

The validity and the reliability of single-item measure on quality of life in patients with cancer

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BACKGROUND

Measuring quality of life of patients is essential part of evaluating the effect of palliative care. This can be done by using various more or less complex methods. The Integrated Palliative Outcome Scale (IPOS) is one of the most used method in palliative care which has good reliability and validity. On the other hand, for some frail or terminal patients it might be too burdensome.

AIM

The aim of this study was to compare a single-item measure for quality of life with the more complex tool.

METHODS

This multi-center longitudinal cohort study was conducted at 3 oncology departments as a part of IMPAC project. Inclusion criteria were: cancer diagnosis, age 18+, cognitive ability to participate, limited prognosis (assessed using the 12-month surprise question). **Patients (N= 135) completed structured interview about prognostic awareness which contained also quality of life questionnaire (IPOS) and a single-item measure assessing their quality of life with 7-point Likert scale (1=very bad; 7=excellent).** 78 patients completed second measurement after 3 months. Non-parametric methods were used in IBM SPSS 26.

RESULTS

We compare sum score of IPOS with single-item measure using Spearman correlation and found moderate correlation ($R = -0.59$, $p > 0.001$). Correlation with items from IPOS showed that the strongest correlations are between single-item and Feeling at peace ($R = -0.56$, $p > 0.001$) and Fatigue ($R = -0.51$, $p > 0.001$). Intraclass correlation for single-item measure between T1 and T2 was 0.51 (95 % CI 0.23-0.69). Differences in answers between measure T1 and T2 were not significantly different between IPOS and single-item measure ($p = 0.2$) using Wilcoxon signed-rank test.



DISCUSSION

This study showed that the single-item measure for quality of life has good validity and test-retest reliability. Moderate correlations with item IPOS Feeling at peace and Fatigue from IPOS showed that this global question might cover psychological and also somatic issues. **To conclude, the single item measure is methodologically robust and might be even more acceptable and feasible for frail palliative patients.**

