CLUSTERING OF HEALTH-RELATED QUALITY OF LIFE (HRQoL) ITEMS IN METASTATIC PROSTATE CANCER PATIENTS

Francesca Martinelli, Chantal Quinten, John Maringwa, Corneel Coens, Charles Cleeland, Carolyn Gotay, Bryce Reeve, Jolie Ringash, Henning Flechtner, Eva Greimel, David Osoba, Madeleine King, Joseph Schmucker-Von Koch, Martin Taphoorn, Joachim Weis, Sophie Fosså, Walter Albrecht, Hendrik Van Poppel, Philip Powell, Mark Johnson, Andrew Bottomley

AIMS: HRQoL is generally viewed as a multi-dimensional construct covering various aspects of a patient's life. Subsets of HRQoL items can form clusters. Previous studies have shown 3 main symptom clusters can be found in both metastatic and non-metastatic cancer patients: a physical function-related cluster, a psychological function-related cluster and a gastrointestinal function-related cluster. However, these clusters may differ by patient characteristics. The aim of this study was to explore the cluster structure of HRQoL items in metastatic prostate cancer patients.

METHODS: Retrospective pooling of 3 EORTC randomized clinical trials yielded baseline HRQoL data, collected using the QLQ-C30 questionnaire, for 382 metastatic prostate cancer patients. The mean (M) age was 70, 69% of patients had a good (0-1) WHO performance status and 66% had received systemic and/or hormonal treatment. Ward’s method was used to explore the cluster structure of the 15 HRQoL items. R-squared (R) was used to assess quality of the clustering, Cronbach’s alpha (A) to evaluate internal reliability of clusters.

RESULTS: In the pooled dataset, 3 main clusters were observed (R=0.534). The first one (A=0.76) included physical and role functioning. The second one (A=0.83) included emotional, cognitive and social functioning, quality of life, fatigue, pain and insomnia. The third one (A=0.72) included nausea/vomiting, appetite loss and constipation. Fatigue (M=45) and pain (M=55) have a strong impact on patients whose physical and role functioning are poor (M=58 and M=59 respectively) not only because of the disease, but also because of age; this may explain why the second cluster included both physical (fatigue, pain) and psychological (emotional and cognitive functioning, insomnia) items.

CONCLUSIONS: Knowing how HRQoL items inter-relate in different malignancies may help clinicians to provide more individualized symptom cares and policy-makers to support tailored psycho-social programs. Patient-reported outcomes offer a unique opportunity to incorporate patient needs in care planning.

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