Convergent construct validity of the 400 points hand function test is better with function the subscore of the PRWE (Patient Rated Wrist Evaluation) questionnaire than with the total score

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Keywords: 400 points hand function test; PRWE questionnaire; Construct validity; Wrist

Objective. – The 400 points hand function test provides an extensive evaluation of the hand. Its validity has been studied little [1]. The Patient Rated Wrist Evaluation (PRWE) questionnaire has the advantage of having subscores for function and pain. The objective of this study was to measure the convergent validity of the 400 points hand function test with the French version of PRWE. The hypothesis was that there is a better correlation between the 400 points hand function test and the subscore for function of the PRWE-F.

Material and methods. – 30 patients (23 m, 7 w, mean age 42), 14 fractures of the radius, 16 lesions of the carpus. PRWE-F and 400 points hand function test at entry and discharge. Correlation coefficients (Pearson’s r) between the 400 points hand function test and the 3 dimensions of the PRWE-F, with corresponding 95% Confidence Intervals (CI).

Results

PRWE total/400 points:
Entry: r = –0,388 (IC: –0,657 to –0,032) P = 0,0341.
Discharge: r = –0,515 (IC: –0,738 to –0,190) P = 0,0036.

PRWE fonction/400 points:
Entry: r = –0,419 (IC: –0,677 to –0,069) P = 0,0213.
Entry: r = –0,593 (IC: –0,786 to –0,296) P = 0,0006.

PRWE douleur/400 points:
Entry: r = –0,318 (IC: –0,608 to 0,048) P = 0,0870.
Discharge: r = –0,385 (IC: –0,654 to –0,028) P = 0,0359.

Discussion. – The results confirm the hypothesis of the study. The subscore function of the PRWE presents the best correlation with the 400 points hand function test. The correlations, however moderate and with large confidence intervals, are comparable to those found in the literature (0.52) [2]. The moderate correlation may be explained by the different concepts behind the two tools: the PRWE is a real-situation test (objective). In spite of our relatively small sample, our results are significant and reinforce knowledge on the construct validity of the 400 points hand function test.

CO38-006–EN

Laboratoire Habitat Handicap (L2H) of Limoges: Evaluation of assistive technology

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Keywords: Assistive technology; Laboratoire Habitat Handicap; Evaluation

Introduction. – The Laboratoire Habitat Handicap (L2H) has been open for one year inside the rehabilitation department of the University of Limoges. It has a 70 m² floorspace with different spaces (kitchen, bathroom, bedroom, office, outdoor). It allows for both the collection of data on individual need for human help and assistive technology devices for disabled persons and evaluation in real life situations (simulation in the L2H).

Objective. – Evaluation of benefit for people who have lost independence and who use technical aids recommended in L2H.

Methods. – Telephone survey with collection rate of acquisition, abandon and satisfaction (as recommended by the HAS) of technical aids and/or new technology devices recommended in the L2H. The reasons for no acquisition or abandon of technical aids were collected. Satisfaction was assessed by four-level Likert scale.

Results. – During the first 9 months of operation (April–December 2010), 123 disabled persons used the L2H, (71 men, 52 women). Eighty-seven percent
came from the Limousin region, 71% of the department of Haute Vienne (36% of Limoges itself). Seventy five percent of the patients suffered from neurological disease. Stroke accounted for 21% of the total number of patients. A total of 222 technical aids were advocated. According to the ISO 9999, such aid was distributed as follows: 6 orthotics and prosthetics, 50 for care and personal protection (including 30 chair raisers and 10 raised toilet seats), 72 for personal mobility (including 52 wheelchairs and 14 transfer aids), 23 for domestic activities, 30 for home changes and rehabilitation equipment, 5 communication aids, 29 for handling objects and 11 cushions. Results of the rates of acquisition, abandonment and satisfaction will be provided during the conference.

Reference