

Trends in Clinical Practice and Nurses' Attitudes About Fertility Preservation for Pediatric Patients With Cancer

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Purpose/Objectives: To examine trends in fertility preservation attitudes and behaviors of pediatric oncology nurses and evaluate their awareness of fertility preservation guidelines published in June 2006 by the American Society of Clinical Oncology (ASCO).

Design: Cross-sectional surveys conducted in 2005 and 2006.

Setting: Annual meetings of the Florida Association of Pediatric Tumor Programs.

Sample: 115 pediatric oncology nurses in 2005 and 95 nurses in 2006.

Methods: A 45-item survey was distributed to conference attendees.

Main Research Variables: Knowledge, current fertility preservation practices, and awareness of fertility preservation guidelines.

Findings: Nurses' attitudes about fertility preservation discussions with patients did not change during the survey period; however, the number of nurses believing that one of their duties was to discuss fertility preservation with patients decreased from 91% in 2005 to 81% in 2006. Nurses' likelihood to discuss fertility preservation with patients with specific characteristics significantly changed over time. Fertility preservation discussions were just as likely for single patients as they were for those married or recently engaged, although nurses were more likely to discuss fertility preservation with patients who had at least one child or who had a poor prognosis. Nurses' awareness of ASCO guidelines was less than 5%.

Conclusions: A majority of nurses perceive that fertility preservation options should be offered to patients. However, practice and patient family barriers exist that may impede discussion. Attitudes and behaviors will be monitored with the 2006 ASCO guidelines.

Implications for Nursing: Nurses play a key role in survivorship discussions for pediatric patients with cancer and their families. Increased knowledge of fertility preservation guidelines may help promote the fertility preservation concept and lead to improved dissemination and implementation of training programs that focus on current ASCO fertility preservation guidelines and address the psychosocial needs of children aged 12–16 years.

Key Points . . .

- ▶ The survival rate for pediatric patients with cancer has improved in recent decades and the focus of patient care has shifted to quality of life for survivors.
- ▶ A potential side effect of cancer treatment is infertility, a factor that affects quality of life in survivors.
- ▶ A few fertility preservation options exist for pediatric patients, but available methods must be initiated prior to cancer treatment (chemotherapy or radiation).
- ▶ Fertility preservation guidelines do not fully address the psychosocial needs of patients younger than age 18.

Precise data about which patients may experience infertility or sterility are not available because factors, such as the type of cancer treatment and age of the patient, have differing effects on fertility (Brougham & Wallace, 2005; Rueffer et al., 2001; Simon, Lee, Partridge, & Runowicz, 2005). For example, young girls undergoing cancer treatment may experience damage to the ovaries or uterus (Brougham & Wallace; Thomson, Critchley, Kelnar, & Wallace, 2002), whereas irradiation can impair spermatogenesis in young boys (Brougham & Wallace). Several chemotherapy agents are known to cause gonadal damage,

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According to the National Cancer Institute (NCI, 2008), 10,400 children were diagnosed with cancer in 2007. Childhood cancer is relatively rare and the survival rate for pediatric patients has improved dramatically in recent decades, with more than 79% of patients surviving (NCI). Pediatric cancer researchers have begun to focus on issues such as long-term morbidity and quality of life in survivors (Oeffinger et al, 2006; Wallace, Anderson, & Irvine, 2005). Infertility is one of the possible side effects of cancer treatments, such as chemotherapy and radiation, that has the potential to affect quality of life (Meirow, 2000; Wallace et al., 2005).