

A systematic review of outcome measures adopted in self-management interventions for stroke

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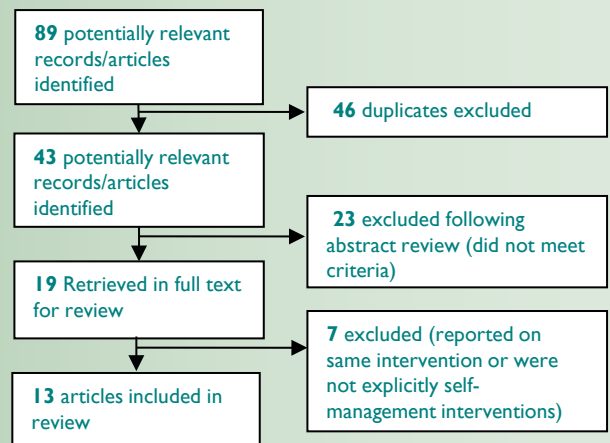
Introduction – Self-management interventions have received growing attention in promoting effective recovery following stroke [1,2]. Evaluation is problematic because the processes effecting change remain uncertain. Outcome measurement has a key role in understanding health-related change.

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Purpose - To systematically review the psychometric properties of outcome measures used in stroke self-management interventions to 1) inform researchers, clinicians and commissioners about the properties of the measures in use and 2) make recommendations for the future measurement of self-management in stroke.

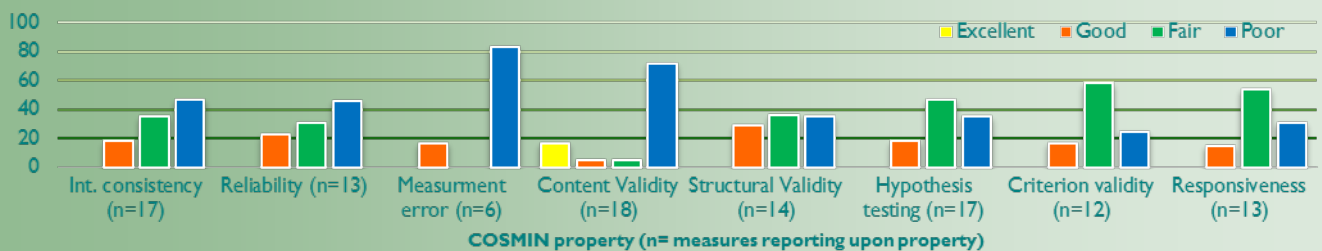
Method - Electronic databases, government & stroke organisation websites, generic internet search engines, and hand searches of reference lists for articles published between 1990-2011. Abstracts were identified against inclusion criteria and retrieved for appraisal and systematically scored, using the COSMIN checklist [3].

Figure 1: Flow chart of search results



Results - 13 studies originating from 6 countries were identified [fig 1]. 43 different measures (mean 5.08/study, SD 2.19) were adopted to evaluate self-management interventions. No studies measured self-management as a discreet concept. 11 (85%) studies included at least one measure without reported reliability and validity in stroke populations. 3 measures rated excellent for content validity; the Stroke Adapted Sickness Impact Profile (SA-SIP30); the Stroke Self-Efficacy Questionnaire (SSEQ) and the Subjective Index of Physical and Social Outcome (SIPSO)

Figure 2: Percentage of studies with COSMIN quality rating (n=21)



Conclusions - outcome measures which are indirect or proxy indicators of self-management and that have questionable reliability and validity, contribute to an inability to sensitively evaluate the effectiveness of stroke self-management interventions. Enquiry into how stroke self-management operates, would clarify the nature and range of self-management activities to be targeted and aid the selection of existing appropriate measures or the development of new measures.

1. Kendall, E., et al., (2007) Recovery following stroke: The role of self-management education. *Social Science and Medicine*, 64: p. 735-746.
2. Jones, F. & Riazi, A. (2011) Self-efficacy and self-management after stroke: a systematic review. *Disability & Rehabilitation*, 33(10): p. 797-810.
3. Mokkink L., et al (2010). The COSMIN checklist for assessing the methodological quality of studies on measurement properties of health status measurement instruments: an international Delphi study. *Qual Life Res*, 19, 539-49

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