An Integrative Review of Sex Differences in Quality of Life and Symptoms Among Survivors of Hematologic Malignancies

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OBJECTIVES: To conduct an integrative review of studies to identify disparities in quality of life (QOL), symptoms, and symptom burden between men and women diagnosed with hematologic malignancies.

SAMPLE & SETTING: 11 studies comprising 13,546 participants aged 18 years or older were included in the analysis. Studies were original peer-reviewed research published in English between January 2005 and December 2020.

METHODS & VARIABLES: A literature search was performed using keywords associated with health-related QOL, hematologic malignancy, and sex/gender differences. PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) guidelines were followed to identify relevant studies. Data were extracted for sex differences in QOL, symptoms, and symptom burden. All studies were appraised for quality and level of evidence.

RESULTS: Women have worse physical health and function, more pain, and higher symptom burden compared with men.

IMPLICATIONS FOR NURSING: Healthcare providers need to understand the impact of sex-based differences on QOL, symptoms, and symptom burden to provide optimal, personalized care.

KEYWORDS quality of life; health-related quality of life; gender; cancer; hematologic malignancy

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An estimated 1.96 million Americans will be newly diagnosed with cancer in 2023 (Siegel et al., 2023). According to the American Cancer Society, 184,720 individuals in the United States will be diagnosed with hematologic malignancies such as leukemia, lymphoma, or myeloma in 2023 (Siegel et al., 2023). A cancer diagnosis is frequently associated with multiple symptoms that vary depending on cancer type and stage of disease. In addition, radiation therapy, chemotherapy, and surgery trigger an array of side effects that may affect the quality of life (QOL) of patients with cancer. There are sex-based differences in the bioavailability, enzyme expression, and chemical mechanisms of drug therapy for oncologic diseases (Schmetzer & Flörcken, 2012). Several studies in hematology-oncology report varying differences in side effects and survival rates between sexes, validating the need for a better understanding of how QOL differs between men and women diagnosed with hematologic malignancies (Klimm et al., 2005; Molica, 2006; Pfreundschuh et al., 2014).

In a large study of 10,700 symptom assessments focused on performance status trajectories and symptom scores in patients with cancer during the final six months of life, four symptoms (drowsiness, tiredness, well-being, and lack of appetite) were reported as moderate to severe (Seow et al., 2011). Fifty percent of the participants in this study were female. Researchers used multivariate analysis to assess the likelihood that participants would report a moderate to severe symptom score. Female participants were significantly more likely to report moderate to severe symptoms of nausea, anxiety, drowsiness, poor well-being, lack of appetite, and tiredness (Seow et al., 2011). This study established the importance of and need for additional research to increase the understanding of sex-based disparities in QOL, symptoms,