

## **Relationship between quality of life and nutritional status in colorectal cancer patients undergoing chemotherapy**

### **ABSTRACT**

**Introduction:** Malnutrition is associated with poorer outcomes following treatment for colorectal cancer (CRC). This study evaluates the relationship between nutritional status using scored Patient Generated-Subjective Global Assessment (PG-SGA) with the validated European Organisation for Research and Treatment of Cancer questionnaire (EORTC-QLQ C30) which consists of five functional scales, three symptoms scales and one item of global health/quality of life (QOL). **Methods:** A total of 42 CRC patients at oncology outpatient clinics from two hospitals in Malaysia participated in the study from March 2011 to March 2012. The participants were classified as either well-nourished (PG-SGA A) or malnourished (PG-SGA B and C). **Results:** The majority of patients were Chinese, male, with a mean age of  $57.1 \pm 9.8$  years and had been diagnosed with stage 2 CRC. Well-nourished patients had statistically significantly better QOL scores on symptom scales: fatigue ( $p < 0.001$ ), nausea and vomiting ( $p < 0.05$ ), and pain ( $p < 0.001$ ) compared to malnourished patients. PG-SGA was strongly correlated with the main domains of the QOL: global health status ( $r = -0.395$ ,  $p < 0.05$ ), fatigue ( $r = 0.816$ ,  $p < 0.001$ ), nausea and vomiting ( $r = 0.730$ ,  $p < 0.001$ ) and pain ( $r = 0.629$ ,  $p < 0.001$ ). The better the nutritional status (lower total mean score of PG-SGA), the higher the QOL (high mean score of global health status). **Conclusion:** The scored PG-SGA is suitable for use as a nutrition assessment tool to identify malnutrition and it is associated with QOL among this population.

**Keyword:** Chemotherapy; Colorectal cancer patient; Malnutrition; Nutritional status; PG-SGA score; Quality of life