

# Perceptions of Stress, Burnout, and Support Systems in Pediatric Bone Marrow Transplantation Nursing

**Regan Gallagher, MSN, RN, and Denise K. Gormley, PhD, RN**

Bone marrow transplantation (BMT) is used to treat various conditions, ranging from immune disorders to many types of cancer. The critical complexity of patients and the environment in which BMT nurses work can lead to stress, burnout, and, ultimately, poor retention. This study aimed to investigate nurses' perceptions of work-related stress and burnout as well as current support systems for nurses. The study included 30 BMT staff nurses from a large pediatric medical center in the midwestern United States. Critical illness or acuity of patients was reported as the most stressful factor; long work hours was the least stressful factor. Most nurses perceived moderate to high levels of emotional exhaustion, and 33% reported moderate levels of depersonalization. Fifty percent perceived high levels of personal accomplishment, despite the critical illness or acuity of their patients, demanding patient families, rotating shifts, short staffing, and caring for dying patients. Most nurses felt that support systems were in place and that staff was accessible, but most respondents were undecided about the helpfulness of the support systems. Results suggest that support systems may significantly affect work satisfaction and feelings of accomplishment for BMT nurses.

**P**atient distress is a primary contributor to the highly stressful work environment of pediatric oncology nurses, and patient suffering is a major cause of job dissatisfaction (Barnard, Street, & Love, 2006; de Carvalho, Muller, de Carvalho, & de Souza Melo, 2005).

Pediatric bone marrow transplantation (BMT) nurses work with young patients who suffer greatly from cancer as well as from BMT side effects. The critical complexity of patients and stressful work environment can lead to high stress, burnout, and, ultimately, high attrition rates among BMT unit nurses. Managing medical interventions has taken precedence in the BMT nursing role, and the emotional toll on nurses remains under-researched (Kelly, Ross, Gray, & Smith, 2000). Decter and Villeneuve (2001) reported that nurses are among the most overworked, stressed, and sick workers. A healthy and satisfied nursing workforce is important for patient safety and the achievement of positive patient outcomes (Aiken, Clarke, Sloane, Sochalski, & Silber, 2002; Laschinger, Shamian, & Thomson, 2001); therefore, the current study aimed to examine relationships among nurse stress, burnout, and perceptions of support systems in pediatric BMT work settings.

## Background

Many nurses feel that they receive little education to prepare them for caring for dying patients or coping with death. Rodgers and Brown (2001) conducted a needs assessment interview with RNs on a BMT unit in Texas. The findings indicated that caring for

### At a Glance

- ◆ Visible support systems may help bone marrow transplantation (BMT) nurses manage stressful work situations.
- ◆ Novice pediatric BMT nurses perceive more emotional exhaustion and depersonalization than experienced nurses and may need additional support.
- ◆ Pediatric BMT nurses feel a sense of personal accomplishment when caring for critically ill children, despite burnout.

dying children was a large stressor for the nurses in their practice (Rodgers & Brown).

Molassiotis, van den Akker, and Boughton (1995) examined level of job satisfaction, psychological difficulties related to work, stress, and useful stress-reduction techniques in 129 nurses and 26 doctors from 16 BMT centers in the United Kingdom. Eighty percent felt low personal accomplishment, more than 10% experienced clinical anxiety, and 0.8% of nurses and 3.8% of doctors

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Regan Gallagher, MSN, RN, is a manager of patient services at Cincinnati Children's Hospital Medical Center in Ohio, and Denise K. Gormley, PhD, RN, is an assistant professor and a director of system-focused nursing in the College of Nursing at the University of Cincinnati in Ohio. (Submitted November 2008. Accepted for publication February 26, 2009.)

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