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## Personality Trait and Quality of Life in Colorectal Cancer Survivors

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olorectal cancer is the third most commonly diagnosed cancer globally, and its prevalence is increasing in Asia (Yee et al., 2009). In Taiwan, colorectal cancer is the third most frequent cause of cancer-related deaths, accounting for 4,531 deaths in 2009 (Department of Health, Executive Yuan, R.O.C., 2011). However, with advances in early detection and treatment, the five-year survival rate for all stages of colorectal cancer has risen to 60% (Denlinger & Barsevick, 2009). Therefore, colorectal cancer has become a curable illness with a rapidly growing number of survivors (Denlinger & Barsevick, 2009; Faul, Shibata, Townsend, & Jacobsen, 2010).

Colorectal cancer survivors frequently experience gastrointestinal symptom distress, depression, and negative body image for as long as three years following diagnosis (Denlinger & Barsevick, 2009; Phipps, Braitman, Stites, & Leighton, 2008; Schneider et al., 2007). Although considerable research has demonstrated that disease-related factors (Shun et al., 2008), other physical factors (e.g., symptom distress, fatigue) (So et al., 2009), and psychological distress (e.g., depression, anxiety) (Bellizzi, Latini, Cowan, DuChane, & Carroll, 2008; Llewellyn, McGurk, & Weinman, 2005; Reich, Lesur, & Perdrizet-Chevallier, 2008) can be associated with quality of life (QOL) in patients with cancer, much less research has focused on QOL in cancer survivors (Ayanian & Jacobsen, 2006; Aziz, 2007).

Studies conducted since 2000 have reported that personality can be significantly related to QOL (Hartl et al., 2010; Michielsen, Van der Steeg, Roukema, & De Vries, 2007). The personality known as type D has been found to be an independent predictor of poor health status and impaired QOL among cardiovascular patients (Denollet, Pedersen, Vrints, & Conraads, 2006; Pedersen, Herrmann-Lingen, de Jonge, & Scherer, 2010; Pelle, Pedersen, Szabo, & Denollet, 2009) and melanoma

**Purpose/Objectives:** To explore the association between quality of life (QOL) and type D personality, which is characterized by the traits of negative affectivity and social inhibition, and to further identify impacts of these traits after controlling for biophysical and psychological factors in colorectal cancer survivors.

Design: Cross-sectional and correlational.

**Setting:** Oncology and surgical outpatient clinics of a medical center in Taiwan.

**Sample:** 124 patients diagnosed with colorectal cancer who had completed active treatment.

**Methods:** Data were collected using a set of structured questionnaires to explore type D personality, biophysical and psychological factors, and QOL. Their associations were verified with Mann-Whitney U test and Spearman's rho correlation. Significant factors associated with QOL were identified with generalized estimating equations.

Main Research Variables: Type D personality and QOL.

**Findings:** Patients with type D personality experienced higher physical and psychological distress than those with non–type D personality. Social inhibition remained an important factor leading to impairment in the mental component of QOL after controlling for other associated factors. Negative affectivity was associated with fatigue intensity and interference of fatigue with life activities.

**Conclusions:** Personality trait was found to be an important factor associated with QOL. The trait of social inhibition was a significant factor influencing mental aspects of QOL, whereas negative affectivity was associated with fatigue.

**Implications for Nursing:** Assessing patients' personality, including negative affectivity and social inhibition, could help nurses to develop supportive groups or social networks for these patients and thereby improve QOL for cancer survivors.

survivors (Mols & Denollet, 2010a). Type D is associated with two personality traits: negative affectivity and social inhibition (Denollet et al., 2006; Ferguson et al., 2009). Negative affectivity indicates the tendency