A Nursing Intervention for Reducing Symptom Burden During Chemotherapy

Annemarie Coolbrandt, RN, PhD, Hans Wildiers, MD, PhD, Annouschka Laenen, PhD, Bert Aertgeerts, MD, PhD, Bernadette Dierckx de Casterlé, RN, PhD, Theo van Achterberg, RN, PhD, and Koen Milisen, RN, PhD

OBJECTIVES: To evaluate the efficacy of an individually tailored nursing intervention for reducing chemotherapy-related symptom distress in adult patients with cancer.

SAMPLE & SETTING: A control group (n = 71) received usual care and an intervention group (n = 72) received usual care and the CHEMO-SUPPORT intervention, all at the University Hospitals of Leuven in Belgium.

METHODS & VARIABLES: The intervention effect was evaluated by measuring the difference in outcomes between the two groups. The primary outcome, overall symptom distress, and other symptom-related outcomes were self-reported at the start of treatment (baseline) and at 3, 6, and 12 weeks.

RESULTS: The CHEMO-SUPPORT intervention showed significantly less worsening of overall symptom distress and severity. Self-efficacy and outcome expectations (measured at six weeks) were significantly higher in the intervention group. Self-care (measured at 12 weeks) was statistically similar between the two groups. The results emphasize the importance of nurses in coaching patients to adequately self-manage their symptoms at home.

IMPLICATIONS FOR NURSING: Providing goal-directed self-management support using motivational interviewing as well as tailoring are promising areas for reducing chemotherapy-related symptom distress.

Although the evidence is unequivocal of a negative effect on quality of life from patients experiencing multiple concurrent symptoms associated with cancer treatment (Lowery et al., 2014), adequate symptom management and supportive care for patients remain a challenge in delivering cancer care. In the ambulatory setting, treatment side effects are commonly experienced in the absence of professional assistance (Ruland et al., 2013). However, evidence suggests that patients self-manage their symptoms poorly and that their communication of symptoms and supportive care needs to healthcare professionals is suboptimal (Clover, Kelly, Rogers, Britton, & Carter, 2013; Coolbrandt et al., 2011, 2013, 2015; Given et al., 2010; Pedersen, Koktved, & Nielsen, 2012).

Various nursing interventions, including coaching, telephone follow-up, and/or home care, have been reported, but the results on relieving symptom burden have been inconsistent (Aranda et al., 2012; Barsevick et al., 2010; Coolbrandt et al., 2014; Kearney et al., 2009; Molassiotis et al., 2009; Williams, Williams, Lafaver-Roling, Johnson, & Williams, 2011). Some produce clinically meaningful and statistically relevant reductions in symptom severity and/or distress, whereas others do not. Unfortunately, reviews of these intervention studies found that it is not possible to make definitive conclusions about the vital parts or core elements of the interventions (Coolbrandt et al., 2014; Howell, Harth, Brown, Bennett, & Boyko, 2017). The interventions' content, doses, and the causal processes that are targeted and produce better outcomes vary widely and often are sparsely reported. In addition, the mediators between intervention and effect are often not evaluated (Coolbrandt et al., 2014; Howell et al., 2017). Remedying this deficit is key to making advancements. Specifically, understanding causal mechanisms enriches not only the understanding of the interventions' effects (or lack thereof), but also facilitates the