Health-related quality of life at diagnosis in multiple myeloma: EQ-5D-5L results from the Myeloma and Related Diseases Registry and comparison with an Australian population norm


1School of Public Health and Preventive Medicine, Monash University; 2Royal Prince Alfred Hospital; 3Alfred Health; 4Central Clinical School, Monash University; 5Sir Charles Gairdner Hospital; 6Medicentre Hospital, NZ; 7Peter Mac Callum Cancer Centre/Royal Melbourne Hospital; 8Canberra Hospital; 9Concord Repatriation General Hospital; 10Monash Medical Centre; 11Austin Health; 12Box Hill Hospital; 13Royal Adelaide Hospital; 14Royal Hobart Hospital; 15Curtin University, WA; 16Myeloma Australia; 17Northern Health; 18Nelson Hospital, NZ, 19Princess Alexandra Hospital; 20Epworth Freemasons; 21St.Vincent’s Hospital, Melb; 22St George Hospital; 23Flinnders Medical Centre; 24Christchurch Hospital, NZ; 25Cabrini; 26Peninsula Health; 27Lalorbe Regional Hospital, Traralgon.

Background: Multiple myeloma (MM) is an incurable cancer associated with a high disease burden and early assessment of health-related quality of life (HRQOL) can help to personalise therapy planning. The EQ-5D-5L is collected in the ANZ Myeloma and Related Diseases Registry (MRDR) at diagnosis and subsequent time-points. We assessed the HRQOL profile of MM patients using results of this simple, generic QOL survey. Participants’ results were also compared to South Australian estimated population normative values to evaluate the functional status of MM patients at diagnosis in ANZ compared to a local population norm.

Methods: Patients with EQ-5D-5L data at diagnosis were compared to the rest of the MM cohort to check that they were representative of the overall group and those missing EQ-5D data. Age and sex-matching to the local normative values was conducted using McCafayre et al.

Results: 413 patients on the MRDR had completed all 5 EQSD domains (mobility, self-care, usual activities, pain/discomfort, anxiety/depression) and the EQ VAS score (self-rated health status from the worst [0] to the best [100] health imaginable). Median age was 67 years (60-74) and 65% were male. Despite the sample composing only a third of MM patients in the registry, characteristics did not differ significantly between patients who completed the EQSD (n=413) and those who did not (n=848), p>0.18 except for gender (p=0.05).

In self care (washing or dressing), 69% of pts reported no problems at diagnosis, while only 22% were pain-free. Problems with mobility were reported in 55%, anxiety/depression in 56%, and problems with usual activities in 68% of patients at diagnosis. 41% of patients reported moderate to extreme problems in usual activities and 39% in pain/discomfort. With increasing age, more patients had problems with mobility, self-care and usual activities (p<0.009), and a lower EQ VAS score (p=0.04). As disease stage (ISS) increased, limitations in mobility and usual activities were more frequent (p=0.01), and EQ VAS score reduced (0.005). Problems in all 5 health domains were more frequent in patients with ECOG2 and EQ VAS score was lower (53±21 v 74±18) compared to ECOG2 (p<0.001).

Problems with mobility, usual activities, and EQ VAS scores were associated with a higher risk for early mortality (12m post diagnosis, p<0.05) in univariate analyses. Compared to the South Australian population norm, there were notably more problems in all health domains in MM, and across all age groupings, however, the difference was more striking in the proportion of MM patients who had problems with routine activities and with pain and discomfort.

There was also a consistent gap between groups for self-rated health status (EQ-VAS), with higher scores (better health) for the normative group.

Conclusion: Pain/discomfort was the most frequently reported health issue at diagnosis in Australian/New Zealand patients with MM, and self-care related problems the least, compared to the other health domains. Also, more health problems were reported with increasing age, ECOG2 and increasing disease stage (ISS). Compared to a local population norm, the greatest difference in reporting of problems was found with routine activities, followed by pain and discomfort. These findings identify the most challenging health issues for MM patients at diagnosis and highlight the contrast with an Australian population norm.

Acknowledgement: The authors thank the patients, hospitals, clinicians and research staff at participating institutions for their support of the MRDR.

The MRDR has received funding from the following companies: Amgen, Bristol-Myers Squibb, Celgene, Gilead, Janssen, Novartis, Takeda.

References

Contact us:
School of Public Health & Preventive Medicine, Monash
E: sjphm-myeloma@monash.edu
W: mrdr.net.au
T: +61 3 1800 811 326