

# Measuring the Psychological Impact of Mindfulness Meditation on Health Among Patients With Cancer: A Literature Review

Yaowarat Matchim, MS, RN, and Jane M. Armer, PhD, RN

**Purpose/Objectives:** To describe the construct of mindfulness meditation and systematically review instruments measuring the psychological impact of mindfulness-based stress reduction (MBSR) on health among patients with cancer.

**Data Sources:** PubMed, CINAHL®, PsycINFO®, ISI Web of Knowledge®, EBSCO, and published literature (1987–2006).

**Data Synthesis:** 13 psychological instruments used in seven studies (2000–2005) to measure effects of MBSR on health in patients with cancer were reviewed. Most studies used a one-group pre- and post-test design. The post-MBSR outcomes for each instrument varied, suggesting different yet promising relationships. For some instruments, data were insufficient to conclude sufficiently whether any were strong or appropriate to use in future intervention studies.

**Conclusions:** To enhance knowledge of MBSR, more intervention research studies of MBSR in patients with cancer and reexamination of specific instruments are needed.

**Implications for Nursing:** Based on the review, instruments can measure MBSR effects and found MBSR to be a potentially beneficial oncology nursing intervention.

## Key Points . . .

- Mindfulness meditation is an awareness of moment-by-moment experiences arising from purposeful attention, along with nonjudgmental acceptance of the experiences.
- Various instruments have been used to measure the psychological impact of mindfulness meditation on health.
- Although the literature on mindfulness meditation is sparse, preliminary findings point to a potential positive impact of mindfulness-based stress reduction on the health and well-being of patients with cancer.

construct of mindfulness meditation and an overview, attributes, and limitations of selected research instruments. An understanding of mindfulness meditation and related research instruments will help future researchers build a solid conceptual framework to design studies, choose an appropriate existing tool(s), and develop new research instruments.

## Background

### Mindfulness Meditation

Mindfulness meditation has been defined as an awareness of moment-by-moment experiences that arises from purposeful attention, along with nonjudgmental acceptance of the experiences (Kabat-Zinn, 2003; Leigh, Bowen, & Marlatt, 2005). Meditation resides at the core of Buddha's teaching more than 2,500 years ago (Bonadonna, 2003) and also is the fundamental stance underlying all streams of Buddhist meditative practice. Meditation was introduced to Western culture in the 1960s (Kabat-Zinn, 2003). Although many

The popular and professional literature provide evidence that mindfulness meditation is applied widely to promote well-being in populations of healthy people and patients with chronic illnesses. Although for centuries mindfulness meditation has been cultivated in the daily lives of Eastern populations, the technique is an alternative therapy that is in its infancy in the Western world, having been introduced in the 1960s. Based on mindfulness meditation's potential impact in managing the growing cost of health care in society and the potential benefit to the well-being of healthy people and those with chronic illnesses, in 2006 the National Institutes of Health (NIH) awarded approximately \$2.5 million in grant funding to an oncology nurse researcher to study the effects of the technique among patients with cancer (Bauer-Wu, 2005). The funding verifies the trend toward increasing awareness of mindfulness meditation in the Western world and supports the need for further research in the field. Despite mindfulness meditation's promise in improving outcomes for patients with cancer and other chronic illnesses, the literature has limited rigorous data-based studies on which to build the body of scientific work in mindfulness meditation. Therefore, clarifying the construct of mindfulness meditation is important, as is examining the existing instruments used to measure the effects of the technique on patients with cancer. This article will provide a description of the

*Yaowarat Matchim, MS, RN, is a nursing instructor at the Prince of Songkla University in Songkla, Thailand, and a doctoral student in the Sinclair School of Nursing at the University of Missouri–Columbia; and Jane M. Armer, PhD, RN, is a professor in the Sinclair School of Nursing at the University of Missouri–Columbia. (Submitted January 2007. Accepted for publication April 12, 2007.)*

Digital Object Identifier:10.1188/07.ONF.1059-1066