

## Occupational Therapy for Adults With Problems in Activities of Daily Living After Stroke

Lynn A. Legg, PhD, MPH, Dip COT; Sharon R. Lewis, MSc, BA;  
Oliver J. Schofield-Robinson, BA; Avril Drummond, PhD, MSc, Dip COT, FCOT;  
Peter Langhorne, BSc, MBChB, PhD

All people carry out a daily set of home-based activities to maintain physical and mental health and to prepare body and mind for the next day's demands. These activities are referred to as activities of daily living (ADL). The goal of occupational therapy is to improve ability to self-care after stroke. Interventions used by occupational therapists include assessment, treatment, adaptive techniques, assistive technology, and environmental adaptations.

### Objectives

To assess the effects of occupational therapy interventions compared with no intervention or standard care/practice, on the ability of adults with stroke to self-care.

### Search Methods

For this update, we searched the Cochrane Stroke Group Trials Register (last searched January 30, 2017), the Cochrane Controlled Trials Register (The Cochrane Library, January 2017), MEDLINE (1946 to January 5, 2017), Embase (1974 to January 5, 2017), CINAHL (1937 to January 2017), PsycINFO (1806 to November 2, 2016), AMED (1985 to November 1, 2016), and Web of Science (1900 to January 6, 2017). We also searched grey literature and clinical trials registers.

### Selection Criteria

We identified randomized controlled trials of an occupational therapy intervention (compared with no intervention or standard care/practice) where ADL was the therapeutic medium or the goal.

### Data Collection and Analysis

Two review authors independently performed study selection, data collection, and risk of bias assessments. We also evaluated the quality of evidence using the GRADE approach. The

primary outcomes were the proportion of participants who had deteriorated or were dependent in ADL and performance in ADL at the end of follow-up.

### Main Results

In this update, we included 9 studies with 994 participants, comparing ADL-focused occupational therapy with no intervention or standard care/practice. We found low quality evidence (based on unclear risk of selection bias and an unavoidable high risk of performance and detection bias) that occupational therapy interventions increased ADL performance scores (standardized mean difference, 0.17; 95% confidence interval, 0.03–0.31;  $P=0.02$ ; Figure), reduced the risk of poor outcome (death, deterioration, or dependency in ADL; odds ratio, 0.71; 95% confidence interval, 0.52–0.96;  $P=0.03$ ), and increased extended ADL scores (odds ratio, 0.22; 95% confidence interval, 0.07–0.37)  $P=0.005$ ). Occupational therapy did not influence mortality or reduce the combined odds of death and institutionalization or death and dependency. Occupational therapy did not improve mood or distress scores. There were insufficient data to determine the effects of occupational therapy on health-related quality of life. There were insufficient data to determine carer-related outcomes or participants' and carers' satisfaction with services.

### Authors' Conclusions

ADL-focused occupational therapy after stroke may improve performance in ADL and reduce the risk of deterioration in these abilities; however, these findings have to be confirmed in high-quality, large multitherapist studies. The majority of studies to date are home based; future studies must reflect the range of health and social care settings to determine the most effective and efficient model of occupational therapy service delivery for adults with stroke.

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From the Rehabilitation and Assessment Directorate, NHS Greater Glasgow and Clyde Health Board, Paisley, United Kingdom (L.A.L.); Patient Safety Research Department, Royal Lancaster Infirmary, United Kingdom (S.R.L., O.J.S.-R.); Faculty of Medicine and Health Sciences, University of Nottingham, United Kingdom (A.D.); and Academic Section of Geriatric Medicine, Institute of Cardiovascular and Medical Sciences, University of Glasgow, United Kingdom (P.L.).

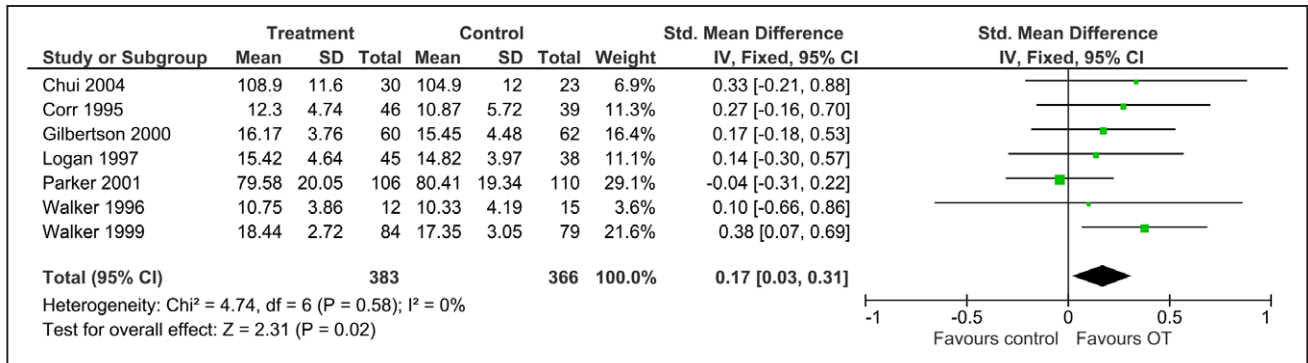
Correspondence to Lynn A. Legg, PhD, MPH, Dip COT, Rehabilitation and Assessment Directorate, NHS Greater Glasgow and Clyde Health Board, Paisley, United Kingdom. E-mail [lynnalegg@gmail.com](mailto:lynnalegg@gmail.com)

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**Figure.** Occupational therapy vs no routine input, outcome activities of daily living. CI indicates confidence interval.

### Disclosures

Drs Drummond and Langhorne were coauthors of one of the included studies. They were not involved in trial selection in this update. The other authors report no conflicts.

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(www.thecochranelibrary.com). Cochrane Reviews are regularly updated as new evidence emerges and in response to feedback, and the Cochrane Library should be consulted for the most recent version of the review.

### Reference

- Legg LA, Lewis SR, Schofield-Robinson OJ, Drummond A, Langhorne P. Occupational therapy for adults with problems in activities of daily living after stroke. *Cochrane Database Syst Rev.* 2017: CD003585. Available at: <http://dx.doi.org/10.1002/14651858.CD003585.pub3>

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