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MEDICAL UNIVERSITY of SOUTH CAROLINA

Health Employment and Longevity Project

Research Brief

Assessment of high-risk opioid use metrics among individuals with spinal cord injury: A brief report

Introduction

Opioids are a class of drugs used to reduce pain. *High-risk opioid use* can be defined by the dose and duration of opioid use, and using other prescriptions like benzodiazepines, sedatives, or hypnotics at the same time. High-risk opioid use is associated with increased likelihood of unfavorable outcomes including misuse, overdose, and death. Our goal was to examine high-risk opioid prescription outcomes among individuals with chronic (>1year-post injury) spinal cord injury (SCI) living in South Carolina. We used two statewide population-based databases, the SCI Surveillance Registry and state prescription drug monitoring program. We included 503 individuals who were injured in 2013 or 2014 and who survived at least 3 years post-injury. We examined prescription data from January 1, 2014 to December 31, 2017.

Key Findings

- Over half (53%) of the individuals filled an opioid prescription in years 2–3 after injury.
    - Of those, 66% were male, 57% were white, 59% had cervical SCI, and 44% were aged 40–64 years, 31% were younger than 40 and 25% were older than 65.
- Nearly half (47%) of those who filled an opioid prescription had a fill for *chronic opioids, defined as ≥60 day supply in the quarter*. In any given quarter over the study period, 52%–63% were prescribed chronic opioids, and that percentage increased over time.
- In any given quarter, 39%–49% of the individuals prescribed chronic opioids had a daily morphine milligram equivalent (MME) ≥50, and approximately 25% (range 23%–31%) of the individuals had daily MME ≥90.
- 38% of those with opioid prescriptions also had a concurrent prescription for benzodiazepines, sedatives, or hypnotics. Benzodiazepines were the most commonly filled together with opioids (76%). In any given quarter, 34%–40% of individuals prescribed chronic opioids (≥60 days) also had chronic concurrent benzodiazepines, sedatives, or hypnotics fill (≥60 days).

What does this mean?

These findings highlight concerning high-risk prescription use among those with SCI and may be used to improve prescription practices and identify individuals at risk of serious adverse outcomes. Continued study is necessary to improve our understanding the prevalence, patterns, predictors, and consequences of high-risk opioid use. Further study of providers and their prescribing patterns may help us better understand the beliefs and practices of those caring for adults with SCI. Additionally, further study of the individuals with SCI would provide the context necessary to better understand the use of opioids and benzodiazepines, sedatives, or hypnotics.

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