

Transparency of reporting: in reply to the letter by O'Halloran

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Received: 11 February 2009 / Accepted: 12 February 2009 / Published online: 20 March 2009
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Transparency of reporting is an accepted surrogate for the methodological quality of randomised–controlled trials. A bulk of literature has been published investigating the internal validity of studies using tools and checklists comprising transparency items for analysis of the studies' publications. That is exactly what we have done in our *European Review of Aging and Physical Activity* (EURAPA) paper published in 2006 [1]. Our analysis was not a Cochrane review but rather a critical appraisal of the transparency of published data of hip protector studies. We exemplarily focused on two papers that the reviewers of the Cochrane review on hip protector [2] have rated as having very good methodological quality and which received the largest weight in the meta-analysis of institutional setting studies. One of these studies was the paper by O'Halloran et al. [3] published in 2004.

Therefore, a contact of the authors would have been unusual, not adequate and not required according to ethical guidelines. O'Halloran's criticism that we should have contacted him to receive the important information not accessible within and via the original publication is therefore inappropriate.

The aim of our analysis [1] was to confirm that the empirically proven criteria of internal validity of randomised–controlled trials as included in critical appraisal procedures and tools do not cover the question if the reported intervention was carefully prepared and optimally

implemented. However, careful preparation is exceptionally important in complex interventions like education programmes. The Medical Research Council [4] has suggested a framework on the development of complex interventions including exploration of a theory, identifying and modelling of components of the intervention and their underlying mechanism, feasibility and acceptability testing within an exploratory trial. Since many reports of complex interventions conclude that there is a lack of efficacy of the intervention programme, it is often impossible for the reader to judge if the intervention had really been ineffective or if in fact it had not been sufficiently prepared or optimally implemented. In our paper, we demonstrated that the critical appraisal procedure used in the Cochrane review on hip protectors [2] did not address these issues sufficiently. We informed the principal Cochrane reviewer, Martyn J Parker, about our findings.

It is not true as claimed by O'Halloran that transparency must inevitably be heavily affected by word limitation of papers as requested by the journal. If an author judges the information as indispensable, he or she would decide to insert this piece of information guided by triage.

Obviously, O'Halloran misunderstood the sentence inserted in our EURAPA paper "Access to the education programme is not possible neither by further references nor authors' offer to contact them". The paper of O'Halloran did not comprise a reference on the published programme. Nevertheless, the authors could have offered to make the material available to the public by a sentence like: "The education programme is available from the authors on request".

We feel that O'Halloran's letter supports the critical issues raised in our manuscript [1] since the author verifies the lack of transparency in reporting of his original hip protector study. Better reporting will help readers critically appraise the internal validity and to interpret trial results and generalisability. Therefore, we would like to encourage any

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methodological effort to increase the transparency of reporting of complex interventions. It might be time to think about an extension of the CONSORT statement with regard to complex interventions.

References

1. Meyer G, Mühlhauser I (2006) Hip protectors in the elderly: lack of effectiveness or just suboptimal implementation? *Eur Rev Aging Phys Act* 3:85–90. doi:[10.1007/s11556-006-0008-4](https://doi.org/10.1007/s11556-006-0008-4)
2. Parker MJ, Gillespie WJ, Gillespie LD (2006) Effectiveness of hip protectors for preventing hip fractures in elderly people: systematic review. *BMJ* 332:571–574. doi:[10.1136/bmj.38753.375324.7C](https://doi.org/10.1136/bmj.38753.375324.7C)
3. O'Halloran PD, Cran GW, Beringer TR, Kernohan G, O'Neill C, Orr J, Dunlop L, Murray LJ (2004) A cluster randomised controlled trial to evaluate a policy of making hip protectors available to residents of nursing homes. *Age Ageing* 33:582–588. doi:[10.1093/ageing/afh200](https://doi.org/10.1093/ageing/afh200)
4. Campbell M, Fitzpatrick R, Haines A, Kinmonth AL, Sandercock P, Spiegelhalter D, Tyrer P (2000) Framework for design and evaluation of complex interventions to improve health. *BMJ* 321:694–696. doi:[10.1136/bmj.321.7262.694](https://doi.org/10.1136/bmj.321.7262.694)