

Social Determinants of Health Disparities are Associated with Prolonged Opioid Utilization after Total Hip Arthroplasty

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INTRODUCTION: Social determinants of health disparities (SDHDs) have been associated with increased risk of poor outcomes after total hip arthroplasty (THA). The purpose of this study was to assess if SDHDs are associated with prolonged postoperative opioid use after primary THA.

METHODS:

This study was a retrospective, single-institution cohort study of patients undergoing primary, unilateral THA for osteoarthritis between 2018 and 2022. Opioid prescriptions for these patients were queried by a national prescription drug monitoring program. Patients with an opioid prescription filled within one year preoperatively were excluded to provide only opioid naïve patients. Patients were divided into 5 cohorts: no postoperative opioid prescription filled, or last prescription filled within 0-30 days, 31-90 days, 91-180 days, or 181-360 days postoperatively. Patients were excluded if they did not fill postoperative opioid prescriptions in consecutive timeframes.

RESULTS: A total of 7,671 patients were included for analysis: 1,900 patients filled no opioid prescriptions postoperatively, 5,549 last filled an opioid prescription between 0-30 days postoperatively, 195 between 31-90 days, 12 between 91-180 days, and 15 between 181-360 days. Multivariate linear regression demonstrated that patients with a last filled prescription between 31-90 days or 181-360 had significantly higher combined social vulnerability index (SVI) scores than those who filled their last prescription between 0-30 days ($P = 0.002$ and 0.005), and patients with a last filled prescription between 181-360 days had significantly higher state area deprivation index (ADI) scores than those with a last filled prescription between 0-30 days ($P = 0.009$).

DISCUSSION AND CONCLUSION: Opioid-naïve patients undergoing THA had low rates of continued opioid prescription filling after surgery, but patients continuing to fill prescriptions in the year after surgery live in areas with greater economic and social vulnerability. Patients with SDHDs may benefit from additional education to avoid prolonged use of opioids after THA.