



RE: Correspondence: Isometric handgrip exercise training reduces resting systolic blood pressure but does not interfere with diastolic blood pressure or heart rate variability in hypertensive subjects: a systematic review and meta-analysis of randomized clinical trials

Neil A. Smart¹

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Dear Editor,

I wish to bring to your attention several methodological concerns regarding the systematic review and meta-analysis conducted by Almeida et al. 2021 published in *Hypertension Research* in September 2021. In essence, I believe that the work does not reflect the published works stipulated in the inclusion and exclusion criteria by the authors. Specifically, I make the following assertions:

1. One study, Millar et al. [1], was incorrectly included in this review, as this article clearly states (Page 621) that subjects were allocated on a ‘nonrandomized cohort design’. This fact has been verified via direct communication with the primary author. Almeida et al. stated that ‘randomized clinical trials’ were the study design necessary for inclusion.
2. Other included studies reported on participants who did not meet the inclusion criteria of ‘treated hypertensives’. Badrov et al. [2] only had 83% of medicated participants, in Taylor et al. [3] ‘most’ but not all participants were medicated.
3. I believe the authors failed to identify the study by Farah et al. [4] and that this study should have been included.
4. I also believe that the study by Okamoto et al. [5] was also not identified and should have been included even though participants were unmedicated, based upon the prior inclusion of the studies by Badrov 2013 and Taylor 2003, who also reported data from unmedicated participants.

Collectively, I believe these inconsistencies suggest that Almeida’s work does not accurately represent the published literature according to the scope of work identified from their inclusion and exclusion criteria. Furthermore, I ascertained, from pooled analyses, that if the correct inclusion criteria were applied, a statistically significant and clinically meaningful reduction in diastolic blood pressure, of the order of -3.2 mmHg, would have been observed.

Kind regards
Neil A. Smart

Compliance with ethical standards

Conflict of interest The author declares no competing interests.

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✉ Neil A. Smart
nsmart2@une.edu.au

¹ School of Science & Technology, University of New England, Armidale, NSW 2350, Australia