

# Common and Co-Occurring Symptoms Experienced by Patients With Gastric Cancer

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**PROBLEM IDENTIFICATION:** Patients with gastric cancer experience multiple disease- and treatment-related symptoms. The purpose of this review was to describe the common and co-occurring symptoms experienced by patients with gastric cancer.

**LITERATURE SEARCH:** Search terms, such as *gastric cancer*, *symptoms*, and *experience*, were used to search PubMed®, CINAHL®, and PsycINFO® for empirical papers published from January 1990 to July 2019.

**DATA EVALUATION:** The search yielded 1,259 articles; 25 studies (21 observational and 4 interventional) were included in this review. Each study was systematically evaluated.

**SYNTHESIS:** The most common symptoms were categorized into physical and affective/cognitive domains. Three to 17 (median = 7) symptoms occurred concurrently. The severity of most symptoms was reported as mild to moderate. However, patients experienced varying levels of symptom severity following treatment trajectories. Older age, female gender, advanced cancer stage, low socioeconomic status, and total gastrectomy were associated with a greater number and severity of symptoms.

**IMPLICATIONS FOR PRACTICE:** Future research of symptom clusters may clarify the phenotypes and relationship between multiple co-occurring symptoms in patients with gastric cancer to develop targeted interventions that support symptom self-management for this population.

**KEYWORDS** gastric cancer; symptom; symptom experience; integrative review

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**G**astric (stomach) cancer was the fifth most frequently diagnosed cancer and the third leading cause of cancer deaths worldwide, with an estimated 1 million new cases and 783,000 deaths in 2018 (Bray et al., 2018). In the United States, an estimated 97,915 people were living with gastric cancer in 2015, with more than 26,240 estimated new cases and 10,800 estimated deaths in 2018 (Siegel et al., 2018). Patients diagnosed with gastric cancer have low five-year survival rates (10%–50%) because of advanced staging of disease at the time of diagnosis and the lack of effective treatments (Axon, 2006; Karimi et al., 2014; Venerito et al., 2018). People with gastric cancer experience multiple synergistic disease- and treatment-related symptoms. Investigators found that, on average, 10–15 of these symptoms occurred concurrently and included abdominal pain, weight loss, nausea, vomiting, dysphagia, dyspepsia, fatigue, and depression (Kim et al., 2016; Lee et al., 2016; Rausei et al., 2013). The undertreated symptoms can negatively influence patients' health outcomes, such as functional performance, psychological status, quality of life, and survival rate (Kim et al., 2017; Konishi et al., 2016; Maconi et al., 2003; Rausei et al., 2013).

Symptom science is one of the four identified themes in the National Institute of Nursing Research (NINR, 2016) Strategic Plan, and it is an essential component of the research programs that are supported by NINR and the National Cancer Institute. Scientists and clinicians emphasized the importance of symptom management in cancer survivorship as a future cancer research priority in the United States (Jaffee et al., 2017). In addition, a new *Symptom Science Center: A Resource for Precision Health* was established by NINR (2019) in June; it emphasized the underlying mechanisms of multiple symptoms and developed personalized approaches for symptom management.