

Effect of socioeconomic disadvantage on patient-reported physical outcomes after orthopaedic trauma

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INTRODUCTION: To determine the effect of socioeconomic disadvantage on patient-reported physical outcomes (PROs) after orthopaedic trauma.

METHODS: A retrospective review of PROs was performed for orthopaedic trauma patients from 2018-2023. Area of deprivation index (ADI) was utilized as a surrogate for socioeconomic disadvantage and divided into five cohorts. Outcomes of interest included PROMIS 10 GPH at 6 weeks, 3 months, 6 months, and 1 year postoperatively. A mixed model analysis was performed to compare outcomes of those in different ADI cohorts.

RESULTS: A total of 844 patients met criteria for inclusion in this study. Of these, 313 (37.1%) were in the least socioeconomically disadvantage group. There was a significant difference in the distributions of age, marital status, smoking status, and self-reported race among the ADI five cohorts ($p < 0.002$). Patients with an ADI of 1 or 2 (least socially deprived) had significantly higher PROMIS 10 GPH scores compared to their counterparts in the ADI Groups 3/4, 5/6, and 9/10, though all groups saw a similar significant improvement from 6-week to 1-year follow-up.

DISCUSSION AND CONCLUSION: Socioeconomic disadvantage has a significant effect on PROMIS 10 GPH following orthopaedic trauma procedures. However, patients in all ADI cohorts saw significant improvement in PROMIS 10 GPH up to 1-year postoperatively.

