Mobility scooters, the long term health impacts

Roselle Thoreau

UCL

WHO uses mobility scooters?

Many older people have difficulty walking and the percentage of people in this group rises with age[1]. Using a mobility scooter enables its user to travel distances previously travelled by foot without any physical effort. For an older adult with difficulty maintaining their previous levels of walking, using a mobility scooter may allow them to participate in activities they previously could not access or partake in without discomfort.

Photo by Sakaatro

1.4% of the population over 65 uses a scooter. This percentage is increasing[3].

Older adults who are scooter users are more likely to be overweight and gain more weight over time than non scooter users.

WHAT impact does mobility scooter use have on the long term health of older users?

1. Does the uptake and use of a mobility scooter correspond to a change in walking?
2. If there is a difference in walking levels of scooter users and non-scooter users, does this correspond to a difference
   - in physical health over time?
   - in physical functional ability over time?
   - in cognitive function?

WHY should we care?

For older adults regular physical activity lowers the risk of disability and the risk of developing chronic conditions associated with age[2]. **By replacing walking with a mobility scooter users risk de-conditioning the physical functionality that allows them to walk, thus reducing their mobile capability at a greater rate than if they had continued to travel without assistance**. The long term impact of mobility scooter use has not been researched at all. Empirical evidence showing the benefits and disadvantages of scooter usage in terms of physical functioning is needed to allow those, recommending or choosing to use a scooter to make a fully informed choice.

The scooter industry is worth 3.5billion pounds today and will be worth 5 billion by 2015[4].

Older adults who are scooter users show the greatest declines in upper body strength[3].

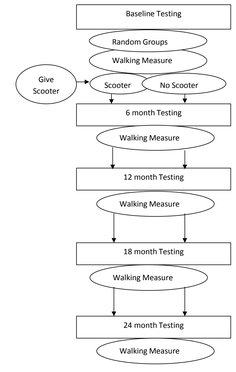
HOW will we find out?

The study will follow the health and mobility of a group of older people for two years.

This study will examine differences over time between scooter users and non-scooter users on their walking levels and on a series of physical and cognitive tests.

Participants will be randomly assigned to either be given mobility scooters or not. Scooter users will be given pedometers to record the distance they travel by foot and their scooters will be fitted with odometers to record how far they travel using the scooter. Non-scooter users will be given pedometers to record how far they travel by foot.

All participants will be monitored over time for physical and cognitive health markers including blood pressure, weight, grip strength, gait speed, anaerobic threshold, lung function, activities of daily living, processing speed, cued/free recall, and working memory. All participants will be measured across these before they are assigned to groups and every six months afterwards across a two year period.



WHAT will the impact be?

The results from this study will form the basis of two health and mobility scooter guides; one aimed at health care professionals and the other at current and potential mobility scooter users.
The guides will give advice on the potential health outcomes of scooter usage. This will give people the tools to make an informed decision on whether to use a scooter.

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For further information
Please contact r.thoreau@ucl.ac.uk.