

Health-related quality of life in older people with osteoporotic vertebral fractures: response to comments by Sani et al.

E. Clark¹ 

Received: 14 July 2016 / Accepted: 26 July 2016 / Published online: 8 August 2016
© International Osteoporosis Foundation and National Osteoporosis Foundation 2016

Dear Editor,

My co-authors and I thank Sani et al. [1] for their interest in our paper [2]. We agree that there is a clear difference between clinical importance and statistical significance.

For the studies that used the SF-36 to assess health-related quality of life (HRQoL), the absolute difference between osteoporotic patients with and without vertebral fractures was 7.8. The minimal clinically important difference for physical function assessed by the SF-36 has been identified as 5.3 in the setting of other musculoskeletal conditions (osteoarthritis) [3].

In addition, although the minimal clinically important difference has not been established for the QUALEFFO or other measures of HRQoL, the standardized mean difference (SMD) for physical function for all studies combined was classed as a moderate difference for physical HRQoL, using standard recommendations [4].

Both these methods confirm that, based on our meta-analysis, the difference in physical HRQoL between those with and without vertebral fractures appears to be clinically meaningful. Therefore, we stand by our conclusion that

osteoporotic patients with vertebral fractures have moderately reduced physical health status compared to osteoporotic patients without vertebral fracture.

References

1. Sani M, Ayubi E, Khazaei S, Mansori K (2016) Health-related quality of life in older people with osteoporotic vertebral fractures: clinically important vs. statistically significant. *Osteoporos Int*. doi:10.1007/s00198-016-3725-1
2. Al-Sari U, Tobias J, Clark E (2016) Health-related quality of life in older people with osteoporotic vertebral fractures: a systematic review and meta-analysis. *Osteoporos Int*. doi:10.1007/s00198-016-3648-x
3. Angst F, Aeschlimann A, Stucki G (2001) Smallest detectable and minimal clinically important differences of rehabilitation intervention with their implications for required sample sizes using WOMAC and SF-36 quality of life measurement instruments in patients with osteoarthritis of the lower extremities. *Arthritis Care Res* 45(4):384–391
4. Cohen J (1988) *Statistical power analysis for the behavioral sciences*, 2nd edn. Erlbaum, Hillsdale, NJ

✉ E. Clark
Emma.Clark@bristol.ac.uk

¹ Musculoskeletal Research Unit, School of Clinical Sciences, University of Bristol, Bristol BS10 5NB, UK