

## Correspondence

### Comment on: Analysis of kyphosis, vertebral fracture and bone mineral density measurement in women living in nursing homes

*To the Editor*

This is a cross-section case-control study which compares the vertebral fracture, degree of kyphosis, and bone mineral density (BMD) between nursing home group and a control group.<sup>1</sup> I guess the 2 groups were matched for the age. However, there was no control for the variables or confounding factors. One of the major confounding factor is dementia which is clearly associated with osteoporosis in different studies. So the results of having more osteoporosis in the nursing home group might be attributed to significantly high rate of dementia within the group.

Furthermore, there was no clear definition of the functional status, although it was documented that all participants had to be not bedridden. But, you need a physically active person who is mobilizing to have the fracture.

*Abdulghani Alsaeed*

*Department of Endocrine and Diabetes  
Prince Sultan Military Medical City  
Riyadh, Kingdom of Saudi Arabia*

*Reply from the Author*

The primary outcome parameters of this cross-sectional study were to compare the vertebral fracture, kyphosis degree and BMD. The dementia was known to have an effect on these parameters. For this reason, it was evaluated as a demographic clinical parameter. Indeed, the nursing home group found a higher rate of dementia. This clinical condition was also supported in our study. In further study, when designing the study and control group, besides the age, a design should be made in which the degree of dementia can be taken as the primary variable. Thus, this confusing situation can be illuminated. As the main group of the study was nursing home group, the control group consisted of elderly people who did not live in a nursing home. As mentioned in the method section, all the participants were elderly, living independently, and performing the activities of daily living independently. All of them were stage 5 according to the Functional Activity Scale. Since both groups were physically active, they were considered to be in similar conditions in terms of fracture.

*Ayla C. Turk*

*Department of Physical Medicine and Rehabilitation  
Hatit University, Corum, Turkey*

## References

1. Turk AC, Sahin F, Kucukler FK, Devci H. Analysis of kyphosis, vertebral fracture and bone mineral density measurement in women living in nursing homes. *Saudi Med J* 2018; 39: 711-718.