

Medical, demographic and psychological predictors of functional status and postoperative pain in patients with hip arthroplasty

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Abstract

Background. Coxarthrosis is a frequent and invalidating disease in old and young patients. In advanced stages, total hip arthroplasty is needed. Post-surgery outcomes are influenced by many independent factors.

Aims. The aim of the current study is to develop and verify a multi-component model to predict success/failure in terms of functionality and degree of postoperative pain intensity in patients undergoing hip arthroplasty.

Methods. The participants (n=55) were selected from patients hospitalized at the Rehabilitation Hospital in Cluj-Napoca. The mean age of patients was m=62.84 (sd=11.18). Assessment scales: i) Harris hip score is a measure of the quality of life after total hip arthroplasty; ii) Visual Analogue Scale for the assessment of perceived pain; iii) the patients' clinical records; iv) a scale to assess catastrophic thinking style; v) B-COPE inventory that measures the different coping behaviors used by patients.

Results. The predictors included in the physical functioning model explained 65% of the criterion variance. The variables that reached statistical significance were: the type of surgical approach, age, catastrophic thinking and physical activity. The results for the second predictive model, with postoperative pain intensity as a criterion variable, showed that predictors explained 34.6% of the criterion variance. In terms of postoperative pain intensity the most important predictor was catastrophic thinking.

Conclusions. The factors that the patient and surgeon should consider when it comes to decide on a hip arthroplasty are: the type of surgical approach, age, physical activity and catastrophic thinking style. These are the most important factors in influencing both postoperative physical functioning and pain.

Keywords: coxarthrosis, hip arthroplasty, postoperative pain, hip function, postoperative rehabilitation.