Children's Hospital of Philadelphia PolicyLab

Opioid Prescribing and Polypharmacy in Children with Chronic Musculoskeletal Pain

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Thirty percent of adults with fibromyalgia receive an opioid, but the prevalence of opioid prescribing in pediatric chronic musculoskeletal pain is unknown. The aims of this study were to determine the prevalence of and factors associated with opioid exposure and polypharmacy among children with chronic musculoskeletal pain. In this retrospective cohort study using health care claims data from 2000 to 2013, the index date was the first ICD-9 code 729.1. Included subjects were ? 2 and < 18 years old at the index date with two or more codes within 12 months and 18 months of continuous enrollment. Subjects with burns, sickle cell disease, or malignancy were excluded. Opioid exposure was defined as one or more prescriptions within six months before or any time after the index date. Polypharmacy was considered minor (2-4 medications) or major (?5 medications). Of 25,321 included subjects, 20% received an opioid and 26% experienced minor polypharmacy. Opioid exposure was associated with female sex (odds ratio [OR] = 1.27, P < 0.01), Caucasian race (OR = 1.27, P < 0.01), hospitalization (OR = 1.20, P < 0.01), and visit with anesthesiology (OR = 1.97, P < 0.01) or orthopedics (OR = 1.09, P < 0.05). Mental health codes were associated with decreased odds of opioid exposure (all P < 0.05). Children seen by a chiropractor or physiatrist had a reduced odds of receipt of an opioid (OR = 0.42 and 0.84, respectively, both P < 0.01). Twenty percent of children with chronic musculoskeletal pain received an opioid. Twenty-six percent experienced polypharmacy, with the majority receiving 2-4 medications. Increased availability of psychological and nonpharmacologic services are potential strategies to reduce opioid exposure.

Journal:

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