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Legitimate opioid prescription increases the risk for future opioid misuse in some adolescents

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Context

Opioids are extremely efficacious for management of pain. However, in recent years opioid misuse, abuse, and overdose have reached epidemic proportions.¹ Adolescents and young adults are at high risk for opioid misuse, with about 10% of 18-year-olds in the USA reporting opioid misuse in the previous 12 months.² The study by Miech and colleagues aimed to contribute further data about whether legitimate opioid prescription is an independent risk factor for future opioid misuse in adolescents.

Methods

The aim of this study was to estimate the risk for future opioid misuse among adolescents who had received a legitimate opioid prescription for pain management. The authors performed secondary analysis of a large prospective, nationally representative cohort study; the Monitoring the Future study collects annual data from college students in the USA about their attitudes, behaviours and values. The sample included 6220 participants who were surveyed in their 12th grade and followed until 23 years of age. Analyses were stratified by covariate risk factors including baseline marijuana, alcohol, and cigarette use. The authors performed cross-sectional analyses to test associations between legitimate opioid use in 12th grade and subsequent opioid misuse at age 23.

Findings

The main finding was that legitimate opioid prescription in adolescence was independently associated with a 33% increased risk for opioid misuse between 19 and 23 years of ages,

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across all participants. Participants were then stratified into 1 of 8 groups according to their future risk of drug use using baseline risk factors such as smoking, alcohol, drug use, and attitudes towards drug use. Miech and colleagues found from the risk stratification analysis that the association between legitimate opioid prescriptions and future opioid misuse was strongest among adolescents in the lowest risk strata (those with little to no previous substance use at baseline).

Commentary

Prescription opioid misuse and its related health consequences are pressing issues among adolescents and young adults in the USA. In a recent survey, around 10% of adolescents in the USA reported misusing opioids other than heroin over the past 12 months.² In order to develop appropriate prevention and mitigation efforts a better understanding of opioid epidemiology in young people is needed.

The study by Miech and colleagues is important in that it contributes further data on adolescents who received a legitimate opioid prescription for pain control and their risk of future opioid misuse. Surprisingly, future opioid misuse risk was only predicted in the subgroup of youth who had minimal previous drug exposure and those who strongly disapproved of illegal drug use at baseline. The authors speculate that for these individuals, an opioid prescription is likely to be their first experience with an addictive substance. Consequently, although opioids are highly efficacious for managing acute pain, the initial pleasurable and safe experience may encourage subsequent misuse. In contrast, among adolescents with a history of drug use, legitimate use of opioids may have made much less of an impression. Given that most efforts by clinicians to screen youth for potential opioid misuse are focused on their past or current drug use, the findings are striking and suggest that cautious opioid prescribing is needed with all children and adolescents. Recent data have shown that children are being prescribed a larger number of opioids than needed for acute pain, leaving a considerable amount of unused opioid at home.³ Leftover opioids from legitimate prescriptions are a major source of opioid misuse in adolescents; almost half of adolescents who misuse opioids get them from their own prescriptions or from prescriptions to friends or family members.⁴

Taken together, it is time to reconsider how we prescribe opioids for children and adolescents. Guidelines to reduce opioid prescriptions combined with increased use of non-opioid analgesics and non-pharmacological pain management strategies may be important first steps. Furthermore, adolescents and their parents should clearly be educated on the risks associated with opioid prescriptions and future misuse.

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Implications for practice and research

- Clinicians should consider the risk for future opioid misuse when prescribing opioids to adolescents.
- Nurses should educate adolescents and parents about the risk of opioid prescriptions.
- Future research should focus on understanding the risk of opioid prescriptions in adolescents without a history of substance use, a group that to date has been received little attention.