Introduction: Gastrointestinal cancer is one of the most common cancers in South Korea. Anxiety and depression are the most prevalent psychological symptoms in cancer patients; however, few studies have examined these psychological distress and quality of life (QOL) in patients with advanced gastrointestinal cancer. Therefore, the objective of the present study was to assess the impact of anxiety and depression as predictive factors for QOL, in Korean patients with advanced gastro intestinal cancer.

Methods: One hundred and twenty consecutive patients with newly diagnosed, advanced gastrointestinal cancer, who were scheduled to receive palliative chemotherapy from July 2012 to June 2014, were enrolled in this observational prospective study. Anxiety, depression and QOL were assessed using the Hospital Anxiety and Depression Scale (HADS), the Patient Health Questionnaire-9 (PHQ-9), and the European Organization for Research and Treatment of Cancer Quality of Life Questionnaire-C 30, respectively, before palliative chemotherapy and at 3 months after the start of chemotherapy.

Results: Overall, 37 patients (30.8%) were diagnosed with anxiety or depression according to HADS or PHQ-9. In the global health status, depression, performance status, and anxiety accounted for 55.1% (adjusted R² = 0.551, p < 0.001) of the variance at baseline, and depression, pain, and performance status accounted for 72.4% (adjusted R² = 0.724, p < 0.001) of the variance at 3 months. In the functional scales, depression accounted for 22.2% (adjusted R² = 0.222, p < 0.001) of the variance at baseline, and depression, performance status, and pain accounted for 76.1% (adjusted R² = 0.761, p < 0.001) of the variance at 3 months. In symptom scales, anxiety accounted for 19.1% (adjusted R² = 0.191, p < 0.001) of the variance at baseline, and pain, depression, and performance status accounted for 74.0% (adjusted R² = 0.740, p < 0.001) of the variance at 3 months.

Conclusion: Depression and performance status were significant predictive factors of QOL at both baseline and 3 months, as were anxiety and pain at baseline and 3 months, respectively. Systemic assessment and comprehensive interventions for anxiety or depression, based on timing and predictive factors of QOL, are required for patients with advanced gastrointestinal cancer.