

# A Longitudinal Study of the Role of Patient-Reported Outcomes on Survival Prediction of Palliative Cancer Inpatients in Taiwan

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摘要

## Abstract

**Goals of work** This study explores the significance of patient-reported outcomes for predicting length of survival of palliative cancer patients. **Patients and methods** Patients were recruited upon admission to the inpatient palliative care unit. Weekly assessment of 180 terminal cancer patients was carried out throughout their survival time using the Medical Outcome Study 36-Item Short-Form Health Survey, the Taiwanese version of the M.D. Anderson Symptom Inventory (MDASI-T), the Karnofsky Performance Status (KPS), the Brief Pain Inventory, and the Brief Fatigue Inventory. Generalized estimating equations (GEE) were utilized to analyze whether the patient-reported outcomes predicted survival time. **Main results** Of all patients, 64 had one assessment, 51 had two, 25 had three, and 40 had four or more assessments, up to a maximum of eight. The univariate analysis showed that gender ( $P<0.01$ ), KPS ( $P<0.01$ ), the physical component summary score ( $P=0.02$ ), the MDASI-T total score ( $P<0.01$ ), composite fatigue severity ( $P<0.01$ ), and composite pain severity ( $P<0.01$ ) were significantly associated with length of survival. The multivariate analysis showed that gender ( $P<0.01$ ), KPS ( $P<0.01$ ), and the MDASI-T total score ( $P=0.01$ ) were significant predictors of survival time. **Conclusions** This is the first study to explore the significance of patient-related outcomes for predicting length of survival of palliative cancer patients using the GEE method. This study confirms that overall symptom severity is a significant factor in assessing the length of survival of palliative cancer patients.