

An Integrative Review of Patient Education During Inpatient Hematopoietic Stem Cell Transplantation

Claire Beaton, RN, MN, Kara Sealock, RN, BN, MEd, EdD, CNCC(C)®, CCNE,
K. Alix Hayden, MLIS, MSc, PhD, and Kathryn M. King-Shier, RN, PhD, FESC

PROBLEM IDENTIFICATION: Patients undergoing hematopoietic stem cell transplantation (HSCT) have significant learning needs that nurses must provide. The review question was “What teaching methods and strategies have been examined to deliver education to patients undergoing HSCT?”

LITERATURE SEARCH: The review was conducted in November 2022 using the following databases: Scopus®, Embase®, MEDLINE®, CINAHL®, PsycINFO®, and ERIC. The search comprised two main concepts: HSCT and patient education.

DATA EVALUATION: The search yielded 1,458 records after duplicates were removed, and 3 studies were included in this review. The studies were critically appraised using the Mixed Methods Appraisal Tool and deemed to be of moderate quality.

SYNTHESIS: Problem-solving training was the teaching method used in all three studies. Satisfaction was noted among patients and those delivering the intervention. The effect of the training on information retention or application was not measured.

IMPLICATIONS FOR PRACTICE: Additional research is needed to explore how to best educate patients undergoing HSCT while hospitalized. Structured teaching methods may have a sound theoretical basis and warrant additional investigation using more rigorous research methods.

KEYWORDS hematopoietic stem cell transplantation; patient education; teaching strategies

ONF, 51(1), 49-58.

DOI 10.1188/24.ONF.49-58

Hematopoietic stem cell transplantation (HSCT) is a curative treatment for hematologic malignancies and nonhematologic diseases (Galgano et al., 2023). The process involves high-dose chemotherapy followed by the infusion of a donor’s (allogeneic) or a patient’s own (autologous) stem cells. HSCT involves lengthy hospitalization, significant side effects, and changes to a patient’s ability to care for themselves, and requires lifelong follow-up (de Azevedo et al., 2017; Schoemans et al., 2019). Given that undergoing HSCT is a high-risk and complex process, the patient must understand their treatment to be involved in their care (Schoemans et al., 2019).

Patient Education

Patient education is the process of teaching, counseling, and training the patient on aspects of their care (Strupeit et al., 2013). The delivery of information requires consideration of timing, delivery format, content, and setting (Schoemans et al., 2019). Successful patient education has many positive outcomes. A systematic review by Husson et al. (2011) revealed that survivors of cancer whose informational needs were satisfied had less anxiety, less depression, and better health-related quality of life. Addressing patients’ needs for knowledge can also positively affect their ability to cope and improve their health and treatment-related decision-making (de Azevedo et al., 2017). Patients are expected to have a dedicated caregiver during the HSCT process, and education can shift caregivers from having a passive role to playing an active role in the patient’s care (Bergkvist et al., 2020). As many HSCT centers move to complete more care in the outpatient setting, patients are discharged from the hospital earlier, which creates additional pressure for patients and their families to