

Correspondence

Falls and depression in the elderly population

To the Editor

I have read with great interest the recently published article by Kose and colleagues¹ in the Saudi Medical Journal, and I appreciated the authors' efforts and work. However, I would like to make a few comments on it because falls and depression are 2 common conditions that impair the health of older people, and are both underestimated in primary care settings. The authors mentioned that they "observed that there was a significant correlation of MMSE test scores among GDS, BBS, GUGT and RMI." They explained - in their discussion that "this means that if cognitive function regresses, depression and impairment of balance and mobility skills will increase." I totally agree that it is statistically correct that any increase in the aforementioned positively correlated variables' score would result in increase in the others' scores. However, as the study design was cross-sectional, a limitation which authors should acknowledge, the temporal relation between the predictors and the outcome variables could not be proved. Unfortunately, the authors also overlooked explaining the relationship between falls and depression, as well as the other correlates. There are 3 different ways in which falls, and depression among elderly people may be related. Depression may precede a fall, or vice versa, or that both are outcomes of a third factor that adversely affects health in older people, and they develop concurrently. The first possibility was proved by Biederman et al² in their prospective study where they found that the relative risk of falls is 2.83 among subjects with depression at the baseline of the study. Chu et al³ also studied prospectively, the predictors of single or recurrent falls. They found that fallers had a significantly higher Geriatric Depression Scale (GDS-15) score than non-fallers. Ishizuka et al⁴ explained the association of falls and depression by the decrease in reflex speed and alertness that accompany depression or its medication. They added that depression is associated with reduced performance in balance and gait tests. Turcu et al⁵ assessed the relationship between depression and postural and gait abnormalities. They found that depression is

associated with postural abnormalities in the standing position, which may predispose to falls.⁵ Moreover, the tricyclic antidepressants, through their alpha 1 adrenergic receptors blockage, could cause postural hypotension and predispose the elderly to falls. The second possibility is that falls often bring depressive reaction and fear of falling. However, the evidence for depression as a result of falls is less compelling than the depression-falls direction.² The last type of relation between depression and falls postulates that they are both the result of a third condition, for example, Parkinson's disease (PD). Meara et al,⁶ in their community based study confirmed that PD is associated with high levels of depressive symptoms, with 64% of the patient group scoring in the "depressed" range of the GDS-15.⁶ Among the 3 groups studied by Chu et al,³ namely, non fallers, single fallers, and recurrent fallers, recurrent fallers were most likely to have PD and high GDS scores.

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Reply from the Authors

We have scrutinized the comments of Dr. Mustafa Afifi about our trial with pleasure, and we think that all these comments are noteworthy and accurate. However, although we aimed for a longitudinal design in this trial, the condition of the geriatric center in which we performed this study was not appropriate for it. It is a fact that our study is in a cross-sectional design. Nevertheless, the parameters of this study are measurable, and our findings point out their correlations with each other. We think that these findings will be of importance in further studies, and so, we submitted this study as a preliminary report. We are now carrying on longitudinal designed studies in this area, and we will submit these articles when we reach the appropriate number of cases. Thanks for your interest.

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