

## Appraisal

## Correspondence: Response to Vaughan-Graham et al

We thank Vaughan-Graham et al for their interest in our systematic review.<sup>1</sup> It is important to distinguish between methodological flaws and concerns about the implications of research outcomes. The concerns raised are not methodological flaws with the systematic review, which was conducted in line with the Cochrane Handbook and reported according to the PRISMA guidelines. Likewise, the concerns raised are not methodological flaws with the included trials, eight of which achieved a PEDro score of 7 or 8 out of 10, as they are not features that determine the internal validity of a trial. However, the authors raise considerations about the implications of the research that warrant discussion.

*The inclusion of studies that did not use certified Bobath therapists*

We acknowledge that the included trials did not report the use of Bobath-certified therapists, and this is a potential limitation of the body of evidence for Bobath therapy. However, the assumption that Bobath therapy delivered by accredited therapists would achieve different outcomes does not appear to be founded on any evidence. Such evidence would not necessarily be useful in practical terms, as the training to achieve this accreditation is long and costly and unavailable in many countries. Fortunately, we have level one evidence for the effectiveness of many interventions in stroke rehabilitation.<sup>2-4</sup> These interventions are based on intensive, active, task-specific training. They do not require significant investment in postgraduate training and they can be implemented in clinical settings globally, including low resource settings.

*The inclusion of Bobath interventions that were not representative of the contemporary Bobath concept*

Twelve of the 13 included trials were published since 2000; hence, this research appears relatively contemporary. If contemporary Bobath therapy is so fundamentally different to non-contemporary Bobath therapy as to deliver different outcomes, it would be useful for it to have a new label. However, as mentioned in our previous letter,<sup>5</sup> it would be preferable for the physiotherapy profession to avoid named approaches. This may discourage therapists from remaining loyal to non-evidence-based therapies and encourage them to change their clinical practice as new evidence emerges. To remain abreast of current evidence, therapists can use excellent stroke clinical practice guidelines, such as those available at <https://informme.org.au/guidelines/living-clinical-guidelines-for-stroke-management> and <https://www.strokeguideline.org/>. It is worth noting that the recent UK guidelines specify that task training should be prioritised over Bobath therapy for walking and upper limb rehabilitation after stroke:

4.18: People with some upper limb movement at any time after stroke should be offered repetitive task practice as the principal rehabilitation approach, in preference to other therapy approaches including Bobath.

and

4.22: People with impaired mobility after stroke should be offered repetitive task practice as the principal rehabilitation approach, in preference to other therapy approaches including Bobath.<sup>6</sup>

*Potential dissimilarities in the dosage of treatments administered in Arya et al*

The trial by Arya et al<sup>7</sup> compared 'meaningful task-specific training' to a 'dose-matched standard training program based on the Brunstrom stage and Bobath neurodevelopmental technique'. Both groups received their allocated intervention of 1 hour a day for 4 to 5 days a week for 4 weeks. We accepted the trial authors' description of this as being a dose-matched trial.

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