

INPLASY

The Lived Experiences of Adult Patients after BMT/ HSCT for Malignant and Non-Malignant Haematological Disorders: A Scoping Review

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Amendments - This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 31 October 2026 and was last updated on 31 October 2026.

INTRODUCTION

Review question / Objective 1. What are the physical challenges experienced by adult patients who have undergone BMT/ HSCT for malignant and non-malignant haematological conditions?

2. What are the psychosocial experiences of these patients?

3. What coping strategies do these patients employ?

4. What are their perceptions of the psychosocial support available throughout the transplantation trajectory?

5. What are the spiritual experiences of these patients?

Objective: To systematically identify, map and synthesise the qualitative evidence on the lived experiences of adult patients who have undergone bone marrow transplantation or haematopoietic stem cell transplantation (BMT/HSCT) for malignant and non-malignant haematological

disorders, across diverse cultural and healthcare contexts, and to identify gaps in the existing evidence.

Background BMT/HSCT involves the infusion of haematopoietic stem cells obtained either from the patient's own stored cells (autologous transplantation) or from a donor (allogeneic transplantation), with the intent of restoring the recipient's haematopoietic and immune systems. It is now an established curative or life-prolonging treatment for a wide range of malignant conditions, such as acute leukaemia, plasma cell dyscrasias and lymphomas, and for non-malignant conditions, such as bone marrow failure syndromes, thalassaemia and primary immune deficiencies. More than 1.5 million transplants were recorded worldwide between 1957 and 2019, and annual activity now exceeds 90,000 procedures, concentrated mainly in high-income countries (Ahmed et al., 2021). Five-year overall survival now exceeds 50% to 70% for many indications, producing a steadily growing population of long-

term survivors across diverse healthcare systems and cultural settings.

Despite improved survival, the transplantation journey carries a substantial and lasting burden. Fatigue, pain, nausea, appetite loss and declines in physical and social functioning are common during hospitalisation, and long-term survivors continue to report problems with physical fitness, pain and emotional stress for five years or more after transplantation. Psychological morbidity is also considerable: up to 55% of patients have elevated anxiety or depression before transplantation, and many experience depression, anxiety or post-traumatic stress symptoms afterwards. Protective isolation, changes in identity, disrupted family and working life, and difficulties with social reintegration add to this burden.

Patients' experiences are also shaped by culture, religious belief, family structure, language and access to psychosocial and supportive care. Coping style, spiritual well-being and meaning-making appear to influence adjustment and resilience, and spirituality may follow different trajectories after autologous and allogeneic transplantation. However, most available evidence is quantitative and captures outcomes on standardised measures rather than patients' own accounts of what transplantation means to them. Qualitative research offers an understanding of how patients experience and make sense of BMT/HSCT, which is needed to design holistic, culturally congruent and patient-centred nursing care.

Rationale Although the quantitative literature on quality of life, symptom burden and psychological distress after BMT/HSCT is extensive, qualitative evidence on patients' lived experiences has not been comprehensively mapped. A recent qualitative metasynthesis (Bell et al., 2024) was limited to patients attending long-term follow-up clinics and identified only four primary qualitative studies. To the authors' knowledge, no scoping review has systematically mapped the full range of published qualitative evidence on the lived experiences of adult BMT/HSCT recipients across the whole transplantation trajectory and across both malignant and non-malignant indications.

In particular, the spiritual and religious dimensions of transplantation, culturally situated coping strategies, and the experiences of patients from under-represented regions, including the Middle East, Africa, South Asia and Latin America, have received little systematic attention. Qualitative evidence from Oman and the wider Gulf region is also scarce. These gaps limit the ability of nurses and other clinicians to design culturally appropriate, patient-centred psychosocial and supportive care interventions.

A scoping review is the appropriate method because the aim is to map the nature, extent and diversity of the available qualitative evidence and to identify gaps, rather than to answer a narrow effectiveness question. The findings will inform clinical practice, nursing education and future qualitative research, including research in Oman and the wider Gulf region.

METHODS

Strategy of data synthesis Electronic databases: MEDLINE (Ovid), CINAHL Complete (EBSCOhost), PsycINFO (Ovid), Scopus (Elsevier), Web of Science Core Collection (Clarivate) and EMBASE (Ovid). No date restriction was applied, in order to capture all qualitative literature published since BMT/HSCT emerged as a clinical intervention.

Grey literature: Google Scholar; ProQuest Dissertations and Theses Global; and the websites of the European Society for Blood and Marrow Transplantation (EBMT), the Center for International Blood and Marrow Transplant Research (CIBMTR) and the International Society for Cell & Gene Therapy (ISCT).

Supplementary searching: Reference lists of all included studies and of relevant systematic and scoping reviews were hand-searched. Study authors were not contacted for unpublished data.

Search strategy: The strategy combines three concept blocks with the Boolean operator AND; synonyms within each block are combined with OR. Truncation is used to capture word variants, and free-text terms are combined with controlled vocabulary (MeSH, CINAHL Subject Headings and Emtree) where available.

Concept 1 (procedure): bone marrow transplant* OR hematopoietic stem cell transplant* OR haematopoietic stem cell transplant* OR HSCT OR BMT OR "stem cell transplant*" OR allogeneic transplant* OR autologous transplant*

Concept 2 (population): adult* OR patient* OR survivor*

Concept 3 (phenomenon): "lived experience*" OR experience* OR perception* OR qualitative OR phenomenolog* OR "thematic analysis" OR narrative* OR "grounded theory" OR "content analysis"

Subject headings: MeSH: "Bone Marrow Transplantation", "Hematopoietic Stem Cell Transplantation", "Qualitative Research", "Adult". CINAHL: Bone Marrow Transplantation, Hematopoietic Stem Cell Transplantation, Qualitative Studies, Adult Patients.

Search limits: No language limit at the search stage. All records are exported in RIS format to EndNote for automated and manual deduplication before screening.

Synthesis: Data are synthesised narratively, as described in items 13 and 14.

Eligibility criteria Inclusion criteria:

Types of participants: Adults aged 18 years or older at the time of transplantation who have undergone autologous or allogeneic BMT/HSCT for any malignant or non-malignant haematological disorder.

Concept: Studies exploring the lived experiences, perceptions or subjective accounts of transplantation in any one or more physical, psychological, psychosocial, spiritual or existential dimensions, at any phase of the transplantation journey.

Context: Any healthcare setting, country or cultural context.

Types of sources: Studies using qualitative designs (including qualitative description, phenomenology, interpretative phenomenological analysis, grounded theory, content analysis and thematic analysis) or mixed-methods designs with a qualitative component; available in full text as peer-reviewed publications or grey literature reports; published in English.

Exclusion criteria:

1. Purely quantitative designs.
 2. Studies involving only paediatric populations (under 18 years), or donors without reporting recipient data.
 3. Studies reporting only the perspectives of healthcare professionals or caregivers, without patient-specific data.
 4. Abstracts, conference proceedings or editorials without accompanying full-text data.
 5. Studies not available in English.
 6. Review articles, commentaries and theoretical papers lacking primary qualitative data.
- Mixed-population studies are included only where data specific to adult BMT/HSCT patients can be extracted separately.

Source of evidence screening and selection

After deduplication in EndNote, records are imported into Rayyan for title and abstract screening. Two reviewers independently screen all titles and abstracts against the pre-determined eligibility criteria and classify each record as include, exclude or maybe. Records rated include or maybe by either reviewer proceed to full-text review, so that screening is conservative.

Full texts are retrieved and assessed independently by both reviewers, and the reasons for excluding each full-text report are recorded. Disagreements at both the title and abstract stage and the full-text stage are resolved through discussion and consensus meetings. Where

consensus cannot be reached, a third independent reviewer makes the final decision. The selection process is reported using the PRISMA-ScR flow diagram.

Data management Search results are exported in RIS format and managed in EndNote, where duplicates are removed automatically and manually. Screening decisions, reviewer ratings and reasons for exclusion are recorded in Rayyan. Data are charted using a standardised data-charting form developed in line with Arksey and O'Malley (2005), Levac et al. (2010) and JBI guidance (Peters et al., 2020). The form was piloted on three randomly selected included studies and refined for clarity and completeness before full use. Two reviewers independently extract data from all included studies; discrepancies are resolved by discussion, with a third reviewer consulted where needed.

Data charted: author(s), year, country and publication type; study design and methodological approach; healthcare setting and clinical context; participant characteristics (sample size, age range, gender, diagnosis and transplant type); data collection and analysis methods; dimensions of lived experience examined; key findings mapped to each review question; cultural, religious or contextual factors; phase of the transplantation journey; follow-up duration; and limitations reported by the study authors.

Reporting results / Analysis of the evidence

Findings are collated and summarised using a narrative synthesis approach, consistent with Arksey and O'Malley (2005), Levac et al. (2010) and JBI guidance, because the qualitative designs of the included studies are methodologically heterogeneous and unsuitable for statistical pooling. Charted findings are grouped thematically according to the five review questions: physical challenges; psychosocial experiences; coping strategies; perceptions of psychosocial support and information; and spiritual and existential experiences. Descriptive summaries highlight patterns, similarities and differences across studies, with attention to cultural context, region, methodological approach, malignant versus non-malignant indication, transplant type and phase of the transplantation journey. Evidence gaps are identified from this mapping.

Methodological quality is described using the Mixed Methods Appraisal Tool (MMAT), version 2018: the five qualitative criteria are applied to qualitative studies and the five mixed-methods criteria to mixed-methods studies. Consistent with scoping review methodology, appraisal results are

reported descriptively and are not used to exclude, score or weight studies.

Presentation of the results Results will be reported according to the PRISMA-ScR checklist (Tricco et al., 2018) in tabular, diagrammatic and narrative formats:

1. A PRISMA-ScR flow diagram showing the number of records identified, deduplicated, screened, assessed in full text and included, with reasons for full-text exclusion.
2. A table of study characteristics: author and year, country, design, sample size, population or diagnosis, and transplant type.
3. A table of MMAT appraisal results for each included study.
4. A table summarising each study's findings on lived experience and its reported limitations.
5. A narrative synthesis organised by experiential domain, linked to the five review questions, with illustrative comparisons across cultural and healthcare contexts.
6. A summary of the distribution of evidence by country and region, by malignant versus non-malignant indication, and by phase of the transplantation trajectory (pre-transplant, acute and survivorship), followed by a table of evidence gaps and implications for practice and research.

Language restriction No language limits at the search stage; only studies available in English are included at full-text screening and data extraction.

Country(ies) involved Oman.

Other relevant information This protocol is registered retrospectively. The literature searches, screening, data extraction, methodological quality appraisal using the Mixed Methods Appraisal Tool (MMAT) and synthesis were completed before registration; the review is completed but not yet published. Database searches, screening and data extraction were conducted between July 2026 and September 2026. The review was not registered prospectively because it was conducted as part of a postgraduate nursing programme, and the need for registration was identified during manuscript preparation. No changes were made to the eligibility criteria or methods after the findings were known. The review follows the Arksey and O'Malley (2005) framework, as refined by Levac et al. (2010) and the Joanna Briggs Institute (JBI), and is reported according to the PRISMA-ScR guidelines.

Keywords Bone marrow transplantation; haematopoietic stem cell transplantation; lived

experience; qualitative research; scoping review; psychosocial support; spirituality; Middle East.

Dissemination plans The completed review will be submitted to a peer-reviewed international journal in nursing, haematology or oncology, and the INPLASY record will be updated with the publication details. The findings will also be presented at national and international nursing and haematology conferences, and shared with BMT/ HSCT clinical teams, nurse educators and postgraduate nursing programmes in Oman to inform culturally congruent, patient-centred care and future qualitative research in the region.

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