

# Worse Psychological Profiles Are Associated With Higher Levels of Stress and Symptom Burden in Patients With Cancer During the COVID-19 Pandemic

Sara Colomer-Lahiguera, PhD, RN, Rachel A. Pozzar, PhD, RN, FNP-BC, Bruce A. Cooper, PhD, Steven M. Paul, PhD, Karin Snowberg, MA, Stacey A. Kenfield, ScD, Susan M. Chang, MD, Maura Abbott, PhD, AOCNP®, CPNP-PC®, CPNP-AC®, Erin L. Van Blarigan, ScD, Jon D. Levine, MD, PhD, Manuela Eicher, PhD, RN, Marilyn J. Hammer, PhD, DC, RN, FAAN, and Christine Miaskowski, RN, PhD, FAAN

**OBJECTIVES:** To identify subgroups of patients with distinct psychological profiles at the beginning of the COVID-19 pandemic and evaluate for differences.

**SAMPLE & SETTING:** Online survey of patients with cancer during the COVID-19 pandemic.

**METHODS & VARIABLES:** Patients completed measures of demographic and clinical characteristics, as well as cancer- and COVID-19-related stress, global stress, social isolation, loneliness, financial toxicity, and common symptoms. Latent profile analysis was used to identify distinct psychological profiles.

**RESULTS:** Among 1,145 patients, three subgroups were identified (i.e., no anxiety or depression and normative level of resilience; high depression, high anxiety, and low resilience; and very high depression, very high anxiety, and very low resilience). Patients with the two worst psychological profiles were younger, more likely to be female, more recently diagnosed with cancer, and more likely to have breast cancer.

**IMPLICATIONS FOR NURSING:** Findings may assist clinicians to identify patients at increased risk for significant psychological morbidity and provide more timely, targeted, and cost-effective interventions.

**KEYWORDS** anxiety; cancer; COVID-19; depression; loneliness; resilience; stress

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A large amount of interindividual variability exists in patients' experiences with depression and anxiety across the trajectory of cancer care (Linden et al., 2012; Niedzwiedz et al., 2019). Prior to the COVID-19 pandemic, prevalence rates for depression and anxiety ranged from 4% (Walker et al., 2013) to 49% (Krebber et al., 2014), and 6% (Watts et al., 2014) to 27% (Watts et al., 2015), respectively. In addition, about 12.4% of patients with cancer reported the co-occurrence of anxiety and depression (Brintzenhofe-Szoc et al., 2009). Of note, during the COVID-19 pandemic, prevalence rates for depression and anxiety markedly increased in patients with cancer, from 23.4% (Wang et al., 2020) to 74.5% (Chen et al., 2020) for depression and from 17.7% (Wang et al., 2020) to 88.6% (Frey et al., 2020) for anxiety. However, no studies evaluated for interindividual differences in the co-occurrence of both symptoms in patients with cancer during the COVID-19 pandemic.

Resilience is the process and outcome of successful adaptation to adversity (Eicher et al., 2015; Zautra et al., 2010). In most studies of patients with cancer, higher levels of depression and anxiety were associated with lower levels of resilience (Min et al., 2013; Schumacher et al., 2014; Tamura et al., 2021). Resilience levels of patients with cancer were relatively high during the COVID-19 pandemic (Dieperink et al., 2021; Drury et al., 2021; Festerling et al., 2023; Fortune et al., 2023; Jacobson et al., 2022; Javellana et al., 2022; Khiyali et al., 2023; Koral & Cirak, 2021; Mihic-Gongora et al., 2022; Mirošević et al., 2022; Velasco-Durantez et al., 2022). However, in three