

# Oncology Nurses' Perceptions of Barriers to Discussion of Fertility Preservation With Patients With Cancer

**Lindsey King, MPH, CHES, Gwendolyn P. Quinn, PhD, Susan T. Vadaparampil, PhD, MPH, Clement K. Gwede, PhD, MPH, RN, Cheryl A. Miree, MS, Crystal Wilson, BA, Heather Clayton, MPH, and Karen Perrin, PhD, MPH, RN**

Infertility is a common result of cancer treatment; however, opportunities exist for patients to preserve fertility prior to treatment. Recent evidence suggests that healthcare providers, including nurses, do not consistently discuss fertility preservation (FP) with patients. This qualitative, cross-sectional pilot study used a focus group and in-depth interviews to explore knowledge, attitudes, and practice behaviors related to nurses' discussion of FP with patients with cancer. Results indicate that only half of the nurses discuss FP methods with patients, even though most believe that having discussions with patients about fertility is part of their role. Factors associated with the discussion of FP among nurses included (a) knowledge (FP procedures, fertility institutes and clinics, resources for patients, and practice guidelines), (b) attitudes (difficulty finding facilities, time constraints, role, comfort level, ethical issues, financial considerations, and patient characteristics), and (c) behaviors (patient initiation, physician behaviors, patient characteristics, and timing). Discussion should be stimulated among nurses about the role of nurses in the FP discussion, and educational interventions and practice guidelines should be developed that are aimed at oncology nurses to help facilitate discussions with patients.

**A**lthough advances in treatment have led to increased cancer survival rates, they also have brought certain undesirable consequences, including infertility, which may result as an adverse long-term effect of cancer treatment (Davis, 2006; Rosoff & Katsur, 2003). Cancer treatments involving surgery, chemotherapy, or radiation may damage fertility. Damage to fertility caused by chemotherapy depends on several factors, such as the type of agents (e.g., busulfan, cyclophosphamide, ifosfamide, and melphalan), dose, and the health and age of the patient (Bashore, 2007; Thomson, Wallace, & Sklar, 2004). Some dosages of radiation (greater than 20 Gy) can cause permanent sterility (Petersen, Daugaard, Rorth, & Skakkeback, 2003). The toxic effects of chemotherapy and radiation can lead to infertility in approximately 30%–75% of male patients with cancer (ages 18–45) (Rueffer et al., 2001). Huyghe et al. (2004) found a 30% decrease in fertility among testicular cancer survivors after treatment, compared to baseline levels prior to the initiation of cancer treatment. Surgery that damages the neurologic pathways for emission of semen also can cause infertility (Schover, 1999). Female patients undergoing cancer treatment face a 40%–80% chance of infertility because of injury or impairment of the ovaries or uterus (Chasle & How, 2003; Sonmezer & Oktay, 2006; Wallace, Anderson, & Irvine, 2005). Surgeries performed as part of cancer treatment, such as

the removal of the uterus and bilateral oophorectomy, can cause infertility in women (Schover, 1999). The effects of chemotherapy and radiation also may send women into premature menopause, resulting in a loss of fertility (Lee et al., 2006).

Cancer survivors of childbearing age have reported that the effect of treatment on their fertility is one of their greatest concerns (Schover, 2005b). In addition, surveys of young survivors show that most are interested in having children, particularly if they were childless at the time of cancer diagnosis (Schover, Rybicki, Martin, & Bringelsen, 1999; Schover, 2005a).

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Lindsey King, MPH, CHES, is a research specialist, Gwendolyn P. Quinn, PhD, is an associate professor, Susan T. Vadaparampil, PhD, MPH, is an assistant professor, Clement K. Gwede, PhD, MPH, RN, is an assistant professor, Cheryl A. Miree, MS, is a research associate, Crystal Wilson, BA, is a research assistant, and Heather Clayton, MPH, is a research assistant, all at the Moffitt Cancer Center in Tampa, FL; and Karen Perrin, PhD, MPH, RN, is an associate professor in the College of Public Health at the University of South Florida in Tampa. This study was supported, in part, by American Cancer Society Institutional Research Grant #93-032-10 and by the Survey Methods Core Facility at the Moffitt Cancer Center and Research Institute. (Submitted July 2007. Accepted for publication October 28, 2007.)

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