Introduction

• Schedule II opioid analgesic prescriptions decreased 17% between 3rd quarter 2018 and 3rd quarter 2021 (IQVIA™ US-Based Longitudinal Prescription Data)

• However, deaths involving natural or semisynthetic opioids have remained stable during this timeframe

• To examine reasons for this divergence, we analyzed substance use behaviors among adults reporting past year use of opioid analgesics

Methods

• The Researched Abuse, Diversion and Addiction-Related Surveillance (RADARS®) System Survey of Non-Medical Use of Prescription Drugs Program is a semiannual online panel-based general population survey of adults in the United States

• Each respondent completes a questionnaire asking about the use and misuse of prescription and illicit drugs

• Data from seven survey launches conducted between September 2018 through September 2021

• Complex survey design and non-response weighting used to create nationally representative estimates

• Problematic substance use was assessed using the Drug Abuse Screening Test (DAST-10) scores and nonprescription fentanyl (NPF) use among respondents who reported past year use of hydrocodone, hydromorphone, morphine, oxycodone, or oxymorphone

• Calibration weighting was used to create nationally representative estimates

• Generalized linear mixed models were used to estimate prevalence and changes across launches

Results

• The number of adults who used prescription opioid analgesics in the past year decreased from 45.8 (95% CI: 44.7-46.9) million in September 2018 to 40.4 (95% CI: 39.2-41.5) million in September 2021 (Figure 1)

• The number who had problematic substance use in the past year (endorsed 4+ DAST-10 items) remained consistent, 3.9 (95% CI: 3.6-4.2) million in September 2018 and 4.0 (95% CI: 3.7-4.4) million in September 2021 (Figure 2)

• The percentage of adults who used opioids in the past year who had problematic substance use increased by 3.5% (p<0.001) per launch on average

• The number of prescription opioid using adults who also reported use of NPF in the past year increased 71% (0.5 million in September 2018 to 0.9 million in September 2021)

• In the September 2021 launch, most respondents (57%) who used NPF in the past year in the general population (1.5 million) also reported use of a prescription opioid analgesic in the past year (0.9 million)

Conclusions

• Declines in the number of adults who reported use of prescription opioids in this nationally representative online survey corresponded with dispensing data obtained from retail pharmacies

• Reasons for the discrepancy between declines in prescribing but stable mortality involving prescription opioids could be:
  – The percentage of those who used prescription opioids and had problematic substance use increased
  – The number of adults who report use of NPF and prescription opioids is rising rapidly.

Strengths

• Nationally representative sample of adults in the United States

• Weighting used to control for selection biases

Limitations

• Cross-sectional

• Based on respondent self-report which may be affected by recall bias

• Limited to respondents 18 or older