoming physically deteriorated as they are in first ARVs dose contact since they experience extraordinary physical pains and discomfort. This tendency of ARVs also triggers the drop out of ARVs consumption by some OVC.

**Figure 4:5. OVC Respondents' Comments on Reasons for their Poor Physical Development while on ART**

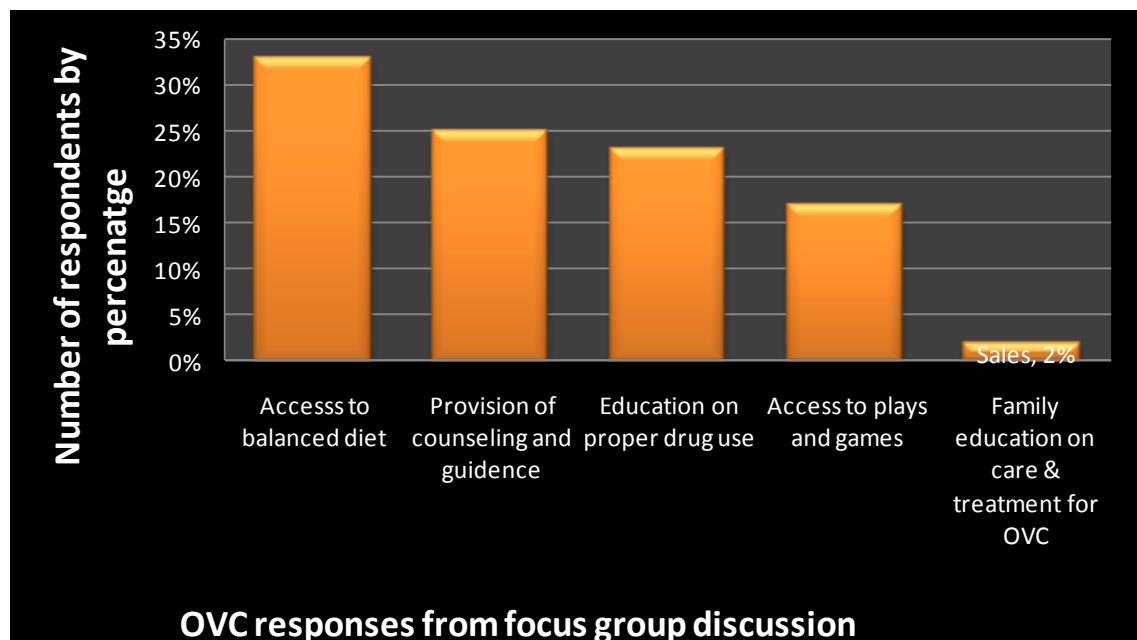


*Source: Research findings 2013*

The pie above indicates the responses from 60(100%) OVC as obtained during focus group discussion. Their reactions to the question which asked them to mention causes of poor physical development of the orphaned and vulnerable children who are on ART were as follows; 33% of the respondents said drug side effects are causes for poor physical development of the OVC who are on ART, 25% of the respondents said the cause behind this is lack of balanced diet, 17% of the respondents said lack of

psychosocial needs also constitute to it, 15% of the respondents said poor drug adherence to some OVC also lead into poor physical development while 5% of the respondents said family difficulties also affect the physical development of the OVC using ARVs and the last 5% respondents said denial and stigma among OVC and around their living environment constitute to their deterioration and hence great impact to their physical wellbeing. However, the challenges need holistic care which might come across multiple interventions of OVC problems along with issues obtained and analyzed in the above pie chart.

**Figure: 4.6. OVC Respondents' Recommendations for Proper Provisions for their Physical Development**



*Source: Research findings 2013*

The above table shows the OVC responses during focus group discussions whereas 60(100%) were involved. In responding to the question which asked them to suggest what is to be done to promote physical development of the OVC who are on ART, their responses were as follows; 33% of the respondents suggested the accessibility of a

balanced diet would increase their physical health, 25% of the respondents said there should be provision of counseling and guidance to OVC who are on ART, 23% of the respondents proposed mainstreaming of proper drug use to OVC using drugs for better drug adherence, while 17% of the respondents said there have to be plays and games for OVC who are on ART and the last 2% said families need to be educated on good care and treatment to OVC who are on ART. However, despite the mentioned provisions by the children who were interviewed, the issues physical development stagnation is also attributed by other factors as identified by the children themselves. Similar to this OVC need special care and treatment that will make promote both physical and psychological wellbeing that in one way or another have relative weight of impact on human body.

**SECTION ‘B’:** This section carries the analysis, presentation and discussion of data as obtained from adult respondents through questionnaires. The categories of respondents included in this presentation involve the medical doctors, counselors, social workers, nurses and clinicians. Likewise, on this part of analysis the total numbers of professional respondents were 60 representing 100%.

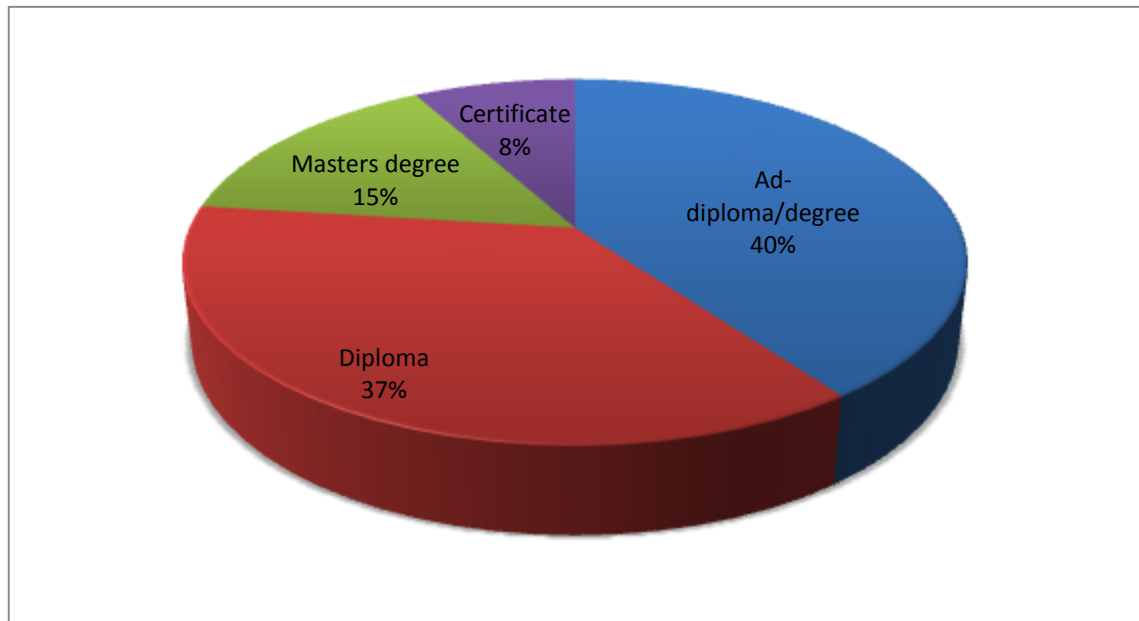
**Part A: Table 4:5 Adult Respondents Sex Distribution**

s/n	Group of respondents	Number of respondents	%
1	Male	25	42
2	Female	35	58
	Total	60	100

*Source: Research findings 2013*

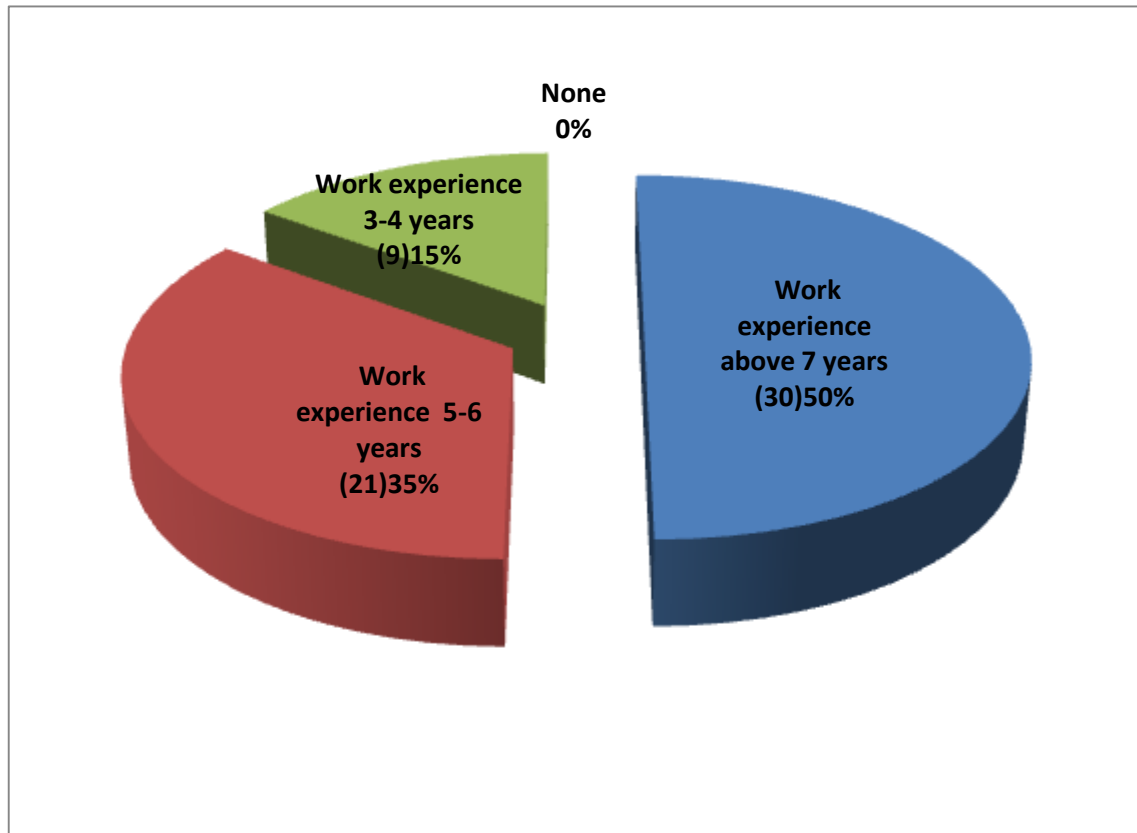
The table above indicates the sex distribution of the adult respondents whereas total number of respondents whose age displayed in the questionnaire was 60 representing 100%, out of whom Male respondents were 42% and female respondents were 58% making a total of 100%.

**Figure 4:7 Adult Respondents' Education Level**



**Source: Research findings 2013**

The pie chart as it indicates the respondents with different academic levels. The information obtained from the respondents indicates that 40% of the respondents have obtained advanced diploma and bachelor degree, 37% of the respondents have acquired diploma, 15% of them have acquired masters' degree, while 8% of the respondents have acquired certificates and zero represents none. This information helped the researcher in validating the accuracy of data given by the respondents. This information contributed to the examination of data accuracy since the study targeted well experienced staff with sounding education background to add value to the study.

**Figure 4:8. Adult Respondents' Experience in Health Setting**

*Source: Research findings 2013*

The pie chart indicates the work experiences of the respondents in relation to the questionnaires they were given to fill in. The respondents were 60(100%) out of which 15% of them had work experience of 3-4 years, while 50% of the respondents had an experience of above 7 years and 35% of the respondents had a work experience of 5-6 years. Thus, all the respondents had long working experience in health setting from whom the information gathered about ART and OVC physical development were indeed factual.

**Table 4.6 Adult Respondents' field of Professionalism**

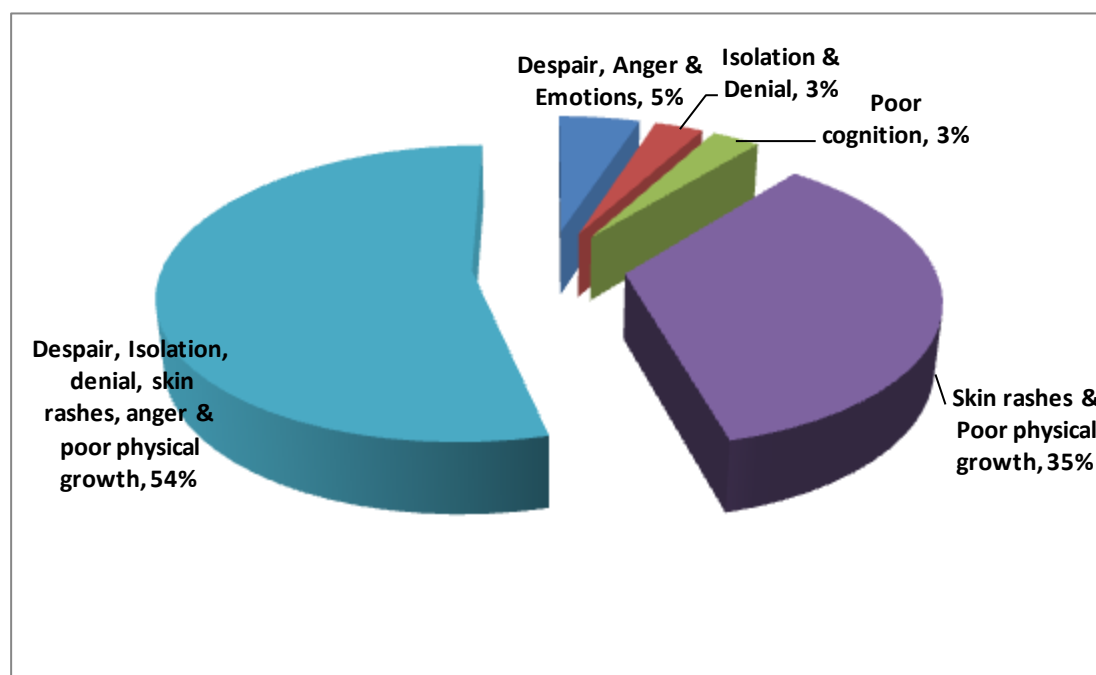
s/n	Field profession	Number of respondents	%
1	Medical doctors	11	18
2	Social workers	21	35
3	Nurses	16	27
4	Counselors	10	17
5	Clinicians	2	3
	<b>Total</b>	<b>60</b>	<b>100</b>

*Source: Research findings 2013*

The table above indicates the professions of the respondents to whom the questionnaires were distributed. The respondents in total were 60(100%) and among these the medical doctors were 18%, Social workers were 35%, Nurses were 27%, counselors were 17% while the clinicians were 3%. All these groups are working with Orphans and Vulnerable children who are HIV positive in day to day duties and therefore, it was important for the researcher to understand the involvement of indicated group of professionals hence coming with valuable analysis based on professional recommendations in assessing the impact of ARVs on physical development of the OVC.

Part 'B': This part comprises of knowledge assessment of the respondents about HIV/AIDS in relation to orphaned and vulnerable children who are extremely marginalized and whose rights are deprived. However, the assessment was made to adult respondents through filling in the questionnaire and their responses have been presented, analyzed and discussed here under.

**Figure 4:9. Adult Respondents' Knowledge About Health Challenges Faced by HIV Positive OVC**

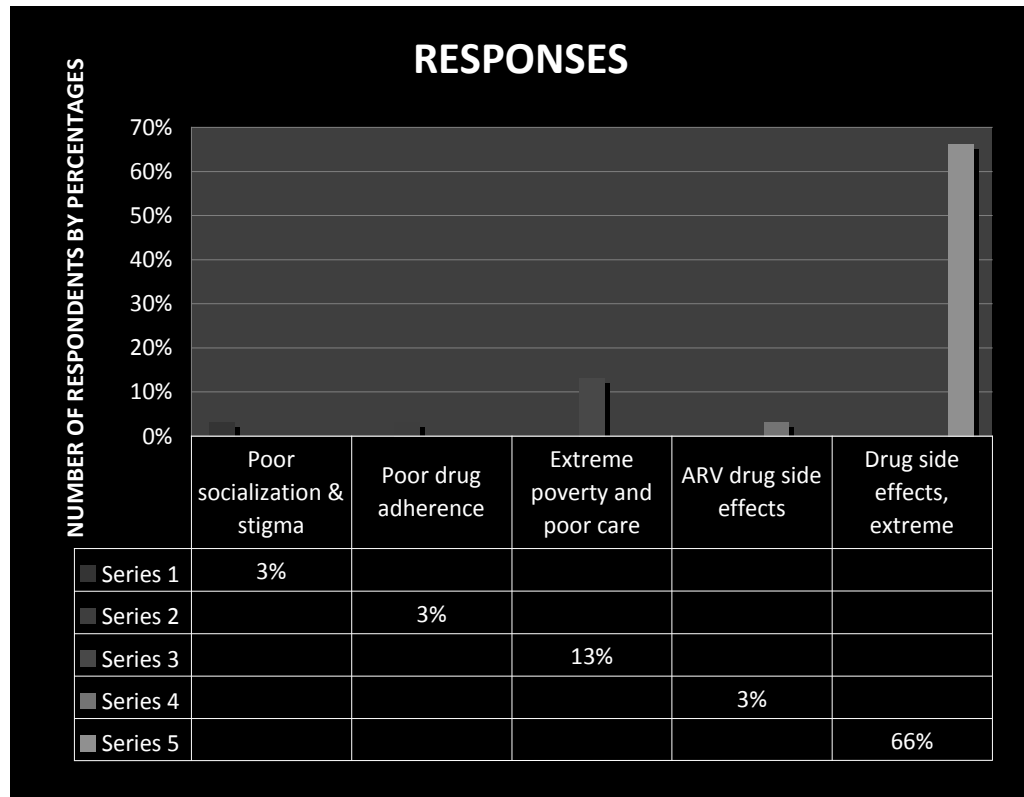


**Source: Research findings 2013**

From the above pie chart 54% of the respondents indicated that all answers marked by other respondents were correct being responses to showing common features of the HIV positive OVC. These features were; poor cognitive ability as indicated by 3% of the respondents, skin rashes and poor physical growth as indicated by 35% of the respondents and despair, anger and emotions as indicated by 5% of the respondents and lastly isolation and denial as indicated by another 3% of the respondents. While 54% of respondents stated that the challenges are cumulative to as despair, isolation, denial, anger and poor physical growth.



**Figure 4:10 Respondents' Comments on Challenges Faced by Orphans & Vulnerable Children who are on ART**



*Source Research findings 2013*

The above bar graph shows the responses obtained from 60(100%) respondents about challenges faced by OVC who are on ART. 66% of the respondents indicated cross cutting challenges such as drug side effects, extreme poverty, poor drug adherence, poor socialization and stigma while 3% of the respondents indicated drug side effects to be a challenge, 13% of respondents indicated extreme poverty and poor care, 3% of the respondents indicated poor drug adherence to one of the challenges and 3% of them indicated poor socialization and stigma to one of the challenges face by OVC who are on ART.

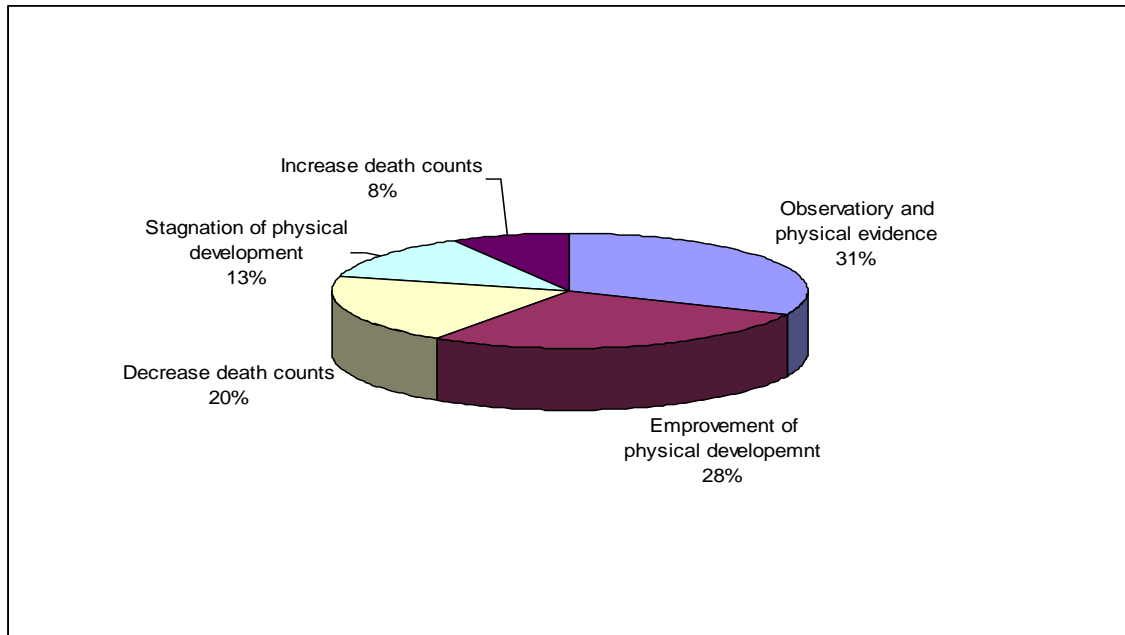
**Table4:7 Assessed Scales of OVC physical Development by Percentage after being Enrolled into ART.**

S/n	Scales	Responses	Number of respondents	%
1	10%-30%	Slight development	10	17
2	30%-50	Minimal development	12	20
3	50%-70%	Good development	19	32
4	70%-90%	Sounding development	16	26
5	90%-100%	Very slight development	3	5
	<b>Total</b>		<b>60</b>	<b>100</b>

*Source: Research findings 2013*

The responses shown in the above table were drawn in terms of scales of percentage and levels of perceptions of adult respondents employed by PASADA in relation to their experience of health and physical state of OVC who are on ART before and after being enrolled into ART, care and support. However, 10(17%) of respondents indicated that there are slight changes of OVC physical development after being enrolled into ART as percentage of improvement ranging 10%-30%. Similar to that, 12(20%) of respondents indicated that OVC enrolled into ART have minimal physical development ranging between 30% and 50% of improvement. Likewise, 19(32%) of respondents indicated that OVC enrolled into ART had good physical development ranging between 50% and 70%. Also 16(26%) of respondents indicated that OVC into ART have sounding physical development compared to their pre-state before being enrolled into ART with range of improvement of 70%-90%. While the last 3(5%) of respondents indicate that the OVC enrolled into ART had very slight physical development just ranging 90%-100% improvement compared to their pre-state before being enrolled into ART.

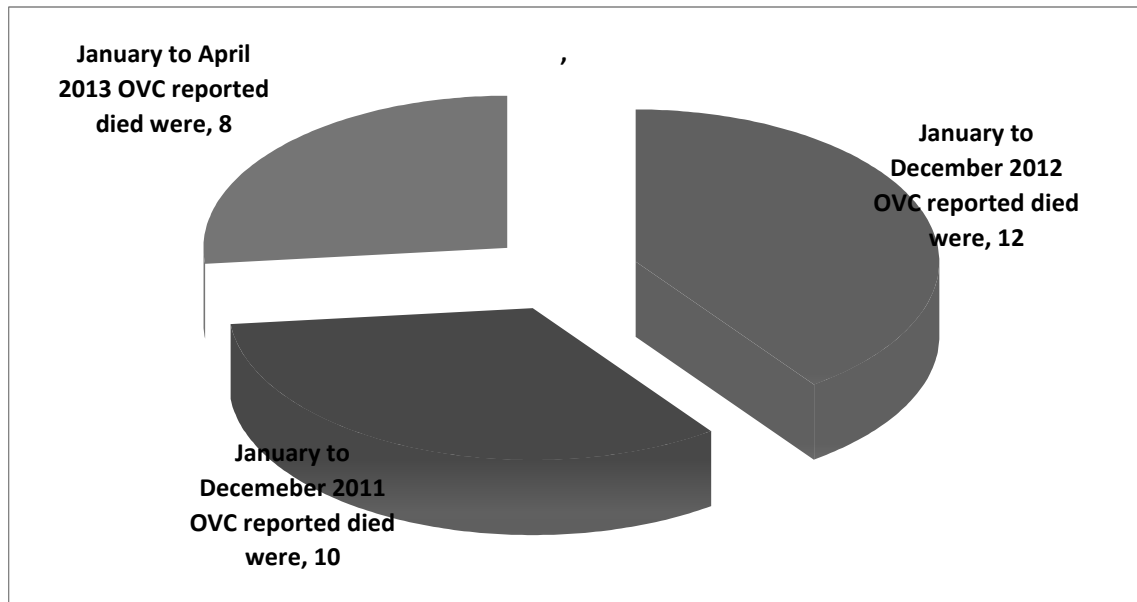
**Figure4:11 Justifiable Indicators for OVC Physical Improvement and Deterioration**



**Source: Research findings 2013**

The responses indicated in the above pie chart, justifies the responses given in question 8 about whether the OVC who are on ART at PASADA are having physical improvement after being enrolled into ART. 32% of the respondents indicated the observatory and physical evidence shows that OVC are having physical improvement, 27% of the respondents indicated ovc are getting improvement and that can be justified through improvement of their physical development, 20% of the respondents indicated decrease death counts as a factor to justify that OVC are getting physical improvement after being enrolled into ART, 13% of the respondents indicated stagnation of physical development counts low improvement of OVC who are on ART and the last 8% of the respondents indicated increase death counts show that very little children are getting physical improvement after being enrolled into ART.

**Figure 4:12: Respondents' Feedback on art Death Trend Happened to OVC in Numbers from January 2011 to April 2013**



*Source: Research findings 2013*

The above pie chart shows the responses about the death rates of OVC who are at PASADA from January 2011 to April 2013. The total respondents were 60(100%) whereas cumulatively indicated that OVC who are on ART at PASADA have consequently been dying from various challenges including drug resistance and drug side effects. Whereby 25(42%) of the respondents indicated that in the period of twelve months from January to December 2011, 10 OVC reported died, while other 20(33%) of respondents indicated that from January to December 2012, 12 OVC were reported died from the similar environment while the last 15(25%) of respondents indicated that from January to April 2013, 8 OVC reported died. With this trend of OVC deaths there is evidence that there should purposive efforts toward enhancing and promoting the wellbeing of OVC.

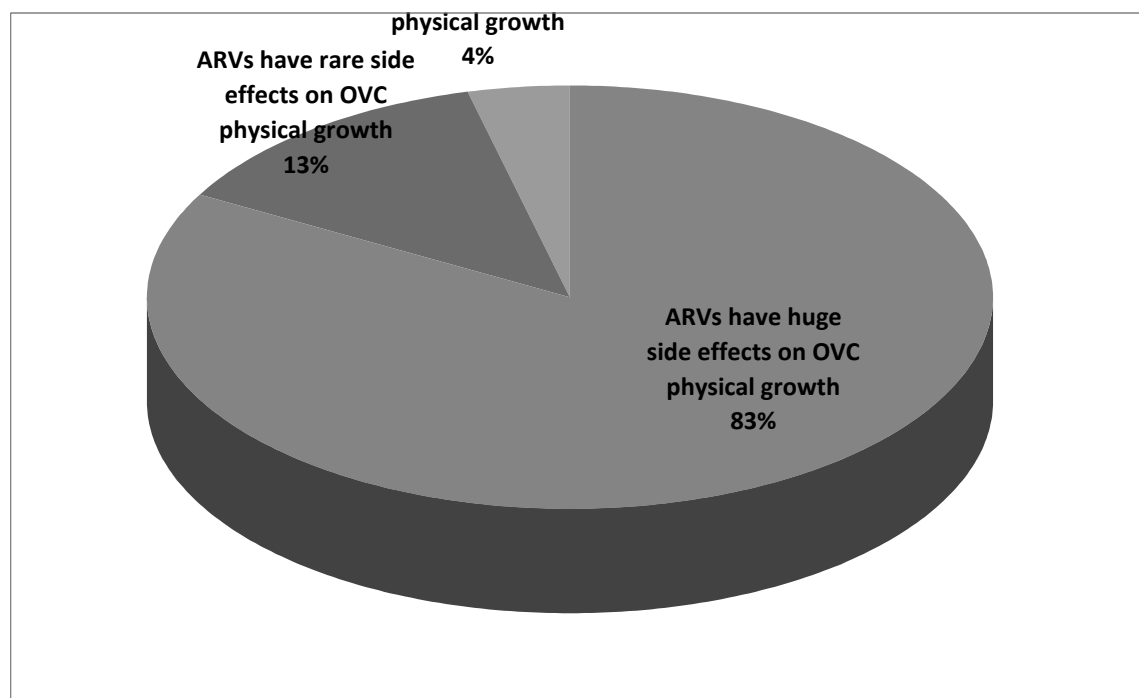
**Table 4:8 Respondents' Comments on Predominant causes of Deaths Among OVC****Who are on ART**

s/n	Responses	Number of respondents	%
1	Drug side effects	5	8
2	Insufficient meals & poor treatment of opportunistic diseases	3	5
3	Poor drug adherence & dosage	0	0
4	Inappropriate counseling approaches	4	7
5	Drug side effects, Insufficient meals & poor treatment of opportunistic diseases, Poor drug adherence & dosage Inappropriate counseling approaches	48	80
	<b>Total</b>	<b>60</b>	<b>100</b>

*Source: Research findings 2013*

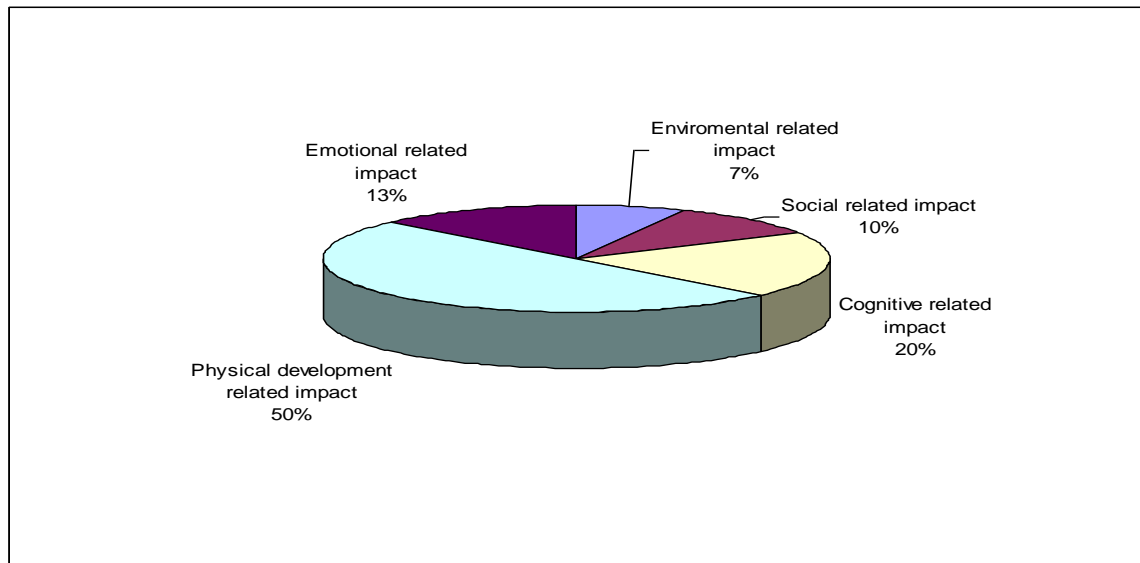
The above responses as shown in the table are basing on the question which wanted the respondents to indicate the predominant causes for the increasing deaths among OVC who are on ART at PASADA. The questionnaires were distributed to 60(100%) respondents and their reactions to the question were as follows; 8% of respondents indicated drug side effects to be the cause for increasing deaths among OVC who are on ART at PASADA, 5% of the respondents indicated insufficient meals and poor treatment of opportunistic diseases also contributing to deaths among OVC who are on ART, 7% of the respondents indicated inappropriate counseling approaches might also be a contributing factor toward OVC deaths at PASADA while 80% of the respondents found also answers were correct meaning that deaths among OVC who are on ART at PASADA are associated with drug side effects, insufficient meals and poor treatment of opportunistic disease, poor drug adherence and dosage and inappropriate counseling approaches.

**Figure 4:13 Perceptions of Respondents on ARVs side effect to OVC Physical Growth**



*Source: Research findings 2013*

The above pie chart shows the responses obtained from 60(100%) respondents who responded to the question which asked whether the OVC who are on ART are affected physically by ARVs consumption. 13% of respondents indicated that ARVs have rare side effects to OVC physical growth, while 4% of respondents indicated that ARVs have no side effects to OVC physical development and the last 83% of respondents indicated that ARVs have huge side effects to OVC physical growth. This means OVC need great and special care while they are on ART, this care should involve counseling and provision of basic necessities like food, nutrition and treatment of opportunistic infections.

**Figure 4.14 Categories of Impact of ARVs Consumption to OVC**

**Source: Research findings 2013**

The responses in the above pie chart represent 60(100%) respondents. The respondents were asked to indicate the ARVs consumption related impact to OVC and the following were their responses; 7% of the respondents indicated environmental related impact , 10% of the respondents indicated that OVC are facing social related impact like trauma, stigma and discrimination, 13% of the respondents indicated that OVC are facing emotional related impact like anger and despair, while 20% of the respondents indicated that ARVs consumption cause cognitive related impact to OVC such dizziness, dropping in school performance and low reasoning ability while 50% of the respondents indicated that the impact caused by ARVs consumption to children is largely physical related impact stagnation in physical change in relation to age of the children. This now call for intergraded efforts by different actors including government agencies and private sector to ensure children have adequate environment for the acquisition of the basic necessities.

**Table 4:9 Respondents Opinions toward Improving the Physical and Psychological Wellbeing of OVC Using ARV Drugs.**

<b>s/n</b>	<b>Responses</b>	<b>Number of respondents</b>	<b>%</b>
<b>1</b>	<b>Adequate nutrition</b>	<b>14</b>	<b>23</b>
<b>2</b>	<b>Reduction of stigma &amp; discrimination</b>	<b>9</b>	<b>15</b>
<b>3</b>	<b>Provision of psychosocial support</b>	<b>12</b>	<b>20</b>
<b>4</b>	<b>Households economic strengthening</b>	<b>10</b>	<b>17</b>
<b>5</b>	<b>Good care and treatment</b>	<b>10</b>	<b>17</b>
<b>6</b>	<b>Drugs adherence &amp; follow ups</b>	<b>5</b>	<b>8</b>
	<b>Total</b>	<b>60</b>	<b>100</b>

*Source: Research findings 2013*

The above table indicates the responses on what can be done to promote the physical wellbeing of the OVC who use ARVs. Among 60(100%) respondents, 23% of respondents indicated adequate nutrition, 15% of the respondents showed reduction of stigma and discrimination, 20% of respondents indicated provision of psychosocial support, 17% said there should households economic strengthening, 17% of respondents indicated that there must be good care and treatment while 8% of the respondents said there have to be drug adherence and intensive follow ups.



## **CHAPTER FIVE**

### **5.0 SUMMARY, CONCLUSION AND RECOMMENDATIONS**

#### **5.1. Introduction**

This chapter involves the summarization of the research work, conclusion and suggestions on what to be done in relation to the analyzed findings. However, in this study the summary, conclusion and recommendations have considered the collected results from the respondents as well as the analyzed and presented findings basing on the research title which was assessing the impact of antiretroviral treatment on the physical development of the orphaned and vulnerable children living with HIV/AIDS.

#### **5.2 Summary**

This part involves the brief explanations of the findings in descriptive and narrative order. The sample size was comprising of 100 respondents in total out of whom 60(60%) were orphans and vulnerable children living with HIV/AIDS and those who are on ART at PASADA while the other 40(40%) respondents made up of social workers, medical doctors, counselors, nurses and clinicians who are employees of PASADA serving the OVC. The overall responses as analyzed from the collected data determined the validity of the findings and hence making the selected topic to be successfully researched and suggesting on the appropriate measures to be taken.

The responses from OVC who were 60(100%) in total during the focus group discussion, provided an insights overview on the impact of antiretroviral treatment on physical development of OVC in the following manner; 42% of the respondents said

ARVs cause body swelling and deterioration to some OVC, 33% of the respondents said the impact of ARVs is that help the decrease of opportunistic infections, 17% of respondents said ARVs help the relaxation of the body while 8% said ARVs cause pain and discomfort hence resulting into poor drug adherence to OVC who are on ART.

From the adult respondents who were professionals from different fields of practice, including the social workers, medical doctors, nurses, counselors and clinicians also recommended on the physical impact of ARVs to OVC living with HIV/AIDS. Their responses justified some challenges face by OVC using ARVs. Out of 60(100%) respondents who were asked about the challenges faced by OVC who are on ART, 66% indicated drug side effects, extreme poverty and poor care, poor drug adherence and poor socialization and stigma

### **5.3 Recommendations**

The issues of orphaned and vulnerable children are very much contradictory, thus there must be interventions which we involve different professionals toward curbing health, social, economic and cognitive problems associated with the use of ARVS by children. Despite other provisions to OVC such as food, clothes, medication and nutrition, the conditions of children using drugs seems to be increasingly dangerous and terrifying.

#### **5.4.1. To the Government**

The government of Tanzania has been in front line in the war against HIV/AIDS and stigma. This is justified by the establishment of TACAIDS and even development of HIV/AIDS policy that ensures good care and protection of the rights of the people living with HIV/AIDS. But despite all these efforts, children are not treated as special

group rather the frame work of action in governing HIV issues thus there should specialties in ensuring OVC as special group of children are care with conversant provisions.

- The government should show commitment on the implementation of policies, project and programs designed for the well fare of children particularly those living with HIV/AIDS.

- The government should consider the Strengthening of health system policy by giving priorities to OVC who are on ART as a special group.

- The government should consider the provision of minimum standards in specific areas such as children protection, food security and other children rights and create environment for them to grow and reach their potentials

#### **5.4.2. To Civil Society Organizations**

Civil society organizations have big role to allocate their resources and programmes that can ensure OVC have adequate resources that necessitate their growth and development. Some things to consider may include;

- The civil societies should unite and improve their services in order to better off support the orphans and vulnerable children including those living with HIV/AIDS at the maximum level in terms of physical, emotional, psychological, social, economic and cognitive development.

- Also they should provide quality and good care to OVC living with HIV/AIDS, and consider the children demands in regard to biological, social and emotional needs.

- Likewise, the civil society organizations should establish clubs for the OVC living with HIV/AIDS to expand their knowledge base toward life sustainability.

### **5.4.3. To Drug Suppliers**

- Supplying drugs with children based formulation and in basing on sufficient amount to avoid scarcity of drugs and drug side effects that might be caused by dosage.
- Should make sure that drugs for children are of high quality and are preserved in good conditions.

### **5.4.4. To Health Workers**

- Should provide quality and holistic care to children specifically those who are orphaned and vulnerable and live with HIV/AIDS.
- Should prescribe drugs accordingly and also educate the children on drug side effects, and ways to use them in accordance with time and limitations.

### **5.4.5. To Families**

- Should take time to direct and guide their children about their rights including right to live, and families not to practice stigma and discrimination hence give good care and nutrition as well as proper use of antiretroviral treatment.
- To provide full support to OVC and accept them with their situation as members of the family and recognize their fundamental needs for survival and growth.

## **5.5 Conclusion**

Basing on these findings therefore, the predominant challenges that constitute to the impact of ART toward physical development of the orphaned and vulnerable children living with HIV/AIDS, include drug side effect, poor drug adherence, insufficient meals and nutrition, stigma and discrimination at individual, family and community level, inappropriate counseling and guidance to OVC and lack of psychosocial support

that help the OVC improve the psychological wellbeing hence building better physical development. However, the study has shown the validity to the against the assumptions the researcher had, and thus OVC at PASADA need great attention so that they can develop and undertake desirable growth that encounter their age.

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[www.google.com](http://www.google.com)

## QUESTIONNAIRE

**Dear respondent:**

This questionnaire has deliberately been prepared to collect the information of the OVC who are on ART at PASADA's clinic, with hope of coming up with more valuable and meaningful assessment of service deliverance and children welfare development. This study is enthusiastically done for the accomplishment of an award of Masters Degree of social Work at Open University of Tanzania. This questionnaire is to be filled in by health workers of PASADA, Counselors and social workers who in day to day routines deal with HIV positive OVC. With this introduction thereafter, the respondents are assured with maximum confidentiality and privacy against any information they will disclose as the questionnaire will want them to do so.

**PART A: PERSONAL PARTICULARS**

- |         |                  |                          |
|---------|------------------|--------------------------|
| 1. Age: | (A) 20-25        | <input type="checkbox"/> |
|         | (B) 26-30        | <input type="checkbox"/> |
|         | (D) 31-49        | <input type="checkbox"/> |
|         | (C) 40 and above | <input type="checkbox"/> |
|         |                  |                          |
| 2. Sex: | (A) Male         | <input type="checkbox"/> |
|         | (B) Female       | <input type="checkbox"/> |
|         | (C) Any          | <input type="checkbox"/> |



3. Educational level:
- (A) Certificate ☐
  - (B) Diploma ☐
  - (C) Ad Diploma/Degree ☐
  - (D) Masters Degree ☐
  - (E) PhD and above ☐

4. Marital status:
- (A) Married ☐
  - (B) Single ☐
  - (C) Divorced ☐
  - (D) Separated ☐

5. Work experience:
- (A) 1-2 Years ☐
  - (B) 3-4 Years ☐
  - (C) 5-6 Years ☐
  - (D) 7 above ☐

6. Field professionalism
- (A) Medical doctor ☐
  - (B) Social worker ☐
  - (C) Nurse ☐
  - (D) Counselor ☐
  - (E) Clinician ☐

**PART B: UNDERSTANDING ABOUT HIV POSITIVE OVC AND THEIR PHYSICAL WELLBEING.**

7. Please tick against an appropriate corresponding letter on common features of HIV positive children

- |   |                          |
|---|--------------------------|
| <b>(A) Skin rashes &amp; poor physical growth</b> | <input type="checkbox"/> |
| <b>(B) Poor cognitive ability</b>                 | <input type="checkbox"/> |
| <b>(C) Despair, anger &amp; emotions</b>          | <input type="checkbox"/> |
| <b>(D) Isolation &amp; denial</b>                 | <input type="checkbox"/> |
| <b>(E) All above are correct</b>                  | <input type="checkbox"/> |

8. What challenges do HIV children who are on ART face in relation to their physical development?

- |  |                          |
|--|--------------------------|
| <b>(A) Poor socialization &amp; stigma</b> | <input type="checkbox"/> |
| <b>(B) Poor drug adherence</b>             | <input type="checkbox"/> |
| <b>(C) Extreme poverty &amp; poor care</b> | <input type="checkbox"/> |
| <b>(D) Drug side effects</b>               | <input type="checkbox"/> |
| <b>(E) All above are correct</b>           | <input type="checkbox"/> |

9. Are OVC on ART at PASADA having physical improvement compared to their past state before being enrolled into ART? Please scale it down

- |                     |                          |
|---------------------|--------------------------|
| <b>(A) 10%-30%</b>  | <input type="checkbox"/> |
| <b>(B) 30%-50%</b>  | <input type="checkbox"/> |
| <b>(C) 50%-70%</b>  | <input type="checkbox"/> |
| <b>(D) 70%-90%</b>  | <input type="checkbox"/> |
| <b>(E) 90%-100%</b> | <input type="checkbox"/> |

10. What are measurements to your answer from question 9?

- (A) **Increase death counts** ☐
- (B) **Decrease death counts** ☐
- (C) **Stagnation of Physical development** ☐
- (D) **Improvement of physical development** ☐
- (E) **Observatory and medical evidence** ☐

11. What is the death rate of OVC who are on ART at PASADA from January 2011 to 30<sup>TH</sup> January 2013? Please scale it down here.

- (A) **1 – 10 children** ☐
- (B) **10 – 20 Children** ☐
- (C) **20 - 30 children** ☐
- (D) **30 – 40 children** ☐
- (E) **Above 50 children** ☐

12. What do you think have been the predominant causes of the scaled number of deaths among OVC who are on ART during a two year period?

- (A) **Drug side effects** ☐
- (B) **Insufficient meals & poor treatment of opportunistic infections** ☐
- (C) **Poor drug adherence & dosage** ☐
- (D) **Inappropriate counseling approaches** ☐
- (E) **All above are correct** ☐

13. Are there special Antiretroviral drugs for children (OVC)? Please tick appropriately

- |                                  |                          |
|----------------------------------|--------------------------|
| <b>(A) Definitely YES</b>        | <input type="checkbox"/> |
| <b>(B) No at all</b>             | <input type="checkbox"/> |
| <b>(C) Same adult drugs</b>      | <input type="checkbox"/> |
| <b>(D) All above are correct</b> | <input type="checkbox"/> |

14. Are the OVC who are on ART affected physically by ARVs dosage?

- |                       |                          |
|-----------------------|--------------------------|
| <b>(A) Very much</b>  | <input type="checkbox"/> |
| <b>(B) Some how</b>   | <input type="checkbox"/> |
| <b>(C) Not very</b>   | <input type="checkbox"/> |
| <b>(D) Not at all</b> | <input type="checkbox"/> |

15. What impacts do OVC who are on ART face as caused by ARVs consumption?

- |  |                          |
|--|--------------------------|
| <b>(A) Physical development related impact</b> | <input type="checkbox"/> |
| <b>(B) Social related impact</b>               | <input type="checkbox"/> |
| <b>(C) Emotional related impact</b>            | <input type="checkbox"/> |
| <b>(D) Cognitive related impact</b>            | <input type="checkbox"/> |
| <b>(E) Environmental related impact</b>        | <input type="checkbox"/> |

**PART C: RECOMMENDATIONS AND SOLUTION FOR BETTER CHILDREN DEVELOPMENT.**

13. Please suggest what can be done to promote better physical development of the OVC who are on ART at PASADA's clinic?

(a).....

(b).....

(c).....

(d).....

(e).....

2. What should be done by the following actors to ensure children development milestone in a normal process?

**(a)The government:**

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.....

.....

**(b) The health workers:**

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.....

.....

.....

.....

**(c) Drug suppliers (ARVs):**

.....

.....

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.....

.....

**(d) Families:**

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.....

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