Health-related quality of life among incident colorectal cancer patients

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Aims

Colorectal cancer is one of the most common diagnosed cancer in Western countries and its evolution can have strong impact on health-related quality of life (HRQoL) of the patients. Disease and treatment –related adverse effects often result in a reduced overall quality of life. The aim of the study is to evaluate the relationship of the latent HRQoL construct to items and domains of EORTC QLQ-C30 and to study their change during time.

Methods

A sample of colorectal cancer patients was recruited after diagnosis. The QLQ-C30 and Hospital Anxiety and Depression Scale (HADS) were assessed at baseline and six months later. The patients recruitment will finish in April 2016. Boehmer model (2005) was used to assess HRQoL. Functional, social and emotional scales were used as indicator variables, as they reflect information about the level of HRQoL, while physical symptoms were established as causal variables as their occurrence can impact on HRQoL. Structural equation modeling (SEM) was applied to the baseline data. The patterns of HRQoL changing between baseline and follow-up assessment will be assessed using the same model.

Results

Between October 2014 and February 2016, 251 patients were assessed (mean age=67.8 yrs, sd=10.3, 54.2% male), 70.5% had colon and 29.5% a rectum cancer. Patients in early-stage (I or II) were n=153 (60.9%), chemotherapy was prescribed in 51.4% of sample.

Mean functional QLQ-C30 subscales range from 65.8 (global QoL) to 89.4 (cognitive functioning), fatigue was the most frequent symptom present in 88% of patients (mean=33.2, ds=23.7); mean HADS Anxiety score was 4.9 (sd=3.5, 24.3% had score>8); mean HADS Depression score was 3.9 (sd=3.9, 17.9% had score>8).

SEM of the Boehmer model showed good overall fit (Chi-square p-value<0.0001, RMSEA=0.05, CFI=0.90, SRMR=0.06).

Conclusions

The sample was heterogeneous in terms of the disease and kind of treatment patients received after diagnosis.

Once completed the data collection, it will be proper to investigate change in patients' HRQoL for different diagnoses and kinds of treatment groups.

A further analysis will compare the model parameters obtained by fitting the model in two subsequent time-point (at baseline and at six months), in order to assess changes regarding HRQoL.