## Unmet Supportive Care Needs of Patients With Colorectal Cancer: Significant Differences by Type D Personality

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olorectal cancer (CRC) is the fourth leading cause of death from cancer, accounting for 608,000 deaths worldwide annually (World Health Organization, 2013). The crude incidence of CRC increased from 19% in 2000 to 33% in 2009, but the global five-year survival rate increased from 69% to 75% via surgical resection (Andreoni et al., 2007; Bureau of Health Promotion, Department of Health, 2012; Paulson, Mahmoud, Wirtalla, & Armstrong, 2010). The number of patients with CRC receiving active treatment and survivors in Taiwan also is increasing (Lai et al., 2009).

Patients with CRC struggle with distress related to their daily lives during and after treatment. A substantial amount of evidence has demonstrated that physical (e.g., nausea, vomiting, fatigue) and psychological (e.g., anxiety, depression) distress accompany active treatment (Börjeson, Starkhammar, Unosson, & Berterö, 2012; Tofthagen, McAllister, & McMillan, 2011). After completing treatment, patients may continue to experience symptoms (e.g., fatigue, sleep disturbance, diarrhea, constipation) and late side effects (e.g., peripheral neuropathy, bowel dysfunction, pelvic fractures, urogenital dysfunction) (Schneider et al., 2007). Physical and psychological distress could increase the level of unmet supportive care needs, and high levels of unmet needs may decrease quality of life (Denlinger & Barsevick, 2009; Faul, Shibata, Townsend, & Jacobsen, 2010).

Supportive care needs in cancer commonly are found across many domains, including psychological, health system and information, physical and daily living, patient care and support, and sexual needs (Boyes, Girgis, & Lecathelinais, 2009; Schofield, Gough, LotfiJam, & Aranda, 2012; Shih et al., 2009; Sutherland, Hill, Morand, Pruden, & McLachlan, 2009). Previous studies have found that disease and treatment status,

**Purpose/Objectives:** To explore the association between supportive care needs and type D personality, and to identify personality traits, including negative affectivity (NA) and social inhibition (SI), and their influence on the supportive care needs of patients with colorectal cancer (CRC).

Design: Cross-sectional, correlational survey.

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

Sample: 277 patients diagnosed with CRC.

**Methods:** Data were collected using a set of structured questionnaires to measure supportive care needs, symptom distress, anxiety, depression, and personality traits. The associations between type D personality and supportive care needs were verified by the Mann-Whitney U test. The significant roles of personality traits were identified by generalized estimating equations, controlling for biophysical and psychological factors overall, and for the five supportive care domains.

Main Research Variables: Supportive care needs, type D personality.

**Findings:** Patients with CRC reported the most unmet needs in the health system and the information domain. Type D patients had higher needs overall and in most domains, except for sexuality needs. A higher level of NA indicated higher overall and psychological needs. A higher level of SI indicated lower needs in health system and information.

**Conclusions:** The level of unmet supportive care needs of patients with CRC is highly associated with type D personality. The trait of NA alters levels of overall supportive care and psychological needs, and the trait of SI influences needs in health system and information.

**Implications for Nursing:** Assessing personality traits before providing an education program is highly recommended for patients with cancer. The assessment could improve the quality of personalized education programs and better meet patient needs.

**Key Words:** supportive care, colorectal cancer, personality