

# Symptom Distress and Quality of Life in Women With Newly Diagnosed Ovarian Cancer Undergoing Chemotherapy: A Longitudinal Approach

Jia-Jing Lee, MSN, RN, Li-Ting H. Longcoy, PhD, DrPH, RN, and Chun-Yi Tai, PhD, RN



**BACKGROUND:** Women with newly diagnosed ovarian cancer who receive chemotherapy experience distressing symptoms and reduced quality of life (QOL). Previous study results identifying changes in symptom distress and QOL over time are limited.

**OBJECTIVES:** This study examined the trajectory of symptom distress and QOL among women with newly diagnosed ovarian cancer from before their first chemotherapy appointment to two weeks after completing six cycles of chemotherapy.

**METHODS:** A longitudinal design was used to examine symptom distress and QOL in 36 participants across eight time points. Generalized estimating equation analyses identified how participants' symptom distress and QOL changed over time.

**FINDINGS:** Psychological symptom distress was highest at baseline and then decreased. Physical symptom distress increased at the second chemotherapy cycle. Similar results were found for QOL, with the lowest QOL reported after the fifth cycle.

## KEYWORDS

ovarian cancer; symptom distress; quality of life; longitudinal study; chemotherapy

## DIGITAL OBJECT IDENTIFIER

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**WOMEN WITH OVARIAN CANCER GENERALLY HAVE** a poor prognosis. No effective screening test is currently available to detect ovarian cancer at an early stage (American Cancer Society [ACS], 2020). Early-stage ovarian cancer is either asymptomatic or manifests with nonspecific symptoms, which increases the difficulty of earlier detection. As a result, about 20% of cases of ovarian cancer are diagnosed at an early stage (ACS, 2020). About 54.3% of women with ovarian cancer are diagnosed at late stages, and their five-year relative survival rate is about 30.8% (National Cancer Institute, n.d.-a, n.d.-b). First-line treatment, such as cytoreductive surgery and chemotherapy, may increase the overall survival rate to 39.7%; however, recurrence is extremely common (Fagotti et al., 2020; Kuroki & Guntupalli, 2020). Because of this poor prognosis, women's physical and psychological well-being are significantly affected by ovarian cancer and its treatment (Mamguem Kamga et al., 2021).

Women with ovarian cancer often experience significant physical symptoms, particularly during chemotherapy. Newly diagnosed women with ovarian cancer usually receive three to six cycles of paclitaxel and a platinum compound, such as carboplatin, as their first chemotherapy treatment (ACS, 2018). However, the side effects from chemotherapy can result in distressing physical symptoms. Common physical symptoms are fatigue, sleep disturbance, pain, nausea, vomiting, and lack of appetite (Beesley et al., 2020; Chou & Lu, 2019; Kwekkeboom et al., 2018). Other symptoms, such as neuropathy, cognitive dysfunction, and cytopenia, may gradually emerge (Gockley & Wright, 2018). Women with ovarian cancer may report considerable distress and reduced quality of life (QOL) as soon as treatment starts and throughout multiple cycles of chemotherapy (Bonhof et al., 2018; Keim-Malpass et al., 2017).

In addition to physical symptoms, women with ovarian cancer may experience psychological distress. Prior to receiving chemotherapy, women with newly diagnosed ovarian cancer may feel anxious and uncertain about what to expect (Chou & Lu, 2019; Hill & Hamm, 2019). Side effects of chemotherapy, such as changes in physical appearance and hair loss, may lead them