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# EARLY PRESCRIPTION OPIOID USE FOR MUSCULOSKELETAL DISORDERS AND WORK: A CRITICAL REVIEW OF THE LITERATURE

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**Objectives** Increasing use of prescription opioids for musculoskeletal disorders has become a major concern for workers' compensation insurers. Recent studies suggest opioids are being provided to claimants increasingly earlier and there are concerns about the impact of early opioid use on work function. This study aimed to systematically review the literature examining the association between early opioid prescriptions/use and work outcomes among workers with musculoskeletal disorders.

**Methods** MEDLINE, EMBASE, CINAHL, and Central were searched and reference lists scanned. Studies were included if they examined opioid prescriptions/use within 12 weeks of musculoskeletal disorder onset (work-related or non work-related), defined as: first symptom onset, injury date, first health-care visit, or date of filing a new workers' compensation claim. Eligible work outcomes included measures of absenteeism, work status, disability payment, and function. Two reviewers independently reviewed articles for relevance, quality (issues relevant to internal validity), and data extraction using standardised forms.

**Results** We identified three studies from North America, all based on workers' compensation claimants with lost-time claims for back disorders. All studies demonstrated significant positive associations between early prescriptions (ever received, increasing cumulative dose) and prolonged work disability (wage replacement status and duration). Nonetheless, the validity of findings was greatly hampered by two sources of bias: measurement bias related to opioid exposure, and confounding, namely confounding by indication. The presentation's focus will be to detail these key methodologic limitations.

**Conclusions** Future research is needed to clarify the relationship between early opioids and work disability, paying particular attention to improving exposure measurement and minimising confounding.