

Journal Watch

Palliative Performance Status, Heart Rate and Respiratory Rate as Predictive Factors of Survival Time in Terminally Ill Cancer Patients

Sanchez C, Elustondo S, Estirado A, et al. *J Pain Symptom Manage* 2006;31:485-492

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Abstract

To determine which symptoms, signs, and characteristics that define the patient's functional status predict the survival time in terminally ill cancer patients, a prospective longitudinal study was conducted with terminally ill cancer patients followed by a Home Care Support Team. Patients were followed up with at least weekly visits until death, collecting variables at each visit. A Cox multivariate regression analysis took into account all the follow-ups in the same patient. Ninety-eight patients were studied, and 250 evaluations were done. The mean age was 72 years. The median survival was 32 days. In the multivariate analysis, three independent variables were identified: Palliative Performance Score of 50 or under, heart rate of 100/minute or more, and respiratory rate of 24/minute or more. The variables that were found to be prognostic in our study are objective, easy, and quick to measure, and do not require that the professional have special training or experience. The prediction of survival time may be improved by considering these variables.

Strengths: As the authors emphasized, the objective factors, such as heart rate, respiratory rate, Palliative Performance Score are reliably assessed by any healthcare professionals who may not be familiar with palliative care practice.

Weakness: The generalizability of the result is limited due to the setting of the population in this study. The inclusion criteria of the study included an expected prognosis of less than 6 months; however, how and by whom this prognosis was estimated were not clearly stated. Treatments such as palliative chemotherapy, hormonal therapy, radiotherapy and acute care admission in case of acute change may have influenced the outcome of the study, and this information was not provided. It is not clearly stated how the patients' symptoms were assessed, especially in the case of assessment of delirium, hallucinations, illusions (?), orientation etc. Unless systematically approached, these symptoms may have been assessed inappropriately (either over- or under diagnosed), and therefore the result may have been compromised by unreliable and inconsistent assessments.

Relevance to Palliative Care: Healthcare professionals agree about the importance of having reliable prognostic tools. Although there are number of published prognostic

factors or scores, there is limited data available about using these tools in different settings. Further validation study in various settings and countries are needed.