Symptom Burden: A Concept Analysis and Implications for Oncology Nurses

Roxanna L. Gapstur, MS, APRN-BC, AOCN®

Purpose/Objectives: To analyze the concept of symptom burden and discuss implications for symptom research and symptom management.

Data Sources: MEDLINE®, CINAHL®, PsycINFO, Cochrane Reviews, and published literature.

Data Synthesis: Through Rodgers’s evolutionary method of concept analysis, attributes of symptom burden were identified as dynamic, multidimensional, quantifiable, subjective, and physiologic. The major antecedent was multiple symptoms related to worsening disease status. Consequences of symptom burden included decreased survival, poor prognosis, delay or termination of treatment, increased hospitalizations, and decreased functional status, and lowered self-reported quality of life. Symptom burden is defined as the subjective, quantifiable prevalence, frequency, and severity of symptoms placing a physiologic burden on patients and producing multiple negative, physical, and emotional patient responses.

Conclusions: Symptom burden is an important concept in the symptoms experience, separate from symptom distress and other related terms. The continued differentiation of symptom concepts is important for sound methodologic research and meaningful interventions that affect and improve patient experiences.

Implications for Nursing: Clarifying multiple symptom concepts in the symptoms experience, determining appropriate measurement methodologies for the concepts, and identifying appropriate strategies will lessen the burden of symptoms and contribute to improved quality of life and better patient outcomes.

The concept of symptom burden commonly is used in medical and psychological literature, especially in reference to patients with chronic or terminal illnesses (Desbiens, Mueller-Rizner, Connors, Wenger, & Lynn, 1999; Klinkenberg, Willems, van der Wal, & Deeg, 2004; Kutner, Kassner, & Nowels, 2001; Nelson et al., 2004; Rose, Koshman, Spreng, & Sheldon, 2000; Ruo et al., 2003; Silveira, Kabeto, & Langa, 2005; Walke, Gallo, Tinetti, & Fried, 2004; Weisbord et al., 2003). Few research investigations concerning symptom burden have appeared in the nursing literature (Longman, Braden, & Mishel, 1997; Zambroski, Moser, Bhat, & Ziegler, 2005); however, multiple related concepts, such as symptom distress, are explored (McCormick, Naimark, & Tate, 2002; Schneider, 1999). The recent concept analyses of symptom clusters (Kim, McGuire, Tulman, & Barsevick, 2005) and symptoms experience (Armstrong, 2003) bring into question inter-relationships among various symptom concepts, including symptom burden. A clear definitional concept of symptom burden is required for continued advancement of scientific knowledge about the symptom experience (Beck, 2004).

Several self-report instruments are available that measure particular concepts in the symptom experience, including symptom burden and symptom distress (Barresi, Shadbolt, Byrne, & Stuart-Harris, 2003; Chiou, 1998; Cleeland et al., 2000; Cooley, 2000; de Haes, van Knippenberg, & Neijt, 1990; McCorkle & Young, 1978; Portenoy, Thaler, Kornblith, Lepore, Friedlander-Klar, Kiyasu, et al., 1994). The tools are used in multiple disease states, including cancer. Medical and nursing researchers often use the same symptom identification instruments, with portions of the tools excluded, depending on the symptom concept being measured. Given the inconsistencies, a specific definition of symptom burden clearly is required for continued advancement of scientific knowledge about the symptom experience.

Methods

Rodgers’ (2000) evolutionary method of concept analysis allows for a dynamic reality with overlapping and interrelated elements in a multitude of contexts and disciplines. The technique requires a multidisciplinary literature review to identify attributes, antecedents, surrogate and related concepts, consequences, and contextual variations of the concept. This literature analysis will address the following questions.

Key Points...

➤ Patients with cancer experience multiple symptoms related to the disease and its treatment.
➤ Identifying key concepts in symptom experiences guides measurement and methodologies for nursing research.
➤ Symptom burden is a distinct concept in symptom experience that contributes to the understanding of patients’ physiologic and psychological functioning during the diagnosis and treatment of cancer.
➤ Oncology nurses must understand symptom concepts and appropriate assessment of multiple symptoms in the illness trajectory to select management strategies that positively affect patient outcomes.