

Associations Between Social Determinants of Health and Psychoneurologic Symptom Clusters in Women With Gynecologic Cancers: A Longitudinal Study

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OBJECTIVES: To evaluate the associations between social determinants of health (SDOH) and psychoneurologic symptom (PNS) clusters in women with gynecologic cancers during cancer treatment.

SAMPLE & SETTING: 67 women with gynecologic cancers who received radiation therapy were assessed at baseline, six to eight weeks after treatment, and six months after treatment at oncology clinics in Georgia.

METHODS & VARIABLES: Fatigue, pain, sleep disturbances, cognitive impairment, and depressive symptoms were measured to determine a PNS cluster score. Associations between SDOH and PNS cluster scores were assessed using mixed-effect models.

RESULTS: Larger mean PNS cluster scores were reported in individuals with less education, lower income, and unemployment, as well as in those living in more disadvantaged neighborhoods.

IMPLICATIONS FOR NURSING: Individual- and community-level SDOH and their interactions were associated with more PNS clusters. Studying SDOH at multiple levels depicts how various social disadvantages can exacerbate poor health outcomes.

KEYWORDS social determinants of health; psychoneurologic symptoms; gynecologic cancers
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Advancements in early cancer diagnosis and treatment have dramatically increased the survival rate among patients with cervical and endometrial cancers over the past 20 years in the United States (Ledford & Lockwood, 2019; Sekse et al., 2015). Five-year survival rates have climbed to 81% for patients with endometrial cancer and 66% for patients with cervical cancer, resulting in an estimated one million survivors of gynecologic cancer in the United States (Cancer .net, n.d.; Schlumbrecht et al., 2018). The growing number of survivors of gynecologic cancer experience side effects of treatment and an array of multiple co-occurring symptoms known as psychoneurologic symptom (PNS) clusters (Bai et al., 2020; Deshields et al., 2014; Pozzar et al., 2022). PNS clusters include fatigue, depressive symptoms, pain, sleep disturbance, and cognitive impairment, which can profoundly affect the quality of life, treatment adherence, and functional status of individuals with and survivors of gynecologic cancer (Bai et al., 2020; Chan et al., 2001; Joly et al., 2019; Karawekpanyawong et al., 2021; Poort et al., 2020; Prue et al., 2010; Sekse et al., 2015; Starkweather et al., 2013). Findings from a critical review by Klügel et al. (2017) indicate that women with gynecologic cancers experience a high rate of depressive symptoms. Among individuals with cancer, women with gynecologic cancers report higher levels of sleep disturbance, anxiety, and depressive symptoms after diagnosis (Linden et al., 2012; Palesh et al., 2010). Identifying factors that influence PNS clusters