

# Signs, Symptoms, and Characteristics Associated With End of Life in People With a Hematologic Malignancy: A Review of the Literature

Elise Button, RN, MAdPrac (Hons), BN, GCertPC, Raymond Chan, RN, PhD, MAppSc, BN, FACN, Shirley Chambers, PhD, BHlthSc (Hons), Jason Butler, MBBS (Qld), MMedSc (ClinEpid), FRACP, FRCPA, and Patsy Yates, RN, PhD, MSocSc, DipAppSc, BA

Button is an acting nurse researcher in Cancer Care Services at Royal Brisbane and Women's Hospital and a doctoral candidate in the School of Nursing at the Queensland University of Technology; Chan is an associate professor in the Cancer Nursing Professorial Precinct at Royal Brisbane and Women's Hospital and the Queensland University of Technology; Chambers is a research fellow in the Institute of Health and Biomedical Innovation at the Queensland University of Technology; Butler is a senior staff specialist in the Haematology and Bone Marrow Transplant Unit at Royal Brisbane and Women's Hospital; and Yates is head of the School of Nursing at the Queensland University of Technology, all in Brisbane, Australia.

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Button, Chan, Chambers, and Yates contributed to the conceptualization and design and provided the analysis. Button completed the data collection. All authors contributed to the manuscript preparation.

Button can be reached at [elise.button@student.qut.edu.au](mailto:elise.button@student.qut.edu.au), with copy to editor at [ONFEditor@ons.org](mailto:ONFEditor@ons.org).

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**Problem Identification:** Identifying people with hematologic cancer who are at risk of deteriorating and dying is essential to enable open, honest discussions, leading to appropriate decision making and effective end-of-life care.

**Literature Search:** PubMed, CINAHL®, PsycINFO, and the Cochrane Central Register of Controlled Trials were searched from January 2005 to December 2015 for descriptive observational studies.

**Data Evaluation:** Critique of the studies was guided by the Critical Appraisal Skills Programme Cohort Study Checklist.

**Synthesis:** Twelve studies were included. The majority of studies ( $n = 8$ ) sampled patients from palliative populations, and most were retrospective ( $n = 11$ ). A number of signs, symptoms, and characteristics associated with end of life in people with a hematologic malignancy were identified, including pain, hematopoietic dysfunction, dyspnea, and reduced oral intake.

**Conclusions:** The studies described a clinical scenario of deterioration, largely in a palliative population. Findings indicate that people with a hematologic malignancy share certain clinical signs of deterioration with other populations and receive a high level of medical interventions at the end of life.

**Implications for Practice:** Nurses are well positioned to identify many of the signs, symptoms, and characteristics found in this review and can play a key role in identifying when a person is nearing the end of life.

**H**ematologic malignancies include leukemia, lymphoma, multiple myeloma, myeloproliferative neoplasms, and myelodysplastic syndromes (Swerdlow et al., 2008). These malignancies differ from solid tumors, most notably in the involvement of the bone marrow, leading to issues such as bleeding, infection, and anemia (Pallister & Watson, 2011). The clinical course and prognosis for people with a hematologic malignancy vary significantly depending on many factors, including the type and specific subtype of the disease, response to treatment, and personal characteristics of the patient (Hung et al., 2013; Pallister & Watson, 2011). Certain diseases, such as acute leukemia, advance rapidly and are imminently fatal (Pallister & Watson, 2011), whereas other malignancies, such as low-grade lymphoma, often follow an indolent illness trajectory (Matasar & Zelenetz, 2008). Aggressive treatment often holds dual potential for cure and mortality (Ezzone & Schmit-Pokorny, 2007).

The illness trajectory of a person with a hematologic malignancy differs from that of a person with solid tumors (Auret, Bulsara, & Joske, 2003; Maddocks, Bentley, & Sheedy, 1994) and shares more similarities with the illness trajectory of a person with organ failure (i.e., heart and lung failure) in the context of