

Impact of mobility assistive products

C. SALATINO, R. ANDRICH, S. PICCIONI, J. JUTAI. **Measuring the psychosocial impact of mobility assistive products with elderly people: Findings from Italian surveys.** *Gerontechnology* 2016;15(suppl):116s; doi:10.4017/gt.2016.15.s.661.00 **Purpose** In 2014 and 2015 the authors surveyed two samples of 79 and 65 users who had obtained mobility assistive devices from the National Health Service in Italy. The first sample was composed of powered wheelchair users, 29% of them being over 65years old (70% were mails)¹. The second sample included users of seven different mobility assistive devices: powered wheelchairs, tilting manual wheelchairs, manual wheelchairs with seating system, tracked and wheeled stair-climbing devices, trans-femoral and transtibial lower limb prostheses; 42% of them were over 65 years old (52% were males). Follow-up interviews were conducted in order to collect information about usage, effectiveness, usefulness and economic impact of their assistive device. **Method** The instruments used during interviews, which were conducted at the users' homes, included an introductory questionnaire and other widely known assessment instruments, one of them being the PIADS (Psychosocial Impact of Assistive Devices Scale)^{2,3}. **Results & Discussion** In both samples older adults aged 65 and over answered the PIADS items in greater numbers than those under 65. Some difficulties in answering the PIADS questions were noticed, which seem to be related to the kind of assistive device rather than to the age of the interviewed person. In the 2015 survey the number of subjects who did not answer the whole PIADS questionnaire was greater (Figure 1) among users of assistive devices manoeuvred by caregivers (tilting wheelchairs, manual wheelchairs with seating system, tracked and wheeled stair-climbing devices) than among users of devices providing full independence (powered wheelchairs, trans-femoral and transtibial lower limb prostheses). Another noteworthy finding is that, although all average scores obtained in the PIADS subscales indicated a positive impact of assistive devices on their users, for older people the scores were a bit lower than those obtained from younger users (Figure 2). This does not occur for electronic wheelchairs users, whose scores do not differ in relation to the age of the interviewed subjects. Building on experience gained during these and previous studies, in the next two years a battery of outcome measurement instruments will be prepared to be used in clinical practice.

References

- 1.Salatino C, Andrich R, Converti RM, Saruggia M. An observational study of powered wheelchair provision in Italy. *Assistive technology* 2015;28(1):41-52; doi:10.1080/10400435.2015.1074631.
- 2.Andrich R, Pedroni F, Vanni G. Psychosocial Impact of Assistive Devices: Italian localization of the PIADS instrument. In: Craddock GM, McCormack LP, Reilly RB, Knops HTP, editors, *Assistive technology: Shaping the future (AAATE 2003)*. Amsterdam: IOS Press; 2003; pp 917-921
- 3.Jutai J, Day H. Psychosocial Impact of Assistive Devices Scale (PIADS). *Technology and Disability* 2002;14(3):107-111

Keywords: PIADS, outcome measurement, assistive devices, elderly people
Address: CITT, IRCCS Fondazione Don Carlo Gnocchi, Milano, Italy;
E: csalatino@dongnocchi.it

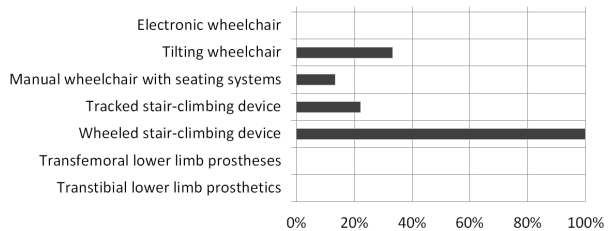


Figure 1. Percentage of subjects who did not answer the PIADS questionnaire, per category of assistive device (2015 survey).

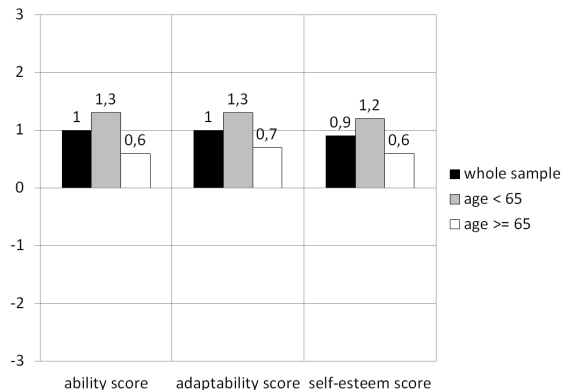


Figure 2. Comparison of PIADS subscale scores between subjects under and over 65 (2015 survey; -3: maximum negative impact; +3: maximum positive impact)