

## Introduction

Childhood cancer is the second most common cause of death in children after injuries. The incidence rates of childhood cancer continue to increase at the rate of about 1 percent per year (**Ries, et al., 2005**). Approximately 1 in 7000 children younger than 14 years will be diagnosed with childhood cancer each year (**Smith and Gloeckler, 2002**). The new cancer cases with confirmed malignancy at the national cancer institute, CAIRO between January 2005 and December 2006, was 18,496, of whom 1,937 (10.5%) were at child age (less than 20 years) (**Elattar, et al., 2007**). According to a new report, the annual incidence of all cancer in children under 5 years in developed countries is 0.5%. Worldwide new cases of childhood cancer per year exceed 200. 000 (**Stiller, 2004**).

The decline in childhood cancer mortality rate is approximately 50% in developed countries. However, there is no marked decrease in mortality rate in developing countries. The declines in mortality rates are attributed to improvement in management of the disease, including newer multidrug chemotherapy schemes. However, most children with cancer living in developing countries cannot profit from these advancements because of their high cost, inadequate resources to establish the development in cancer management in most developing countries. Hence governments, politicians, voluntary associations and international organizations must make accessible the benefits of modern medicine to all the world's children with cancer (**Chow, et al., 2006**).

The causes of childhood cancers are largely unknown, other predisposing factors leading to cancer as specific chromosomal, genetic abnormalities and ionizing radiation exposures. Childhood cancers are

histologically variable, embryonic tumors are the most common and congenital anomalies, hereditary immune deficiency states (**Pinkerton, et al., 2004**). Environmental factors play a role as risk factors for childhood cancers, including Epstein-Barr virus, hepatitis B virus and human immunodeficiency virus, in addition, some parasitic infections have been implicated, particularly malaria in tropical Africa, acting as a co-factor for Burkitt's lymphoma and schistosomiasis in Egypt, causing bladder cancer (**Parkin, 2001**).

The signs and symptoms of a malignant disease depend on the interval between time of origin and diagnosis, as well as the type and location of the tumor. In general, childhood cancer may manifest in one of the following three ways as a mass lesion or with symptoms directly related to the tumor or with nonspecific symptoms (**Allen and Vessey, 2004**).

The overall cure rate for childhood cancer is now approximately 75%. The treatment of childhood cancer includes chemotherapy (the use of medical drugs to kill cancer cells), radiation (the use of radiant energy to kill cancer cells) and surgery (to remove cancerous cells or tumors). The type of treatment depends on the type, severity of cancer and the child's age (**Behrman and Kliegman, 2002**).

The primary focus of chemotherapy is to prevent cancer cells from multiplying and invading adjacent tissue or developing metastasis. Chemotherapy is the use of anticancer drugs to treat cancerous cells. In most cases, chemotherapy works by interfering with the cancer cell's ability to grow or reproduce. Chemotherapy may be used alone for some types of cancer or in combination with other treatments such as radiation

or surgery. Often, a combination of chemotherapy drugs used to fight a specific cancer (**Robin and Miller, 2007**).

Mothers dealing with childhood cancer face many different stressors throughout the course of their child's illness. Supportive care is a key component of nursing care for a child and family dealing with cancer. Supportive care as the provision of necessary services by those affected by cancer to meet their physical, informational, psychosocial, emotional, practical and spiritual needs during the diagnosis, treatment, follow-up phases and Provision quality of care from diagnosis to treatment (**Goldbeck, 2006**).

Mothers with a continue of care are face many different sectors including, hospitals, continuity home care and ambulatory specialty clinics, frequent hospitalizations, lengthy treatments and complications affect the daily routine for children with cancer. The oncology nurse plays a role by informing mothers that cancer and its therapies can cause physical, psychosocial and cognitive problems, children need follow up and special continued care at home, mothers will not be shocked if they learn how to deal with problems when emerge. Mothers should have detailed information about the diagnosis and the available treatment, sources of assistance and strategies for maintaining physical health, positive attitudes and well-being (**Grootenhuis and Last, 2007**).