

Intimate Partner Violence During Recovery from an Orthopaedic Injury: An Observational Cohort Study

*Kim Madden, PhD; Sheila Sprague, PhD; Brad Petrisor, MD; Prism Schneider, MD, PhD; Ydo Kleinlugtenbelt, MD, PhD; Elisa A.M. Hackenberg, MD; Maria Villar, MD, PhD; Jeremy Hall, MD, MEd; Sofia Bzovsky, MSc; Lehana Thabane, PhD; Mohit Bhandari, MD, PhD; PRAISE-2 Investigators
McMaster University, Hamilton, ON, Canada*

Purpose: Orthopaedic injuries may lead to an increased incidence of intimate partner violence (IPV) during the recovery period as people dependent on others' help and care are at higher risk of abuse. In addition, there is a lack of understanding of how IPV affects injury recovery. In women being treated for an orthopaedic injury, we aimed to determine: (1) the number of new IPV disclosures in the 12 months following an orthopaedic injury and (2) the impact of IPV on recovery.

Methods: We enrolled 250 female participants from 6 orthopaedic fracture clinics in 4 countries. IPV disclosure, using 3 direct questions from the Woman Abuse Screening Tool, and outcomes were assessed at the participants' initial visit, and at 1, 3, 6, and 12 months following enrollment. Outcomes included: return to function (measured by the Return to Function questionnaire), injury-related complications, serious adverse events, and quality of life (measured using the EuroQol-5 Dimensions [EQ-5D]).

Results: 81 of 250 participants (33%, 95% confidence interval [CI]: 27.4% to 39.4%) had experienced IPV in their lifetime and disclosed this at their initial orthopaedic clinic appointment. 21 participants (12.4%) who did not disclose abuse at the initial visit later disclosed IPV during the 12-month follow-up. History of IPV led to a 32% lower likelihood of returning to preinjury level of function for responsibilities around the home (hazard ratio 0.68, 95% CI 0.46 to 0.99; $P = 0.046$). While the results did not reach statistical significance, estimates suggested that IPV victims also suffered more injury-related complications (16.7% vs 14.2%, $P = 0.64$) and more serious adverse events (7.8% vs 4.9%, $P = 0.12$). Participants with a history of IPV had lower health-related quality of life at their initial post-fracture visit and at all follow-up time points than participants who did not have a history of IPV. The greatest mean differences were at 6 months for both the EQ-5D Visual Analog Scale (6.1 points lower, 95% CI: -11.0 to -1.2; $P = 0.02$) and EQ-5D function index (0.07 points lower, 95% CI: -0.12 to -0.02; $P = 0.01$).

Conclusion: A surprisingly high proportion of women disclosed IPV during the 12 months following their orthopaedic injury. In addition, IPV victims suffered a more difficult recovery than patients without a history of IPV and had both delayed and reduced return to function. This study supports the need to optimize orthopaedic clinics to provide the appropriate support for asking about and providing assistance to IPV victims.