

# Burnout and Well-Being

## Evaluating perceptions in bone marrow transplantation nurses using a mindfulness application

Kathryn Knill, DNP, RN, APRN-CNP, Barbara Warren, PhD, APRN-CNS, FNAP, FAAN, Bernadette Melnyk, PhD, APRN-CNP, FAANP, FNAP, FAAN, and Susan E. Thrane, PhD, MSN, RN, CHPN®, FPCN®

**BACKGROUND:** Oncology nurses are at increased risk for developing burnout. Although various interventions have been researched, mindfulness has been proven to be beneficial in mitigating burnout while improving well-being.

**OBJECTIVES:** The aim was to evaluate whether the use of a mindfulness mobile application (app), Headspace®, increases perceptions of well-being and decreases perceptions of burnout among inpatient bone marrow transplantation (BMT) staff nurses and nurse practitioners (NPs).

**METHODS:** This evidence-based practice quality improvement initiative introduced the Headspace app to BMT nurses and evaluated its impact on burnout and well-being at baseline and every 30 days for 90 days.

**FINDINGS:** There were significant improvements in burnout and well-being in staff nurses and NPs from baseline to each time point. Sleep hygiene meditations were the most widely used programs within the Headspace app for both nursing groups.

### KEYWORDS

burnout; well-being; bone marrow transplantation; mindfulness

### DIGITAL OBJECT IDENTIFIER

10.1188/21.CJON.547-554

**RESEARCH INDICATES THAT NURSES WHO WORK** on oncology units experience a high level of stress and burnout when compared to other nursing specialties (Kaple, 2021). Burnout includes the following three main components: emotional exhaustion, depersonalization, and low personal accomplishment (National Academies of Sciences, Engineering, and Medicine [NASEM], 2019). A meta-analysis of 17 studies involving 9,959 oncology nurses showed that 30%–35% of nurses experienced low personal accomplishment and high emotional exhaustion (Cañadas-De la Fuente et al., 2018). These symptoms of burnout in oncology nurses were also found in a study by Wentzel and Brysiewicz (2018), which showed that oncology nurses were susceptible to symptoms of emotional exhaustion, cynicism, and depersonalization when they regularly witnessed significant physical, mental, and emotional suffering of their patients. Nurses working in inpatient hematology-oncology units are often at risk for burnout because they maintain close connections with patients throughout their cancer treatment, helping them navigate from one phase of care to the next; this is particularly true for those working with patients undergoing bone marrow transplantation (BMT) (Kasberg et al., 2011). Hematopoietic stem cell transplantations, often called BMTs, are associated with high patient morbidity and mortality. In recent years, the use of newer therapies, like chimeric antigen receptor T-cell therapy, have been used to treat relapsed and refractory hematologic malignancies. These therapies are associated with significant, life-threatening complications, which can have major implications on the physical and emotional state of patients and their care team (Azoulay et al., 2019).

### Background

Clinician well-being affects the safety and quality of care that patients receive, leading organizations to search for ways to increase well-being within the workplace (Melnyk et al., 2018). Research has shown that individuals with higher levels of well-being have better outlooks on life, live longer, perceive themselves to be in better health, engage in healthy behaviors, have fewer mental and physical illnesses, feel more socially connected, and are more productive at work and home (Song & Baicker, 2019; World Health Organization, 2019).