## Prevalence, Duration, Severity, and Distress of Chemotherapy-Related Gastrointestinal Symptoms in Patients With a Hematologic Malignancy

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Purpose/Objectives: To describe prevalence, duration, severity, and distress of chemotherapyrelated gastrointestinal (GI) symptoms, and evaluate inclusion of clinically relevant GI symptom items on cancer symptom questionnaires.

Design: Longitudinal descriptive design.

Setting: Inpatient and outpatient hematology settings.

Sample: 105 adults with a hematologic malignancy receiving their third or subsequent cycle of chemotherapy.

Methods: Participants completed weekly assessments of 19 GI symptoms during a three-week period of chemotherapy. Descriptive statistics were calculated to summarize GI symptom prevalence, duration, severity, and distress ratings at each week. Findings were compared to item content of 12 cancer multisymptom questionnaires identified in the literature.

Main Research Variables: GI symptom prevalence, duration, severity, and distress.

Findings: Participants reported an average of three to five GI symptoms at each time point that were typically experienced as mild to moderate in duration, severity, and distress. Only 3 of 11 clinically relevant GI symptoms were included on more than half of the cancer symptom questionnaires.

**Conclusions:** Patients receiving chemotherapy experience a moderate GI symptom burden across a wide range of potential GI symptoms.

Implications for Nursing: Future research should include measures of clinically relevant GI symptoms that may be emerging with new cancer therapies and toxicity prevention protocols.

hemotherapy is associated with side effects of varying prevalence, duration, severity, and distress, many of which are gastrointestinal (GI) symptoms. Evidence has shown that chemotherapy directly affects GI cell replacement within a few hours after administration (Mitchell, 2006). Perhaps the most well-known and well-studied GI symptoms in patients with cancer are nausea and vomiting. In the past five years, about 10,000 articles have been published concerning chemotherapy-related nausea and/or vomiting. However, chemotherapy is known to cause as many as 19 GI symptoms, including anticipatory nausea, anticipatory vomiting, dysphagia, eructation, xerostomia, oral mucositis, dysgeusia, anorexia, retching, nausea, vomiting, pyrosis, early satiety, bloating, diarrhea, constipation, rectal itching, rectal burning, and flatulence (Cherwin, 2012).

Patients with a hematologic malignancy are at particular risk for GI symptoms because of the high doses of chemotherapy needed to produce an effect on cancer cells in the blood, lymphatic tissue, and bone marrow (Camp-Sorrell, 2010). Few studies of chemotherapy-related symptoms focus exclusively on