

## CONTINUING EDUCATION

# Quantitative Measurement of Quality of Life in Adult Patients Undergoing Bone Marrow Transplant or Peripheral Blood Stem Cell Transplant: A Decade in Review

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**Purpose/Objectives:** To critically evaluate a decade of quantitative quality-of-life (QOL) measurement in adult patients undergoing bone marrow transplant (BMT) or peripheral blood stem cell transplant (PBSCT).

**Data Sources:** Quantitative research articles published between January 1990 and January 2000 in the nursing and medical literature.

**Data Synthesis:** QOL measures reported in BMT and PBSCT literature support the multidimensional nature of the construct. The majority of studies used a single instrument to assess QOL. Variations in measurement included use of a single versus multiple instruments to assess QOL, theoretical underpinnings of instruments, and output (overall score, domain scores) provided by the instruments.

**Conclusions:** A study's purpose, conceptual approach, patient burden, and resources available to the researcher should guide decisions regarding QOL instrumentation. No gold standard exists for assessing QOL in research or clinical practice.

**Implications for Nursing:** Nurses can select from a variety of tools to measure QOL in the BMT and PBSCT patient populations. Clinicians must consider the clinical meaningfulness of changes in QOL before implementing changes in their practice.

### Key Points . . .

- ▶ Quality-of-life (QOL) data, in addition to disease-free intervals and survival statistics, provide clinicians and patients undergoing bone marrow transplant (BMT) or peripheral blood stem cell transplant (PBSCT) with information to guide their treatment decisions.
- ▶ QOL measurements in the BMT and PBSCT literature support the multidimensional nature of the construct with items related to the physical, psychological, and social domains most often included in QOL instruments.
- ▶ No gold standard exists for measuring QOL in research or practice.
- ▶ Researchers and clinicians must consider a number of factors, including study purpose, conceptual approach, expected patient burden, and available resources, prior to selecting a QOL instrument for use in research and practice.

### Goal for CE Enrollees:

To enhance nurses' knowledge regarding quality-of-life (QOL) measurements in adults undergoing bone marrow transplant (BMT) or peripheral blood stem cell transplant (PBSCT).

### Objectives for CE Enrollees:

- On completion of this CE, the participant will be able to
1. Discuss a decade of quantitative QOL measurements in adult patients undergoing BMT or PBSCT.
  2. Describe the variations in the types of instruments available to measure QOL.
  3. Discuss the nursing implications of understanding the clinical meaningfulness of changes in QOL.

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Cancer and the treatment of cancer affect all aspects of patients' lives. Therefore, assessing patients' quality of life (QOL) throughout the cancer experience has become very meaningful. In addition to disease-free intervals and survival statistics, QOL data provide clinicians and patients with cancer with supplementary information to guide their treatment decisions. Cancer clinical trials increasingly contain a QOL component to delineate the length as well as the quality of survival. In fact, the Cancer Therapy Evaluation Program of the National Cancer Institute (NCI) (1988) has given research aimed at improving survival and QOL the highest priority.

How to best evaluate QOL remains a controversial topic among QOL researchers. One reason for this is the lack of agreement regarding the conceptual definition of QOL and the subsequent operational definition (Ferrans, 2000). Researchers may choose from a variety of instruments that reflect a variety of QOL conceptualizations. Differences in conceptualizing QOL, however, may lead to conflicting QOL outcomes. Furthermore, this lack of a gold standard for measuring QOL frequently translates into difficulty interpreting and synthesizing research findings within a particular field of interest.