UNIVERSITY OF NORTH CAROLINA
BEHAVIORAL HEALTH WORKFORCE
RESEARCH CENTER

Policy Brief
September 2025

Understanding How the Workforce is Assessing Mental Health and Substance Use Disorders During Pregnancy

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Background

Substance use disorders (SUDs) and mental health disorders (MHDs) are a significant public health issue for individuals in the perinatal period (i.e., conception to one year postpartum). SUDs/MHDs are the most common complications of pregnancy (Byatt et al., 2020; Dagher et al., 2021) and perinatal substance use is linked with multiple adverse obstetric and neonatal outcomes (Prince & Ayers, 2019). Among pregnant women in the U.S. in 2022, 9.6% reported using illicit drugs and 11% reported consuming alcohol within the last 30 days (SAMHSA, 2023). MHDs can also have detrimental effects on women during the perinatal period and their children. Estimates suggest approximately 12.4% of pregnant women have major depressive disorder (Le Strat et al., 2011) and, of the 20% of women who experience perinatal anxiety, a quarter develop symptoms during pregnancy (Ayers et al., 2025).

Early identification and intervention can substantially mitigate the risks associated with perinatal SUDs and MHDs (Andrews et al., 2018; Howard & Khalifeh, 2020). Nationally, screening pregnant women for a SUD/MHD is recognized as a healthcare priority associated with benefits that include identification of undiagnosed cases, reduced healthcare costs, and improved health outcomes (Reese et al., 2023; Waqas et al., 2022). Despite recommendations for universal screening, there is limited evidence on how frequently screening for SUD and MHD occurs during pregnancy (Byatt, 2020; Faisal-Cury et al., 2021). Existing work suggests that the U.S. healthcare workforce is inconsistent in screening pregnant women, resulting in missed opportunities for early intervention and support (Choi et al., 2022; Sidebottom et al., 2021). Implementation of screening remains difficult even in states in which universal screening for perinatal MHDs is mandated (Reese et al., 2023; Waqas et al., 2022). A lack of consistent and widespread perinatal screening poses challenges for adequately identifying and addressing SUD and MHD related needs (Faisal-Cury et al., 2021; White et al., 2024).

Understanding the current landscape is a critical first step toward improving screening practices. The purpose of this study was to examine screening practices and treatment initiation patterns among pregnant women through analysis of data from the National Survey of Drug Use and Health (NSDUH). Study objectives sought to: (1) determine the proportion and characteristics of pregnant women screened for substance use by healthcare providers; (2) determine the proportion and characteristics of pregnant women with a mental health condition *and* discussed their mental health related concerns with a member of their healthcare team; (3) examine the proportion of pregnant women who both screened positive

or substance use/who have a mental health condition *and* received SUD and/or MHD treatment during pregnancy, and the types of treatment they received; (4) assess whether being screened for substance use is associated with a higher odds of receiving SUD treatment among pregnant women who reported using a substance; and, (5) assess whether speaking to a healthcare provider about mental health concerns is associated with a higher odds of receiving MHD treatment among women with a mental health condition.

Methods

The study sample was drawn from the NSDUH, a nationally representative annual survey of non-institutionalized individuals aged 12 and older in the U.S. conducted between 2021-2023. The sample (*SAMHSA*, 2025) was restricted to females between the ages of 12-49. Pregnancy was identified by those who responded "yes" to being pregnant at the time of survey completion. The first dependent variable, substance use screening, was identified when pregnant respondents reported being screened by a health care provider in the last 12 months for alcohol consumption and/or the use of marijuana or other illegal drugs. The second dependent variable was whether pregnant respondents had a mental health condition in the past 12 months *and* had spoken to a health care professional about their mental health concerns in this same time period. The NSDUH includes items assessing any mental illness, serious mental illness, major depression, suicidal thoughts or behaviors, generalized anxiety disorder, and serious psychological distress; based on their responses, pregnant women were classified as either meeting or not meeting the threshold for one or more of these mental health conditions.

First, descriptive statistics were calculated to determine the following: 1) the differences in demographic characteristics and SUD treatment attendance among pregnant women who were screened for substance use versus pregnant women who were not screened for substance use; and 2) the differences in demographic characteristics and MHD treatment attendance among pregnant women with a MHD who spoke to a member of their health care team about their mental health related concerns versus pregnant women with a MHD who did *not* speak to a member of their health care team about their mental health related concerns. Second, two adjusted logistic regression models were conducted to assess: 1) the odds of attending SUD treatment among pregnant women who disclosed alcohol and/or drug use in the last 12 months *and* were screened for substance use in the last 12 months; and 2) the odds of attending MHD treatment for among pregnant women with a mental health condition and spoke to a member of their health care team about their mental health concerns. All estimates were computed following SAMHSA's guidelines to account for the stratified cluster sample design and weights for the 3-year pooled dataset (SAMHSA, 2022).

Key Findings

Of the total sample of women (weighted *N*=70,570,158; unweighted *N*=69,094), 2.9% (weighted *n*=2,037,128; unweighted; *n*=2,051) were pregnant.

Substance Use Screening During Pregnancy

Among pregnant women, 64.7% (weighted *n*=1,317,044; unweighted *n*=1,317), reported they were screened for substance use by a healthcare provider in the last 12 months and 35.3% (weighted *n*=720,084; unweighted *n*=734) were not screened by a healthcare provider for substance use in the last 12 months (Table 1). Pacific Islander/Alaskan Native women (98.7%), women between the ages of 26-34 (72.6%), and women with a college degree or higher (74.8%) were more likely to report receiving a SUD screening during pregnancy compared to Black/African American women (51.3%), women who were between the ages of 12-15 years old (36.5%), and women with an eighth grade education or less (27.2%). Women who were insured by Medicaid (57.3%) were screened for a SUD less than women insured by a private plan (74.5%) (Table 1).

In examining only pregnant women who reported alcohol and/or drug use in the last 12 months (weighted *n*=1,184,650; unweighted *n*=1,276), 73% were screened for substance use; however, only 32,267 (3.8%) attended SUD treatment. Of these women who attended any type of SUD treatment, the highest proportion attended outpatient SUD treatment (98.8%) (Table 2). An adjusted logistic regression model including only pregnant women who reported alcohol and/or drug use in the last 12 months was conducted to determine if any factors significantly predicted attending SUD treatment in the same time period (Table 3). Screening for alcohol and/or drug use on its own did not significantly increase the odds of attending SUD treatment; however, when a healthcare provider engaged in a follow-up conversation about substance use among those who reported substance use, respondents had 10.3 times higher likelihood of attending SUD treatment (OR=10.3, 95% CI: 2.02—53.37) compared to those who did not receive a follow-up conversation from their healthcare provider. Additionally, several demographic factors were significantly associated with the likelihood of *not* attending substance use treatment. Hispanic individuals had 94% lower odds of attending SUD treatment (OR = 0.06, 95% CI: 0.08–0.42) compared to their White counterparts. Those with incomes more than twice the federal poverty threshold had 80% lower odds of attending SUD treatment (OR = 0.20, 95% CI: 0.03–1.01) compared to those living at or below the poverty level. Being uninsured had 90% lower odds of attending treatment (OR = 0.10; 95% CI: 0.08–1.51) compared to their insured counterparts. Additionally, compared to pregnant women residing in a large metropolitan area, pregnant women residing in a non-metropolitan area were 94% less likely to attend SUD treatment (OR=0.06, 95% CI: 0.04—0.51) (Table 3).

Pregnancy, Mental Health Symptoms, and Discussing Mental Health Concerns with A Healthcare Provider

Among pregnant women with a MHD in the last 12 months (weighted *n*=508,069; unweighted *n*=553), 30.4% (weighted *n*=154,378; unweighted *n*=158) discussed these concerns with a member of their healthcare team (Table 4). Among pregnant women with a MHD and who spoke to a member of their healthcare team about their mental health concerns, the highest proportion were Asian (55.3%), had an eighth grade education or less (81.3%), and were privately insured (52.8%), compared to the lowest proportion comprised of multi-racial women

(21.2%), those with a ninth to twelfth grade education (16.6%), or those who were insured by Medicaid (41.9%) or uninsured (41.9%) (Table 4). Of the 30.4% of women with a MHD who discussed these concerns a member of their healthcare team, 84.4% received mental health treatment and 78.5% of these women went to outpatient treatment (Table 2). An adjusted logistic regression model including only pregnant women who reported a mental health symptom in the last 12 months revealed that talking to their healthcare provider about their mental health concerns resulted in a 5.7 times higher likelihood of attending MHD treatment (OR = 5.7; 95% CI: 2.6–12.3); however, no other demographic characteristics were found to be significant (Table 5).

Policy Implications

Just over two-thirds of all pregnant women reported being screened for substance use during pregnancy. Further, women who were Pacific Islander/Hawaiian and White, between the ages of 26-34, had a college degree or higher, and had private insurance were screened at higher rates than their pregnant counterparts. These gaps in SUD disorder screening underscore *why* universal screening for SUDs is important, *how* to screen for SUDs, *what* to say when someone reports substance use symptoms, and *where* treatment options are available and accessible. Policies that enhance SUD/MHD screening and the accessibility of substance use and mental health services for pregnant women are imperative. For example, screening for SUDs and MHDs accompanied by follow-up with treatment options is one quality improvement measure that has been successfully implemented by the Connecticut Department of Social Services. An additional example of a successful measure is the Obstetrics Pay-for-Performance Program, which incentivizes healthcare providers to conduct comprehensive visits with pregnant *and* postpartum women who are insured by Medicaid through screening for and addressing substance use and behavioral health concerns (MACPAC, 2021). Policymakers might consider implementing similar pay-for-performance models that promote screening for SUDs/MHDs during the perinatal period, especially for women insured by Medicaid. Further, it is critical that healthcare providers discuss SUDs/MHDs and treatment options with patients in a way that is nonpunitive and non-stigmatized (Daehn et al., 2022). As such, policies that require providers to complete perinatal behavioral health continuing education could assist in provider confidence building and competency in serving women in the perinatal period.

In terms of MHDs, less than one-third of pregnant women with a MHD discussed their mental health concerns with a member of their healthcare team. Those who discussed these concerns were more than five times more likely to attend treatment for an MHD. Though these data do not indicate inquiries about screening for a MHD during pregnancy, the results call for policies to increase access to mental healthcare during pregnancy. For example, Massachusetts Medicaid has embedded supports for healthcare providers who treat pregnant and postpartum women that include behavioral health supports (e.g., psychiatric consultation), training opportunities, and incentivization via reimbursement for behavioral health screening (Center for Health Care Strategies, 2024). Greater advocacy for similar policies that support the expansion and development of integrated behavioral health care and provider training will be

needed to address and treat perinatal MHDs (Harrison, 2024). Additionally, the expansion of telehealth and mobile behavioral health services for rural and underserved populations could increase access to needed care. Both telehealth and mobile services reduce geographical barriers to accessing care and present opportunities for specialized perinatal SUD and MHD services (Girmay, 2024). Future policy endeavors might consider how these service delivery modalities can improve patient engagement given the increased accessibility and convenience they afford.

Funding Statement

This project is supported by the Substance Abuse and Mental Health Services Administration (SAMHSA) and the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS) under grant number U81HP46529 Cooperative Agreement for a Regional Center for Health Workforce Studies. This information or content and conclusions are those of the author and should not be construed as the official position or policy of, nor should any endorsements be inferred by SAMHSA, HRSA, HHS or the U.S. Government.

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Table 1. Sociodemographic characteristics of pregnant women who were screened for a substance use disorder by a member of their healthcare team

	Total pregnant women	Total pregnant woman that received screening for a substance use disorder (SUD)
	N	*N* (%)
	2,037,128	1,317,044 (64.7)
Age		
12-15 yrs	9,802	3,574 (36.5)
16-17 yrs	37,739	20,807 (55.1)
18-25 yrs	475,814	267,472 (56.2)
26-34 yrs	1,025,558	745,002 (72.6)
35-49 yrs	488,215	280,190 (57.4)
Race/Ethnicity		
White	1,122,239	799,601 (71.3)
Black/African American	326,438	167,570 (51.3)
Native American/Alaskan Native	11,717	8,085 (69.0)
Pacific Islander/Hawaiian	14,867	14,671 (98.7)
Asian	151,002	100,221 (66.4)
Multi-Racial	37,831	28,517 (75.4)
Hispanic/Latinx	373,034	198,379 (53.2)
Income level		
At or below the poverty level	470,966	231,570 (49.2)
Two times higher than poverty level	351,629	221,235 (62.9)
More than two times higher than poverty level	121,352	863,227 (71.1)
Educational attainment		
Eighth grade or less	45,783	12,442 (27.2)
Ninth grade to twelfth grade	159,717	79,343 (49.7)

High school degree/GED	434,598	223,062 (51.3)
College credits to associate’s degree	563,443	378,936 (67.3)
College degree or higher	833,587	623,261 (74.8)
County Status		
Large metro	1,141,347	753,363 (66.0)
Small metro	616,402	396,486 (64.3)
Nonmetro	279,379	167,196 (59.8)
Medicaid	777,008	445,478 (57.3)
Private insurance	1,037,418	772,932 (74.5)
Uninsured	1,141,347	121,399 (70.1)

Table 2. Pregnant women who reported alcohol and/or drug use (*n*=1,184,650) or mental health symptoms (*n*= 508,069) and attended treatment in the last 12 months, with types of treatment received.

Substance use during pregnancy		Mental health condition during pregnancy	
	Pregnant women who reported alcohol and/or drug use during pregnancy (*n*=1,184,650)		Pregnant women with mental health condition during pregnancy (*n*= 508,069)
	Alcohol and/or drug use and received a SUD screening (*n*= 864,849; 73%)		Mental health condition and spoke to a healthcare provider about mental health concerns (*n*= 154,378; 30.4%)
Went to SUD treatment in the last 12 months	32,267 (3.8)	Went to treatment for a MHD) in the last 12 months	130,346 (84.4)
Type of SUD treatment attended*		Type of MHD treatment attended*	
Inpatient	951 (2.9)	Inpatient	59,722 (45.8)
Residential	839 (2.6)	Residential	63,559 (48.8)
Outpatient	31,871 (98.8)	Outpatient	102,259 (78.5)

*Individuals could have been counted more than once if they attended more than one type of treatment

Table 3. Logistic regression models of pregnant women who reported alcohol and/or drug use during pregnancy and the odds of attending substance use treatment.

	Odds Ratio	95% CI	*p*
Screened for alcohol and/or drug use during pregnancy by a healthcare provider	1.9	[0.17, 20.51]	0.60
Follow-up conversation initiated by a healthcare provider when patient screened positive	10.3	[2.02, 53.37]	<.01
Age	1	[0.52, 2.18]	0.86
Education level	0.9	[0.52, 1.40]	0.52
Race (REF: White)			
Black/African American	0.5	[0.13, 3.24]	0.59
Native American/Alaskan Native	0.3	[0.03, 1.91]	0.18
Native Hawaiian/Pacific Islander	—	—	—
Asian	—	—	—
Multi-racial	0.8	[0.35, 11.46]	0.75
Hispanic	0.06	[0.08, 0.42]	<.01
Income level (REF: Low income)			
Up to two times the federal poverty threshold	0.8	[0.11, 5.51]	0.80
More than two times the federal poverty threshold	0.2	[0.03, 1.01]	<.01
Location (REF: large metro)			
Non-metro area	0.06	[0.04, 0.51]	<.01
Small metro area	5.5	[0.81, 37.74]	0.08
Insured by Medicaid	3.5	[0.66, 17.73]	0.14
Insured by private plan	0.6	[2.21, 1.82]	0.39
Uninsured	0.1	[0.08, 1.51]	<.05

Table 4. Sociodemographic characteristics of pregnant women with a mental health condition *and* who spoke with a member of their healthcare team about their mental health concerns.

	Total pregnant women with mental health condition	Total pregnant woman with mental health condition *and* initiated a conversation about their mental health with a member of their healthcare team
	N (%)	*N* (%)
	508,069 (25%)	154,378 (30.4%)
Age		
12-15 yrs	445 (4.5)	85 (19.2)
16-17 yrs	4,737 (12.6)	2,479 (52.3)
18-25 yrs	133,271 (28)	35,540 (26.7)
26-34 yrs	264,801 (25.8)	79,896 (30.2)
35-49 yrs	104,813 (21.5)	36,377 (34.7)
Race/Ethnicity		
White	286,513 (25.5)	72,744 (25.4)
Black/African American	72,058 (22.1)	18,086 (25.1)
Native American/Alaskan Native	1,950 (16.6)	933 (47.9)
Pacific Islander/Hawaiian	54 (0.4)	0 (0)
Asian	15,061 (1)	8,330 (55.3)
Multi-Racial	10,969 (29)	2,327 (21.2)
Hispanic/Latinx	121,462 (32.6)	51,958 (42.8)
Income level		
At or below the poverty level	131,042 (27.8)	39,524 (30.2)
Two times higher than poverty level	108,469 (30.8)	21,189 (19.5)
More than two times higher than poverty level	267,546 (22.1)	92,654 (34.6)

Educational attainment		
Eighth grade or less	2,099 (4.6)	1,707 (81.3)
Ninth grade to twelfth grade	27,317 (17.1)	4,524 (16.6)
High school degree/GED	109,968 (25.3)	36,065 (32.8)
College credits to associates degree	197,834 (35.1)	59,847 (30.3)
College degree or higher	170,851 (20.5)	52,235 (30.6)
County Status		
Large metro	273,622 (24)	96,585 (35.3)
Small metro	172,292 (27)	44,681 (25.9)
Nonmetro	62,154 (22.2)	13,112 (21.1)
Medicaid	219,420 (28.2)	64,154 (41.9)
Private insurance	240,456 (23.2)	80,833 (52.8)
Uninsured	61,592 (35.6)	64,154 (41.9)

Table 5. Logistic regression models presenting the odds of pregnant women with a MHD who attended treatment discussing their depression-related concerns with their health care team.

	Odds Ratio	95% CI	*p*
Pregnant women with a MHD who spoke to a member of their healthcare team about their mental health concerns	5.7	[2.66, 12.30]	<.01
Age	1.24	[0.71, 2.16]	0.44
Education level	1.40	[0.95, 2.80]	0.09
Race (REF: White)			
Black/African American	0.88	[0.31, 2.49]	0.80
Native American/Alaskan Native	1.25	[0.17, 9.30]	0.83
Native Hawaiian/Pacific Islander	-	-	-
Asian	0.47	[0.08, 2.93]	0.41
Multi-racial	1.49	[0.39, 5.72]	0.56
Hispanic	1.66	[0.57, 4.86]	0.35
Income level (REF: Low income)			
Up to two times the federal poverty threshold	0.81	[0.34, 1.94]	0.62
More than two times the federal poverty threshold	0.52	[0.20, 1.37]	0.18
Location (REF: large metro)			
Non-metro area	1.39	[0.49, 3.9]	0.52
Small metro area	1.28	[0.20, 1.37]	0.55
Insured by Medicaid	0.80	[0.24, 2.74]	0.72
Insured by private plan	0.50	[0.15, 1.64]	0.25
Uninsured	0.80	[0.30, 2.10]	0.64