

An evaluation of the association between age and health related quality of life and symptoms in cancer patients. A pooled analysis of closed EORTC Randomized Controlled Trials

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Background

Previous studies have demonstrated the prognostic value of age in cancer survival, with older cancer patients reporting a poorer survival than younger patients. However, for health care professionals it is important to understand the relation of association between age and age-related factors, such as Health Related Quality of Life (HRQOL) of cancer patients. The objective of this study was therefore to investigate the influence of age on the HRQOL of cancer patients.

Methods

Patients from 30 closed European Organisation for Research and Treatment of Cancer (EORTC) Randomized Controlled Trials, covering 11 cancer sites, were included in this retrospective meta-analysis. HRQOL was recorded at baseline using the EORTC QLQ-C30. The variable age was dichotomized at 70 years; representative for younger and older cancer patients. A multivariate analysis, modelling the binary variable age, and corrected for gender, cancer site, disease severity (metastases vs. non metastases), World Health Organization (WHO) performance status, on 15 HRQOL scales was used.

Results

Baseline HRQOL data were available for 5,388 patients younger than or equal to 70 and 718 patients older than 70. HRQOL impairment between the two age groups was reported at baseline for global health status (<.001), physical functioning (<.001), role functioning (0.009), cognitive functioning (<.001), financial difficulties (<.001) and for the symptoms fatigue, nausea & vomiting, pain, dyspnea, appetite loss, constipation (all <.001). Thus, for the functioning and symptom scales, older people reported a poorer HRQOL compared to younger people. However, interestingly, older cancer patients reported a lower financial burden compared to younger people.

Conclusions

Our pooled analysis indicates that the HRQOL of older cancer patients is affected differently by cancer compared to younger patients. Older people reported a poorer score in different HRQOL domains. Health care professionals should be aware that the most vulnerable cancer patients are older people and hence our results could provide insights to help provide suitable clinical awareness and care for more senior patients. However, older patients in general reported that the financial burden of this disease was of a limited impact compared to younger patients. This could be important for supportive care services when treating younger patients.