EXPLORING NURSES' ROLE IN THE MANAGEMENT OF CHILDREN DIAGNOSED WITH CANCER IN GHANA.

By

FUGAR ENYONAM ADZO (212253476)

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SUPERVISOR: EMERITUS PROF. DORIS KHALIL

CO-SUPERVISOR: MRS. ANGELA DUNN

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Cape Peninsula University of Technology

DECLARATION

This is to declare that the work handed in for marking is my own work, and that I will not allow anyone to copy it for their own benefit.

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STUDENT DETAILS

Fugar Enyonam Adzo

Name (printed)	Signature
212253476	17/03/2015
Student Number	Date

ABSTRACT

Background: Oncology nursing continues to evolve in response to advances in cancer treatment. The role of the oncology nurse in the management of cancer in children is very significant as these children go through a lot of emotional trauma due to the disease. **Aim and objectives**: The aim of the study is to explore and examine the quality of nursing care given to children diagnosed with cancer in Ghana. Some of the objectives are to examine strategies nurses use in planning care; and to determine processes nurses use to evaluate care given. **Methodology**: A mixed-methods qualitative cross-sectional descriptive design was used. **Population and samples**: Komfo Anokye Teaching Hospital in Ghana is selected as the research site. The population consists of all nurses working in the hospital and parents/carers looking after children diagnosed with cancer. The samples was nurses working on paediatric wards/clinics, parents/carers, and key informants. Selection of sample groups was opportunistic. Methods of data collection: three sources were used to collect data, i.e. questionnaires for nursing working on paediatric wards/clinics, interviews with nurses and carers, and key informant interviews. **Analysis**: descriptive statistical analysis of data was undertaken and the three data sources were triangulated to determine similarities and differences of responses. **Benefits of the study**: The results of the study will be submitted to the hospital management and articles will be submitted to peer-reviewed nursing journals.

Key words: paediatric oncology, nurses, oncology nurses, Kumasi, Ghana, Komfo Anokye teaching hospital.

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List of abbreviations

Abbreviation	Full name
AIDS	Acquired Immune Deficiency Syndrome
ALL	Acute Lymphoblastic Leukaemia
BL	Burkitt Lymphoma
CPUT	Cape Peninsula University of Technology
CAM	Complementary and alternative medicine
CHAG	Christians Health Association of Ghana
CDCP	Centre for Disease Control and Prevention
ECOWAS	Economic Community of West African States
EN	Enrolled Nurse
GHS	Ghana Health Service
GSS	Ghana Statistical Services
HIV	Human immunodeficiency virus
HHV8	Human herpes virus 8
IARC	International Agency for Research on Cancer
IGF	Internally Generated Fund
I V	Intravenous
KATH	Komfo Anokye Teaching Hospital
KBTH	Korle Bu Teaching Hospital
NHIS	National Health Insurance Scheme
PICC	Peripherally Inserted Central Catheter
PMO	Principal midwifery Officer
PNO	Principal Nursing Officer
RN	Registered Nurse
TCJ	The Joint Commission
TCM	Traditional Chinese Medicine
WHO	World Health Organisation

CHAPTER 1: INTRODUCTION

1.1 Introduction to the chapter

This chapter provides an overview of the study in terms of the background and rationale; problem statement; purpose and justification of the study; aim and objectives of the study; conceptual model and description; theoretical framework of the study; and layout of the rest of chapters.

1.2 Background of the study

Childhood cancer, in recent times, appears to be a major problem in developing countries. Cancer is a group of heterogeneous diseases that share common biologic properties as clonal cell growth and invasive abilities. Research has shown that all cancers are genetic and share common molecular pathogeneses. All cancers are the effect of mutations in oncogenes and tumour suppressor genes. Therefore, each specific cancer occurs through mutations in specific genes (Langhorne, Fulton, & Otto, 2007). The incidence of cancer is on the rise and boys are more prone than girls. The cause of cancer in children is not fully known but there are some multi-factorials such as genetic, immunologic, environmental, and socioeconomic factors which interplay the cause of cancer in children. Although infectious diseases are much more prevalent than cancer in developing countries, more deaths are caused by cancer worldwide than by HIV infection, tuberculosis, and malaria combined.

Incidence of cancer is higher in developing countries than in developed countries, and is growing because the populations in these countries are younger and expanding (WHO. Globocan 2008). As a result, up to 2% of all cancers in developing countries arise in children, whereas in Europe and North America, childhood cancers constitute less than 0·5% of total incident cases. According to estimates by the International Agency for Research on Cancer for 2008, almost 100 000 deaths before the age of 15 result from cancer every year, and more than 90% of these deaths occur in low-middle income countries (WHO. Globocan 2008). With continued socioeconomic development, the

proportion of deaths from cancer is likely to increase in developing countries, especially in young people. Mortality is high in developing countries—80% of young cancer patients in Africa die, including in countries with more developed health systems such as South Africa. Available data probably underestimate the burden of childhood cancer (Hesseling, Molyneux, & Tchintseme, 2008; WHO. Globocan 2008).

Unfortunately, there are no screening tools currently in use for childhood cancers, and there are no known preventive measures other than avoiding carcinogens (Langhorne, Fulton, & Otto, 2007). Although research is ongoing on how to improve the lives of children affected by cancer through education, the role of the oncology nurse plays a very important aspect in the lives of these children and their families as a whole. Children are the future leaders and if we lose them all to cancer, what will the future look like if the nurse does not play his or her role as it should. Children diagnosed with cancer and their families go through a lot of emotional trauma and need to understand the condition of their love ones when it comes to cancer. The provision of services for children and young people with cancer and their families has consistently emphasised the need for specialist nursing as central to the delivery of safe and effective care. The temptation when examining the role of the specialist nurse is to look at those posts that carry a recognised ‘specialist’ label. It is equally important, however, to look at the development of nursing practice across the specialty and at how this can be both supported and recognised.

Nurses with specialist knowledge, skills and expertise in paediatric oncology are needed in positions where they are able to develop nursing practice, direct service development, lead nursing research, and guide education and training. Effective clinical leadership is essential at the point at which nursing care is delivered whether that is at the hospital bedside, in the clinic and day care unit, or in the family home. The families and the health team need to work hand in hand to support these children for a bright future. The role of the oncology nurse is vital in the survival of these children. Ghana has just a hand full of trained oncology nurses where the rest are being trained on-the-job, while cancer in children is increasing at a faster rate than ever before. Family

education in anticipation of discharge starts from the time of diagnosis. These teachings include information about the disease and its treatment, home care, medication, infection prevention and response to fever.

As a trained oncology nurse, I have observed that children diagnosed with cancer and their families go through lots of emotional trauma. There is no cure although there is an on-going research to find cure. Caring for a child diagnosed with cancer is one of the most technically and emotionally difficult areas in nursing. Not only is one dealing with children one must also reassure and educate families about their relative's condition. Nurses seem to forget completely when it comes to planning nursing care for children diagnosed with cancer (Herman, 2012; American Nurses Association, 2010). The nursing process is a total quality check tool in nursing and must be used accordingly. The Nurses and midwives Council of Ghana included the nursing process in the nurses job description (See appendix D). However, some nurses find it difficult to employ the process when caring for children diagnosed with cancer. What nurses termed nursing care now-a-days is nothing compare to the steps in the nursing process. Nurses fail in so many ways in planning nursing care for cancer children and their families. Right from assessment, planning, implementation of nursing care to evaluation of care. Discharge care planning, support systems and attitude of nurses play vital roles in the life of patient and the family. These when done meticulously could promote health and decrease readmission of the child and help the child a lot when he/she is in remission. A large number of cancer children die due to improper nursing management. Many have the belief that cancer is a curse and therefore leave patients to their faith. To ensure the delivery of quality nursing care, the oncology nurse must make use of the nursing process in the management of children diagnosed with cancer and their families. The nursing process guide the nurse in giving a holistic care to the patient by systematically following the five steps of the nursing process and prioritising problems diagnosed by the nurse (Zator Estes, 2014). The nursing process is base on the process of gathering information from patients, documenting subjective and objective signs or symptoms, setting goals for care, developing intervention strategies and evaluating the effectiveness o the care plans (Herman, 2012; American Nurses Association, 2010).

Records should provide true, comprehensive and clear assessments and information about patient care (Nursing and Midwifery Council 2002).

1.2.1 Statement of research problem

Over the past ten years, the number of children diagnosed with cancer has increased in Ghana (Clegg-Lampety & Hodasi, 2007). Evidence elsewhere shows that early diagnosis and treatment of the disease increases survival rates (Clegg-Lamptey & Hodasi, 2007). Ghanaian paediatricians are advocating for the development of appropriate protocols and guidelines for treatment of cancer in children (Clegg-Lamptey & Hodasi, 2007). The role of the nurse in the management of cancer in children plays vital role in the life of these children and on their survival. Many children die of cancer due to poor management and follow-up care (Clegg-Lampety & Hodasi, 2007). It is the opinion of the writer that the ability of the Oncology nurse to appropriately assess, plan, implement, evaluate and provide the relevant health education to the child, parents/carers will increase the quality of patient care. To the knowledge of the writer, no study had been conducted to determine the role of nurses in the management of children diagnosed with cancer in Ghana. Neither had there be a study to explore nurses' application of the nursing process in paediatric oncology setting in Ghana.

1.3 Purpose and justification of the study

1.3.1 Purpose

This study sets out to explore and identify gaps in nurses' role in the management of Ghanaian children diagnosed with cancer.

1.4 Aim and objectives

1.4.1 Aim

The aim of the study is to explore and examine quality of nursing care given to Ghanaian children diagnosed with cancer in a large teaching hospital.

1.4.2 Objectives

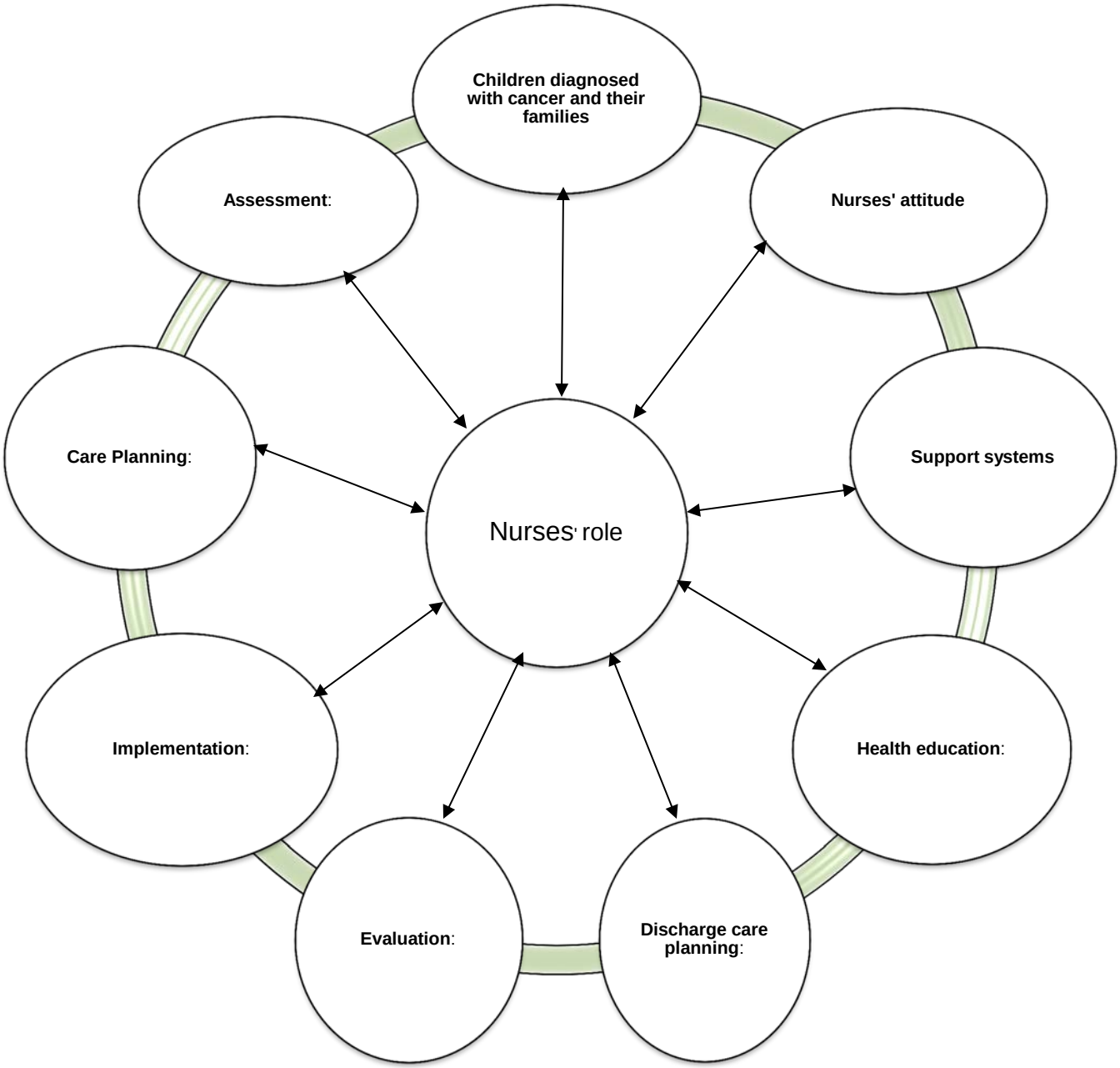
Objectives of the study are to

- Explore nurses' role in the assessment of children with cancer for nursing intervention.
- Examine strategies nurses use to plan nursing care for children with cancer
- Review actions taken by nurses during implementation of nursing care
- Determine processes nurses use to evaluate nursing care given to children diagnosed with cancer
- Scrutinise protocols in place to guide nursing interventions
- Assess types of evaluation of nursing care
- Determine actions taken during discharge care planning
- Explore processes used for health education of the child, parents and carers
- Appraise nurses' attitude towards care of children diagnosed with cancer

1.5 Conceptual model

Conceptual model is the pictorial representation of what a study is about. Conceptual models influence clinical nursing practice by specifying principles for and purposes of practice, identifying significant clinical problems, settings for practice, legitimate recipients of nursing care, and the content for the nursing process, signifying methods for delivery of nursing services and by providing frameworks for clinical information systems, patient classifications systems and quality assurance programmes (Grossman, Aqulnik & Batist, 2012). Based on the above objectives the conceptual model below shows relationships among variables of the study

Figure 1.5.1: Conceptual model (developed by the author)



1.5.2 Description of conceptual model and Relationship between the variables

Nursing process

The role of the nurse in managing patients diagnosed with cancer is very important. Children with cancer have a survival advantage if managed very well (Kaspers, Caron, & Kremer, 2012; Nathan, Ford & Henderson, 2009). There is a relationship between children with cancer, their families and the nurse applying the nursing process. Applying the nursing process by assessing the patients' physical, emotional needs, their health habits and practices, planning, implementing and evaluating the interventions, will contribute towards effective management. Assessing the patients' needs at all stages are important.

Coordinating treatment and care

A paediatric oncology nurse plays an important role in coordinating the plethora of technologies that are now being used in cancer diagnosis and treatment (Hopkins, & Mumber, 2009). This coordination covers direct care for the patient, documenting medical records, participating in therapy sessions, managing symptoms, educating patients and their families, counselling them throughout the diagnosis, treatment, and follow-up procedures (Hopkins, & Mumber, 2009). There is a relationship between coordination of treatment and care and including the multidisciplinary health care professionals.

Multidisciplinary group

The nurse should ensure that there is continuity of care by involving the multidisciplinary group. The prognosis of cancer in children depends on the experiences of a multidisciplinary team namely, the histopathologist, the paediatric oncologist, the surgeon, the radiologist and the oncology nurse (Rasool, Lone, Wani, Afroz, Zaffar, & Mohib-ul Haq, 2012). The prognosis depends on accurate diagnosis and close cooperation among histopathologist, paediatric oncologist, surgeon and radiotherapist (Karabus & Hartley, 2007: 186; Sausville &Longo, 2005). Out of these multidisciplinary

groups, the paediatric oncologist and the oncology nurse play the central and coordinating roles in the multidisciplinary management team (Karabus & Hartley, 2007).

In other African countries, nurses assess patients prior to treatment for toxicities and treatment side effects, and also communicate with the oncology team within the hospital should there be an acute need for medial assessment and intervention (Boztepe, 2009). Nurses access intravenous lines (IV) and access central devices such as ports and PICC lines. The nurses draw blood for laboratory and check against parameters. The nurses administer intravenous chemotherapies, intramuscular and subcutaneous injections. The nurses educate clients and families about the disease and give support during and after care. There is a relationship between providing continuity of care and educating the patient and family.

Educate patient and family about the disease

The nurses' role include educating clients and families about the disease and give support during and after care. They need to inform the patent, families and carers about the treatment as well as the side effects. In educating the patient and family, the role of the nurse is to offer support with a positive attitude. The oncology nurse is the patient's primary line of communication. The patient and family should be able to contact the oncology nurse by phone throughout the entire program (Hopkins & Mumber, 2009).

1.6 Theoretical framework

The nursing process theory and Orem's Self-care deficit theory of nursing was used to explore the nurses' role in the management of children diagnosed with cancer in Ghana. Orem's self-care deficit theory is a combination of three theories: self-care, self-care deficit and nursing systems (George, 2011). Self-care is about the individual's activities of daily living to maintain his/her own health. The self-care agency is the acquired ability to perform self-care that is affected by basic conditioning factors such as age, gender, health care system, family system, etc. (George, 2011). There are mainly three types of self-care requisites i.e. universal, developmental, and health deviation self-care.

Whenever there is inadequacy of any of these self-care requisites, the person will be in need of care (Alligood, & Tomey, 2010).

The nurse through thorough assessment of the patient identifies the deficit. Once a need is identified, the nurse has to select required nursing systems to provide care, i.e.: wholly compensatory, partly compensatory or supportive and educative system (Orem, 2007; Alligood, & Tomey, 2010). The care will be provided according to the degree of deficit the patient is presenting. Once the care is provided, the nursing activities and the use of the nursing systems are to be evaluated to get an idea about whether the mutually planned goals are met or not. Thus, the theory could be successfully applied into the nursing practice (Orem, 2007; Tomey, & Alligood, 2010).

The nursing process is the scientific approach to nursing care. The nursing process offers nurses systematic ways of planning and delivering nursing care (Seaback, 2013; Zator Estes, 2014). The nursing process is a cyclical and ongoing process that can end at any stage if the problem is solved. The nursing process not only focuses on ways to improve physical needs, but also social and emotional needs as well as goal directed (Doenges, & Moorhouse, 2003).

The characteristics of the nursing process are patient-centred, goal-directed, cyclical, dynamic, interpersonal, collaborative, systematic, and universally applicable. The process involves five major steps: assessment, diagnosis, planning, implementing/intervention, and evaluation (Doenges, & Moorhouse, 2003). Orem's theory deals with essential issues concerning nursing practice; what nursing care required, and how that care should be delivered (Cox, Hinz, Lubno, Scott-Tilley, Newfield, Slater, & Sridaromont, 2009).

The first step is assessment, that aimed obtain patient's history, as well as a list of symptoms or complaints. Using the information gathered in the assessment, the nurse forms nursing diagnosis. The assessment and diagnosis allow the nurse to develop a nursing care plan, which is a plan of action for how to care for the patient (Seaback,

2013; Zator, 2014). This step includes nursing goals set by both the nurse and patient, and determining how best to meet those goals. The implementation sets the nursing care plan in motion in order to meet the patient's goals (Carpenito-Moyet, 2004). Finally, the nurse to show whether goals had been met evaluates the patient. Evaluation may be done during the implementation phase in order to make changes to the nursing care plan as needed. For example, if the patient gets worse, he or she may need to be reassessed to come up with a different diagnosis and plan of action. The nurse may also be evaluated at this point to determine how he or she cared for the patient (Seaback, 2013; Zator, 2014).

Use of the nursing process has implications for the client, nurses, and the profession of nursing. The client benefits because use of the nursing process ensures quality and individualised care and encourages client participation in all phases of the nursing care. The nursing process benefits the nurse by increasing job satisfaction and enhancing professional growth. For the profession of nursing, the use of the nursing process defines the scope of nursing practice (Cox, et al, 2009; Seaback, 2013; Zator, 2014).

1.7 Layout of theses

Brief description of the rest of the thesis is presented below:

Chapter 2: Literature review with focus on the history, political and demographic of Ghana, and health services in Ghana. Childhood cancers, incidences of childhood cancers and the types treatment of childhood cancers. Training of oncology nurses and nursing management of Paediatric cancer. The support systems, health education and nurses' attitude towards children diagnosed with cancer.

Chapter 3: Describes the research methodology that was used to reach the objectives of the study, and discusses in detail the research design, study population, sampling, data collection and technique of data collection and method of data analysis.

Chapter 4: Presents results on data collection on nurses' role during assessment of a child diagnosed with cancer and the purpose of assessment. Planning and

implementation of nursing care for children diagnosed with cancer. In addition, evaluation of nursing intervention and discharge care planning. It also involves the support systems, health education and nurses' attitude towards children diagnosed with cancer.

Chapter 5: Presents discussions of study results. This includes the steps in the nursing process, which are assessment and nursing diagnosis, planning, implementation and evaluation of nursing interventions. In addition, discharge care planning, health education, support systems and nurses' attitude towards children diagnosed with cancer. Also, the constraints and the limitations faced by the researcher.

Chapter 6: Presents conclusions and recommendations of study findings. This is base on the nine objectives of the study.

CHAPTER 2: LITERATURE REVIEW

2.1 Introduction of the chapter

This chapter focused on Nurses' role in the management of children diagnosed with cancer in Ghana. The literature review considered the history, political and demographic of Ghana, health services in Ghana, childhood cancers, incidences of childhood cancers, treatment of childhood cancers cultural beliefs about cancer in children, training of Oncology Nurses, nursing management of Paediatric cancers, support system, health education and nurses' attitude globally and in Ghana.

2.2 History, political and demographic of Ghana

2.2.1 History of Ghana

Ghana is one of the 16 Economic Community Of West African States (ECOWAS) and formally a British Colony known as Gold Coast (Witter & Garshong, 2009). Ghana has a total land surface area of 23,8537square kilometres. Ghana shares boundary with Burkina Faso to the north, Togo to the East, Ivory Coast to the West and Gulf of Guinea to the south. Ghana gained its independence from British rule on 6th March 1957, and on 1st July 1960 became a republic and sovereign state within the British Commonwealth of nations.

2.2.2 Political history and demographics of Ghana

The administrative and political capital of the country is Accra (Government of Ghana, 2010). Ghana is a constitutional democracy and currently operates a multi-party democratic presidential system of government following the promulgation of the 1992 fourth Republic Constitution of Ghana. The country has an Executive Presidency that is elected for four-year term with a maximum of two terms. Ghana has a total population of about 24, 233,431 (Government of Ghana, 2010). The population is made up of several ethnic groups of which the Akans constitute the largest ethnic group, followed by the Mole-Dagbon, Ewe, and Ga/ Dangme (G.S.S 2002). Ghana has ten (10)

administrative regions of which Ashanti, where the study will be taken is one of the largest regions. Each region is divided into districts.

2.3 Health services in Ghana

In Ghana, most health care is provided by the government and administered by two authorities, i.e. the Ministry of Health, and the Ghana Health Service (Witter & Garshong, 2009). The healthcare system is divided into five levels: at the five level are health posts, which are supposed to be first contact for health care delivery; at the second level are health centres and clinics; at the third level are district hospitals; the fourth level are regional hospitals; and the fifth level are tertiary hospitals which include teaching hospitals. Additional funding for health centres and hospitals are National Health Insurance Scheme, financial credits, Internally Generated Fund (IGF), and Donors-pooled Health Fund (Witter & Garshong, 2009).

Ghana has three (3) Teaching hospitals and Regional hospitals. Every district has a District hospital, Clinics and Health centres. There are also private-owned hospitals and clinics provides less than 2% of health services in the country, in addition to hospitals and clinics managed by religious organisations. Collectively they are known as the Christian Health Association of Ghana (CHAG), make up thirty-five percent (35%) of Ghana's health service provision (Witter & Garshong, 2009). Health care varies across the country. Urban centres are well served, and contain most hospitals, clinics, and pharmacies in the country. However, rural areas often have no modern health care. Patients in rural areas either rely on traditional African medicine, or travel long distances to obtain health care (Witter & Garshong, 2009).

In 2003, Ghana began implementation of a National Health Insurance Scheme (NHIS) which aimed at universal coverage, despite vocal opposition from donors and technical experts (National Health Insurance Scheme, undated: 1). Five years later, the NHIS

provides insurance for almost 60 percent of the population, covering 95 percent of the disease burden. The NHIS has gained increasing attention from other African countries that are seeking to reform their health systems (National Health Insurance Scheme, undated). The complex policy process in developing the NHIS and the current progress in meeting coverage targets of the poor have so far not been well-described (National Health Insurance Scheme, undated). In addition the apparent success is met by scepticism in many quarters, for a number of reasons one of them being the problems concerning long-term financial stability (National Health Insurance Scheme, undated).

2.3.1 Village level health service (Health post)

Health post is first level, which provides primary care for rural and pre-urban communities. A small health point is located in one village, covering several villages. Here, a professional nurse, an auxiliary nurse, midwives and one or two volunteers, assists the Community Health Officer. Basic preventive and curative services for minor ailments are being addressed at the community and household level (Nurses' and Midwifery Council of Ghana, 2010; GSS, 2003). Oncology cases are not taken care off at this level. The village level refer cases beyond their technical abilities to the next level, which is the health centre or 'Polyclinic'.

2.3.2 Level 2 Health Centre and Polyclinic

The health centre has traditionally been the first point of contact between the formal health delivery system and the client. Headed by a Medical Assistant and staffed with program heads in the areas of midwifery, laboratory services, public health, environmental, and nutrition. Each health centre serves a population of approximately 20,000. It provides basic curative and preventive medicine for adults and children as well as reproductive health services. It provides minor surgical services such as incision and drainage. It augments its service coverage with outreach services and refers severe and complicated conditions to appropriate levels. The polyclinic is the urban version of the rural health centre. Polyclinics are usually larger, and offer a more comprehensive array of services, are manned by physicians, and can offer complicated

surgical services. They are mainly in metropolitan areas (Ghana Statistical Service, 2003). Level-2 also refer cases to the district level for further management and therefore oncology cases are not manage at the polyclinics.

2.3.3 Level 3 District Hospital

District hospitals are the facilities for clinical care at the district level. District hospitals serve an average population of 100,000–200,000 people in a clearly defined geographical area. The number of beds in a district hospital is usually between 50 and 60. It is the first referral hospital and forms an integral part of the district health system. A District Hospital provides curative care, preventive care, and promotion of health of the people in the district. The district hospital provides quality clinical care by a more skilled and competent staff than those of the health centres and polyclinics. Treatment techniques, such as surgery, laboratory and other diagnostic techniques appropriate to the medical, surgical, and outpatient and in-patient activities are carried out in the district hospital (Ghana Statistical Services, 2003). District hospital also refer cases beyond their capabilities to the next level for further management, i.e. the regional hospital in the regional capital.

2.3.4 Regional Hospital

At the regional level, the District Health Management Team delivers public health services along with the public health division of the regional hospital (GSS, 2003). The Regional Health Administration provides support to the districts and sub-districts within each region through supervision and management. The regional hospital also delivers curative services. The hospital has the capacity to provide specialised care not available at district hospitals. Generally, it provides care to a geographically well-defined population (GSS, 2003). Although the regional hospitals take care of specialised cases, the regional hospitals also refer oncology cases to the teaching or tertiary hospitals in the country for expertise treatment and management.

2.3.5 Tertiary and Teaching Hospital

Tertiary health care is classified as purely curative and offer a range of hospital services, depending on the defined status of the institutions (GSS, 2003). The tertiary health care level is sub-divided into several different categories depending on it s range of service. A teaching hospital takes both referral cases and serves as a first point of contact. Tertiary health care delivery in Ghana is mostly an income generating area of health. Most of the services in these institutions are available at the cost of patients only. These tertiary institutions also operate on private bases as profit making institutions by offering curative services to non-insured people on a cash-and-carry basis (GSS, 2003). The tertiary and teaching hospitals have specialists of various kinds and admit oncology patients for further care and management.

2.4 Childhood cancers

According to Jemal, Siegel, Ward, Hao, Xu & Thun (2009), cancer is the second most common cause of death among children aged between one and fourteen years old in the United States. More than 16 out in every 100,000 children and teenagers in the U.S. were diagnosed with cancer, and nearly 3 of every 100,000 died from the disease (Kurt, Nolan, Ness, Neglia, Tersak, Hudson, Armstrong, Hutchinson, Leisenring, Oeffinger, Robison, & Arora, 2012). The most common cancers in children were leukaemia (cancer of the bone marrow and blood) and cancer of the brain, and cancer of the central nervous system (Centre for Disease Control and Prevention (CDCP), 2007; Childhood cancer incidence statistics, 2012; Childhood cancer statistics, 2013).

2.4.1 Neonatal cancers

Neonatal tumours occur within the first 28 days of neonatal life and represent a population of tumours that may demonstrate particular patterns of behaviour. The majority of neonatal tumours are solid tumours, many of which may be detected on antenatal sonographic scanning (Avni, Massez & Cassart, 2009; Alamo, Beck-Popovic, Gudinchet, & Meuli, 2011). Although leukaemia was reported as being the main cause of death from tumours occurring within the 1st month of life, it actually represents a relatively small percentage of neonatal tumours.

The diagnosis of a neonatal malignancy is devastating for the neonate's family and for members of the health care team (Alamo, Beck-Popovic, Gudinchet, & Meuli, 2011). Fortunately, most tumours found in the newborn are benign, rather than malignant. The types of cancer commonly found in neonates differ from those found in older children. Neuroblastoma is the most frequently diagnosed malignancy, followed by brain tumours, leukaemia, retinoblastoma, renal tumours, sarcomas, and germ cell tumours (teratomas). Neonatal tumours occur in every 12,500–27,500 live birth and comprise 2% of childhood malignancies (Moore, Satgé & Sasco, 2003). Teratomas, neuroblastomas, mesoblastic nephroma, and fibromatosis are the majority of neonatal tumours that present with mass at birth which are not infrequently identified on antenatal ultrasound (Hurst, Firth & Chitty, 2008). Histologically, teratoma and neuroblastoma remain the two main tumour types encountered with soft tissue followed by sarcoma, renal tumours, Central Nervous System tumours and leukaemia being the next most common tumour types identified in neonates. Malignant tumours are uncommon in the neonatal period per se and benign tumours may have malignant potential (Hurst, Firth & Chitty, 2008).

Benign tumours may also be life threatening because of their size and location. Other tumours may demonstrate local invasiveness, but no metastatic potential, and tumours that are clearly malignant may demonstrate unpredictable or uncertain behaviour. Congenital abnormalities are associated with neonatal tumours (Hurst, Firth & Chitty, 2008; Avni, Massez & Cassart, 2009). Genetic defects are highly likely in neonatal tumours and include those with a high risk of malignancy (e.g., retinoblastoma), but also genetically determined syndromes with an increased risk of malignancy and complex genetic rearrangements. Tumours are mostly genetically related at a cellular level and factors influencing cellular maturation or apoptosis within the developing foetus may continue to operate in the neonatal period. Cytogenetics of neonatal neoplasms appears to differ from neoplasms in older children. Certain apparently benign tumours and masses may have malignant potential and undergo malignant change if untreated. Other tumours, although malignant by histological criteria (e.g., congenital

fibrosarcoma), behave benignly in neonates. On the other hand, certain tumours appear to occur early and subsequently regress (Hedrick, Flake & Crombleholme, 2004).

2.4.2 Children under five (5) cancers

Neuroblastoma is the most common form of cancers in children under-five years. Leukaemia, central nervous system cancers, retinoblastoma and Wilms tumour are the next most common cancers (Jemal, Siegel, Ward, Hao, Xu, & Thun, 2009). The less common ones are Lymphomas including Hodgkin's disease and Non-Hodgkin's Lymphoma, soft tissue Sarcomas, Kidney cancers and cancer of the bones. The five commonest tumours in Ghana in descending order of frequency for the 0–4 year group are lymphomas, nephroblastoma, CNS tumours, hepatic tumours and sarcomas (Jemal, Siegel, Ward, Hao, Xu & Thun, 2009).

2.4.3 Acquired cancers

Acquired mutations start in one cell of the body, and that cell passes the mutation on to all the cells that come from it. Some may have outside causes like radiation exposure, and others may have causes that have not yet been found. But most are likely to be caused by random events that sometimes happen inside a cell. Acquired (somatic) mutations are not present in the egg or sperm. These mutations are acquired at some point in the life, and are more common than inherited mutations. This type of mutation occurs in one cell, and then is passed on to any new cells that are the offspring of that cell (Langhorne, Fulton & Otto, 2007). Mutations that we are not born with, but that occur by chance over time in cells of the body are said to be "acquired." Acquired mutations are not present in all cells of the body. They are not inherited, and are not passed down from parents to children. Acquired mutations are always involved in causing cancer (Langhorne, Fulton & Otto, 2007).

Most childhood cancers are not inherited. They are caused by mutations acquired during the child's life. Some of these may even have occurred before the child was born. A few types of childhood cancers are known to occur more often in some families. Some of these are due to hereditary cancer syndromes. Children born with a genetic predisposition to leukaemia, on the other hand, are known to acquire the predisposing genetic mutation whilst they are in the womb. Retinoblastoma is acquired childhood cancer that starts in the eye. It can be caused by an inherited mutation in the tumour suppressor gene *Rb*. Even though the child has a remaining normal copy of the *Rb* gene, he or she is likely to develop this cancer. This is because there is no backup to stop the mutated gene from making abnormal cells if the remaining healthy *Rb* gene stops working in even one cell (Langhorne, Fulton & Otto, 2007). Children with the hereditary form of retinoblastoma are more likely to get tumours in both eyes. They also have an increased risk of developing other types of cancers like cancers of the bone, brain, nasal cavities, and melanoma (Langhorne, Fulton & Otto, 2007).

2.4.4 HIV related cancers

The most common HIV related cancers in children are non-Hodgkin's lymphoma, smooth muscle tumours (leiomyosarcomas and leiomyomas), and Kaposi's sarcoma. Only 2% of children with AIDS present with malignancy. Leiomyosarcomas, are the second most common paediatric HIV-1-associated cancer and is probably linked to Epstein-Barr virus infection of smooth-muscle cells. AIDS-associated Kaposi's sarcoma in children is more widespread in sub-Saharan Africa, an area where human herpes virus 8 (HHV8) is endemic. HHV8 can be transmitted vertically from mother to child early in life. Several various tumours which also occur in HIV-infected children are leukaemia, Ewing's sarcoma, rhabdomyosarcoma and ependymoblastoma (Mueller, 1999: 311; Mutalima, Molyneux, Johnson, Jaffe, Kamiza, Borgstein, Mkandawire, Liomba, Batumba, Carpenter, & Newton, 2010).

2.5 Incidences of childhood cancers

In 2008-2010, there were averages of 1,603 new cases of childhood cancer each year in the UK, 883 (55%) in boys and 720 (45%) in girls, giving a male: female ratio of around 12:10 (Cancer statistics, 2013). The crude incidence rate shows that there are 160 new cancer cases for every one million boys in the UK and 137 for every one million girls (Childhood Cancer Incidence Statistics, 2013). The World age-standardised incidence rates do not differ significantly between the constituent countries of the UK for either sex (Childhood Cancer Statistics, 2013).

According to Stiller (2004), for all childhood cancers diagnosed, the World age-standardised incidence rates were typically in the range 70-160 cases per million children. The UK incidence rate was the lower end observed in western countries and Oceania whilst the white populations of North America were at the highest. Recent analyses of childhood cancer incidence in Australia and the US have shown continued high rates in comparison to the rest of the world (Baade, Youlden, & Valery, 2010; Linabery, & Ross, 2008). In the United States, cancer is the second most common cause of death among children between the ages of 1 and 14 years, surpassed only by accidents (WHO.Globocan, 2008; National Centre for Health Statistics, 2009).

2.5.1 Global perspectives of childhood cancers

Globally, incidence of childhood cancer is 14.9 per 100,000 < 15 years of age and in the United States, it is 160,000 new cases/year < 15 years of age and 90,000 deaths/year < 15 years of age (National Cancer Institute, 2007). According to Parkin (2008), total incidence of childhood cancer varies rather little among different regions of the world, with a cumulative risk to the age of 15 in the range 1.0–2.5 per thousand. Mainly, the differences are due to diverse environments, lifestyles, dietary habits, and hygienic conditions (Sala, Pencharz, & Barr, 2004).

The publication of international incidence of childhood cancer, by the International Agency for Research on Cancer (IARC), shows that childhood cancer incidence is generally similar in Australia, Canada, Japan, the USA and Western Europe (Parkin, 2008). Major differences in incidence were observed in acute lymphoblastic leukaemia (ALL) and brain tumours (Parkin, 2008). In Egypt, cancers occurring in the under 20 years old constitutes 6% of all cancer cases, as opposed to only 1%in the USA (Parkin, 2008). The situation is similar in other low and middle-income countries. The death rate from infections is decreasing and the incidence of cancers in the young population is increasing faster than ever (Parkin, 2008).

2.5.2 Childhood cancers in developing countries

More than 85% of paediatric cancer cases occur in developing countries. This rate will exceed 90% (Yaris, Mandiracioglu, & Buyukpamukcu, 2004). Children with cancer living in developing countries cannot fully profit from those advances in paediatric oncology (Rivera-Luna, 2007; Yeh, Nekhlyudov, & Goldie, 2010). Cancer in children is relatively rare with incidence in South Africa of approximately 1500 children per year (Karabus & Hartley, 2007). Leukaemia is the most common malignancy of childhood and the solid cancers seen in children are embryonal tumours and sarcomas, rather than carcinomas (Karabus & Hartley, 2007). Of the 2324 children of all races registered at the Red Cross Hospital, leukaemia, brain tumour, lymphoma, neuroblastoma and Wilm's tumour accounted for nearly 80% (Karabus & Hartley, 2007; Hesseling, Molyneux, & Tchintseme, 2008).

According to Scott (2007), the overall incidence of paediatric solid malignant tumour is difficult to estimate in Africa because of lack of vital hospital statistics and national cancer registries in most of countries. The reported incidences vary between 5% and 15.5% of all malignant tumours (Scott, 2007). Throughout the African continent, patterns of malignant disease vary with an obvious increase in the prevalence of Burkitt Lymphoma (BL) and Kaposi Sarcoma in response-increased prevalence of HIV disease (Scott, 2007). In sub-Saharan countries, Burkitt Lymphoma is the commonest tumour

followed by Nephroblastoma, non-Hodgkin Lymphoma, and Rhabdomyosarcoma (Scott, 2007). Cancer is now curable in developed countries as survival rates is better, but in Africa, children still die without access to adequate treatment (Scott, 2007).

2.5.3 Childhood cancers in Ghana and West Africa

Incidence trend patterns of common childhood cancers have recently been evaluated because of concerns that they may be on the rise. Among the childhood cancers, there was an abrupt increase in the incidence of Leukaemia (Scott, 2007). The greatest variation in incidence of paediatric cancers occurs in comparisons of high-income to low-income countries and may derive from incomplete ascertainment of paediatric cancer occurrence. Burkitt Lymphoma is the most common childhood cancer in Ghana accounting for about half of all reported cases (Ghana web 2010; Hesseling, Molyneux, & Tchintseme, 2008; World Child Cancer, 2013).

According to Renner (2013), about 1,200 children below the age of 15 were presumed to be affected with childhood cancers in Ghana yearly, accounting for about 17 per cent of deaths, the highest percentage at the Korle-Bu Teaching (KBTH). However, the largest cancer centre in the country located at the KBTH sees only 150 of these cases yearly. A consultant at the Paediatric Unit of the KBTH, Renner, announced this at a ceremony to mark International Childhood Cancer Day held in Accra in this year (2013). Quoting unpublished data from the Child Health Department of the KBTH, Renner (2013), noted that although there was no comprehensive epidemiological data on the magnitude of childhood cancers in the country, estimates from incidence data in more developed countries showed one in every 500 children could be affected (Hesseling, Molyneux, & Tchintseme, 2008; Welbeck & Hesse, 2005).

Although childhood cancers were becoming a potentially important disease condition, very little was known about their cause. More so, many of the types of cancers occurred

at an early age, suggesting that factors that caused the disease operated before birth. It is noted that although Ghana have two institutional cancer registries in the two major teaching hospitals; Komfo Anokye and Korle-Bu Teaching Hospitals, their data hold on cancer diagnosed in the departments do not reflect the overall national picture. Renner (2013) reported that according to Dr. Nyarko, Focal Person for Cancer Control Programme of Ghana Health Service (GHS) childhood cancers are on the increase with lymphomas being the most common. Additionally, it is still a major cause of death worldwide (Ghana web, 2010; Welbeck & Hesse, 2005).

2.6 Treatment of childhood cancers

According to Smith, Seibel & Altekruse (2010), dramatic improvements in survival have been achieved for children and adolescents with cancer. Between 1975 and 2002, childhood cancer mortality has decreased by more than 50% (Smith, Seibel & Altekruse, 2010). Childhood and adolescent cancer survivors require close follow-up because cancer therapy side effects may persist or develop months or years after treatment (Rebholz, Reulen and Toogood, 2011; Katz & Gonzalez-Morkos, 2009).

According to Jemal, Siegel & Xu, (2010), during the past five decades, dramatic progress has been made in the development of curative therapy for paediatric malignancies. Long-term survival into adulthood is the expectation for 80% of children with access to contemporary therapies for paediatric malignancies (Jemal, Siegel & Xu, 2010). The therapy responsible for this survival can also produce adverse long-term health-related outcomes, referred to as “late effects,” that manifest months to years after completion of cancer treatment (Jemal, Siegel & Xu, 2010). Variety of approaches have been used to advance knowledge about the very long-term morbidity associated with childhood cancer and its contribution to early mortality (Jemal, Siegel & Xu, 2010; Sausville & Longo, 2005). These initiatives have utilized a spectrum of resources including investigation of data from population-based registries, self-reported outcomes provided through large-scale cohort studies, and information collected from medical

assessments (Hesseling, Molyneux, & Tchintseme, 2008; Kurt, Nolan, Ness, et al., 2012).

2.6.1 Chemotherapy

Chemotherapy is a general term for medications used to destroy or stop the growth of cancer cells. Chemotherapy is the use of cytotoxic drugs in the treatment of cancer. Chemotherapy provides cure, control or palliation. Chemotherapy is a systemic treatment rather than localised (Chu, & De Vita, 2004). Chemotherapy medicines are given for several reasons to treat cancers that respond well to chemotherapy, decrease the size of tumour for easier and safer removal through surgical operation, to enhance the cancer-killing effectiveness of other treatments, such as radiation therapy and to control the cancer and enhance the patient's quality of life. Chemotherapy works by interfering with the ability of cancer cells to divide and duplicate themselves (Langhorne, Fulton & Otto, 2007; Chu, & De Vita, 2004).

Chemotherapy can be given through the bloodstream to reach cancer cells all over the body, or it can be delivered directly to specific cancer sites. Each chemotherapy medicine works to prevent cells from growing, by preventing the copying of cellular components needed for cells to divide, replacing or eliminating essential enzymes or nutrients the cancer cells need to survive, or triggering cells to self-destruct (Langhorne, Fulton & Otto, 2007; Hesseling, Molyneux, & Tchintseme, 2008). Often, combination of drugs will be used, with each medicine attacking the cancer cells in a special way. This decreases the chances that cancer cells will survive, become resistant and continue to grow.

Chemotherapy is given in different ways depending on the cancer type and the medicines used. For many patients, the medical team will surgically install a central venous line (catheter) in a vein in the chest (subcutaneous port) or arm before chemotherapy starts. The line will allow treatments to be given and blood samples taken

without being “stuck” with a needle. At the end of the treatment, the central line will be removed (Langhorne, Fulton & Otto, 2007).

2.6.2 Surgery

Surgery is the branch of medicine that uses manual and instrumental means to deal with the diagnosis and treatment of injury, deformity, and disease. Surgical oncology is the branch of surgery focusing on the surgical management of malignant neoplasms, including biopsy, staging, and surgical resection (Langhorne, Fulton, & Otto, 2007; Hesseling, Molyneux, & Tchintseme, 2008). Surgical intervention in cancer treatment is an important option. The procedure may be used to prevent reoccurrence of cancer in a high-risk patient. It is also use to diagnose a primary or metastatic site of malignancy. Surgery provides a route of administration of therapy. It also provides primary or secondary treatment of an identified malignancy (Lissauer & Clayden, 2007).

Surgery is use to rehabilitate by means of reconstructive interventions, or offer palliative care through symptoms management in advanced cancer. The role that surgery plays in the treatment depends upon the type, location, and extent of the cancer (Chu, & De Vita, 2004; Langhorne, Fulton, & Otto, 2007). In some cases, the healthcare team may be able to take out a solid tumour. In other cases, chemotherapy or radiation may be used to shrink the size of a tumour so that it can be removed more easily during surgery.

Preparing children for surgery is very challenging regardless of their age. For small children, it is hard to know how much to tell them and how much they will understand (Chu, & De Vita, 2004; Langhorne, Fulton, & Otto, 2007; Lissauer & Clayden, 2007). For older children, such as adolescents, understanding more can create more fear. Child Life Specialists are always available at the hospitals to help nurses and their parents figure out how to talk with the child in the most appropriate way based on their age. Before the surgical procedure, the nurses prepare the child and the family

physically, psychologically and spiritually (Chu, & De Vita, 2004; Langhorne, Fulton, & Otto, 2007).

2.6.3 Radiotherapy

Radiation therapy is the use of high energy X-Ray to kill cancer cells. Radiation therapy is used to target tumours in specific locations. By delivering radiation to the tumour's exact location, doctors hope to shrink its size. Sometimes, radiation takes place before surgery or chemotherapy is given to make the tumour small enough to remove, and other times, radiation takes place without the need for surgery (Langhorne, Fulton & Otto, 2007; Hesseling, Molyneux, & Tchintseme, 2008; Lissauer & Clayden, 2007).

Radiation therapy works by destroying or damaging rapidly growing cells, such as cancer cells. However, it can damage cells only in the area of the body where the radiation is given. Unlike chemotherapy, radiation does not cause cell damage throughout the body. It can, however, damage healthy cells in the area being irradiated, but normal cells are better able to repair themselves. Radiation has been used successfully to treat patients for more than 100 years. Many advances have been made to ensure that radiation therapy is safe and effective (Langhorne, Fulton & Otto, 2007; Lissauer & Clayden, 2007).

Before a child begins radiation therapy, the radiation oncology team will carefully tailor their plan to ensure that he or she receives safe and accurate treatment. Treatment will be carefully planned to target the cancer while avoiding or protecting healthy organs in the area. Special computers are use to monitor and double-check the treatment machines to ensure the proper treatment is given. Radiation therapy will not make a child radioactive after treatment (Langhorne, Fulton & Otto, 2007). Radiation therapy can be delivered in two ways, externally and internally. The majority of paediatric cancers are treated with external radiation.

During external beam radiation therapy, radiation beams come out of a machine called a linear accelerator. The beams are aimed at the tumour, either where it is or where it was before surgery and/or chemotherapy. It is not painful. If a child needs to receive radiation, the radiation field or area is measured precisely and marked on the child's body. This process is called simulation (Lissauer & Clayden, 2007). To minimize side effects, treatments are typically given five days a week, Monday through Friday, for a number of weeks. This allows enough radiation to get into the body to kill the cancer while giving healthy cells time to recover (Langhorne, Fulton & Otto, 2007).

2.6.4 Palliative care

Palliative care is an approach that improves the quality of life of patients and their families facing the problem associated with life-threatening illness, through the prevention and relief of suffering by means of early identification and impeccable assessment and treatment of pain and other problems, physical, psychosocial and spiritual (Perry, Potter & Ostendorf, 2014; Langhorne, Fulton & Otto, 2007). Palliative care provides relief from pain and other distressing symptoms. It offers a support system to help patients live as actively as possible until death. Palliative care offers a support system to help the family cope during the patients' illness and in their own bereavement (Albrecht & Taylor, 2012; Sausville & Longo, 2005). It uses a team approach to address the needs of patients and their families, including bereavement counselling, if indicated. It is applicable early in the course of illness, in conjunction with other therapies that are intended to prolong life, such as chemotherapy or radiation therapy, and includes those investigations needed to better understand and manage distressing clinical complications (Langhorne, Fulton & Otto, 2007).

Palliative care for children represents a special, albeit closely related field to adult palliative care. Palliative care is an essential part of cancer control which be provided relatively simply and inexpensively (Perry, Potter & Ostendorf, 2014). World Health Organisation defines palliative care as an advance method that improves the quality of life of individuals and their families facing severe infirmity by means of prevention and relief of distress by way of early recognition and perfect assessment and management of pain (WHO, 2011). This address the physical, psychological and spiritual needs of patients and their families (WHO, 2011). This is appropriate for children and their families about the provision of active total care of the child, physically mentally and spiritually. This also involves giving support to the family throughout (Kehl, 2008). Health providers evaluate and alleviate a child's physical, psychological, and social distress (Perry, Potter & Ostendorf, 2014; Langhorne, Fulton & Otto, 2007). Effective palliative care requires a broad multidisciplinary approach that includes the family and makes use of available community resources which is successfully implemented even if resources are limited. It can be provided in tertiary care facilities, in community health centre and even in children's homes (Kehl, 2008).

2.6.5 Alternative therapy/ treatment

Complementary and alternative medicine (CAM) is a collection of diverse medical and health care systems, practices, and products that are not currently considered part of conventional medicine (Post-White, 2006; Post-white, Fitzgerald, Hageness & Sencer, 2009). Complementary and alternative medicine (CAM) is the term for medical products and practices that are not part of standard care. Standard care is what medical doctors, doctors of osteopathy, and allied health professionals, such as nurses and physical therapists, practice (Post-White, 2006). However, some are being used together with standard medical care. Acupuncture for example is use to help with side effects of cancer treatment (Mansky, & Wallerstedt, 2006).

In multiracial and multicultural Singapore, cancer patients are exposed to CAM from both western and eastern cultures, ranging from health supplements to traditional forms of medicine like Traditional Chinese Medicine (TCM), traditional Malay (Jamu) medicine and traditional Indian (Ayurvedic) medicine in paediatric cancer patients (Post-White 2006; Post-white, Fitzgerald, Hageness & Sencer, 2009). In Japan, parents' hope from the use of alternative therapies ranged from reducing pain, shortening the therapeutic cycle, limiting side effects, increasing the child's internal strength, improving the child's ability to deal with unpleasant medical events, and curing the disease (Hyodo, Amano & Eguchi, 2005). Some Parents believed that alternative therapies have body-building effects even though they may fail to cure cancers (Cassileth & Deng, 2004; Post-white, Fitzgerald, Hageness & Sencer, 2009).

Advantages of the use of CAM in cancer patients includes boosting the immune system, relieve pain and control complications or side-effects related to disease or treatment (Lim, Wong, & Chan, 2006; Yates, Mustian, & Morrow, 2005). CAM is view together with conventional treatment as a more integrative and holistic approach for the treatment of cancer and associated side-effects. According to Shih, Chiang, & Chan (2009), some parents use CAM due to its presumed action as an anticancer agent.

The use of prayer has been debated for inclusion as a CAM therapy (McLean & Kemper, 2006). According to McLean & Kemper (2006), belief in prayer is linked with culture. Although prayer may not cure a disease or manage symptoms, it brings tranquillity to families that everything is being done for their child. Conventionally, village priests and Muslim clerics are the primary care givers, offering herbal remedies as well as spiritual healing. In turn, cultural health attributions affect beliefs about disease, treatment, and health practices.

2.6.5.1 Traditional healers

Traditional Medicine is still in use in modern day Africa for treatment of diseases like cancer without much reported cases of undesirable effects unlike the modern chemotherapy and the likes (Peltzer, 2009; Okigbo, & Mmeka, 2006). The traditional medical practitioner or traditional healer is defined as someone who is recognised by the community in which he or she lives as competent to provide health care. This is by using vegetable, animal and mineral substances and certain other methods based on the social, cultural and religious backgrounds as well as the prevailing knowledge, attitudes and beliefs regarding physical, mental and social well-being and the causation of disease and disability in the community (Peltzer, 2009; Booyens, 1991).

In China, Traditional Chinese medicine (TCM) has been widely applied for cancer care in China. Traditional Chinese Medicine has progressively more become popular in the West in treating diseases including in cancer patients (Liu, Li, Liu, Ma & Li, 2011; Jia, 2012). Chinese medicine plays an significant role in minimizing disability, protecting cancer patients against suffering from complications, and helping patients to live well. Chinese medicine may also assist in supportive and palliative care by reducing side-effects of conventional treatment or improving quality of life (Yang, Li, Li, Wang, & Li, 2012; Li, Liu, Xu, Wu, & Liu, 2003).

Traditional Chinese Medicine interventions are classified into herbal medicine, acupoint stimulation, dietary therapy, massage, TCM psychological intervention, TCM five element music therapies and qigong (Xu, Jin, Shen, Li & Zhou, 2007). Herbal medicine, including oral decoction, injection, external usage, perfusion, aerosol inhalation, mouth rinsing and nasal feeding, are the most frequently applied intervention in both treatments. Among all the types of alternative treatment, herbal medicine decoction forms the majority. Needling acupuncture and acupoint injection are also one of the dominating treatments use in China for the treatment of cancers (Xu, Jin, Shen, Li, & Zhou, 2007).

The clinical application of Traditional Chinese Medicine is of high clinical interest not only in the treatment of cancer and cancer related conditions, but also in its prevention. Traditional Chinese Medicine treatment is for prevention of relapse or metastasis of cancer or other cancer related conditions (Li, Liu, Xu, Wu, & Liu, 2003). Traditional Chinese Medicine seems to have higher impact in the prevention of relapse and or metastasis, haemorrhage, radiotherapy induced inflammation, radiation injury, chemotherapy or radiotherapy induced nausea and or vomiting or other gastrointestinal disorder, other chemotherapy included side effects, and other drug-induced side effects (Liu & Li, 2009). This is consistent with previously identified role of Traditional Chinese Medicine as complementary medicine adjuvant or postal to conventional treatment (Yoder, 2005; Ernst, 2009; Carmady & Smith, 2012; Li, Yang, Li., Zhang, Yang, Chang, Sun, Zhou, Guo, Xu, Liu, & Bensoussan, 2013).

Traditional healers in South Africa are practitioners of traditional African medicine in South Africa. There are two main types of traditional healers within the Nguni societies of Southern Africa: the diviners (sangomas) and the herbalists (inyanga) (van Niekerk, 2012). These healers are effectively South Africa shamans who are highly revered and respected in a society where illness is thought to be caused by witchcraft, pollution or through neglect of the ancestors (Cumes, 2012). Traditional healers are consulted by approximately 60% of the South African population, usually in conjunction with modern biomedical services (Cumes, 2012).

A sangoma is a practitioner of ngoma, a philosophy based on a belief in ancestral spirits and the practice of traditional African medicine (Truter, 2007). Sangoma perform a holistic and symbolic form of healing by drawing on the embedded beliefs of the Nguni culture who believe that ancestors in the afterlife guide and protect the living. Sangomas are called to heal, and through them it is believed that ancestors from the spirit world can give instruction and advice to heal illness, social disharmony and spiritual difficulties (Fazel, 2013). Traditional healers work in a sacred healing hut where they believe their ancestors reside (Truter, 2007). Helping and harming spirits are believed to use the human body as a battle ground for their own conflicts. By using ngoma, the sangoma

can create harmony between the spirits which results in the alleviation of the patient's suffering (Truter, 2007; Abdullahi, 2011).

A traditional healer's goal in healing is to establish a balanced and harmless relationship between the afflicted patient and the spirits that are causing their illness or problem (Fazel, 2013; Abdullahi, 2011). The healer intercedes between the patient and the world of the dead in order to make restitution (Cumes, 2012; Carmady & Smith, 2011). This is generally performed through divination (throwing the bones or ancestral channeling), purification rituals, or animal sacrifice to appease the spirits through atonement (Truter, 2007). The traditional healer is guide by the ancestors during the throwing of the bones with regard to the type of herbs to use or mix. Sometimes they were guided to go and dig in the veldt for the ingredients. A traditional healer received guidance for each person specifically and uniquely (Truter, 2007).

Throwing the bones to access the advice of ancestors is an alternative practice to the exhausting ritual of possession by the ancestor (Fazel, 2013). The patient or diviner throws bones on the floor, which may include animal vertebrae, dominoes, dice, coins, shells and stones, each with a specific significance to human life. The traditional healer or the patient throws the bones but the ancestors control how they lie. The healer then interprets this metaphor in relation to the patient's afflictions, what the ancestors of the patient require, and how to resolve the disharmony (Truter, 2007). When the diviner comes to an acceptable understanding of the problem and the patient agrees, she will instruct the patient on a course of medicine which may include the use of herbs. The healers then refer the patient to an herbalist or recommend a Western medicine regimen (Richter, 2003).

The spiritually curative medicines prescribed by a traditional healer are called muthi. They may be employed in healing as warranted in the opinion of the herbal specialist or inyanga. Muthi is a term derived from a Zulu word for tree (Richter, 2003). African Traditional healers make extensive use of botanical products but the medicine prescribed by an inyanga may also include other formulations which are zoological or mineral in composition. Traditional medicine uses approximately 3,000 out of 30,000

species of higher plants of Southern Africa (Makhubu, 2013; Carmady & Smith, 2011). Muthis are prepared, and depending on the affliction, a number of purification practices are administered. The healer, through dreams, or during prayers, is advised of an auspicious time for collecting the plants, and in some cases is told which particular plants to collect for a specific patient and where these plants are located. The healers supplement the advice from an ancestral spirit with their own knowledge, training and experience (Wreford, 2007; Carmady & Smith, 2011).

Treatment depended on the location of the cancer. Reference is made to medicine to drink in order to kill cancer of the blood before they can treat a specific cancer. Others do steam treatments and lotions to apply to sores. A boiled mixture of roots of *mokgalo, sekanama, mathuba difalo,marokulu-pudi* and *majana* (rooi stroom) are use as a general treatment for cancers (Booyens, 1991). Traditional healers in South Africa believe that their treatments are effective as long as the patient comes in the early stages (Cumes, 2012). Bathing, the herbal mixtures are added to bath water to purify the patient. Some of the preparation is use to induce vomiting to cleanse and tone the system. Medicinal herbs are commonly inhaled by steaming them in a bucket of boiling water (Richter, 2003). A blanket is used to cover the patient and container. Hot rocks or a portable stove may be included to keep the bucket boiling. The patient sits under the blanket, breathes in the herbal mist and sweats. Nasally, a mixture of plants can be taken dried and powdered as snuff (Truter, 2007). Some are taken to induce sneezing which may traditionally be believed to aid the eviction of disease. Others are taken for the common conditions such as headaches. Enemas, infusions and some decoctions are commonly administered as enemas. The enema is a preferred route of administration of certain plant extracts, as it is believed they are more effective when administered this way. Cuttings, extracts or powders are directly applied to small cuts made with a razor blade in the patient's skin (Cumes, 2012).

2.6.5.2 Spiritual healers

Though herbalists have traditionally offered the most ready treatment of illness, pre-modern traditional beliefs stressed the combination of spiritual and physical healing (Richter, 2003).In rural communities where spiritual and tribal leaders are revered, the use of prayer, ritual and herbal remedies is common. Witch doctors tell patients with tumours to treat it like a boil, and just put some herbs on it (Truter, 2007). In Ghana, Mali, Nigeria and Zambia, the first line of treatment for 60% of children with high fever is herbal medicines (WHO, 2002). Others are told simply to pray for the tumour to be taken away by God (WHO, 2002). Spiritual practices tend to improve parents' coping skills and social support, foster feelings of self-reliance and hope, encourage healthy behaviour, reduce feelings of dejection and anxiety, and support a sense of relaxation, alleviating stressful thoughts and promoting healing ones (Cannon, Darrington, Reed & Loberiza, 2011).

2.7 Cultural beliefs about cancer in children

Every cultural group has different belief systems with regard to health and healing in comparison to the Western biomedical model of medicine. According to Vaughn, Jacquez & Baker (2009), people attribute causes of illness to factors within individuals themselves, for example bad habits or negative, factors within the natural environment. For example pollution and germs, factors related with others or the social world for example interpersonal pressure, medical facilities, and actions of others and supernatural factors including God, destiny, and indigenous beliefs such as witchcraft or voodoo (Helman, 2001; Nathan, Ford & Henderson, 2009). Westerners tend to attribute the cause of illness to the individual or the natural world whereas individuals from non-industrialized nations are more likely to elucidate illness because of social and supernatural causes (Nathan, Ford & Henderson, 2009).

A study comparing African Americans, Latinos and Pacific Islanders with White Americans on causal attributions of illness, the ethnic minority groups rated supernatural beliefs as considerably more significant than White Americans (Landrine &

Klonoff, 1994). In a study of British lay perceptions on health and recovery from illness, Furnham found that strength of religious beliefs tend to predict fatalistic or supernatural health-related beliefs. Health beliefs across cultures of Britain, Uganda and South Africa established the fact that Africans are more likely to attribute illness to evil others (Helman, 2001).

In Ghana and other African countries, having cancer is believed by many to be a curse. The affected would therefore resort to various traditional and religious practices. Children with cancers in sub-Saharan Africa often present with advanced-stage disease (Amporful, 2013). Parents' reactions to children's diagnoses of cancer are mix of emotions including shock, denial, and worry. Delay in presentation is often caused by cultural beliefs and misinformation, and patients are often seen first by traditional healers (Hadley, 2012; Amporful, 2013). They would usually seek medical attention when all other means have failed. It is usually too late. This only reinforces the belief that cancer is a curse and the affected person would surely die if care is sought at a health care facility (Amporful, 2013).

In Ghana, Nigeria and other African and western countries, childhood cancer is rare or unheard of. There is a low level of awareness of childhood cancer. This was evident by people's reaction when the physicians informed them about their child's diagnosis (Ali, Atkin, & Neal, 2006). Parents are mostly shock and surprise and do not expect such an illness to come upon children. Some question and cannot understand how a child can get cancer. Generally, people believed that only adults after a certain age could possibly get such a disease (Ali, Atkin, & Neal, 2006; Banerjee, Watt, Gulati, Sung, Dix, Klaassen, & Klassen, 2011).

In some cultures, most people appear to think that there can be no infirmity worse than cancer owing to the fact that cancer is an incurable disease. In comparison with other diseases, people thought cancer is the worst possible diagnosis (Kim, Sherman & Taylor, 2008). Cancer is perceived to be an untreatable disease that is not survivable. On hearing about their child's diagnosis, parents think they would certainly lose their child to cancer (Banerjee, Watt, Gulati, Sung, Dix, Klaassen, & Klassen, 2011). They feel a sense of loss coming to their lives and fear that their child's life would come to a

definite end. Some do not believe there are treatments or medications available to cure childhood cancers (Dix, Klassen, Papsdorf, Klaassen, Pritchard, & Sung, 2009).

People find it very difficult to talk about cancer within their communities. One cannot mention the word 'cancer' loudly. The term cancer is not easy to hear or verbalise. The word cancer itself is bad. People fear that their children may be discriminated against and are uncertain of how others would respond or cope with hearing about their children's diagnoses. They are troubled other children would not play with their children because of the cancer (Banerjee, Watt, Gulati, Sung, Dix, Klaassen, et al, 2011).

Many people see the disease as a spiritual punishment. Cancer is understood through religion. They think someone has done erroneous and that is the outcome thus God is punishing them (Banerjee, Watt, Gulati, Sung, Dix, Klaassen, et al, 2011). Some people questioned whether their children's cancers were consequences of their own or their children's mistakes in their past or present lifetime. Few others feel that probably they did not do something right at some point in their life and that God is not pleased with them, hence believe that cancer is a form of punishment from God (Amporful, 2013). Due to these beliefs, they rely on traditionalist for help.

2.8 Training of Oncology nurses

2.8.1 Globally

Nurses earn a three-year bachelor of nursing degree to enter the profession (Gaff, Aittomaki & Williamson, 2001). Once one had completed the nursing programme, the next step is to take the state nursing exams; passing these gives one a practicing certificate (McLeod, Tapp, Moules & Campbell, 2010; Gaff, Aittomaki & Williamson, 2001). The nursing license allows one to practice throughout the country. After the basic and experiences gained one is due for further education and choose a specialty area of interest. Education is not free, but the government subsidizes the training and funds are allocated for postgraduate nursing education (MacKay & Gregory, 2011). Nursing Coun-

cils regulate continuing competence and requires nurses to upgrade themselves every three years (Nurses' & Midwives Council of Ghana, 2010).

2.8.2 Developing countries and Ghana

In developing countries Nigeria, Zimbabwe, Zambia, nurses are allow to specialise in an area of interest. Professional nurses are allow to further their education after serving for some number of years. This is subsidised by the government (Gaff, Aittomaki & Williamson, 2001). In Ghana, there are public and private colleges and universities that offer nursing programmes. Colleges offer three-year diplomas and universities offer four-year nursing degrees programmes. The programmes are not free, but the government subsidizes education at public institutions. After education is completed, there is a professional nursing exam that is conducted, and regulated by the Nurses and Midwifery Council of Ghana (Nurses' & Midwives Council of Ghana, 2010). After a nurse earns a nursing degree, he or she can continue to specialize in oncology. Becoming an oncology nurse in Africa involves on-the-job training with certification of chemotherapy administration being done within the institution. However, is not so in some other African countries like South Africa, Nigeria, etc., (Ghana web, 2010). Nurses are encouraged to take advanced training through a postgraduate program at university, but this is not compulsory (Ghana web, 2010).

The process of becoming an oncology nurse in Ghana is a bit different (Ghana web, 2010). A general nurse is trained-on-the-job then sent to South Africa to study the oncology nursing for two years and this depend on the needs of the facility (Ghana web, 2010). Currently Ghana has three academic hospitals, but only two offer oncology services (Ghana web, 2010). Based on need and available funds, a nurse may be sent to South Africa for two years of oncology training. The training is expensive and mostly funded by the hospital and sometimes by the International Atomic Energy Agency. At the time of writing, there are only three (3) oncology specialist nurses while the rest were trained on the job (Ghana web, 2010).

2.9 Nursing management of Paediatric cancer

2.9.1 Assessment and nursing diagnosis

The nurse uses systematic and dynamic ways to collect and analyse data about the child and the family, which is the first phase in delivering nursing care. Assessment includes not only physiological data, but also psychological, socio-cultural, economic, spiritual as well as life-style factors (Seaback, 2013; Zator, 2014; Ackley & Ladwig, 2014). The nurse involves the child's family in the care and the family is interviewed by the nurse to source information about child's condition. The nurse categorises patterns in data, formulates initial ideas and document findings (Seaback, 2006; 2013; Zator, 2014). The assessment goes hand in hand with the nursing diagnosis which is also a recommendation by the nurses' and midwives council of Ghana and has been included in the nurses' job description (See Appendix D). The nursing diagnosis is the nurse's clinical judgment about the client's response to actual or potential health conditions or needs. The diagnosis is the basis for the nurse's care plan. Nursing diagnosis involves analysis of collected information (Herdman, 2012; Seaback, 2013; Zator, 2014). This is where the child and the family's problems and strengths are described by the nurse. The nurse uses critical thinking and decision-making skills in developing nursing diagnoses. After analyses of data, the nurse makes a list of nursing diagnoses which pave way for planning and setting objectives towards achieving expected outcome (Seaback, 2006; ANA, 2010; Reed, 2009; Seaback, 2013).

2.9.2 Planning

Planning is the stage of the nursing process includes identification of priorities, determination of appropriate patient-specific outcomes and interventions. Nurses in collaboration with patient, family and the rest of the health care team meet and determine the urgency of the problems identified (Ackley & Ladwig, 2014). Based on the assessment and diagnosis, the nurse sets measurable and achievable short- and long-range goals for the patient and family (Seaback, 2013; Zator, 2014). Mutual goal setting along with symptom pattern recognition and triggers helps prioritise interventions and

determines which interventions are going to provide the best outcome (Ackley & Ladwig, 2014). The nurse prioritises the nursing diagnoses, identifies short-term and long-term goals and expected outcomes and determines nursing interventions that addresses the problem or prevent a potential problem (Moorhead, Johnson, Maas & Swanson, 2013; Perry, Potter, & Ostendorf, 2014). Assessment data, diagnosis, and goals are written in the patient's care plan so that nurses as well as other health professionals caring for the patient would access to it (See Appendix D). Goals are patient and family centred (Reed, 2009; Seaback, 2006; 2013).

Planning is done with patient, family and the multidisciplinary team to maximise efforts and understanding, and increase compliance with the proposed plan and outcomes. A successful care plan must identify measurable goals and outcomes, and nursing interventions. Outcome must be specific, measurable, attainable, realistic and timed (Ackley & Ladwig, 2014). Once problems are prioritised, patient's outcome is easily identified then the nurse decides what interventions to employ. The nurse must document the actual care plan, including prioritised nursing diagnostic statements, outcomes, and interventions to ensure continuity of care (Ackley & Ladwig, 2014). Planning patient's care is vital and therefore was included in nurses' job description by the nurses and midwives council of Ghana (See Appendix D).

2.9.3 Implementation

Implementation of nursing care is carrying out the particular, individualised mutually concurred-on interventions in the care planned on patient. The implementation phase of the nursing process is where the actual nursing care is given or delivered (Ackley & Ladwig, 2014). This phase involves implementation of the nursing care plan (Seaback, 2013; Zator, 2014). As planned interventions are performed, the nurse continues to review the child's condition before, during and after each intervention is carried out (Reed, 2009; Bulechek, Butcher, Dochterman & Wagner, 2013). Effectual communication enhances nursing care. Throughout implementation of nursing care, the nurses' liability is to effectively communicate with patient and family and the health care team (Perry, Potter & Ostendorf, 2014; Boztepe, 2009) Nursing care is implemented

according to the care plan, so continuity of care for the child and family during hospitalization and in preparation for discharge needs are addressed (See Appendix D). Care is documented in the child's record. The child's response both negative and positive is documented (Seaback, 2006; Funnell, Koutoukidis, & Lawrence, 2009; Seaback, 2013; Zator, 2014). Nursing care implementation forms part of the nurses' job description in Ghana (See Appendix D).

2.9.4 Evaluation

Evaluation is the last stage of the nursing process even though is occurs at the end of the nursing process, it runs throughout all the stages. Evaluation of nursing intervention is essential because it alerts the nurse on the progress in patient's condition therefore was also included in the nurses' job description in Ghana (See Appendix D). The nurse re-examine patient and in order to know the effectiveness of the care planned on the patient (Ackley & Ladwig, 2014; Perry, Potter & Ostendorf, 2014). Both the child's status and the effectiveness of the nursing care are continuously evaluated (Seaback, 2013; Ackley & Ladwig, 2014). It requires comparison of child's current state with the stated anticipated outcomes and results in modification of the plan of care to enhance progress toward the stated goals (Funnell, Koutoukidis & Lawrence, 2009). The nurse reactivates each step of the nursing process if the set goal was not met or partially met. The nurse collects data or information to determine why the goal was not met and what modifications to the care plan are required (Seaback, 2006; 2013; Zator, 2014). Nurses conduct discharge care evaluation by comparing patient's condition before and after treatment. The patient and family are capable of often telling the nurses how the intervention helped or did not help. With this, the nurse reassess the mutual set goals to determine whether the set goals were measurable, attainable, realistic and whether an ample time was allow for a positive outcome of intervention (Ackley & Ladwig, 2014: 10; Perry, Potter & Ostendorf, 2014).

2.9.5 Discharged care plan

Discharge care planning facilitates the transfer of patient from a health facility to the most self-sufficient stage of care, whether in the home or to another health facility (Gibbens, 2010). From moment of admission, nurses assess patient's discharge requirements by means of nursing history and consultation with patient and health care provider (Perry, Potter & Ostendorf, 2014). Psychosocial support structure, physical health, functional status, monetary resources, health standards, cultural and ethnic milieu, level of education and obstruction to care that are needed by patient and family are assess. This is to offer patient with the overall suitable quality of care all through the stages of illness. This involves identifying long-term goals (Ackley & Ladwig, 2014; Perry, Potter & Ostendorf, 2014). This is done by promoting continued restoration care and problem resolution through home health, physical therapy, follow-up schedules and other referral sources. The nurses plan for the present needs of the child and the families (Perry, Potter & Ostendorf, 2014). The nurses consider potential needs of the child and the families. The nurses coordinate needs with appropriate personnel depending on the needs of the client. The nurses initiate referrals to community services and are in touch with the client and families. This begins from the day patient and the families visit the hospital for the first time (Perry, Potter & Ostendorf, 2014; Seaback, 2006; 2013). Discharge care plan progress with patient and family, and ongoing communication about patient's health improvement is extremely important (The Joint Commission, 2012a). Discharge care plan when done effectively, reduce hospital readmission and enhance patient's satisfaction (Rose & Haugen, 2010). Nurses comprehensively assess patient's health care needs at discharge; categorize accessible and necessary resources, and connect patient and family to the appropriate resource. Before a patient is discharge from the hospital, patient and family need to know how to manage care in the home and what to expect in regards to any continuing physical problems (Rose & Haugen, 2010; Perry, Potter & Ostendorf, 2014).

2.10 Support systems

Having a child who is diagnose with cancer and losing him or her because of cancer is a difficult experience for families, which they cannot cope with easily with this, both patient

and family need continuous counselling in order to cope with the situation. Following the cancer diagnosis, the family begins to experience a variety of losses, the most significant of which is the demise of the child (Perry, Potter & Ostendorf, 2014). Grief is experienced either at the threat of losing a beloved child, shutting a bright future of the child, future dreams, child's education if the child is of school going age, and happiness, everything come to a halt due to cancer. Grief includes many painful emotions such as anger, desperation, guilt, isolation, anxiety, and depression (Kehl, 2008). Patients and their families need to be supported psychologically, physically, and spiritually by nurses in order to encourage them through treatment and beyond.

2.10.1 Child

Children diagnosed with cancer need special attention due to the condition and the situation in which they find themselves. These children need love and patience to pick up with others in their societies specially those of school going age (Katz & Gonzalez-Morkos, 2009). The child's schoolteacher and the principal of the school are inform about the child's condition, treatment and the side effects of the treatment on the child in writing. The number of days that the child will be away from school and type of cancer must be state in the letter (Noll, 2009; Upton & Eiser, 2006; Katz & Gonzalez-Morkos, 2009). This helps the child keep up with schoolwork even while in the hospital, and at home before going back to school. The child's teacher is educated about changes in the child's physical appearance and the special needs of the child (Upton & Eiser, 2009).

The child will be prone to infection so the teacher and the child are educated on being selective in terms of choosing playmates and what foods to avoid in school (Leigh & Miles, 2002; Katz & Gonzalez-Morkos, 2009). When there is an outbreak of infection in the child's school, the cancer child is allow to be absent from school for few days. The child is excuse from certain physical education activities to avoid severe fatigue (Upton & Eiser, 2006).

2.10.2 Family

Nurses encourage the families to open up to their friends about the condition of their child. The support of the community can make the family feel cared for, valued, and appreciated during a time of stress. A community is made up of friends, extended family, neighbours, parents and teachers from school, members and leaders of religious institutions, work place, and other social groupings (Brown, Nesse, Vinokur, & Smith, 2003). Families that receive social support copes better, feel less depressed and less stress. Good social support can help improve the quality of care that parents can provide their family (Brown, Nesse, Vinokur & Smith, 2003). Siblings of a sick child cope better when they and their parents get help from others (Barrera, Fleming & Khan, 2004).

When thinking about supporting a family, one must think about the entire family. The cancer from the mother and father, to siblings and the child who is sick affects everyone. Each family member possibly has a way of coping. Mothers have the most difficult time throughout the period following the child's diagnosis and at the start of treatment (Barrera, D'Agostino, Gibson, Gilbert, Weksberg, & Malkin, 2004). However, once treatment starts, mothers usually focus on treatment-related needs and psychological distress diminishes. Having help and support from friends and family has substantially improve how mothers adjust to the challenges of having a child with cancer, and their closest friends and family play a predominantly significant role (Glajchen, 2004; Barrera, D'Agostino, Gibson, Gilbert, Weksberg & Malkin, 2004).

Fathers frequently try to maintain work and the mother will sometimes have to cut back or leave her job (Brody & Simmons, 2007; Limburg, Shaw, & McBride, 2008). Mothers often look for support from family and friends, while fathers tend to appreciate support from healthcare professionals, extended family members, and church communities (Taylor, 2011; Klassen, Klaassen, & Dix, 2008).

2.11 Health education

Health education and teaching of patient and family are very essential interventions in nursing. The nurse is responsible for educating patient and family about home care. The nurse provides information and resources by collaborating with patient and family in order to address patient's health needs (McKinney, 2010). This session identifies patient and family's knowledge about the disease, treatment and medications. Patient and family teaching is to encourage health behaviour and self-care by involving patient and family in decision-making that improves health out-comes (Perry, Potter & Ostendorf, 2014). Family and child education is on infection risk, preventive measures, nutrition and response to fever. They are educated about the side-effects of the treatments and how to cope with them (Langhorne, Fulton & Otto, 2007).

According to The Joint Commission, (2012), principles for patient and family teaching comprise consideration of needs, functional abilities, learning styles and the patient and family's willingness to learn. Patient and family teaching based on the assessment and then education given on safe and efficient use of medications, diet and nutritional alteration, safe use of medical tools, pain management, rehabilitative methods to encourage and improve functional abilities and self-care activities (TJC 2012). It is the responsibility of the entire health care team to teach patients and their families but nurses play a very important role as they are always in contact with the patients and their families. Nurses do this mostly after diagnosis; before chemotherapy administration, surgery, radiotherapy and discharge (Perry, Potter & Ostendorf, 2014; Pittman, 2009; Langhorne, Fulton & Otto, 2007).

2.12 Nurses attitude towards cancer care

Attitudes toward cancer may create a barrier to communication between patients and health care professionals and may influence decision making about referral to specialist services and the selection of appropriate treatments (Ekwall, Gerdtz & Manias, 2008). There has been increasing interest in the attitudes of health professionals and the public, their effects on the quality of care that patients with cancer receive and the effects of attitudes on an individual's likelihood to present with symptoms. Whereas the

public might be excuse for their negativity, one could assume that because of education, health professionals' attitudes would be more positive (McLafferty, 2007).

Professional experience seemed to reinforce attitudes held or even increase nurses' negative attitudes. This is more and more worrying when one considers that staff holding negative attitudes may be likely to make different decisions regarding the treatment and care of patients with cancer than those with positive attitudes, placing low value on the patient and psychological care (Maisels &. Kring, 2005; Griffin & Polit, 2007). Furthermore, it is no doubt that some nurses still hold negative attitude to active treatment, believing that patients are subjected to illness and pain without benefit. Support for nurses is essential to ensure that negative attitudes do not compromise the nature and quality of care that they are rendering to their patients (Ammentorp, Mainz & Sabroe, 2006).

2.13 Summary of the chapter

Ghana is one of the 16 Economic Community Of West African States (ECOWAS) countries in West Africa and formally a British Colony known as Gold Coast. Ghana has a total land surface area of 23,8537square kilometres. The literature review considered the history, political and demographic of Ghana, health services in Ghana, childhood cancers, incidences of childhood cancers, treatment of childhood cancers cultural beliefs about cancer in children, training of Oncology Nurses, nursing management of Paediatric cancers, support system, health education and nurses' attitude globally and in Ghana.

CHAPTER 3: METHODOLOGY

3.1 Introduction

The purpose of the research is to explore the nurses' role in the management of Ghanaian children diagnosed with cancer. This chapter describe, in detail, the research methodology that was used to address the above purpose by describing the research design, setting, population, sample and sampling techniques, data collection process and data analysis as well as ethical considerations.

3.2 Qualitative research approach

Qualitative research is an interpretative methodological approach that is supposed to create more subjective knowledge (McBride & Schostak, 2005; Gillis & Jackson, 2002; Munhall, 2001; Marre, 2011; de Vos, Strydom, Fouche` & Delport, 2005; Taket, 2010). Qualitative research is a systematic, interactive, and subjective approach which is used to describe life experiences, and to present them in a meaningful way (Curtin & Fossey, 2007; Boyd, 2001; Welman, Krugar & Mitchell, 2005; Gillis & Jackson, 2002; Munhall, 2001). It is developed from the behavioural and social sciences as a process of understanding the exceptional, self-motivated, all-inclusive nature of human beings (Marre, 2011; Welman, Kruger & Mitchell, 2011; Curtin & Fossey, 2007; Hek, Judd & Moule, 2003).

3.2.1 Philosophy of Qualitative research

The philosophical base of qualitative research is interpretative, humanistic, and naturalistic (Bickan & Rog, 2008; Curtin & Fossey, 2007; Streubert &Carpenter, 2011). Qualitative researchers trust that fact is both multifaceted and active, and can be found only by studying persons as they intermingle with and within their socio-historical settings (Munhall, 2001; Creswell, 2003).

It is argue that qualitative descriptive studies are less interpretive than other qualitative research studies, as they do not require researchers to go in-depth with their data (Bless & Higson-Smith, 2004; Sandelowski, 2000). According to Burns & Grove (2007), the purpose of descriptive design is to discover and describe a phenomenon in real life status. The exploratory nature of the design is mostly related to the inquisitiveness of the researcher, as his/ her desire to gain a deeper understanding of the phenomenon under study (Bickan & Rog, 2008; Babbie & Mouton, 2001).

3.3 Research design

A qualitative cross-sectional descriptive design was used (Polit & Beck, 2004). Cross-sectional descriptive research is an enquiry which tries to understand how people interpret and make sense of their experiences and the world in which they live in (Polit & Beck, 2004; de Vos, Strydom, Fouche` & Delport, 2005). Cross-sectional designs are used to examine groups of subjects in various stages of development simultaneously. The assumption is that the stages are part of a process that will progress over time (Burns & Grove, 2001; Welman, Kruger & Mitchell, 2011). Selecting subjects at various points in the process provides important information about the totality of the process even though the same subjects are not monitored through the entire (Burns, & Grove, 2007).

Cross-sectional designs involve the collection of data at one point in time. Cross-sectional study is design in a way that processes evolving over time can be inferred, such as when the measurements capture the process at different points in its evolution with different individuals (Polit, & Beck, 2010; Taket, 2010; Wheeldon, 2011). The processes of development selected for the study might be related to age, position in an educational system or growth pattern. Subjects are then categorised by group, and data on the selected variables are collected at a single point in time (Burns, & Grove, 2007).

A qualitative descriptive design was used to assist the researcher to explore and describe the role of the nurse in the management of children diagnosed with cancer in

Ghana. The choice of the qualitative approach was first and foremost determined by the nature of the phenomenon of interest and the research questions (Burns & Grove, 2007). As hinted to in the previous chapter, nursing process is viewed as a form of qualitative process of data collection, which is conducted before, during and after a patient has been diagnosed, admitted and discharged with the objective of assessing the health status of a patient and their families. Whilst making recommendations in order to avoid recurrences of similar case (Welman, Kruger & Mitchell, 2011; Polit & Beck, 2010). The researcher believed that understanding the role of the nurse in that process can only be best depicted through qualitative inquiry owing also to the fact that the word 'role' in itself, also depicts a process. Processes are mostly difficult to quantify because they come with experiences and emotions which must follow a logical order. The researcher also believed that qualitative approach was more appropriate to guide the exploration of this study (Burns, & Grove, 2007; Welman, Kruger & Mitchell, 2011).

The main advantage of cross-sectional design is that it is practical, relatively economical and easy to manage. Others are everything is done in the present, taking a random sample from the population of interest, can be a pilot for future studies, generates hypotheses for future studies, study multiple outcomes and exposures, and can measure prevalence (Burns, & Grove, 2009; Teddlie & Tashakkori, 2009).

However, there are problems in inferring changes and trends over time using cross-sectional design (Taket, 2010). One cannot conclude that in cause and effect or sequence of events, everything is measured at one specific point in time. Cross-sectional design is not good to be used in studies for rare diseases or those that have short duration or short survival (Taket, 2010; Wheeldon, 2011). This is because of the limitation in finding a large number of cases in the population, prone to selection and measurement bias. There is bias during subject selection (Burns, & Grove, 2009).

Qualitative researchers adopt a person-centred and holistic perspective, and this makes the approach an important method in nursing research (Holloway & Wheeler, 2002; Babbie, 2004). Qualitative research has many approaches aiming at exploring behaviour, perspectives, feelings and experiences of people (Leech & Onwuegbuzie, 2009; Taket, 2010). The researcher has to consider the nature and type of the research problem, the skills and training he or she has, and the resources available in order to adopt a specific methodology for the study (Holloway & Wheeler, 2002; Taket, 2010; Wheeldon, 2011). A qualitative design will be used for this study, because the aim is to explore the nurse' role in the management of Ghanaian children diagnosed with cancer in order to identify the gaps in the management in the oncology nurses own perspective. Qualitative research is deemed the appropriate method to use to allow the participants to share their experiences.

3.4 Population and sampling

3.4.1 Population

A study population is the set of elements (people, events, behaviours) that the research focuses on, and to which the result obtained should be generalised (Welman, Kruger & Mitchell, 2011). In this study, the population consisted of all nurses working in paediatric oncology departments in Ghana. The target population is referred to as a sub-set of the study population, which consists of those elements that meet the inclusion criteria to the study (Burns & Grove, 2007). In this study, the target population was all nurses working in paediatric departments at Komfo Anokye Teaching Hospital (KATH) in Ghana (Collis & Hussey, 2009).

3.4.2 Sample/ Participants

Sample selection is the process of selecting the sample from a population in order to obtain information regarding a phenomenon, which represents the population of interest. A sample is defined as the selected group of the unit from the defined population (Polit & Beck, 2006; Collis & Hussey, 2009; Welman, Kruger & Mitchell,

2011). Convenience sampling or opportunistic sampling is the use of readily available people as study participants (Collis & Hussey, 2009; Burns & Grove, 2007). In this study convenience sampling was used to select participants for the study. The researcher used convenience sampling because the participants ran shifts, i.e. morning, afternoon and night shift and therefore those who were on day duty were readily accessible. The sample included oncology nurses with postgraduate diploma in oncology; nurses who had been trained on-the-job; and licensed practical nurses (enrolled nurses) who work in both outpatient and in-patient wards. Parents and caregivers whose children had been diagnosed with cancer and receiving treatment at the department were key informants.

Sample size in qualitative studies is smaller than in quantitative studies, and usually related to the nature of the research questions (Van der Walt & Van Rensburg, 2006; Welman, Kruger & Mitchell, 2011). According to Holloway & Wheeler (2002), sample size does not determine the importance of the study. The researcher anticipates that the sample size would be a minimum of twenty (20) oncology nurses for this study. The sample size may change depending on the saturation of the data (Fain, 2004).

3.4.3 Recruitment of participants

The researcher recruited the participants after Ethical approval was obtained from CPUT Ethical Committee (See Appendix H). The Ethical approval from CPUT was presented to the Ethical Committee of Ghana Health Service for a National Ethical clearance. The Ethical approval from Ghana Health Service (See Appendix I) was in turn presented to the Research and Development Unit of Komfo Anokye Teaching Hospital for registration of the study. Certificate of registration (See Appendix J) obtained from Komfo Anokye Teaching Hospital's Research and Development Unit and permission letter (See appendix G) to conduct the study were submitted to the head of oncology department for access to the research site and participants. The ward in-charge informed potential participants about the researcher. The researcher was

introduced those who are willing to participate to the study. The researcher made appointment (dates and times) to meet participants for interview at a place of their choice, to ensure privacy. Consent form was signed by each participant. Each participant was given information sheet that explains the nature of the research (see Appendix C).

3.4.4 Sampling technique

A sample is a subset of the target population that is selected for the study (Brink, 2006). Sample size in qualitative studies is smaller than in quantitative studies, and usually related to the nature of the research questions (Van der Walt & Van Rensburg, 2006; Welman, Kruger & Mitchell, 2011). According to Holloway & Wheeler (2002), sample size does not determine the importance of the study. The researcher anticipates that the sample size would be a minimum of twenty (20) oncology nurses for this study. The sample size may change to enable saturation of data (Fain, 2004; de Vos, Strydom, Fouche` & Delport, 2005).

The researcher used purposive sampling to select the informants who met the following inclusion criteria:

3.4.5 Inclusion and exclusion criteria

3.4.5.1 Inclusion criteria

- All categories of nurses working at the paediatric oncology outpatients and admission wards of KATH.
- Both male and female nurses working in the department will be included.

3.4.5.2 Exclusion criteria

- Nurse Managers who do not have direct patient contact will be excluded.
- Student nurses allocated to the oncology department will be excluded.
- Non-nursing staff will be excluded.

- Children attending outpatient clinics and those on admission will be excluded.

3.4.6 Selection of key informants

Key informants were selected by the researcher after their permission was sorted and they agreed to share their views with the researcher about the care their children received during and after admission. Only those who could speak English were selected. The informants were used because the researcher wanted to know whether the information that the nurses gave is actually what is being done in the facility. The researcher also wanted to know whether the key informants are satisfy with the care their children received from the nurses.

3.5 Methods of data collection

Various data collection methods in qualitative research are interviews, scenario research, role playing, protocol analysis and participant observation (Holloway, 2006; Welman, Kruger & Mitchell, 2011). In this study, semi-structured interviews and questionnaires were used for data collection (see appendices E and F). The two methods allowed participants to describe their roles and experiences.

3.5.1 Questionnaires

A questionnaire is a research instrument consisting of a series of questions and other prompts for the purpose of gathering information from respondents (Mellenbergh, 2008; Burns & Grove, 2009). Questionnaire is a quick way of obtaining data, less expensive in terms of money and time, participants feel a greater sense of anonymity and are more likely to provide honest answers. Also the format is standard for all subjects and is not depend on the mood of the interviewer (Mellenbergh, 2008; Burns & Grove, 2009; de Vos, Strydom, Fouche` & Delport, 2005). Although questionnaire has a lot of advantages, there are some disadvantages such as low response rate, subject must be literate, respondent may fail to answer some of the items and some may provide irrelevant answers. Questionnaires do not provide opportunity for the researcher to

clarify any item that may be misunderstood by subjects (Mellenbergh, 2008; Burns & Grove, 2009).

3.5.1.1 Development of Questionnaires

The researcher developed questionnaires based on the objectives of the study (appendix E). The researcher developed the questions taking into consideration the nursing process to match up with the needs of the patients and their families. Questions were set from the steps in the nursing process. This is to examine the role of nurses in the hospital during the management of children diagnosed with cancer and their families. The questionnaire was tested among nurses working with oncology patients. Most of the nurses that reviewed the questions agreed that the content and structure of questions would be within the scope of nurses looking after oncology patients.

3.5.2 Interviews

According to Polit & Beck (2010), this method of collecting data involves presentation or oral-verbal stimuli and reply in terms of oral-verbal responses. They can range from in-depth, semi-structured to unstructured depending on the information being sought (de Vos, Stydom, Fouche` & Delport, 2005; Polit & Beck, 2010). There are different types of interviews as follows; personal interviews where the interviewer asks questions generally in a face-to-face contact to the other person or persons and telephone interviews; when it is not possible to contact the respondent directly. In this study, interviews were conducted through confidential face-to-face sessions (Polit & Beck, 2010; Sewel, 2001).

In this study, specific questions was developed to focus interview sessions with nurses and key informants (see Appendix F). the interviews questions would ensure that the relevant topics are covered in the interview (Polit & Beck, 2006; de Vos, Strydom, Fouche` & Delport, 2005). Interview was used to collect data because it allowed respondents to express themselves in detail. The researcher went through the information sheet with study participants and participants were requested to sign a

consent form. The researcher ensured confidentiality and privacy about participant information (see Appendix C).

3.5.3 Process of data collection

The data collection process sequenced five days in a week between 1 to 5 hours per day. Questionnaires were distributed to study participants who voluntarily consented to participate in the study. The researcher distributed the questionnaires to nurses working in the paediatric oncology department. The purpose and the aim of the study were explained to the participants. The researcher put the completed consent forms filled by the study participants under lock and key to ensure confidentiality. The study participants were allowed to complete the questionnaires in privacy and independently, and were allowed as much time they needed to complete the questionnaires.

A pre-interview meeting was organised with all potential informants, where they were briefed about the study using information contained in the information sheet (See Appendix C). At the end of the meeting, the researcher booked an appointment with each participant who agreed to be interviewed. Oral permission to audio-record interview sessions were sought from each participant. The researcher set a place and time that was convenient for the participant for interview. The researcher began the interview on a friendly note by sharing work experiences with the participants in order to allow the participant to settle to expel any anxiety about the interview. On the day of the appointment, the researcher reviewed the information sheet again with the participant. After the review, the participant signed the consent form. The researcher alerted the participant that the interview would take about 45 minutes to an hour of their time and the interview would be audio taped on which all participants obliged. The researcher used numbers e.g. N1, N2, N3 ... where N means nurse and K for key informants in place of participant's name to ensure confidentiality. Questions from the interview guide were used to solicit information in relation to participants' role in the management of children diagnosed with cancer in Ghana. Probing was used where appropriate to aid the flow of information.

At the end of all the interviews, the researcher thanked each participant for their contribution. The researcher then listened to the recorded audio interviews and typed the content into Microsoft word document. The researcher kept the same code that was used on the original manuscripts thus N1, N2. The capturing and typing of data was done according to the order of questions on the interview guide.

After capturing data into Microsoft word document, the researcher created a file with five folders corresponding to the five stages of the nursing process that was used as a framework for the study. Information related to each stage for the informants were captured into the related folders. The folders were further organised and captured into a table format containing five columns. The informants' responses with the corresponding code were captured in the first column. The informants' responses were copied from their transcribed manuscripts and pasted into this column. Thereafter, the researcher reviewed the documents and proceeded with cleaning the data, i.e. removing unwanted information provided.

Following the cleaning of data, the researcher studied the data in order to identify concepts that emerged from the data by using an inductive approach. Similar concepts were highlighted with the same colour. At the end of this exercise, the identified concepts were copied and pasted into the second column of the table. Similar concepts were grouped together in the third column. The fourth column contains the number of times that a concept emerges from the data. These groups of concepts were examined to derive possible categories which were captured in the fifth column. Each category was captured with the emerged concepts. In the last column the researcher captured possible theme with the related interpretation after consulting the literature.

3.5.4 Data protection and Management

Holloway & Wheeler (2002), data management involves transcribing, organising, developing categories and coding data. In this study, the researcher used thematic content approach as a framework to guide the data analysis process (Balls, 2009; de Vos, Strydom, Fouche` & Delport, 2005; Welman, Kruger & Mitchell, 2011). This process of data protection and management began during the data collection process. The completed questionnaires were collected on the same day. The questionnaires were stored securely under lock and key at the researcher's home, as the researcher remained the sole person to access the raw data. The audio tape was stored securely at the researcher's home. The researcher played the audio, listened to it, and transcribed. Transcribing of interviews was done within 24 hours and helps the researcher to be immersed in the data and organisation of the data (Balls, 2009). The transcribed document were sent to respondents for correction and confirmed that content reflect information given during interviews.

3.5.4.1Questionnaires

Close-ended questionnaire responses were analysed with simple descriptive statistics. The researcher read all the questions and ensured that all the questionnaires were completed. Questionnaires that are not completed were separated from those that were completed. The questions were taken one after the other and analysed, e.g. all responses to question 1 were captured together. All close-ended questions were captured on Microsoft excel for data analysis. Data was organised into frequency tables. Open-ended questions were captured on Microsoft Word document and common themes were grouped. The table below (Table 3.5a) shows the relationships between objectives, questionnaire, and information required from respondents (de Vos, Strydom, Fouche` & Delport, 2005; Balls, 2009).

Table 3.5a: Relationship between objectives, questionnaire questions and information required

Objectives	Questionnaire questions	Information required

Explore nurses' role in the assessment of children with cancer for nursing intervention.	Question 8: In your view, what is the purpose of nursing assessment?	Determining patient's problem Formulating nursing diagnosis Plan and give individualised nursing care Provide data for nursing diagnosis
	Question 9: What is the nurses' role during assessment?	Gather information about patient's problems Prioritise patient's problems Plan and give individualised nursing care
	Question 7: Describe how you would conduct nursing assessment of a child diagnosed with cancer.	Interview parents, carers and patients, observation, and physical examination of patient
Examine strategies nurses use to plan nursing care for children with cancer	Question 11: How do you diagnose patient's problem?	Evidence of problems identification during the assessment, use of critical thinking skills of analysis
	Question 12: What strategies do you use in planning nursing care for children with cancer?	Nursing planning activities, gaps or inconsistencies
Review actions taken by nurses during implementation of nursing care	Question 16: Describe some steps you normally take during implementing of nursing care for a child diagnosed with cancer	Coordinating care with other health team members; assess the knowledge and skills needed to implement the plan; prepare the patient; prepare the environment
	Question 20: describe your nursing focus	Patient-centred, goal oriented and safe for the patient
Determine processes nurses use to evaluate nursing care given to children diagnosed with cancer	Question10: What is the purpose of evaluation?	Patient's progress towards achievement of stated goals/ outcomes and to judge the effectiveness of the nursing orders, strategies and the care plan
	Question 24: Describe your understanding of quality assurance in nursing care of children diagnosed with cancer	Patient-centred care, delivering the care systematically toward the set goals of patient Systematic evaluation of care given to the patient
	Question 24a: Describe the nurses' role in relation to quality assurance.	Standards of care; to deliver safe, effective, quality care; document care that is given; quality of care using quality assurance tools, example the nursing process
Objectives	**Questionnaire questions**	**Information required**

Scrutinise protocols in place to guide nursing interventions	Question 30: Are there policies or guidelines in place to inform on nursing management of children diagnosed with cancer?	Evidence that nurses are aware of policies, if any
	Question 30a:Mention and describe the uses	The nursing care plan Determine patient's progress towards achievement of stated goals/ outcomes and to judge the effectiveness of the nursing orders, strategies and the care Systematic evaluation of care given to the patient
Assess types of evaluation of nursing care	Question 22: How do you evaluate nursing care given to a child?	Evaluation of nursing care daily, review of nursing intervention
Determine actions taken during discharge care planning	Question 25: Describe the action you take in planning the discharge of a child diagnosed with cancer.	List arrangements made, e.g. outpatients appointment, medical social worker, community nurse visits, school nurse
	Question 27: list some support services provided to child diagnosed with cancer that is able to speak and understand	Counselling for patient, parents and carers, cancer support group meetings
Explore processes used for health education of the child, parents and carers	Question 26: What health education programmes do you have for children, parents and carers?	Education sessions about the disease, use of pictures, simple language and local dialects, how to care for the child at home, diet, personal hygiene, school, and living a normal life, playing with other children, child's self-image
Appraise nurses' attitude towards care of children diagnosed with cancer	Question 33: In your view, how do other nurses react to caring for children diagnosed with cancer?	Fear, anxiety, or sadness, giving additional attention to details, and over-protectiveness

3.5.4.2 Interviews

The researcher transferred the recorded audio data onto the computer and listened to each respondent's data again in order to compare it to the written documents. The researcher typed the manuscript into Microsoft Word document. After transcription, the researcher sent the transcribed document to the respondent to verify and they

confirmed. The researcher created a file with five folders corresponding to the five phases of the nursing process as it is the framework for the study. Information relating to each phase for the participants was captured into the related folder. These folders were further organised into a table format, which contained five columns. The researcher captured possible theme with the related interpretation after the literature was consulted. The table below (Table 3.5a) shows the relationships between objectives, interview questions, and information required from respondents (de Vos, Strydom, Fouche` & Delport, 2005).

Table 3.5b: Relationship between objectives, interview questions, and information required.

Objectives	Interview questions	Information required
Explore nurses' role in the assessment of children with cancer for nursing intervention.	Question 1: What are the roles of nurses responsible for looking after children with cancer?	Gather information about patient's problems Determine patient's problem Formulating nursing diagnosis Prioritise patient's problems Plan and give individualised nursing care Determine patient's normal function Determine potential problems Patient initial contact and continues thereafter Observation, interviewing and examination Provide data for nursing diagnosis
Examine strategies nurses use to plan nursing care for children with cancer	Question 3: how do you go about planning nursing care for a child diagnosed with cancer, and do you involve members of the multidisciplinary team?	Use of identified problems during planning phase; diagnostic statements Use of critical thinking skills of analysis Comparing data against standards analysing data after comparing with standards Identifying gaps or inconsistencies in data. Determine health problems, risks, and strengths
Review actions taken by nurses during implementation of nursing care	Question 8: How do you involve family members and carers in the care of patients on your ward?	Review and validate the plan with other health team members; assess the knowledge and skills

		needed to implement the plan; prepare the patient; prepare the environment Patient-centred, goal oriented and safe for the patient
Objectives	**Interview questions**	**Information required**
Scrutinise protocols in place to guide nursing interventions	Question 2: What are some of the treatment guidelines in the management of childhood cancers and how do you go about it?	Determine patient's progress towards achievement of stated goals/ outcomes and to judge the effectiveness of the nursing orders, strategies and the care plan The planned and systematic evaluation of care given to the patient Assist in development of standards of care; to deliver safe, effective, quality care; to document care that is given; to evaluate the quality of care using quality assurance tools, example the nursing process. Systematic method of planning, delivering, and evaluating individualised care for client in any state of health or illness; holistic nursing care and meeting the set goal using
Assess types of evaluation of nursing care	Question 10: do you conduct daily evaluation of nursing care?	Daily evaluation of care, review of nursing interventions
	Question 11: once the child is discharge, do you conduct evaluation or effectiveness of care given during admission?	Discharge care planning undertaken, nurses meeting to discuss care given
	Question 12: In what ways do you think nursing care interventions could be improved?	Nurses views on how care for children diagnosed with cancer could be improved during admission
Determine actions taken during discharge care planning	Question 5: describe for me, follow-up care arrangements made for patients and their families after discharge	List arrangements made, e.g. outpatients appointment, medical social worker, community nurse visits, school nurse
	Question 6: kindly, explain some of the support systems put in place to assist parents and carers after a child is diagnosed with cancer	Counselling for parents and carers, cancer support group meetings
Explore processes used for health education of the child, parents and carers	Question 7: How do you go about educating children and their families about the disease?	Education sessions about the disease, use of pictures, simple language and local dialects, how to care for the child at home, diet,

		personal hygiene, school, and living a normal life, playing with other children, child's self-image
Appraise nurses attitude toward care of children diagnosed with cancer	Question 4: In your view, what is the general attitude of nurses towards children diagnosed with cancer?	Fear, anxiety, or sadness, giving additional attention to details, and over protectiveness

3.5.4.3 Key informants interviews

The researcher listened and transcribed the recording at the end of each interview session. The transcribed document was sent to each informant and was verified. The key informants' responses were grouped into similar themes as identified from the nurses' responses to enable comparison of information given. The table below (Table 3.5b) shows the relationships between objectives, interview questions, and information required from key informants.

Table 3.5c: Relationship between objectives, key informants' questions and information required

Objectives	Key informant questions	Information required
Explore nurses' role in the assessment of children with cancer for nursing intervention.	What does the nurse do whenever your child reacts to a treatment and you bring him/her to the hospital? Probing ques.; what is the reason you think the nurse ask those questions?	The nurse asks questions about my child's health to know what is wrong. The nurse look at my child and touches my child to know where the problem is Determine what the child's problem is and the cause
Examine strategies nurses use to plan nursing care for children with cancer	How are you involved in the care of your child?	The nurse asks for my opinions whenever she want to do something on my child
Review actions taken by nurses during implementation of nursing care	What does the nurse do any time you complained fears about your child's health?	The nurse educate me about side-effects of the treatment The nurse keep on reassuring me and my child
Determine processes nurses used to evaluate nursing care given to children diagnosed with cancer	What did nurses do each day after your child received nursing care	The nurses ask me and the child how he/ she is fairing to know if the problem persist or gone

Scrutinise protocols in place to guide nursing interventions	How do you know if the care received by your child is satisfactory?	When my child look cheerful and relief from pain The advices from the nurses about my child's health
Assess types of evaluation of nursing care	In what ways do you think the care that the nurses gave to your child could be improved?	Paying more attention to the child's condition, giving holistic care rather than generalising and effective communication with the parents and carers
Objectives	**Interview questions**	**Information required**
Determine actions taken during discharge care planning	Describe to me the arrangements made for follow-up care for the child.	When the child was discharged the nurses arranged for the child to come for review on Outpatient department bases, to see the social worker and home visit
Explore processes used for health education of the child, parents and carers	Did the nurses explain to the condition of the child, and how to look after him/ her?	Yes. The nurses educated us on the condition using pictures on diet, exercises, protection from fall, clothes, personal hygiene and playing with mates both at home and school
Appraise nurses' attitude towards care of children diagnosed with cancer	In your view, what is the attitude of nurses towards children diagnosed with cancer?	The nurses are friendly, welcoming, caring, anxious and encouraging.

3.5.4.4 Triangulation of data sources

According to Barbour (2001), triangulation is used to address the validity of the data collected. Utilising multiple data collection methods leads to an acceptance of reliability and validity when the data from the various sources are comparable and consistent (Golafshani, 2003; de Vos, Strydom, Fouche` & Delport, 2005; Denscombe, 2010). Triangulation in this study consisted of data from questionnaire responses, nurses' interview responses, and key informants interview responses. The three data sources were compared and contrasted for similarities and differences of information given. The processes of analysis were done as follows:

a) Compared questionnaire responses with nurses' interview responses
b) Compared questionnaire responses with key informants' interview responses

c) Compared nurses' interview responses with key informants' interview responses
d) Identified areas of similarities and differences, and any information not confirmed by the other two sources

3.6 Validity, Reliability and Trustworthiness

3.6.1 Dependability

According to Shenton (2004), dependability refers to the consistency of the research findings in the event that the study was to be replicated within a similar context. A study is regarded as trustworthy when the findings of the study are considered dependable (Polit & Hungler, 2006). The dependability of the study was enhanced by related the theoretical, methodological and analytical processes of the study. Tables 3.5.4.1, 3.5.4.2, and 3.5.4.3 show the extent that questionnaires and interview questions are dependable enough to collect data that will address objectives of the study.

3.6.2 Confirmability

According to Polit & Hungler (2006), confirmability is measured by the research findings in relation to the data collected. In this study, confirmability was achieved by associating objectives with questionnaire and interview questions as outlined in Tables 3.5.4.1-3.5.4.3. According to Patel (2008), this clears ensures objectivity and neutrality of data collected.

3.6.3 Trustworthiness

Trustworthiness is concerned with the findings of the research (Collis & Hussey, 2003). It is used in qualitative research in achieving the quality of the study (Polit & Beck, 2008). Trustworthiness is concerned with consistency stability and repeatability of the informants' accounts as well as the researcher's ability to collect and record information accurately (Brink, Van der Walt & Van Rensburg, 2009). According to Brink, Van der Walt & Van Rensburg (2009), it is very difficult to determine validity and reliability in qualitative research. Therefore, measure that taken to ensure validity and reliability of

the study is been presented in Tables 3.5.4.1-3.5.4.3. In addition, once ethical approval is granted the questionnaires were piloted by distributing to nurses in other department of the research site.

3.7 Ethical Considerations

Ethics is a set of moral principles that is used to guide the planning, implementing and evaluating of any research project (Meyer, Niekerk & Naude, 2004). It provides rules and guidelines to the researcher about behavioural expectations and the expected conducts towards participants in the study, co-researchers, research assistants, fieldworkers, institution and sponsors (Meyer, Niekerk & Naude, 2004). The following ethical considerations applied to this research study in order to avoid harm to the participants as lay down by the Helsinki Declaration (World Medical Association, 2008).

3.7.1 Autonomy

Respect for autonomy means that participants must make a free and informed choice to participate (Polit & Beck, 2010). A Qualitative researcher view consent as an ongoing process (Holloway & Wheeler, 2010). The researcher provided participants with an information sheet and all the necessary information about the study. This was for the participants to make an informed decision whether to participate in the study or not to participate (See appendix A). The participants were informed and a digital device or recorder was used to record the interview, for transcription purposes. Written consent was signed by each participant before data collection (see Appendix C).

3.7.2 Beneficence

Beneficence means maximising good outcomes for participants (Holloway & Wheeler, 2010; World Medical Association, 2008). Above all, one should not do any harm. The researcher will explain to the participants that there would be no direct benefit of the study to them, but that the information gathered will be used to improve management of children diagnosed with cancer in future, and guide further research for the

management of children with cancer (see Appendices A and C). Participants were informed that data collected will be kept safe and be destroyed five years after the study.

3.7.3 Non-maleficence

Non-maleficence means avoiding or minimising unnecessary harm or risk (Holloway & Wheeler, 2010; World Medical Association, 2008). The researcher carefully phrased the interview questions and encourage participants, and key informants to ask questions for clarification.

3.7.4 Right to privacy and confidentiality

Confidentiality is a pledge made by the researcher to participants that no information would be made accessible to any third party who is not involved in the study (Leedy & Ormrod, 2005; World Medical Association, 2008). The researcher would be the only person able to link the names with the interviews, and the digital recorder would be kept separate in a safe place and be destroyed after completion of study, after five (5) years. The participants were informed that quotes would be included in the data but there will be no link between the data and their names (Leedy & Ormrod, 2005). The participants' names were substituted with numbers and alphabets according to the order in which they were interviewed, e.g. Participant N1, N2, N3…..and be destroyed after completion of study. The consent forms will also be kept safe and be destroyed after the study (see appendix C). Findings were reported in a way that there were no links of information to any participant. Their names were not be written on any documents of the study (see appendix E and F).

3.7.5 Justice

The principle of justice includes participants' right to fair treatment and privacy. Individual justice in the selection of participants will be employed by the researcher and exhibit fairness in the selection of participants (World Medical Association, 2008). The

research will be conducted on the group that stands potentially to benefit from the findings. Social justice requires that distinctions be drawn between classes of participants that ought and ought not to participate in any particular kind of research, based on the ability of members of that class to bear burdens, and on the appropriateness of placing further burdens on already burdened persons (Polit & Beck, 2010; Polit & Hungler, 2010). The researcher ensured that the selection of participants was based on the research requirements and agreements made with the participants were followed (see Appendix C). Everyone was be treated equally without any discrimination.

3.7.6 Risks and benefits to participants

The degree of risk to be undertaken by participants taking part in the research should not exceed the potential benefits of the knowledge to be gained. Researchers are expected to carefully assess the risk and benefit that may occur during the study before commencing the study (Polit & Hungler, 2010; World Medical Association, 2008). The study will benefit patients by receiving quality care. The nurses in the paediatric oncology department of KATH will use the study as a guide in delivering health care to the patients.

3.8 Benefits and limitations of the study

Patients will benefit from this study because the study is set out to improve the nursing care in order to deliver quality nursing care. The nurses too will benefit and base on the study findings, they may need to be trained, organise workshops to refresh their minds on what quality care is all about in order for them to change their attitude because cancer is a traumatic disease. Some nurses refused to participate in the study. More carers/parents were willing information but could not speak the English language.

3.9 Summary

This chapter outlined the methodology that was used for data collection, protection and management. It concentrated on the two main research designs and clarified why these particular methods and techniques of data collection were used. It also examined how data was assembled into themes of interest which brought meaning to the collected data. The following chapter present the results of the research study.

CHAPTER 4 : RESULTS

4.1 INTRODUCTION

This chapter presents results of nurses' responses to questionnaires, nurses and carers/parents interview of information on nurses' role in the assessment of a child diagnosed with cancer in Ghana. Nursing intervention, strategies for planning care, implementation of planning care, processes and types of evaluation of care, cancer management Guidelines or Policies, discharge care planning, health education, and nurses' attitude toward children diagnosed with cancer in Ghana.

4.2 Demographics

Twenty-four (24) nurses and ten (10) parents/carers voluntarily participated in the study. Two (2) ward managers, one (1) clinical instructor, two (2) nursing officers, eight (8) are senior registered nurses and ten (10) are staff nurses and one (1) enrolled nurse. One (1) of the ward managers was in-charge of the inpatients department for children diagnosed with cancers and the other in-charge of the outpatients department for children diagnosed with cancer. The clinical instructor supervise student nurses on the ward. The two (2) nursing officers, eight (8) senior nurses, ten (10) staff nurses work in the ward for children diagnosed with cancer whilst one (1) senior and one (1) enrolled nurses work in the paediatric oncology outpatients department. Out of the ten (10) carers/parents, six (6) are parents and four (4) are carers of children diagnosed with cancer and receiving treatment at the Komfo Anokye Teaching Hospital in Ghana.

4.3 Nurses' role in the assessment of a child diagnosed with cancer in Ghana

Nurses were required to provide confidential information in response to questionnaires. Those nurses that returned the questionnaires were interviewed. To confirm or refute information provided, carers/parents of children diagnosed with cancer were interviewed for information on how nurses assess their children.

4.3.1 Nurses' responses to Questionnaires

Questionnaires were distributed to twenty (20) registered nurses but only eighteen (18) completed questionnaires were returned. All the eighteen (18) are registered nurses. Three (3) are ward managers; one (1) a clinical instructor, eight (8) are senior registered nurses and six (6) are staff nurses.

Table 4.3a: Assessment of a child diagnosed with cancer (open-ended questions)

Themes	**Vital signs**	**Signs & symptoms**	**Physical examination**	**Previous medical history**	**Family history**
Nurse 1	Nurse took base-line vital signs	Mother described	We do head to toe assessment	Mother provide health information	Ask mother about family history
Nurse 2	Taking the vital signs of the child	Assessing the signs and symptoms of the child	We observe the child's physical appearance	Asking the parents of the child's medical history.	Family history
Nurse 3	We check vital signs	Mother described	We look at the appearance of the child	Asking about child's medical history.	Family records
Nurse 4	Vital signs	Looking out for the signs that the child	By observation	Past and present medical history	Family history

		present			
Nurse 5	Checking of vital signs	Signs and symptoms	Observation	Asking the mother the child's medical history	Ask the mother the family history
Nurse 6	Taking the vital signs of the child	Using the signs and symptoms exhibited by the child	We do physical assessment	Asking of the present and past medical history.	Family histories
Nurse 7	Vital signs	Looking out for signs presented by the child	Physical assessment	Medical history	Ask for family histories
Nurse 8	We check their vital signs	Ask mother about the signs the child presented at home	Observation	Child's health records	Ask mother about family history
Nurse 9	Checking vital signs	Ask mother about changes in the child	Observing the child for abnormalities	Medical history	Family records
Nurse 10	Checking vital signs	Ask mother for symptoms	Check for abnormalities	Medical histories	Family histories
Nurse 11	checking the baseline vital signs of the child	Ask mother about signs and symptoms presented by the child	Head to toe examination of the child	Health records of child	Family history
Nurse 12	We check their vital signs	Signs and symptoms	Physical assessment	Child's medical history	Family history
Nurse 13	Checking vital signs	Ask mother to describe signs and symptoms	Observation	Ask mother about medical history	Family records about health
Nurse 14	We check the vital signs	Signs presented by the child	Observe child for abnormalities	Medical records	Family history
Nurse 15	Vital signs	Ask mother to	Observation	Medical records	Mother

		describe symptoms of the child		of child	narrates family history
Nurse 16	Baseline vital signs	Signs and symptoms	Physical assessment of child	Check child's medical report	Family history
Nurse 17	Checking of child's vital signs	Ask mother about signs and symptoms	Carry out complete head to toe assessment on the child	Ask mother for child's past and present medical history	Ask questions on family history
Nurse 18	Child's vital signs	Signs and symptoms	Observe child for abnormalities	Ask for child's medical report	Ask mother about family history

Table 4.3a presents results on nurses responses to how they assess children diagnosed with cancer on the ward. Concerning types of nursing assessments undertaken, eighteen (18) nurses indicted that they check vital signs. Nine (9) nurses indicated that they review signs and symptoms presented by the child and nine (9) nurses indicated that they inquire carer/parent to narrate signs and symptoms presented by the child. Nine (9) out of eighteen (18) nurses indicated that they conduct observations and the rest of the nine (9) indicated that they conduct head-to-toe physical examination on the child. All the eighteen (18) nurses stated that they review previous medical history of the child; and eighteen (18) nurses indicated that they request carer/parent to give family medical history.

Table 4.3b: Purpose of nursing assessment (open-ended questions)

Themes	**Determining patient's problem**	**Plan and give individualised nursing care**	**Evaluate nursing intervention**	**Planning treatment**
Nurse 1	Identify the problems of the patient	Draw a nursing care plan for the patient.	For proper care and evaluation	To determine a proper treatment plan
Nurse 2	To find problems with the child	Draw nursing interventions to solve them.	To guide the nurse on what to do for the	For proper treatment plan for patient

			child	
Nurse 3	To systematically collect and analyse data about the patient	To figure out patient's problem and give care	To achieve set goals for the child	For excellent treatment planning
Nurse 4	identify client's needs and problems	To give individualise nursing care	To give total quality nursing care	To know exactly what the child needs
Nurse 5	Identify the patients' problems	Nursing intervention	To achieve set goals for the child and the family	For proper nursing intervention
Nurse 6	Determine child and family problems and intervene	Draw a nursing care plan for the child.	Accurately plan care and intervene. To evaluate care at the end of the day	For proper treatment care planning
Nurse 7	To fully diagnose patient's problem	To draw a care that would meet the child and family needs	Evaluate well	Excellent nursing intervention
Nurse 8	To accurately diagnose patient's problems	To give quality and total nursing care.	To meet child and family needs	Good nursing care planning
Nurse 9	Identify patient and family problems	To draw a care that actually address patient's needs	Assess the care rendered	Helps the nurse to plan for treatment
Nurse 10	Identify patient's needs	To take care of the child well	To evaluate care given at the end of the day	To identify what treatment plan should be drawn for patient and family
Nurse 11	To make out patient's problems	Plan and give total nursing care	To achieve set goals for patient	To accurately plan for patient's treatment needs
Nurse 12	For accurate nursing diagnosis	Plan an effective nursing care for patient	To meet patient needs	Adequately plan care that suits patient's condition

Nurse 13	Identify patient's needs	Plan and give care appropriately	To evaluate care given to our patients	To identify what treatment plan is suitable for patient
Nurse 14	To identify patient's problems	To intervene appropriately	To meet patient's needs	To adequately plan treatment for patient
Nurse 15	For nursing diagnosis	To plan an individualise nursing care	To solve patient's problems	Helps the nurse to plan appropriate treatment for patient
Nurse 16	To know precisely what the patient needs are	Plan and give care that meets patient's needs	Meet set goals	To accurately plan patient's treatment
Nurse 17	For problem identification in order to give total nursing care to patient and family	To draw individualise nursing care	To achieve set goals for patient	For proper treatment care plan
Nurse 18	Identify patient's problems	To give individualised care to patient and family	Assess the care rendered at the end of the day	To plan the exact treatment that meet patient's health needs

Table 4.3b set out themes identified from responses on role of nurses during assessment of a child diagnosed with cancer. Eighteen (18) nurses indicated that the purpose of assessment is to systematically identify patients' problems. Eleven (11) nurses indicated that the purpose for assessing a patient is to plan and give individualised nursing care to patient and family. Seven (7) nurses indicated that the purpose is to draw a nursing care plan to intervene patient's problems. Eight (8) nurses indicated that the purpose of assessment is to identify and intervene patient's problem and evaluation of nursing care. Ten (10) nurses indicated that the purpose of assessment is to deliver total quality nursing care to patient and family in order to attain set goals. Eighteen (18) nurses indicated that assessment assist the nurse to accurately plan treatment that meets child's needs.

Table 4.3c: Nurses' role during assessment

Themes	Gather information about patient's problems	Plan and give individualised nursing care	Observation
Nurse 1	Identify the problems of the patient	Draws a nursing care plan to solve patient's problems.	Critical observation
Nurse 2	Identifying the problems with the child	Draw a care that address patient's needs	Observing patient
Nurse 3	Collect data on physiological, psychological, spiritual and some cultural aspect of the patient.	Give individualised nursing care to patient	Checking for abnormalities
Nurse 4	Listen and collect data on patient's problems	Plan a care for patient	Physical examination of the patient
Nurse 5	Taking history and particulars	Plan an individualised care on patient	Observe child carefully
Nurse 6	Identify problems of the child	Plan a care on patient	Physical assessment of child
Nurse 7	Identifying patient's problems	Plan and give nursing care	Observe child and family carefully
Nurse 8	Find the child's problem	Draw a nursing care plan for the child	Observing child's behaviour
Nurse 9	Take note of patient's problems	Planning and implementing	Observation
Nurse 10	Listen circumspectly	Plan and give care	Good observation
Nurse 11	Gather information about patient	Draw a care to address patient's needs	Observe patient attentively
Nurse 12	Identify patient's problems	Draw a care on patient	Observation
Nurse 13	Collect data for nursing diagnosis	Plan and give nursing care	Observe child carefully

Nurse 14	Taking history	Give care	Observation
Nurse 15	Identify problems	Give individualised care	Good observation
Nurse 16	Gather information about patient's needs	Give total nursing care	Physical assessment
Nurse 17	Develop nursing diagnosis	Draw a care on patient to address the problem	Observe well
Nurse 18	Identify patient's problems	Draw individualised nursing care	Proper observation

Table 4.3c presents results of nurses' responses of nurses' role during assessment of a child diagnosed with cancer on the ward. In providing information on nurses' role during assessment, ten (10) nurses indicated that their role is to identify patient's problems. Eight (8) nurses indicated their role as gathering information about patient's needs. Six (6) nurses indicated that their role is to plan and provide individualised nursing care to patient and family. Five (5) nurses indicated that the nurses' role during assessment is to draw a nursing care plan that addresses patient's problems. Seven (7) nurses indicated that their role is to plan and provide nursing care on patient. Fifteen (15) nurses indicated that their role is to critically observe patient. Three (3) nurses indicated that their role is to conduct physical examination on the child and one (1) nurse indicated that one of the nurses' roles is to inspect for abnormalities on the child.

Table 4.3d: Diagnosing patient's problems and intervention (open-ended question)

Themes	**Outcome of assessment**	**Use of critical thinking skills of analysis**	**Observation**	**Questioning mother/ Carer**
Nurse 1	Asking patient to verbalise	Interpretation of vital signs taken	By observation	Asking the mother
Nurse 2	Problem identification during assessment	Interpreting the vital signs	By observing the child	We ask the carers
Nurse 3	Based on the information gathered during the assessment stage	By interpreting the vital signs checked	Physical examination	The mothers tell us

Nurse 4	From the data collected	Vital signs	Physical assessment	We ask carers about the signs the child present at home
Nurse 5	The diagnosis done with patient problem related to the cause	The vital signs	Heat to toe examination	Mother describe during questioning
Nurse 6	Through data collection	By checking vital signs	Physical assessment	We ask the mother
Nurse 8	During assessment	We use the signs and symptoms	By observation	By asking the mother about the signs and symptoms the child is experiencing
Nurse 10	Through assessment	Use of the vital signs and signs and symptoms	Observation	Mother narrate patient's problems
Nurse 11	From information gathered	Analysing data collected on patient	Physical examination	We ask mothers
Nurse 12	During assessment	We analyse the vital signs	Thorough examination	Questioning the mothers
Nurse 13	Base on assessment	We use the vital signs	Through observation	We question the parents
Nurse 14	Problem identify during assessment	Critical analysis of the signs and symptoms	Observation	Mothers describe when questioned
Nurse 15	We identify problems during assessment	We interpret the signs	Proper observation	We ask the mother too
Nurse 16	During data collection, we identify patient's problems	We use the vital signs	Physical assessment	We ask the mother about the child's experiences
Nurse 17	Based on the data	By the use of the signs and symptoms and the vital signs	Physical assessment	We ask the mother

Nurse 18	During assessment	We analyse the vital signs	Head to toe examination	We ask the mothers to describe them

Table 4.3d sets out themes identified from responses on nursing diagnosis and intervention of patient's problems, twelve (12) nurses provided evidence of problem identification during assessment. Six (6) nurses stated that they employ critical thinking skill analysis when formulating nursing diagnosis and relate the same during intervention of patient's problems. Nine (9) nurses indicated that they conduct observation; nine (9) indicated that they conduct physical assessment on children to identify abnormalities. Eighteen (18) nurses indicated that they enquire history from mother/carer to diagnose patient's problem during assessment.

4.3.2 Interviews

The following subsections present results from both nurses and carers/parents on nursing assessment of a child diagnosed with cancer in Ghana.

4.3.2.1 Nurses' response

Only six (6) nurses voluntarily offered to participate in the interviews. Out of the six (6) nurses, two are Principal nursing officer / managers, three are registered nurses working in the children's ward and one (1) is an enrolled nurse working in the out-patient department. Interview responses were grouped into themes based on information provided.

Table 4.3e: Nursing roles

Themes	Check vital signs	Health education about disease condition	Educate parents/carers on Drug administration	Educate on nutrition
EN (OPD)	We check their weight, temperature, their body face area for medication, height and blood pressure, we perform head to toe assessment on the child and ask mother to describe signs and symptoms	We ask them about the family history and child's medical records. Educate the parents about the diagnoses briefly, how the treatment would be given, number of cycles that the child has to take	We educate them on medication and their side effects. Some of the drugs are non-insured so we calculate the amount and give them to go and pay.	We educate them on what they have to feed the children on so that they can be healthy all the time to increase their Haemoglobin because when the Haemoglobin is low we cannot give the chemotherapy.
RN (IP)	We check their vital signs; send them to the lab for their Hb to be checked. We check their weight as well. We ask parents to describe symptoms of child. We conduct physical assessment for abnormalities	We educate them on the disease condition after they narrate the family history and ask about the child's medical records and inform them on what they are suppose to do	We educate them on how to serve medication	We educate them on nutrition so that the child's can be healthy always
RN (IP)	We check their weight, blood pressure and height, observe for abnormalities, ask parents to describe signs and symptoms and get them ready for the doctor.	We educate parents on the disease condition and the treatment regime and their side-effects after enquiring about the child's medical records and the family history	We teach the parents how to serve medicine	We teach them what to feed the child on and what they must not give to the child
PNO	We check their vital	We enquire about the	Explaining the treatment	We educate them on

(Ward-Manager)	signs, weigh them, and send them to the lab and their heights. We take history from the mother about signs and symptoms and observe them for abnormalities	family history and the child's health records. Explaining the condition to the patient and the available treatments, side-effects.	regimen and the side effects of the drugs, the importance of subsequent visit to continue treatment.	nutrition because if the child is anaemic we cannot serve the chemo. So we tell them to feed them well with balanced diet
RN (IP)	We weigh them, check their height, check their vital signs, we ask mothers for the symptoms, physical assessment and get them ready for the doctor	We ask for the medical and family history. We educate them on the condition and the types of treatments we offer and the side-effects.	We teach the mothers how to serve medication and when to serve it	We educate mothers on nutrition and foods that increase the haemoglobin level
PMO(OPD)	we check vital signs, we take history from the mothers signs and symptoms and observe for abnormalities	We educate children and their families about the condition, treatment regimen and their side-effects after the family history and the child's medical history.	We educate them on the treatment regimen and medication	We teach them to feed the children with nutritious diet

Table 4.3f: Nurses' roles (continued)

Themes	Counselling child and family	Wound dressing and pain management	Problem identification, planning, intervention and evaluating care, drug administration
EN (OPD)	We counsel them to allay fear	We do pain management	We identify patient's problem, plan a care, intervene and evaluate care. We plan treatment with patient's mothers and administer prescribed medications.
RN (IP)	Reassure patients and their families to allay their fears and worries and counsel them as well.	Some come at a terminal the stage with ulcers so we care for their wounds and manage their pains.	We determine problems, draw a care, implement and evaluate. We serve medication especially pain medications
RN (IP)	We counsel them all the time so that they would not be too worried	We do daily dressing for those with wounds	We diagnose patient's health problem, plan a care on patient. We evaluate care given. Yes we plan treatment with family. We set the tray ready for intra-theca, and administering drugs.
PNO (Ward-Manager)	Nurses' roles include making the patient comfortable, alleviating pain,	We perform daily routine care such as mouth care, wound dressing etc to those who need it	We identify patient problems, plan an individualised care, intervene and evaluate care given. We also plan their treatments with them We administer chemotherapy
RN (IP)	Psychological care	Pain management, thus palliative care	Administration of cancer drugs. We plan care with the family, identify problems and intervene individually and evaluate care.
PMO(OPD)	We do daily counselling to allay their fears	We teach them what to do when the child is in pain	We serve drugs. We diagnose patient's problem, plan and give individualised nursing care. Evaluation is done after every care that is drawn on patient.

Table 4.3e presents results of nurses' interview responses on nursing roles. Six (6) nurses stated that they check patient's vital signs. Six (6) nurses stated that the ask mothers to describe child's signs and symptoms. Six (6) nurses stated that they inform children and carer/parent about the disease condition. Six (6) nurses stated that they enquire about child's medical history and family history. Five (5) nurses stated that they inform parents/carers about the treatment regimen and their side effects. Six (6) nurses stated that they inform carer/parent about drug administration. Six (6) stated that they inform carer/parent and patient on diet.

Table 4.3f presents the continuation of results of nurses' responses on nurses' roles. Five (5) nurses stated that they offer counselling services to patient and parent/carer. One (1) nurse stated that they reassure patients and their families. Four (4) nurses stated that they control patient's pain and three (3) nurses stated that they perform wound care on those patients who have wound. Six (6) nurses stated that they administer chemotherapy medications as part of their roles. Six (6) nurses stated that they identify patient's problems. Three (3) nurses stated that they plan nursing care and give individualised care to patients; three (3) stated that they draw a care plan on patient. Six (6) nurses stated that they evaluate nursing care. All the six (6) nurses stated that they plan patient's treatment with their parents/carers. Three (3) nurses stated that they conduct physical assessment on patient and three (3) nurses stated that they observe patients for abnormalities.

4.3.2.2 Carers/parents interview responses

Ten (10) carers/parents voluntarily offered to participate in the interviews. Out of the ten (10) carers/parents, six (6) parents, four (4) are carers of children diagnosed with cancer and receiving treatment in the Komfo Anokye Teaching Hospital. Interview responses were grouped into themes based on information provided.

Table 4.3g Carers/parents responses on nurses' role during assessment of children diagnosed with cancer.

Themes	Vital signs	Signs & symptoms	Observation/ physical assessment/ examination	Previous medical history	Family history
KI1	The nurses check the temperature of my child and weigh him	The nurses ask me to describe what is happening to my child	The check the child and touches him to see whether there is pain	The nurse ask me about my child's medical history	The nurse asked me whether we have such
KI 2	They put thermometer in my sister's armpit to check the whether she is hot. They check her weight and send her to the lab	They always ask her what is wrong with her and whether she feels pains. Yes, they ask me too	The nurse sometimes ask her to remove her dress so that they can check her well	They ask about the sicknesses she had in the past	The nurse asked me whether somebody has ever suffered this disease in the family
KI 3	Yes, the nurses check his temperature, weight and height.	They asked him how is feeling. Yes they asked me too and I told them	They nurses checked him thoroughly	They asked me about his health records	Then whether we have the disease in our family and I told them no
KI 4	The nurse check whether he is hot then weigh him	They asked how he is feeling and what happened at home	The nurses ask me to remove his shirt so that they can check him well	They asked me whether he has health problems	The nurse asked about my family history
KI 5	They check the weight, temperature and Bp and send us to the lab	Asked me what the problem was	The checked him from the head to the toe	The nurse asked about his medical records	She asked about family diseases

KI 6	They checked his Bp, weight and hotness	The nurse asked me to describe the what is wrong with my child	She asked me to remove his shirt for examination	The nurse asked for his medical record	She asked about our family history
KI 7	The nurses checked his temperature and weight before we go to the lab	She asked what was wrong with him	She examined him very well	The nurse asked for his medical past records	Then whether we have the disease in our family
KI 8	The nurse checked the weight and temperature	They asked how he is feeling and what happened at home	She looked at his abdomen and palm	The nurse asked about his medical records	She asked about our my family history
KI 9	The nurse check whether he is hot then weigh him	Asked me what the problem was	The checked him from the head to the toe	The nurse asked for his medical record	She asked whether the disease in the family
KI 10	They checked her temperature, Bp, weight and send her to the lab	The nurse asked me to describe what is wrong with my child	She examined her thoroughly	She asked about her medical record from birth	She took our family history

Table 4.3h Carers/parents responses on nurses' role during assessment of children diagnosed with cancer

Themes	Determining patient's problem	Plan and give individualised nursing care	Evaluate nursing intervention	Planning treatment
KI1	The nurses ask me what is wrong with the child	The nurses treat my child well	The nurses always ask how I see my child now	The nurses tell me this is what they are going to do for my child
KI 2	The nurse asked me what is wrong with her	The nurses care for my sister after questioning us	The nurses asked me how my sister is feeling and I told them she is better than before	The nurses are really giving good care to my sister. They told me about the types of treatments
KI 3	They asked him how he was feeling	The nurses did their best for us. They really care for him	After that he told me he felt better when the nurses asked him	The nurses did it in a way that we did not misuse money
KI 4	The nurse asked how he behaved at home	They took good care of my brother	She asked me how I see my brother now	The nurses did what was expected of them to my brother
KI 5	She asked about his behaviour at home	After all that the nurses started caring for my child	She asked me how do I see my child and I told her he is better than how he was	The nurses did well in terms of treatment
KI 6	She asked me to describe how the child was feeling at home before we coming to the hospital	They nurses acted upon my complains	She asked about my child's condition, how he feels now	The nurses told me the types of treatment they have here
KI 7	The nurse asked me to describe my child's condition	She planed and started nursing my child	The nurse asked how my child felt after treating him	They told me the types of medicines and treatments they

				will give to my child
KI 8	They asked him how he was feeling	The nurse cared for my child	She asked how I see my child	I was informed about my child's treatment and how it will be done
KI 9	The nurse asked me to describe what is wrong with my child	The nurses planned a good care for my child	She asked my child was feeling	The nurses planned my child's treatment with me and how long it will take
KI 10	The nurse asked about his condition again	The nurses really gave my child a very good care	The nurse asked me about my child's health	They made known to me the treatment that my child will receive

Table 4.3g presents the results on carer/parents responses on nurses' role during assessment of children diagnosed with cancer. Ten (10) carers/parents stated that the nurses check vital signs of the children. Four (4) carers/parents stated that nurses send the children to the laboratory after they check the vital signs. Ten (10) carers/parents stated that the nurses ask them to describe the signs and symptoms that the child present at home. Ten (10) carers/parents stated that the nurses conduct physical assessment on the children. Carers/parents (10) stated that nurses enquire about the past medical records of the children during assessment. Ten (10) carers/parents stated that nurses enquire about their family health history.

Table 4.3h presents continuation of carers/parents responses on nurses' role during assessment of children diagnosed with cancer. Ten (10) carers/parents stated that nurses ask questions that help them identify child's health problems. The ten (10) carers/parents stated that the nurses plan and give care to their children after problem identification. Ten (10) carers/parents stated that nurses ask them whether the child's condition is improving after each care as a form of nursing care evaluation. Ten (10) carers/parents stated that nurses plan and treat their children accurately.

4.3.3 Triangulation of responses

Table 4.3i: Triangulation of nurses' responses on nurses' role during assessment of a child diagnosed with cancer

	Questionnaire	**Nurses' interviews**	**Parent/carers interview**
Vital signs	Nurse took base-line vital signs. We check their weight, temperature, height and blood pressure.	We check their weight, temperature, their body face area for medication, height and blood pressure	They check the weight, temperature and Bp and send us to the lab
Signs & symptoms	We check their vital signs. Also mother describes it.	We ask mothers to describe the signs and symptoms	The nurse asked me to describe what is wrong with my child

Observation/ physical assessment/examination	By observation, physical assessment, physical examination	We conduct head-to-toe examination on the child and observation	The nurse performed thorough check on the child
Previous medical history	Ask the mother the child's medical history. History from parents	We ask for the past and present medical records of the child	The nurse asked about my child's medical record
Family history	Ask the mother the family history	We inquire about their family history	The nurse asked whether we have the disease in the family
Determining patient's problem	Identify the problems of the patient. To systematically collect and analyse data about the patient	We identify patient and family's problems and develop nursing diagnosis	The nurse ask questions about my child's health and ask me to describe how my child was feeling
Plan and give individualised nursing care	Draw a nursing care plan for the child. To give quality and total nursing care.	We give individualised nursing care to meet patient's needs	The nurses planned a very good care for my child
Evaluate nursing intervention	Evaluate well	We asked the mothers how they see their child before and after treatment	The nurse asked how do I see my child
Planning treatment	Helps the nurse to plan for treatment	We plan treatment with the mothers and inform them about the treatment regime	The nurses planned my child's treatment with me and how long it will take

Table 4.3i presents results on triangulation of nurses' responses on nurses' role during assessment of child diagnosed with cancer. Comparing responses on the nurses' role during assessment of a child diagnosed with cancer of questionnaire responses and interview responses, eighteen (18) nurses indicated that they check vital signs and six (6) nurses stated that they check vital signs. Ten (10) carers/parents confirmed that

nurses check children's vital signs. Nine (9) nurses indicated that they review signs and symptoms; six (6) nurses stated that they review signs and symptoms of the child. Nine (9) nurses indicated that they enquire mothers to describe the signs and symptoms of the child and four (4) nurses stated that they ask the mothers to describe the signs and symptoms of the child. Ten (10) carers/parents confirmed that nurses enquire them to describe their children's signs and symptoms. Nine (9) nurse indicated that they perform physical assessment and nine (9) indicated that they conduct observation of child for abnormalities; three (3) nurses stated that they observe children for abnormalities and three (3)nurses stated that they perform physical assessment to detect abnormalities on the child. Ten (10) carers/parents confirmed that nurses perform physical examination and observe their children for abnormalities.

All the twenty-four (24) nurses indicated that they enquire information on the children's medical records. Ten (10) carers/parents confirmed that nurses enquire information about their children's medical records. All the nurses indicated that they collect information as child's parent/carer narrates family history. Parents/carers confirmed that the nurses enquire information about their family health history. Eighteen (18) nurses indicated that they identify patient's problem; six (6) nurses stated that they identify patient's problem and develop nursing diagnosis. The ten carers/parents confirmed that nurses ask them to describe how the child feels. Eighteen (18) nurses, eleven (11) indicated that they plan and give individualised nursing care to patients; three (3) nurses who were interviewed stated that they plan and deliver individualised nursing care. Seven (7) nurses indicated that they draw a care on patient; and three (3) nurses interviewed stated that they draw nursing care plan on patients. All the carers/parents interviewed confirmed that nurse plan and give care on their children. Twelve (12) nurses provided evidence of problem identification during assessment. Six (6) nurses stated that they employ critical thinking skill analysis when formulating nursing diagnosis and relate the same during intervention of patient's problems. Nine (9) nurses indicated that they conduct observation; nine (9) indicated that they conduct physical assessment on children to identify abnormalities. Eighteen (18) nurses indicated that they enquire history from mother/carer to diagnose patient's problem during assessment.

4.4 Strategies for planning care

Planning care for a child diagnosed with cancer include making decision with patient and family and the multidisciplinary team about when the needs of patient. Nurses and the multidisciplinary team plan treatment with patient and family. Nurses plan and give individualise nursing care to patient and family after thorough assessment.

4.4.1 Nurses' response to Questionnaires

Table 4.4a: Strategies in planning nursing care

Themes	Nursing planning activities	Nursing care plan
Nurse 1	The nursing care plan and carrying out the doctor's treatment plan	We draw nursing care on our patients
Nurse 2	Doctor's treatment plan and nursing care plan	Nursing care plan is what we follow when drawing care on our patients
Nurse 3	The strategies will be based on the needs of the child with the carer as well as that of the family needs.	We use the nursing process to draw care on the patient
Nurse 4	We plan care with the mothers	The nursing care plan
Nurse 5	Involvement of child and parent	Care plan
Nurse 6	The family is involved in planning care for the child whenever the diagnosis is confirmed	Drawing a nursing care plan
Nurse 7	We plan care with family	Drawing a care on patient
Nurse 8	We plan care based on the needs of patient and family	Using the nursing process to draw a nursing care plan for the child.
Nurse 9	We plan patient care together with the family	Us of the nursing care plan
Nurse 10	With regards to patient's needs, we plan the care together with the family	Nursing care plan

Nurse 11	Strategies are based on patient and family needs	Nursing care plan
Nurse 12	We plan care with the family	We use the care plan to draw care on patient
Nurse 13	Depending on patient's problem, a care is planned with the family and other team members	We use the care plan
Nurse 14	We discuss patient's condition with family and plan care together with them	Care plan to intervene patient's problems
Nurse 15	We plan patient care base on the need	We draw care on patient
Nurse 16	Everybody is involved during the planning period	Care plans
Nurse 17	We plan the care together	We use the nursing care plan to draw care on patients
Nurse 18	We plan care with the family for the patient	Nursing care plan

Table 4.4a sets out themes on activities during care planning for children diagnosed with cancer. Nine (9) nurses indicated that they involve parents/carers of children diagnosed with cancer when planning care and treatment. Four (4) nurses indicated that during planning, they involve the multidisciplinary team. Five (5) nurses indicated that care planning for cancer children is based on patients' needs. Eighteen (18) nurses indicated that they employ the nursing care plan to intervene patient's problem.

Table 4.4b: Involvement of child and family in nursing care planning

Themes	**Total nursing care**	**Supportive care**	**Effective care delivery**
Nurse 1	The nurse will be able to give total nursing care.	We counsel them	We involve the family for effective care
Nurse 2	We give care to the whole family because you cannot nurse a child without the family	So they understand and appreciate what is been done	So that the set goals can be met on time

Nurse 3	We give total care to our patients	Continuous counselling	For total recovery of patient
Nurse 4	Quality o care involves considering the entire family of patient	Counselling and showing love to patient and family	We deliver our care effectively
Nurse 5	We give total nursing care to our patients	It helps them to co-operate and understand the need for care	We always want to see our patients smiling then we know the care given was effective
Nurse 6	Total nursing care involves the total family	Counselling	We give systematic nursing care to our patients
Nurse 7	We involve the entire family when caring for the child	Counselling	Quality nursing care delivery
Nurse 8	Because the nursing care given should be a total family involvement nursing.	Counselling the child and the parents	Effective nursing care
Nurse 9	We always involve the family when caring for the a child	For supportive care.	Effective treatment
Nurse 10	You cannot care for a child without involving the care giver	We counsel them	Total quality care delivery
Nurse 11	For a care to be complete, the family must be included so that is what we offer	We support them through counselling	We always ensure that patient's needs are met at the end of the day
Nurse 12	We involve patient's family in our care	counselling	Effective nursing care delivery
Nurse 13	Total nursing care	We always counsel and encourage them not to lose hope	We ensure quality of care for the patient and the family
Nurse 14	Total nursing care is what we offer to our patients and their families	counselling	We always meet patient's needs

Nurse 15	We give total quality care to all our patients	Through counselling	Set goals are always patient and family centred
Nurse 16	We render quality care to our patients and their families	Counselling	We always se goals that meet patient's needs
Nurse 17	We involve patient's family so that the care can be complete	We counsel them	Here quality assurance is assured for patient and family
Nurse 18	Without the family the care given will not be complete	We only counsel them	We give effective nursing care t our patients and their families

Table 4.4b presents the results on nurses' responses on why patients' families are involve during implementation of care. Nine (9) nurses indicated that they involve the families in order to deliver a total quality nursing care; nine (9) nurses indicated that they involve the family so that care given can be complete. Eighteen (18) nurses indicated that the family play a role in giving supportive care to the child hence they involve them during implementing care. Thirteen (13) nurses indicated that they involve the family in order to deliver an effective care to the children and their families. Seven (7) nurses indicated that for set goals on patient to be met, they have to involve the family.

Chart 4.4a: Involvement of child and family in nursing care planning (close ended question)

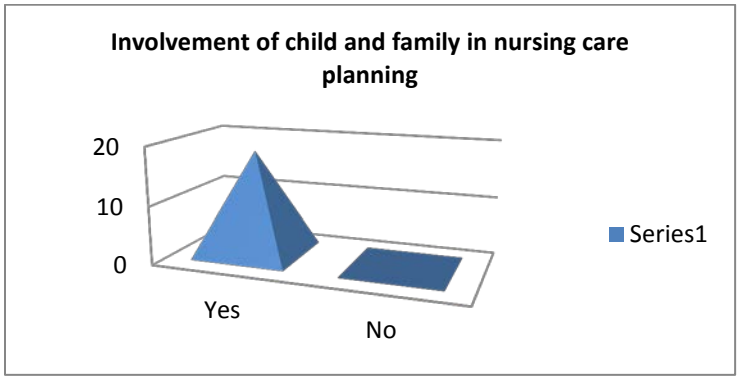


Chart 4.4a presents results of nurses' responses of information on whether child and family are involved in nursing care planning, eighteen (18) nurses confirmed that child and family are involved in planning nursing of their care as reflected in chart above.

4.4.2 Interview responses

4.4.2.1 Nurses response

Table 4.4c present results on nurses' responses on planning nursing care and involving the multidisciplinary team. Six (6) nurses interviewed stated that they plan care for patients following the nursing process. Six (6) nurses stated that parents/carers are involved when planning care for the children. Six (6) nurses stated that they involve the multidisciplinary team when planning care for children diagnosed with cancer. Six (6) nurses stated that they evaluate nursing care.

Table 4.4c: Planning nursing care and involvement of the multidisciplinary team

Themes	Planning a nursing care	Involving multidisciplinary team
EN (OPD)	We do but we do not have an accurate nursing care plan that we use in treating the children but it is an everyday routine. When they are in the ward we check their Hb, blood pressure and temperature but we do not draw care plans on them and we do same to those who come on O.P.D. bases too. We usually plan the care with the family. We evaluate our care at the end of the day	Yes we do involve them.
RN (IP)	Yes we do plan their care. We do feed those who have naso-gastric tube in situ. We care for their mouths depending on where the problem is. We plan care, implement and evaluate. This is done with the carers and mothers	We also work with the multidisciplinary team where doctors, nutritionist, laboratory technicians, the pharmacist.
RN (PI)	Yes. When they come and after doing all the lab investigations and confirmed the type of cancer the patient is	Recently we formed a Tumour Board so we meet every two weeks to discuss with them so the

	suffering from we call the parents and talk to them about their child's condition. We plan care together with our medical team and the parents. Yes we evaluate our nursing care	surgeons, lab technician and the pathologist too come so we discuss all the cases with them. So we involve all of them and they help us a lot and give us our results early enough.
PNO (Ward manager)	Yes, but not all. We follow the nursing process when planning care. We evaluate care given. Yes we plan with the mothers	We have the paediatric oncologist, the radiologist, the pharmacist, the lab technicians and the surgeons who come in but it is not a team for oncology unit alone.
RN (IP)	Planning the nursing care usually starts with assessment base on the problems. After that you develop your nursing diagnosis and render the care. We draw a nursing care plan based on the problem the child present with. Then you evaluate care given. We always work with the parents	Yes we involve everybody, the care givers, the mothers, patient relatives and the multidisciplinary team.
PMO (OPD)	We use the nursing process; we assess the patient, identify patient problems and develop nursing diagnosis after assessing the patient, planned a care, intervene and evaluate at the end of the day and plan again if the first one did not work. Yes we involve them when planning care for the children	Yes. We have a board known as Tumour Board consisting of various personnel.

4.4.2.2 carers/parents' responses

Table 4.4d: Involving family members in the care of children on admission

Themes	Planning care
KI 1	Am the only one who is always with the child and the father is the one who buys the medicines all the time so I would say yes they do involve me.
KI 2	No, they don't consult me whenever they want to do something to her. But when they need some medicine they ask me to go and buy them.
KI 3	Yes they always involve me during decision-making and counsel me all the time because am the one who pays for everything.
KI 4	Yes they do because we are providing money for the medicines so if they don't involve us the treatment would not be complete.
KI 5	Yes they do involve me when they are caring for my child because am always by him and if they do not do that my child would not cooperate with them. Yes, they ask for my opinion
KI 6	Yes the nurses do plan the care with me and ask for my opinion.
KI 7	They informed me about everything. We all take the decision together
KI 8	The nurses tell me everything and ask about my opinion
KI 9	Yes, whenever the nurses are planning something for my child they inform me about it
KI 10	They always involve us when they are discussing about my child and ask me whether I agree.

Table 4.4d presents the results on their involvement during care planning for their children. Ten (10) carers/parents stated that nurses involve them in planning care for their children. Eight (8) carers/parents stated that nurses involve them during decision-making and ask for their opinion about the plan.

Table 4.4e: Triangulation of information sources on planning of care for children diagnosed with cancer

	Questionnaire	**Nurses' interviews**	**Parent/carers interview**
Nursing planning activities	The strategies are base on the needs of the child with the carer as well as that of the family needs. Use words and terms that the child can understand	Planning the nursing care usually starts with assessment base on the problems. After, you develop your nursing diagnosis and render the care. We draw a nursing care plan based on the problem the child present with.	I was part of the team when they were planning my child's treatment The nurses do involve us when planning something because we are providing money for the medicines so if they do not involve us the treatment would not be complete.
Nursing care plan	We use the nursing process to draw a nursing care plan for the child.	We use the nursing process; we assess the patient, identify patient problems and develop nursing diagnosis after assessing the patient, planned a care, intervene and evaluate at the end of the day and plan again if the first one did not work.	They always involve me and ask me for my in-put
Total nursing care	The nursing care given should be a total family involvement nursing. You cannot care for a child without involving the care giver	We allow the carers/parents to stay with their children in the ward	They do involve me when they are caring for my child because am always by him and if they do not do that my child would not cooperate with them.

4.5.3 Triangulation of responses on strategies use in planning nursing care

Comparing questionnaire and interview responses on strategies use in planning nursing care for children diagnosed with cancer, nine (9) nurses indicated that they involve parents/carers of children diagnosed with cancer during treatment and care planning. Six (6) nurses interviewed stated that parents/carers are involved during care and treatment planning for the children. Parents/carers also confirmed that nurses do involve them during treatment planning for the children. Four (4) nurses indicated that the multidisciplinary team is involved during care planning for children diagnosed with cancer. Six (6) nurses interviewed provided evidence that they involve the multidisciplinary team during care planning for children diagnosed with cancer. Parents/carers also confirmed that the multidisciplinary team is involved during care planning. Eighteen (18) nurses indicted that they employ the nursing care plan to intervene patient's problem. Five (5) nurses indicated that care planning for children diagnosed with cancer depends on patient's needs. Six (6) nurses interviewed stated that they plan patient's care according to the nursing process. Parents/carers confirmed that nurses plan care on patients.

4.5: Implementation of planning care

Implementation of nursing care is carrying out the particular, individualised mutually concurred-on interventions in the care planned on patient.

Table 4.5a: Steps during implementation of nursing care

Themes	**Assess the knowledge and skills needed to implement the plan**
Nurse 1	Assessment; diagnosis; planning of nursing care; implementation; and evaluation.
Nurse 2	Assessment, diagnosis, planning, implementation and evaluation.
Nurse 3	Implementation is carried out based on the plan of care for the child and the medical team is involve all the time
Nurse 4	We assess the environment and patient's needs before implementation

Nurse 5	We implement care base on the nursing care planned for the child together with the multidisciplinary team. Communication play a big role during implementation of care
Nurse 6	Assessing the child's problems, diagnosing, planning the care, implementing nursing interventions and evaluating nursing care given.
Nurse 7	We assess the needs of the patient then we plan accordingly. We encourage patient and parents to verbalise their views on the care. We evaluate care given
Nurse 8	Assessment, diagnosis, planning, implementation and evaluation. We communicate with our patients all the time to identify any problem when implementing care
Nurse 9	We assess the environment and put the necessary things in other before we commence with the plan. We always communicate with the patient during care implementation
Nurse 10	We assess the environment first before implementing care
Nurse 11	We assess patient's needs, diagnose problems, plan care to solve the problem, implement and evaluate. We work together with the medical team and keep communication between patient and the team
Nurse 12	We assess, diagnose, plan care, intervene and evaluate
Nurse 13	We go according to the nursing process and change our care if the first one did not work
Nurse 14	Patient's needs are assess, the problem diagnose, care plan, implement and evaluate
Nurse 15	We assess patient before we plan a care. we involve the medical team when planning care and inform them when patient's condition changes
Nurse 16	We follow the nursing process. We assess the needs of patient, diagnose problem, plan, implement and evaluate
Nurse 17	We assess the needs of the patient. We encourage those who can talk to verbalise their feelings to us. We change the plan if not working out. After that we evaluate care
Nurse 18	We plan a purposeful care our patients and communicate effectively to ensure that patient's needs are met. Evaluation is done at the end of every nursing care given

4.5.1 Nurses responses to Questionnaires

Table 4.5a presents results on nurses' responses on implementation of care. Fifteen (15) nurses provided evidence that they systematically employ the nursing process when implementing care on patients. Seven (7) nurses indicated that they keep communication between patient and the multidisciplinary team during care implementation. Four (4) nurses indicated that they involve the medical team during care implementation on patient. Two (2) nurses indicated that they conduct environmental assessment before nursing care implementation. Six (6) nurses indicated that they perform evaluation of nursing care.

Table 4.5b: Involving a child during implementation

Themes	Co-operation	Ensure quality of care	Achieve set goals
Nurse 1	This is done to get the co-operation of the child.	You cannot care for the child without involving him/her. We always involve them so that the care can be complete	We involve children their care to achieve set goals
Nurse 2	Children who can speak and understand are involve during their care	We involve them to ensure quality of care	The needs of the child should be met and this cannot be achieved if the child is not involved in the implementation process.
Nurse 3	We involve them when caring for them	To ensure quality of care,	The needs of the child should be met and this cannot be achieved if the child is not involved in the implementation process.
Nurse 4	So the child will appreciate what is been done	If we do not involve the child we would not know what exactly their problem is so we involve them to ensure quality care	This is done to achieve set goals
Nurse 5	We involve those who can speak and understand during their care	To ensure quality care delivery	To meet patient's needs
Nurse 6	We plan care together	We always involve them so that they understand what we are doing for them	To meet the needs of the patient
Nurse 7	We explain everything procedure to them	We involve them when implementing their care	To achieve set goals

Nurse 8	The treatment is explained to the children who can speak and understand	We always talk to them	For the care to be complete
Nurse 9	Procedures are explained to child to seek for his or her consent before treatment	We talk to them	For total quality care
Nurse 10	You have to speak directly to the child according to age of the child.	This is to gain their attention and to know about how they feel	We ensure quality care delivery
Nurse 11	We explain their treatment to them and anytime we are about to perform a procedure, we explain it to them	We talk to them all the time	To ensure quality of care
Nurse 12	We explain every procedure to them	We involve them	So that the care can be complete
Nurse 13	We explain procedures to them	We always talk o them when implementing care	We do this because we want the care to be of quality
Nurse 14	We inform them about the procedures	We involve them when implementing the care	To ensure quality assurance
Nurse 15	We talk to them about their treatment	We do involve them especially those who can speak and understand	For quality service delivery
Nurse 16	We always inform them about what we are going to do for them	We involve them during implementation process too	So that the need so of patient can be fully met
Nurse 17	Before we perform a procedure,	We involve them	For set goals to be achieved

	we inform them		
Nurse 18	We explain the procedure to them	We always involve them in their care	To achieve set goals for the patient

Table 4.5b presents results on nurses' responses on why children are involve during care implementation. Eighteen (18) nurses indicated that they involve children in order to gain their co-operation during care implementation. Fourteen (14) nurses indicated that they involve children by explaining each procedure to them before implementing. Eight (8) nurses indicated that they involve the children by planning their care with them so that they appreciate what they do for them. Ten (10) nurses indicated that they involve children during care implementation in order to achieve set goals on patient. Eight (8) nurses indicated that they involve children during care implementation in order to deliver total quality care.

Table 4.5c: Activities in which children are involved during implementation of care

Themes	**Counselling**	**Planning and giving treatment**	**Education**
Nurse 1	We involve them during counselling	Treatment giving	education
Nurse 2	Counselling	Treatment planning and giving	Education on procedures
Nurse 3	Counselling	Treatment planning and serving	Education
Nurse 4	Counselling	Treatment planning	We educate them on the procedures
Nurse 5	Counselling	Serving medication	
Nurse 6	Counselling	Treatment planning and giving	Education
Nurse 7	Counselling	Giving treatment	Education
Nurse 8	Counselling	Giving treatment	Education
Nurse 9	Counselling	Serving medication	When performing procedures we educate them on it
Nurse 10	We talk to them	We plan treatment with them	Education
Nurse 11	We counsel them	We involve them during	Education

		medication	
Nurse 12	We counsel them child	We plan treatment with them	Education
Nurse 13	We counsel the child as we implement the care	During treatment planning and giving	During procedures
Nurse 14	We counsel them	Planning and giving treatment	When performing a procedure
Nurse 15	Counselling	When giving treatment	Education
Nurse 16	Counselling	Planning and serving medicine	Education
Nurse 17	We counsel them	Giving treatment	We educate them when performing procedures
Nurse 18	Counselling	Giving treatment	Education

Table 4.5c presents results on nurses' responses on activities in which children are involve during implementation of care. Eighteen (18) nurses indicated that they involve the children in counselling when implementing care. Nine (9) nurses provided evidence that they involve children treatment planning. Fifteen (15) nurses indicated that they involve children when serving medication. Six (6) nurses indicated that they educate children when performing procedures. Eleven (11) nurses indicated that they involve children during education.

Table 4.5d: Activities in which parents/ carers are involved during implementation of care

Themes	Counselling (supportive care)	Education	Treatment planning and giving	Decision-making
Nurse 1	Counsel and encourage visitation by family	We explain the procedure to them and the need for it	We allow them to serve medication	We involve them during decision-making
Nurse 2	Counselling. We allow family to visit	Education	Treatment planning	We ask for their opinion during treatment planning
Nurse 3	Counselling and allowing families to pay them visits	Education	Treatment plan	They are involved in decision-making
Nurse 4	Counselling and visiting	Education on procedures	We plan the treatment together	We meet with the family to take decisions together
Nurse 5	Counselling and visiting	We explain procedures to them	Treatment planning and serving medication	We meet and decide with family when planning care
Nurse 6	We counsel them and allow the family to visit	Education	Planning treatment for the child	They are involve in decision-making
Nurse 7	We counsel them all the time and ask family to visit	Education about procedures	Serving medicine	We involve them in decision making
Nurse 8	Counselling and visitation	Education	Treatment planning	Decision-making
Nurse 9	We counsel and ask family to visit	Educate on procedures	Giving treatment	Taking decision
Nurse 10	Counselling and allowing family visit	Education	Giving treatment	They are involve in decision-making
Nurse 11	Counselling, Visitation	About procedures	Serving drugs	Decision-making

Nurse 12	We counsel and allow family to visit them	Education	Serving treatment	We involve them during decision-making
Nurse 13	We counsel them and allow visits	We educate them on the procedures	Giving medication	Decision-making
Nurse 14	We always counsel them and family also visits	We educate them when performing procedures	Giving medication	They are involve in decision-making
Nurse 15	We counsel and allow visiting	Education during procedures	Giving treatment	Decision-making
Nurse 16	Counselling and family visiting	Education	Giving treatment	They are involve in decision-making
Nurse 17	We counsel and ask family to visit them	Education	Planning and giving treatment	Decision-making
Nurse 18	Counselling and visitation	We educate them when performing procedures	Planning and serving medicine	We involve them during decision-making

Table 4.5d presents results on nurses' responses on activities in which parents/carers are involved during implementation. Eighteen (18) nurses indicated that they involve them through counselling. Eighteen (18) nurses indicated that they allow family members to visit on the ward. Ten (10) nurses indicate that they educate parents/carers when performing procedures on their children. Eight (8) nurses indicated that they involve parents/carers through education. Eight (8) nurses indicated that they involve parents/carers during treatment planning. Eleven (11) nurses indicated that they involve parents/carers during medication. Eighteen (18) nurses provided evidence that they involve parents/carers during decision-making.

Chart 4.5a: Involving parents/carers during implementing care

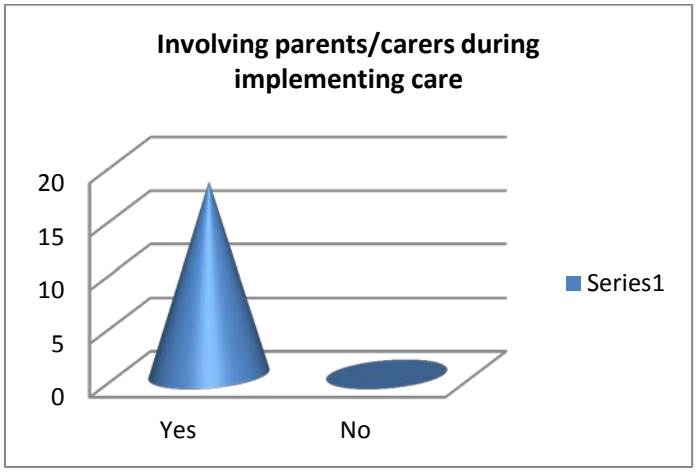
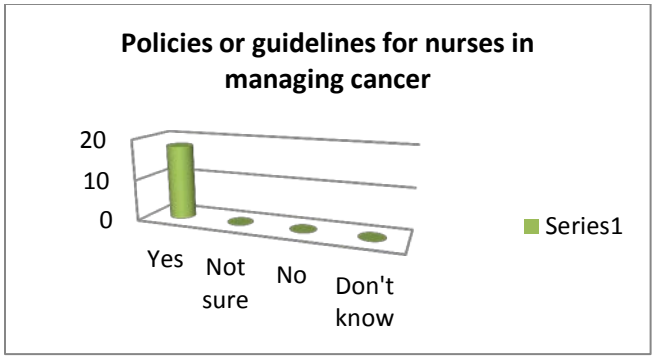


Chart 4.5a presents the results of nurses' responses of involving carers/parents during nursing care implementation. As indicated on the chart above on the view of nurses involving carers/parents during nursing care implementation, eighteen (18) nurses indicated that they involve carers/parents during nursing care implementation.

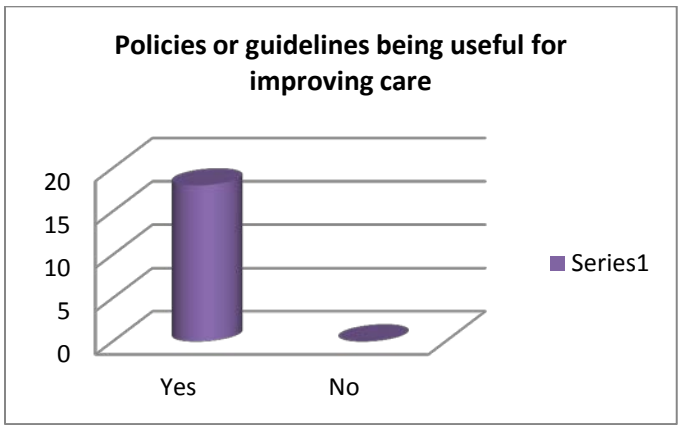
Chart 4.5b: Policies or guidelines for nurses in managing cancer



4.5.1 Nurses' responses to Questionnaires

Chart 4.5b presents results of nurses' responses on nurses' guidelines/policies for nurses for managing children diagnosed with cancer. Eighteen (18) nurses indicated that yes, there are guidelines/policies for nurses as represented on the chart above.

Chart 4.5c: Policies or guidelines being useful for improving care



Providing information whether the policies are useful for improving nursing care, eighteen (18) nurses indicated that the guidelines/policies are useful for improving nursing care as reflected on the chart above.

Table 4.5e: Involving the multidisciplinary team, family members and carers in the care of patients on the ward

Themes	For child's cooperation	Decision-making	Medication	Encouraging visitation
EN (OPD)	Here in the ward we do not allow the carers to leave the children alone so every day we either see patient's father, mother or a relative with them. When implementing care, we involve the medical team as a well as the mothers	We involve the family during decision-making	We involve them during drug administration	We encourage visitation
RN (IP)	We involve them so that we can get the child's cooperation. We keep communicating with the medical team during care implementation as well as the patient and the carer	In the paediatric ward we allow one family member either father or mother or a relative to stay by them and we involve them during decision making	We allow mothers to serve medication	We advice the family to visit patient on the ward
RN (IP)	We involve them by asking them to stay with the children to allay fear and also inform them any time we are going to perform a procedure on the child to gain their cooperation. We always involve the multidisciplinary team	We involve them when taking decisions on the child	We allow them serve drugs on the ward	We encourage visiting
PNO (Ward manager)	We allow the parents or the care givers to be with the patient throughout hospitalisation. Caring for these children include involving the mothers and the team	We always work together with the family	Any treatment given for example infusion, we explain to the mother how to know whether it is flowing by looking at the	We allow visitation

			drops and if it is not flowing they come to report to us. Because of the acute shortage of nurses we cannot assign a nurse to a patient. During medication we allow them to give the drug and make sure the patient takes the drug.	
RN (IP)	We involve the carers by asking those questions about their children, what they like and allow them to be with their children so that the children can cooperate with us. The medical team is not left out. We communicate with them during care implementation	We include the parents when planning care and ask for their opinion.	We allow parents to give medicine to their children	We encourage the family members to visit the children during admission.
PMO (OPD)	We allow parents to stay by their children so that they can co-operate with us. We plan care with the parents. We keep communicating with the team about the child's condition	They share their view and concerns with us. They are always with the patients so if the patients have any problem the carers come and inform us.	Mothers do serve medication	We advice the family to visit the patient on the ward

Table 4.5f: Nursing care interventions and ways to improve service delivery

Themes	More trained paediatric oncology nurses	Drawing a care on patients	A separate wards for oncology patients only	NGOs/ Equipments
EN (OPD)	Due to their lack of adequate training, the nurses felt need for specialist nurses. They argued that assigning a nurse to a patient or at most five (5) so we can improve the care that we giving to our patients daily. More paediatric oncology nurses should be trained so that these patients can be managed properly.	We draw care on patients but not all of them. Only those who are in critical condition	For our care to be more effective, we need a ward for only oncology patients as you can see they oncology cases are mixed with other conditions	We also need NGOs to help us with equipments for quality service delivery
RN (IP)	For us to give a quality care to our cancer patients, we need train paediatric oncology nurses. We are general nurses so we use our discretion	Proper handing-over so that when a nurse draws a care on a patient and the set goal was not met the other nurse can change it and plan another care to suit the problem that he or she is trying to solve. Nursing care is the continuity of care so is like a cycle that goes round and round.	We need a special ward for oncology alone. Look at how the patients are in the ward with other infectious conditions. How can we say our interventions are of quality	We do not have the equipments to work with. We are always improvising. We need NGOs to help
RN (IP)	We are also praying that our young ones should go to school and learn more on these conditions so that they can have more knowledge on how to give care to those with this condition in order to improve our service delivery to our patients and their families.	When we use the nursing care plan it will help us a lot so we should continue using it. This will help us to know the actual problems of the patient and give the correct interventions.	The ward is not big yet we share it with other sick children as you can see. How can you say you are delivering a quality care	Philanthropists should come to our aid and help us with equipments

PNO (Ward manager)	Acute shortage of nurses so we need more nurses especially paediatric oncology trained nurses to improve service delivery.	We draw nursing care on our patients	We need a good place solely for paediatric oncology and trained paediatric oncology nurses.	Philanthropies that can donate things equipments and support us; with these we can do a lot of things and improve our nursing care to our patients.
RN (IP)	If we have more oncology trained nurses on the job our interventions can be done more effectively. We need more hands on the job to improve our nursing interventions.	We draw a care plan on our patients but not always only those with high body temperature	There should be a specific ward for only paediatric oncology cases where oncology trained nurses would be put there to deliver care to children with childhood cancers.	The hospital need to buy equipments for the ward.
PMO (OPD)	More hands of Paediatric trained oncology nurses so that our nursing delivery can be more effective.	We draw care on only critically ill patients.	We need a ward specially design for paediatric oncology so that we can say we are providing quality care. We cannot mix our special cases with other conditions.	We must get specialised equipment needed for patient care and stop improvising.

4.5.2 Interview responses

4.5.2.1 Nurses response

Table 4.5e presents results on nurses' responses on involving family members and carers/parents on the ward. Six (6) nurses stated that they involve the multidisciplinary team during care implementation. Four (4) nurses stated that they communication between patient and the medical team during implementation of care. Six (6) nurses stated that they involve families during care implementation in order for the child to co-operate. Six (6) nurses stated that they involve patient's family during decision-making. Six (6) nurses stated that they involve family by allowing them serve medicine during medication. Six (6) nurses stated that they encourage family visitation during admission.

Table 4.5f presents results of nurses' responses on the implementation of care. Six (6) nurses stated that they employ the nursing care plan when implementing care; two (2) nurses stated that they do not draw care on patients all the time. Six (6) nurses stated that they need trained paediatric oncology nurses so that their nursing care delivery can be more effective. Six (6) nurses interviewed stated that they need a separate ward for paediatric oncology patients only so that the care delivery can be of quality. Six (6) nurses stated that they need NGOs who can donate equipments for their service delivery to be more accurate.

Table 4.5g: Ways to improve nursing care delivery

Themes	Satisfactory
KI 1	The nurses are good. Their work is satisfactory; I said this because they know what to do for us so even if they are not doing what they are suppose to do because we do not know, so l would say the little that they do is satisfactory for us.
KI 2	There is nothing to comment about. The care that the nurses give is satisfactory.
KI 3	The care they give here is excellent because they do everything because they know what to do to the child. There is nothing that l will want them to improve upon because their care is satisfactory.
KI 4	Am satisfied with the care they give and there is nothing to improve.
KI 5	The nurses are excellent. They always want the best for us so they are good.
KI 6	I would say they are doing very well and we are satisfy with it
KI 7	The nurses know what to for our sick children so I think we are satisfied with the care.
KI 8	The nurses are doing a great job here. In fact they are good
KI 9	The care these nurses are providing here is the best because they always try hard to put smile on our faces
KI 10	I will say the care is satisfactory because the nurses are friendly and good to us

Table 4.5g presents responses of carers/parents on ways to improve nursing care delivery. Six (6) carers/ parents stated that they are satisfied with the service delivery; four (4) carers/parents stated that the care nurses provide to their children is excellent.

4.5.2 Interview responses

Table 4.5h: Nurses' treatment guidelines for managing cancer

Themes	Treatment guidelines or Policies	The procedures
EN (OPD)	Each cancer has its protocol in treating them.	We first do investigation, which are bone marrow biopsy, Ultrasound, MRI to know the type of cancer and the stage.
RN (IP)	They have some treatment protocols that they follow.	We transfuse them when they are anaemic. We send them to the lab
RN (IP)	Doctors have treatment guideline for all the cancers so we always look on the protocol to see what treatment to give to a patient with particular cancer.	We send them to do full blood count before chemotherapy. We check their vital signs
PNO (Ward-manager)	We have curative and palliative guidelines. So we follow the guidelines because every condition has its own guidelines.	The paediatric oncologist writes the treatment and we are guided by the instructions that the doctors give.
RN (IP)	They have protocols that the nurses use any time they are managing a particular problem. The nurses also have guidelines for pain management especially.	We transfuse them whenever the patient is anaemic and needs blood.
PMO (OPD)	We have protocols that we follow for various cancers.	We send them to the lab, check their vital signs, transfuse when the need arises

4.5.2.1 Nurses response

Table 4.5h presents results on nurses' responses on nurses guidelines/policies in managing children diagnosed with cancer. Six (6) nurses stated that there are guideline/policies for nurses which they follow when managing children diagnosed with cancer. Six (6) nurses stated that they perform routine procedures such as vital signs. Six (6) nurses stated that they send patients to the lab for full blood count before chemotherapy. Three (3) nurses provided evidence that they transfuse patients when they are anaemic

Table 4.5i: Involving carers/parents during implementation of nursing care

Themes	Supportive care	Decision-making	Medication	Encouraging visitation
KI1	I'm always here by her because she would not allow the nurses to anything to her me.	The nurses involve us because we are paying for the drugs and everything	I would say yes they do involve me.	Yes, my family pay visit everyday
KI2	The nurses allow me to stay by my child in the ward.	The nurse ask for my opinion on what they want to do only if they want me to buy medicine	I give medicine to my sister when the nurses ask me to give.	My family do visit me
KI3	The mother is always here in the ward with him	Sometimes they ask me whether I like what they want to do for him	She has being giving him medicine	My family is always here by me during visiting hours
KI4	I'm the only one who stays with him all the time in the ward	Yes because we are providing money for the drugs	I only give him when the nurses ask me	Yes, they visit
KI5	I always stay by her here in the hospital	Yes the nurse ask me sometimes what I think they should do for my child	I give her medicine sometimes when the nurse ask me to give	They are always here
KI 6	The nurses allow me to stay by my child. The doctors, that is their work to care for us so they are always here with the nurses	When the nurses are meeting on my child's condition , they call me	They nurses allow me to give medicine to my child	Yes they visit us
KI 7	The wards is like my second home because am always here by my child	The nurses always talk to me and ask for my input about my child	The nurses taught me how to give medicine to my child	My relatives come and visit

KI 8	The nurses allow us to stay by the child in the ward. Yes the doctors are always here	The nurses involve me when taking decision on my child	I give medicine to my child when the nurse ask me to give	The nurses allow my family to visit
KI 9	I'm always by him in the ward. The doctor is always in the ward checking the children	We are paying for the treatment so they always consult us	I was taught how to give medicine to my child so I give it sometimes	My family is always by me
KI 10	The nurses allow me to stay by him	The nurses ask for my opinion sometimes	Yes, they taught me so I give it	Yes they do

4.5.2.2 Carers/parents responses

Table 4.5i presents results on their involvement during implementation of nursing care. Ten (10) carers/parents stated that nurses involve them during implementation of nursing care by allowing them to stay on the ward. Ten (10) carers/parents stated that nurses taught them how to serve medication on the ward. Ten (10) carers/parents stated that nurses involve them during decision-making. The ten (10) carers/parents provided evidence that their families always visit them on the ward.

4.5.2.2 Carers/parents responses

Table 4.5j: Carers/parents responses on nursing procedures

Themes	Procedures
KI 1	The nurses gave blood to my child because he was short of blood
KI 2	They send us to the lab any time we visit the hospital for treatment
KI 3	They gave him blood
KI 4	They gave him blood
KI 5	They checked his temperature and weigh him before we went to the lab
KI 6	The send us to the lab
KI 7	The nurse gave my child blood because of anaemia
KI 8	They checked his blood pressure, temperature and send us to the lab
KI 9	They always check his temperature, Bp, and weight whenever we come for treatment
KI 10	My child received blood once because she was having anaemia

Table 4.5j presents results on carers/parents responses on nurses performing procedures on their children. Ten (10) carers/parents stated that nurses perform procedures on their children. Five (5) carers/parents provided evidence that their children were transfused due t anaemia. Four (4) carers/parents stated that nurses send them to the laboratory each time they visit for review. Four (4) carers/parents stated that nurses check their children's vital signs for each visit.

Table 4.5k: Triangulation of sources on implementation of nursing care

	Questionnaire	Nurses' interviews	Parent/carers interview
Assess the knowledge and skills needed to implement the plan	Implementation is carry out based on the plan of care for the child. By assessing the child's problems, diagnosing, planning the care, implementing nursing interventions and evaluating nursing care given involving the medical team	We use the nursing process; we assess the patient, identify patient problems and develop nursing diagnosis after assessing the patient, planned a care, intervene and evaluate at the end of the day and plan again if the first one did not work. We work together with the multidisciplinary team	The nurses always talk to us when caring for the child and ask whether we have any problem
Ensure quality of care	To ensure quality of care, we involve them	We always want the best for our patients and their families so we involve everybody during care implementation	The nurses ask how my child is doing when caring for him
Achieve set goals	The needs of the child must be met and this cannot be achieved if the child is not involved in the implementation process.	We involve them so that the care given can be complete	After everything the nurses ask how I see my child and I told them he is fine
Supportive care	Procedures are explained to child to seek for his or her consent before treatment. Continuous counselling	We allow the parents or the caregivers to be with the patient throughout hospitalisation. We involve them so that we can get the child's cooperation.	I'm always here by her because she would not allow the nurses to anything to her me. The nurses are always counselling us
Decision-making	We plan care with the family	In the paediatric ward we allow one family member either father or mother or a relative to stay by them	The nurses involve us because we are paying for the drugs and everything

		and we involve them during decision making	
Medication	Parents/carers and children are involved in treatment giving	During medication, we allow parents/ carers to give the drug and make sure the patient takes the drug. Any treatment given for example infusion, we explain to the mother how to know whether it is flowing by looking at the drops and if it is not flowing they come to report to us.	The nurses taught and allow me serve my child's medication in the ward
Encouraging visitation	We allow their family members to visit them on the ward	We encourage the family members to visit the children during admission.	My family is always here during visiting hours
Treatment guidelines or Policies	Yes, there are protocols or guidelines that we follow	We have curative and palliative guidelines. We follow the guidelines because every condition has its own guidelines. We have protocols that we follow for various cancers.	Not asked
The procedures	We transfuse them when they are anaemic, we check vital signs, wound dressing, chemotherapy administration	We first do investigations, which are bone marrow biopsy, Ultrasound, MRI to know the type of cancer and the stage. We transfuse them whenever the patient is anaemic and needs blood.	The nurses check his temperature, Bp, and weight any time we come for treatment. My child received blood due to anaemia

4.5.3 Triangulation of responses of steps during implementation of nursing care

Comparing questionnaire and interview responses on implementing nursing care, fifteen (15) nurses indicated that they systematically employ the nursing process when implementing care on patient. Six (6) nurses interviewed stated that they employ the nursing care plan when implementing care. Parents/carers also confirmed that nurses do plan care for their children. Seven (7) nurses indicated that they keep communication between the multidisciplinary team during care implementation. Six (6) nurses interviewed stated that they involve the multidisciplinary team during care implementation. Parents/carers also confirmed that nurses do involve the medical team in the ward during implementation of care.

Eighteen (18) nurses indicated that they involve children and their carers/parents during care implementation to gain their co-operation. Six (6) nurses interviewed stated that they involve children and family during care implementation in order to gain their co-operation. Parents/carers also confirmed that nurses do involve them during care implementation. Fourteen (14) nurses indicated that involve patient and family during decision-making and explain procedures during implementation to ensure quality of care. Six (6) nurses interviewed stated that they involve children and family in decision-making and explain procedures during implementation in order to deliver quality care. Parents/carers also confirmed that nurses do involve them in decision-making during implementation.

Fifteen (15) nurses indicated that they involve parents/carers and children during medication. Six (6) nurses interviewed stated that they involve parents/carers and children during medication. Parents/carers also confirmed that nurses do involve them when serving medication. Eighteen (18) nurses indicated that they encourage family visitation on the ward. Six (6) nurses interviewed stated that they encourage family members to visit the children on the ward. Parents/carers also confirmed that nurses do all their family members to visit on admission.

Eighteen (18) nurses indicated that they have guidelines/policies which they follow. Six (6) nurses interviewed provided evidence that they have guidelines/policies which they follow when managing children diagnosed with cancer. Eighteen (18) nurses indicated that they perform procedures such as checking vital signs, wound dressing, blood transfusion and chemotherapy administration. Six (6) nurses interviewed provided evidence that they transfuse children when anaemic, check vital signs, perform wound dressing and administer chemotherapy. Parents/carers also confirmed that nurses do transfuse their children, dress wound, check vital signs and administer chemotherapy.

4.6: Evaluation of nursing interventions, Processes and Types of evaluation of care and Quality Assurance

Evaluation is the last stage of the nursing process even though is occurs at the end of the nursing process, it runs throughout all the stages. Evaluation of nursing intervention is essential because it alerts the nurse on the progress in patient's condition. Quality assurance is the systematic evaluation of care given to the patient.

Table 4.6a: Description of quality assurance in nursing care

Themes	**Patient-centred care**	**Delivering the care systematically toward the set goals of patient**
Nurse 1	In quality assurance, the nurse makes sure that the patient gets the best nursing care. The care given to the child should be quality nursing care.	Solving patient's problem systematically and focusing on patient's needs
Nurse 2	Planning nursing care that suits patient's condition	Delivering care in a way that solve patient's problem
Nurse 3	Planning a care that is patient oriented and achieving goals at the end of the day	High quality of care that meets the needs of the child and that of the family.
Nurse 4	Including patient and family in planning their care	Implementing a care which best work for patient condition

Nurse 5	It is about giving good care.	Systematic way of delivering nursing care to patient
Nurse 6	The nurse should give the child all the best nursing care necessary for the child to recover.	Giving care accurately and patient-oriented
Nurse 7	Giving total care	To achieve set goals
Nurse 8	Quality assurance is giving the best nursing care to the child.	A care that involves the whole family
Nurse 9	Giving the best care to the patient and the family	Patient oriented nursing care
Nurse 10	Making sure that the child is free from other infections that can be acquired on the ward.	Patient centred care
Nurse 11	Is a care that involves the whole family	Following the steps in the nursing process focusing on the patient and the family
Nurse 12	Giving total quality nursing care to patient and family	Achieving the set goals at the end of the day on patent
Nurse 13	Patient centred care	When patient's needs are met
Nurse 14	Patient centred care	Patient centred nursing care
Nurse 15	Providing the best of care to patient	Planning patient-oriented care to address patient's problems
Nurse 16	Making sure that patient and family needs are met	Ensuring patient-oriented nursing care
Nurse 17	Giving the best care to patient	Delivering care following the steps systematically
Nurse 18	Involving all the medical team in the care of patient and family	Using the nursing process in delivering care where set goals are patient-oriented

4.6.1 Nurses' questionnaires responses

Table 4.6a presents results on nurses' responses on quality assurance in nursing care. Six (6) nurses indicated that quality assurance in nursing care is a care that is patient-centred; twelve (12) nurses indicated that quality assurance is giving total quality nursing care to patient and family; seven (7) nurses indicated that quality assurance is meeting patient and family needs. Eleven (11) nurses indicated that quality assurance means systematic way of delivering nursing care and achieving set goals. Five (5) nurses indicated that quality assurance in nursing care is planning a care that is patient-oriented.

Chart 4.6.a: Evaluation of nursing care

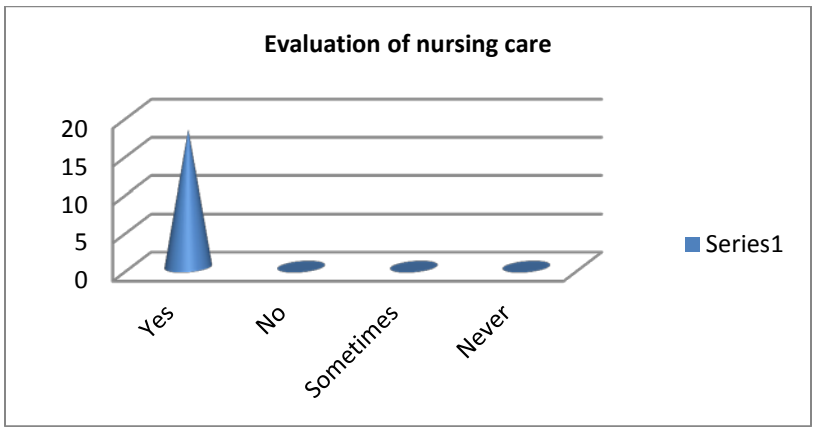


Chart 4.6a presents results of nurses' responses on whether nursing care evaluated all the time. All the eighteen (18) nurses indicated that yes, nursing care should be evaluated all the time as reflected on the chart above.

Chart 4.6b: Evaluation of care after discharge

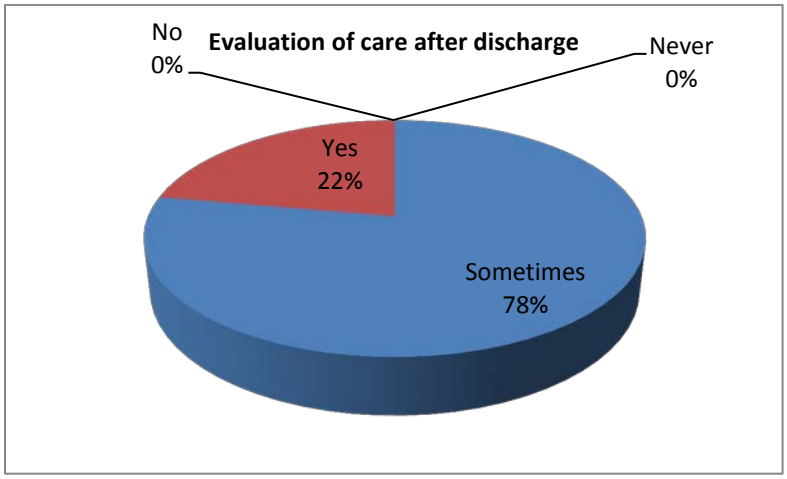


Chart 4.6b presents results of nurses' responses on evaluation after discharge. Fourteen (14) nurses indicated that yes, evaluation of care after discharge is done sometimes; four (4) nurses indicated evaluation of care after discharge is done always. None of the nurses indicated no or never as reflected on the chart above.

Chart 4.6c: Evaluation being a useful activity of nursing

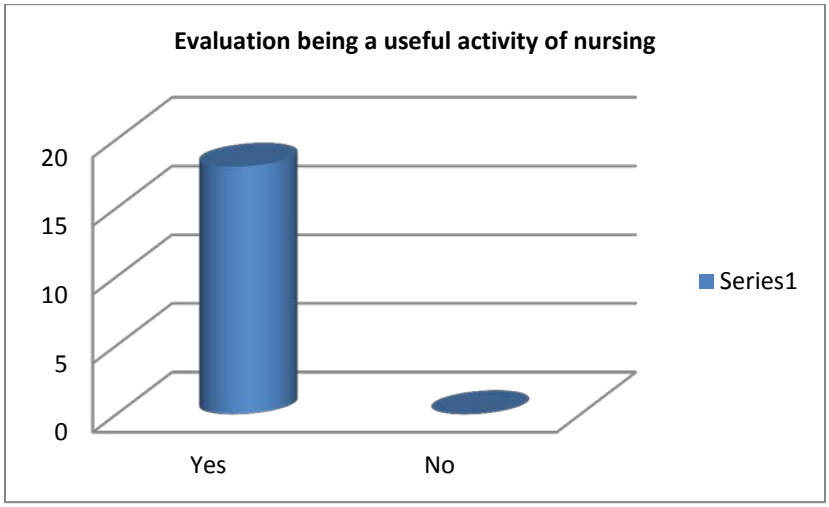


Chart 4.6c presents results of nurses' responses on whether nursing care evaluation is useful in nursing. Eighteen (18) nurses' indicated that yes, evaluation is a useful activity in nursing as shown above.

Table 4.6b: Conducting daily evaluation of nursing care

Themes	Daily evaluation of care	Hourly evaluation of care
EN (OPD)	Yes, we evaluate our nursing care after everything	No we do not. We only do that occasionally when a patient is critically ill and needed attention and due to shortage of staff. Look at me here; we are only two so it is a real big problem. Things that are supposed to be done are not being done.
RN (IP)	Yes we do evaluate our care like monitoring, daily nursing care, ask whether any complaints. We ask the carers then they tell us what their child is experiencing then we also take action.	We do not draw nursing care plan for them always but ideally we should do it all the time.
RN (IP)	Yes, we do. We use it to evaluate the care that we give to the patients at the end of the day especially the assessment because it helps a lot.	We do evaluate care but it is not done all the time. In most cases, we evaluate care hourly when patient's condition is critical
PNO (Ward manager)	Yes, we do. We go round and ask the patients and the mothers how the children are feeling. At times we use the vital signs to check and compare them with the previous day.	Only in critical conditions
RN (IP)	Yes, we do it by going through the nursing care drawn on a patient base on your assessment you would know that the care given and the set goal were achieved.	Not always only in severe cases
PMO (OPD)	Yes but not all the time. Sometimes, we conduct chat rounds as a form of	No we do not do that. Although we draw care plans on our

	evaluation	patients, it is not all of them due to shortage of staff. We only do it for critically ill patients. Evaluate and when the goal is not fully met we change it.

4.6.2.1 Nurses response

Table 4.6b presents results on nurses' responses on evaluation of nursing care. Six (6) nurses stated that they evaluate their nursing care daily. Six (6) nurses stated that they do not conduct evaluation of care hourly; on the contrary, four (4) nurses stated that they conduct hourly evaluation of care only on critically ill patients. Two (2) nurses stated that they conduct chat rounds in the form of care evaluation.

Table 4.6c: Conducting evaluation or effectiveness of care given during admission after discharge

Themes	**Discharge care evaluation and further planning**	**Nurses meeting to discuss care given**
EN (OPD)	Yes. We nurses usually check vital signs and save medication so we monitor and check whether what we did to the child was effective if not then we change our way of doing it next time.	Yes, when the child is discharge we discuss the care given so that we correct where we did not perform well
RN (IP)	Not all the time because of shortage	Yes, We do. When the child is discharged we go through the care rendered during admission to see whether the set goals for that particular have been met fully or partially. If fully met you give credit to yourself if not met then you correct things that were not done right next time.
RN (IP)	Yes, we do. We evaluate how he or she came and how he or she is before discharge. We	Not always. This is because of shortage of staff.

	always tell them to take care of the child so he or she can be healthy all the time and come for treatment as and when it is due.	
PNO (Ward manager)	Yes, once the child is discharged we evaluate care given. Even when they come for review and for their cycles we do evaluate them so it is not only after discharge.	Not all the time because we are under staff
RN (IP)	Yes we do. Base on your assessment, you would know the child came in a bad state but now going home in a good or an improved or a well state.	Sometimes. It is not something we do often because we do not have enough staff and scheduling a meeting is another problem so we do it once a while
PMO (OPD)	Yes. We compare the state in which the patient was brought in and the state in which they are discharge and draw our conclusion.	Not always but we do meet to discuss issues about the patients

Table 4.6c presents results on nurses' responses on evaluation of care during admission after discharge. Six (6) nurses stated that they conduct evaluation of nursing care during admission after discharge. Two (2) nurses stated that they compare the state in which the child was brought and the state in which the child is in before discharge to evaluate care given during admission. Six (6) nurses stated that they meet to discuss care given after discharge to assess care given in order to correct where they did not do well. Four (4) nurses stated that they meet to discuss care given but not all the time due to staff shortage.

Table 4.6d Carer/parent responses on evaluation of care after discharge

Themes	Evaluation of care
KI 1	The nurses asked me how I see my child before and after treatment
KI 2	The nurse asked me whether there is improvement in my sister's health and I said yes
KI 3	The nurse asked how I see my child after treatment
KI 4	After every treatment the nurses ask how my brother is doing
KI 5	The nurse asked me and I told her my child is fine
KI 6	I told the nurse my child is now fine
KI 7	The nurse asked how my child is feeling now that we are about to go home and I told her he is better
KI 8	The nurse asked me to compare how my child was and now and tell her the difference
KI 9	She asked how do l see my child
KI 10	The nurses asked how l see my child and l told her she is better than before

4.6.2.2 Carers/parents responses

Table 4.6d presents results on carers/parents responses on care evaluation. Ten (10) carers/parents stated that nurses evaluate care by asking them how the child is doing after care. Parents/carers confirmed that nurses do improve upon their care delivery all the time.

Table 4.6e Triangulation of responses to evaluation of nursing care

	Questionnaire	Nurses' interviews	Parent/carers interview
Patient-centred care	The nurse should give the child all the best nursing care necessary for the child to recover.	We assess patient's problem and deliver care accordingly	They involve us in every care
Delivering the care systematically toward the set goals of patient	Giving high quality of care that meets the needs of the child and that of the family.	We deliver care systematically to attain the set goals	Yes, the nurses ask us question whether the child's condition is improving and care for us as well
Daily evaluation of care	Yes, daily evaluation is done but for critically ill patients	We do evaluate our care like monitoring, daily nursing care, ask whether any complaints. We ask the carers then they tell us what their child is experiencing then we also take action. We go round and ask the patients and the mothers how the children are feeling. At times, we use the vital signs to check and compare them with the previous day.	The nurses asked me how I see my child before and after treatment
Hourly evaluation of care	Yes, only for those who need critical care	No, we do not do that. Although we draw care plans on our patients, it is not all of them due to shortage of staff. We only do it for critically ill patients. Evaluate and when the goal is not fully meet we change it.	After every treatment the nurses ask how my child is doing
Discharge care evaluation and further planning	Yes, discharge care evaluation is being done	We evaluate how he or she came and how he or she is before discharge. We always tell them to	The nurses ask me to compare how we came and how are going home if there

		take care of the child so he or she can be healthy all the time and come for treatment as and when it is due. Once the child is discharge, we evaluate care given. Even when they come for review and for their cycles we do evaluate them so it is not only after discharge.	is any improvement
Nurses meeting to discuss care given	Yes, we meet and discuss care delivered to patient and improve on those that were not done right	When the child is discharge, we go through the care rendered during admission to see whether the set goals for that particular have been meet fully or partially. If fully met you give credit to yourself if not met then you correct things that were not right next time.	The nurses are always trying their best for us

4.6.3 Triangulation of responses to evaluation of nursing care

Comparing questionnaire and interview responses on evaluation of care, eighteen (18) nurses indicated that they evaluate nursing care. Six (6) nurses interviewed stated that they evaluate their nursing care delivery. Parents/carers also confirmed that nurses do evaluate care by asking them about the child's condition after care. Six (6) nurses indicated that they deliver a patient-centred care. Six (6) nurses interviewed stated that they provide patient-centred care by delivering care according to patient's needs. Parents/carers also confirmed that nurses enquired about the child's problem before delivering care. Eighteen (18) nurses indicated that they conduct hourly evaluation on critically ill patients only. Four (4) nurses interviewed stated that they conduct hourly evaluation of care on critically ill patients only. Parents/carers also confirmed that nurses do conduct evaluation on patients.

Eighteen (18) nurses indicated that they evaluate care after a patient is discharge and plan further actions. Six (6) nurses interviewed stated that they conduct discharge care evaluation by comparing patient's condition before and after treatment. Parents/carers confirmed that nurses do ask them to distinguish between child's condition before and after treatment. Eighteen (18) nurses indicated that they meet and discuss nursing care delivery after patient is discharge in order to correct nursing care delivery which was not done accurately. Six (6) nurses interviewed stated that they meet and discuss care delivery after discharge but not all the time due to shortage of staff. Parents/carers also confirmed that nurses do improve upon their care delivery all the time.

4.7 Discharge care planning

Table 4.7a: Actions taken during discharge care planning for children diagnosed with cancer (open-ended question)

Themes	Outpatients appointment	Community nurse visits	Education on home care	Supportive care	Rehabilitation
Nurse 1	Follow-ups	The nurses in the oncology unit visit them	The parents are counsel on the home care of the child.	We counsel them	We inform them about rehabilitation
Nurse 2	We give them OPD appointments	We visit them but not all the time	We educate them on home care	Counselling	Rehabilitation
Nurse 3	Follow-ups	We do home visit	Education on disease medication, diet, weight monitoring	Supportive care	Rehabilitation
Nurse 4	OPD treatment, we call them too just to remind them	Home visits	We educate them on what to feed the children and hygiene	Counselling	Rehabilitation
Nurse 5	Follow up care on OPD review for treatment, call them when the date is drawing closer	The nurses in the oncology unit visit them at home	I made them know that the hospital staying is temporal, so I do educate them to alley their anxiety on the disease condition.	Continuous counselling	School services /Rehabilitation
Nurse 6	Plan follow-up, give appointment dates for review	Home visits	Counsels the child's parents about home care.	Counselling	Rehabilitation/ school services
Nurse 7	OPD appointments. Telephone calls as a reminder	Home visit	We educate on diet, hygiene, general home care	Counselling	Rehabilitation/ school services
Nurse 8	Plan for follow-up care and call to	Home visit	Educate the client and family about home care	Counselling	Rehabilitation

	remind them				
Nurse 9	OPD appointments. We call to remind them about the review dates	Home visits	Home care on diet, hygiene and medication	Counselling	Rehabilitation and school services
Nurse 10	Follow-up care	Home visit	Give health education on the disease condition and management at home	Counselling	Rehabilitation
Nurse 11	OPD visit for treatment. We call to remind them of the review date	Home visit	Home care on diet and personal hygiene	Counselling	School services/ rehabilitation
Nurse 12	Review on OPD bases	Home visit	Personal hygiene and diet	Counselling	Rehabilitation
Nurse 13	Review at the OPD. We call them on phone to remind them about the review	Home visits	Home care	Counselling	Rehabilitation
Nurse 14	OPD appointments	Home visits	We educate them on diet and hygiene	Counselling	Rehabilitation
Nurse 15	OPD appointments	We do home visit	Diet and hygiene	Counselling	Rehabilitation
Nurse 16	OPD review	Home visits	Educate on diet and personal hygiene	Counselling	Rehabilitation services for the child
Nurse 17	Review at the OPD for treatment	Home visits	We educate the mothers on nutrition	Counselling for both child and	Rehabilitation services

			and personal hygiene	family	
Nurse 18	OPD appointments	Home visits	Home care on diet and hygiene	Counselling	Rehabilitation

4.7.1 Nurses' responses to Questionnaires

Table 4.7a presents results on nurses' responses on actions taken during discharge care planning for children diagnosed with cancer. Fourteen (14) nurses indicated that they plan and make provisions for patient to visit the out patients' department for continuity of care. Seven (7) nurses provided evidence that they call carers/parents to remind them on review dates. Four (4) nurses indicated that they plan a follow-up care for the patients. Eighteen (18) nurses indicated that they arrange for home visits in the community. Eighteen (18) nurses indicated that they educate patient and family on home care. Thirteen (13) nurses provided evidence that they educate them on diet. Nine (9) nurses indicated that they educate patient and family on personal hygiene. Five (5) nurses indicated that they educate patient and family on disease condition, general management and medication at home. Eighteen (18) nurses indicated that they arrange for counselling sessions for patients and their families. Eighteen (18) nurses provided evidence that they inform patients and families about rehabilitation and five (5) nurses indicated that they arrange for school services for children diagnosed with cancer.

4.7.2 Interview responses

Table 4.7b: Follow-up care arrangements made for patients and their families after discharge.

Themes	Outpatients appointment	Community nurse/Home visits	Telephone calls
EN (OPD)	We arrange for OPD reviews for continuity of care and counselling sessions	We tell them what to do like visiting the nearest hospital or clinic. Home care and nutrition	We normally collect their address and their phone numbers so when the results are in we call them to come for their treatment
RN (IP)	We give them OPD appointment cards and arrange for counselling	Those in the oncology unit do visit them at home at times. We educate on nutrition, rehabilitation and school services	We call remind them when to come for review
RN (IP)	When they are about to be discharged we call and tell them that they have to be coming to the hospital every three weeks. Counselling	We educate them on home care and rehabilitation for school. We tell them to feed the children with nutritious diet and ensure personal hygiene	We call them on phone just to remind them and ask how they are doing at home. We arrange and visit those in our community sometimes.
PNO (Ward manager)	We only tell them about the need to come back to continue the treatment. We arrange counselling sessions for the family as well	Education is given on diet and hygiene and general home care of child. We inform them about rehabilitation and school/social services	We call to remind them. We visit those in the community
RN (IP)	When the patients are about to be discharged we counsel them and remind them about the review dates. We counsel them each time they visit	Home care, hygiene, nutrition, rehabilitation and school services	We take their telephone numbers and call them just to ask about their condition at home. Those who do not visit the hospital as planned they call them and ask why they did not turn up for treatment.
PMO (OPD)	We tell them to come on OPD bases for treatment , counselling sessions to allay fear	Diet and hygiene and general home care and rehabilitation/school services	When the patients come, we take their phone numbers. We educate them during admission about the plans for follow up so when they are discharge we inform them about

			their next visit so when the day is drawing nearer we call to remind them to come on the appointed date.

4.7.2.1 Nurses response

Table 4.7b presents results on nurses' responses on discharge care planning for children diagnosed with cancer. Three (3) nurses stated that they arrange for OPD reviews and provide patients with appointment dates. Three (3) nurses stated that they make plans for follow-up care for patients and families. Six (6) nurses stated that they organise counselling sessions for patients each time they visit for review. Four (4) nurses stated that the notify carers/parents about rehabilitation services. Five (5) nurses stated that they notify carers/parents about school services for children diagnosed with cancer. Four (4) nurses stated that they inform carers/parents on personal hygiene. Six (6) nurses stated that they inform carers/parents about diet. Five (5) nurses stated that they inform parents/carers about home care. Four (4) nurses stated that they organise and visit patients in the community. Six (6) nurses stated that they make telephone calls to remind patients and family about appointment dates.

Table 4.7c: Description of follow-up care for a child diagnosed with cancer.

Themes	Discharge planning
KI 1	They do not do home visits but the nurse do call to remind me about the next visit to the hospital for review and take medicine. They also told me to feed my child with good food and keep him neat all the time. Yes they informed me about rehabilitation and school services and counsel us
KI 2	They always ask me to come here and not to go to any other hospital. The taught me how to care for her at home in terms of food and hygiene.
KI 3	I have being coming here whenever the child is sick. They never asked me to go to any other hospital apart from KATH. They call to ask after the child some times
KI 4	They always call to remind me of his next cycle of treatment so I always brings him here in KATH, how to care for him at home and rehabilitation
KI 5	They always ask me to come to KATH for review. They never asked me to go to another hospital. The nurses educated me on nutrition, hygiene and home care
KI 6	The nurses call to ask how we are doing and to remind me of the review. They counsel us anytime we visit and educate us on diet and hygiene
KI 7	We always come here for review and anytime the child is sick. I was told to keep him neat always and give him nutritious food

KI 8	This is where we always attend our review clinic. The nurses call to remind on the review date. The nurses visited me at home. They taught me how to care for my child, feed him well and keep him neat always
KI 9	They call us to know how are doing and to remind us to come for treatment and taught me how to care for the child in at home. The nurses pay us visit in the house. They told me there are rehabilitation services for the children
KI 10	The nurses ask us to come here for OPD treatment all the time. They counsel and educate us on home care, hygiene and diet. They also informed us about rehabilitation and school services for the child. The nurse visited once in the house

4.7.2.2 Carers/parents responses

Table 4.7c presents results on carers/parents responses on discharge care planning for children diagnosed with cancer. Carers/parents stated that they always visit the OPD for review. Six (6) carers/parents stated that nurses call to remind them about the next appointment. Seven (7) carers/parents stated that nurses inform them about nutrition. Ten (10) carers/parents stated that the nurses informed them about home care. Seven (7) carers/parents stated that the nurses informed them about personal hygiene. Three (3) carers/parents provided evidence that nurses visited them at home. Four (4) cares/parents stated that nurses informed them about rehabilitation.

Table 4.7d: Comparism of nurses and carers/parents responses on discharge care planning

	Questionnaire	Nurses' interviews	Parent/carers interview
Outpatients appointment	Plan follow-up, give appointment dates for review	When the patients come, we take their phone numbers. We educate them during admission about the plans for follow up so when they are discharged we inform them about their next visit When they are about to be discharged we call and tell them that they have to be coming to the hospital every three weeks.	They always ask me to come to KATH for review. They never asked me to go to another hospital.
Community nurse/home visits	Home visit	We tell them what to do like visiting the nearest hospital or clinic. Those in the oncology unit do visit them at home at times	They do not do home visits
Education on home care	Educate the client and family about home care. Education on disease medication, diet, weight monitoring	We educate them on home care. How to take care of the child at home, diet and hygiene	The nurse told me to make sure that my child is always neat and feed him with nutritious food
Supportive care	The parents are counsel on the home care of the child.	We counsel them all the time	They always counsel us
Rehabilitation	Rehabilitation/ school services	We inform them about rehabilitation and those of school going age we give them letters for their school teachers	They informed us about rehabilitation and school services
Telephone calls	We call to remind them about review date and ask how they are doing	We take their telephone numbers and call them just to ask about their condition at home. When the day is drawing nearer, we call to remind them to come on the appointed date.	The nurses call to remind me about the next visit to the hospital for review and take medicine.

4.7.3 Triangulation of responses on discharge care planning

Comparing questionnaire and interview responses on discharge care planning, fourteen (14) nurses indicated that they plan and make provisions for patients to visit the out-patient department for continuity of care. Three (3) nurses interviewed stated that they arrange for out-patients' department reviews and provide patients with appointment dates. Parents/carers also confirmed that nurses do arrange for out-patients' department appointments for their children. Four (4) nurses indicated that they plan follow-up care for patients. Three (3) nurses interviewed stated that they make plans for follow-up care for patients and families. Parents/carers also confirmed that nurses do plan follow-up care for them. Seven (7) nurses indicated that they contact patient and family by phone to remind them about their review dates. Six (6) nurses interviewed stated that the contact patient's family by phone to remind them on review date and day. Parents/carers also confirmed that nurses do contact them to remind them about review date and day.

Eighteen (18) nurses indicated that they arrange counselling sessions for patients and families. Six (6) nurses interviewed provided evidence that they organise counselling sessions for patients and families. Parents/carers also confirmed that nurses do organise counselling sessions for them. Eighteen (18) nurses indicated that they inform patient and family about home care. Five (5) nurses interviewed stated that they inform patients and carers/parents about home care. Parents/carers also confirmed that nurses do informed them about home care. Eighteen (18) nurses indicated that they arrange home visit for patients and families in the community. Four (4) nurses interviewed stated that they organise and visit patients in the community. Parents/carers also confirmed that nurses do visit them in them at home.

Thirteen (13) nurses indicated that they inform patients and carers/parents about diet. Six (6) nurses interviewed stated that they inform patient and family about diet. Parents/carers also confirmed that nurses do informed them on diet. Nine (9) nurses indicated that they inform patient and family about personal hygiene. Four (4) nurses

interviewed stated that they inform patient and family about personal hygiene. Parents/carers also confirmed that nurses do informed them about personal hygiene. Eighteen (18) nurses indicated that they inform patients and parents/carers about rehabilitation services for children diagnosed with cancer. Four (4) nurses interviewed stated that they notify patient and family about rehabilitation services for the children. Parents/carers also confirmed that nurses do informed them about rehabilitation services. Five (5) nurses indicated that they inform patient and family about school services for children diagnosed with cancer. Five (5) nurses interviewed stated that they inform patient and family about school services for the children. Parents/carers also confirmed that nurses do informed them about school services.

4.8 Health education

Table 4.8a: Health education for children who can speak and understand (open-ended question)

Themes	Education sessions about the disease, use of pictures, simple language and local dialects	Playing with other children, and living a normal life, diet	School/ Social services	Rehabilitation
Nurse 1	The child is educated on the type of cancer that he has showing pictures about the disease. Treatment regime	On diet, personal hygiene and home care	We inform them about school and social services	Rehabilitation
Nurse 2	We educate them on the disease condition and show them pictures of other cancer patients before and after treatment	We educate on diet and home care	School servicers	Rehabilitation
Nurse 3	Education given on the condition with pictures	Diet, personal hygiene	Social services	Rehabilitation
Nurse 4	Education on disease condition and treatment	Diet and hygiene	School servicers	Rehabilitation
Nurse 5	Educate on cancer and the side effects of the drugs	Diet and hygiene	Social services	Rehabilitation
Nurse 6	Educate on the disease , treatment and side-effects	Diet and hygiene	Social services	Rehabilitation
Nurse 7	Education on disease condition	Diet, personal hygiene	School servicers	Rehabilitation
Nurse 8	Education on condition with pictures of other cancer patients	Diet and hygiene	Social services	Rehabilitation
Nurse 9	Educate on condition, treatment	Diet and hygiene	School/ social services	Rehabilitation

	and check-ups			
Nurse 10	Disease and adhere to treatment regime and regular check-ups	Diet and personal hygiene	School services	Rehabilitation
Nurse 11	Education on condition and home care	Diet and hygiene	Social services	Rehabilitation
Nurse 12	Disease condition, pictures of other children with cancer and regular check-ups	Diet and hygiene	School services	Rehabilitation
Nurse 13	Disease condition and regular check-ups	Diet and hygiene	School services	Rehabilitation
Nurse 14	Regular check-ups, disease condition	Personal hygiene and diet	School services	Rehabilitation
Nurse 15	Disease condition Adherence to treatment regime and regular check-ups	Diet and personal hygiene	School services	Rehabilitation
Nurse 16	On disease condition and signs to look out for at home	Diet and hygiene	Social services	Rehabilitation
Nurse 17	Disease condition and regular check-ups	Hygiene and diet	School services	Rehabilitation
Nurse 18	Disease condition. Adhere to treatment regime and regular check-ups	Diet and hygiene	School services	Rehabilitation

4.8.1 Nurses' responses to Questionnaires

Table 4.8a presents results on nurses' responses on health education for children diagnosed with cancer who can speak and understand. Eighteen (18) nurses indicated that they educate children who can speak and understand about the disease condition. Five (5) nurses indicated that they use pictures during education about the disease. Eight (8) nurses indicated that the educate children on the treatment and their side-effects. Seven (7) nurses indicated that they educate children about the benefits of regular check-ups. Eighteen (18) nurses provided evidence that they educate children regarding diet. Eighteen (18) nurses indicated that they inform children concerning personal hygiene. Eleven (11) nurses indicated that they inform children regarding school services. Eight (8) nurses indicated that they inform children regarding social services. Eighteen (18) nurses indicated that they inform children regarding rehabilitation services.

Table 4.8b: Health education for parents or carers (open-ended question)

Themes	Education sessions about the disease, use of pictures, simple language and local dialects	Playing with other children, and living a normal life, diet	School/ Social services	Rehabilitation
Nurse 1	Educate that the carer that what the child has is not anybody's fault. We educate them about the condition	Diet, home care and hygiene	School services	Rehabilitation
Nurse 2	Disease condition	Diet and hygiene	School services	Rehabilitation
Nurse 3	The condition and treatment plan	Nutrition,	Social services	Rehabilitation services
Nurse 4	Disease	Diet and hygiene	School services	Rehabilitation
Nurse 5	Disease condition	Diet and hygiene	School services	Rehabilitation
Nurse 6	Education on the cancer and about treatment plan	Personal hygiene and diet	School services	Rehabilitation
	Disease condition with pictures	Personal hygiene, diet	Social services	Rehabilitation
Nurse 8	Disease condition	Diet and hygiene	School services	Rehabilitation
	Disease condition with pictures and the treatment	Diet and hygiene	School services	Rehabilitation
Nurse 10	Condition and the treatment	Diet and hygiene	School services	Rehabilitation
Nurse 11	Disease condition and the treatment	Diet, hygiene and home care	School services	Rehabilitation
Nurse 12	The condition with pictures and the treatment	Diet, hygiene, home care	School services	Rehabilitation
Nurse 13	Disease condition and treatment with pictures	Hygiene and diet	Social services	Rehabilitation
Nurse 14	Disease condition and the treatment	Diet and hygiene	Social services	Rehabilitation
Nurse 15	The disease condition with pictures	Diet and hygiene	Social services	Rehabilitation
Nurse 16	Disease condition and the treatment	Personal hygiene	School services	Rehabilitation
Nurse 17	Condition and treatment	Diet and hygiene	School services	Rehabilitation
Nurse 18	Disease condition and the treatment	Diet, hygiene	School services	Rehabilitation

Table 4.8b presents results on nurses' responses on health education for carers/parents whose children are diagnosed with cancer. Eighteen (18) nurses indicated that they educate carers/parents about the disease condition. Five (5) nurses indicated that they use pictures during education about the disease condition. Eight (8) nurses indicated that they educate on carers/parents on treatment and their side-effects. Seven (7) nurses indicated that they educate carers/parents about the benefits of regular check-ups. Eighteen (18) nurses provided evidence that they educate carers/parents regarding diet. Eighteen (18) nurses indicated that they inform carers/parents concerning personal hygiene. Eleven (11) nurses indicated that they inform carers/parents regarding school services for the children. Eight (8) nurses indicated that they inform carers/parents regarding social services for their children. Eighteen (18) nurses indicated that they inform children regarding rehabilitation services.

4.8.2 Nurses and carers/parents' Interview responses

Table 4.8c: Educating children and their families about the disease

Themes	Education sessions about the disease,	How to care for the child at home
EN (OPD)	We first ask them their view about the disease or the diagnoses. From there we educate base on what they tell us then we tell them the type of disease it is, how it comes by with pictures, treatment and their side effects and what to do at all times. Some prefer the traditional way of treating the disease and we advice them that we cannot combine the two.	They should make sure the child eat well and when the child is malnourished we refer them to the hospital nutritionist. The importance of follow-ups care, home care and rehabilitation services
RN (IP)	We tell them nobody knows how the disease comes about. Mostly the people come from farming areas so we educate them to drink clean water, boil them before drinking. How the treatment would be and that they should make sure that once they begin treatment they must complete it so that the child can be cured using pictures. We also tell them that whenever they see anything like boil they should not waste time to report to the nurse and not use herbal medicine on it.	They should eat good food. Follow-up, rehabilitation and home care
RN (IP)	Yes we educate the parents and the children	What to eat and personal

	who can speak and understand about the disease with pictures, what to do, treatment and their side effects and what to do when the side effect occurs.	hygiene. Home care, rehabilitation and follow-up
PNO (Ward manager)	We educate them on disease condition; the signs and symptoms with pictures; side effect of the drugs and what to do because we are trying to create awareness among parents for early detection and prevention.	Their diet and good personal hygiene. Follow-ups and rehabilitation of the child
RN (IP)	We educate them by asking the family questions about the disease in order to clear any miss conceptions before we start with the condition using pictures to explain.	We educate them nutrition, hygiene and follow-up
PMO (OPD)	We give general health education critically on the condition using pictures because we have not trained in oncology nursing. The basic knowledge that we have about cancer we educate them on that. We educate them about various treatment; side effects and what to do when the need arises.	We educate them on hygiene, diet, the need for follow up, and infection prevention.

4.8.2.1 Nurses response

Table 4.8c presents results on nurses' responses on health education for children diagnosed with cancer and their carers/parents. Six (6) nurses stated that they educate patient and carers/parents about the disease condition. Four (4) nurses stated that they educate on treatment and their side effects. Six (6) nurses stated that they educate on diet. Four (4) nurses stated that they educate on personal hygiene. Six (6) nurses stated that they educate about the importance of follow-up care. Four (4) nurses stated that they educate on home care. Four (4) nurses stated that they educate on rehabilitation services for children with cancer.

Table 4.8d: Health education

Themes	**Education about the disease**	**Nutrition**	**Personal hygiene**
KI 1	They show pictures as they educate us about the disease, treatment, side-effects and home care and rehabilitation of the child	Eat good food	They told me to look after him very well. He should always be neat.
KI 2	They show us pictures of the disease, treatment cycles and side effects of the treatment and what to do at home	They said I should not give her fat food	Keep her clean all the time.
KI 3	The disease with pictures, treatment and side effects and rehabilitation services	They told me to give him nutritious diet.	He should not be roaming about and must always be neat.
KI 4	Home care, rehabilitation. About the disease with pictures and treatment	Eat balance diet.	They said with cancer he is not supposed to go near smoky areas and that we should take very good care of him. We should make sure he is always clean, brushes his teeth
KI 5	Health education was given on the disease with pictures, treatments and their side-effects, follow-up care and home care	I should feed him well with good food.	They told me to take very good care of him. I should not let him go out and play.
KI 6	The disease with pictures, treatment and side effects, home care, follow-ups and rehabilitation services	Food that are rich in protein	Personal hygiene
KI 7	They show pictures as they educate us about the disease, treatment, side-effects and home care, follow-up and rehabilitation of the child	They said I should him with nutritious diet	personal hygiene
KI 8	They show us pictures of the disease, treatment cycles and side effects of the treatment and what to do at home and follow-up	Good food and I should make sure that the food is well cooked before I give to my child	Good personal hygiene. Bathing and brushing of teeth
KI 9	Health education was given on the disease with pictures, treatments and their side-effects, follow-up care and home care	The nurses educated me on diet. What I should feed my child.	Personal hygiene. He should not be roaming about

KI 10	Rehabilitation, home care, follow-up, disease and treatment and side effects	They said I should feed him with good food so that he will not have anaemia	The nurse told me to make sure he brushes his teeth well and rinse the mouth after eating. He should be neat all the time

4.8.2.2 Carers/parents responses

Table 4.8d presents results on cares/parents responses on health education. Nine (9) carers/parents stated that nurses educated them on the disease condition using pictures. Ten (10) carers/parents stated that nurses educated them on treatment and the side effects of the drugs. Nine (9) carers/parents stated that nurses educated them on home care. Six (6) carers/parents stated that nurses educated them on follow-ups. Six (6) carers/parents stated that nurses informed them about rehabilitation services for children. Ten (10) carers/parents provided evidence that nurses educated them on children's nutritional needs. Ten (10) carers/parents provided evidence that nurses informed them regarding the children's personal hygiene.

Table 4.8e: Triangulation of nurses and carer/parents responses

	Questionnaire	Nurses' interviews	Parent/carers interview
Education sessions about the disease, use of pictures, simple language and local dialects	They are educated on how to care for the child at home and to comply with treatment.	We educate them on the disease condition; the signs and symptoms; side effect of the drugs and what to do because we are trying to create awareness among parents for early detection and prevention. We give general health education critically on the condition because we have not trained in oncology nursing. The basic knowledge that we have about cancer we educate them on that. We educate them about various treatment; side effects and what to do when the need arises.	The nurses told me with cancer he is not supposed to go near smoky areas.
Playing with other children, and living a normal life, diet	We educate on nutrition	They should make sure the child eat well and when the child is malnourished, we refer them to the hospital nutritionist.	I should not let him go out and play. They told me to give him nutritious diet.
School/ Social services	Social services	We inform them about school and social services	There are no special systems in place for these children.
Personal hygiene	We educate them on good personal hygiene	We educate them on hygiene	We should make sure he is always clean, brushes his teeth

4.8.3 Triangulation of responses on health education

Comparing questionnaire and interview responses on education to patient and family, eighteen (18) nurses indicated they do educate parents/carers about the child's disease condition and home care required. Six (6) nurses interviewed stated they provide education on disease and home care. Parents/carers also confirmed that they were given information on disease condition and home care that the child would require. Eighteen (18) nurses indicate they do educate parents/carers about the child's diet and nutrition. Six (6) nurses interviewed stated they provide education on nutritional requirement of the child. Parents/carers also confirmed they were given information on nutrition that the child would require.

Eighteen (18) nurses indicated they do educate parents/carers about the child's personal hygiene. Six (6) nurses interviewed stated they provide education on personal hygiene. Seven (7) nurses indicated they do educate parents/carers about the importance of follow-up care for the child. Six (6) nurses interviewed stated they provide education on the importance of follow-up care. Parents/carers also confirmed they were given information on the importance of the child's follow-up care. Eighteen (18) nurses indicated they do educate parents/carers about rehabilitation services such as school and social services. Four (4) nurses interviewed stated they provide education on rehabilitation services such as school and social services. Parents/carers also confirmed that they were given information on rehabilitation services.

4.9 Support systems for carers/parents

Table 4.9a: The support systems provide for carers/parents and children with cancer

Themes	Counselling for patient	Cancer support group meetings/NGOs	Social services	School systems	Rehabilitation services
Nurse 1	Counselling	We counsel them in groups and introduce them to those in remission. Those diagnosed with Burkitt lymphoma receive support from an NGO from Germany	There is a medical social work unit so we refer them to the unit in case they need help	We only give them letters to be sent to the child's teacher and the head-teacher of the school if they child is schooling	We do not have rehabilitation centre but we always tell the parents to have patience with them
Nurse 2	Counselling	We encourage them to join cancer groups. NGOs	We offer social services	We give them letters for the child's school	We do not have such services here
Nurse 3	Counselling	We counsel them. Sometimes we invite parents whose children are in remission to talk to them. An NGO from Germany support Burkitt lymphoma cases	Social service	school systems	There is rehabilitation centre
Nurse 4	We counsel them all the time	We invite cancer groups which gives talk on how to cope with the condition. Burkitt lymphoma is supported by a German NGO	We send them to the hospital social worker	School services	Rehabilitation

Nurse 5	It is all about counselling	We teach them in groups in order to make them feel comfortable	Social services	School systems	Rehabilitation
Nurse 6	Counselling	We encourage the parents to join cancer groups	Social works	School systems	We rehabilitate the child after discharge
Nurse 7	We counsel both child and family	Joining cancer survival groups. An NGO supports Burkitt lymphoma cases	Hospital social works unit	We give them letters for their school if the child is a pupil	rehabilitation
Nurse 8	Counselling	Advice to join cancer groups	Social worker	Letters for their schools	Rehabilitation
Nurse 9	We counsel them	To join cancer association. Burkitt lymphoma cases receive support from an NGO in Germany	Social worker	School services	We advice parents on what to do for the child to pick up again
Nurse 10	Counselling	Join Paediatric cancer association	Social services	School services	Rehabilitation
Nurse 11	Counselling	Join cancer groups	Refer to the hospital social works unit	School services	Rehabilitation
Nurse 12	Counselling	Joining cancer groups	Social services	School services	Rehabilitation
Nurse 13	Counselling	Join cancer associations	Social services	School systems	Rehabilitation
Nurse 14	Counselling	Join associations form by cancer survivors and	Medical social worker	School services	Rehabilitation

		those with Burkitt lymphoma receive support from an NGO			
Nurse 15	Counselling	Share their experiences with cancer groups and learn more from them. NGOs	Social works	School systems	Rehabilitation
Nurse 16	Counselling	Join cancer groups, NGO	Social works unit	School systems	Rehabilitation
Nurse 17	Counselling	Join cancer groups	Social worker	School services	Rehabilitation
Nurse 18	Counselling	There are cancer groups so we advise them to join and share their views and also learn about coping techniques	Social works	School services for those of school going age	Rehabilitation

4.9.1 Questionnaire responses

Table 4.9a presents results on nurses' responses on support systems in place for children diagnosed with cancer. Eighteen (18) nurses indicated that they provide counselling services to patients and their families. Fifteen (15) nurses indicated that they advice the families to join cancer survival groups/associations to learn about coping techniques. Three (3) nurses provide evidence of arranging meeting of cancer survivors. Nine (9) nurses indicated that children diagnosed with Burkitt lymphoma receive support from an NGO. Three (3) nurses indicated that they refer patients and their families to the medical social worker. Fifteen (15) nurses indicated that they inform parents/carers about the social services. Fifteen (15) nurses indicated that they inform the parents/carers about school systems; five (5) nurses indicated that they provide the parents/carers with letters indicating their health condition to be presented to school authorities. Eighteen (18) nurses indicated that they inform parents/carers about rehabilitation services.

Table 4.9b: Support systems put in place to assist parents and carers after a child diagnosed with cancer.

Themes	Counselling/Rehabilitation services	NGOs	Financial supports	Medical social worker
EN (OPD)	We counsel them all the time and advice them to join cancer groups as well. We inform them about school services where we give them letters for their school authorities	In KATH, we have an NGO who sponsor but not all the treatment for Burkitt lymphoma so if a child is diagnosed with Burkitt lymphoma we treat him or her free unlike the other cancers that the parents have to pay to the last treatment.	Sometimes we help them from our own pocket.	We refer them to the hospital social works unit
RN (IP)	We only counsel them and introduce them to cancer association and advice them to join these groups for moral support. We also inform them about rehabilitation services for the children	Some people come to donate things and money especially the whites.	The hospital is trying to put things in place so that they get help for those who find it difficult to fund their children's treatment.	We refer them to the medical social worker
RN (IP)	We counsel and ask them to join cancer associations so they know. They are inform about social/school services for the children.	Some NGOs support the treatment for Burkitt lymphoma so those who come with it are lucky. They don't spend much on treatment unlike the others	We advice them to go and inform their churches about the condition and ask for financial assistance from the church. They come in for letters which doctors write for them to confirm that truly the child needs financial support. Some go to radio stations so they can get funds for the treatment. We write	We send them to the social worker

			letters for them to go and look for money. Some of the medical students do help because they form a group to help cases like this. Some of the doctors too contribute towards that.	
PNO (Ward manager)	We counsel them. We inform them about rehabilitative services and school supports and joining of cancer survivor groups. We provide them with letters for the school authorities	We have an NGO called Cancer Health Africa in Germany. There is a German doctor who always solicits funds for cancer drugs whenever she visits Germany for this unit. Still occasionally helps with some of the drugs.	Some doctors contribute towards that so when the need arise we contact them for help	We refer to the hospital social worker
RN (IP)	We support them psychologically and physically. We inform them about these cancer survivor groups that they can join for psychological support	The hospital is trying to put things in place so that those who cannot afford the treat can be supported	Some of the nurses pay from their pocket just to help them	Financially, we refer them to the social welfare personnel to take up the financial concerns of the parents.
PMO (OPD)	We counsel them too. We inform them about rehabilitation and school systems. Those of school going age are given letters for their school teachers .	We do not have anything like that but we have an NGO which helps with some of the cancer drugs for patients with Burkitts lymphoma the patient would not spend much.	The medical students formed an association that carter for those who could not afford the treatment	We refer them to the medical social work unit

4.9.2.1 Nurses' responses

Table 4.9b present results on nurses' responses on support systems for children diagnosed with cancer. Six (6) nurses stated that they provide counselling services to children diagnosed with cancer and their families. Four (4) nurses stated that they inform the carer/parents about school services for children diagnosed with cancer. Three (3) nurses stated that they inform parents about rehabilitation services for children diagnosed with cancer. Three (3) nurses stated that they provide letters for children's school authorities about their condition. Five (5) nurses stated that they advice parents/carers to join cancer groups for psychological support. Five (5) nurses provide evidence that children diagnosed with Burkitt lymphoma are supported by an NGO from Germany. Three (3) nurses stated that medical students form an association that contribute towards children diagnosed with cancer but could not afford treatment. Two (2) nurses stated that some nurses support children financially. One (1) nurse state that the hospital is making arrangement for those who could not afford treatment. One (1) nurse stated that the hospital doctors write letters to some of the carers/parents which they present to radio stations and mining companies for financial support. All the six (6) nurses stated that they refer carers/parents to the medical social unit to solicit help.

Table 4.9c: Support systems for children diagnosed with cancer.

Themes	Counselling services/treatment planning	Financial support	School /social services
KI 1	They counsel me and my child all the time. The nurses involve us when they were planning treatment care for the child. They also told me that I should join cancer associations	There is no financial support	There was a time the nurses asked me to go and see the social worker
KI 2	The nurses counsel us all the time ask me to join cancer groups for support. They involve me during treatment planning and told me the treatment my sister is going to receive	The nurses did not give me any financial support but I went to the goldmines and got help financially.	They only gave me a letter to send to the school teacher
KI 3	They counsel us and advised us to join cancer group. Yes, they involve me because I'm the one paying so the nurses told me everything concerning the treatment and ask for my opinion	There is no support from anywhere. I have being buying all the drugs myself.	I have being discussing with the head-mistress of the school and I had not told them anything. The headmistress told me that when the child is fine I can bring him to school. There are no special systems in place for these children.
KI 4	They counsel us all the time and said I should join a cancer group for moral support. Yes, we all plan the treatment and care together	No way, it is my father who is doing everything financially.	About informing the school authorities it was my father who did that because since he started treatment he has not been to school.
KI 5	The always counsel me not to worry. They always involve me and ask me for my in-put	There are no support systems in place.	My child is not yet going to school
KI 6	The nurses counsel me. I even joined a cancer group that the nurses introduce to me. The nurses called me	They only counsel us apart from that they do not do anything again	They nurses informed me about school services and rehabilitation services for my child

	to join them because they are going to plan my child's treatment		
KI 7	The nurses always talk to me nicely not to be worried and advised me to join cancer groups for psychological support. Yes I was involved during treatment planning	We pay for the treatment. There is no support from anywhere	They said there are services in place for school, social worker and rehabilitation.
KI 8	They always tell me not to be worried. They involved me and ask me whether I accept it	We do not receive any financial support	They referred me to the social worker
KI 9	They counsel me. Yes, I was part of the team when they were planning my child's treatment	Financially, we pay from our pocket. They only counsel us	They gave me a letter which I sent to my child's school to inform them about the condition
KI 10	They counsel us. Yes they do involve me all the time	We pay for everything. There are no support systems	The nurses sent me to see the social worker for help

4.9.2.2 Carers/parents responses

Table 4.9c presents results on carers/parents responses on support systems. Ten (10) carers/parents stated that nurses provide counselling services. Seven (7) carers/parents stated that nurses advised them to join cancer groups for psychological support. Ten (10) carers/parents provided evidence that nurses involve them during treatment planning for their children. Ten (10) carers/parents deny receiving financial support stating that they pay for all the treatment. Two (2) carers/parents stated that they were given letters which was presented to their children's school authorities. Five (5) carers/parents stated that they were informed about school /social services; two (2) carers/parents stated that they were referred to the medical social worker

Table 4.9d: Triangulation of information on support systems for carers/parents and children diagnosed with cancer

	Questionnaire	**Nurses' interviews**	**Parent/carers interview**
School services	School systems	We inform them about the school system where we write letters for them to be sent to their schools	They said there are services in place for school. I was given a letter which I presented to my child's school teacher.
Rehabilitation services	Rehabilitation services	We inform them about rehabilitation services that are in place to help the child	They informed us that there are rehabilitation services
NGOs	There is an NGO from Germany who takes care of those with Burkitt lymphoma. Some of the medical students also form a group that help those who could not afford the treatment	We have an NGO called Cancer Health Africa in Germany. There is a German doctor who always solicits funds for cancer drugs whenever she visits Germany for this unit. Still occasionally helps with some of the drugs. In KATH, we have an	They said there are services in place for school, social worker and rehabilitation. I was given a letter which I presented to my child's school teacher.

		NGO who sponsor but not all the treatment for Burkitt lymphoma so if a child diagnosed with Burkitt lymphoma we treat him or her free unlike the other cancers that the parents have to pay to the last treatment.	
Financial supports	Some doctors do support those who could not afford the treatment	The hospital is trying to put things in place so that they get help for those who find it difficult to fund their children's treatment. Some of the medical students do help because they form a group to help cases like this. Some of the doctors too contribute towards that Sometimes we help them from our own pocket.	There is no financial support. There is no support from anywhere. I have being buying all the drugs myself.
Medical social worker	Social service	Financially, we refer them to the social welfare personnel to take up the financial concerns of the parents.	The nurses referred me to the hospital social worker
Counselling services	Counselling, for supportive care it helps them to co-operate and understand the need for care. Counsel them as a group with the other children with the same diagnosis.	We counsel them all the time. We support them psychologically and physically.	They counsel us all the time.
Support groups	Join Paediatric cancer association	We advice them to join cancer survival groups	They told us that there cancer groups that we can join for emotional support

4.9.3 Triangulation of responses on strategies use in planning nursing care

Table 4.9d Support systems for carers/parents and children diagnosed with cancer

Comparing questionnaire and interview responses on the support systems carers/parent and for children diagnosed with cancer, eighteen (18) nurses indicated that they provide counselling services to patients and their families. Six (6) nurses interviewed stated that they provide counselling services to children diagnosed with cancer and their families. Parents/carers also confirmed that nurses do provide counselling services to them. Fifteen (15) nurses indicated that they advice carers/parents to join cancer groups. Five (5) nurses interviewed provided evidence that they advice parents/carers to join cancer groups for psychological support. Parents/carers also confirmed that nurses do advised them to join cancer groups for psychological support. Nine (9) nurses indicated that an NGO supports those with Burkitt lymphoma. Five (5) nurses interviewed stated that some NGOs from Germany support children diagnosed with Burkitt lymphoma. Parents/carers stated that they receive no support from such a group because their children do not fall into that category. Three (3) nurses indicated that they refer parents/carers to the medical social worker. Six (6) nurses interviewed stated that they refer parents/carers to the medical social worker. Parents/carers also confirmed that nurses do referred them to the medical social worker.

Fifteen (15) nurses indicated that they inform parents/carers about school/social services for children diagnosed with cancer. Three (3) nurses interviewed stated that parents/carers are inform about school/social services. Parents/carers also confirmed that nurses do informed them about school/social services. Five (5) nurses indicated that they provide parents/carers with letters for the children's school authorities. Three (3) nurses interviewed stated that they provide parents/carers with letters for children's school authorities. Parents/carers also confirmed that the nurses do provided them with letters for the children's school authorities. Eighteen (18) nurses indicated that they inform parents/carers about rehabilitation services for children with cancer. Three (3) nurses interviewed stated that they inform parents/carers about rehabilitation services.

Parents/carers confirmed that nurses do informed them about rehabilitation services for children diagnosed with cancer.

4.10 Nurses' attitude

This section presents the attitude of nurses toward children diagnosed with cancer and the reaction of other nurses who work does not work in the oncology ward toward children.

Table 4.10a: Description of nurses' feelings toward caring for children with cancer (open-ended question)

Themes	Emotional	Empathetic	Sad	Giving total quality nursing care delivery
Nurse 1	Emotional	Sympathetic	Sad	In caring for a child with cancer there should be quality nursing care given to the child.
Nurse 2	Emotional	Empathetic	Very sad	Delivering a total quality care to them
Nurse 3	Very emotional	Empathetic	Sad	Giving off our best for them
Nurse 4	Emotional	Sympathy	I feel very sad	Giving them the care
Nurse 5	Very emotional	Empathetic	Sad	Plan the best nursing care for them
Nurse 6	Emotional	Empathetic	Sad	Children diagnosed with cancer should be given best of nursing care necessary for their recovery.
Nurse 7	Very emotional	Empathy	Sad	Plan quality care for them
Nurse 8	Emotional	Sympathetic	Sad	Children with cancer should be given the maximum support and nursing care
Nurse 9	Emotional	Empathetic	Feels sad when caring for them	Giving off our best for these children
Nurse 10	Emotional	Empathy	Sad	The best of everything in nursing care to them
Nurse 11	Very emotional	Sympathy	Sad	They need the best of care
Nurse 12	Emotional	Sympathy	Sad	We must give them quality nursing care
Nurse 13	Very emotional	Empathy	Very sad	Total quality care
Nurse 14	Very emotional	Empathetic	Sad	Best nursing care
Nurse 15	Emotional	Empathetic	Sad	They deserve the best in nursing
Nurse 16	Emotional	Sympathetic	Very sad	Quality care
Nurse 17	Emotional	Sympathetic	Very sad	Quality nursing care
Nurse 18	Very emotional	Empathetic	Very sad	Total quality nursing care

4.10.1 Nurses' responses to Questionnaires

Table 4.10a presents results on nurses' responses on nurses' attitude toward children diagnosed with cancer. Seven (7) nurses indicated that nurses' attitude towards children with cancer is very emotional. Eleven (11) nurses out of eighteen nurses indicated that nurses feel emotional toward children diagnosed with cancer. Eighteen (18) nurses indicated that they have empathy for children diagnosed with cancer. Twelve (12) nurses provided evidence that they feel sad toward children diagnosed with cancer. Six (6) nurses provided evidence that they feel very sad toward children diagnosed with cancer. Seven (7) nurses provided evidence that children diagnosed with cancer should receive total quality nursing care and eleven (11) nurses indicated that they feel children diagnosed with cancer should receive the best nursing care.

Table 4.10b: Reaction of other nurses to caring for children with cancer

Themes	Empathy/ Sympathy	Sad	Misconception	Love
Nurse 1	Empathy	Very sad	Other nurses from other wards think that if you look after a child diagnosed with cancer, you can also get cancer.	They show them love
Nurse 2	Sympathy	Sad	They think we are going to die of cancer	Love
Nurse 3	Reaction is based on empathy	sad	They feel unease	Love
Nurse 4	Empathy	Sad	They feel unease	Shows lots of love and care
Nurse 5	Empathy	Sad	They become afraid of us	Lovely
Nurse 6	Sympathetic	Very sad	They feel unease	Love
Nurse 7	Empathy	Very sad	They said we will suffer from cancer as well	Lovely
Nurse 8	Empathy	Sad	The other nurses feel that if you care for a child with cancer you might also end up getting cancer one day.	Lots of love
Nurse 9	They show sympathy	Sad	They said we would die of cancer one day	Love
Nurse 10	Empathy	Sad	They run away from us because they think they will have cancer	Love
Nurse 11	Sympathy	Sad	They run away from us	Lots of love
Nurse 12	Sympathetic	Sad	Other nurses hide when they see us	Lots of love
Nurse 13	Sympathetic	Very sad	They feel unease	Love
Nurse 14	Empathetic	Very sad	They are afraid to come into the ward	Love
Nurse 15	Empathetic	Very sad	They become unease	Love
Nurse 16	Empathy	Sad	They become afraid to come into contact with us	Love
Nurse 17	Empathy	Sad	Some do run away	They show them love
Nurse 18	They show sympathy	Sad	They do not like being with us	They show love

Table 4.10b presents results on nurses' responses on reactions of other nurses toward children diagnosed with cancer. Eighteen (18) nurses indicated that nurses' reaction toward children diagnosed with cancer is based on empathy. Twelve (12) nurses provided evidence that other nurses' react sad toward children with cancer. Six (6) nurses indicated that nurses respond very sad toward children diagnosed with cancer. Five (5) nurses provided evidence that nurses from other wards have misconception that if a nurse work in the cancer unit, the nurse will die of cancer. Nine (9) nurses indicated that some nurses feel unease when they see a nurse from the oncology unit. Four (4) nurses indicated that some nurses feel that if they come into contact with oncology unit nurse they will contract cancer as well. Eighteen (18) nurses indicated that some nurses show love toward children diagnosed with cancer.

4.10.2 Interview responses

This section presents negative and positive attitudes and knowledge of nurses who work in the oncology ward and nurses who work in other wards toward children diagnosed with cancer and the impact of cancer on families.

4.10.2.1 Nurses response

Table 4.10c presents results on nurses' responses on nurses' attitude toward children diagnosed with cancer. Two (2) nurses stated their attitude toward children with cancer is emotional. Tow (2) nurses stated that their reaction toward children diagnosed with cancer is based on empathy. Two (2) nurses stated that they feel sad toward children with cancer. Two (2) nurses stated that nurses react friendly toward children diagnosed with cancer. Three (3) nurses stated that nurses feel that those who work in the cancer unit will get cancer as well. Two (2) nurses stated that some nurse feel that nurses who work on cancer patient will also die of cancer. Six (6) nurses provided evidence that nurses attitude in now positive after they were educated on cancer.

Table 4.10d presents results on nurses' responses on the impact of cancer on families. Two (2) nurses stated that most of the families are illiterates so when they inform them about the diagnosis, they accept it without any difficulties but those who are literates

face challenges accepting the diagnosis. One (1) nurse stated that some of the parents attribute the diagnosis to their past life style and accept it in good faith. One (1) nurse stated that some parents attribute the diagnosis to a previous accident they had. Two (2) nurses stated that some parents break down and cry when informed about the diagnosis. Three (3) nurses stated that some families prefer to let the child die because definitely the child will die. Two (2) nurses stated that some parents reject the result and argue with them. One (1) nurse stated that some men neglect their wives and children due to the disease. Six (6) nurses stated that patients' families become very sad and devastated when it comes to money for treating the children. Three (3) nurses stated that some families become aggressive about the results. Two (2) nurses stated that some men blame their wives as the cause of the disease. One (1) nurse stated that some parents blame the family members as being cursed.

Table 4.10c: Nurses' attitude toward children diagnosed with cancer

Themes	Good	Misconception
EN (OPD)	They all have sympathy with them because they do not have good prognoses. They always come when they are in the late stage so their chances of survival are very slim. We feel so sad and bad about their condition.	Most nurses fear to work here in the wad because they think once you are working in this ward you will also get cancer
RN (IP)	I feel very sad when l see them, l feel very bad likewise my colleagues.	The nurses said those of us work here in the children's ward will get cancer and die so they do not like working here
RN (IP)	Every nurse petty these children because we take them as our own children so we feel the same as the mothers feel. We treat them nicely to make them feel at home.	Some of the nurses are even afraid to come close to us because we work on cancer cases but now their attitude is changing for the best
PNO (Ward manager)	Now their attitude is friendly. There is a good relationship between the nurses and the patients. I become very emotional sometimes when I see little children in severe pain	Previously it was a problem. They feel, l think it was out of ignorance, they did not know what it is and they over heard that working with cancer people you would also be affected so because of that their attitude was very bad but this year through education, reading and workshops, we got to know that it is not true. Some nurses are even dying of cancer while they had never worked in the cancer unit.
RN (IP)	The general attitude of nurses here in the ward is very good. They are friendly and welcoming. I become emotionally disturb sometimes	At first they fear those who work on cancer patients but now it is better after education
PMO (OPD)	It depends on the individual. Most of us have emotions so we feel petty for the children. Their attitude is positive.	At first it was a big problem because they thought once you work with cancer patient you will also die of cancer but now due to education, they are changing

Table 4.10d: The impact of the diagnosis on the family members

Themes	Positive reactions	Negative reactions	Sad	Aggressive
EN (OPD)	We always tell them the truth, some would accept to go with the drugs others would tell us they would go home and pray to their God. So it depends on the parents, most are not educated so when we tell them they comply.	Some neglect their wives and children due to the disease	At times, they really become sad because we tell them we do not have 100% assurance for them.	Some of the families become aggressive when we tell them the diagnosis
RN (IP)	Some break down and cry a lot. After counselling they accept it and decide on what to do.	It has a lot of negative impacts on the family members. Some at time ask for discharge because they know the child is still going to die so why should they waste money to treat him or her.	They are sad. Sometimes it affects the family because the child is like that and they do not know what the outcome may be. The whole family would be confused so they keep on asking questions.	Some become very aggressive and accuse their wives as the cause
RN (IP)	They become very pathetic when we break the news to them.	When they hear the news that their child has cancer, they are demoralised. Some would tell us if the child is not going to be cured then there is no need spending money on them.	In most cases, the family become sad and ask questions upon question	In some cases the family neglect the mother and the child.
PNO (Ward manager)	Unfortunately, most of the clients are illiterates in the rural areas so even we try to explain they do not even understand what we are talking about so they accept it. Their belief is that once they are in the	Some people will tell you point blank that it is not their result and even leave without us seeing them again	Most of the families become very sad about the diagnosis	Some parents, especially the men become very angry with their wives for not listening to them and being the cause

	hospital their child will be healed. But those who are a bit educated, when we tell them it is very difficult to accept until further counselling. Sometimes we have to show them pictures about children suffering from cancers before and after treatment before they accept it.			of the disease
RN (IP)	Some parents attribute the disease to their previous lifestyle	Some parents will tell you once the child is going to die, there is no need wasting money treating it	It is very sad and devastating to the family most especially when it comes to money.	Some take it in good faith while others behave as if the nurse is the cause of the disease
PMO (OPD)	Some attribute it to accident they had some time ago but others take it in good faith that it is just like malaria so it has come so they just have to cope with it.	Some take it likely and others argue with us	They become sad because they do not have money for the treatment	Some become shocked so they deny it and some also accuse the family members as been cursed.

Table 4.10e: Key informants' view on nurses' attitude toward children with cancer

Themes	Friendly	Cordial	Good
KI 1	I would say they are friendly because they know what to do for us and they do everything to make us happy so they are friendly.	The attitude of the nurses is cordial. They are always ready to listen to us	They are very good
KI 2	The nurses are friendly because they even gave me a letter to go and look for money in big companies.	They have a cordial relationship with one another and extended the same toward us	The nurses are good t us
KI 3	The nurses are friendly. We always approach them whenever we need help	For my case, the attitude is cordial. There have being a good relationship with the nurses even the doctors. The way they counselled me was amazing.	They are welcoming
KI 4	They are friendly and always doing their best for us even though we do not money they take care of my brother well.	There is a cordial relationship among the nurses and that is good	I like the nurses. They are good
KI 5	The nurses are very friendly with us	The attitude is cordial	They are very good, the nurses and the doctors. The way they talk to me and my husband it is very good for us.
KI 6	The nurses are always ready to hear us out. In fact they are very friendly	They have a cordial behaviour	They are best here in the hospital
KI 7	They approach us in a friendly manner and always listen to us	They are always there for each other	I like the nurses here because they are the best
KI 8	They are very friendly	They behave like sisters in the hospital. I like the way they behave	They are very good
KI 9	They are always with us and want the best for us.	Their attitude is very unique compare to other wards	The nurses here in children's ward are very good
KI 10	The nurses are very friendly	They are unique	They behave very well

4.10.2.2 Carers/parents responses

Table 4.10e presents results on carers/parents responses on nurses' attitude toward children diagnosed with cancer. Ten (10) carers/parents stated that the attitude of nurse is friendly toward children diagnosed with cancer. Ten (10) carers/parents stated that nurses have cordial relationship with children diagnosed with cancer and ten (10) carers/parents provided evidence that nurses attitude toward children diagnosed with cancer is very good because the nurses always want the best for their children.

Table 4.10f: Description of feelings after diagnosis

Themes	**Sad /emotional/**	**Shock / aggressive**
KI 1	I was very sad but now my child is fine since he started treatment so am happy.	I nearly collapsed but thank God the nurses are good
KI 2	I was very sad when they told us that my sister is having cancer but am happy now because my sister is getting better.	It came to us like a blow
KI 3	I was very sad even till now.	It came to me as a shock. In fact I was astonished when they told me about the diagnosis.
KI 4	I was very sad but now am happy because my brother is feeling better.	My husband said am the cause of the disease so I should treat him
KI 5	My mood was very bad. I cried a lot and my husband too	It was a big surprise to me
KI 6	I was not myself for some time. I was emotionally disturbed	In fact I was shocked
KI 7	It is very emotional	I became speechless
KI 8	I was very sad	I was shocked
KI 9	It was very pathetic	We are neglected
KI 10	I became disturbed emotionally when the nurse informed us about the disease	It was a heavy blow to us

Table 4.10f presents results on carers/parents responses on their feeling after the child was diagnosed with cancer. Six (6) carers/parents stated that they were sad when informed about their children's condition. Three (3) carers/parents stated that they were emotionally disturbed about the diagnosis. One (1) carer/parent stated that the diagnosis made them became pathetic. Eight (8) carers/parents stated that they were shocked when informed about the diagnosis. One (1) carer/parent stated that the family

neglected them because of the diagnosis. One (1) carer/parent stated that the husband blamed her for the cause of the disease.

Table 4.10g: triangulation of sources on nurses' attitude

	Questionnaire	Nurses' interviews	Parent/carers interview
Emotional	Emotional	Caring for these children is very emotional so other nurses do not want to work in this unit. Sometimes, we the nurses become very emotional when babies are in severe pains	It is very emotional
Empathetic/sympathetic	Empathetic	Caring for these children is very sympathetic	The nurses always talk to us politely and encourage us to voice out our problems
Sad	Feels sad when caring for them	I feel very sad when I see them, I feel very bad likewise my colleagues.	I was very sad
Giving total quality nursing care delivery	Children with cancer should be given the maximum support and nursing care	Here we deliver total quality nursing care because we involve the family during our care. We provide systematic nursing care that meet patient and family needs	The nurses are doing their best for us
Misconception	Other nurses from other wards think that if you look after a child diagnosed with cancer, you can also get cancer.	Previously it was a problem. They feel, I think it was out of ignorance, they did not know what it is and they over heard that working with cancer people you would also be affected so because of that their attitude was very bad but this year through education, reading and workshops, we got to know that it is not true. Some nurses are even dying of cancer while they had never worked in the cancer unit.	They told me cancer is a curse but the nurses told me it is just like other disease so now I know
Love/ Cordial/ Good/ Friendly	Shows lots of love and care	The general attitude of nurses here in the ward is very good. They are friendly and welcoming.	For my case, the attitude is cordial. There have being a good relationship with the nurses
Aggressive	Some of the parents become very aggressive and accuse their wives of	Some deny it and some accuse the family members as been cursed. In some cases, the family neglect the	My husband neglect me and the child that I am the cause of the disease

	being the cause	mother and the child.	
Shock	Some become shocked when we tell them about the diagnosis	Some become shocked when we inform them about the diagnoses	It came to me as a shock. In fact, I was astonished when they told me about the diagnosis.

4.10.3 Triangulation of data relating to nurses' attitude

Comparing questionnaire and interview responses on nurses' attitude, eighteen (18) nurses indicated their approach toward children diagnosed with cancer is emotional. Two (2) nurses interviewed stated they become emotional. Eighteen (18) nurses indicated they have empathy for these children. Two (2) nurses interviewed stated that their attitude is empathetic toward children diagnosed with cancer. Parents/carers also confirmed that nurses' reaction toward the children is empathetic. Eighteen (18) nurses indicated they feel sad. Two (2) nurses interviewed stated their attitude is sad toward children diagnosed with cancer. Parents/carers also confirmed that nurses' reaction toward the children is sad.

Eleven (11) nurses indicated that they feel children with cancer should receive the best nursing care. Seven (7) nurses indicated that they feel children diagnosed with cancer should be given total quality nursing care. Four (4) nurses interviewed stated that they provide children diagnosed with cancer total quality nursing care. Parents/carers also confirmed that the children were given the best of care the children require.

Eighteen (18) nurses indicated that other nurses' reaction toward children diagnosed with cancer is based on empathy, love, cordial and friendly. Two (2) nurses interviewed stated that other nurses have empathy, cordial, love and friendly toward the children. Parents/carers also confirmed that nurses are empathetic, love, cordial and friendly. Eighteen (18) nurses indicated that nurses' reaction is sad toward cancer children. Parents/carers also confirmed that nurses from other wards feel sad when they see the children.

Five (5) nurses indicated that nurses from other wards have misconception that those who work in the cancer unit will die of cancer. Two (2) nurses interviewed provided evidence that other nurses have the feeling that those who work in the oncology unit will die of cancer. Parents/carer also confirmed that some nurses do avoid entering the ward. Four (4) nurses indicated that other nurses have the conception that those who

work with cancer patient will contract cancer as well three (3) nurses stated that some nurses believe that those who work with cancer patients get cancer as well. Parents/carers also confirmed that nurses from other wards do avoid entering into their ward.

Five (5) nurses indicated that some men become aggressive about the diagnoses and neglect their wives and the sick children. Three (3) nurses interviewed stated that some families become very aggressive when informed about the diagnoses and neglect patient and mother. Parents/carers also confirmed that their husbands and families neglected them. Eight (8) nurses indicated that some families express shock when inform about the diagnoses. Three (3) nurses interviewed stated that families become shock when inform about the diagnoses. Parents/carers also confirmed that they were shocked when informed about the diagnoses.

4.11 Constraints and Limitations

4.11.1: Constraints

Financially, there was no provision for international students so the researcher funded the study due to this the researcher is stuck financially. The time allocated for data collection delayed due to a delay in releasing the ethical clearance certificate owing to a delay in obtaining an ethical clearance in Ghana for data collection. Obtaining ethical clearance in Ghana was a bit difficult.

4.11.2: Limitations

The time scheduled for data collection was not enough due to the delay. Other teaching hospitals could have being use but the study was for only one teaching hospital in Ghana. The results cannot be generalised because the study was conducted in only one hospital in Ghana. Information could have being solicited from nurses who are working in other wards but the study population and the inclusion criteria was nurses in the paediatric oncology unit.

4.12 Summary

Chapter four (4) presented the results from data collected from nurses in the paediatric oncology unit, in a teaching hospital in Ghana in order to explore nurses' role in the management of children diagnosed with cancer in Ghana. Questionnaires were distributed to nurses and some nurses and carers/parents were interviewed on the various steps in the nursing process. Nurses requested to provide information on their roles during assessment of a child diagnosed with cancer. How they diagnose patient's problems and intervene these problems. Nurses also requested to provide information on strategies use in planning care for a child diagnosed with cancer, implementation of planning care and evaluation of nursing care. Information about discharge care planning, health education and nurses' attitude also requested where parents/carers requested to confirm nursing care delivery and nurses' attitude.

Chapter 5: Discussions

5.1 Introduction

This chapter presents discussions on results obtained. It discusses the findings of the research in relation to the reviewed literature. These include demographics, nurses' role in assessment, planning, implementation of nursing care, evaluation and discharged care planning. It also discussed health education, support systems and attitude of nurses.

5.2 Demographics

Twenty-four (24) nurses and ten (10) parents/carers voluntarily participated in the study. Two (2) ward managers, one (1) clinical instructor, two (2) nursing officers, eight (8) are senior registered nurses and ten (10) are staff nurses and one (1) enrolled nurse. One (1) of the ward managers was in-charge of the inpatients department for children diagnosed with cancers and the other in-charge of the outpatients department for children diagnosed with cancer. The clinical instructor supervise student nurses on the ward. The two (2) nursing officers, eight (8) senior nurses, ten (10) staff nurses work in the ward for children diagnosed with cancer whilst one (1) senior and one (1) enrolled nurses work in the paediatric oncology outpatients department. Out of the ten (10) carers/parents, six (6) are parents and four (4) are carers of children diagnosed with cancer and receiving treatment at the Komfo Anokye Teaching Hospital in Ghana.

5.3 Nurses' role in assessment

The role during assessment of the child included taking of vital signs (Table 4.3a). It was evident from response that all nurses measure vital signs of the child (Seaback, 2013 and Zator Estes, 2014). However, interview responses indicated that nurses are more involved in assessment (Table 4.3d) than evident from their questionnaire responses (Table 4.3a). Parents/carers also confirmed that nurses do check the child's

vital signs during assessment (Table 4.3f). In comparing information from the three data sources, it was evident that both nurses and carers/parents agreed that the child's vital signs were checked (Table 4.3h). Nurses ask parents/carers to describe signs and symptoms of the child during assessment (Tables 4.3a and 4.3d). Nurses' activities during assessment support Seaback, (2013); and Ackley & Ladwig, (2014); findings that nurses check child's vital signs. Parents/carers confirmed the information (Table 4.3f). Although some nurses indicated that they ask the mother to describe signs and symptoms, they did not indicate whether the nurses ask the child directly, to describe his/her signs and symptoms. The response could be due to the fact that the questionnaire did not explore ways that nurses obtain information from the child's own description of his/her signs and symptoms. Nurses did not indicate whether they actually touch the child and ask questions during assessment. Assessment is one of the stipulated nurses' job description in Ghana (See Appendix D), however, the participants' role during assessing a child diagnosed with cancer was appeared inadequate.

Physical examination is one of the functions of nurses during assessment of the child. Nurses indicated that they perform head to toe examination on the child without indicating how they perform it (Tables 4.3a and 4.3d). Nurses' activities during assessment supports Zator Estes, (2014); Ackley & Ladwig, (2014); and Perry, Potter & Ostendorf, (2014) findings, that nurses conduct head to toe physical examination by touching the child. However, there was no indication of any interaction between the nurse and the child during physical examination. Some nurses indicated that they observe the child for abnormalities (Tables 4.3a and 4.3d). On the other hand, nurses failed to elaborate how they carry out observation on the child. Parents/carers confirmed that nurses ask them to undress the child for examination and observation during assessment (Table 4.3f). In comparing information from the three data sources it was evident that both nurses and parents/carers agreed that physical examinations on the child were conducted (Table 4.3h).

Nurses obtain the child's previous medical history from the parent/carer (Table 4.3a). Nurses' activities during assessment supports Seaback, (2013); Zator Estes, (2014) and Ackley & Ladwig, (2014); findings that was similarly emphasised in this study in terms of nurses obtaining the information needed to become au fait. Some nurses indicated that they ask for the child's medical history without indicating the source (Table 4.3a). However, interview responses indicated that nurses are more involved in assessment (table 4.3d) than questionnaire responses provided in (Table 4.3a). Parents/carers also confirmed that nurses enquired from them the child's previous medical history (Table 4.3f). In comparing information from the three data sources it was evident that both the nurses and the carers/parents agreed that nurses enquired them (parents/carers) about the child's previous medical history (Table 4.3h).

It was evident from responses that all nurses take family history from the child's parents or carers (Table 4.3a). Nurses' activities during assessment confirmed Perry, Potter & Ostendorf, (2014); Ackley & Ladwig, (2014); Magnil, (2011) and Herdman, (2012) findings, that highlighted the significance of family members in paediatric care. Nonetheless, interview responses indicated that nurses are more involved in taking family history during assessment (Tables 4.3d and 4.3f). Nurses' activity of taking family history supports McLeod, Tapp, Moules & Campbell, (2010) findings about nurses knowing the family and helps the parents to become involved in the care of their child with oncology disease. Being familiar helps nurses to gain a deep understanding about the family.

In addition, knowing the family creates opportunities for nurses to address family concerns and distress in meaningful ways. However, it was not evident that a child who could speak and understand was involved during assessment or ask about his/her health. In comparing information from the three data sources, it was evident that both nurses and carers/parents agreed that family history was obtained from the parents or carers of the child (Table 4.3h). During assessment of the child, nurses gather

information about the child's problems (Table 4.3c). It was evident that all nurses identify child's problems and supported by Ackley & Ladwig, (2014) and Perry, Potter & Ostendorf, (2014) study. Nurses do formulate nursing diagnosis after assessing the child and questioning the parents/carers about child's signs and symptoms Zator Estes, (2014), Ackley & Ladwig, (2014) and Perry, Potter & Ostendorf, (2014). In comparing information from the three data sources, it was evident that both the nurses and the carers/parents agreed that nurses interpret the child's vital signs through critical thinking (Table 4.3e). Participants' activity during assessment supports Magnil, (2011); Ackley & Ladwig, (2014); Herdman, (2012); Seaback, (2013) and Zator, (2014) findings, that nurse use critical thinking skills to analyse child diagnosed with cancer's information. The nurses' use critical thinking and decision-making skills in developing nursing diagnoses (Table 4.3c), Seaback, (2006), ANA, (2010) Reed, (2009) and Seaback, (2013). Most of the nurses have fair knowledge about assessment of a child and formulating nursing diagnosis based on the child diagnosed with cancer's problem. However, nurses failed to indicate that they involved a child who could communicate verbally during assessment and formulation of nursing diagnoses.

5.3.2 Carers/parents role in assessment

The role that parents/carers played during assessment of the child included describing signs and symptoms of the child (Table 4.3f). Parents/carers activities during assessment support Seaback, (2006 & 2013) and Zator, (2014) findings that parents/carers provide information about the child's signs and symptoms. However, interview responses indicated that nurses involved parents/carers more during assessment (Table 4.3d) than questionnaire responses provided in (Table 4.3f). Carers/parents played the role of providing information about the child's health conditions. The role that carers/parents played was providing information about the child's past medical history during assessment (Table 4.3f). Furthermore, the role that parents/carers played was informing nurses about their family history (Table 4.3f). Parents/carers responses support Ackley & Ladwig, (2014) findings that parents/carers provide information about the child to nurses during assessment.

5.4 Planning nursing care

Nurses indicated that they plan and give individualised nursing care to child diagnosed with cancer and family (Table 4.4a). Respondents' activities during nursing care planning support Seaback, (2013) Zator Estes, (2014), Ackley & Ladwig, (2014), Moorhead, Johnson, Maas & Swanson, (2013) and Perry, Potter & Ostendorf, (2014) findings that nursing process offers nurses systematic ways of planning and delivering nursing care. However, during interview nurses were able to elaborate more on what they actually do on the ward (Table 4.4f) than evident from their questionnaire responses (table 4.4a). Parents/carers also confirmed that nurses do plan nursing care on the child (Table 4.4h). In comparing information from the three data sources, it was evident that both nurses and parents/carers agreed that nurses' plan individualised care for the child (Table 4.4j). On the other hand, nurses did not indicate clearly indicate how the child is involved during his/her care planning and the age group of children diagnosed with cancer that are involved during planning. Furthermore, nurses indicated that they employ the nursing care plan to intervene children diagnosed with cancers' problem (Table 4.4a and 4.4f), Reed, (2009: 61), Seaback, (2006 & 2013) and Ackley & Ladwig, (2014). However, nurses failed to indicate how they draw nursing care planning and how they go about the interventions. Nurses plan care for a child diagnosed with cancer depending on children diagnosed with cancer' needs (Table 4.4a).

Participants' activities during planning support MacKay & Gregory, (2011), Ackley & Ladwig, (2014), Moorhead, (2013) and Orem, (2007) findings that child diagnosed with cancer and family-centred care should be seen as a vehicle that promotes holistic care for child diagnosed with cancer and family. All the nurses indicated that they draw nursing care plans for each child diagnosed with cancer (Tables 4.4a and 4.4f). Nurses' activities during planning supports Zator Estes, (2014), Ackley & Ladwig, (2014) and Seaback, (2013) findings that nursing care is delivered according to the care planned on child diagnosed with cancer. An opposite view found in this study, is that the nursing care planning for children diagnosed with cancer, diverge from the philosophical

foundation of the nursing process. Respondents' activities during nursing care planning is compromise to suit nurses activities rather than planning child diagnosed with cancer and family care centrality all through the course of action.

5.4.1 Involvement of parents and carers in the planning of the child's care

Nurses indicated that they plan the child's care with parents/carers (4.4a). Participants' activity during planning supports Zator Estes, (2014) and Ackley & Ladwig, (2014) findings that nurses plan care with the child and parents/carers. However, during interview, nurses elaborated more on the activities in which they involve parents/carers during decision-making and planning nursing care for a child diagnosed with cancer (Table 4.4f) than evident from their questionnaire responses (table 4.4a). Parents/carers also confirmed their involvement in planning activities of the child (Table 4.4h). In comparing information from the three data sources it was evident that both nurses and parents/carers agreed that child and parents/carers are involved during the child's care planning (Table 4.4j). Nurses indicated that they involve parents/carers of children diagnosed with cancer during treatment planning (Tables 4.4a and 4.4f). Participants' activities during planning support Perry, Potter & Ostendorf, (2014) and Ackley & Ladwig, (2014) findings that planning nursing care with child diagnosed with cancer, family and the multidisciplinary team increases the perceptive and conformity with the intended specific plan, thereby attaining measurable goals and outcomes. However, nurses did not indicate whether they explain the reason for involving the child and the carers/parents. Carers/parents indicated that nurses involve them because they are providing funds for the treatment of the child. In addition, nurses, parents and carers confirmed that the multidisciplinary health team is involved during care planning for children diagnosed with cancer (Tables 4.4a, 4.4f and 4.4h). In comparing information from the three data sources, it was evident that both nurses and carers agreed that the medical team is involved during care and treatment planning of the child (Table 4.4j). Nurses specified that they deliver total nursing care by involving the child and the parents/carers (Table 4.4b). Respondents' activities during planning support Ackley & Ladwig, (2014), Seaback, (2013) and Zator Estes, (2014) findings, that nursing a child,

the nurse involves the entire family. Most nurses could not provide information on what nursing care plan entail. However, interview responses indicated that nurses involved child and family more during planning as one cannot care for a child without the family (Table 4.4f). Parents/carers also confirmed their involvement during the child's care (Table 4.4h). In comparing information from the three data sources, it was evident that both nurses and parents agreed that nurses involve them in planning (Table 4.4j). Again, nurses failed to indicate the activities that a child diagnosed with cancer and family are involved during care planning. Furthermore, participants were unable to indicate the age group of children diagnosed with cancer that are involved in care planning. In relation to the nursing process, the nurses in this study emphasised the need to provide children diagnosed with cancer with the best nursing care. However, during interviews, the nurses have faint knowledge about planning nursing care for children diagnosed with cancer and their families. In the context of paediatric oncology care, nursing process is the tool to achieve comprehensive and high-quality care for children diagnosed with cancer and families. Nursing care planning was clearly stated in the nurses' job description in Ghana (See Appendix D), however, most of the respondents lack nursing care planning skills.

5.5 Implementation of nursing care

Some nurses indicated that they systematically implement care on children diagnosed with cancer (Tables 4.5a and 4.4f). Respondents' activity during implementation supports Ackley & Ladwig, (2014) findings that nurses carry out actual nursing care planned on child diagnosed with cancer. Parents/carers confirmed that nurses always involve them when implementing care (Table 4.4g). In comparing information from the three data sources, it was evident that both nurses and parents/carers agreed that nurses implement nursing care plan on child diagnosed with cancer (Table 4.5h). On the other hand, interview responses reveal that nurses actually care for children diagnosed with cancer depending on their health needs, for examples, wound dressing and tube feeding are types of care given (Table 4.4f). Parents/carers confirmed that

nurses address child's needs accordingly (Table 4.3g). In comparing information from the three data sources, it was evident that nurses address child's needs (Table 4.4j).

Few nurses indicated that they maintain communication between the multidisciplinary team, child diagnosed with cancer, and family during care implementation (Table 4.5a and 4.5e). The nurses' activity during implementation supports Perry, Potter & Ostendorf, (2014) finding that communicating with child diagnosed with cancer, family and the multidisciplinary team during care implementation encourages comfort, understanding, and minimise misinformation. However, nurses did not state clearly the kind of communication maintained between the child, family and the multidisciplinary team. Both Parents and carers' acknowledged nurses' advocacy roles during the nursing care process (Table 4.5g). Comparing information from the three data sources, it was evident that both nurses and parents/carers agreed that nurses correspond with them and the health care team (Table 4.5h).

During implementation of care, nurses update the multidisciplinary team about progress in the child's condition. Nurses continuously communicate directly with the child about his/her condition and ask the child how he/she feels about the care, and does same with the parents or carers Ackley & Ladwig, (2014). Some nurses seem not to understand the questionnaire questions on communicating with patients meanwhile it was clearly indicated. However, some nurses understood the questions and used the opportunity to complain about the problems that they are encountering while caring for the sick child diagnosed with cancer. The identified problems include training of nurses in paediatric oncology, allocating separate ward that would take care of paediatric oncology cases, and provision of equipments for nursing care procedures (Table 4.5f). some the nurses argued that their care delivery could be more cost effective if the hospital employs train paediatric oncology nurses, provide separate ward for paediatric oncology cases and equipment. Furthermore, the respondents complained about the need for allocating trained oncology nurses to nurse children diagnosed with cancer in order to render quality service to children diagnosed with cancer (Table 4.5f). Some nurses indicated

that they have guidelines/policies, which they follow when managing children diagnosed with cancer (Chart 4.7a and Table 4.7a). Furthermore, the nurses indicated that they perform procedures such as checking vital signs; wound dressing, monitor blood transfusion and chemotherapy administration children diagnosed with cancer for the sick children (Chart 4.7b and Table 4.7a). Parents/carers confirmed that nurses monitor their children intravenous transfusions, dress wound, check vital signs and administer chemotherapy (Table 4.7b). Nurses also specified that they encourage family visits but did not specify whether these visits were permitted all hours or only during specified visiting-hours (Table 4.5d and Table 4.5e).

5.5.1 Involvement of parents and carers in actual nursing care

Nurses indicated that involve children and their carers/parents during care implementation to gain their co-operation (Tables 4.5b; 4.5e; and 4.5g). Participants' activity during care implementation supports Perry, Potter & Ostendorf, (2014); Ackley & Ladwig, (2014) findings, that nursing a child without the family make the care incomplete. Nurses indicated that they also involve the children and their families during decision-making and explain procedures during implementation of care to ensure quality of care (Tables 4.5d and 4.5e). Respondents' activity during care implementation supports Seaback, (2006); Funnell, Koutoukidis, & Lawrence, (2009); Seaback, (2013) and Zator, (2014) findings, that nurses seek the opinion of child diagnosed with cancer and family during care implementation. However, nurses did not indicate the type of decision-making in which they involve the child. Furthermore, the nurses failed to indicate the age group of sick children that are involved during decision-making. The nurses also failed to indicate how the child's opinion is sought. Parents/carers confirmed that nurses seek their opinion and explain procedures to them during implementation of care (Table 4.5g). In comparing information from the three data sources, it was evident that both nurses and parents/carers agreed that they and the nurses decide on common goal during care implementation (Table 4.5h). In addition, nurses indicated that they involve child and parents/carers during medication (Table 4.5d). Nurses' activity during

implementation supports Ackley & Ladwig, (2014); Seaback, (2013); Zator, (2014); findings that carers/parents and the child play a part during medication. Interview responses indicated that nurses involve the child and the carers/parents more during medication (Table 4.5e and 4.5g) than evident from questionnaire responses (Table 4.5d).). In comparing information from the three data sources, it was evident that both nurses and parents/carers agreed on child's and family's involvement during medication (Table 4.5h).

5.6 Evaluation of nursing intervention

Nurses indicated that they evaluate nursing care delivery (Chart 4.6a). Respondents' activity during evaluation supports Reed, (2009); Bulechek, Butcher, Dochterman & Wagner, (2013); Ackley & Ladwig, (2014); and Perry, Potter & Ostendorf, (2014) findings that evaluation of nursing intervention is essential to alert nurse on the progress in child diagnosed with cancer's condition. However, interview responses elaborated on what nurses actually do when evaluating nursing care (Table 4.6b). Parents/carers also confirmed that nurses evaluate nursing care intervention by asking them how the child was feeling after care (Table 4.6d). Nurses did not indicate whether they directly find out from the child his/her feeling after nursing care intervention. In comparing information from the three data sources it was evident that both nurses and carers/parents agreed that nurses evaluation is been carried out (Table 4.6e). In addition, nurses did not indicate whether the nursing care evaluation is documented anywhere. Nurses indicated that they conduct hourly evaluation on critically ill children diagnosed with cancer only (Table 4.6b). Nurses' activity of evaluating only critically ill children diagnosed with cancer refuted Funnell, Koutoukidis, & Lawrence, (2009) findings that the nurse continuously review the child's condition before, during and after each intervention.

In the researcher's opinion, nursing care evaluation is for every child diagnosed with cancer whether critically ill or not. Some children diagnosed with cancer might not be critically ill physically but emotionally and therefore need a care plan to address their problem. Parents/carers confirmed nurses conduct evaluation of care on children

diagnosed with cancer (Table 4.6d). Comparing information from the three data sources, it was evident that both nurses and carers/parents agreed that nurses appraise care interventions (Table 4.6e). Some participants indicated that they evaluate care after a child diagnosed with cancer is discharge to inform on future care management (Chart 4.6b). Nurses' activities during post-discharge care evaluation supports Ackley & Ladwig, (2014) and Perry, Potter & Ostendorf, (2014) findings that nurses conduct discharge care appraisal. Few nurses also indicated that the nursing staff meet and discuss nursing care delivery after a child diagnosed with cancer is discharge in order to correct their underperformances (Table 4.6c; Ackley & Ladwig, 2014). On the other hand, some nurses stated that they do not conduct post-discharge evaluation as often as they would like due to staff shortage (Chart 4.6b and Table 4.6c). However, as found also in this study, nursing care evaluation should not be for critically ill children diagnosed with cancer alone rather it should be for every in child diagnosed with cancer.

5.6.1 Involvement of parents and carers during the sick child's care evaluation

Interview responses elaborated on actions nurses take during discharge care evaluation (Table 4.6c) than evident from questionnaire responses (Chart 4.6a). Parents/carers confirmed that nurses enquire from them about the child's health condition before and after discharge (Table 4.6d). Furthermore, nurses indicated that they conduct 'chat rounds' by asking the sick child and parent/carer about the condition as a form of evaluation (Table 4.6b). Respondents' activity during evaluation supports Ackley & Ladwig, (2014) and Perry, Potter & Ostendorf, (2014) findings that child diagnosed with cancer and family are capable telling nurses how the intervention helped or did not help. In comparing information from the three data sources, it was evident that both nurses agreed that nurses conduct chat rounds in form of evaluation (Table 4.6e). Chat rounds are conduct to gather information about child diagnosed with cancer's needs but not for evaluation of nursing care interventions. From the research findings, it is realise that most nurses do not know how to evaluate nursing care. The nurses and midwives

council of Ghana recommended evaluation of nursing interventions in nurses' job description (See Appendix D) yet, the participants performance during nursing intervention was inadequate (Table 4.6b)

5.7 Discharge care planning

Respondents indicated that they make provisions for children diagnosed with cancer to visit the paediatric oncology outpatients department for continuity of care and provide child diagnosed with cancer and family with appointment dates (Table 4.7a and 4.7b). Participants' activity during discharge care planning supports Gibbens, (2010); Zator Estes, (2014); Perry, Potter & Ostendorf, (2014) and Ackley & Ladwig, (2014) findings, that discharge care planning facilitates the transfer of child diagnosed with cancer from a health facility to child diagnosed with cancer's home. Parents/carers also confirmed that nurses do arrange for out child diagnosed with cancer' appointments for their children (Table 4.7c). In comparing information from the three data sources, it was evident that both nurses and carers/parents agreed that nurses prepare towards discharge care of the child (Table 4.7d). Some nurses indicated that discharge care planning commence the moment the sick child is admitted (Table 4.7a).

Nurses' activities during discharge care planning support Perry, Potter & Ostendorf, (2014); The Joint Commission, (2012a); Ackley & Ladwig, (2014) and Zator Estes, (2014) findings that from the moment of admission, nurses assess child diagnosed with cancer's discharge requirements by means of nursing history and consultation with child diagnosed with cancer and health care provider. Nurses did not state clearly how they carry out the discharge care planning. Nurses indicated that they contact child diagnosed with cancer and family by phone to remind them about their out child diagnosed with cancer's appointments (Table 4.7a). Nurses' activity during discharge care planning supports The Joint Commission, (2012a) findings that discharge care plan progress with child diagnosed with cancer and family, and ongoing communication about child diagnosed with cancer's health improvement is extremely important.

However, in the interview responses nurses elaborate more on being in touch with child diagnosed with cancer and family over the telephone (Table 4.7b) than evident from questionnaire responses (Table 4.7a). Parents/carers also confirmed that nurses do contact them to find out how the child is doing and coping with home care (Table 4.7c). Comparing information from the three data sources, it was evident that both nurses and parents/carers agreed that nurses get in touch with them over the telephone (Table 4.7d).

In clinical practice, nurses gain deeper knowledge and manage a more complex condition in paediatric oncology care working in close collaboration with the parents and health care team (Korhonen & Kangasniemi, 2013). Nurses indicated that they organise counselling sessions for children diagnosed with cancer family members (Tables 4.7a and 4.7b). Participants' activity supports the study by Perry, Potter & Ostendorf, (2014) findings that nurse assess the psychosocial and health needs of child diagnosed with cancer and family and address them accordingly. Parents/carers also confirmed nurses assess and address their needs (Table 4.7c). In comparing information from the three data sources, it was clear from responses that that nurses encourage and support the family throughout the child's treatment (Table 4.7d). Nurses did not state clearly, what they do during the counselling session but indicated that they organise and visit children diagnosed with cancer/families in the community (Tables 4.7a and 4.7b). It was evident from responses that nurses visit children diagnosed with cancer at home supported by Ackley & Ladwig, (2014) and Perry, Potter & Ostendorf, (2014) studies.

Participants specified that they inform children diagnosed with cancer and carers/parents about personal hygiene and diet (Tables 4.7a and 4.7b; Rose & Haugen, 2010; Perry, Potter & Ostendorf, 2014). Parents/carers also confirmed that nurses do informed them about nutritional requirement of the child (Table 4.7c). Furthermore, nurses specified that they inform children diagnosed with cancer and parents/carers about rehabilitation services for children diagnosed with cancer (Tables 4.7a and 4.7b). Respondents' activities during discharge planning support Rose & Haugen, (2010) and Perry, Potter & Ostendorf, (2014) findings that nurses comprehensively assess child

diagnosed with cancer's health care needs at discharge; categorize accessible and necessary resources, and connect child diagnosed with cancer and family to the appropriate organisations. Parents/carers also confirmed that nurses inform them about rehabilitation services for children diagnosed with cancer (Table 4.7c). Nurses did not list types of rehabilitation services in place for children diagnosed with cancer and how to access. Nurses also failed to indicate the age at which the child starts rehabilitation. Nurses also indicated that they inform child diagnosed with cancer parents/carers about school services for children diagnosed with cancer (Tables 4.7a, 4.7b and 4.8c; Rose & Haugen, 2010; Perry, Potter & Ostendorf, 2014). Nurses did not indicate how they arrange school services or its importance to the child.

5.8 Health education

Nurses specified that they educate parents/carers about the child's disease condition and home care required (Tables 4.8b). Nurses' activity during health education supports McKinney, (2010); Perry, Potter & Ostendorf, (2014); The Joint Commission, (2012a); Pittman, (2009); Langhorne, Fulton & Otto, (2007) findings that child diagnosed with cancer and family teaching be base on assessment and then education given on disease condition and signs to observe. However, interview responses indicated that nurses elaborate more on health education (Table 4.8c) than evident from questionnaire responses (Table 4.8b). Parents/carers also confirmed information given (Table 4.8d). Furthermore, nurses indicated that they educate parents/carers about the child's personal hygiene, diet and nutrition requirement (Table 4.8b). Nurses' activities during health education support The Joint Commission, (2012a); Perry, Potter & Ostendorf, (2014); Pittman, (2009); Langhorne, Fulton & Otto, (2007) and Zator, (2014) findings that child diagnosed with cancer and family teaching is based on use of medications, diet and nutritional alteration, safe use of medical tools, pain management. However, interview responses indicated that the nurses elaborated more on nutrition, medication and pain management (Table 4.8c). Parents/carers also confirmed that nurses teach them about what to feed the child in order to improve his/her immune system (Table

4.8d). Nurses also indicated that they educate parents/carers about rehabilitation services such as school and social services (Tables 4.8b and 4.8c). Participants' activities during health education conformed with The Joint Commission report, (2012a); Perry, Potter & Ostendorf, (2014); Pittman, (2009); Langhorne, Fulton & Otto, 2007) findings that child diagnosed with cancer and family teaching about rehabilitative methods to encourage children diagnosed with cancer and families throughout treatment. Parents/carers also confirmed that nurses inform child diagnosed with cancer and family about rehabilitation services (Table 4.8d). In comparing information from the three data sources, it is establish that nurses educate child diagnosed with cancer and family about rehabilitation services for children diagnosed with cancer (Table 4.8e). However, nurses did not indicate types of rehabilitation services in Ghana for the children diagnosed with cancer.

5.9 Support systems for parents and carers

Nurses specified that they provide counselling services to children diagnosed with cancer and their families (Tables 4.9a). Nurses' activity during support system agrees with Perry, Potter & Ostendorf, (2014) and Kehl, (2008) findings that both child diagnosed with cancer and family need continuous counselling in order to cope with the situation. However, interview response indicated that nurses are more involved in counselling (Table 4.9b) than evident from questionnaire responses (Table 4.9a). Parents/carers also confirmed the information (Table 4.9c). Furthermore, nurses indicated that they advise parents/carers to join cancer groups for psychological support (Tables 4.9a and 4.9b). Respondents' activities during support system confirmed Brown, Nesse, Vinokur, & Smith, (2003) findings that nurses encourage families to open up to their friends about the condition of their child and other social groupings. Families that receive social support copes better, feel less depressed and less stress. Parents/carers also confirmed that they join cancer groups for psychological support (Table 4.9c).

In comparing information from the three data sources, it is establish that both nurses and parents/carers agreed on cancer associations (Table 4.9d). Nurses indicated that

they refer parents/carers to the medical social worker (Tables 4.9a and 4.9b). Participants' activity during support services agrees with Barrera, M., D'Agostino, N. M., Gibson, J., Gilbert, T., Weksberg, R. & Malkin, D. (2004) findings that the social worker play a major role in addressing child diagnosed with cancer and family's social needs. Parents/carers also confirmed meeting the medical social worker (Table 4.9c). In addition, nurses indicated that they provide parents/carers with letters for the children's school authorities (Tables 4.9a, 4.9b and 4.9c). Nurses' activity during support services agrees with Noll, (2009) and Upton & Eiser, (2006) findings that the child's school authorities are inform about child's condition and the number of days the child could be away from school. The respondents did not indicate whether the special needs of the child are clearly indicate in the letters for the school authorities. However, some parents/carers confirmed that nurses provide letters for child's school authorities while some parents/carers stated that they informed the school authorities themselves (Table 4.9c). Nurses also indicated that they provide rehabilitation services for children with cancer (Tables 4.9a and 4.9b). Parents/carers confirmed that nurses informed them about rehabilitation services in place for children diagnosed with cancer, however, the facility has never engaged children diagnosed with cancer in any rehabilitative activity (Table 4.9c). The respondents failed to indicate the location of rehabilitation services for the children to access. Nurse indicated that children diagnosed with Burkitt Lymphoma receive free treatment (Tables 4.9a and 4.9b). Parents/carers indicated that their cancer-diagnosed children do not receive free treatment (Table 4.9c).

5.10 Nurses' attitude towards care of children diagnosed with cancer

Nurses indicated that their attitude toward children diagnosed with cancer is emotional (Tables 4.10a and 4.10c; Ammentorp, Mainz & Sabroe, 2006). Parents//carers also confirmed the attitude to be true (Table 4.10e). Furthermore, nurses specified that they have empathy for children diagnosed with cancer (Tables 4.10a and 4.10c). Nurses' attitude supports Ammentorp, Mainz & Sabroe, (2006) findings that nurses display empathy in delivering nursing care. The respondents did not indicate clearly whether the

emotional attitude have positive or negative effect on their nursing care delivery. Parents/carers also confirmed that nurses' reaction toward the children is empathetic (Table 4.10e). Nurses indicated that their attitude is sad toward children diagnosed with cancer (Tables 4.10a and 4.10c). Nurses' attitude refuted McLafferty, (2007) findings that nurses must show empathy and not sympathy when dealing with a child diagnosed with cancer. Parents/carers also confirmed that nurses become sad when caring for children diagnosed with cancer (Table 4.10e). Nurses failed to indicate how being sad influence their service delivery. Participants also indicated that they feel children with cancer should receive the best nursing care (Table 4.10a). Nurses' attitude supports McLafferty, (2007) findings that nurses strive to deliver the best of care to children with cancer.

Respondents did not indicate how they carry out total quality nursing care. Parents/carers also confirmed that nurses give their best to children with cancer (Table 4.10e). Nurses specified that other nurses' reactions toward children diagnosed with cancer are empathy, love, cordiality and friendliness (Tables 4.10b and 4.10c). Nurses' attitude supports Maisels &. Kring, (2005) and Griffin & Polit, (2007) findings that positive attitude of nurses is essential to ensure that negative attitudes do not compromise the nature and quality of care that they are rendering to children diagnosed with cancer. Parents/carers also confirmed the information (Table 4.10e). Nurses also indicated that the attitude of other nurses is now positive after they were educated on cancer (Table 4.10c; McLafferty, 2007). Nurses did not indicate how this positive attitude has influence service delivery to children with cancer.

Nurses failed to indicate how often nurses are educated about cancer. In nursing, awareness of the risk of dependency will prepare nurses to muddle through with the high amount of emotional stress caused by paediatric oncology care and nurses who work with children with chronic conditions need to be aware of the attitude of care and their own belief system.

Nurses indicated that nurses from other wards have misconception that those who work in the cancer unit will die of cancer (Tables 4.10b and 4.10c). It was evident from responses that other nurses have the belief that cancer is communicable therefore, those who work with cancer child diagnosed with cancer will also suffer from cancer (Table 4.10c). Nurses' attitude support Maisels &. Kring, (2005) Griffin & Polit, (2007) and Ekwall, Gerdtz & Manias, (2008) findings that it is no doubt that some nurses still hold negative attitude to active treatment, believing that child diagnosed with cancer children diagnosed with cancer are subjected to illness and pain without benefit. Nurses did not indicate how negative attitude is affecting their nursing care delivery to children diagnosed with cancer.

5.11 Constraints and Limitations

The main limitations of this study relate to the timing of the study and the situation in the unit. Nurses working in the paediatric oncology ward are not oncology-trained nurses. During interview, most of the nurses were unwilling to sit for an interview with the excuse that they were not oncology trained. The paediatric oncology children diagnosed with cancer were sharing the same ward with children with other disease conditions, which made it difficult for the researcher to differentiate oncology cases from other conditions during selection of parents and carers for interview. Many nurses are working in the paediatric oncology ward but only two were on the job train attend to oncology out child diagnosed with cancer children diagnosed with cancer. Many nurses might have given vital information on the topic if they were oncology-trained nurses. Nurses from other wards might have relevant information about the study but they did not meet the inclusion criteria of the study. Furthermore, most of the carers/parents were unable to speak the English language due to this a lot who were willing to give vital information could not participate.

5.12 Summary of chapter

Nursing care for children diagnosed with cancer and their family is one of the most difficult and demanding aspects in nursing. Nurses have to go extra mile in order to make children diagnosed with cancer and their families comfortable and wanted. Nurses employ the nursing process in dealing with the situation. Nurses work hand-in hand with the multidisciplinary team to provide quality nursing care involving child diagnosed with cancer and family. Nurses through thorough assessment, diagnose and plan individualise nursing care for children and their family. Nurses together with the health care team plan care with child diagnosed with cancer and family and implement the accepted care in order to attain a mutual goal by the whole team. Nurses evaluate nursing care intervention and reassess unmet set goals. Nurses and the health care team plan discharge care for child diagnosed with cancer for continuity of care in the home and educate child diagnosed with cancer and family on home care after assessing child diagnosed with cancer's health needs. Nurses and the health care team provide the needed support to child diagnosed with cancer and family and the nurses' attitude towards children diagnosed with cancer explained through their actions toward these children.

Chapter 6: Conclusions and Recommendations

6.1 Introduction

This chapter presents conclusions and recommendations on nurses' role in the assessment of child diagnosed with cancer with cancer for nursing intervention. It involves the strategies nurses use to plan nursing care for child diagnosed with cancer with cancer and actions taken by nurses during implementation of nursing care. It also includes the processes nurses use to evaluate nursing care given to child diagnosed with cancer diagnosed with cancer, protocols in place to guide nursing interventions, and types of evaluation of nursing care. Furthermore, the chapter presents the actions taken during discharge care planning, processes used for health education of the child diagnosed with cancer, parents and carers and nurses' attitude towards care of child diagnosed with cancer diagnosed with cancer and conclusions and recommendations for further research.

6.2 First objective of the study

The first objective of the study is "to explore nurses' role in the assessment of children with cancer for nursing intervention". In relation to objective one, conclusions from results/discussions are presented as follows:

Conclusion

- Nurses assess child diagnosed with cancer diagnosed with cancer by checking their vital signs, reviewing their previous medical histories and employ carers/parents to describe signs and symptoms presented by the child diagnosed with cancer.
- Nurses conduct physical examination, critically observe, and review child diagnosed with cancer's signs and symptoms during assessment.

- The nurses systematically identify child diagnosed with cancer problems through thorough assessment, gather information and plan an accurate care for the child diagnosed with cancer in order to give total quality care.
- Although some nurses indicated that they ask the mother to describe signs and symptoms, they did not indicate whether they ask a child diagnosed with cancer that can speak and understand language to describe signs and symptoms. Nurses did not ask the child diagnosed with cancer to describe the signs and symptoms because the question did not actually requested respondents to indicate whether they ask the child diagnosed with cancer for the signs and symptoms.
- There seem to be no interaction between the nurse and the child diagnosed with cancer during physical examination.
- There was no evidence that nurses prioritise a child diagnosed with cancer's problem before planning care on patients.

The outcomes support the diagram presented in fig 1.1, i.e. Assessment: Assess child diagnosed with cancer health needs, check vital signs, identify child diagnosed with cancer problems, conduct thorough health assessment; touch, communicate with patient, interview patient; documentation of findings

BASED ON THE ABOVE, THE FIRST OBJECTIVE, I.E. "TO EXPLORE NURSES' ROLE IN THE ASSESSMENT OF CHILD FOR NURSING INTERVENTION" HAS BEEN ACHIEVED.

Recommendations

Based on the above conclusions, the following recommendations are proposed:

- ✓ Nurses should ensure that they always prioritise children diagnosed with cancer problem before planning care.
- ✓ Nurses should always interact with the child diagnosed with cancer when conducting physical examination

- ✓ During assessment, nurses are to touch the child diagnosed with cancer and ask questions whether there is pain or not.
- ✓ Nurses should always indicate how they assess the signs and symptoms of child diagnosed with cancer by asking those who could speak and understand language to explain how they feel
- ✓ Nurse Managers should remind nurses about the nursing process.
- ✓ Nurses should be encouraged to actually touch the child diagnosed with cancer when conducting assessment, observation and physical examination

6.3 Second objective of the study

The second objective of the study is "to examine strategies nurses use to plan nursing care for children with cancer". In relation to objective two, conclusions from results/discussions are presented as follows:

Conclusions

- ➢ All the nurses utilise the nursing care plan to intervene in child diagnosed with cancer problems after assessment.
- ➢ Nurses did not indicate clearly how the child diagnosed with cancer is involved during his/her care planning.
- ➢ Some nurses involve parents/carers during treatment and care planning for children diagnosed with cancer.
- ➢ There is no clear cut planning strategies
- ➢ Some nurses plan and give individualised nursing care to children diagnosed with cancer.
- ➢ Nurses involve the multidisciplinary team when planning care for child diagnosed with cancer diagnosed with cancer.
- ➢ Most nurses do not have an idea on what nursing care plan entails. This is because nurses keep on indicating they draw nursing care on patient but failed to give details on what goes into nursing care planning.

- Nurses did not indicate whether they explain the reason for involving the child diagnosed with cancer and the carers/parents during care planning
- Few nurses plan nursing interventions depending on the child diagnosed with cancer's needs.

The outcomes did not support the diagram presented in fig 1.1. Care Planning: treatment, plan holistic care on patient and family. Plan a specific, measurable, attainable, reliable and timely nursing care; involve patient and family, multidisciplinary team; proper documentation of care planned

BASED ON THE ABOVE, THE SECOND OBJECTIVE: "TO EXAMINE STRATEGIES NURSES USE TO PLAN NURSING CARE FOR CHILDREN DIAGNOSED WITH CANCER" HAS BEEN ACHIEVED.

Recommendation

Based on the above conclusions, the following recommendations are proposed:

- ✓ Nurses should be reminded about what planning entails in the nursing process taking a particular look at the cancer child and the family.
- ✓ Nurses should clarify correctly activities that children are involved during care planning
- ✓ Nurses should be reminded on how to plan care on child diagnosed with cancer
- ✓ Nurses should always indicate how care planning is done
- ✓ Nurses should always explain the reason for involving the child diagnosed with cancer and the parents/carers during care planning
- ✓ Nurses should always engage the children when planning their care, specifically those who could speak and understand
- ✓ Nurses should plan and draw nursing care on patients regardless of their condition.

6.4 Third objective of the study

The third objective of the study is “to review actions taken by nurses during implementation of nursing care”. In relation to objective three, conclusions from results/discussions are presented as follows:

Conclusion

- Nurses systematically appear to plan when implementing care for children diagnosed with cancer.
- Few nurses foster communication between the multidisciplinary team and involve patient and family during care implementation.
- Nurses involve child and family by explaining procedures during care implementation in order to gain the child’s co-operation.
- Nurses failed to indicate clearly, what goes into nursing care implementation of a child diagnosed with cancer.
- Parents/carers are involved during decision-making by the nurses.
- Some nurses involve child and family during medication and encourage visitation.
- Nurses failed to indicate the age group of a child diagnosed with cancer that is involved during decision-making.
- Some nurses that understood the question used the opportunity to complain about the problems they face. The identified problems include training of nurses in paediatric oncology, allocating separate ward that would take care of paediatric oncology cases, and provision of equipments, which according to them could ensure cost effective nursing care delivery.
- Nurses did not state clearly the kind of communication they foster between the child diagnosed with cancer, family and the multidisciplinary health team.
- Nurses failed to elaborate on how the nursing care is plan and whether the care is specific, measurable, attainable, reliable and timely.

The outcomes did not support fully the diagram presented in fig 1.1, i.e. Implementation: assess needs for nursing care implementation, assess environment, direct communication between patient, families and health care team; coordinate treatment and care

BASED ON THE ABOVE, OBJECTIVE 3: “TO REVIEW ACTIONS TAKEN BY NURSE DURING IMPLEMENTATION OF NURSING CARE” HAS BEEN ACHIEVED.

Recommendation

Based on the above conclusions, the following recommendations are proposed:

- ✓ Nurses should always indicate the type of decision-making the child diagnosed with cancer in involved and why.
- ✓ Nurses should always communicate with the multidisciplinary health team about progress in child diagnosed with cancer’s condition during care implementation.
- ✓ The needed equipments should be provided in order to enhance nursing care delivery
- ✓ Nurses should always communicate with children and ask how they feel during care implementation
- ✓ Nurses should always prepare patients and families before care implementation.

6.5 Fourth objective of the study

The fourth objective of the study is “to determine processes nurses use to evaluate nursing care given to children diagnosed with cancer. In relation to objective four, conclusions from results/discussions are presented as follows:

Conclusion

- ➢ Nurses do evaluate but do not document nursing care delivery.

- Nurses did not indicate whether they ask a child diagnosed with cancer who could speak and understand language about his/her feeling regarding nursing care intervention.
- From the researcher's findings, it is realised that nurses do not conduct nursing care evaluation often.
- Nurses do not know how to evaluate nursing care
- Nurses failed to indicate whether they involve the child diagnosed with cancer during evaluation of nursing care.

The outcomes did not support the diagram presented in fig 1.1, i.e. Evaluation: evaluate nursing interventions; re-plan nursing care; re-evaluate care; documentation

BASED ON THE ABOVE, OBJECTIVE 4: "TO DETERMINE PROCESSES NURSES USE TO EVALUATE NURSING CARE GIVEN TO CHILD DIAGNOSED WITH CANCER" HAS BEEN ACHIEVED.

Recommendation

Based on the above conclusions, the following recommendations are proposed:

- ✓ Nurses should ensure that they plan each child diagnosed with cancer's nursing care individually and evaluate nursing intervention all the time.
- ✓ Nurses should be reminded on evaluation of nursing interventions properly
- ✓ Nurses should always ask a child diagnosed with cancer who could speak and understand language how he/she feels during and after nursing care intervention
- ✓ Nurses should evaluate child diagnosed with cancer care plan according to child's needs and condition.
- ✓ Documentation is vital therefore, nurses should always document every procedure performed on patient.
- ✓ Nurses should plan nursing care on every patient whether critically ill or not.

- ✓ Nurses should always employ the nursing process as a quality assurance check tool when evaluating care on patient.
- ✓ Nurses should evaluate patients at all times regardless of their condition.

6.6 Fifth objective of the study

The fifth objective of the study is to scrutinise protocols in place to guide nursing interventions.

In relation to objective five, some of the conclusions from results/discussions are presented as follows:

Conclusion

- ➢ There are facility-based policies and guidelines to guide nurses in the management of children diagnosed with cancer.
- ➢ Nurses confirm that the policies and guidelines are useful to them.

The outcomes also support the diagram presented in fig 1.1, i.e. Follow guidelines or protocols; documentation

BASED ON THE ABOVE, OBJECTIVE 5: “TO SCRUTINISE PROTOCOLS IN PLACE TO GUIDE NURSING INTERVENTIONS” HAS BEEN ACHIEVED.

Recommendation

Based on the above conclusions, the following recommendation is proposed:

- ✓ Nurses should always follow the laid down guidelines and policies whenever managing children with cancer.

6.7 Sixth objective of the study

The sixth objective of the study is to assess types of evaluation of nursing care. In relation to objective six, some of the conclusions from results/discussions are presented as follows:

Conclusion

- Nurses conduct nursing care evaluation after discharge and correct their downsides.
- Nurses conduct hourly evaluation on critically ill patients only.

  Nurses conduct chat rounds as a form of care evaluation.

The outcomes also did not support fully the diagram presented in fig 1.1, i.e. Evaluation: evaluate nursing intervention hourly, daily and 24 hourly.

BASED ON THE ABOVE, OBJECTIVE 6: “TO ASSESS TYPES OF EVALUATION OF NURSING CARE” HAS BEEN ACHIEVED.

Recommendation

Based on the above conclusions, the following recommendations are proposed:

- ✓ Nurses should evaluate nursing care plan hourly for all patients and not only the critically ill patients.
- ✓ Nurses should always evaluate child diagnosed with cancer care after discharge in order to correct their underperformances.

6.8 Seventh objective of the study

The seventh objective of the study is to determine actions taken during discharge care planning. In relation to objective seven, conclusions from results/discussions are presented as follows:

Conclusion

- Nurses provide parent/carer of a child diagnosed with cancer review dates for continuity of care of patients on outpatients' bases.
- Nurses communicate with patients and families over the telephone to enquire of their health and remind them of their next review date.
- Nurses inform patients and families about home care, personal hygiene and dietary requirement for children diagnosed with cancer.
- Nurses organise and visit patients at home.
- Nurses did not state clearly, what they do during the counselling session but inform patients and families about rehabilitation services for children diagnosed with cancer.
- Nurses did not indicate the involvement of the child diagnosed with cancer during discharge care planning.
- Nurses organise additional counselling sessions for patients and families.

  Nurses did not state the types of rehabilitation services in place for children diagnosed with cancer and how they have access and also failed to indicate the age at which the child diagnosed with cancer starts rehabilitation.

The outcomes did not support fully the diagram presented in fig 1.1, i.e. Discharge care planning: assess child diagnosed with cancer needs at home; follow-up care; rehabilitation needs; school services.

BASED ON THE ABOVE, OBJECTIVE 7: "TO DETERMINE ACTIONS TAKEN DURING DISCHARGE CARE PLANNING" HAS BEEN FULLY ACHIEVED.

Recommendation

Based on the above conclusions, the following recommendations are proposed:

- ✓ Nurses should always refer patients and families to the medical social worker.
- ✓ Nurses should always involve the child diagnosed with cancer during discharge care planning
- ✓ Nurses should involve the community nurses during home visits.

- ✓ Nurses should ensure that they inform parents/carers about the exact rehabilitation services in place for the children
- ✓ Nurses should involve school nurses of children diagnosed with cancer when planning discharge care for the children diagnosed with cancer.
- ✓ Nurses should always encourage parents/carers and patients to attend cancer support group meetings.
- ✓ Before a child diagnosed with cancer is discharge from the hospital, child diagnosed with cancer and family need to know how to manage care in the home and what to expect in regards to any continuing physical problems. Discharge care plan when done effectively, reduce hospital readmission and enhance child diagnosed with cancer's satisfaction.

6.9 Eighth objective of the study

The eightieth objective of the study is to explore processes used for health education of the child diagnosed with cancer, parents and carers. In relation to objective eight, some of the conclusions from results/discussions are presented as follows:

Conclusion

- ➢ Nurses do offer health education to patients and families on disease condition, types of treatments and their side effects using pictures.
- ➢ Nurses educate patients and families on nutritional requirements and personal hygiene of children diagnosed with cancer.
- ➢ Nurses offer education about home care for children diagnosed with cancer.
- ➢ Parents/carers confirm that nurses do offer health education about home care for children diagnosed with cancer.

The outcomes did not support fully the diagram presented in fig 1.1, i.e. Health education: Disease condition; recommended treatments and side effects and their management; home care; hygiene and nutritional requirements; special needs both at home and in school

BASED ON THE ABOVE, OBJECTIVE 8: "TO EXPLORE PROCESSES USED FOR HEALTH EDUCATION OF CHILD DIAGNOSED WITH CANCER, PARENTS AND CARERS" HAS BEEN ACHIEVED.

Recommendation

Based on the above conclusions, the following recommendations are proposed:

- ✓ Nurses should intensify education on side effects of cancer treatments and actions to take at home when they occur.
- ✓ Nurses should state the special needs of a child diagnosed with cancer in the letter for child's school authorities.

6.10 Ninth objective of the study

The ninth objective of the study is to appraise nurses' attitude towards care of children diagnosed with cancer. In relation to objective nine, some of the conclusions from results/discussions are presented as follows:

Conclusion

- ➢ Most of the nurses react positively towards children diagnosed with cancer although there are some misconceptions among other nurses who do not work in the paediatric oncology unit.
- ➢ Parents/carers also confirm nurses' reactions to be positive.

The outcomes also support the diagram presented in fig 1.1, i.e. Nurses' attitude towards children with cancer: Positive behaviours; ready to serve; show empathy.

BASED ON THE ABOVE, OBJECTIVE 9: "TO APPRAISE NURSES' ATTITUDE TOWARDS CARE OF CHILDREN WITH CANCER" HAS BEEN ACHIEVED.

Recommendation

Based on the above conclusions, the following recommendations are proposed:

- ✓ Nurses in other wards should be well educated on cancer in order to clear their minds about children diagnosed with cancer, nurses who work in the oncology unit and cancer as a whole.
- ✓ Although nursing children diagnosed with cancer is very emotional, nurses should not feel sad as sadness might compromise nursing care delivery

6.11 Recommendation for Policy makers

In view of the main findings of the study, the following additional recommendations are proposed:

To Hospital management

- ✓ The hospital management should clearly explain in simple terms the policy for the management of children diagnosed with cancer.
- ✓ Continuous in-service training in the clinical area should include issues related to nursing process in order to enhance the competencies of nurses, particularly those in the inpatients' departments.

To Ministry of Health of Ghana

- ✓ The Ministry of Health of Ghana should make a common policy for the management of children diagnosed with cancer to be use in all the teaching hospitals in Ghana.
- ✓ Junior nurses should be encouraged to train in paediatric oncology nursing.
- ✓ The Nurses and Midwives Council of Ghana should include the roles of nurses in the management of children with cancer in their curriculum in order to expose new nursing students to the nurses' role in the management of children diagnosed with cancer.

To Nursing education

Nursing schools and academic institutions in Ghana should ensure that nurses are abreast with policies on the management of children diagnosed with cancer and the use of the nursing process regardless of the patient's condition.

To Carers/parents

There should be policies on procedures on health education for parents/carers of children diagnosed with cancer.

To Oncology societies, NGOs and Support groups

Nurses should organise, plan with these support groups, and ensure that their activities are in line with the hospital policies.

6.12 Implication for further research

- o A study, which considers nurses' role in the management of children diagnosed with cancer be conducted in all the teaching hospitals in Ghana.
- o Conduct a study, which considers nurses' competency in nursing care planning during nursing care delivery to children diagnosed with cancer in Ghana, so that nurses could have an in depth understanding of nursing care planning.

- An in depth study, which considers nurses role in the management of women diagnosed with cancer needs to be conducted.
- Conduct a study, which considers nurses' attitude towards cancer in nursing care delivery nationwide.
- There is a need to conduct study on nurses' knowledge about evaluation of nursing interventions.
- A study needs to be conduct on nurses' competency in evaluation of nursing interventions on children diagnosed with cancer.
- A study, which considers nurses' role in the management of young adults diagnosed with cancer.
- An in depth study, which considers nurses' role in the assessment of children diagnosed with cancer be conducted.
- An in depth study needs to be conducted on nurses' role in the management of males diagnosed with cancer.
- A study, which considers nurses' role in the management of the aged diagnosed with cancer needs to be conducted.
- A similar study should be conducted in other wards within the facility.
- An in depth study needs to be conducted on nurses' role during palliative nursing care on children diagnosed with cancer.
- An in depth study needs to be conducted on nurses' role to grieving parents and caregivers whose children are diagnosed with cancer.
- A study needs to be conducted on nurses' involvement of children diagnosed with cancer during their care.

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LIST OF APPENDICES

Appendix A: Consent form

Bellville Campus,

P.O. Box 1906, Bellville 7535

Cape Town, Granger Bay and Mowbray Campuses,

P.O. Box 652, Cape Town 8000

Website: www.cput.ac.za

Research title: "**Exploring nurses' role in the management of Ghanaian children diagnosed with cancer**"

I ....., have understood what the study is about. The researcher has explained in detail to me about the study and ethical issues involved. I agreed to take part in the study and accept the use of audio recorder. I have not been forced to take part in the study. I also understand that I can choose not to answer specific question and can withdraw at any time and it will not have any effect on me or my family.

The study will give me the opportunity to share my views and experience on the management of children with cancer.

Date..... Signature.....

Date..... Signature.....

Fugar Enyonam Adzo (Researcher) Cell: +233204744961 (GH).

Email: enyovesta@yahoo.com

Supervisor: Emeritus Prof. Doris Deedei Khalil

Email: khalilD@cput.ac.za

Co-Supervisor: Mrs. Angela Dunn

Email: dunna@cput.ac.za

Appendix B: Application for ethical clearance (KATH)

Bellville Campus,

P.O. Box 1906, Bellville 7535

Cape Town, Granger Bay and Mowbray Campuses,

P.O. Box 652, Cape Town 8000

Website: www.cput.ac.za

18TH MARCH 2013
THE CHAIRPERSON, RESEARCH ETHICS COMMITTEE
KOMFO ANOKYE TEACHING HOSPITAL
KUMASI

Dear Sir/ Madam,
SUBMISSION OF APPROVAL FOR ETHICAL CLEARANCE TO CONDUCT RESEARCH "EXPLORING NURSES' ROLE IN THE MANAGEMENT OF GHANAIAN CHILDREN DIAGNOSED WITH CANCER"

I am a postgraduate Nursing student undertaking the above research for a period of three (3) months. I hereby submit my research proposal on the above subject for ethical clearance. I hope my proposal will meet your requirement for approval.

Yours faithfully

( )

Fugar Enyonam Adzo

Email: enyovesta@yahoo.com; phone numbers: +27732492547 (SA) +233204744961 (GH)

Cc: Emeritus Prof. Khalil and Mrs Dunn (research supervisors)

Appendix C: Research information sheet and informed consent

Bellville Campus,

P.O. Box 1906, Bellville 7535

Cape Town, Granger Bay and Mowbray Campuses,

P.O. Box 652, Cape Town 8000

Website: www.cput.ac.za

Research title: "Exploring nurses' role in the management of Ghanaian children diagnosed with cancer"

Researcher: Fugar Enyonam Adzo

I am a postgraduate student at the Cape Peninsula University of Technology, conducting a study as a partial requirement for my M.Tech nursing degree. I am inviting you to take part in this study which is aimed at exploring nurses' role in the management of Ghanaian children diagnosed with cancer.

Benefits: Taking part in this study will give you the opportunity to share your view and experiences on the management of cancer children. The study may also provide further insight on the management of childhood cancers, which may inform health care policies regarding the management of children with cancer in Ghana.

Procedure: The interview will take 45 minutes to 1 hour of your time and it will take place at the ward. You will be asked few questions related to the research as explained above. You will be asked questions about the management of children diagnosed with cancer about attitude, knowledge, treatments of side effects, follow-up care. All answers will be appreciated. The interview will be recorded. You are allowed to ask questions or to indicate if you want to stop the interview or not to answer some of the questions asked during the interview.

Risk/ Discomfort: If you take part in this study there is no physical risk, but some of the questions asked may be sensitive. You have the right to answer or decline to answer those questions or to let me know how you feel.

Time: The researcher will use approximately 45 minutes to one hour to conduct the interview. **Cost**: The study does not involve any cost to you as a participant.

Ethical considerations: Your participation in the study is voluntary and you can withdraw at any time. You have the right to withdraw from the study at any time or refuse to answer any question and your decision will not affect your relationship with the researcher or the hospital. You can choose not to answer any question at any point and it will not have any effect on your work. There will be an audio taping of the interview and it will be transcribed to paper and all information gathered will be confidential and handled with care.

Right to privacy and confidentiality: Your privacy will be protected at all times if you participate in this study. Everything we talk about in the interview will be kept confidential. In the analysis, there will be no names and the researcher will ensure that possible identification is removed from the description and you will also have the chance to comment on the analysis. You are free to stop taking part in the interview at any time and you may choose not to answer specific questions, as you prefer.

Participant's agreement form:

I have read the information above or it has been explained to me in a language that l understand. I consent voluntarily to participate as a participant in this study.

Name: .....

Signature: .....

Date: .....

Witness: .....

Signature: .....

Date: .....

Appendix D: Job description for general nurses (Registered Nurses) in Ghana

4. NURSING & MIDWIFERY STAFF

4.1 GENERAL NURSES

4.1.2 Staff Nurse

Job Title : Staff Nurse

Grade : Staff Nurse

Responsible To : Ward/Unit Manager

Accountable To : Head of Nursing

To provide professional nursing care to patients by contributing to the assessment, planning, implementation and evaluation of patient care to improve health outcomes.

Main Duties and Responsibilities

- Undertake assessment, planning and implementation of interventions for addressing patient care problems.
- Evaluate patient responses to interventions and modify plans as needed.
- Undertake and demonstrate nursing tasks in the best interest of patient care and professional standards. These include:
  - Washing and bathing
  - Bed Making
  - Elimination including catheterisation, bowel and stoma care
  - Feeding e.g. oral, nasogastric or parenteral feeding and ensuring adequate nutritional intake for patients in liaison with the dietician.
  - Obtaining specimens e.g. bodily fluids, wound swabs, blood.
  - Administration of drugs e.g. oral, intravenous, subcutaneous, rectal and topical and monitoring of effects.
  - Simple and complex dressings.
  - Monitoring of vital signs (Pause, temperature, BP, respiration)
  - Demonstrate an enquiring approach towards patient care.
- Read reports and take note of critical cases, do chart rounds and ensure treatment has been given
- Participate in the ward rounds
- Assist with manual handling and transferring of patients in compliance with the hospital policy
- Maintain a safe and therapeutic patient care environment
- Undertake the last offices for deceased patients and give relevant information to relatives/carers
- Advise on the promotion of health and prevention of illness, teaching patients and their relatives where appropriate
- Assist the Ward Manger/ Unit In-Charge in promoting the right of patients/clients and maintaining the privacy and dignity of clients/patients and staff
- Perform other official duties assigned by the Ward Manager/Unit In-Charge

Communication and Working relationships

- Maintain effective communication with colleagues, clients/patients and visitors in the ward/unit.

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- Discuss treatment/management of condition with patient and relatives where applicable and encourage them to ask questions.
- Attend meetings as required in connection with the nursing care.
- Attend and contribute at general staff meetings.

Personal and People Development

- Develop and maintain continuing personal and professional development to meet the changing demands in the area of nursing care.
- Monitor own performance against agreed objectives.
- Participate in the facilitative supervision of Health Care Assistants, students and other junior staff in the ward/unit and teach such staff.
- Participate in the induction of new staff in the ward/unit.
- Participate in the development and implementation of education programmes for patients, their families and others about post discharge care programs
- Keep log of own performance and in-service training log for purposes of appraisal.

Health Safety Responsibilities

- Adhere to the health and safety policies, guidelines/protocols (eg. the use of personal protective clothing/equipment
- Take care of own safety and take all measures to ensure the safety of the patient, relatives and staff - reporting all accidents, risk assessments and incidents, completing relevant documentation and undertake further investigation as directed.
- Assist the Ward Manager/Unit in-Charge to maintain a safe, clean, pleasant and therapeutic environment taking remedial action when necessary.

Quality Assurance

- Comply with the GHS quality assurance policy and guidelines and work within the prescribed quality standards for the nursing care.

Further Information

- The post holder must at all times:
    - Work in accordance with the GHS/NMC Code of Professional Conduct and Disciplinary Procedure.
    - Strictly adhere to the provisions of the Patient's Charter.
    - Participate in National Health Programmes

This job description is intended as a guide to the principal duties and responsibilities for the post and should not be considered an exhaustive list. It is subject to change in line with future development of the service

Person Specification
Staff Nurse

Criteria	Essential	Desirable
Educational Qualification and Experience	Valid registration with the NMC RGN Diploma/ SRN Must have completed the mandatory rotation	
Knowledge	Demonstrate knowledge of the principles of life span growth and development Knowledge and understanding of quality assurance issues Knowledge of GHS guidelines ○ Patients Charter ○ Health and Safety ○ Hospital Protocols	
Skills and Abilities	Communicate effectively both orally and written. Report writing skills Ability to work under pressure Ability to work in a team Good interpersonal skills Ability to initiate and maintain clear, concise documentation	Computer skills
Personal Attributes	Self motivated/ ability to motivate others Flexible attitude and committed to the needs of the Service	

4.1.2 Senior Staff Nurse

Job Title : Senior Staff Nurse

Grade : Senior Staff Nurse

Responsible To : Ward/ Unit Manager

Accountable To : Head of Nursing

Job Purpose

To provide professional nursing care to patients by planning, implementing and evaluating patient care plans to improve health outcomes.

Main Duties and Responsibilities

- Undertake assessment, planning and implementation of interventions for addressing patient care problems
- Evaluate patient responses to interventions and modify plans as needed.
- Undertake and demonstrate nursing tasks in the best interest of patient care and professional standards. These include:
    - Washing and bathing
    - Bed Making
    - Elimination including catheterisation, bowel and stoma care
    - Feeding e.g. oral, nasogastric or parenteral feeding and ensuring adequate nutritional intake for patients in liaison with the dietician.
    - Obtaining specimens e.g. bodily fluids, wound swabs, blood.
    - Administration of drugs e.g. oral, intravenous, subcutaneous, rectal and topical and monitoring of effects.
    - Simple and complex dressings.
    - Monitoring of vital signs (Pause, temperature, BP, respiration)
    - Demonstrate an enquiring approach towards patient care.
- Read reports and take note of critical cases, do chart rounds and ensure treatment has been given
- Participate in the ward rounds
- Assist with manual handling and transferring of patients in compliance with the hospital policy
- Maintain a safe and therapeutic patient care environment
- Undertake the last offices for deceased patients and give relevant information to relatives/carers
- Advise on the promotion of health and prevention of illness, teaching patients and their relatives where appropriate
- Assist the Ward Manger/ Unit In-Charge in promoting the right of patients/clients and maintaining the privacy and dignity of clients/patients and staff
- Perform other official duties assigned by the Ward Manager/Unit In-Charge

Communication and Working relationships

- Maintain effective communication with colleagues, clients/patients and visitors in the ward/unit.
- Discuss treatment/management of condition with patient and relatives where applicable and encourage them to ask questions.
- Attend meetings as required in connection with the nursing care.
- Attend and contribute at general staff meetings.

Personal and People Development

- Develop and maintain continuing personal and professional development to meet the changing demands in the area of nursing care.
- Monitor own performance against agreed objectives.
- Participate in the facilitative supervision of Health Care Assistants, students and other junior staff in the ward/unit and teach such staff.
- Participate in the induction of new staff in the ward/unit.
- Participate in the development and implementation of education programmes for patients, their families and others about post discharge care programs
- Keep log of own performance and in-service training log for purposes of appraisal.

Management

- Take charge of the ward/unit, as delegated by the ward/unit manager or by initiative in the absence of the ward/unit manager or shift in-charge.
- Assist in the effective running of the ward/unit by ensuring that
  - Adequate supplies and logistics are available to meet the needs of the patients/clients in the ward/unit
  - All equipment for patient use is kept in good working condition and are maintained regularly
- Participate in roster planning and monitoring
- Assist in maintaining up-to-date records in the unit.

Health Safety Responsibilities

- Adhere to the health and safety policies, guidelines/protocols (eg. the use of personal protective clothing/equipment
- Take care of own safety and take all measures to ensure the safety of the patient, relatives and staff - reporting all accidents, risk assessments and incidents, completing relevant documentation and undertake further investigation as directed.
- Assist the Ward Manager/Unit in-Charge to maintain a safe, clean, pleasant and therapeutic environment taking remedial action when necessary.

Quality Assurance

- Comply with the GHS quality assurance policy and guidelines and work within the prescribed quality standards for the nursing care

Further Information

- The post holder must at all times:

- Work in accordance with the GHS/NMC Code of Professional Conduct and Disciplinary Procedure.
- Strictly adhere to the provisions of the Patient's Charter.
- Participate in National Health Programmes

- *This job description is intended as a guide to the principal duties and responsibilities for the post and should not be considered an exhaustive list. It is subject to change in line with future development of the service*

Person Specification
Senior Staff Nurse

Criteria	Essential	Desirable
Educational Qualification and Experience	Registered General Nurse with Diploma in Nursing plus at least Three years' working experience at the level of Staff Nurse; evidence of continuing professional development	
Knowledge	Knowledge and understanding of quality assurance issues. Knowledge of GHS guidelines o Patients Charter o Health and Safety o Hospital Protocols	
Skills and Abilities	Communicate effectively both orally and written. Report writing skills Ability to work under pressure Good interpersonal skills Problem solving skills Ability to work in a team Ability to initiate and maintain clear, concise documentation	Computer skills
Personal Attributes	Self motivated/ ability to motivate others Flexible attitude and committed to the needs of the Service	

4.1.3 Nursing Officer (NO)

Job Title : Team leader/Shift In-Charge

Grade : Nursing Officer

Responsible To : Nurse Manager

Accountable To : Head of Facility

Job Purpose

To assess, plan, implement and evaluate nursing care and contribute to the efficient management of the ward/unit

Main Duties and Responsibilities

- Ensure that planned nursing care is delivered safely and effectively taking into account the views of the patient and their relatives.
- Ensure that plans of care for patients are written and updated and that all observations, documentation and communication are accurate ensuring that appropriate care is given accordingly
- Assess the care needs of patients, develop and implement plans of nursing care accordingly. These include:
  - The provision of rest and comfort
  - Patient observation and reporting
  - Ensuring adequate nutrition and elimination
  - Administering prescribed medication and reporting on patient's response
  - Ongoing education of patient and relatives on disease condition and providing the needed psychological support.
  - Helping patient to adapt to their new environment
- Formulate, initiate, and revise patient care as condition warrants.
- Participate in the ward rounds
- Allocate task based on skill of staff
- Supervise staff and students in the ward/unit.
- Evaluate nursing care and ensure continuity of care.
- Take responsibility for the protection of patients' valuables during the shift.
- Perform delegated assignment by the ward/unit manager.

Communication and Working Relationships

- Maintain effective communication with ward/unit manager, staff, patients/clients, and visitors
- Discuss treatment/management of condition with patient and relatives where applicable and encourage them to ask questions.
- Participate in the organization of ward/unit meetings.
- Attend and contribute at general staff meetings.
- Effectively work with the nursing team in the ward/unit and other health workers.

Personal and People Development

- Develop and maintain continuing personal and professional development to meet the changing demands in the area of nursing care.
- Monitor own performance against agreed objectives and standards.
- Undertake facilitative supervision of Health Care Assistants and other junior staff in the ward/unit and teach such staff.
- Function as a preceptor for nursing students.
- Participate in the induction of new staff in the ward/unit.
- Contribute to the identification of training needs for nurses in the ward/unit.
- Contribute to the development and implementation of education programmes for patients, their families and others about post discharge care programs
- Contribute to Continuing Professional Development (CPD) of the staff in the ward/unit.
- Keep log of own performance and in-service training log for purposes of appraisal.

Management

- Promote team morale in the ward/unit.
- Ensure availability of supplies and other logistics in the ward/unit during the shift.
- Participate in roster planning and monitoring
- Maintain up-to-date records in the ward/unit
- Be responsible for the safe custody, administration and recording of drugs in accordance with policy.
- Participate in the compilation of periodic ward/unit report
- Contribute to devising improved job methods for increasing efficiency in the ward/unit.

Research

- Participate in clinical audit in the ward/unit.

Health Safety Responsibilities

- Take care of own safety and ensure the safety of other staff and that of clients/patients
- Ensure that accidents/incidents or ill health, failings in equipment that occur during the shift are recorded and reported.
- Assist in ensuring planned preventive maintenance of plant and equipment in the ward/unit.

Quality Assurance

- Participate in quality improvement activities.
- Keep up-to-date with quality developments relevant to area of work and related services.
- Contribute to clinical supervision and peer review in the ward

Further Information

- The post holder must at all times:

- Work in accordance with the GHS/NMC Code of Professional Conduct and Disciplinary Procedure.
- Strictly adhere to the provisions of the Patient's Charter.
- Participate in National Health Programmes

This job description is intended as a guide to the principal duties and responsibilities for the post and should not be considered an exhaustive list. It is subject to change in line with future development of the service

Person Specification
Nursing Officer

Criteria	Essential	Desirable
Educational Qualification and Experience	Registered General Nurse (RGN) with a Degree plus ONE (1) year internship **OR** Registered Nurse with Diploma and Five (5) years' working experience at the level of Senior Staff Nurse; evidence of continuing professional development	
Knowledge	Knowledge of Basic Life Support Knowledge of GHS Patient Charter Knowledge of Risk Assessment Understanding of audit processes Knowledge of Health and Safety Knowledge and understanding of quality assurance issues	
Skills and Abilities	Demonstrated teaching, leadership, human relations and effective communication skills Ability to manage under pressure Problem solving skill Ability to work in a team Supervisory skills Ability to initiate and maintain clear, concise documentation Computer skills	
Personal Attributes	Self motivated/ ability to motivate others Flexible attitude and committed to the needs of the Service	

4.1.4 Senior Nursing Officer (SNO)

Job Title : Ward Manager/Unit-In Charge

Grade : Senior Nursing Officer

Responsible To : Departmental Manager/Head of Nursing

Accountable To : Head of Facility

Job Purpose

- Take a lead role in the assessment, planning, implementation and evaluation of nursing care in the ward/unit in accordance with required standards.
- Ensure efficient management of human and material resources for nursing service delivery in the ward/unit.

Main Duties and Responsibilities

- Provide leadership for the nursing team in the ward/unit
- Organize and manage nursing care in the ward/unit, ensuring that patients are treated with respect and dignity at all times
- Promote practice that is sensitive to the needs of patients/clients from multi-cultural backgrounds
- Supervise nurses and other staff in the ward/unit and assess their training needs to upgrade their skills
- Investigate incident reports on patient care safety and counsel staff accordingly
- Ensure maintenance of a safe and therapeutic environment for patient care within the ward/unit.
- Ensure maintenance of inventory of specialized items and ensure items are available at all times.
- Participate in the ward rounds.
- Ensure proper documentation on nursing care activities in the ward/unit.
- Ensure that the planning, delivery and evaluation of care programmes address the changing needs of patients in the ward/unit.
- Ensure the availability of the right skill mix for the delivery of nursing care during every shift.
- Promote the right of both patients and nurses in the ward/unit.
- Protect all confidential information concerning patients obtained in the course of professional practice and make disclosures only with the patient consent or when disclosure can be appropriately justified.
- Carry out other delegated assignment by the Departmental manager/Head of Nursing.

Communication and Working relationships

- Establish and maintain effective communication with staff, patients/clients, and visitors
- Discuss treatment/management of condition with patient and relatives as part of on-going education of patients and their families.

- Organize and attend ward/unit meetings as required
- Liaise appropriately with the department manager/ health facility management ensuring open and effective communication is maintained.
- Ensure involvement of staff in the ward in relevant discussions/ developments that are responsive to the demands placed on the ward/unit.
- Effectively work in a team with staff in the ward/unit and other health workers.

Personal and People Development

- Develop and maintain continuing personal and professional development to meet the changing demands in the area of nursing care.
- Monitor own performance against agreed objectives
- Ensure the appraisal of staff performance in the ward/unit.
- Lead in the identification of training needs for staff in the ward/unit.
- Coordinate education and development for the nursing staff in the ward/unit. This may include making input into in-service and staff development programs, orientation and induction of all new staff in the ward/unit.
- Take a lead role in the clinical supervision of the nursing staff and students in the ward/unit.
- Ensure Continuing Professional Development (CPD) of the staff in the ward/unit.
- Keep log of own performance and in-service training log for purposes of appraisal.

Management

- Be responsible for effective day-to-day management of the ward/unit.
- Ensure regular availability of supplies and other logistics in the ward/unit.
- Coordinate and supervise roster planning and monitoring and documentation of all leave for the nursing staff in the ward/unit.
- Plan and budget for nursing care activities for the ward/unit.
- Prepare and submit regular reports on nursing activities in the ward/unit.
- Ensure complete and accurate documentation on nursing care activities in the ward/unit.
- Promote a positive image for the ward/unit.
- Devise improved job methods for increasing efficiency in the ward/unit.

Research

- Participate in clinical audit.

Health Safety Responsibilities

- Take care of own safety and ensure the safety of other staff and that of clients/patients in the ward/unit.
- Ensure that GHS and Facility safety policies, arrangements, assessments, etc are disseminated to all nursing staff in the ward/unit.
- Ensure adherence to the health and safety policies, guidelines/protocols in the department (eg. the use of personal protective clothing/equipment).
- Ensure that accidents/incidents or ill health, failings in equipment are reported and recorded.
- Assist in ensuring planned preventive maintenance of plant and equipment in the ward/unit.

Appendix E: questionnaire

Briefing to questionnaire respondents

Dear colleague,

Re: **A research study "Exploring nurses' role in the management of Ghanaian children diagnosed with cancer"**

Thank you for agreeing to take part in the study. I am a Masters' nursing student at the Cape Peninsular University of Technology in South Africa. My course requires that I have to undertake a research study on nursing care given to Ghanaian children diagnosed with cancer. I selected to carry out the study at the Komfo Anokye Teaching Hospital.

In order for me to determine nursing care given to children diagnosed with cancer, I need you to complete the attached questionnaire. Please do not write your name on any part of the questionnaire except if you are willing to be interviewed. Kindly answer all questions. All information provided will be treated in the strict confidence. Only my research supervisors and I will have access to information on the questionnaire.

Yours sincerely

Enyonam Fugar

Questionnaire:

1. Please indicate where you work in the hospital

Children's ward [ ] Outpatients [ ] Neonatal unit [ ]

2. What is your rank?

Staff nurse [ ] Senior staff nurse [ ] Ward-in-charge [ ] Enrolled nurse [ ]

3. How long have you been working in the ward or clinic?

Less than 6 months [ ] 6 months – one year [ ] 1-2 years [ ] 3-4 years [ ] more than 4 years [ ]

4. Are you a trained oncology nurses?

Yes [ ] No [ ]

5. If yes, where did you obtain your training?

University [ ] nursing college [ ] on the job training [ ]

6. How long was your training programme?

Two weeks [ ] three to six weeks [ ] one year programme [ ] two years programme [ ] others [ ]

7. Describe how you would conduct nursing assessment of a child diagnosed with cancer?

8. In your view, what is the purpose of nursing assessment?

9. What is the nurses' role during assessment?

10. What are the sources for assessment?

11. How do you diagnose patient's problem?

12. What strategies do you use in planning nursing care for children with cancer?

13. Should the child, his/her parents and carers be involved in nursing care planning?

Yes [ ] No[ ]

Please explain your selected answer ……..

14. Do you involve the child (who can speak and understand) in the planning of his/her nursing care?

15. Do you involve the child's parent and carers in planning nursing care for the child?

16. Describe steps you normally take during implementing of nursing care for a child diagnosed with cancer.

17. Do you involve the child during the implementation of his/her nursing care?

Yes [ ] No [ ]

Please explain your answer ……..

18. Do you involve parents or carers during implementation of nursing care?

Yes [ ] No [ ]

19. What activities of implementation of care is each of the following involved?

Child diagnosed with cancer ……

Parents or carers ……

20. Indicate which of the following describes your nursing focus

Patient- oriented [ ] goal-oriented [ ] task-oriented [ ] nursing process-oriented [ ]

21. Do you conduct evaluation of your nursing care?

Yes [ ] No [ ] Sometimes [ ] Never [ ]

22. Do you conduct evaluation of care given to a child after discharge?

Yes [ ] No [ ] Sometimes [ ] Never [ ]

23. In your view, is evaluation of nursing care useful activity of nursing?

Yes [ ] No [ ]

24. Describe your understanding of quality assurance in the nursing care of children diagnosed with cancer.

25. Describe actions you take in planning the discharge of a child diagnosed with cancer

26. What health education programmes do you have for the following:

A) Child diagnosed with cancer that is able to speak and understand

B) Parent or carers of the child

27. List some of the support services provided to Child diagnosed with cancer that is able to speak and understand

28. Describe counselling services provided to

a) Child diagnosed with cancer that is able to speak and understand

b) Parents or carers

29. Do you refer families to the medical social worker?

Yes [ ] No [ ] only when requested [ ] Never [ ]

30. Are there policies or guidelines in place to inform on nursing management of children diagnosed with cancer?

Yes [ ] No [ ] Not sure [ ] Don't know [ ]

31. Do you think such policies or guidelines will help improve nursing care for children diagnosed with cancer?

Yes [ ] No [ ]

32. Describe some of your feeling towards caring for children diagnosed with cancer

33. In your view, how do other nurses react to caring for children diagnosed with cancer?

34. Please use this space to share your views on caring for children diagnosed with cancer

Thank you for completing this questionnaire

Appendix F: Interview guides for nurses and key informants

Introduction and briefing of respondents: (to be read to participants before each interview session)

Thank you for agreeing to take part in this interview. The reason for this interview is that I am a Masters' nursing student at the Cape Peninsular University of Technology in South Africa. My course programme requires that I undertake a research study on nursing care given to Ghanaian children diagnosed with cancer. I selected to carry out the study at the Komfo Anokye Teaching Hospital.

Before we start, I will like your permission to audio-record our discussions. Recording the session will help me remember things we discussed and your answers. If you want a copy of the discussion, I will copy one for you. However, if you do not feel comfortable for your voice to be recorded, I will respect your wishes and only take down notes of your comments. Your name will not appear in any report written and you will not be penalised if you do not feel comfortable to answer some of the questions.

Our discussion will only take about 30 minutes and you can stop the discussions at any time if you feel uncomfortable. At the end of our discussions, I will transcribe your responses and send to you for your comments and confirmation that what is written is true reflection of your views. If you are ready, we can start the interview.

A: Nursing staff interview questions

Question 1: What are the roles of nurses responsible for looking after children with cancer?

Question 2: What are some of the treatment guidelines in the management of childhood cancers and how do you go about it?

Question 3: how do you go about planning nursing care for a child diagnosed with cancer, and do you involve members of the multidisciplinary team?

Question 4: In your view, what is the general attitude of nurses towards children diagnosed with cancer?

Question 5: describe for me, follow-up care arrangements made for patients and their families after discharge

Question 6: kindly, explain some of the support systems put in place to assist parents and carers after a child is diagnosed with cancer

Question 7: How do you go about educating children and their families about the disease?

Question 8: From your experience, what is the impact of the diagnosis on the family members?

Question 8: How do you involve family members and carers in the care of patients on your ward?

Question 9: do you conduct daily evaluation of nursing care?

Question 10: once the child is discharge, do you conduct evaluation or effectiveness of care given during admission?

Question 11: In what ways do you think nursing care interventions could be improved?

B: Key informants interview questions

Question 1: when was your child diagnosed with cancer and how long was he/she in hospital?

Question 2: In your view, what is the general attitude of nurses towards children diagnosed with cancer?

Question 3: describe for me, arrangements made for follow-up care for the child.

Question 4: kindly, explain some of the support systems put in place to assist you look after the child was diagnosed with cancer

Question 5: did the nurses explain the condition of the children, and how to look after him/her?

Question 6: describe for me your feelings after your child was diagnosed with cancer

Question 7: were you or other members of the family involved in the care of your child during admission in the hospital?

Question 8: In what ways do you think the care that the nurses gave to your child could be improved?

Appendix G: Letter requesting permission to conduct study (KATH)

Always Victory Enterprise
Post Office Box 223
Keta.
20th May, 2013.

Director of Nursing Services
KOMFO ANOKYE TEACHING HOSPITAL
KUMASI
20th May 2013

Dear Sir/ Madam,

Re: Request for permission to conduct a research study titled Exploring nurses' role in the management of children diagnosed with cancer in Ghana

I am writing to request permission to conduct the above study at the Komfo Anokye Teaching Hospital. I am a Masters' nursing student at the Cape Peninsular University of Technology in South Africa. My course programme requires that I undertake a research study on nursing care given to children diagnosed with cancer in Ghana. My research supervisors are Emeritus Prof. Doris Khalil and Mrs. Angela Dunn both staff of the University.

I selected to carry out the study at the Komfo Anokye Teaching Hospital. I will be grateful if you would allow me to approach nursing staff working in paediatrics outpatients and admission wards in the hospital to collect data. Thank you in anticipation of a positive response from your office.

Yours sincerely,

Enyonam Fugar
(0204744961)

Cc: Emeritus Prof. Khalil, Mrs. A Dunn

Appendix H: Ethical approval from Cape Peninsula University of Technology

Cape Peninsula
University of Technology

HEALTH AND WELLNESS SCIENCES RESEARCH ETHICS COMMITTEE (HW-REC)
Registration Number NHREC: REC- 230408-014

P.O. Box 1906 • Bellville 7535 South Africa
Symphony Road Bellville 7535
•Tel: +27 21 959 6352 • Fax +27 21 953 8490
Email: danielso@cput.ac.za

3 October 2013
CPUT/HW-REC 2013/H35

Faculty of Health and Wellness Sciences – Nursing and Radiography Department

Dear Ms Enyonam Adzo Fugar

APPLICATION TO THE HW-REC FOR ETHICAL CLEARANCE

Approval was granted on 20 September 2013 by the Health and Wellness Sciences-REC to Enyonam Adzo Fugar for your Ethical Clearance application. This approval is for research activities related to an MTech: Nursing at this Institution.

Title: Exploring nurses' role in the management of children diagnosed with cancer in Ghana.

INTERNAL SUPERVISOR: Prof D Khalil

INTERNAL CO-SUPERVISOR: Mrs A Dunn

Comment:
Approval will not extend beyond 3 October 2014. An extension should be applied for 6 weeks before this expiry date should data collection and use/analysis of data, information and/or samples for this study continue beyond this date.

Note:
The investigator(s) should understand the conditions under which they are authorized to carry out this study and they should be compliant to these conditions. **It is required that the investigator(s) complete an annual progress report that should be submitted to the HW-REC in December of that particular year, for the HW-REC to be kept informed of the progress and of any problems you may encounter.**

Kind Regards

Zuleika Nortjé
CHAIRPERSON – ETHICS RESEARCH COMMITTEE
FACULTY OF HEALTH AND WELLNESS SCIENCES

Appendix I: Ghana Health Service Ethical approval

GHANA HEALTH SERVICE ETHICAL REVIEW COMMITTEE

In case of reply the number and date of this Letter should be quoted.

My Ref. :GHS-ERC:
Your Ref. No.

Research & Development Division
Ghana Health Service
P. O. Box MB 190
Accra
Tel: +233-302-681109
Fax + 233-302-685424
Email: nitadzy@yahoo.com

14th November, 2013

Fugar Enyonam Adzo,
Cape Peninsula
University of Technology

ETHICAL APPROVAL - ID NO: GHS-ERC: 25/09/13

The Ghana Health Service Ethics Review Committee has reviewed and given approval for the implementation of your Study Protocol titled:

"Exploring nurses' role in the management of children diagnosed with cancer in Ghana"

This approval requires that you inform the Ethical Review Committee (ERC) when the study begins and provide Mid-term reports of the study to the Ethical Review Committee (ERC) for continuous review. The ERC may observe or cause to be observed procedures and records of the study during and after implementation.

Please note that any modification without ERC approval is rendered invalid.

You are also required to report all serious adverse events related to this study to the ERC within seven days verbally and fourteen days in writing.

You are requested to submit a final report on the study to assure the ERC that the project was implemented as per approved protocol. You are also to inform the ERC and your sponsor before any publication of the research findings.

Please always quote the protocol identification number in all future correspondence in relation to this approved protocol

SIGNED.....
DR. CYNTHIA BANNERMAN
(GHS-ERC VICE-CHAIRPERSON)

Cc: The Director, Research & Development Division, Ghana Health Service, Accra

Appendix J: Certificate of registration from Komfo Anokye Teaching Hospital

KOMFO ANOKYE TEACHING HOSPITAL

RESEARCH AND DEVELOPMENT UNIT (R & D)

CERTIFICATE OF REGISTRATION

REG. NO[a] *RD/CR13/162*

This is to certify that

Prof/Dr/Mrs/Mr/Ms *Fugar Enyonam Adzo*

has registered his/her proposed study titled *Exploring nurses' role in the management of children diagnosed with cancer in Ghana*

.....with the Research and Development Unit.

Date *04th October,2013*

Name of issuing officer

Bernard Arhin

Signature

[a]Must tally with registration number on the registration form