

Introduction

Cancer in children is the second most common cause of death in childhood. The incidence rate of childhood cancer in Egypt is about 150 cases/per million children of 0–14 years of age every year. Annual incidence of childhood cancer peaks in the first year of life and under 5 years of age. In developed countries only 0.5% and world wide about half of all the childhood cancer cases diagnosed before 15 years of age actually occur below the age of 5 years. Worldwide, the incidence of childhood cancer for boys is substantially higher than for girls, a boy to girl ratio of 2:1 there were 1,184 (61.1%) boys and 753 (38.9%) girls (**Elattar, et al., 2009**).

The health related quality of life (HRQL) of children with cancer has been a subject of increasing interest in recent years. Definitions of quality of life (QOL) in pediatric oncology generally refer to a multidimensional construct, which incorporates the domains of physical, social, emotional and cognitive functioning (**Yeh, and Hung, 2011**). The assessment of HRQL is of a great importance for pediatric cancer and their health-care providers as a result of the advances in cancer treatment and the improvement of the survival rates. Measuring HRQL during the treatment provides useful information to children and families and health care providers when they face difficult situations concerning treatment alternatives (**Yeh, 2010**). QOL as an outcome variable has become an important measure in clinical research, making a transition from a "biomedical" model of health to one that incorporates the social aspects of disease (**Bondini, et al., 2007 and Kassem, 2009**).

Health education is an essential component of nursing care and is directed toward promoting, maintaining and restoring health; preventing illness and assisting people to deal with the residual effect of illness. Mothers' education has demonstrated it's important to improve QOL of their children, ensure continuity of care, effectively reduce the incidence of complication of illness, decrease child anxiety and maximize independence in the performance of activities of daily living (**Black & Hawks, 2009**).

Almost 70% of all children with cancer are cured, according to **Thomson, et al., (2010)**, and 74.3% of the children aged 0–14 years survive for at least 10 years after the initial cancer diagnosis. **Pizzato, et al., (2006)** added that, the incidence of cancer in childhood and early adolescence continues to increase, the portion of children expected to become long-term survivors' approaches 85% because of the success of the cancer treatment.

Treatment of children with cancer is long and aggressive, it can even happen sometimes those children feel quite well before they were diagnosed, but much worse after they undergo diagnostic tests and start chemotherapy. The child's QOL is affected by the whole process; this information will be especially useful for parents, because it will give them an idea about how their child might react during the course of treatment and QOL measures are useful when we want to assess the value of an intervention (**Chou & Hunter, 2009 and Peter, et al., 2011**).

The mother plays an important role where children with cancer are often limited in their opportunities to develop independence and autonomy. The limitations come from restrictions placed by treatment regimens and therapy related complications. Therefore, mothers can promote their children

more comfortable, prevention of infection; regulate activity, nutrition, skin care, and emotional support. Therefore, mothers must be informing in a manner that they can fully understand the nature of the disease, its course, treatment, complication and prognosis (**Thompson, 2009**).

Nurses play a vital role in management of children with cancer. The public relies on nurses to be accessible, well informed and reliable. It is the nurse's duty to give correct and current information and remove barriers to care. Even if the nurse does not feel preparation enough to provide in-depth mother education about childhood cancer; she has a responsibility to assess symptom control, safe medication use and correct any erroneous information (**Jackson & Rees, 2009**). The oncology nurse should have guidelines for assessing cultural beliefs that might influence the family's coping style following a cancer diagnosis. The nurse could provide assistance by assessing the family situation at home; it might be helpful if parents notify a teacher or counselor in school about the adjustments going on at home. Their observations of changes in the child's behavior or school performance may be indicators of the child's coping ability. Nurses teach mothers how to care for the child and provide psychological support to the family and identify factors that will mediate a positive adjustment and outcome. Nursing care should be coordinated to meet child physical and psychological needs while involving the family when appropriate (**Elkateb, et al., 2002**).