

Level of physical function six weeks post hip fracture surgery among patients in two public hospitals in Johannesburg

ABSTRACT

Introduction: Hip fractures are among the reasons for patient admission to an orthopaedic ward and are related to high rates of mortality and morbidity due to a loss of function and complications post surgery. Hip fractures are linked with significant impairment, including physical dependence and disability, reduced societal involvement, and depression. The clinical manifestation of hip fractures is apparent in the physical impairments that arise. A hip fracture is a significant contributor to permanent disability.

Aim: The goal of this research is to determine the level of physical function six weeks post hip fracture surgery among patients in two public hospitals in Johannesburg.

Methodology: An observational cross-sectional study was conducted. Sixty-two (62) patients (43 females and 19 males) from Charlotte Maxeke Academic Hospital and Chris Hani Baragwanath Academic Hospital who were six weeks post hip fracture surgery consented to participate in this study. To collect data, the following tools were used: verbal pain rating scale, Lower Extremity Functional Scale, Measure of Participation and Activities Screener, and a self-developed demographic questionnaire. Ethical clearance was obtained prior to commencement of the study. Data was collected over 22 weeks and analysed using the STATISTICA program. Descriptive and inferential tests were utilised to analyse the data.

Results: At six weeks post surgery, the majority of participants (n=36; 58.06%) presented with mild pain to no pain. Lower extremity function was significantly correlated with gender and pain factors: $p < .05$ [$F(3,58)=616.2106$ ($P < .0005$, adjusted $R^2=.97$)]. Pain was the only variable which significantly correlated with participation: $p < .05$ [$F(3,58)=295.50$, $p < .0005$, adjusted $R^2=.94$].

Conclusion: This study indicated that the postoperative functional outcome following a hip fracture in the research population in the public health system of

South Africa is generally good. The factors that predict functional and participation outcomes following a hip fracture in these patients are gender and pain level.

Implications: The findings that gender and pain affect functional outcomes and that pain affects activity and community re-integration participation level have important implications for rehabilitation clinical practice.