



Comment on 'Effects of Spiritual Group Therapy on Caregiver Strain in Home Caregivers of the Elderly with Alzheimer's Disease'



To the Editor,

We read with interest the article by Mahdavi et al. entitled "Effects of Spiritual Group Therapy on Caregiver Strain in Home Caregivers of the Elderly with Alzheimer's Disease" (Mahdavi, Khoshknab, Mohammadi, Hosseini, & Haghi, 2017). In this study, the authors conclude that "spiritual care can reduce care strain in home caregivers of the elderly with Alzheimer's disease."

Although we commend the authors for conducting a fascinating study, the article lacks basic methodological details that would be essential to verify whether these conclusions are valid and reliable:

1. "Sample size calculation": The study bases its sample size calculation on a pre-post intervention difference. This is troubling in that pre-post differences are not excluded from bias through randomization. Instead, the sample size should have been calculated by comparing the intervention groups.
2. "Randomization effectiveness": The authors do not provide details on whether the randomization led to a balance between randomization arms, but instead mention the use of "homogeneity" tests (Sperandeo, Maldonato, Baldo, & Dell'Orco, 2017). While it is unclear what exactly is meant by homogeneity test, presenting results regarding balance across arms is important as residual confounding might distort results in different directions, sometimes invalidating the final conclusions.
3. "Analyzing change": The analysis with an analysis of variance is probably unreliable when evaluating change scores since this method does not account for baseline scores (Norman, 1989). More than a mere methodological detail, the failure to adjust for baseline

scores might lead to erroneous conclusions regarding final scores.

4. "Randomization methods": Besides stating that randomization was blocked, there are literally no details regarding the methods used to generate random numbers and how reliably they were applied during the study. This is concerning since an adequate randomization is at the very basis of the conclusions reached in this study.
5. In the face of these limitations, we urge the authors to provide additional details so that their findings can be properly evaluated, and the full merit given to them.

References

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