Hematology and Depression Levels
Examining correlated factors among hospitalized patients

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**BACKGROUND:** Depression in patients with cancer negatively influences physical symptoms, treatment success, coping, and quality of life (QOL), and is associated with increased mortality.

**OBJECTIVES:** This study investigated the prevalence of depression and explored fatigue, QOL, and pain that is associated with depression in patients on first admission to a hematologic oncology unit.

**METHODS:** This descriptive study measured depression, QOL, and fatigue with the Patient Health Questionnaire–9, the Functional Assessment of Cancer Therapy (FACT)–General, and the FACT–Anemia scale, respectively. Pain levels were examined with a numeric rating scale.

**FINDINGS:** 58 patients participated; 17 reported moderate to severe depression, which highly correlated with fatigue, QOL, and pain. Among all factors, multivariate analysis showed that fatigue, particularly the physical domain of fatigue, has the strongest reverse correlation with depression.

**DEPRESSION IS COMMON AMONG PATIENTS WITH CANCER.** Although the feeling of depression is to be expected in patients with a cancer diagnosis, unresolved depression negatively affects physical symptoms, interferes with treatment, hampers effective coping, and decreases quality of life (QOL) (Brunault et al., 2016; Drabe et al., 2015; Stagl et al., 2015). Researchers focusing on patients with cancer suggest a close association between depression and increased mortality (Chan, Wan Ahmad, Yusof, Ho, & Krupat, 2015). Among all patients with cancer, those with hematologic malignancies require special attention because they can be prescribed aggressive, multicycle chemotherapy and immunotherapy for optimal treatment efficacy. They may suffer from severe complications, leading to extended or multiple hospitalizations. Compared to patients with solid tumors, patients with hematologic malignancies may experience a heavier physical and psychological symptom burden (LeBlanc & El-Jawhari, 2015), specifically when they are hospitalized and receiving treatment (Lester, Stout, Crosthwaite, & Andersen, 2017).

Studies have evaluated the prevalence of depression in patients with cancer, with reported rates ranging from 8% to 24% (Krebber et al., 2014). The prevalence of depression can differ based on the type of cancer and treatment phase (Krebber et al., 2014). Although investigations of depression have been conducted more often in patients with solid tumors, limited studies are available concerning patients with hematologic malignancies. Clinton-McHarg et al. (2014) conducted a cross-sectional outpatient study at three hematology clinics in Australia and reported that about 20% of outpatients receiving care for hematologic cancer experience clinically significant levels of anxiety and/or depression.

Pain, fatigue, insomnia, and mood disturbances are common and frequently co-occur in patients with cancer (Doong et al., 2015). Those symptoms may occur in a cluster and negatively influence patients’ daily functioning and QOL (Van Lancker, Beeckman, Verhaeghe, Van Den Noortgate, & Van Hecke, 2016). In 2015, The American College of Surgeons’ Commission on Cancer issued a statement requiring cancer centers in the United States to screen patients for psychosocial distress (Zebrack et al., 2015). Although many studies have been published that report on routine assessment for depression in hospitalized patients, the literature is limited regarding hospitalized patients with hematologic malignancies. Depression has been correlated with an increased

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hematologic oncology; hospitalization; depression; fatigue; physical well-being

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