Medical Xpress

Study shows importance of quality of life scores as prognostic factors in cancer patients

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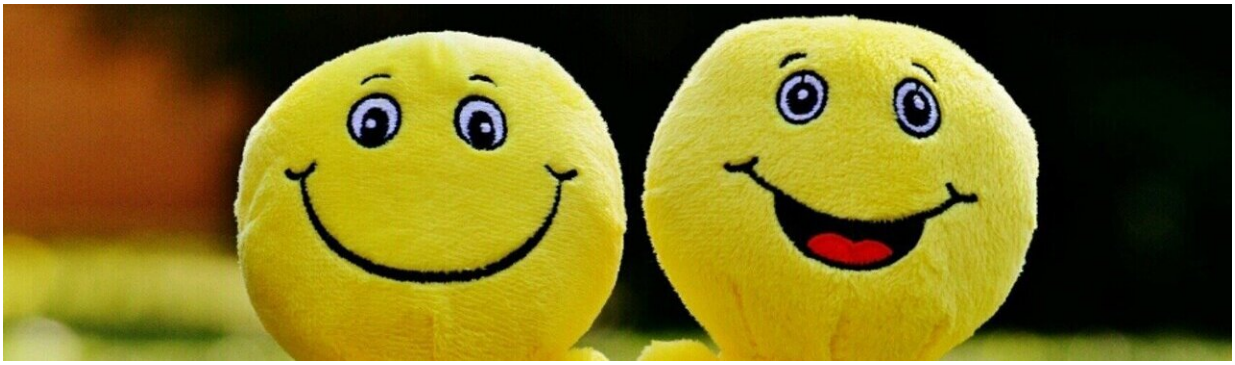

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Cancer patients own reporting of their quality of life can be important in predicting the outcome of their disease, say researchers from the European Organisation for Research and Treatment of Cancer (EORTC). Until recently, reports from clinicians on issues such as patient age and tumor status were used primarily in determining prognoses, but now researchers have shown conclusively that patient-reported outcomes (PROs) have considerable value in predicting survival.

In a paper published in *The Lancet Oncology* today (2 December 2019), Dr. Andrew Bottomley, EORTC assistant director and head of the Quality of Life Department, EORTC, Brussels, Belgium, together with

colleagues from seven countries, reports the findings of a meta-analysis of 44 clinical trials carried out between 2006 and 2018 on patients with cancer that report QoL scores. "We saw that, each year, the scientific literature was populated with dozens of new analyses showing the value of QoL scores, but these were single analyses and many of the trials had limited methods," says Dr. Bottomley. "We decided to try to follow up an earlier EORTC analysis2 that showed QoL was important, but that methods and standards of its analysis needed improvement."

After reviewing the literature, the authors identified 44 Phase 2 or 3 randomized controlled trials that met the strict criteria for inclusion in their analysis. These covered results 28281 patients across 13 different cancer types. Sample sizes among the studies ranged from 63 to 1152 patients, and a total of 23122 patients completed PRO assessments. The main PRO tools used to assess the patients were the EORTC Quality of Life Core questionnaire and the Functional Assessment of Cancer Treatment questionnaire. These were then combined with clinical factor assessments such as performance status, tumor size, and serum markers.

In 41 of the 44 studies included, or 93%, the researchers found that at least one PRO domain, such as physical functioning or pain, was significantly associated with overall survival after other clinical variables had been controlled for. "This is an important result that, additionally, allowed us to confirm that methods and standards of collecting and analyzing QoL data have improved since the original review some ten years ago, though we still need some methodological improvements if we are to optimize the prognostic value of these data. We plan to do a further analysis in five years' time to check that future studies have improved methods further, whether clinical trialists are using these results to stratify patients in trials, and the extent to which they are being used as prognostic indicators," Dr. Bottomley says.

QoL assessment is becoming increasingly important in oncology.

Governments are starting to collect data not only from cancer clinical trials, but also from patients undergoing standard hospital care. This can not only help health services understand patients' needs, but also allow for QoL mapping across countries and perhaps even more widely. "We are seeing a move not just out of research, and single or multiple hospitals, but into country-level data with all the impact on policy that that implies," says Dr. Bottomley.

In demanding better standards for future research in the field of prognostic prediction—being able to tell patients what survival duration they can expect—the researchers hope that patients will be able to better adapt their lives to the impact of the cancer diagnosis on their survival. "Although this will not alter practice, it will encourage clinicians to take more interest in patients' QoL scores and to understand their importance. They are vital in making services and care specific for each cancer patient. "Targeted treatment' is much discussed in the context of pharmaceuticals, but QoL scores also allow us to 'target' the direct needs and concerns of the patient rather than just relying on tumor size or organ-specific problems," Dr. Bottomley concludes.

More information: Justyna Mierzynska et al. Prognostic value of patient-reported outcomes from international randomised clinical trials on cancer: a systematic review, *The Lancet Oncology* (2019). DOI: 10.1016/S1470-2045(19)30656-4

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