

# Telenursing Interventions for Patients With Cancer Receiving Chemotherapy: A Scoping Review

Aurora De Leo, MSN, RN, Gloria Liquori, MSN, RN, Sara Dionisi, PhD, RN, Fabrizio Petrone, MSN, RN, Alessandro Spano, MSN, RN, Nicolò Panattoni, MSN, RN, Noemi Giannetta, PhD, RN, Marco Di Muzio, PhD, RN, and Emanuele Di Simone, PhD, RN

**PROBLEM IDENTIFICATION:** To provide an overview of telenursing interventions, primary outcomes, and tools used in patients with cancer receiving chemotherapy, a scoping review was conducted.

**LITERATURE SEARCH:** PubMed®, Embase®, and CINAHL® databases were searched using the following keywords: *telenursing*, *adverse event*, and *drug therapy*.

**DATA EVALUATION:** From the screening process, 11 studies were identified.

**SYNTHESIS:** In patients with cancer receiving chemotherapy, telenursing interventions were mainly used to monitor symptoms, particularly fatigue, anxiety, and depression. The interventions used included outcome-specific, nonspecific, and validated tools, or tools developed from reporting systems for adverse events.

**IMPLICATIONS FOR RESEARCH:** Large-scale, well-conducted randomized controlled trials, systematic reviews, and meta-analyses are needed to test the results of this scoping review.

**KEYWORDS** telenursing; chemotherapy; adverse events; oncology nursing; cancer

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The care pathway of patients with cancer involves a strong integration among healthcare organizations, healthcare professionals, patients, family members, and caregivers (World Health Organization, n.d.). Improvements in cancer-related treatment have led to an increase in cancer survivors and a consequent increase in the needs of patients with cancer. Patients receiving chemotherapy or oral cancer treatments frequently experience side effects or symptoms as a result of the disease or its treatment (Chae et al., 2022; Zerillo et al., 2018). Using oral chemotherapies poses numerous challenges in patients with cancer, including toxicity management and therapeutic adherence. However, these symptoms are often underestimated and underreported in health records by clinicians (Carrasco & Symes, 2018).

In nursing care, telenursing—a branch of eHealth—is the application of electronic technology to health (Scantlebury et al., 2017). Telenursing can improve data transmission and patients' relationship with the care team, as well as increase access to and the quality of care (Barbosa et al., 2016). Patient-reported outcomes have been used to improve symptom monitoring, therapeutic adherence, and patients' quality of life (QOL), and to decrease costs related to health care (Howell et al., 2017; Strasser et al., 2016). Patient-reported outcomes can include treatments and cancer-related symptoms (Kerrigan et al., 2020), and they allow for closer symptom monitoring. For example, the use of patient-reported outcomes can help to avoid conducting a retrospective summary with the care team (Baldwin et al., 2017). In addition, the use of digital tools to collect patient-reported outcomes for symptom monitoring positively affects data transmission, patient self-efficacy, and timeliness of