

# Barriers to Healthcare Utilization and Adolescent Prescription Drug Misuse During COVID-19

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## Introduction

- **Prescription drug misuse (PDM)** is a significant contributor of **overdose fatalities** among **U.S. adolescents ages 12-17**.<sup>1</sup>
- The **onset of the coronavirus disease (COVID-19) pandemic** led to **changes in healthcare service delivery** due to social distancing and quarantine mandates.
- Resultingly, **sources of prescription drugs and quality of mental health or substance use disorder treatment decreased** for adolescents.<sup>2-4</sup>

## Objectives

This study aimed to determine **if there is an association between experiencing barriers to healthcare utilization and meeting diagnostic criteria for PDM** among adolescents ages 12-17 years old living in the U.S. during COVID-19.

**Prevalence differences (PDs)** were also examined between each year of data after stratifying by type of barrier.

## Methods

- **Complex survey-weighted data** from the 2021-2022 **National Survey on Drug Use and Health (NSDUH)** were utilized.
- A **modified Poisson regression analysis with robust error variance** was performed to measure the association of interest for this study using **multivariable prevalence ratios (PRs)**.
- PDM diagnosis was defined as a **dichotomous** outcome for **in alignment with the diagnostic criteria in the DSM-5**.
- **Barriers to medical, mental health, or substance use treatment/care** consisted of appointments being moved to telehealth, appointments being delayed/cancelled, delays in receiving prescriptions, and an inability to access care at all.

## Results

**Table 1.** Demographic characteristics of U.S. adolescents ages 12-17 years old by PDM diagnostic criteria status, NSDUH 2021-2022 (N=21,274)

Characteristic	Meets PDM diagnostic criteria n=494 (2.15%) n (%) <sup>*</sup>	Does not meet PDM diagnostic criteria n=20,780 (97.85%) n (%) <sup>*</sup>
<b>Barrier to healthcare utilization experienced</b>		
No barrier(s) experienced	83 (0.32%)	6,664 (32.05%)
Appointments moved to telehealth	275 (1.66%)	12,396 (57.45%)
Appointments delayed/cancelled	25 (0.12%)	1,412 (6.94%)
Delays in getting necessary prescriptions	10 (0.05%)	220 (0.94%)
Inability to access care at all	1 (<0.01%)	88 (0.47%)
<b>Sex assigned at birth</b>		
Male	210 (0.96%)	10,774 (50.33%)
Female	284 (1.18%)	10,006 (47.52%)
<b>Race/ethnicity</b>		
Non-Hispanic White	234 (1.12%)	10,359 (49.45%)
Non-Hispanic Black/African-American	60 (0.21%)	2,925 (13.34%)
Non-Hispanic Native American/Alaskan Native	7 (0.03%)	313 (0.68%)
Non-Hispanic Native Hawaiian/Pacific Islander	2 (<0.01%)	73 (0.39%)
Non-Hispanic Asian	17 (0.10%)	969 (5.87%)
Non-Hispanic multiracial	37 (0.12%)	1,264 (3.21%)
Hispanic	137 (0.57%)	4,877 (24.92%)
<b>Total annual family income</b>		
<\$20,000	77 (0.37%)	2,961 (13.18%)
\$20,000-\$49,999	150 (0.57%)	5,105 (24.99%)
\$50,000-\$74,999	59 (0.30%)	2,817 (12.95%)
≥\$75,000	208 (0.91%)	9,897 (46.74%)
<b>Covered by health insurance<sup>†</sup></b>		
Yes	484 (2.10%)	20,028 (93.55%)
No	10 (0.05%)	752 (4.31%)
<b>Metropolitan status</b>		
Large metro	219 (1.17%)	9,685 (54.60%)
Small metro	194 (0.65%)	7,742 (30.43%)
Nonmetro	81 (0.33%)	3,353 (12.82%)
<b>Overall self-reported health status</b>		
Excellent	78 (0.36%)	6,670 (31.99%)
Very good	182 (0.86%)	8,162 (38.18%)
Good	153 (0.64%)	4,869 (23.19%)
Fair/poor	81 (0.29%)	1,079 (4.49%)
<b>Past-year major depressive episode</b>		
Yes	283 (1.04%)	3,979 (18.97%)
No	256 (1.11%)	16,801 (78.88%)
<b>Past-year other SUD<sup>‡</sup></b>		
Yes	1 (0.02%)	1 (<0.01%)
No	493 (2.13%)	20,779 (97.85%)

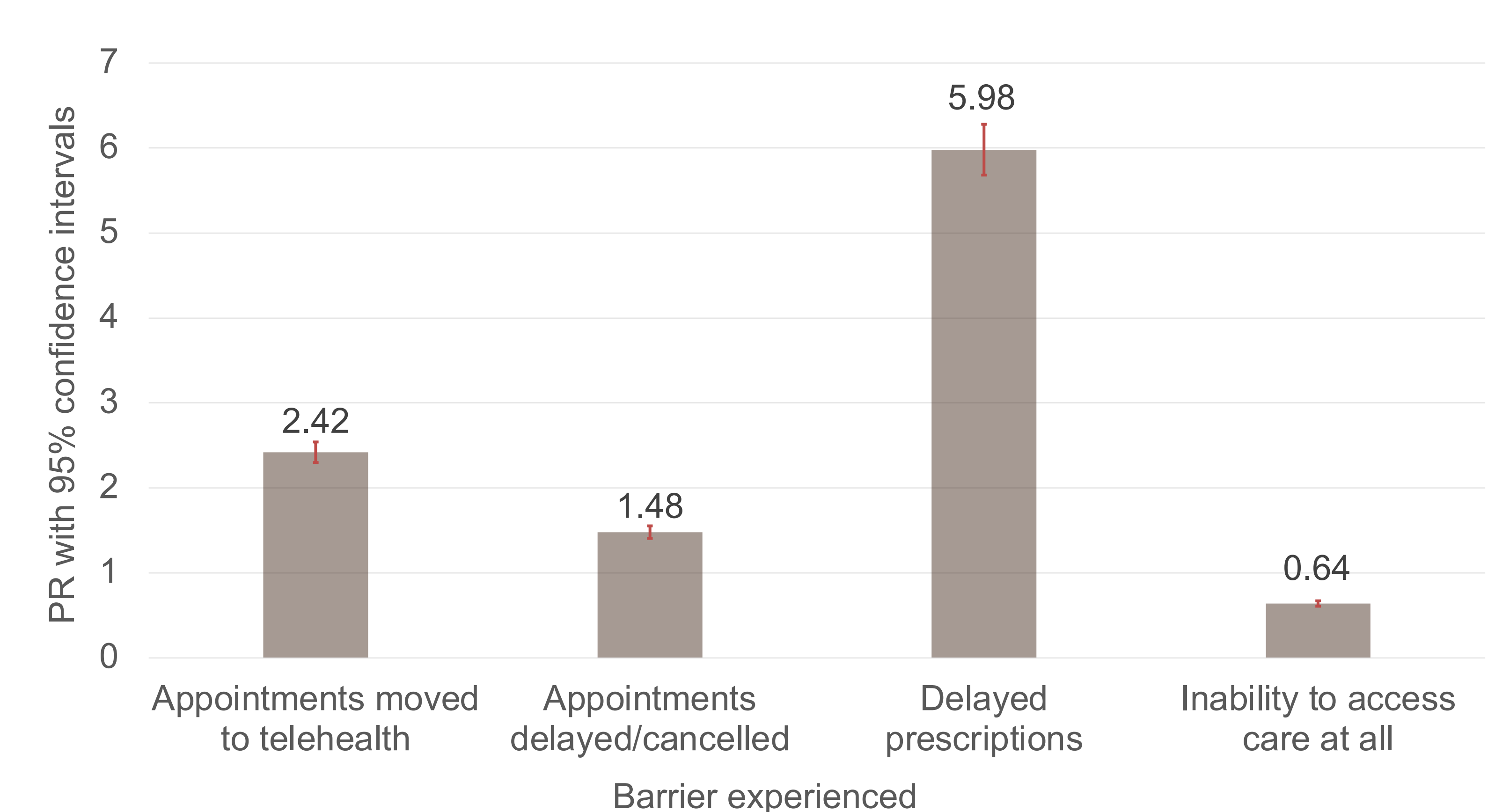
NSDUH – National Survey on Drug Use and Health, PDM – prescription drug misuse, SUD – substance use disorder.

<sup>\*</sup>Values of *n* represent unweighted frequencies while percentiles are weighted.

<sup>†</sup>Consists of Medicare, Medicaid/CHIP, military insurance, private insurance, or other health insurance.

<sup>‡</sup>Consists of alcohol use disorder, cannabis use disorder, and/or illicit drug use disorder.

**Figure 1.** Prevalence<sup>\*</sup> of adolescent PDM diagnosis by type of barrier to healthcare utilization experienced, NSDUH 2021-2022 (N=21,274)



<sup>\*</sup>Compared to adolescents who did not experience any barriers to healthcare utilization

- **Prevalence differences** of adolescent PDM diagnosis between 2021 and 2022 were **not statistically significant**.

## Conclusions

- Compared to adolescents who did not experience any barriers to healthcare utilization during COVID-19, **adolescents who experienced appointment- or prescription-related barriers had a higher prevalence of meeting PDM diagnostic criteria**.
- Further research is needed to examine the **efficacy of healthcare treatment and delivery** used during the pandemic that are still currently in practice and **identify patterns of adolescent prescription drug sourcing** during the pandemic.

## References & Disclosures

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