

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

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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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