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Symptom Clusters in Patients With Gastric Cancer: A Qualitative Study

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Background: Gastric cancer was the fifth frequently diagnosed and the third leading cause of cancer deaths worldwide in 2018 (Bray et al., 2018). In the United States, there were an estimated 97,915 people living with gastric cancer in 2015, with more than 26,240 estimated new cases and 10,800 estimated deaths in 2018 (Siegel, Miller, & Jemal, 2018). Patients with gastric cancer experience multiple concurrent disease- and treatment-related symptoms (Venerito et al., 2018; Yu et al., 2016). When symptoms remain unrecognized or undertreated, they can negatively impact patient-reported outcomes including functional performance, emotional status, and quality of life, and increase the cost of treatment (Rausei et al., 2013; Tey et al., 2014; Hess et al., 2016). A symptom cluster is defined as two or more concurrent symptoms related to each other, and it plays a crucial role in determining how symptoms are related and how they influence patients' outcomes (Barsevick, 2007; Miaskowski, 2006, 2016). In a symposium hosted by the National Institute of Nursing Research, *Advancing Symptom Science through Symptom Cluster Research*, researchers highlighted the importance of defining the characteristics of symptom clusters and developing targeted interventions for patients to advance symptom science research (Miaskowski et al., 2017). However, little is known about the experience of symptom clusters among gastric cancer survivors.

Purpose: The purposes of this study were to explore the experience of multiple concurrent symptoms, and to describe the symptom clusters in patients with gastric cancer.

Method: A qualitative descriptive approach was used for this study (Sandelowski, 1995, 2000, 2010). In-depth interviews were conducted with ten gastric cancer survivors to explore their symptom related experiences. Content analysis was used to analyze the data (Vaismoradi, Turunen, & Bondas, 2013; Hsieh, & Shannon, 2005).

Results: Participants were five males and five females with an average age of 55 years old. Three participants were Non-Hispanic White, seven were Black. They experienced 5 to 12 concurrent symptoms. Gastrointestinal symptoms, fatigue, and depression were reported by all participants. Symptom clusters were categorized as follows: 1) gastrointestinal pain, dysphagia, vomiting; 2) bodily pain, constipation, diarrhea; 3) stomach discomfort, sleep disturbance, fatigue, depression/anxiety; 4) nausea/vomiting, constipation/diarrhea, lack of appetite, weight loss. Despite experiencing several concurrent symptoms related to living with symptom clusters, the participants often focused on two or three symptoms that were of particular significance to them and lacked awareness of symptoms clusters.

Conclusions: Participants with gastric cancer experienced multiple concurrent symptoms yet had limited awareness of symptom clusters. Their focus on individual

symptoms within the experience of multiple symptoms appeared to be due to the meanings that individuals associated with these symptoms. Additional research into symptom clusters might clarify the characteristics and relationship of multiple symptoms in gastric cancer survivors and could be used for the future targeted interventions to self-manage co-occurring symptoms for these survivors.

Title:

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Gastric Cancer, Qualitative and Symptom Cluster

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Abstract Summary:

Gastric cancer was the fifth frequently diagnosed and the third leading cause of cancer deaths worldwide in 2018. Gastric cancer survivors experience multiple disease- and treatment-related symptoms. We conducted a qualitative study to explore the symptom clusters among patients and to inform future self-management research targeted on the symptom clusters.

Content Outline:

I. Introduction

A. Gastric cancer patients experience multiple disease- and treatment-related symptoms.

B. When symptoms remain undertreated, they can have a detrimental impact on functional performance, emotional status, and quality of life, and increase the cost of treatment.

II. Methods

A. Design: Qualitative descriptive study

B. Participants and Setting

1. Inclusion and exclusion criteria

2. Setting

3. Sampling

C. Procedure

1. Recruitment

2. Retention

3. Data collection

D. Data analysis

III. Results

A. Demographic and clinical and characteristics

B. The complex and dynamic nature of symptom experience among patients

1. The severity and frequency of symptoms varied markedly following treatment

2. Most prevalent symptoms: gastrointestinal symptoms, fatigue, depression/anxiety

3. Complex symptom experience
- C. The typologies and interrelationships in symptom clusters
 1. Gastrointestinal pain – dysphagia – vomiting
 2. Bodily pain – constipation – diarrhea
 3. Stomach discomfort – sleep disturbance – fatigue – depression/anxiety
 4. Nausea/vomiting – constipation/diarrhea – lack of appetite – weight loss
- D. Living with symptom clusters
 1. Feeling “sick in the stomach”
 2. Focusing on two or three symptoms that were of particular significance
 3. Lacking awareness of symptoms clusters

IV. Conclusions

- A. Gastric cancer patients experience multiple concurrent symptoms yet have a limited awareness of symptom clusters.
- B. Patients focus on the meanings associated with individual symptoms.
- C. Future research on interventions should target symptom clusters to self-manage multiple symptoms.

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