



UMEÅ UNIVERSITET

Umeå University Medical Dissertations, New Series No 2343

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# REHABILITATION NEEDS AFTER TRANSIENT ISCHEMIC ATTACK

A Perspective of Patient-Reported Outcome Measures

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## Akademisk avhandling

som med vederbörligt tillstånd av Rektor vid Umeå universitet för avläggande av Medicine doktorexamen framläggs till offentligt försvar i Aula Biologica, fredagen den 14e februari, kl. 09:00.

Avhandlingen kommer att försvaras på svenska.

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Department of Community Medicine and Rehabilitation

**Organization**

Umeå University  
Department of Community  
Medicine and Rehabilitation

**Document type**

Doctoral thesis

**Date of publication**

24 January 2025

**Author**

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**Title**

Rehabilitation Needs after Transient Ischemic Attack – A Perspective of Patient-Reported Outcome Measures

**Abstract**

**Background:** Transient ischemic attack (TIA) has drawn increased interest in the last 20 years. However, the long-term consequences and rehabilitation needs of TIA still remain largely unknown. The overall aims of this thesis was to evaluate long-term disabilities after TIA and their effects on patients' daily activities, social participation, and health-related quality of life (HRQoL).

**Methods:** This thesis involved two cohorts. 47 community-dwelling individuals in the sub-acute phase (4 months) after TIA in a prospective cohort study (Study I). A retrospective cohort study (Studies II–IV) assessing 431 community-dwelling adults' rehabilitation needs, mainly in the chronic phase (1–13 years) after TIA onset, made up cohort two.

Five patient-reported outcome measures (PROMS), including the Fatigue Assessment Scale with added sleep-related questions, Hospital Anxiety Depression scale, simplified Modified Rankin Scale, Stroke Impact Scale 3.0 (SIS), and the EQ-5D three-level version (EQ-5D-3L) assessed the participants.

**Results:** Assessments with PROMS were feasible, and the most common parameter affected was mood in Study I. In Study II first-ever TIA patients had higher mean scores than the general age-matched population. Depression, anxiety, heart disease, and atrial fibrillation were independently associated with increased perceived fatigue. This fatigue was significantly associated with fewer activities in everyday life. In Study III, the most reported perceived disabilities assessed by the SIS belonged to the emotions domain. No significant differences in SIS domains were observed over time. Perceived disabilities and their correlations with Activities of Daily Living ADL and participation were demonstrated consistently. In Study IV, most first-ever TIA patients were not affected regarding HRQoL, unlike TIA with stroke patients with significantly lower EQ-5D-3L index scores. A preserved HRQoL was observed over time. Factors associated significantly with poorer HRQoL in this cohort were persons with severity of lesion, more depression, anxiety, and perceived fatigue.

**Conclusion:** Our findings support the screening of long-term consequences of TIA among community-dwelling individuals. Besides secondary prevention measures after TIA, tailored rehabilitation interventions could improve the everyday lives of TIA patients.

**Keywords**

TIA, fatigue, activities of daily living, participation, health-related quality of life, long-term consequences

**Language**

English

**ISBN**

print: 978-91-8070-596-7  
PDF: 978-91-8070-597-4

**ISSN**

0346-6612

**Number of pages**

47 + 4 papers