

Financial Burden of Orthopedic Trauma: A Prospective Study

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Purpose: While growing health-care costs are a serious concern and focus of recent health policy, there is a paucity of data examining the impact of traumatic injuries on patients' financial and mental well-being. In a previous retrospective study, we found that, despite high rates of insurance, orthopaedic trauma patients report high rates of worry and financial distress. The purpose of this prospective study was to better understand the impact and progression of financial distress throughout the injury experience.

Methods: This prospective cohort study included adult patients presenting to 2 Level I trauma centers with a fracture requiring operative treatment over a 2-year period. Surveys assessing financial burden, worry, physical function, and pain catastrophizing scale (PCS) were administered at multiple intervals post-surgery. Descriptive and inferential statistical analyses were performed.

Results: This study included 311 patients (interquartile range [IQR] 41.5 to 71.5 years old). The most common injuries were distal tibia (21.5%), distal fibula (19.5%), and pertrochanteric (13.9%) fractures. Patients reported having private health insurance (43%), public insurance (46%), and no insurance or "other" (11%). The majority were employed (51%) or retired (33%). At 3 months postoperatively, there was no relationship between patients' financial worry scores and their employment status, access to paid leave, or insurance status. As a result of their injury, 40% reported needing to use savings, 14% borrowed money or took out a loan, 15% could not pay bills, and 38% cut down on general expenses. Medical bills greater than \$1000 were significantly associated with not attending physical therapy after 3 months ($P = 0.036$), higher self-reported worrying ($P = 0.015$), and higher average scores on the PCS ($P < 0.05$). Women also reported significantly higher worry scores than men at 3 months postoperatively (39.89 vs 23.05, $P = 0.004$).

Conclusion: Our study found that patients with traumatic orthopaedic injuries experience substantial financial burdens and worry regardless of employment status, insurance status, or access to paid leave. Medical bills $> \$1000$ may negatively impact patient recovery by influencing decisions not to attend physical therapy, increasing anxiety, and are associated with increased pain catastrophization scores. Surgeons should be mindful of the negative impact financial burdens have on their patients medical care and recovery following injury.