



## LETTER

# Health-related quality of life in older people with osteoporotic vertebral fractures: clinically important vs. statistically significant

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Dear editor,

We read the article by Al-Sari et al. [1], recently published online in your journal, with great interest. The authors aimed to evaluate differences between physical and/or mental health-related quality of life (HRQoL) in osteoporotic patients with vertebral fracture compared to those without fracture using a meta analysis. The authors reported standardized mean differences (SMD) with 95 % confidence interval (CI) in physical and mental HRQoL in osteoporotic older people with vertebral fracture compared to those without fracture of 0.53 (0.38–0.68) and 0.19 (0.05–0.33), respectively [1].

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Although the data reported by Al-Sari et al. [1] are interesting, it is important to emphasize that, clinically, differences in mean physical and mental HRQoL of 0.53 and 0.19 are negligible. The reader should distinguish the difference between statistical significance and clinical importance. Larger sample size, higher standard deviation (SD) and bigger mean difference can increase the chance of finding a statistically significant difference [2]. In meta analyses, the larger sample size arising from pooling individual studies can easily lead to a significant *P*-value.

As the authors point out in their conclusion, osteoporotic older people with vertebral fracture have worse physical HRQoL than osteoporotic older people without vertebral fracture. However, this conclusion should be interpreted with caution because clinical judgments have been overlooked.

## Compliance with ethical standards

**Conflict of interest** The authors declare that they have no conflict of interests.

## References

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2. Fletcher RH, Fletcher SW, Fletcher GS (2012) *Clinical epidemiology: the essentials*. Lippincott Williams & Wilkins, Baltimore