Prevalence of Illicit Drug and Non-Medical Prescription Drug Use among Pregnant Women in the United States

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Introduction

- Illicit drug use and non-medical prescription drug use (NMU) are dangerous for both mother and fetus acutely and could lead to teratogenic changes that might affect the child for life
- Assessing illicit drug use and NMU in pregnancy is challenging
  - Women are hesitant to disclose such use
  - Accuracy of screening tools for clinical use is questionable
  - Traditional probability surveys do not paint a timely picture of use because of excessive delays between collection and publication and their relative immutability
- The purpose of this study is to describe national prevalence estimates of last month illicit or non-medical prescription drug use among pregnant women in the United States in 2018

Methods

- The RADARS® Survey of Non-Medical Use of Prescription Drugs (NMURx) Program is a cross-sectional, online, anonymous survey of the general adult population in the United States
- Women who self-identified as pregnant and between 18-49 years of age in the 3rd quarter 2018 survey launch were included for analysis
- Prevalence estimates of last month use of any illicit drug or NMU of any prescription pain reliever, sedative, or stimulant were generated
  - NMU was defined as use in any way not directed by a healthcare provider
- Differences in prevalence of last month use in women with various demographic characteristics were tested using Rao-Scott chi-square tests

Results

Figure 1. Prevalence of last month drug use among pregnant women, 2018

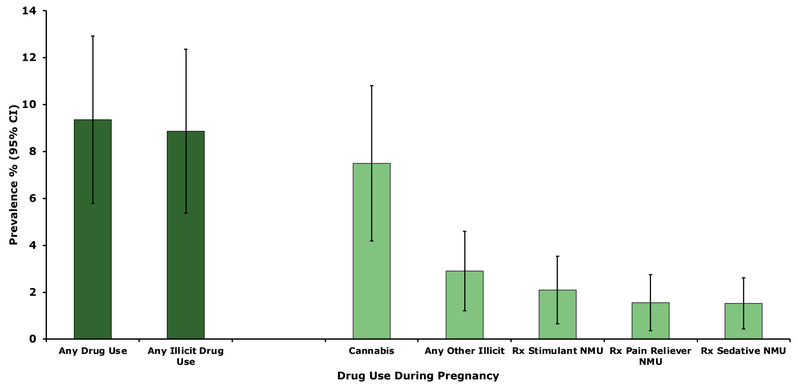

Table 1. Prevalence of drug use among pregnant women, 2018

Drug Use During Pregnancy	Last Month Drug Use Prevalence, % (95% CI)	Estimated No. of Pregnant Women
Any Drug Use/NMU[a]	9.35 (5.79, 12.92)	228,291
Prescription Pain Reliever NMU	1.55 (0.36, 2.75)	37,896
Prescription Sedative NMU	1.52 (0.43, 2.61)	37,104
Prescription Stimulant NMU	2.09 (0.65, 3.53)	50,974
Cannabis	7.49 (4.18, 10.80)	182,806
Any Illicit Drug Use[b]	8.86 (5.37, 12.36)	216,296
Any Illicit excluding Cannabis Use	2.90 (1.20, 4.59)	70,691

[a]Any illicit drug use, cannabis use, or NMU of prescription pain relievers, sedatives, stimulants, or cannabinoids
[b]Illicit drugs included anabolic steroids not prescribed by a healthcare professional, alkyl nitrites, nitrous oxide, cannabis, cocaine powder, crack cocaine, gamma hydroxybutyrate/gamma butyrolactone, heroin, ketamine, kratom, lysergic acid diethylamide, 3,4-methylenedioxymethamphetamine, mephedrone, mescaline, methamphetamine, non-pharmaceutical amphetamine, non-pharmaceutical fentanyl, phencyclidine, psilocybin or mushrooms, salvia, or synthetic cannabinoid receptor agonists

- An estimated 9.35% of pregnant women reported illicit drug use or NMU of a prescription drug in the last month (Figure 1/Table 1)
- The prevalence of illicit drug use in pregnant women was 8.86%
  - The single illicit drug with the highest prevalence of use among pregnant women was cannabis (7.49%)
- The prevalence of last month NMU of prescription drugs in pregnant women was highest for stimulants (2.09%)
- The prevalence of last month illicit drug use or NMU of prescription drugs was higher for
  - Pregnant Hispanic women compared to pregnant non-Hispanic women
  - Pregnant women who had experienced acute or chronic pain in the past year compared to those who had not
- No difference in prevalence of last month illicit drug use or NMU of prescription drugs across groups with other demographic characteristics assessed (Table 2)

Results

Table 2. Last month prevalence of drug use by demographic characteristics of pregnant women, 2018

Demographic Characteristic	Last Month Any Drug Use/NMU[a] Prevalence, % (95% CI)	p-value[b]
Census Region		
Northeast	12.69 (1.62, 23.75)	0.6483
Midwest	Suppressed[c]	
South	8.73 (3.75, 13.72)	
West	11.20 (2.74, 19.66)	
Ethnicity		
Hispanic	22.46 (9.82, 35.10)	0.0015
Non-Hispanic	6.73 (3.34, 10.11)	
Race[d]		
White	9.01 (5.16, 12.87)	0.7382
Black	10.83 (0.78, 20.88)	0.7355
Other	Suppressed	-
Marital Status		
Married	7.41 (3.39, 11.42)	0.1401
Divorced/Separated/Widowed	7.49 (0.44, 14.53)	
Never Married	15.15 (5.81, 24.49)	
Education		
High School or Less	11.12 (3.05, 19.20)	0.7423
Some College	10.25 (3.38, 17.12)	
Bachelor's Degree or Higher, Trade School	7.89 (3.16, 12.62)	
Household Annual Income		
<$50,000	11.12 (5.35, 16.90)	0.5093
$50,000-99,999	6.72 (2.51, 10.92)	
≥$100,000	9.29 (0.32, 18.25)	
Employed in the last week		
Yes	7.49 (2.68, 12.30)	0.3296
No	11.09 (5.86, 16.31)	
Chronic Pain in the last year		
Yes	24.29 (12.34, 36.25)	0.0004
No	6.71 (3.11, 10.32)	
Acute Pain in the last year		
Yes	21.49 (10.64, 32.34)	0.0013
No	6.61 (3.04, 10.18)	

[a]Any illicit drug use, cannabis use, or NMU of prescription pain relievers, sedatives, stimulants, or cannabinoids
[b]p-value for chi-square test of differences in proportions
[c]Suppressed due to disclosure risk (numerator <5 respondents) or statistical validity considerations (denominator <25 respondents)
[d]Respondents can endorse multiple races, and therefore significance was tested between white and non-white, and between black and non-black, respectively

Conclusions

- Illicit drug use and NMU of prescription drugs is not uncommon among pregnant women in the US and is largely driven by cannabis use
- Illicit drug use and NMU of prescription drugs during pregnancy appears to disproportionately affect Hispanic women and women who have experienced pain in the past year

Disclosures

The Researched Abuse, Diversion and Addiction-Related Surveillance (RADARS®) System is supported by subscriptions from pharmaceutical manufacturers, government and non-government agencies for surveillance, research and reporting services. RADARS System is the property of Denver Health and Hospital Authority, a political subdivision of the State of Colorado. Denver Health retains exclusive ownership of all data, databases and systems. No subscriber was involved in the conception, analysis, drafting, or review of this abstract or poster.