



# Measuring Physical Activity in early dementia – results from the PrAISED feasibility study

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## Introduction

Physical activity has multiple benefits in people with dementia including positive effects of functional abilities, mood, mobility and cognition. Measuring levels of physical activity can be challenging in this population. As part of the follow-up assessment of the Promoting Activity, Independence and Stability in Early Dementia (PrAISED) feasibility study, several methods of measuring physical activity were assessed.

## Method

The follow-up assessments of the PrAISED feasibility study included 49 participants with an average age of 78 years (35% female) diagnosed with Mild Cognitive Impairment (MCI) or dementia. Physical activity was measured using accelerometers and two physical activity questionnaires, the International Physical Activity Questionnaire (IPAQ) and the LASA Physical Activity Questionnaire (LAPAQ), which was added at a later point.



## Results

The completion rates were 78% for the accelerometer and 83% for the IPAQ questionnaire. Correlation analyses between the different measurements showed very strong correlations between the IPAQ and LAPAQ questionnaires ( $r=0.86$ ;  $n=20$ ;  $p=0.00$ ) and the number of steps as measured with the accelerometer and the LAPAQ scores ( $r=0.83$ ;  $n=18$ ;  $p=0.00$ ) and a moderate correlation between IPAQ scores and number of steps ( $r=0.45$ ;  $n=35$ ;  $p=0.01$ ). Accelerometers were well tolerated by the participants.



## Conclusion

The findings indicate that both questionnaires as well as the accelerometer are valid outcome measures for physical activity in people with MCI or mild dementia. The questions included in LAPAQ were shorter and seemed slightly easier to answer for the participants. The difference in questions regarding walking (type of walking and timeframe to consider) might have led to the different correlations of these two questionnaires with accelerometer results.

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