

# Cancer, Cognitive Impairment, and Work-Related Outcomes: An Integrative Review

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**Problem Identification:** Cancer survivors often report concerns regarding their memory, attention, and ability to process information and make decisions. These problems, which have also been demonstrated on objective neuropsychological assessments, may have a significant impact on work-related outcomes.

**Literature Search:** A literature review was conducted using the following electronic databases: Ovid (MEDLINE®), PubMed, CINAHL®, and Web of Science. Search terms included *cancer, survivors, cognitive, work, and work ability*. Empirical research published in English from January 2002 to August 2015 that focused on cognitive impairment in adult cancer survivors was included in the review.

**Data Evaluation:** Articles were evaluated by two independent researchers.

**Synthesis:** Twenty-six studies met the inclusion criteria. Ten were qualitative, 15 were quantitative, and 1 had a mixed-methods design. Quantitative articles were synthesized using the integrative methodology strategies proposed by Whittemore and Knafl. Synthesis of qualitative articles was conducted using the criteria established by the Swedish Agency for Health Technology Assessment and Assessment of Social Services.

**Conclusions:** To date, research in this context has been limited by cognitive assessments focusing primarily on patient self-assessments of attention, concentration, and memory. Additional research is needed to examine the impact of cognitive performance and to expand work-related outcomes measures to include perceived work ability, productivity, and actual performance.

**Implications for Nursing:** Lack of information regarding cognitive impairment inhibits survivors' ability to prepare, understand, and accept impending cognitive changes and how they may affect work ability. Oncology nurses can assist cancer survivors by preparing and educating them on how to better manage impairment associated with cancer and its treatment.

More than 40% of the 14.5 million cancer survivors in the United States alone are of working age (American Cancer Society, 2014). However, many of these individuals experience unrelieved symptoms and side effects from cancer and cancer treatments, including cognitive impairment (Jansen, Miaskowski, Dodd, Dowling, & Kramer, 2005a, 2005b). Concerns regarding cognitive function, including problems with attention, memory, processing information, and making decisions, have been reported by cancer survivors (Munir, Burrows, Yarker, Kalawsky, & Bains, 2010; Myers, 2012). These cognitive impairments have been demonstrated on neuropsychological assessments (Anderson-Hanley, Sherman, Riggs, Agocha, & Compas, 2003; Falletti, Sanfilippo, Maruff, Weih, & Phillips, 2005; Jansen et al., 2005a; Stewart, Bielajew, Collins, Parkinson, & Tomiak, 2006) and functional magnetic resonance imaging (Cimprich et al., 2010; Ferguson, McDonald, Saykin, & Ahles, 2007; McDonald,