

**ADL assessment after stroke: aspects on reliability
The stability between raters, instruments and
modes of administration**

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av
Yvonne Daving

Fakultetsopponent:
Professor Erik Bautz-Holter
Fysikalisk medisin og rehabilitering
Oslo Universitet. Norge

This thesis is based on the following papers:

- I. Daving Y, Andrén E, Nordholm L, Grimby G.
Reliability of an interview approach to Functional Independence Measure.
Clin Rehabil 2001 Jun; 15(3):301-310.
- II. Daving Y, Andrén E, Grimby G.
Inter-rater agreement using Instrumental Activity Measure.
Scand J Occup Ther 2000; 7:33-38.
- III. Grimby G, Andrén E, Daving Y, Wright B:
**Dependence and perceived difficulty in daily activities in community-
living stroke survivors two years after stroke.**
Stroke 1998; 29:1843-1849.
- IV. Daving Y, Claesson L, Sunnerhagen KS.
**Agreement in activities of daily living performance after stroke in a
postal questionnaire and interview of community-living persons.**
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ADL assessment after stroke: aspects on reliability. The stability between raters, instruments and modes of administration.

Yvonne Daving

The Institute of Neuroscience and Physiology /Rehabilitation Medicine

The Sahlgrenska Academy at the University of Gothenburg, Göteborg, Sweden, 2009

Abstract

Activities in daily living, ADL are assessed as an outcome of the rehabilitation process or to be able to determine suitable interventions. The overall aim here was to analyse assessments in terms of ADL in order to investigate influences of ADL assessment and study the stability of the raters, instruments and modes of administration in assessing personal, P-ADL and instrumental, I-ADL items.

Different assessment procedures and instruments were used: the Functional Independence Measure, FIM™, the Instrumental Activity Measure, IAM and the ADL taxonomy. The participants were a convenience sample of stroke victims. The stability in assessing ADL performance was studied according to the following: 1) inter-rater agreement, 2) stability by raters, 3) systematic disagreement on the item level, 4) agreement between different modes of administration and 5) agreement between the ADL instruments on the item level.

Reliability varied for the FIM™ and IAM items, with generally good inter-rater agreement for the same interview situation but less stable agreement in a reproduced semi-structured interview according to the same procedure with a flow chart. There was generally moderate to good agreement between two modes of administration except in some items. It was also possible to maintain a general stability of the assessed ADL dependency after dichotomising the ADL data when a questionnaire was used. Problems related to the instrument and method used (i.e. the assessment procedure) and environmental influences were identified; these were different use of the categories of the scales and interpretation of the concept of ADL independence by subjects self-report conducted by different raters and modes of administration.

The study indicates that further use of a self-reported questionnaire might be an accessible mode of administration in clinical work, both in hospital and in primary care. However, the assessment procedure needs further development to suit each clinical situation, such as acute care. Complementary use of an ADL questionnaire and the semi-structured interview might facilitate clinical interventions, making them more cost effective and reducing the time required for both patients and the professional. This thesis can be seen as a part of further analyses to develop clinically valid and applicable ADL assessment tools.

Key words: outcome assessment, stroke, activities of daily living, reproducibility, questionnaire, interview

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