

**AN EVALUATION OF THE QUALITY OF CARE GIVEN AT CHARITABLE
CHILDREN'S INSTITUTIONS IN WESTLANDS DISTRICT, NAIROBI COUNTY,
KENYA.**

BY

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**A Research Project Submitted in Partial Fulfilment of the Requirements for the Award of
the Degree of Master of Education in Early Childhood Education.**

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DECLARATION

I hereby declare that this project is my original work and has not been submitted for an award of degree in any other University.


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DEDICATION

This research project is dedicated to my late mother, Theresa Nyochola, who gave special love and care to orphans and neglected children in her community.

ACKNOWLEDGEMENT

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ABBREVIATIONS AND ACRONYMS

AFED	- Academic of Educational Development
AIDS	- Acquired Immune Deficiency Syndrome
ARIs	- Acute Respiratory Infections
CBOs	- Community Based Organizations
CCI	- Charitable Children Institution
CEDC	- Children in Especially Difficult Circumstances
CNSP	- Children in Need of Special Protection
DECT	- Department of Educational Communication as Technology
DRDI	- Daily Recommended Dietary In take
FBO	- Faith Based Organization
FPE	- Free Primary Education
GOK	- Government of Kenya
HIV	- Human Immune Virus
HRW	- Human Right Workshop
ICU	- Intensive Care Unit
KDHS	- Kenya Demographic Health Survey
KIE	- Kenya Institute of Education
KNPC	- Kenya National Population Census
NACC	- National Aids Control
NGOs	- Non – Government Organization
OVC	- Orphans and Vulnerable Children
PE	- Physical Education
PEM	- Protein Energy Malnutrition
PMTCI	- Prevention of Mother to Child Infection
SPSS	- Statistical Package for Social Science
UNAIDS	- United Nations Program on HIV/ AIDS

- UNGASS/ AIDS** - United Nations General Assembly Special Session on HIV/ AIDS
- UNICEF** - United Nations Children's Education Fund
- UoN** - University of Nairobi
- WHO** - World Health Organization

ABSTRACT

The study was to evaluate the quality of care given at charitable children's institutions in Westlands District, Nairobi County; Kenya. Since Kenya attained independence in 1963, cities and towns like Nairobi have seen a large influx of inhabitants due to rural –urban migration, resulting high crime rates, poverty, family disruptions, poor physical and mental health due to stress and under nutrition. The advent of HIV/AIDS has compounded the problem with many children orphaned, while many others are born infected. There is also the problem of unwanted pregnancies such as teenage pregnancy. This and other issues lead to a high rate of abandoned, neglected or abused children. Another repercussion of this type of migration is that the traditional African family safety net has been broken. Grandparents, aunts, cousins and others are separated by hundreds of kilometers. Neighbours in the cities tend to be strangers and do not have the same bond as persons from the same or neighboring villages. This means that should there be children who are victims of poverty or abandonment or whose parents are deceased, the state must step in to assist. It is with this in mind that I set out to explore the quality of care given to children in the charitable institutions. It would be important to analyze the type and quality of care given to these children and suggest ways in which it can be improved to better the lives of the children. Due to the limitations of the study, discussed in the core of chapter one, the study is delimited to Westlands Division, within Nairobi County. The study had four specific objectives, including observe the quality of food given in charitable institutions; examine the existing extra curricular educational activities in the institutions; Staff: Child ratio impacts on services delivery in the targeted respondents from the institutions. The study concludes that children do not get sufficient basic needs in these charitable institutions, especially food, clothing and psycho –social guidance. It also confirms that there are an increased number of destitute children especially boys due to cultural, property inheritance issues and customs. The homes should therefore be empowered to employ more and better trained experienced personnel in the children's institutions. Findings from studies like this are important because they enable the institutions to monitor and evaluate their performance and make improvements, inform state policy formulators, research and scholars and raise public awareness.

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Globally, child care of Children In Need of Special Protection (CNSP) has become an essential component of life in the society. For purposes of this study, care refers to the attention or thought given to young children in charitable children institutions in order to enhance their growth and development to become responsible adults. In the past, abandonment and neglect were limited while orphanhood in large scale was a sporadic, short-term problem associated with war, famine or disease (Smart 2003). Scholars have noted that in early 1980s, barely 2% of African children were orphaned compared to current numbers of between 15% and 17%. Deininger, Klaus; Garcia, Marito and Subbarao, (2001). By 2003, 15 million children under 18 years worldwide had been orphaned by HIV/AIDS. Out of these about 12 million live in sub-Saharan Africa. According to UNAIDS (2004) report on HIV/AIDS, 80% of the world's HIV/AIDS orphans can be found in Sub-Saharan Africa. This is the highest recorded incidence of orphaned children since the industrial revolution, which has escalated the growth of children institutions worldwide. The same growth is evident in Kenya, a developing country in the sub Saharan Africa.

In crisis situations, children are generally the most vulnerable to malnutrition and disease, particularly younger children of between 0 to 8 years of age as this is the stage of rapid growth and development. Apart from this, young children's immune systems are not fully developed to effectively fight infections, Lawler and Chenoweth (1990). Inadequate nutrient intake predisposes children of these ages to malnutrition. Children in difficult circumstances such as the abandoned, neglected, orphaned and street children, broadly referred to as Children in Need of Special Protection (CNSP) are usually in a worse of situation because of lack of parental care and personalized attention Casa, (2000).

In Europe, the poor lifestyle of workers was witnessed through habitual drunkenness and drug abuse that led to child neglect adding to suffering among children, Ashton and Thomas (1948). This development aggravated living conditions which led to regular outbreaks of typhoid, dysentery, cholera and tuberculosis which occasioned high mortality rates. Children orphaned and neglected had to fend for themselves, seeking refuge in the streets, Montari (1998). This of course necessitated children centres to support the livelihood of the destitute. Internationally, United Nations Children and Education Fund (UNICEF) is mandated by the United Nations General Assembly to advocate for the protection of children's rights, in order to help meet their basic needs and to expand their opportunities to reach their full potential. Given the rising numbers of destitute children, State and Charitable Children's homes began receiving recognition across countries. Rapid urbanization has also led to the break up of the traditional social structures, this means that orphans and other destitute children, no longer have the care they are entitled to. The conclusion was deduced that institutionalization was the most appropriate way to care for these children, UNICEF (1998). Consequently children would be able to lead peaceful lives and enjoy their natural right to life and survival within the society, even in circumstances where they were orphaned or abandoned. In the children' institutions, orphans and abandoned children were to be provided with social structures similar to those that were present in the general society. They would also be provided with physiological needs which include food clothing, shelter and security.

All over the world malnutrition is a problem, especially in developing countries, it is treated as a public health issue amongst children under 8 years of age, with the results usually being poor health, stunted growth, mental underdevelopment and micro-nutrient deficiencies, Rolfes, (1993). Nutrition plays a vital role in the determination of individual's health status, growth and development, it imbalances under-nutrition, specific nutrients deficiencies or over nutrition result in malnutrition. Hunger and malnutrition remain the most devastating problem worldwide for the street children found in urban areas all over the world – with malnutrition accounting for almost 50% of all child death as cited by Clarke, S. (1987). In

Kenya malnutrition features most amongst orphaned children due to inadequate diets, National Plan of Action for Nutrition, (1994).

Indeed high mortality rates among children due to infectious diseases are a reflection of their poor nutritional status, UNICEF (1998) report on health; many diseases are a result of poor nutrition, such as scurvy caused by lack of vitamin C and Rickets caused by lack of vitamin D. As urbanization took root in developing countries, poor lifestyle increased the incidence of disease especially HIV/AIDS. This disease has had devastating effects on all families, particularly children, for they have lost their parents and other caregivers to the pandemic and some are born infected. On the other hand exposure of children to threats of violence at home, evictions from make-shift accommodation or squatter settlements and lack of any formal consideration for destitute children, further compounding the plight of vulnerable children. The implication is that children who used to belong to everyone in the extended family now find themselves belonging to nobody at all, Dorothy Munyakho for UNICEF (1992). Such children take to the streets; transform themselves into beggars and resorting to thuggery as they mature and start their families.

In order to fill this gap, Charitable Children Institutions (CCI) in Kenya started developing from as early as 1910, established by the colonialists to fulfill their own needs. Kabete Rehabilitation Centre, for example, was established by the British Colonialists for the youth who did not possess passes or identification cards. In 1920, the Kabete Rehabilitation Centre changed to become an approved school for the alleged hard core youth who needed to be disciplined before reintegrating them back to the society. This strategy was intended to support moral upbringing and effective participation. During Mau Mau uprising in the 1950s, challenges affecting children in development increased leading to the establishment of Children Institutions in Kakamega, Likoni in Mombasa, Othaya, Wamumu and Dagoretti purposely to care for the children left behind by parents on the run from colonial authorities. Getathuru was established in 1959 by the colonialists as a reception and discharge centre to support destitute and vulnerable children. After independence in 1963, Children's

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Department was established through the Children's Act (Cap 141, 143 and 144) to look after the welfare of the children in terms of their total wellbeing, Ministry of Home Affairs (2009). Child care practices such as feeding, immunization and health seeking behavior are very crucial in determining nutritional status and health of children who are less than 8 years of age. Furthermore, proper child care practices, household food security and provision of basic social services have been identified as the three necessary conditions for child survival and development, UNICEF (1998) report on child survival.

HIV/AIDS has aggravated the magnitude of the problem, scaling up support often constitutes different responses which include adoption into the children homes. An example is Barnados Children's Home, others are taken care of through Home Based Care and Support and at times support from extended family. The response has attracted the involvement of diverse stakeholders such as the government, Non-Governmental organizations (NGOs); Faith based Organizations (FBOs) and the private sector in partnership with community initiatives. UNICEF Report on the child rights (2005); Government of Kenya (GOK 2005) states that every child has the inherent right to life and the state has an obligation to ensure the child survival and development so as to become responsible citizens. The Government of Kenya draft of (2006) on child care reveals that the Department of Children Services (DCS) currently has 142 children institutions in Nairobi County (out of which 74 are registered) which are categorized under the Children's Act (2001). Children in charitable institutions need to be provided with extra care right from the beginning of their enrolment into the homes, as they are often received when malnourished and have under-developed immune system WHO (2000). In addition, most infants in the institutions are not breast-fed thus they are more prone to infections due to lack of natural immunity provided by breast milk.

Children institutions are categorized into three broad forms namely, Juvenile Remand Home established under section 50 of the Children's Act (2001), Charitable Children Institutions and Rehabilitation Homes. There are eleven children remand homes in Kenya designed to offer safe custody and care to children pending finalization of their cases at the Children's

Court. These cater for delinquent children with petty offenses such as refusal to attend school, engaging in street violence and drug abuse. They are used as remedial institutions for children below 18 years of age who have developed defiant behavior and therefore requires some corrective measures to enable them become responsible citizens.

Rehabilitation institutions, formerly known as the Approved Schools are established under section 47 of the Kenya Children's Act (2001). There are ten (10) rehabilitation institutions in Kenya and one reception centre at Getathuru that rehabilitation and reintegrates children back to the society, they offer various forms of training such as life skills, technical training and counseling. The standard services offered in the Approved Schools, include being attached to mentors whose main role is to provide parental guidance, through counseling and monitoring growth in terms of change in behavior and they act as the role models.

Children homes are established with an aim of giving care and offering protection to abandoned, neglected, orphaned and other vulnerable children. Currently, there are several such institutions in Nairobi which include Nairobi Children's Home, Kabete Rehabilitation, Getathuru, and private homes largely manned by Government, Community Based Organizations, Faith Based Organizations, Non-Governmental Organizations, and individuals, Ministry of Home Affairs (2009).

Kenya has a national program and commitment for the care of Orphaned and Vulnerable Children (OVC). In 2005, an Act of Parliament to make provision for parental responsibility, fostering, adoption, custody, maintenance, guardianship, care, protection, and administration of children institutions; to give effect to the principles of the convention on the rights and welfare of the child and for connected purposes was enacted by the parliament of Kenya and this act is cited in the Children's Act 2001. The Charitable Children's Institutions regulation of 2005 stipulates that institutions shall be run in a way consistent with the guiding and overriding rights contained in the convention on the Rights of the Child (1989), to ensure that

maximum survival and development of children, non-discrimination of children, respecting of children's right to air opinions and securing of the best interests of the children.

The Children's Act safeguards the right and welfare of the child, Kenya Gazette Supplement No.89 (2005). It also regulates the governance and management of the institutions, thus providing acceptable standards. Kenya is a signatory to the United Nations General Assembly Special Session (UNGASS) declaration on HIV/AIDS, and has already come up with an OVC policy, Smart (2003). Standard child care can make a significant difference in children's development. For many years studies have been examining the aspects of child care that have positive influence on children's development, Clarke –Stewart (1987). Lack of personalized attention also makes it difficult to attend to the different growth stages appropriately, Engle, Menon, and Hadad (1995). In addition, the poor unhygienic environmental conditions in the institutions expose these children to infections which further pre-dispose them to malnutrition. Therefore it is very important to evaluate the institutional status and child care approaches of Children in Need of Special Protection (CNSP) – the orphaned, neglected and abandoned children with a view to determining the institutions' adequacy in addressing the children's health, nutritional needs, extra curricula and the staff: child ratio.

1.2 Statement of the Problem

All over the world various, child care residential centres have been set up to provide care services for children in need of special protection (CNSP). They provide shelter and other child care services aimed at transforming and enhancing the development and lives of vulnerable children to become responsible and useful members in the society.

According to Aronson (1998) withdrawal symptoms, depression and anxiety that sometimes manifest from institutionalization lead to immunosuppressant and puts children in these institutions at risk of disease infection. As the impact of HIV/AIDS epidemic escalates, a large population of Children in Need of Special Protection is being absorbed in charitable

institutions to provide shelter, care and support. The Kenya government strives to settle children living in the streets into charitable institutions and there is urgent need to determine the quality of care using the Children's Act (2001) a benchmark upon which the institutions must abide. Information on the prevailing situation at the homes is therefore pertinent in the planning of placement of street children and setting priorities for their care and provision of resources needed for their upkeep. A careful search on available literature shows a dearth of research information on this important issue. This therefore created the impetus for this study with an aim of evaluating the level of care practices offered to children in these institutions.

1.3 Purpose of the Study

This study sought to evaluate the quality of care offered at charitable children institutions in Westlands District, Nairobi County.

1.4 Specific Objectives of the Study

The Study was intended to achieve the following specific objectives:

1. Observe the quality of food in the charitable institutions in relation to their general wellbeing within Westlands District, Nairobi County.
2. Examine the existing extra curricular educational activities in charitable children's institutions in Westlands District.
3. Find out the quality of health services offered in the children's institutions .
4. Evaluate how Staff : Child ratio impacts on service delivery in the targeted respondents from the institutions.

1.5 Research Questions

The study attempted to answer the following research questions:

1. What was the quality of food in charitable institutions in Westlands District, Nairobi County?
2. What type of extra curricular educational activities did the children engage in?
3. How were the health services are available utilized in these institutions?

4. What impact did Staff : Child Ratio have on service delivery in the charitable children institutions?

1.6 Significance of the Study

The findings of this study will inform policy makers to come up with appropriate policies on care givers training, make them aware of the challenges the charitable children's institutions are facing, and to ascertain if they are complying with the charitable children's institutions' regulations (2005). It would also contribute to knowledge of Early Childhood Programmes at the Faculty of Education in various institutions and other organizations dealing with charitable children institutions for future planning and raise public awareness on the plight of CNSP and the relevance of these children's institutions.

The study will also facilitate documentation of lessons learnt that can be replicated to other orphaned and vulnerable children (OVC). Curriculum developers will also use the findings to come up with curriculum on care giving approaches as well as its supervision. It will provide data which the Ministries of Health, Culture and Social Services and NGOs dealing with Children in Need of Special Protection can use in planning intervention projects for the care of these children.

1.7 Limitations

This study was a cross sectional survey which meant to evaluate the quality of care given to children in charitable children's institutions within Westlands District, Nairobi County. However, certain limitations arose due to the sensitivity of the topic, some administrators were unwilling to give all information required neither did they allow their juniors to provide the information. Although the study planned to interview children, this was not agreeable to the managers so that aspect was not investigated. Funds were limiting to contract more research assistance; this was overcome by working long hours and doing most typing personally.

1.8 Delimitation

The sampled population of the study covered children of ages between birth to eight years and was confined to Westlands District, Nairobi County. The observation therefore was not generalized to other institutions without due caution.

1.9 Basic Assumption

This study assumed that the charitable institutions were providing for the basic nutritional, extra curricular activity, health and staffing needs in line with the minimum legal standards set out under the Kenya Children's Act.

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The sampled population of the study covered children of ages between birth to eight years and was confined to Westlands District, Nairobi County. The observation therefore was not generalized to other institutions without due caution.

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1.10 DEFINITION OF KEY TERMS

Abandoned Child	A child who has been deserted by the parents, with the parents not having an intention of ever going back for the child
Care Giver	A person who delivers service to children either in the normal family home or in Children's Charitable Institutions on a voluntary or salaried basis.
Care giving approaches	Virtues and values used by the care givers in charitable children institutions.
Charitable Children's Institutions [CCI(s)]	A home or residential institution which has been established by the government, an individual, corporate or incorporate and has been granted approval by the national council for children services (NCCS) to manage a programme for the care, protection, rehabilitation or control of children (Children's Act 2001).
Child	For the purpose of this study "child" is used to mean a person of up to eight years of age.
Child Abuse	Any act by a person, group or society that inflicts harm on a child or prevents him/her from realizing normal growth and development.
Child Care Practices	Behaviour and activities of care-givers that affect the child directly and those that influence the environment.
Children's Homes	A place where destitute or orphaned children are cared for by persons who are neither their biological parents nor their blood relatives.
Child Neglect	Any Act by parent, group or society that disregards the provision of a child's basic needs.
Destitute	A child from a very poor family, which cannot afford even the basic necessities of food, clothing and shelter.
Infants	Children of ages less than twelve months
Ratio	Number of Children being taken care of by one care giver
Rehabilitation	Restoration to a good condition or to a former position or reputation. To a delinquent it is the act of bringing back to a normal life through special treatment.

1.11 Organization of the Study

The study was divided into 5 chapters as follows:- chapter one is the introduction which contains: The background of the study, statement of the problem, purpose of the study, research questions, significance of the study, limitations and delimitation, basic assumptions, definition of terms and organization of the study. Chapter two contains introduction, literature review – historical perspective of care given to children in Charitable Children’s Homes/Institutions in the world affecting child development to its potential and social interaction, care given in institutions, role of care givers, adult child ratio, environment, safety, staffing, services and training and experience. Chapter three contains research design, target population, sample and sampling techniques, description of instruments, data collection and data analysis, discussion of variables from questions of the study based on objectives, different topics related to objectives and variables that support the study. Studies done in those areas were also cited. Chapter four presents the findings and analysis of the study based on the set objectives and Chapter five highlights the main issues emanating from the study. The findings of the study are presented in summary, conclusions drawn and recommendations made on how to meet the needs of the children in charitable institutions more appropriately and adequately.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter focuses on the review of the available literature relating the quality of care services given to children, child care practices and highlights the needs gap.

The World Summit Declaration and Development of Children, together with Child Rights Convention (CRC) provided the child rights agenda for the 1990s, African Human rights Law Journal (2001). "Provide improved protection of children in difficult circumstances and to tackle the root causes leading to situation" was a clause among the global goals which participating nations committed themselves to achieve by the year 2000 (African Rights Law Journal, 2000). The Child Care Act, (1983) defines children in especially difficult circumstances as children in circumstances which deny them their basic human needs. Their nutritional status/quality food and care are inadequate and they need that care in line with section 14(4) of the child care Act, (1983). Often the issue is one of enabling them to access services and benefits which are intended for all children; that is enrolling them in children's homes to ensure that their special circumstances are addressed in legislation (African Human Rights Journal 140; 2001). Interventions are necessary to prevent the risk of diseases, malnutrition poor /no education. In the absence of such interventions, these children will have their problems inclined to be cyclical and self perpetuating.

2.1 Charitable Children's Institutions and Policies

"Charitable children's institution" means a home or institution which has been established by a person, corporate or an incorporate, a religious organization or a non-governmental organization and has been granted approval by the Council to manage a programme for the care, protection, rehabilitation or control of children, Kenya Gazette Supplement No.95 Act, (2001). As a country, Kenya has over 60 pieces of legislation dealing with children's issues. The national policy on Orphans and Vulnerable Children (OVC) is to ensure that all children in Kenya who are orphaned or vulnerable are protected and supported in order for them to

achieve their full potential that is physical, intellectual, social, emotional and spiritual and realize their rights.

Reviewing the Kenya Institute of Education (KIE) report of 2002 and Subbarao's research of (2001), some of these charitable institutions are government sponsored and run, others are privately sponsored and run, and a number are residential offering long term services. There are others where children are kept temporarily. The children should be provided with nutritious foods, which will satisfy their salient needs, the environment should have appropriate growth and development aspects of the child. These children face a high risk of malnutrition, morbidity, mortality and psychological damage to their development. Kibride (2002), states that the impact of these challenges is significantly interfering with the development of their full potential. Street children are involved in many undesirable activities before they join or taken into the institutions, including stealing, smuggling, sniffing glue, trafficking drugs. Abandoned and orphaned children are helpless if care services and nutritional status is not taken care of.

According to Panter (2002), the aim of these institutions is to improve family capacity, to be self-sustaining while creating a safe and conducive living environment for children. Alchlom, (1969) developed therapeutic methods to work with young offenders. Through the years up to 1979, they were treated dominantly by methods following psychodynamic principles with counseling, group therapy in particular, widely applied; this tradition of treatment has been going on until today. The decades that followed, that is 1980s, 1990s there has been upsurge in offender treated programmes based on behavioral and cognitive behavioral principles as acknowledged by Hollin (1990). The 1980s saw a fall of rehabilitative ideal, then in the 1990s, there was a spectacular come back, mainly in Canada, Britain and parts of the United States. Studies which were done on effects of offender's treatment show that treatment can have a small but significant effect in terms of reducing a repeat of the offender's deeds further. Certain treatment factors when combined would be delivered by highly trained

practitioners. Organizations would support, manage and evaluate the treatment programmes to ensure quality treatment; Hollin, (1995, 2004).

In Pakistan the Edhi Foundation runs institutions for street children called Ana Guar (Our Home). These centers also accommodate mentally ill orphans who run away from their homes, about 6000 children live in these homes. A destitute or homeless person becomes member of Edhi family once they enter its premises; Mohamed (2002). In Latin America, Casa Alianza is a branch of the New York based Covenant House. It serves some 4000 children from the streets that may include destitute, orphans, abandoned or neglected children. It is dedicated to helping children from the streets back to meaningful and productive lives through programmes that foster stability and restores hope Casa (2000). In Guatemala and Mexico in response to the growing number of street girls who become pregnant, and their babies dying from lack of proper care, programmes for care of children was started to give services to such children, offering rehabilitation services including nutritional services to their mothers as well. Child care and vocational training is also provided (Manuel 2001).

According to Elkin and Handel (1972), there must be an ongoing society "family". A child requires human nature that establishes emotional relationship with others and experiences such sentiments as love, sympathy, envy, pity, shame and pride. In this respect services must be rendered to these children who need care from the parents and society. Many (OVCs) are at great risk of infection. UNICEF (2004); Hunter and Williamson (2000); UNAIDS (2002) in their study reported that orphaned children suffer a catalogue of deprivations and vulnerabilities including depression, malnutrition and health care services, lack of education, homelessness, abuse and the increased risk of HIV/AIDS infection if they cannot get any alternative charitable children's institutions to cater for their physiological needs and safety. State parties shall protect the child from all forms of physical or mental violence, injury or abuse, neglect, malnutrition or exploitation including sexual abuse (UN Convention on the Rights of the Child (1989, Article 19). This policy sets out common values, principles and

beliefs and describes the steps that will be taken in meeting our commitment to protect children (Save the Children, 2003).

2.2 Nutritional Status/Food Quality

Linear (1982), describes nutritional status as the relationship of food to utilization by the body. The science of food, the nutrients and their action, interaction and balance in relation to health and diseases. Deficits in physical measurements, indicating past or current malnutrition at the cellular level are usually attributed to lack of food, an increased rate of nutrient utilization and or to impaired absorption or assimilation of nutrients. Malnutrition is therefore a result of inadequate dietary intake, illness or combination of the two or excessive dietary intake as indicated by the World Health Organization report, (1995a). Thus a malnourished person is pre-disposed to infections/illnesses, due to stress on the body and depleted nutritional reserves leading to malnutrition. This is because the body's nutritional status relates synergistically to the body's immune system. The major outcomes of malnutrition are classified in terms of morbidity (incidence and severity), mortality, psychological and intellectual development and consequences in adult life that include adult size and risk of chronic diseases (WHO, 1995a). Such diseases as diarrhoea, malaria and measles, a combination that increases the toll that either problem would take alone (World Bank, 1993a).

According to Robinson (1990), malnutrition impairs components of immune system making them ineffective in combating diseases and also interferes with the body ability to heal wounds, maintain the function of the vital organs and an immune response. Malnourished children have lower resistance to infections and are more likely to die from common childhood ailments like diarrhoea/diseases, measles, tuberculosis and respiratory infections as stated by Hawes (1993). Cobb N, (2001) asserts that the dramatic changes in height and weight that take place during the early years of a child depend on adequate nutrition, rapid muscular development, as well as continuing brain growth, all requiring adequate nutrition. As a consequence, children of ages 3 to 5 years need more energy than adults and therefore

nutrition as a benchmark for growth need to be taken care of in children's Institutions. One common form of malnutrition during these years is protein deficiency which requires adequate supplies of protein to support rapidly developing muscles and body tissues. Malnutrition when chronic can stunt physical growth and affect brain development, concentration, and apathy and generally decrease ability to cope with the demands of the child's environment as cited by Cobb, (2001).

The most important causes of growth faltering during the weaning period is the early introduction of breast milk substitutes and the lack of support for children in the institutions. In addition, the time constraints on child care givers preclude their having enough time and attention for feeding young children in the Institutions frequently the lack of energy-dense weaning foods especially in the children's homes as well as lack of information and financial resources prevents children's homes from making adequate arrangements for the frequent feeding of the infants under their care thus the infants growth is jeopardized, National Food Consumption Survey in children S. Africa (2001).

Feeding practices offered to infants determine eating habits and influence nutritional status for a lifetime as asserted by Ballabriga (1987). Exclusive breastfeeding is recommended for infants up to the age of six (6) months with continued breastfeeding even after introduction of complementary feeding up to 2 years because of the benefits of breast milk on the health of the baby. The process of complementary feeding begins at 6 months of age and should be carried out appropriately because of the possible high risk of infections leading to prevalence of faltering growth and further morbidity and death. Protein Energy Malnutrition (PEM) also referred to as Protein Calorie Malnutrition, develops in both adults and children whose consumption of protein and energy is insufficient to satisfy the body's nutritional needs. Children who live in homes may have Protein Energy Malnutrition because of their background – poverty leading to Kwashiorkor a wet Protein - Energy Malnutrition, primarily characterized by protein deficiency. This condition appears at the age of 1 year when breastfeeding is discontinued but it can also develop at any time during a child's formulating

years. It is very obvious kwashiorkor can develop in children in homes if the institution lack finances to purchase a variety of foods. Marasmas is also another (PEM) caused by energy-deficiency, Lawler, Chemoweth and Gawick (1990).

According to Ropkenya (2010), Child malnutrition is the most widely spread disorder in tropical areas, recognized as a consequence of poverty and is known to cause a great deal of both physical and emotional human suffering. Child, malnutrition is most likely to strike those who lack nutritionally adequate diets, those not protected from frequent illnesses and those who do not receive adequate care (African Journal of Food Agriculture and Nutritional Development – (ropkenya,2005). The nutritional status of infants and children under 5 years of age is of particular concern since the early years of life are crucial for optimal growth and development. It is reliably estimated that globally 226 million children below 5 years old are stunted, 67 million are wasted and 183 million weigh less than they should be for their age.

2.3 Extra Curricula Education Activities in Charitable Institutions

Activities aimed at changing care practices of children requires substantial resources in form of time given to care for the children in need of special protection and funds. Faith based, Community Based, Government and Non Governmental Organizations and other stakeholders have been involved in intervention within the Nairobi County to maximize the quality of life of the children.

Clarke, and Stewart (1987), describe a quality environment as one that is well planned and invites children to learn and grow. Care Homes that are neat, clean, and orderly, physically set, organized into activity areas and oriented to the child's activity are found to promote good child development with enough materials and equipments available that are developmentally appropriate for children of different age levels. Activities planned by the caregivers must also be appropriate and should allow for imaginative play. Bridgman, (1988), asserts that play opportunities that enhance children's social, emotional, physical and

cognitive development are other indicators of high quality service delivery. Children need to be given time to play and explore using concrete materials in order to enhance their natural curiosity and intellectual development.

According to Jomtien World Conference (1990) report, every person – child, youth, adult shall be able to benefit from educational opportunities designed to meet their basic learning needs, (such as literacy, oral expression, vulnerability and problem solving) and the basic learning content (such as knowledge, skills, values and attitudes) required by human beings to be able to survive, to develop, to live in dignity, to participate fully in development and to improve the quality of their lives, to make informal decisions and to continue learning.

Hepburn (2001) claims that, a well designed primary educational opportunities are critical since they offer children the opportunity to socialize and develop behaviourally and provide them with emotional support, nutritional and health care, attention and the life skills training they need. In Kenya, the National Rainbow Coalition (NARC) Government demonstrated a clear political commitment to improve the well being of children, youth and families in the street; (G.O.K, 2003). The government has also assumed responsibility of preventing and stopping violations of human rights and this has clearly been demonstrated through powerful emergency response to the situation of street children. NARC manifesto did also motivate the society in general to participate in translation of political good will into positive outcomes for street children, abandoned and neglected children; (G.O.K, 2003)., and gave rise to the enactment of Act of Parliament (Charitable Children Institution Regulations, 2005).

Ouma (2004), asserts that although the Kenya Government is obligated to provide education for all, many actors play vital roles in delivery, from international agencies to local communities, Report further asserts that the situation is appalling, placing children in difficult circumstances in worse situations; as done by some NGOs and Religious groups. The implementation of Free Primary Education (FPE) for all and resettlement programmes are important contributions towards removing and eliminating the conditions that cause

children, youth and families to take to the streets. It is worth noting that providing opportunities alone without adequate regular evaluation and checks means that few children will benefit. This has led to the establishment of the residential homes to provide reintegration and cognitively the children will be able to fit well in the society and in classroom experiences; G.O.K (2003).

Kelly (2002) defines early years of any child's growth and development as time they require to be socially integrated with respect to their age, good health and good nutrition with nurturing care expected from care-givers which include love, touching hugging, use of positive tone of voice, talking with them and listening to them, ensuring eye contact, answering their questions, laughing with them and smiling at them. Secure attachment to the children in the children's homes is necessary for the care-givers who keep a watchful eye on them and responding to their vocalizations, expressions and gestures. It is in this respect that the care-givers should be patient, friendly, trust worthy, well-behaved, kind, understanding, confident, just, loving, devoted, creative, courteous, a role model, polite, morally upright and knowledgeable as cited in the KIE report of 1999. The minimum age of care-givers should be 21 years and above so as to cater for ages ranging from 3 years up to 15 years, though according to Junn, (1997) a care-giver required to care for children with the oldest being below 15 years of age, must be above 18 years old. However, the researcher is of the opinion that it is paramount that care-givers be persons of stable temperament and of good social standing.

In Kenya services rendered in Charitable Children Institutions (CCI) not only include formal and non-formal education but also feeding, sheltering and provision of employment opportunities which entail creation of small enterprise development in the pursuit of in-come generation for the children as they come of age to facilitate improved conduct, development and prospect of all orphaned and vulnerable children whose future appear uncertain (Ouma, 2004).

2.4 Health Status of Children in Charitable Institutions

Studies done by Saoko and Mutemi (1999), reports on the state of children's institutions as alarming in most of the government and private institutions. a fact that is contributed to lack of adequate facilities, overpopulation in the institutions, lack of resources, lack of trained personnel, high child: staff ratios and poor management of finances. Malnutrition and illness afflict children in the institutions who rarely get medical attention when they are ill and in need of care.

This grim situation is globally reflected In the Human Rights Workshop (HRW) report, (1996), which highlights the plight of Romanian children who suffer from inadequate food, housing, clothing, and medical care, lack of stimulation, education and neglect. About 60% of children living in children's institutions in Romania were found to be suffering from iron deficiency and anaemia. In China institutionalized children suffer from starvation, disease and unnatural death more so there is a pattern of cruelty, abuse and malign neglect that result in very high mortality rates in the state institutions, HRW (1999). Sick children in institutions in China are attended to by non-university trained doctors and it is uncommon for university physicians to care for a child from an orphanage, Miller and Kierman (1995).

Alden, (1991), agrees that it is indeed expensive to maintain children's homes rather than assisting families and communities to care for orphans and that cost comparison from Uganda shows operating costs for orphanages to be 14 times higher than those for community care. An unknown number of children estimated in millions in children's homes and other non-penal institutions all over the world are kept in grossly substandard facilities according to the Human Rights Workshop report, (1996). The child care givers and other personnel responsible for nurturing and providing for the children, often physically and sexually abuse them (HRW, 1996). Even in clean institutions with adequate food, resources, care givers/staff neglect the children, leaving them to be alone in cribs with no stimulation, play and adult attention (HRW, 1996).

A study by Alden (1999), on orphans summarized the situation in children's homes as generally not adequate at meeting children's developmental needs in Uganda. It has been observed in Kenya that problems children in institutions experience include pollution, overcrowding, imbalanced diet, shortage of trained care givers, lack of recreational facilities and lack of standard care. Studies done by Saoko and Mutemi (1999), reports on the state of children's institutions as alarming in most of the government and private institutions.

Mulligan (1992) suggests that a key aspect of providing a good environment for children is the safety of the setting. Care givers must be vigilant in their supervision of children at all times. The child care provider needs to know what to do in case of an emergency and also the sanitary procedures such as washing hands and local licensing standards must be followed. Adequate lighting, temperature and noise control are also factors that contribute to safe environment as cited in Charitable Children's Institutions Regulations, (2005).

2.5 Staff: Child Ratio and Service Delivery in Charitable Institutions

According to Kostelnik (1993), good staffing ratios are an essential ingredient in quality services. To be able to provide adequate care and stimulation, the aspects of age and number of children the adult should handle is very important. It is recommended that for children below one year, the Care-Giver:Child Ratio should be 1: (3 to 4) while for 3 years old should be 1: (10 to 15) as stated in the KIE (1999), while group size indicator (2002) puts it 7:1. Galinsky and Phillips, (1989), recommends a ratio of at least one adult for every 3 to 4 infants and an adult for every 4 to 6 children under 3 years. The recommended ratio for 3 to 4 years old children is one adult for every 10 children and 1:12 for school age children.

Having small groups of children can help strengthen the ties between children and care givers thus there is need for government regulations and policies concerning running of the homes to be adhered to. The study aims at identifying key health and nutrition areas for intervention by the government. There should be no more than six to eight babies, six to ten toddlers, ten to twenty pre-scholars and at least two adults per group. Child care campaign and advocacy

in USA recommends that there should be less than four infants in a group and not more than 8 to 10 toddlers in a group with a minimum of one adult.

Clarke and Stewart (1994) further asserts that care givers with small groups are more actively involved and spend more time interacting with children; they are more responsive, more socially stimulating, and less restrictive than caregivers in larger groups. Children receive less attention, affection, response and stimulation from care givers each time a single child is added to a group. Children who have highly involved care givers tend to exhibit behaviour suggestive of secure attachment, Dunn (1993).

Gotts, (1988), asserts that children in larger groups receive less attention and show lower gains as compared to smaller group size which is associated with more developmentally appropriate classroom activities than larger group size. Lower Child:Care Giver Ratios are associated with less distress in toddlers, less apathy and distress in infants, in Kenya, staffing ratios have not yet been streamlined and no enactment is available giving appropriate guidelines, this is a key gap in the impact of legislation on quality of services rendered to children

Effective care givers who render child care service serve as nurses and advocates for the children, Niagara, (2004) and Gail (2000). They organize and understand the children's needs, socialize with them and promote their development aspects. Close attachment and bonds between children and care-givers are important part of children's development and learning. And according to the Kenya's Children's Act (2001), there is provision of employment criteria with regards to qualifications, skills, character, health, age and experience, this legislation provides assurance on services rendered.

The key role of care-givers is to provide comfort and responsiveness to the needs of the children, impacts on how these children learn to handle their emotions and to seek help when needed and appraise children's efforts and provide them with feedback on what they have

done well. This leads to children being encouraged to take more activities independently, gain confidence and feel motivated to be independent. Care givers should be available for them and be prepared to talk to them, give special responsibilities which should lead to children knowing that the care-giver takes interest in their activities and that they feel valued by the care-giver's availability and attitude, hence feel secure. If this is done the children will move to greater levels of self-dependence, gain confidence, have a stronger sense of self-worth, leading them into using their imagination, experimenting and feeling proud of their abilities. According to Maslow's (1970), hierarchy of needs as cited by Cobb (2001) distinguishes the basic need in order of their importance which not only demonstrates the hierarchical arrangement but also shows the broad base of physiological and safety factors before other possible needs are considered.

2.6 Children in Need of Special Protection

The term "Children in Need of Special Protection (CNSP)" refers to Children in Especially Difficult Circumstances (CEDC). These include: children living in severe poverty, infected and affected by HIV/AIDS, with disabilities and illnesses, experiencing abuse, neglect and abandonment, labourers, living in the streets, sexually exploited in conflict with the law, exposed to armed conflicts or violence and child refugees, UNICEF Report on child refugees (1995).

Shauna (2004) and Junn (1997), on their part agree that care-givers with strong knowledge of child development recognize how important it is for children to have a sense of belonging, being loved and trusted in their environment. Warm and caring relationship with care givers provides children with the basis for all types of learning. Studies have shown that the presence of alternative care givers encourage children to explore their worlds. The care-givers need to ask specific open-ended questions, explain reasons behind requests and encourage them to stay involved in play activities. As a result children tend to become consistent and persist on tasks, feel a sense of leadership and feel valued and important; as

cited by (Junn Ellen, 1997). Such care-givers' skills are acquired through training to impact quality services they render.

Care givers with at least specialized training at college level behave more sensitively and less harshly, engage in more positive interactions, provide more warmth, more enthusiasm and more developmentally appropriate communication with children, display less detachment, more involved with and are more interested in the children, less punitiveness (less hostile, threatening and harshly critical of children). (Junn, 1997)

2.7 Theoretical Framework

This study settled on Maslow's theory on the hierarchy of needs, humanistic psychologist (Maslow's, 1970) as cited by Cobb, N. (2001) developed the hierarchy of needs which presents the relative priorities of important basic needs. Maslow used the need for physiological and psychological motives. According to Maslow's theory of needs, a person must first satisfy his/her basic needs such as food, shelter and clothing before graduating to yearn for secondary needs like security and safety and up the ladder, sense of belongingness and love so as to attain self esteem and ultimately self actualization. Charitable Children's Institutions remove children from harmful environments to help them develop into responsible members of the society and it would therefore be prudent for the institution's management to adopt the theory to be able to offer quality services to the children under their care.

Maslow postulates certain human needs and arranges them in order of hierarchy as mentioned by (Child, 2004). He distinguishes the basic needs in order of their importance as follows:-

Self actualization needs, Self esteem, Love and belonging needs, Safety needs, Physiological needs. The needs not only demonstrate the hierarchical arrangement but also the base of

physiological needs and safety factors before other possible needs are likely to be considered. Progress through the hierarchy is more likely as more important needs are satisfied.

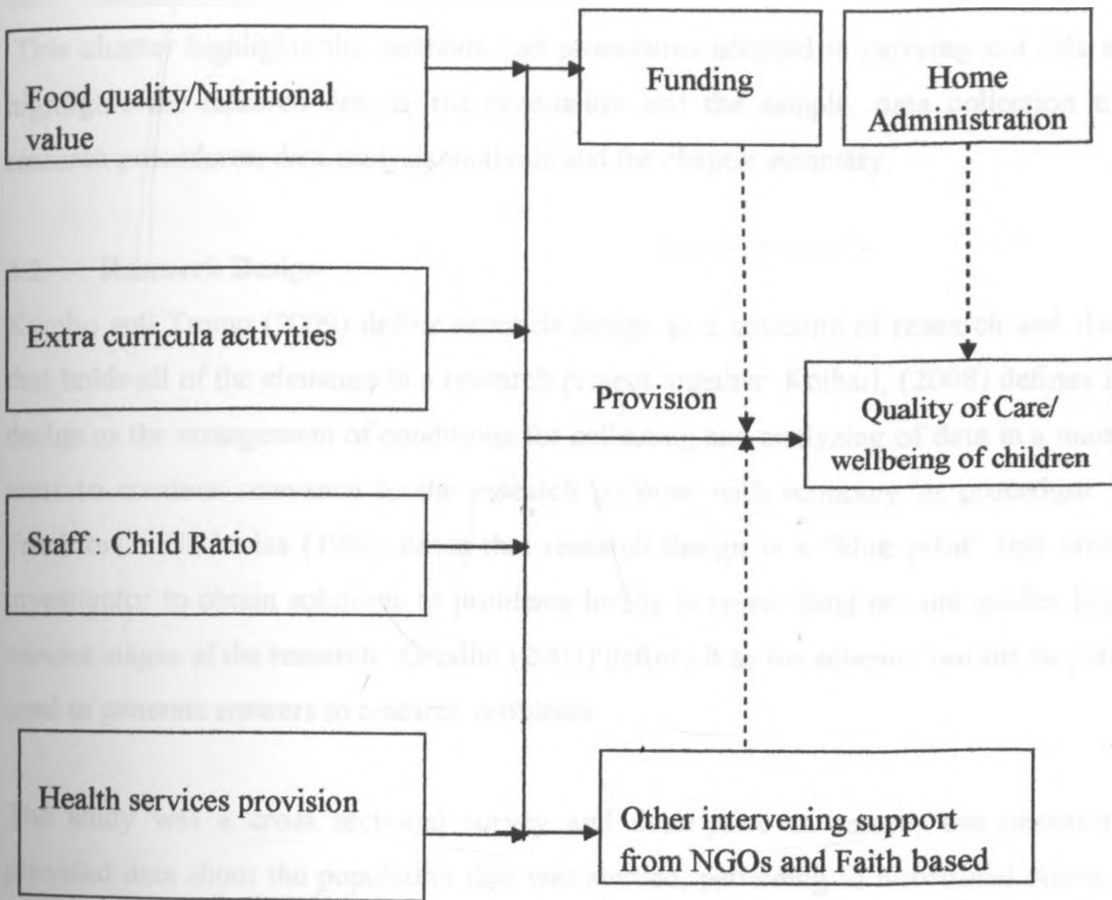
2.8 The Conceptual Framework

The conceptual framework describes the dependent and independent variables that influenced the study. A variable is a measurable characteristic that assumes different values among the subjects. The main independent variables of the study include the nutritional status/quality of food of the children in the charitable institutions, the educational and extra curricula activities offered in the same institutions, the Staff: Child Ratio and lastly the health services provided to the children in the institution. The dependent variable is the general well being/quality of care of the children in the sampled institutions. These variables are as summarized in Figure 2.8.1 below.

Figure 2.8.1

Conceptual framework

Relationship between selected factors and quality of care



CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter highlights the methods and procedures adopted in carrying out this study. It highlights the research design, the population and the sample, data collection methods, research procedures, data analysis methods and the chapter summary.

3.2 Research Design

Kombo and Tromp (2009) define research design as a structure of research and the “glue” that holds all of the elements in a research project together. Kothari, (2008) defines research design as the arrangement of conditions for collecting and analyzing of data in a manner that aims to combine relevance to the research purpose with economy in procedure. Chava Frankfort – Nachmias (1996) notes that research design is a “blue print” that enables the investigator to obtain solutions to problems he/she is researching on and guides him/her in various stages of the research. Orodho (2003) defines it as the scheme, outline or plan that is used to generate answers to research problems

The study was a cross sectional survey and descriptive in nature, the research design provided data about the population that was studied, pertaining to nutritional status and the quality of care of children in charitable institutions and it sought to describe the state of affairs, as they existed at that particular time. It further provided a systematic description that was factual and as accurate as possible thus fitted well with research problem. This method captured populations’ characteristics by making inferences from the sample characteristics.

3.3 Target Population

This study targeted one (1) manager, one (1) care giver, one (1) matron and one (1) nurse each from the six (6) institutions located within Westlands District, Nairobi County.

Target population were the children and staff in the six (6) registered children’s institutions in Westlands District. There are 74 registered homes in Nairobi County with only 6 institutions in Westlands District which were all sampled because of their proximity and being an area with most Charitable Institutions in the whole County of Nairobi. The homes provide care for different categories of Children in Need of Special Protection (CNSP) who were referred there mainly from the Ministry of Home Affairs, Culture and Social Services, Hospitals, Police, Good Samaritans and Non Governmental Organizations (NGOs). As per the Kenya Demographic Health Survey (KDHS, 2008) it was noted that 33% of children under 5 years of age were stunted, 22% were under-weight and 6% wasted.

Table 3.1:
List of targeted respondents from Charitable Institutions in Westlands District

Institution	Managers	Caregivers	Children	Total %
1	1	2	4	16.66
2	1	2	4	16.66
3	1	2	4	16.66
4	1	2	4	16.66
5	1	2	4	16.66
6	1	2	4	16.66
Total	6	12	24	100%

3.4 Sampling Procedure and Sample size

Initially eight (8) charitable institutions had been selected for this study but only six (6) institutions were finally targeted for the study, because the other two institutions, one had closed down completely and another one had relocated to Kiambu County hence not eligible to be in my sample. Out of the six visited, two institutions did not give all the information required but the challenge was overcome by being able to interview a subordinate staff who gave some information.

The selection of the institutions in Westlands District was done using probability sampling method which was used to determine the number of children from each home to be included in the study. A comprehensive sample of children in homes that had less than twenty (20) children under eight (8) years of age were then taken while in those with more than twenty children, random sampling was done to select individual respondents. The sampling included 6 managers and 6 care givers.

3.5 Research Instruments

Four research instruments were used which included the questionnaires, documentary analysis forms, observation and interviews.

(a) Questionnaire

The data collection tool was structured so as to capture quantitative data using (close ended) which was used to measure the objective responses and also the unstructured (open ended) which was used to capture the qualitative data through the subjective responses for the study. There were two (2) types of questionnaires namely; for the care givers and the managers:

- (i) Questionnaires for the managers which sought information on the management approaches used, how children were enrolled in the institution, and their numbers according to sex policy of the institution, whether the services were rendered according to the legislation.
- (ii) Questionnaires for Care-givers sought information on the category of the institution, the number of children enrolled in the institution, their ages, their educational backgrounds, any level of training on child care, their experience in care-giving and number and age of children under their care.

Questionnaires were used because they offered a considerable advantage in records and presented an even stimulus potential to large numbers of respondents simultaneously and provided the researcher with relatively accumulative data; Walker, (1985).

(b) Document Analysis

For secondary data, the researcher perused through the records from the Charitable Children Institutions (CCI) like the enrollment and meal menus, so as to get the information on total enrolment which is attributed to costs of the residential institution. According to Mwiria and Wamahu, (1995:62) document analysis is the best method of accessing valid information since it cannot create, waiver or withhold information. This was used to supplement, validate and ascertain the responses in the questionnaires during the researchers' visit to the Charitable Children Institutions, physical facilities and the extra curricula activities were observed to find out to what extent they were compliant with the Children's Act of 2001 Peil (1995) maintains that much is learnt by observing what people actually do and how they do it and that observation is almost combined with casual or informal interviewing.

(c) Interviews

The researcher carried out interviews with the respondents' to seek information on impact of legislation on services delivery the management styles, enrolment procedures, and number of destitute children in the institution – according to sex. Peil, (1995) maintains that interviews can provide reliable, valid theoretical satisfactory results from the respondents. Likewise the researcher carried out an interview schedule with class teachers to enquire on class attendance and participation, behavior on class and challenges exhibited by these children.

3.6 Instrument Validity

Kothari (2005) defines validity as the extent to which differences found with a measuring instrument reflect true differences among those being tested.

Orodho (2005) says it is the degree to which the empirical of the concept accuracy measures the concept while Mugenda & Mugenda (1998) defines validity as the accuracy and meaningfulness of inferences, which are based on the research results.

Of the 24 questionnaires sent out to six (6) institutions, a total of 18 (75%) were returned as shown in table 1.

3.6.1: Instrument Reliability

The researcher used the test-retest method of assessing reliability of data and this involved administering the same instrument twice by the researcher to the same group of subjects. It also involved keeping the initial condition/answers constant, and administering the same test/questionnaires, observations, interviews to the same respondents. The researcher waited for time lapse before doing the second testing/questioning/observing and then the scores were correlated from both testing periods. Kothari (2008) defines reliability as a measuring instrument which is reliable if it provides consistent results. The researcher identified six (6) institutions which she gave a standard questionnaire. She then verified the information provided by the institutions from permanent records at the Government's offices, and other secondary sources such as donors of those institutions who provided reliable information. Another reliability strategy was the impromptu visits to the institutions which helped verify the truth of the matter concerning daily care of the children in the visited homes.

The aim of the pretest was to validate the reliability of the research instruments used in the collection of data for the study and create room for improvement. It helped check the appropriateness of the language used in the instruments, the clarity of the questions and ascertained if they brought out the input needed for the study.

3.7 Data Collection Procedures

Primary data was derived through the use of questionnaires and observation while relevant literature from the institutions formed secondary data. The self administered questionnaires and interview guide in both cases were captured in both qualitative and quantitative data relevant to the study. The researcher got an introduction letter from the Department of Educational Communication and Technology, University of Nairobi (DECT-UoN). All questionnaires were delivered by the researcher to the respective institutions in the sample at an agreed time, then the respondents were given two weeks to fill up the questionnaires before they were collected. It is within these two weeks that the researcher took the opportunity to observe the relevant things in the institutions, some of these were the physical

facilities and equipment. Document analysis tables were filled by the researcher from the institutions/ records.

3.8 Data Analysis

Kothari, (2005) defines data analysis as the computation of certain indices or measures along with searching for patterns of relatedness that exist among them. The researcher ensured that the questionnaires were counter-checked to ensure completeness. The data analysis process involved the arrangement and coding of the transcripts and the field notes, then a template was prepared using Statistical Package For Social Sciences (SPSS) as per the questionnaire after which the data was systematically entered into the SPSS software to generate tables and graphical presentations. After the generation of frequency tables, interpretations of the finding was done.

CHAPTER FOUR- RESEARCH FINDINGS AND DISCUSSIONS

4.0 Introduction

This chapter presents the findings and discussions arising from the analysis of the study based on the set objectives.

4.1 The questionnaire return rate for this study

Out of the twenty four (24) questionnaires given out, eighteen (18) questionnaires were duly filled and returned giving a return rate of 75% as in table 1 below.

Table 1: The Questionnaire Return Rate

Institution	Manager	Matron	Nurse	Care-giver	Total Response	Remarks
C1	1	1	1	1	4	Included in study
C2	1	1	1	1	4	Included in study
C3	1	1	1	1	4	Included in study
C4	1	1	1	1	4	Included in study
C5	1	-	-	-	1	Excluded from study
C6	1	-	-	-	1	Excluded from study

4.2. Socio-demographic characteristics of the study population

4.2.1 Distribution of children

There were a total of 269 children in the charitable institutions included in the study of which 183 were from institutions managed by private individuals while the remaining 86 were from institutions run by International NGOs and Roman Catholic church.

Table 3:**Category of children in the institutions and number of children enrolled**

Category of Children	Number of children	Percentage (%)
Abandoned	46	17.1
Orphaned	100	37.2
Abused	20	7.4
Destitute	10	3.7
Single parent (Father)	10	3.7
HIV/AIDS infected	60	22.3
Teenage parents	16	5.9
Imprisoned mother	2	0.7
Terminally ill parent	5	1.9
Total	269	100

From the study, the total number of children in the six (6) institutions in Westlands District was 269 and that the orphaned category of children comprised (37.2%) followed by HIV/AIDS infected and abandoned at (22.3%) and (17.1%) respectively. The imprisoned mother category was the least with (0.7%) of the children as shown in table 3 above. The orphaned and the HIV/AIDS infected had higher percentage because of loss of parents through HIV/AIDS pandemic in Kenya and many children were born infected with HIV/AIDS.

Table 4:**Social amenities**

Social Amenity	Institution	Percentage (%)
Tap water	6	100
Electricity	6	100
Firewood	1	16.7
Gas and charcoal	4	66.7
Total	6	100

Looking at the availability of social amenities like tap water, boreholes, electricity, it emerged that all (100%) of the institutions relied on tap water from the Nairobi City Council, while 2 (33.3%) of the six homes had dug up boreholes to supplement the City Council water. For lighting purposes, all the six homes used electricity for lighting the rooms for children. On cooking, it emerged that 2 (33.3%) of the homes used firewood and charcoal to prepare children's food whereas 4 (66.7%) of the homes used both gas and charcoal as shown in table 4 above. It is reasonable to expect all the institutions to have electricity and water since they are in the city of Nairobi.

Table 5:**Goals for setting up charitable children's Institutions**

Goal	Number of Institutions	Percentage (%)
Temporary shelter	6	100
Education	6	100
Permanent shelter	-	-
Facilitate adoption	2	33.3

From the study it emerged that all the six (100%) homes had been set up to offer temporary transit shelter and care. However, the managers of the institutions had a way of providing education as a secondary objective of the institution. Two of the institutions (33.3%) had

schools within the compound while the other four arranged for schooling outside their compounds.

Table 6:
Distribution of children by age and Gender

Age bracket	Institutions	Percentage (%)	Gender	Percentage (%)
1 >	4	66.7	Male	53.3
1 – 2 years	2	33.3	Female	46.7
3- 4 years	2	33.3		
5 - 6 years	5	83.3		
Above 6 years	4	66.7		

On the age distribution, the study established that the mean age of the children was 25 months with the youngest having been 3 weeks old and the oldest 19 years old. There was a higher number of older children representing (43.1%) who were between 3 to 4 years of age as compared to (16.7%) who were below the age of 1 year as shown in table 6 above.

On gender, it emerged that 53.3% of the children were males whereas the remaining 46.7% were female, meaning that there were more boys in the institutions than girls. One manager commented that there is a cultural expectation to give boys land and thus more likely to find boys left out in society than girls, mainly in cases of single parenthood.

Table 2:**Category of institutions and number of children:**

Category of Institution	Number of children	Percentage (%)
Private	118	43.9
International NGOs	38	14
National NGOs	15	5.6
Roman Catholic Church	33	12.3
Protestant Churches	65	24.2
Total	269	100

From the categories of the institutions shown in table 2 above, it emerged that they were run by private individuals, International/national NGOs, Protestant churches and Roman Catholic Church. (50%) of the institutions visited had been in operation for an average of 10 years while the other (50%) had been in existence for twenty years. It also emerged that most (83.3%) of the institutions catered for abandoned, orphaned and neglected children and one catered for girls who are threatened by sexual abuse and early marriage.

Table 7:**Categorization of Children in Need of Special Protection**

Category	No of children	Percentage (%)
Orphaned	95	35.3
Single fathers & teen mother	16	18
Abandoned	99	36.8
Neglected	13	5
Unknown background	< 10	3.7
Total	≤ 269	100

On the Children in Need Of Special Protection,(CNSP) from the study findings in table 7 above, it did emerge that 99 children representing (36.8%) had been abandoned either in hospitals or on the streets of urban centres because they were HIV/AIDS infected while 95 children representing (35.3%) were orphaned. There were 16 children of single fathers and teenage girls representing (18%) of the total population of study while children from destitute families and those neglected by parents were 13 representing 5% of the total population. The other categories comprised of less than 10 children representing (3.7%) of the total population whose backgrounds were not known.

Presentation of the findings as per the research objectives**4.3 Food Quality:**

During the investigation of the nutritional status of children in the institutions, feeding practices was assessed only in homes which had children within the age under investigation at the time of the study. Feeding practices pertaining to children below two (2) years of age were therefore assessed. From the findings, five (5) of the institutions were considered whereas for older than two (2) years of age three (3) of the institutions were considered.

The feeding aspects of infants observed included types of milk substitutes used, age of introduction, frequency of giving the breast milk substitute, milk feeding equipment, whether bottle, or cup and spoon and the person involved in feeding the infants. Formula milk was the most common breast milk substitute in two institutions where infants were fed as shown in table 8 below.

Table 8:
Breast-feeding substitutes used by children institutions and age of Introduction

Substitute for breast feeding	Age of Introduction			No. of Institutions
	1 - 3 months	3 - 6 monthsh	Above 6 months	
Formular	2	2	-	2
Cow milk	3	3	3	2
Packed milk	1	1	1	2

Two of the institutions in the study introduced formula milk as the first breast milk substitute to children of age 3 months, diluted cow milk was also used in these institutions whenever the formula was unavailable. The two institutions introduced cow's milk after the age of six months. As shown in table 8 above, two institutions which had children of 3 months and below fed them with milk on demand and children in these two institutions were fed routinely. Bottle feeding was the mode used to feed children below 3 months old in the two institutions, while cup and spoon were used, only when volunteers were present. In one of the institutions care givers fed the infants on rotational basis which lowered the ability of children to develop attachment to the care givers. These were the institutions which did not have consistent care givers, hindering attachment therefore slow language development.

Table 9:**Management of infant feeding breast milk substitute by the institutions**

Management of infant feeding	Number of institutions	Percentage (%)
Frequency on demand	2	33.3
Routine (2 - 3 hrs)	1	11.1
Bottle feeding equipment	2	33.3
Cup and spoon	2	33.2
<u>Persons feeding infants:</u>		
Care givers	3	50
Different persons	3	50
Rotational care giver	2	33.3

The complementary feeding aspects under investigation included age of introduction to complementary foods given and their nutritive value. In addition, the feeding frequency and method of feeding were investigated. Two (33.3%) of the institutions introduced complementary foods before the age of 4 months, another two institutions had infants introduced to complementary food at between 4 and 6 months of age as shown in table 10 below.

Table 10:**Age of introduction of complementary foods by institutions**

Age	Number of institutions	Percentage (%)
Less than 4 months	2	33.3
4 - 6 months	2	33.3

The most commonly used complimentary foods from birth to 6 months was breast milk substitute. From 6 to 7 months two institutions provided iron fortified cereals and porridge while the other 4 institutions provided ordinary millet porridge which was not fortified.

Between 7 to 8 months, two institutions provided vegetables and fruits in form of juices, starchy vegetables like pumpkin, potatoes and bananas. Green vegetables such as spinach, kale, and cabbage were provided for vitamins and minerals. At 8 - 9 months, the institutions provided protein from legumes like beans, peas, green grams and lentils. Vitamins are got from fruit juice freshly squeezed. By age 9 to 12 months the institutions provided animal protein from meats like beef, chicken, fish, liver, mutton which was given in minced form. At twelve (12) months, three (3) meals were offered and introduction of whole milk. (See a complementary feeding menu from institution is attached as an appendix 8).

All the institutions were able to provide foods rich in carbohydrates, fats oils, protein and vitamins. Locally produced foods like potatoes and porridge were the most commonly used in all the institutions as compared to the commercially packaged foods such as cerelac and weetabix which were used only in one institution.

Fats and oils were used mainly in food preparation or enrichment of other foods, cooking oil was used in food preparation of the main meals namely lunch and supper in all the six institutions. It also emerged that (50%) of the institutions were able to provide milk for the children, this was given either plain or as component of a dish for example porridge. One institution provided milk as component to breakfast cereals while in 4 institutions representing (66%) of the respondents provided milk in tea. Foods rich in plant proteins were common as all the homes were able to provide beans and peas on a daily basis. Animal proteins were provided in only 2 institutions representing (33.3%) of the respondents, while vitamins and minerals were provided in vegetables and fruits. All the institutions were able to provide food with spinach and ripe bananas being given in 4 (66.7%) of the institutions, the vegetables were given as part of lunch and supper while fruits were blended for younger groups and given as a snack in two (33.3%) of the institutions which seemed able. Bananas, pawpaw and carrots were common in all the institutions.

Table 11:**Complementary foods**

Complimentary foods	Number of institutions	Percentage (%)
Enriched porridge	3	50
Potatoes	6	100
Bananas (smashed)	6	100
Rice	5	83.7
Cerelac	2	33.3
Weetabix	2	33.3
Milk plain	2	33.3
Milk in tea	5	83.3
Eggs	3	50
Meats (Chicken, fish)	2	33.3
Legumes (beans, peas)	6	100
Cooking oil in food	6	100
Margarine	2	33.3
Dark green leaf vegetables	6	100
Yellow/orange	3	50
Fruits	4	66.7

Note: An institution offered more than one complementary food.

Frequency of feeding was determined by the age of the child and decreased with increased age. In two of the institutions, children below age 6 months were fed on demand. Children between the age of 6 months and 12 months were given fruits, confectionaries and porridge, while only 2 (33.3%) of the institutions gave 3 meals and snacks in a day. Another 3 (50%) of the institutions gave 3 main meals and 3 snacks during the 2 to 8 years as shown in table 12 below.

Table 12:**Feeding Frequency for complementary foods and assistance offered**

Frequency feeding by age of child	Number of institutions	Percentage (%)
<u>Less than 6 months:</u>		
On demand	2	33.3
<u>6 - 12 months:</u>		
3 main meals + 5 snacks	2	33.3
3 meals only	2	33.3
<u>13 - 24 months are fed:</u>		
6 times a day	1	16.7
3 main meals and snacks	1	16.7
3 main meals + 2 snacks	1	16.7
Assistance	Yes	Percentage (%)
Active feeding for all children	-	-
Partial active feeding	4	66.7
Supervised	2	33.3

Assistance during feeding was given to children below age of eighteen months and once a child was able to eat using a spoon alone, they would be left to feed by themselves. After this age, only children with feeding difficulties got assisted during feeding from either the care givers, volunteers or any other staff member and this was the case in 4 (66.7%) of the institutions. In 2 (33.3%) of the institutions, all the children including those with difficulties fed without any assistance, but under the supervision of a care giver as shown in table.

Only (50%) of the institutions had children above two years of age who were assessed for the types of food given; variety, nutritive value and frequency of feeding.

A seven day food frequency was used to determine the foods given and the frequency of provision by the institutions. There was a wide variety of foods provided with most of them being given two to three times a week.

The main source of starch were rice, ugali, enriched porridge, mashed potatoes with rice being the most commonly used by 5 (83%) of the institutions 2 to 3 times a week. This was followed by bread which were also given 2 to 3 times by 4 (66.7%) of the institutions, while all homes used cooking fat or oil in food preparation.

Most of the protein foods were plant in origin with beans being given in all 6 (100%) institutions twice or thrice a week. Milk formula was provided to children below 2 years substituted later with cow milk. In (83.3%) of the institutions, beans were mainly served as bean stew for the young group of the children and a mixture of maize and beans to older children between 6 - 8 years. The most commonly consumed animal protein was beef, provided in 3 (50%) of the homes twice a week. Plain milk was the least provided protein as only 2 (33.3%) of the institutions could afford to provide it twice a week. Milk tea was provided 7 times a week by all homes (100%) to older children. The least consumed vegetables were pumpkins given by only 1 (16.7%) of the institutions and the most consumed was kale and green grams.

A variety of fruits were given, namely banana, pawpaw, oranges and mangoes when in season. 5 (83.3%) of the homes were able to provide children with a fruit at least once a week with 2 (33.3%) of the institutions providing it daily. Fruits were also given in the form of fresh juices to younger children by 2 (33.3%) of the institutions with one home giving it daily and 1 (16.7%) twice a week as shown in table 13 below:

Table 13:**Quality of Food given and frequency of consumption (See menu on Appendix 8)**

Food	Daily	5 - 6 times	2 - 3 times	Once a week	Less than a week	Once
Ugali /Chapati	-	-	2	5	-	
Rice	1	1	3	4	-	
Potatoes	-	1	4	1	-	
Mashed bananas	-	-	1	1	-	
Enriched porridge	5	-	1	-	-	
Breakfast cereals	-	-	1	1	-	
Maize	-	2	2	1	1	
<u>Fats and Oils:</u>						
Margarine	1	-	1	-	-	
Cooking fat	6	-	-	-	-	
<u>Animal Protein:</u>						
Beef/meat	-	-	4	-	-	
Fish	-	-	-	4	-	
Egg	-	-	-	4	1	
Milk	3	1	1	1	-	
Milk in tea	6	-	-	-	-	
<u>Plant Protein:</u>						
Green grams	-	-	6	-	-	
Beans/peas	-	2	3	6	1	
<u>Protective foods:</u>						
Cabbages/carrots	-	2	2	2	-	
Kale	-	1	5	-	-	
Pumpkin	-	1	1	1	1	
Fresh fruits	2	1	1	2	1	

Nutrition is very important in growth and development of a child, then Homes offered the meals that they could afford since administrators depended on the donors for funding. They tried their best to give balanced diet to children, the researcher observed the types of foods provided to the children in terms of the quantity and the nutritional value. All food values were assessed and in 4 (66.7%) of the institutions, food provision was wanting in terms of quality, quantity, frequency and variety.

Food Composition Tables

The composition of food varied widely, depending on other factors as variety of plant or animal, growth and feeding conditions and for some foods, on freshness. Tables were based on average values from a number of samples analysed in the laboratory and therefore only provided a rough guide as shown in pages 47 and 48.

The following table provides details of the energy (Calories), Protein, carbohydrate and fat 100g of various foods.

Food (100g)	Energy (Calories)	Protein (g)	Fat (g)	Carbohydrates (g)
Beef minced stewed	230	23	15	0
Beef silverside salted	240	29	14	0
Biscuit - rich tea	440	6.9	15.7	71.5
Carrots boiled	20	0.6	0	4
Chicken kiev curry	328	24.4	21.6	10
Chocolate Break (mug of)	107	3.1	2.4	19.4
Cornflour	350	0.6	0.7	92
Corn Flakes	748	14	0.7	1
Drinking Chocolate	370	6	6	77
Egg scrambled	250	10	23	0
Fat cooking	900	0	100	0
Flour white	340	11	1.2	75
Green Bean Mix	25.71	1.21	0.53	4.18
Honey	290	0	0	76
Ice cream dairy	170	4	7	25
Liver fried	250	27	13	7
Liver stewed	200	25	10	3
Margarine	730	0	81	0
Marmalade	260	0	0	69
Milk	65	3.3	3.8	4.7
Milk condensed skimmed	270	9.9	0.3	60
Mince and Spaghetti	92.34	8.79	4.04	5.33
Mince meat	284	1.0	4	62

Food (100g)	Energy (Calories)	Protein (g)	Fat (g)	Carbohydrates (g)
Oil vegetable	900	0	100	0
Omelette	200	11	16	0
Onions fried	350	2	33	10
Orange juice	40	0.6	0	9
Pan cake	300	6	16	36
Pasta	365	13.2	2	77
Pears	30	0.2	0	8
Peas boiled	41	5.4	0.4	4.3
Porridge Oats with bran	332	10.6	6.7	60
Potatoes boiled - King Edwards	82	1.4	0.1	19.7
Rice white boiled	119	2.6	0.1	28
Spaghetti boiled	120	4	0.3	26
Sugar	390	0	0	100
Tangerines peeled	36	1	0	8
Toffees	430	2	17	71
Tomato Juice	12	0	0	3
Tomatoes raw	15	1	0	5
Yogurt flavoured - low fat	41.6	4.6	0.1	5.5
Yogurt natural	55	5.9	1.2	5.6

Children with insufficient breakfast protein had significantly lower levels of melatonin. It was likely this group was severely affected because protein needed was so high in growing children (Krispin Sullivan, CN 1995).

4.4 Extra Curricula Activities

It was the intention of the researcher to ascertain children activities which were expected to give them an opportunity to express their feelings and experiences as a way of building their resilience and confidence. From the study findings it emerged that the children's activities involved drama, singing, reciting poems and dancing plus Physical Education (PE).

The researcher did gather information on extra curricula activities through observation whereby in one institution children were observed doing drama, in two other institutions, the children were observed playing with balls since they were still too young, they were just throwing balls around and running after them. In one institution, pre school children were observed doing Physical Education (PE). These activities are very important in the growth and development of the children as it removes stress and worry for the destitute children. It also helped the children in the institutions to socialize.

Extra curricula activities should be the children's way of life and should be inseparable with their growth and development. It also helps children accommodate their daily experiences and motivate them to communicate thus improving their language skills.

Early introduction of complementary foods by children's institutions differed from findings from a study on infant feeding in low income urban households where complementary feeding was introduced nine months after birth (Almedon, 1991). The late introduction of complementary feeding was attributed to lack of knowledge on feeding practices by mothers. The findings of this study however, were in agreement with those from a study on pre-school going group and material nutritional status in peri-urban Nairobi, where most mothers introduced complementary feeding before the age of three months Njama, (1988). 10% of babies below two months and 36% of those below six months are given complimentary foods KDHS (2008/9).

The difference between the institutions in Kenya and Chinese institutions was attributed to lack of adequate knowledge on child care practices by the care givers in the latter institutions,

Miller (1999). As regards feeding frequency of the children, the institutions fed children below six months of age with breast milk substitutes on demand. The frequency of feeding for children between 13 to 24 months of age in most children's institutions was approximated at six times a day. The feeding frequency by the institutions was appropriate as breast milk feeding children or those on breast milk substitutes fed on demand and frequency of feeding increased with age as this facilitates adequate food consumption and nutrient intake, Dietz and Stern (1999).

Feeding the infants by a specific caregiver allowed for development of close relationship between the children and the caregivers, which are beneficial to the child in terms of psychological and emotional development. The close relationship also allows a care giver to monitor the feeding habits of the child, the child's health and growth, enhancing attachments Engle, Menon and Hadad (1997) and motivate them to communicate, thus improving their language.

4.5 Health Services

Like in family set ups where people live together in a home as a family, there has to be order and cleanliness in the home. The standard of hygiene must be put in place, the environment must be clean and safe for children to move. Safety of the children concerning sharp objects that can harm them must be cleared.

Children interviewed agreed that their home had to be kept clean, offences like fighting each other that could cause harm to others must not happen. During play time care givers and volunteers were there to check for protection and any child hurt seriously to be taken to hospital by any care giver or any institutions' personnel. All care givers in the institutions must insist on hand washing after visiting washrooms and before eating and always after play. Well equipped emergency response unit, complete with regularly updated first AID-Kit. Is must with good ventilations and specious rooms.

Health practices was assessed and all 6 (100%) of the institutions had their children immunized and growth monitored in 2 (33.3%) of the institutions as shown in table 14 below.

Table 14:
Health Practices in the institutions

Practice	Number of Institutions	Percentage (%)
Immunization	6	100
<u>Growth monitoring:</u>		
Sometimes	3	50
Once a month	-	-
<u>Source of growth monitoring and immunization:</u>		
City Council Clinics	5	83.3
In-house	1	16.1
Medical care		
<u>Care of Medical Needs of Children:</u>		
In-house dispensary with nurse	1	16.1
National referral	5	83.3
Doctor on call	1	16.1
Nearest hospital	5	83.3
On medical wing	1	16.1
<u>Responsibility in ensuring prescribed drug taken:</u>		
Nurse	2	33.3
Unit mother	3	50
Matron	1	16.1
Older children	2	33.3

Health practices was observed and all 6 (100%) of the institutions had had their children immunized and growth monitored in (50%) of the institutions as shown in table above.

Various practices and measures to promote health and prevent disease occurrence had been put in place by all the children's institutions. All the institutions that had infants took them out for fun and sun bathing and all were able to provide eating areas, washing areas and sleeping areas though some areas were not really fit for the children. There were no chairs for the children to sit on. Nets were used in 2 (33.3%) of the institutions. Regular deworming was done only in 2 (33.3%) of the homes. Other health promotional activities such as sterilization of feeding bottles and isolation of sick children were practiced in one particular institution as shown in table 15 below.

Table 15:
Preventive Health measures by children's homes

Measure	No. of Institutions	Percentage (%)	Immunization status	Percentage (%)
Sun bathing for infants	2	33.3	Fully immunized	81
Provision of specific rooms for specific activities	6	100	Partially immunized	6
Nets	2	33.3	Not immunized	1
Separate beds for children	3	50	Unknown status	12
Water for drinking	5	83.3		
Boiling drinking water	5	83.3		
Sterilization	2	33.3		
Isolation of sick children	2	33.3		
No sharing of clothes	6	100		
Protective clothing when handling children by outsiders	1	16.7		

Note: One institution offered more than one preventive measures.

According to the information collected concerning immunization, children were all fully immunized in 3 (50%) of the institutions. They were not very keen to find out the earlier immunization of children because some of the children were brought in by neighbours or good Samaritans who were not able to explain anything about the child's immunization history. Another 12% had BCG scars but their immunization status was not known. 6% of the children were partially immunized while 1% status was not known as shown in table 15.

The explanation for the common use of modern health facilities in the current study, despite financial constraints/inadequacy in most children's institutions was that the health facilities from which the home sought care were able to give waivers or services at subsidized costs. Secondly the institutions that got a lot of support from international donors were financially

able to provide proper health care from these facilities. In fact one institution had its own hospital and ICU in their compound.

Regular monitoring was done by only 2 (33.3%) of the homes and this was due to the cost of taking sick children to hospital purposively for growth monitoring thus after the immunization process, growth monitoring was limited to when a child was sick. These results suggested that growth disorders could therefore not be detected early enough putting the health of the child in jeopardy. Two (33.3%) of the institutions sought care for immunization, growth monitoring and hospitalization from city council clinics, the reason for this was cited as proximity and free service delivery. Distance from health facilities and expenses were shown to influence health services in other studies, Kloss, (1990). In a study of utilization of selected hospitals, health status in Ethiopia found that transport cost was a limiting factor to utilization of health care facilities.

To enhance Health Promotion Measures in the institutions, infants were taken out into the sun, a good source of vitamin D which enhances the absorption of calcium and phosphorus to help in the formation of strong bones and teeth, Rolfes (1993).

This is in contrast to findings from the Chinese children's institutions where children were not exposed to the sun and as a result suffer from rickets, Aronson (1998). The lack of exposure to the sun in Chinese children's institutions was attributed to inadequacy of personnel and lack of appropriate knowledge. In an institution, protective clothing for caregivers and visitors to the institution was provided thus the risk of contamination when handling infants is reduced, a public health strategy.

Immunization creates artificial immunity to common childhood infections and therefore is a vital component of child care. Most of the children from the findings were fully immunized. A higher number of children who were not fully immunized for age was reported in children from orphanages in Europe, Russia, China, where 65% of children did not have antibodies to diphtheria and tetanus when tested before being given up for adoption UNICEF (1998).

Uses of expired vaccines, lack of trained medical personnel as observed by Vendel (1988) were factors. The immunization coverage of children in the institutions was higher than the country's coverage which stood at 60% in 1998, Ministry of Home Affairs report on immunization (1999). Overall 77% of children aged twelve to twenty three months were fully immunized (KDHS 2008/9).

The high immunization status of children in the homes implies that immunization, as a health care component is adequate though, again this could be attributed to the fact that it was easier to target institutions than individual homes during immunization campaigns, and Westlands falls within the middle –upper section of the county with higher access to health facilities.

The overall morbidity burden based on a two week incidence rate in the current study was 3.7% meaning 5 children were not well among the 269 children in the six institutions visited. This morbidity burden in the children's institutions was quite low though in 2 (33.3%) of the institutions, poor sanitation and overcrowding could explain the difference observed as the two institutions had triple decker-beds in a tiny room.

According to Aronson (2001), children from all over the world living in charitable institutions are at risk of tuberculosis and giardiasis, however, findings from the current study did not confirm this. HIV/AIDS and diarrhoea were amongst the major causes of morbidity, while Acute Respiratory Infections (ARIs) had high prevalence and this attributed to practices by institutions which compromised the health of the children. These included congestion in (33.3%) of the institutions especially with regard to sleeping arrangements with children in the institutions sharing beds, visitors not provided with facilities for washing of hands before handling the children and provision of aprons, and the general pollution levels.

In this study, HIV/AIDS infections had a prevalence of 20% in one of the children's homes, this was attributed to the status of parents of the children who are abandoned or orphaned,

and lack of access to Prevention of Mother to Child Infection (PMTCI) services by expectant HIV positive mothers.

4.6: Staff: Child ratio

The staff qualifications in the institutions as shown in table 16 below, it emerged that (50%) of the managers in the visited institutions had nursing, social work and general administration background. And that none of managers interviewed had child care or early childhood qualification. 33.3% of the managers were missionary workers with no knowledge of child development though they had worked for a number of years training on the job whereas the remaining (16.7%) of the managers had an accounting background.

It also emerged that the institutions in the study had volunteers from both abroad and locally who had interest in child care. And that basic on job training was carried out by (33.3%) of the homes who had trained their workers in First Aid while only 1 institution representing (16.1%) of the homes had a nutritionist

Table 16:

Qualifications and Training for care givers

Qualification required for Employment	Number of Personnel	Percentage (%)
Commitment	14	17.5
love to work with children	10	12.5
No specific qualification	40	50
Child care Training	6	7.5
Experience	10	12.5
<u>Training undertaken by care givers:</u>		
First Aid	3	3.8
Nutrition	2	2.5

From the study findings in table 16, it emerged that all the children's institutions in the study had either a mother or (father where the institution had only boys) per room comprised of a group of children of a given age. For example children between 0 - 6 months of age formed a house or unit.

Another two (33.1%) of the institutions had a matron in charge of all children taking the parental role. A house mother, was assigned specific children to nurture until replaced to other institutions or adopted by foster parents being the mode in all the 6 (100%) institutions. In one particular institution, an administrator who was a retired nurse took care of the children.

4.7 Challenges facing children's institutions

From the study it emerged that the main challenges facing the institutions was inadequate finances as cited by all the institutions. While (83.3%) of the respondent institutions cited inadequate food as the main challenge whereas (66.7%) of the respondent institutions cited adequate health services as a challenge. Lack of government support in terms of finances and qualified personnel to give advice on running the institutions was cited (66.7%) of the institutions.

Other challenges included adequate land holding area and educational needs such as school fees were cited by (83%) of the respondents.

CHAPTER FIVE - SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents a summary, the purpose, objectives, methodology, findings, conclusions and recommendations of this study.

The purpose of the study was to determine the quality of care given at charitable children's institutions in Westlands District in Nairobi County. In order to achieve this, the following objectives were formulated.

1. Investigate the nutritional status of children in the charitable institutions.
2. Find out the existing extra curricular educational activities in charitable children's institutions.
3. Establish the health services available in children's institutions.
4. Investigate how Staff: Child Ratio influence service delivery in the institutions.

The research methodology used was a cross sectional survey, research design was descriptive with the population of study of 16 respondents from four (4) charitable children institutions. Both secondary and primary data was used in the study; the sample design used was stratified sampling technique. The data collection method used was through personal interviews via questionnaires which were administered to the respondents and also through observation. Secondary data was used to gather the information; this was derived from the administrative and personal reports.

Data analysis methods used was Statistical Package for Social Sciences (SPSS) to analyze the findings and generate the reports which were presented in frequency tables, and figures.

5.2 Summary of Research findings

5.2.1 Socio-Demographic characteristics of Children in Need of Special Protection

The largest proportion of children in the institution was from the international category, this was attributed to the fact that these institutions were better endowed in terms of resources to take care of a higher number of children and had better facilities to take care of the infants 0

to 6 months. There were more males than females with a ratio of 1:5 in the international institution which was only one (16.1%) of the institutions. Predominance of males over female amongst the under eights in the institutions was also reflected in the last demographic census where males were more than females in the under eight age group GOK/CBS, (2001), KNPC, (2009).

The predominance of males compared well with socio-demographic statistics of 3 similar children's institutions in China where an average sex ratio was 1:5 for females to males Aronson (1999). The demographic results implied that male children were more likely to be abandoned than girls and in Kenya, the higher frequency of boys could be attributed to customs where getting a male child out of wedlock posed a problem for a woman and the society where a woman would want to get married later. The institutions reported that boys were more difficult to bring up and therefore more girls were adopted than boys.

There were more children in the older age bracket of four and five years old than in below one year group. This difference was attributed to high morbidity rate of children below one year whose immune systems were easily compromised, as they did not get breast milk and immunization, Academy of Education Development (AED), Engle (1995). Half of the deaths of the children are either from coughs if not attended to immediately, $\frac{1}{3}$ of all cases of HIV/AIDS are reported to occur before the age of one year, Hawes, Scotchmer, Aarons, Morley and Young, (1993).

In addition, high enrolment of children from age $1\frac{1}{2}$ years as cited by the institutions was a contributing factor to higher number of children in older age groups. Abandoned children formed the biggest proportion of children in need of special protection in the children's institution. The increase in numbers of abandoned children in hospitals and other places had been used as an indicator of the impact of Children in Need of Special Protection, problem in Kenya, Mutemi (1994).

5.2.2: Nutrition

On the first objective which was nutrition, it emerged that infant feeding using breast milk substitute and the formula milk was common in two of the institutions and was done for children at the age of three months. This was mainly done by the care givers and other people entrusted with the responsibility of doing so. Other weaning foods like vegetable and fruits juices were introduced at age of between seven to eight months, while food with vitamins introduced to children of between nine to twelve months. It emerged that all institutions offered their children a balanced diet, an intervention which targeted the disease conditions predisposing the children to malnutrition. The popular formula milk for the 3 months old children was however, feared to be carrying the risk of being low in energy. Complementary feeding which was introduced at the age of 6 months equally faced challenges in terms of financial constraints for the institutions could not afford to give it exclusively to the children.

Cobb (2001) stresses that most infants in the institutions are not breast fed, thus they are prone to infections due to lack of natural immunity provided by the breast milk. Lack of personalized attention also makes it difficult to attend to the different growth stages. In addition to the poor inhygienic environment, conditions in the institutions that expose children to infections and further predispose them to malnutrition is rampant. It is therefore crucial to assess the nutritional status and child care practices of children in special protection with a view to determining the institutions adequacy in addressing the children's health needs.

The importance of controlling malnutrition cannot be underestimated as it is one of the major health and welfare problems amongst infants and young children in Kenya. The results of the this study revealed that children in the respective institutions were malnourished due to lack of awareness of the importance of balanced diet and poor complementary feeding practices. The relationship between poor complementary feeding practices and malnutrition having been established in many studies (Lawrence, 1994).

This study did not solicit the relationship between the nutrient value of foods and the nutritional status of the children and therefore high malnutrition rates amongst children in the 6 to 24 months age group could not be a reflection of the feeding quality of complementary feeding practices by the institutions. Despite the feeding timetable, the meals could have been inadequate in quantity and lacking nutritional value as observed in one of the private institutions where children were provided with strong tea.

The result of study support findings from other studies on the nutritional status/quality food of children under 8 years of age which have reported a high prevalence of malnutrition between the ages of 6 - 24 months. Studies on Demographic Health Survey (DHS) fifteen (15) developing countries including Cameroon, Malawi, Pakistan on malnutrition prevalence carried out between 1991 and 1995 showed similar results with malnutrition indicators of stunted growth, under-weight and wasting peaking in children between 12 to 24 months of age, Engle (1997).

According to the current study, gender of the children did not have an influence on their nutritional status. However, boys seemed a little malnourished and wasted than girls. Lack of significance between sex and the nutritional status of the children tallied with the findings from the National Nutritional survey, where there was also no association between nutritional status and gender (KDHS 1998). The higher malnutrition rates amongst boys especially those above 6 months of age could probably be due to care givers serving equal portions to the different sexes, without taking into consideration the higher dietary requirements for boys as boys tend to be relatively more active than girls at that age therefore utilizing more energy, Rolfes (1993).

There was a significant difference between the international run homes and private, NGO, Catholic, Krishna run institutions. The findings that children from the internationally run institutions were better nourished than the children from other respective categories as expected given that the internationally run orphanages are better empowered financially and

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in facilities. Lack of statistical significance between the category of the home and nutritional status is in contrast to findings from Chinese orphanage depending on the resources, Miller, (1999). The findings imply that health interventions targeted at the disease conditions predisposing the children to malnutrition would reduce the high malnutrition rates.

In this study, formula milk was a popular breast milk substitute for children less than 6 months of age with 2 (33%) of the homes introducing the milk to the infants as first substitute before the age of 3 months. Formula milk was in most cases given as a donation because of long life. Formula milk carries the risk of being low in energy content and other nutrients especially when mixed in dilute proportions and therefore unable to sustain optimal growth, King and Burgess (1996) which is a common use of formula milk is in contrast to findings from studies in Chinese orphanages, characteristic feature in most children institutions. This is supported by finding from Chinese Orphanages where infant formulas are usually mixed in very dilute proportions therefore losing their nutritional value, Miller (1995).

Bottle feeding was the common mode of feeding in institutions caring for younger children, the reason given for the use of bottles was that when dealing with so many children, it was easier to use a bottle than a cup and spoon given the inadequacy of personnel in most institutions. Another reason was that bottles were good indicators of milk each child consumes. Concurring with findings from the Chinese children's institutions where inadequacy in personnel was also cited as the main factor limiting the use of cup and spoon, Miller (1999). Though the reasons given by the institutions were valid, bottle feeding increases the risk of diarrhoea and teats when not cleaned properly, Michaelson and Weaver (2000).

The imminent health risks facing the infants were reinforced by the findings that more than (50%) of the institutions did not sterilize feeding bottles. Complementary feeding was introduced before the recommended age of six months in the majority of the institutions with

many children' homes introducing the complementary foods before four months of age. The reason reported for early introduction of complementary foods was that children were not getting enough of the breast milk substitutes. Secondly, financial constraints in Private and Faith Based Institutions made it impossible to give children milk exclusively until the age of six months. According to WHO (World Health Organization of 2001 a) early introduction of complementary foods has no added advantages on nutrition status of the children, but to the contrary, exposes the infants to infections and diarrhoea. The current findings were similar to the general feeding practices in Kenya where complementary feeding was introduced before six months with only 17% , 32% of the infants below 4 months were exclusively breast fed, Kenya Demographic Health Survey (1998), (2008/9) respectively.

All the children' institutions gave the children a varied diet, including the main nutrients required for body growth, plant proteins were more common than animal proteins both in complementary feeding and in feeding the 2 - 8 years olds. This was expected, given that plant proteins were cheaper than animal proteins, and locally produced foods commonly used both for complementary and feeding the children between 2 to 8 years. Provision of food from all the food groups differ from findings of the study on complementary.

5.2.3: Extra Curricula Activities

From the study findings it emerged that various forms of extra curricula activities were being undertaken in some institutions, for example there was use of drama and songs to impart knowledge and skills, ball games to enhance the physical fitness of the children and build teamwork. Though the children involved were pretty young, they still showed a lot of enthusiasm in carrying out these activities. Kelly, (2002) defines early years of any child's growth and development as very important in laying the foundation for adulthood. It is during this time that they require to be socially integrated with respect to their age and be in good health and nutrition.

5.2.4: Health Activities

Hygiene being one of the most important aspects in any institution, from the study it emerged that four institutions upheld cleanliness both in their classrooms and dormitories. Immunization was keenly upheld in the four institutions for this was one of the most important components of infant's growth. The study further revealed that as a health measure, growth monitoring was done in three of the intuitions at the City Council clinics and that most of the cases of the medical needs was done through referrals to the nearest hospitals. There was one institution which had its own health facility with even an Intensive Care Unit (ICU). De-worming was a measure that was regularly done for the institutions, the feedings bottles sterilized to reduce incidences of diarrhoea and other infections. Other equally important measures undertaken to enhance good health for the children included sleeping under bed nets to prevent malaria and the treatment of drinking water to avoid water borne diseases. All the above mentioned factors contributed to low morbidity burden in the institutions. However, the other two institutions, where I only met the subordinate staff at the gate emerged to have a clean compound. Other necessary information on health was not availed as walking around was not permitted - only information from the manager's questionnaires was received.

5.2.5: Staff: Child Ratio

Most of the staff in the sampled institutions had diverse training backgrounds which included social work, nursing, administration, missionaries and child care training. Some of the institutions had employed matron in-charge; others had a designate house mother who was assigned to take charge specific number of children to nurture till they are adopted by foster parents. It emerged that one care taker, took charge of an average of 10 children while others were entrusted with taking charge of slightly more - 15 to 20 children. From the study findings, half of the care takers interviewed in this study were of the age between 31 to 40 years old.

5.3 CONCLUSIONS

Based on the findings of this study, it is imperative that the sampled charitable institutions were highly endowed in terms of resources to take care of a higher number of children and had better facilities to take care of the infants 0 - 6 months old, initiated and practiced the standard required balanced diet for the children in their institutions despite the meals being served in small quantities and at times lacking in high nutritional value. It is said that an army moves on its stomach. The same can be given that infants triple their birth-weight within the first year and increase in length by half gain. The nutritional demands of the first year are enormous, because of the rate at which they grow, infants are always hungry, or so it seems to parents waking every 2 to 4 times for a feeding (Nancy Cobb, 2001). The best food for meeting infants' needs is breast milk (Hervada and Hervada (1995); (Lawrence, 1994). Infact breast milk is such a perfect food that infants who are breastfed need nothing else for the first six months.

One of the many advantages of breastmilk is that it is more easily digested than commercial formulae and less likely to suffer gastric discomforts such as diarrhoea or constipation (Lawrence, 1994). Another advantage to breast milk is the protection that it offers infants against disease.

The health services offered were satisfactory since the children got immunization services and their growths monitored and the incidences of diseases were minimal. On extra curricula activities, which was a very important aspect in the growth and development of the children, was average. On the ratio of the child to staff, feeding the infants by a specific caregiver allowed for development of close relationship between the children and the caregivers, which were beneficial to the child in terms of psychological emotional development, and lower ratios facilitated this. There was electricity in all the institutions because they were able to pay. It was therefore proven from this study that despite the challenges and hardship faced by the charitable institutions, the services they offer to the children were moderate since they met the bare minimum requirements as stipulated under The Children's Act (2001).

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5.4 RECOMMENDATIONS

The results and discussions in this study indicated a need for more inclusive support for the institutions in Westlands District, Nairobi County to meet the multifaceted needs of the children in these institutions, and increase the capacity to absorb more OVCs without compromising the quality of care. This would require the government and other stakeholders to invest more in the children's institutions in the country to ensure that the future of the nation is secure and on course. From the discussion of research findings the research brought out the following recommendations:

The government should have a programme or quality assurance unit to inspect, assess and support all institutions in the country. The support could include food rations, financial and provision of trained personnel to these institutions. There should be formulation of policies that prevent child vulnerability by empowering family unit through information and economic independence. There is also need to design policies that meet health, education, welfare, security and nutritional needs that should include their care givers. Ensure education for all institutionalized children through universal services that take into consideration the changing roles of children in need of special protection and financial constraints; and address the psychological needs of these vulnerable children, reducing discrimination and stigma that affected and infected children experience. Non-Governmental Organizations, Community Based Organizations and Faith Based Organizations should adequately conceptualize the need of children in need of special protection so that they provide adequate facilities and support. Creation of public awareness and encouragement of voluntary services especially from both retired and active professionals to fill the staff needs gap.

5.4.2 Recommendations for further research-

The current study was limited to one District - Westlands District in Nairobi County. Future studies should be carried out in the whole country. There is therefore a need for another study to compare Institutional Quality Care and Home Based Care in the District.

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Appendix I

Ethical Issues

Information was presented and consent was obtained from the participants prior to commencement of the questionnaire/interview. Participants were informed that participation was voluntarily and the information they gave would be treated with confidentiality.

Dear Participant,

You are being asked to participate in a research study on quality of care given at charitable institutions in Westlands District, Nairobi County. You will be provided with the necessary information to assist you to understand the study and to explain what will be expected of you (the participant) The risks, benefits and the rights of the participants will be outlined to you. Please feel free to ask me, the researcher, any question that is not clear to you. You have the right to question anything regarding the study at any time.

It is important to make you aware that the study has been approved by the department of educational communication and technology of the University of Nairobi and the national Council of Science and Technology. These are groups of independent experts who have the responsibility to ensure that the rights and welfare of the participants such as yourself, in research are protected and that studies are conducted in an ethical manner.

Queries with regard to your rights as a research subject can be directed to the Chairman, department of Educational Communication and Technology on the following telephone number 020 8014072. You can also write to:

The Chairman,
Educational Communication and Technology
University of Nairobi
P. O. Box 30197 - 00100
Nairobi.

Participation in this research is completely voluntary. You are not obliged to take part in it. If you participate, you have the right to withdraw from the study at any given time, during the study without penalty or loss of benefits. Should you wish to withdraw from the study, please return to me for a final discussion in order that we terminate the research in an orderly manner.

Although your identity will at all times remain confidential, the results of the research study may be presented at scientific conferences or in specific publications. This consent statement has been prepared in compliance with current statutory guidelines.

I thank you for your time.

Zilpa Bertha Muga
Researcher

Appendix 2

Questionnaire for the Managers

Centre No.....

Personal details

1. Sex: (Male/Female)
2. Position held at the institution
3. Highest professional qualification
4. For how long have you been working with Children in Need of Special Protection?.....
5. For how long have you been the head of this institution?.....
6. Have you ever been the head of another institution Yes. No

Administrative Details

1. Name of the home and address
2. Type of home: Government, International, Religious, Private, others
3. For how long has this home been in existence under the ministry of home Affairs Culture and Social services?.....
4. What is the mode of operation in looking after the children?
House mothers Older children Staff members Others specify
5. Who are the sponsors of the institution?.....
6. Does the home have any income generating projects (list them).....
7. Do you have any regulations to follow?.....
8. How many care-givers do you have? Female..... Male
9. How many children are currently attending school? re Unit [] Primary []
10. If yes, how many per year? – 10 [], 11- 20 [] 21- 30 [] Over 30 []
11. What are the goals of the Institution?

Information on the children's home

12. What is the current enrolment?

Age (Years)	No. of boys	No. of girls	Total
Below 2			
2-5			
6-8			
Above 8			
Total			

Appendix 3

Questionnaire for Care-givers

Centre No.....

Care giver Details

1. Sex: (Male/Female)
2. Highest education training.....
3. Highest professional training.....
4. For how long have you worked with Children in Need of Special Protection?.....
5. What are the challenges you face in your work?.....
6. What suggestions would you give for the improvement of the well being of such children?.....

Child Details:

7. Sex: (male/Female).....
8. Age of the child in months. Exact..... Approximate (For those whose dates of birth are unknown)
9. When was this child enrolled? (Date.....)
10. What was the child's age on enrolment?.....
11. What category of Children in Need of Special Protection is the child?.....
12. Are parents alive? Yes No One parent
13. Who brought the child here Police Parent Good Samaritan

Appendix 3

Questionnaire for Care-givers

Centre No.....

Care giver Details

1. Sex: (Male/Female)
2. Highest education training.....
3. Highest professional training.....
4. For how long have you worked with Children in Need of Special Protection?.....
5. What are the challenges you face in your work?.....
6. What suggestions would you give for the improvement of the well being of such children?.....

Child Details:

7. Sex: (male/Female).....
8. Age of the child in months. Exact..... Approximate (For those whose dates of birth are unknown)
9. When was this child enrolled? (Date.....)
10. What was the child's age on enrolment?.....
11. What category of Children in Need of Special Protection is the child?.....
12. Are parents alive? Yes No One parent
13. Who brought the child here Police Parent Good Samaritan

Appendix 4
Questionnaire for the Matron

Centre No.....

Dietary practices

For children below 2 years of age

1. At what age did you start giving the milk substitute?
2. What is the frequency of giving milk? (any time table?).....
3. Which of the following is the child fed through? Bottle..... Cup and spoon.....
4. Who feeds the child?.....
5. Is the child being fed on other foods? Yes No
If yes, which are these foods?.....
6. At what age did the child start being fed on these foods apart from milk?
7. What is the frequency of the other foods?.....

For 2- 8 years old

8. A semi quantitative food frequency check list

0 – None
1 – Once a day
2 – Twice a day
3 – Three times a day
4 – Four times a day

Food group	Serving measurement (in std, cup, glass)	Serving day frequency 0 1 2 3 4
Animal foods		
Milk products		
Grains/legumes		
Nuts		
Cereals/starches		
Vegetables/fruits		
Sugars/oils		
Spices		

Weekly Menu

Time	<u>Breakfast</u>	<u>10.00 a.m</u>	<u>Lunch</u>	<u>Supper</u>
	Type of food			
Monday				
Tuesday				
Wednesday				
Thursday				
Friday				

Appendix 5
Questionnaire for the Nurse

Centre No.....

Health and Morbidity Data

1. Has the child been unwell in the past 14 days? Yes No
2. If yes from which of the following?
 Diarrhoea Cough/cold Malaria/Fever Bloody diarrhoea
 Any of the immunizeable disease (Specify) Others
3. Where do you usually take the child for medical attention?
 Local Clinic Government hospital Health Centre
 Private practitioner Dispensary Others (Specify)
4. What immunization has the child received? Confirm from child health card)
 Fully immunized Not fully immunized Not at all
5. Do you take the child to the clinic for weighing? (Confirm with growth monitoring card)
 Sometimes Always Never
6. What facilities do you have for the following emergencies
 a) Fire b) Sickness
 c) Accidents..... d) Intruders
7. What methods do you use to motivate the infants to
 (i) Talk?
 (ii) Laugh
 (iii) Walk.....
8. What kind of in door games (play) do the children play?.....

National Immunization schedule

Vaccination	Age	Remarks
BCG Polio	At birth	
DPT 1 st Dose Polio (OPV1)	6 weeks	
DPT 2 nd Dose Polio (OPV 2)	10 weeks	
DPT 3 rd Dose Polio (OPV 3)	14 weeks	
Measles	9 months	

Appendix 6:

Questionnaire for selected children in the Charitable Children Institutions

Age _____

Gender _____

Class _____

I live with _____

Tick where appropriate

1. Do you like your house mother?

Yes No

If no why _____

If yes why _____

2. What play materials do you have?

3. Are you allowed to play with them at all times?

Yes No

4. Do you like the food you eat always?

Yes No

If no why _____

If yes why _____

5. Who takes you to hospital when you fall sick?

6. How many times do you eat fruits? _____

7. Do you get milk everyday? _____

8. Do you go to school? _____ Where? _____

What level /class are you in? _____

Appendix 7

Observation schedule on care giving approaches

The care giving approaches were grouped into three sections and the actions to be observed are as follows:-

	Approaches	Action Observed for	Frequency/Time				
			5 min.	10 min.	15 min.	20 min	Above 25 min
	Role Model	ages 1 - 5					
a.	Loving Observing caregivers providing love	Smile					
		Pats					
		Hug					
		Welcoming					
		Total					
b.	Courtesy Ages 2 – 8 yrs	Using words like:					
		Sorry					
		Please					
		Thank you					
		Excuse me					
		Total					
2.	Types of services for ages 1 – 2 years:	Provision of health care: use of diapers clean rooms					
	Ages 2 – 8 yrs	Safety – provision of good play equipment and environment					
3.	Welfare:	Total					
		Nutritious: Breakfast					
		Ten o'clock tea					
		Lunch					
		Attendance to minor ailments					
		Total					

Tally method to be used to record the observation. Key (/) No. of times action is made and number of minutes observed.

Appendix 7

Observation schedule on care giving approaches

The care giving approaches were grouped into three sections and the actions to be observed are as follows:-

	Approaches	Action Observed for	Frequency/Time				
	Role Model		ages 1 - 5	5 min.	10 min.	15 min.	20 min
a.	Loving Observing caregivers providing love	Smile					
		Pats					
		Hug					
		Welcoming					
		Total					
b.	Courtesy Ages 2 – 8 yrs	Using words like:					
		Sorry					
		Please					
		Thank you					
		Excuse me					
		Total					
2.	Types of services for ages 1 – 2 years:	Provision of health care: use of diapers clean rooms					
	Ages 2 – 8 yrs	Safety – provision of good play equipment and environment					
3.	Welfare:	Total					
		Nutritious: Breakfast					
		Ten o'clock tea					
		Lunch					
		Attendance to minor ailments					
		Total					

Tally method to be used to record the observation. Key (/) No. of times action is made and number of minutes observed.

Appendix 8

MENU FOR ONE YEAR AND ABOVE

MONDAY	Porridge	Milk and Peanut Butter Bread	Cabbage and ugali and mince	Lemon and Avocado	Beans with French green beans and carrots and rice
TUESDAY	Weetabix with milk	Carrot juice and Crisps	Green grams with rice	Pawpaw Banana	Mince with peas and carrots and chips
WEDNESDAY	Porridge	Milk and Bread with BB	Spinach, fish and ugali	Avocado and Lemon juice	Spaghetti and eggs
THURSDAY	Weetabix with milk	Orange Carrot juice Biscuits	Vegetables and rice with beans	Milk and biscuits	Green bananas, Potatoes, French beans, mince
FRIDAY	Porridge	Milk Bread Peanut Butter	Cabbage and ugali Fish	Pawpaw Banana	Green grams Rice
SATURDAY	Cerelac	Biscuit Milk	Chips, Spinach Sausage	Avocado Lemon Juice	Beans with French green beans, rice
SUNDAY	Porridge	Milk Crisps	Chicken stew with rice	Carrot Orange juice	Spinach and ugali with eggs

MENU

	Breakfast	Snack	Lunch	Snack	Supper
MONDAY	Infant Weaning Porridge	Milk Bread	Rice Beans Spinach (Spinach only below 7 m)	Carrot juice (7 m & up)	Potatoes, carrots, French Green beans
TUESDAY	Weetabix Milk	Carrot juice (7 m & up)	Peas, potatoes, carrots, Mince (9 m & up)	Pawpaw & Bananas (7 m & up)	Rice, green grams and spinach (spinach only under 8 months)
WEDNESDAY	Proctor Allen Porridge	Milk bread (9 m & up)	Matoki with green peas	Carrot & Orange juice (7 m & up)	Shagetti, Tomatoes, French Green beans Mince 9 months
THURSDAY	Weetabix Milk	Orange and Carrot juice (7 m & up)	Pumpkin and potatoe soup. Bread Peanut butter 9 months.	Milk Biscuit (9 m & up)	Beans Rice Carrots Spinach
FRIDAY	Infant Weaning Porridge	Milk Bread (9 m & up)	Spinach and ugali with fish for 9 months and up.	Banana and Pawpaw	Matoki with green peas
SATURDAY	Cerelac	Milk Biscuit (9 m & up)	Vegetable stew with beans (9 M & up)	Carrot and orange juice	Rice, carrots and green peas, without liver (below 9 m)
SUNDAY	Porridge	Milk Bread	Mince 9 m and up Spinach	Carrot and Orange Juice	Green grams

COMPLEMENTARY FEEDING

0 - 6	6 - 7	7 - 8	8 - 9	9 - 12	12
Exclusive Breast milk substitute feeding	<p>Cereals</p> <p>Iron fortified Infant Cereals and porridge</p> <p>e.g.</p> <ul style="list-style-type: none"> - Wheatabix - Oats - Comflakes 	<p>Vegetables and f fruits</p> <p>Starchy vegetables</p> <p>e.g.</p> <ul style="list-style-type: none"> - Pumpkin - Potatoes - Bananas - Sweet potatoes <p>Green vegetables:</p> <ul style="list-style-type: none"> - Spinach - Kale - Broccoli - Cabbage - Terere - Managu <p>Fruits:</p> <ul style="list-style-type: none"> - Bananas - Pawpaw - Oranges - Pineapple - Melon - Avocado - Pears - Apple 	<p>Plant proteins</p> <p>Legumes</p> <p>e.g.</p> <ul style="list-style-type: none"> - Beans - Peas - Cowpeas - Lentils - Green grams <p>Fresh fruit juice:</p> <p>Freshly squeezed</p>	<p>Animal proteins</p> <p>Meats</p> <p>e.g.</p> <ul style="list-style-type: none"> - Beef - Chicken - Fish - Liver - Egg-york - Muton - Lamb 	<p>Offer 3 meals</p> <p>Introduce whole milk and whole egg.</p>

COMPLEMENTARY FEEDING

0 - 6	6 - 7	7 - 8	8 - 9	9 - 12	12
<p>Exclusive Breast milk substitute feeding</p>	<p>Cereals</p> <p>Iron fortified Infant Cereals and porridge</p> <p>e.g.</p> <ul style="list-style-type: none"> - Wheatabix - Oats - Cornflakes 	<p>Vegetables and f fruits</p> <p>Starchy vegetables</p> <p>e.g.</p> <ul style="list-style-type: none"> - Pumpkin - Potatoes - Bananas - Sweet potatoes <p>Green vegetables:</p> <ul style="list-style-type: none"> - Spinach - Kale - Broccoli - Cabbage - Terere - Managu <p>Fruits:</p> <ul style="list-style-type: none"> - Bananas - Pawpaw - Oranges - Pineapple - Melon - Avocado - Pears - Apple 	<p>Plant proteins</p> <p>Legumes</p> <p>e.g.</p> <ul style="list-style-type: none"> - Beans - Peas - Cowpeas - Lentils - Green grams <p>Fresh fruit juice:</p> <p>Freshly squeezed</p>	<p>Animal proteins</p> <p>Meats</p> <p>e.g.</p> <ul style="list-style-type: none"> - Beef - Chicken - Fish - Liver - Egg-york - Mutton - Lamb 	<p>Offer 3 meals</p> <p>Introduce whole milk and whole egg.</p>