

Perceptions of Hematopoietic Stem Cell Transplantation and Coping Predict Emotional Distress During the Acute Phase After Transplantation

Michael Baliouis, PhD, DClinPsy, Michael Rennoldson, DClinPsy,
David L. Dawson, DClinPsy, Jayne Mills, DClinPsy, and Roshan das Nair, PhD

Baliouis is a trainee clinical psychologist at the Nottinghamshire Healthcare National Health Service (NHS) Trust in Nottingham; Rennoldson is a senior lecturer in the Division of Psychology at Nottingham Trent University in Nottinghamshire; Dawson is a research clinical psychologist in the School of Psychology and College of Social Science at the University of Lincoln in Lincolnshire; and Mills is a clinical psychologist and das Nair is a consultant clinical psychologist, both at the Nottingham University Hospitals NHS Trust in Nottinghamshire, all in the United Kingdom.

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Baliouis can be reached at michael.baliouis@nhs.net, with copy to editor at ONFEditor@ons.org.

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Purpose/Objectives: To test whether a widely used model of adjustment to illness, the self-regulatory model, explains the patterns of distress during acute hematopoietic stem cell transplantation (HSCT). According to the model, perceptions of HSCT, coping, and coping appraisals are associated with distress.

Design: Longitudinal, correlational.

Setting: The Centre for Clinical Haematology at Nottingham City Hospital and the Department of Haematology at Royal Hallamshire Hospital in Sheffield, both in the United Kingdom.

Sample: 45 patients receiving mostly autologous transplantations for a hematologic malignancy.

Methods: Patients were assessed at baseline, on transplantation day, and two and four weeks after transplantation using three questionnaires: the short-form Depression Anxiety Stress Scales (DASS-21), Brief Coping With Problems Experienced (Brief COPE), and Brief Illness Perceptions Questionnaire (Brief IPQ) adapted for HSCT. Multilevel regression was used to analyze the clustered dataset.

Main Research Variables: Psychological distress, including depression, anxiety, stress, and overall distress (DASS-21); use of different coping styles (Brief COPE); and perceptions of HSCT and coping appraisals (Brief IPQ).

Findings: As suggested by the self-regulatory model, greater distress was associated with negative perceptions of HSCT, controlling for the effects of confounding variables. Mixed support was found for the model's predictions about the impact of coping styles on distress. Use of active and avoidant coping styles was associated with more distress during the acute phase after HSCT.

Conclusions: Negative perceptions of HSCT and coping contribute to psychological distress during the acute phase after HSCT and suggest the basis for intervention.

Implications for Nursing: Eliciting and discussing patients' negative perceptions of HSCT beforehand and supporting helpful coping may be important ways to reduce distress during HSCT.

Hematopoietic stem cell transplantation (HSCT) is a complex and intensive procedure for which its acute phase can last several weeks and involves high toxicity, prolonged isolation, and a range of debilitating side effects (e.g., fatigue, nausea) (Frödin, Börjeson, Lyth, & Lotfi, 2010; Gooley et al., 2010; Mosher et al., 2009). Patients report an overwhelming experience and loss of agency, describing the procedure as a “walk to hell and back” and “really, really hard” (Xuereb & Dunlop, 2003, p. 404). Surveys of psychiatric morbidity in patients undergoing HSCT have found that about half of patients meet clinical criteria for anxiety or depression during the first weeks, with anxiety often greatest around admission and