

# Association between functional dependence, functional capacity, and pain in older people with severe osteoarthritis of the hip

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## Abstract

Background and aim: To determine the association between functional dependence, functional capacity, and pain intensity in older adults with hip osteoarthritis. Methods: Cross-sectional study with a consecutive sampling of 85 participants. Functional dependence (Barthel Index), functional capacity (WOMAC questionnaire), and pain (Numerical Rating Scale) were measured. Differences between functional capacity and pain, depending on functional dependence status were determined. Moreover, correlation analyses were performed between these outcomes. All analyses considered a significance level of  $p < .05$ . Results: 85 participants ( $72.26 \pm 5.69$  years old; 54.12% women) were included. Mean values for Barthel Index, WOMAC, and pain intensity were  $94.00 \pm 9.35$ ;  $44.49 \pm 17.08$  and  $6.09 \pm 3.12$ , respectively. Of the total participants, 46 were classified as independent. The analysis showed that participants classified as dependent exhibited a higher score in WOMAC-total ( $p = .001$ ), WOMAC-pain ( $p = .037$ ), WOMAC-function ( $p < .001$ ), and pain intensity ( $p = .01$ ), with medium to high effect sizes. No differences were seen in WOMAC-stiffness ( $p = .184$ ). An inversed, moderate correlation between the Barthel Index and WOMAC-total ( $p < .001$ ), WOMAC-pain ( $p = .007$ ), WOMAC-function ( $p < .001$ ) and pain intensity ( $p = .002$ ) were seen, but not in WOMAC-stiffness ( $p = .141$ ). Conclusion: Functionally dependent older adults with advanced hip osteoarthritis have lower functional capacity and higher pain intensity than those classified as functionally independent. This information provides a valuable insight for clinicians to plan future health strategies. © 2021 Asociación Española de Fisioterapeutas

## Author keywords

Aged; Frail elderly; Osteoarthritis Hip; Pain; Physical fitness