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Center for Behavioral Health Statistics and Quality

The CBHSQ Report

Short Report

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WOMEN OF CHILDBEARING AGE AND OPIOIDS

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INTRODUCTION

The past decade has seen a rise in the proportion of infants who have been exposed to opioid drugs, such as heroin or prescription pain relievers (e.g., oxycodone, hydrocodone), at birth.[1] Between 2000 and 2009, opioid use among women who gave birth increased in the United States from 1.19 to 5.63 per 1,000 hospital births per year.[1] A tandem increase has been seen in the incidence of neonatal abstinence syndrome (NAS) among newborns—a neonatal drug withdrawal syndrome primarily caused by maternal opioid use—during the same period (from 1.20 per 1,000 hospital births per year in 2000 to 3.39 per 1,000 hospital births per year in 2009).[1]

Dependence on opioids during pregnancy is associated with an increased risk of adverse outcomes for infants and mothers. The incidence of NAS in newborns born to opioid-dependent women is between 70 and 95 percent.[2] Research suggests that newborns with NAS (most commonly in the context of opioid misuse during pregnancy, although other drugs have also been implicated) are more likely than all other hospital births to have low birthweight or respiratory complications.[1] Untreated heroin and other opioid misuse during pregnancy is also associated with increased risk of placental abruption, preterm labor, maternal obstetric complications, and fetal death.[2,3,4]

The standard treatment for opioid use disorder during pregnancy is methadone or buprenorphine maintenance therapy.[2,3,4,5,6] Exposure to methadone or buprenorphine in utero can result in NAS; however, using these substances among pregnant women with opioid use disorder improves outcomes for mothers and infants compared with the outcomes for mothers and infants who receive no treatment.[2,3,4,5,6] Maintenance therapy with methadone or buprenorphine provides a steady concentration of opioids in the pregnant woman's blood, preventing the fetus from repeatedly experiencing cycles of opioid toxicity and withdrawal.[2,6] Pregnant women who receive maintenance therapy with methadone or buprenorphine often require comprehensive medical treatment, including routine prenatal care.[2,6] For example, research has shown that pregnant women admitted to substance use treatment for opioid misuse often need referrals to routine prenatal medical care.[2,6]

In Brief

- Combined 2007 to 2012 National Surveys on Drug Use and Health (NSDUHs) indicate that an annual average of about 21,000 pregnant women aged 15 to 44 misused opioids in the past month. The percentage of women misusing opioids in the past month was lower among pregnant women aged 15 to 44 than among nonpregnant women in that age range (0.9 vs. 2.6 percent).
- NSDUH data also indicate that, among pregnant women, past month opioid misuse was more common among those aged 15 to 17 and 18 to 25 than among those aged 26 to 34 (2.8 and 1.5 percent vs. 0.5 percent) and more common among those living below the federal poverty level than among those living at or above the federal poverty level (1.6 vs. 0.7 percent).
- According to the 2012 Treatment Episode Data Set, 21,553 female substance use treatment admissions aged 15 to 44 were pregnant at treatment entry. Of these 21,553 admissions, 22.9 percent reported heroin as a substance of misuse, and 28.1 percent reported any nonheroin opioid as a substance of misuse.
- The 2012 National Survey of Substance Abuse Treatment Services data indicate that 13 percent of outpatient-only substance use treatment facilities and 13 percent of residential treatment facilities offered special programs for pregnant/postpartum women; within hospital inpatient treatment facilities, 7 percent offered special programs for pregnant/postpartum women.

This issue of *The CBHSQ Report* includes data from the National Survey on Drug Use and Health (NSDUH), the Treatment Episode Data Set (TEDS), and the National Survey of Substance Abuse Treatment Services (N-SSATS) to examine opioid misuse and treatment among women of childbearing age. NSDUH data provide information on opioid misuse among women of childbearing age in the general population, whereas TEDS data focus on women of childbearing age who have been admitted to substance use treatment for opioid misuse. N-SSATS data describe specialized, relevant services offered to women within the nation's substance use treatment facilities.

NSDUH is an annual survey of the U.S. civilian, noninstitutionalized population aged 12 years or older. In the NSDUH section of this report, opioid misuse is defined as use of heroin or nonmedical use of prescription-type pain relievers in the past month.[7,8] Combined data from the 2007 to 2012 NSDUHs are used to estimate opioid misuse among women aged 15 to 44 who reported that they were pregnant at the time of the interview. Comparisons are made with those who were not pregnant (referred to as "nonpregnant women" in the NSDUH section of this report). NSDUH data from 2007 to 2012 were combined to ensure that there were adequate numbers of pregnant women (including pregnant women who were users of opioids) to generate reliable estimates. In the combined 2007 to 2012 NSDUH data, about 145,000 females were aged 15 to 44. Because NSDUH data were combined from multiple years, however, the estimates that are presented in this report represent annual averages.

TEDS is a national data system that contains information on people aged 12 years or older who were admitted to substance use treatment facilities annually. State substance use agencies report the data to the Substance Abuse and Mental Health Services Administration. Treatment programs receiving any public funds are requested to provide TEDS data on publicly and privately funded clients. TEDS collects information on up to three substances of misuse that led to the treatment episode. In this report, TEDS data are used to examine the characteristics of admissions aged 15 to 44 who were pregnant at the time of treatment entry, including the type of opioid misuse, whether the use of methadone or buprenorphine was a part of the treatment plan,[9,10] and health insurance status. Comparisons are made with female admissions aged 15 to 44 who were not pregnant at the time of admission (referred to as "nonpregnant female admissions"). Notably, TEDS records represent admissions rather than individuals because a person may be admitted to treatment more than once.

N-SSATS is an annual survey of all known substance use treatment facilities, both public and private. In this report, N-SSATS data are used to describe substance use treatment facilities that offer special programs or groups for pregnant/postpartum women, including treatment setting,[11] operation of an opioid treatment program (OTP),[9,12,13] opioid detoxification services offered, child care services offered, and whether facilities accepted Medicaid. When applicable, comparisons are made with those facilities that did not offer specially designed programs or groups to pregnant/postpartum women.

For NSDUH, the observed difference between estimates is evaluated in terms of statistical significance. Statistical significance is based on the *p* value of the test statistic and refers to the probability that a difference as large as that observed would occur due to random variability in the estimates if there were no differences in the percentages being compared. In this report, the significance of observed differences is reported at the .05 level when the *p* value is defined as less than or equal to the designated significance level. Because TEDS and N-SSATS both involve censuses and actual counts rather than estimates, statistical significance and confidence intervals are not applicable. For these two datasets, the differences between subgroups mentioned in the text of this report have Cohen's h effect size greater than or equal to 0.20, indicating that they are considered to be meaningful.

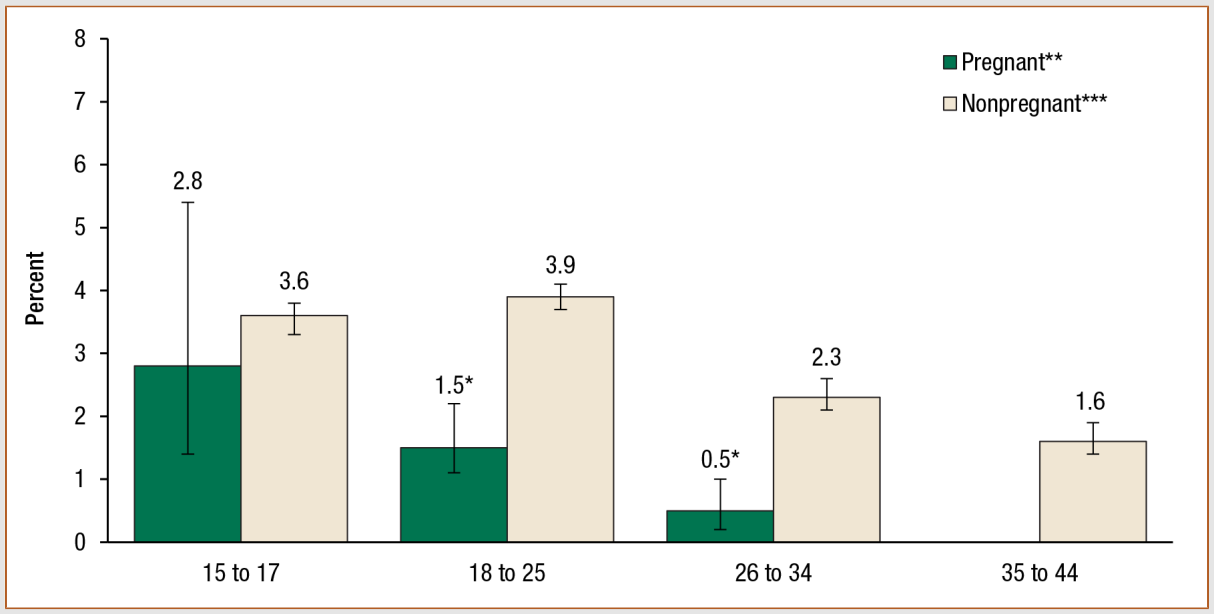
NATIONAL SURVEY ON DRUG USE AND HEALTH

Past Month Opioid Misuse

Combined data from the 2007 to 2012 NSDUHs indicate that an annual average of about 21,000 pregnant women aged 15 to 44 misused opioids in the past month. The percentage of women misusing opioids in the past month was lower among pregnant women aged 15 to 44 than among nonpregnant women in that age range (0.9 vs. 2.6 percent).

To better understand the differences and similarities in opioid misuse among women aged 15 to 44 by their pregnancy status, comparisons were made between pregnant and nonpregnant women in age subgroups. Past month opioid misuse was lower among pregnant women aged 18 to 25 than among same-aged nonpregnant women (1.5 vs. 3.9 percent) (Figure 1). Similarly, past month opioid misuse was lower among pregnant women aged 26 to 34 than among same-aged nonpregnant women (0.5 vs. 2.3 percent).

Figure 1. Past month opioid misuse among women aged 15 to 44, by pregnancy status and age: 2007 to 2012



* Difference between the estimates for pregnant women and nonpregnant women is statistically significant at the .05 level.

** Difference between the estimates for the two youngest age groups (i.e., 15 to 17 and 18 to 25) and the 26 to 34 age group is statistically significant at the .05 level.

*** Difference between the estimates for the two youngest age groups and the two oldest age groups (i.e., 26 to 34 and 35 to 44) is statistically significant at the .05 level.

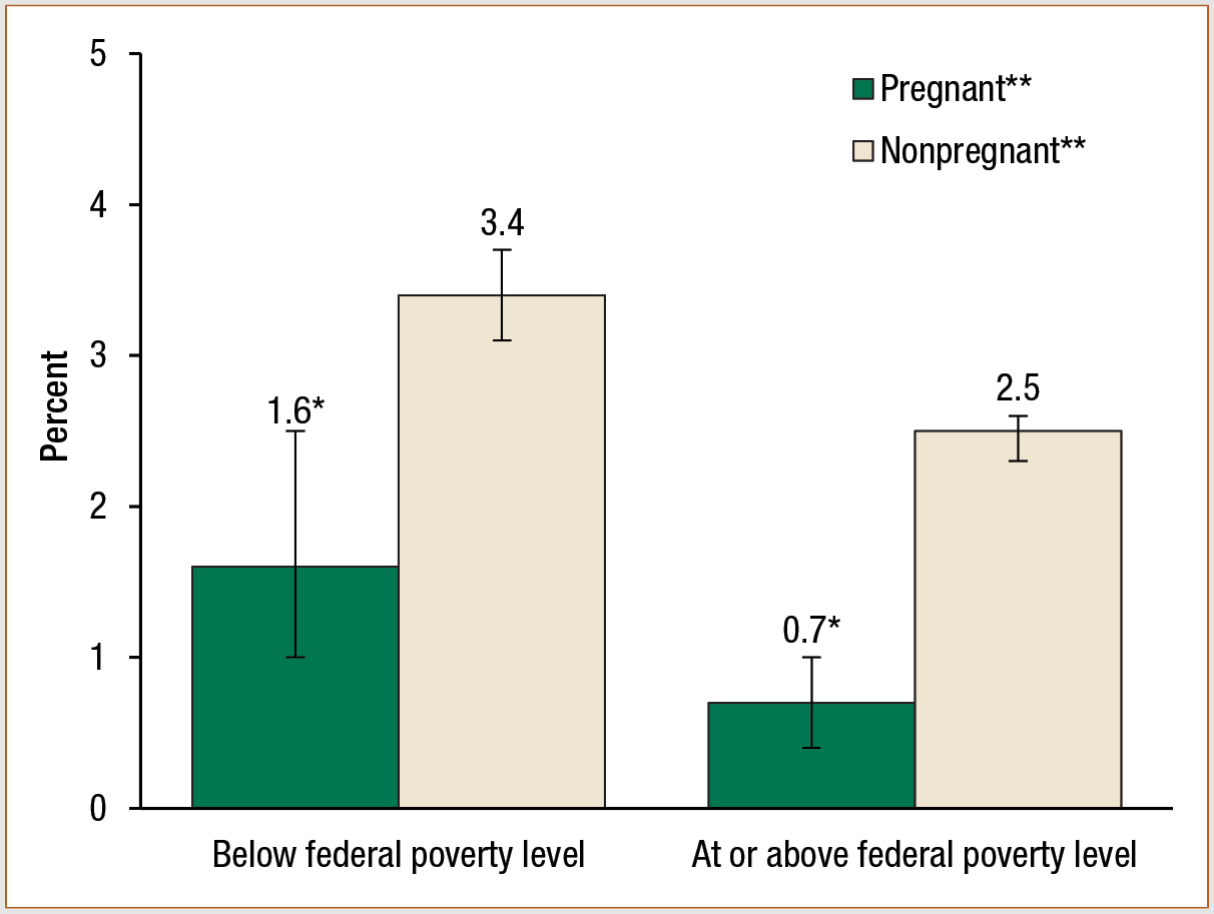
Note: Estimate for pregnant women aged 35 to 44 is suppressed because of low precision.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Surveys on Drug Use and Health (NSDUHs), 2007 to 2012.

Making comparisons between pregnant and nonpregnant women of varying age groups provides an opportunity to determine whether opioid misuse differs by pregnancy status in the same way across different age groups (e.g., among women aged 18 to 25, are pregnant women more or less likely to misuse opioids than nonpregnant women?). Another way of understanding opioid misuse among pregnant women is to see whether age-related patterns (e.g., higher misuse by younger women) occur regardless of pregnancy status. Nonpregnant women aged 18 to 25 (3.9 percent) and nonpregnant women aged 15 to 17 (3.6 percent) were more likely to misuse opioids in the past month than nonpregnant women aged 26 to 34 (2.3 percent) and nonpregnant women aged 35 to 44 (1.6 percent). Similarly, among pregnant women, those aged 15 to 17 and 18 to 25 were more likely to misuse opioids in the past month than pregnant women aged 26 to 34 (2.8 and 1.5 percent vs. 0.5 percent). The estimate of opioid misuse for pregnant women aged 35 to 44 was suppressed because of low precision.

In addition to identifying whether there is a relationship among age, pregnancy status, and opioid misuse, comparisons were also made by poverty status (i.e., whether the respondent was living at or above the federal poverty level or below it). Past month opioid misuse was less common for pregnant women living below the federal poverty level than for nonpregnant women living below the federal poverty level (1.6 vs. 3.4 percent); misuse was also less common for pregnant women living at or above the federal poverty level than for nonpregnant women living at or above the federal poverty level (0.7 vs. 2.5 percent) (Figure 2). When looking at differences among pregnant women by their poverty status, pregnant women who were living below the federal poverty level were more likely than pregnant women living at or above the federal poverty level to be past month opioid misusers (1.6 vs. 0.7 percent; Figure 2). This pattern was also true for nonpregnant women aged 15 to 44: those living below the federal poverty level were more likely than nonpregnant women living at or above the federal poverty level to be past month opioid misusers (3.4 vs. 2.5 percent; Figure 2).

Figure 2. Past month opioid misuse among women aged 15 to 44, by pregnancy status and federal poverty level: 2007 to 2012



* Difference between the estimates for pregnant and nonpregnant women is statistically significant at the .05 level.

** Difference between the estimates for women living below the federal poverty level and women living at or above the federal poverty level is statistically significant at the .05 level.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Surveys on Drug Use and Health (NSDUHs), 2007 to 2012.

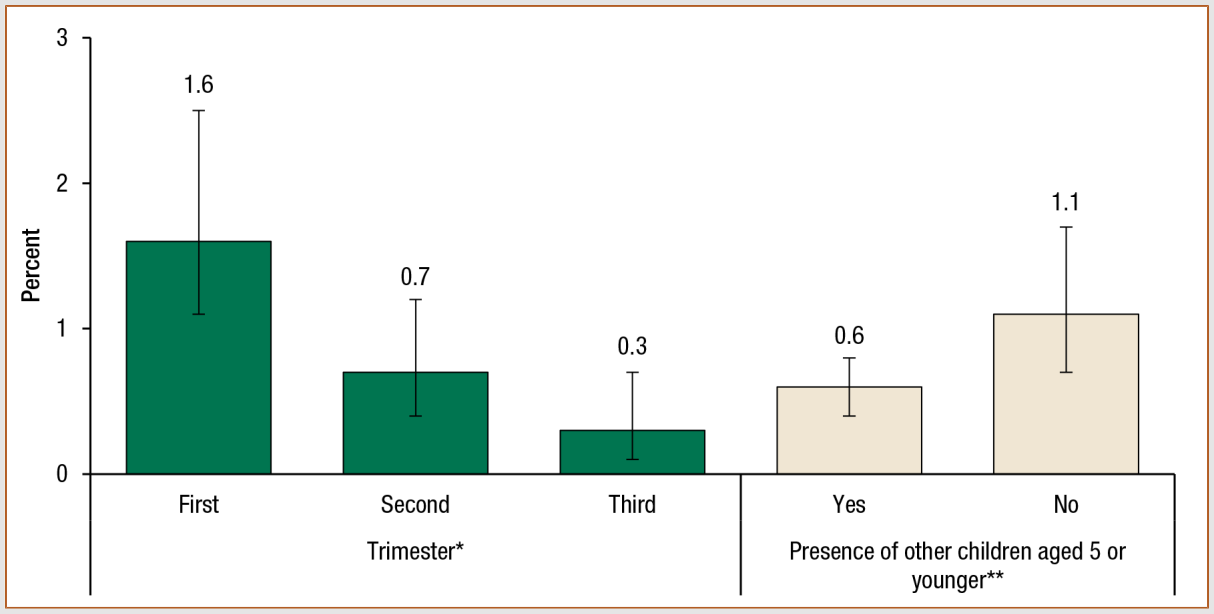
Opioid Misuse by Pregnancy Trimester

NSDUH also collects data on the number of months that women are pregnant. This information can be then used to examine past month opioid misuse among pregnant women according to the trimester of their pregnancies. Pregnant women who were in their first trimester (i.e., 1 to 3 months) at the time of the interview were more likely than women in their second and third trimesters (i.e., 4 to 6 months and 7 to 9 months, respectively) at the time of the interview to have misused opioids in the past month. Specifically, 1.6 percent of pregnant women in their first trimester misused opioids in the past month, compared with 0.7 percent of those in their second trimester and 0.3 percent of those in their third trimester (Figure 3).

Opioid Misuse by Presence of Other Children in the Household

The presence of other children aged 5 years or younger in the household can also be determined with NSDUH data. Pregnant women aged 15 to 44 who had other children aged 5 or younger in their household were less likely than pregnant women without other children aged 5 or younger in their household to have misused opioids in the past month (0.6 vs. 1.1 percent, respectively; Figure 3).

Figure 3. Past month opioid misuse among pregnant women aged 15 to 44, by pregnancy trimester and presence of other children aged 5 or younger: 2007 to 2012



* Difference between the estimate for the first trimester and the two later trimesters (i.e., second and third) is statistically significant at the .05 level.

** Difference between the estimate for presence of other children aged 5 or younger and no presence of children aged 5 or younger is statistically significant at the .05 level.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Surveys on Drug Use and Health (NSDUHs), 2007 to 2012.

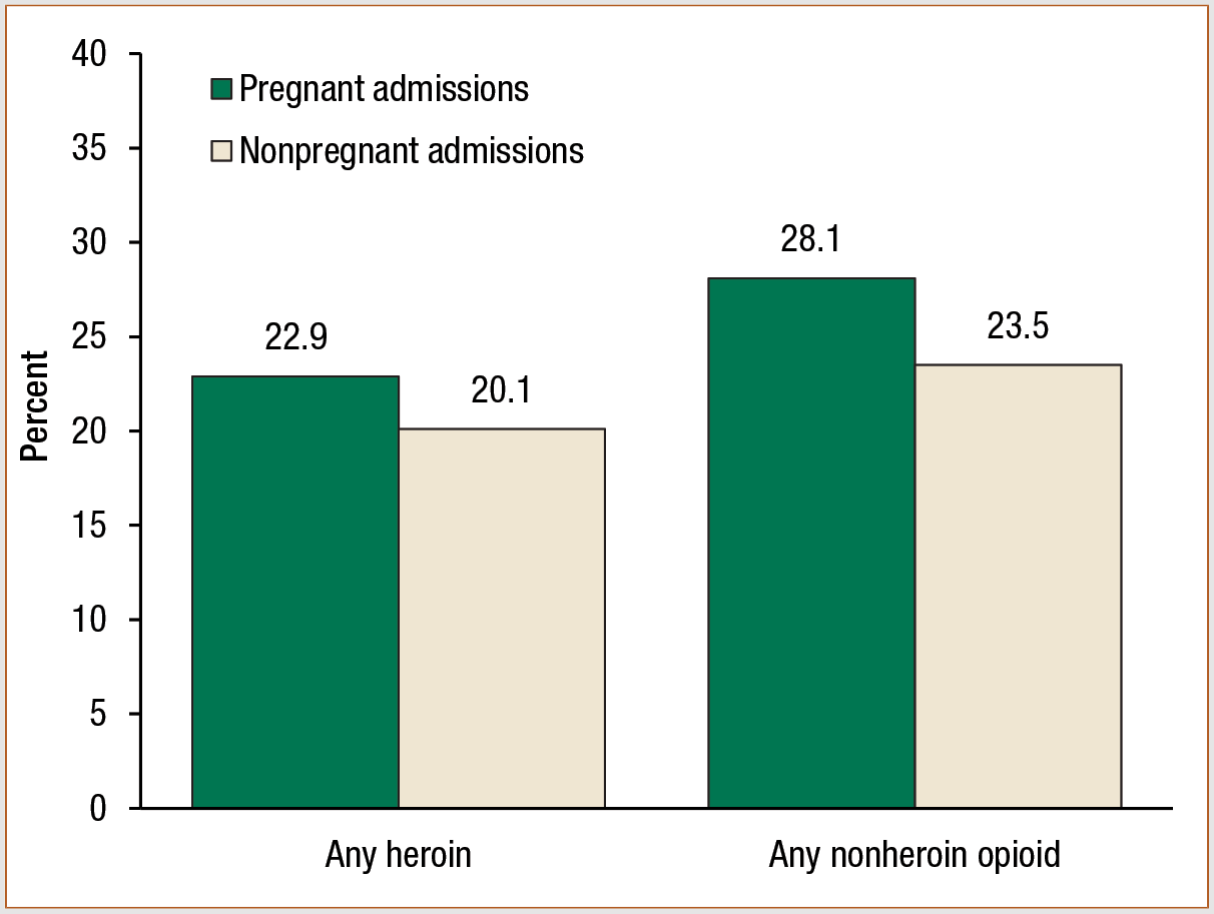
TREATMENT EPISODE DATA SET

Substance Use Treatment Admissions

Although NSDUH data can help define the scope of opioid misuse among pregnant women and identify vulnerable subgroups within the population of pregnant women, TEDS data inform the number of female admissions (pregnant and nonpregnant) who are getting help for opioid misuse, their insurance status, and whether medication-assisted treatment was part of their substance use treatment program. In 2012, TEDS collected data on 428,662 female admissions to substance use treatment who reported that they were aged 15 to 44 at treatment entry; of these, 5.0 percent—21,553 admissions—were pregnant at the time of admission. Pregnant female admissions were aged 26.5 years on average, whereas nonpregnant female admissions aged 15 to 44 were an average age of 29.3 years.

As noted previously, TEDS collects data on the primary substance of misuse and up to two additional substances of misuse reported at the time of admission. In this report, the percentages reflect the misuse of any heroin or nonheroin opioid, whether it be the primary, secondary, or tertiary substance of misuse. Nearly one-quarter (22.9 percent) of pregnant treatment admissions reported any heroin use in 2012, and more than one-quarter (28.1 percent) reported any nonheroin opioid misuse (Figure 4).[14] Similar proportions of nonpregnant female admissions reported any heroin use (20.1 percent) or any nonheroin opioid misuse (23.5 percent).

Figure 4. Reported opioid misuse among female admissions aged 15 to 44, by pregnancy status: 2012



Source: SAMHSA, Center for Behavioral Health Statistics and Quality, Treatment Episode Data Set (TEDS), 2012.

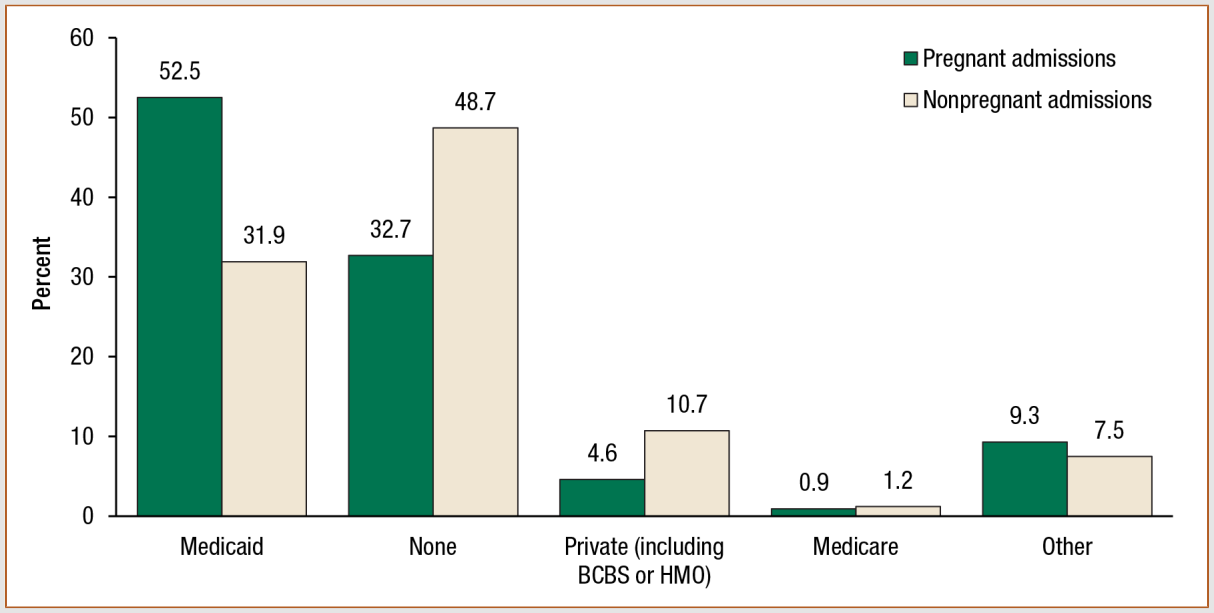
Health Insurance Status of Treatment Admissions

More than half (52.5 percent) of pregnant female admissions aged 15 to 44 were covered by Medicaid at the time of treatment entry (Figure 5). Coverage by Medicaid at the time of entry was more common for pregnant women than for nonpregnant women (52.5 vs. 31.9 percent). Nearly one-third (32.7 percent) of pregnant female admissions aged 15 to 44 did not have health insurance, and 4.6 percent reported having some form of private health insurance at the time of treatment entry. Pregnant women were less likely to report lacking health insurance coverage at the time of treatment entry than nonpregnant women (32.7 vs. 48.7 percent) (Figure 5).

Medication-Assisted Opioid Therapy

TEDS collects data on whether medication-assisted opioid therapy was planned as part of a client's treatment program. Medication-assisted opioid therapy within TEDS is defined as opioid therapy using methadone or buprenorphine.[9,10] About half of pregnant female admissions aged 15 to 44 who reported heroin use (48.5 percent) had medication-assisted opioid therapy as a part of their treatment plan, compared with fewer than one-quarter (23.4 percent) of nonpregnant female admissions with heroin use (Figure 6). Also, for female admissions aged 15 to 44 who reported nonheroin opioid misuse, a larger proportion of pregnant female admissions had medication-assisted opioid therapy as a part of their treatment plan (36.9 percent) compared with nonpregnant female admissions (15.5 percent).

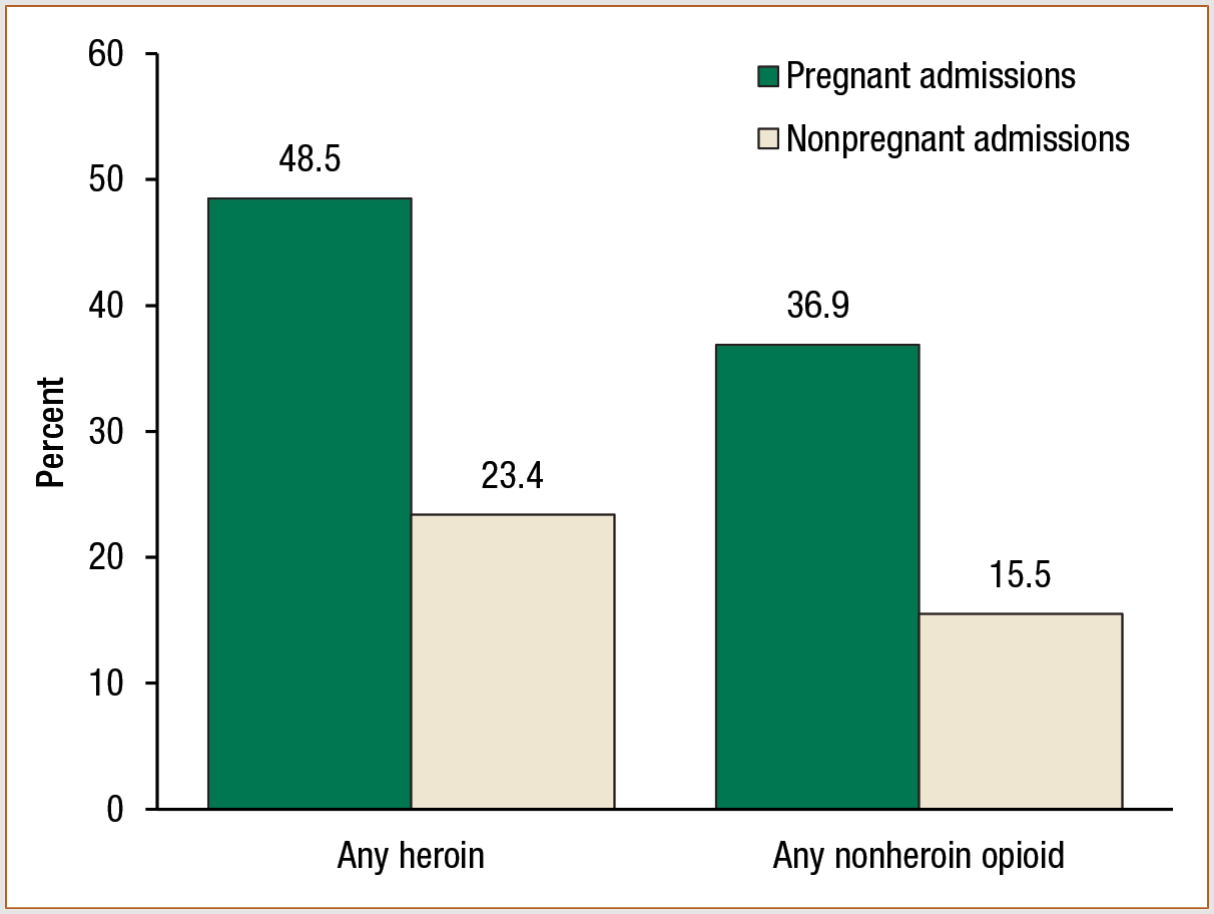
Figure 5. Health insurance status among female admissions aged 15 to 44, by pregnancy status: 2012



BCBS = BlueCross BlueShield; HMO = health maintenance organization.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, Treatment Episode Data Set (TEDS), 2012.

Figure 6. Proportion of female substance use treatment admissions aged 15 to 44 for whom medication-assisted opioid therapy was planned, by pregnancy status and reported opioid substance: 2012



Source: SAMHSA, Center for Behavioral Health Statistics and Quality, Treatment Episode Data Set (TEDS), 2012.

Types of Substance Use Treatment Facilities

Within N-SSATS, outpatient-only, hospital inpatient, and residential treatment facilities[11] are asked whether they provide specially designed programs or groups for pregnant/postpartum women. In 2012, 13 percent of outpatient-only substance use treatment facilities and 13 percent of residential treatment facilities offered special programs for pregnant/postpartum women (1,268 outpatient-only treatment facilities and 477 residential treatment facilities; Table 1). Within hospital inpatient treatment facilities, 7 percent, or 52 hospital inpatient treatment facilities, offered special programs for pregnant/postpartum women.

Table 1. Substance use treatment facilities that offered a special program or group for pregnant/postpartum women, by type of treatment facility: 2012

Type of treatment facility*	Facility offers special group for pregnant/postpartum women (#)	Facility offers special group for pregnant/postpartum women (%)
Outpatient only**	1,268	13
Residential***	477	13
Hospital inpatient+	52	7

* A facility can provide more than one type of care.

** Outpatient-only treatment can include regular outpatient treatment, intensive outpatient treatment, day treatment or partial hospitalization, detoxification, and methadone maintenance therapy.

*** Residential treatment can include long-term care (more than 30 days), short-term care (30 days or fewer), and residential detoxification.

Hospital inpatient treatment can include inpatient treatment and inpatient detoxification. Hospital inpatient treatment facilities can simultaneously offer outpatient, residential, and hospital inpatient care.

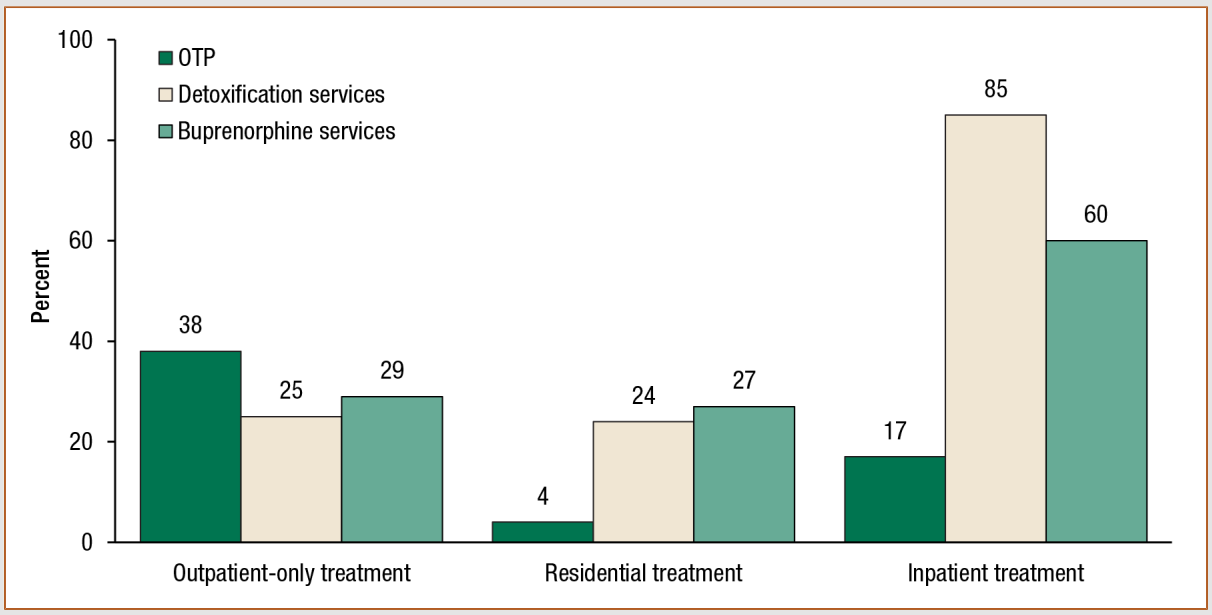
Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey of Substance Abuse Treatment Services (N-SSATS), 2012.

Opioid Treatment Programs and Detoxification Services

Within the N-SSATS data for outpatient-only treatment facilities, residential treatment facilities, and hospital inpatient treatment facilities, three types of opioid-related programs are identified: (1) OTPs offering maintenance and/or detoxification services,[12,13] (2) facilities offering opioid detoxification services, and (3) facilities offering buprenorphine-assisted treatment. OTPs are distinguished from other treatment programs because they are certified to use specific opioid drugs such as methadone in treating opioid dependence.[9,12,13] Note that although an OTP can offer buprenorphine as part of a treatment program, certified physicians in health care settings outside of OTPs can approve buprenorphine for substance use treatment.[9]

Of the outpatient-only treatment facilities that offered specially designed programs for pregnant/postpartum women in 2012, 38 percent (487 facilities) operated an OTP, 25 percent (317 facilities) offered opioid detoxification services, and 29 percent (374 facilities) offered buprenorphine services (Figure 7). Of the 8,876 outpatient-only treatment facilities that *did not* offer specially designed programs for pregnant/postpartum women, 6 percent (539 facilities) operated an OTP, 6 percent (558 facilities) offered opioid detoxification services, and 15 percent (1,302 facilities) offered buprenorphine services (data not shown). Among outpatient-only treatment facilities operating an OTP that also offered specially designed programs for pregnant/postpartum women, more than two-thirds (71 percent) offered both maintenance programs and detoxification[12] services, 29 percent offered maintenance programs only, and 1 facility offered detoxification services only. Among outpatient-only treatment facilities operating an OTP that *did not* offer specially designed programs for pregnant/postpartum women, 58 percent offered both maintenance programs and detoxification services, 41 percent offered maintenance programs only, and 1 percent offered detoxification services only (data not shown).

Figure 7. Substance use treatment facilities that offered special programs or groups for pregnant/postpartum women, by treatment facility type, opioid treatment program (OTP) status, and detoxification and buprenorphine services: 2012



Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey of Substance Abuse Treatment Services (N-SSATS), 2012.

Of the residential treatment facilities that offered specially designed programs for pregnant/postpartum women, 4 percent (21 facilities) operated an OTP, 24 percent (113 facilities) offered opioid detoxification services, and 27 percent (131 facilities) offered buprenorphine services (Figure 7). In comparison, of the 3,089 residential treatment facilities that *did not* offer specially designed programs for pregnant/postpartum women, 2 percent (60 facilities) operated an OTP, 24 percent (749 facilities) offered opioid detoxification services, and 25 percent (760 facilities) offered buprenorphine services (data not shown). Among residential treatment facilities operating an OTP that also offered specially designed programs for pregnant/postpartum women, 67 percent offered both maintenance programs and detoxification services, 19 percent offered maintenance programs only, and 14 percent offered detoxification services only (data not shown). Among residential treatment facilities operating an OTP that *did not* offer specially designed programs for pregnant/postpartum women, 50 percent offered both maintenance programs and detoxification services, 18 percent offered maintenance programs only, and 32 percent offered detoxification services only (data not shown).

Of hospital inpatient treatment facilities that offered specially designed programs for pregnant/postpartum women, 17 percent (9 facilities) operated an OTP, 85 percent (44 facilities) offered opioid detoxification services, and 60 percent (31 facilities) offered buprenorphine services (Figure 7). In comparison, of the 728 hospital inpatient treatment facilities that *did not* offer specially designed programs for pregnant/postpartum women, 10 percent (76 facilities) operated an OTP, 78 percent (565 facilities) offered opioid detoxification services, and 62 percent (454 facilities) offered buprenorphine services (data not shown). Among hospital inpatient treatment facilities operating an OTP that also offered specially designed programs for pregnant/postpartum women, 44 percent offered both maintenance and detoxification services, 11 percent offered maintenance programs only, and 44 percent offered detoxification services only. Among hospital inpatient treatment facilities operating an OTP that *did not* offer specially designed programs for pregnant/postpartum women, 47 percent offered both maintenance programs and detoxification services, 7 percent offered maintenance programs only, and 46 percent offered detoxification services only (data not shown).

Services for Children

Facilities were asked to identify whether they provided child care services. Overall, child care services were more commonly offered by residential treatment facilities (13 percent) than by outpatient-only or inpatient treatment facilities (6 and 2 percent, respectively; data not shown). This pattern was repeated, but with higher levels of child care services, among facilities with programs for pregnant/postpartum women. Among residential treatment facilities that offered special groups for pregnant/postpartum women in 2012, slightly more than half (54 percent) offered child care services, and 58 percent offered residential beds for children. About 1 in 5 (18 percent) outpatient-only treatment facilities offering special groups or programs for pregnant/postpartum women offered child care services (data not shown). Among hospital inpatient treatment facilities offering special groups or programs for pregnant/postpartum women, 15 percent offered child care services, and 12 percent reported having residential beds for children (data not shown). (Note that a facility may offer more than one type of care; e.g., a hospital inpatient treatment facility may also offer residential care.)

Notably, N-SSATS data indicate that child care services were more frequently provided in residential treatment facilities with specially designed programs for pregnant/postpartum women than in other types of treatment facilities. For example, among residential treatment facilities thatoffered special groups for pregnant/postpartum women, 54 percent offered child care services compared with 6 percent of residential treatment facilities that did not offer special groups for pregnant/postpartum women. Among facilities that *did not* offer specially designed programs for pregnant/postpartum women, child care services were offered by 6 percent (191 facilities) of residential treatment facilities and 1 percent (10 facilities) of hospital inpatient treatment facilities (data not shown).

Medicaid Coverage

About two-thirds of outpatient-only and residential treatment facilities that offered specially designed programs or groups for pregnant/postpartum women (68 and 61 percent, respectively) accepted Medicaid as a form of payment in 2012. In comparison, 79 percent of hospital inpatient treatment facilities that offered specially designed programs or groups for pregnant/postpartum women accepted Medicaid as a form of payment (data not shown).

DISCUSSION

Opioid misuse can disrupt fetal development at any stage during a pregnancy—even before a woman knows she is pregnant. In fact, the first months of pregnancy are a time of greater risk of congenital heart defects and other negative neonatal and maternal outcomes.[2,3] In this report, 2007 to 2012 NSDUH data show that an annual average of about 21,000 pregnant women misused opioids in the past month. Given the overall dangers of opioid misuse in general and the rise in the number of infants born with opioid dependence,[1] outreach and educational resources may help women access needed services to address opioid misuse during pregnancy. Because pregnant women aged 15 to 17 and aged 18 to 25 were more likely than their older counterparts to have misused opioids in the past month, prevention and intervention efforts targeting adolescents and younger women may be especially beneficial.

Poverty is associated with less favorable pregnancy outcomes, such as higher preterm delivery rates.[15] NSDUH data also showed that pregnant women living below the federal poverty level were more likely to misuse opioids than pregnant women living at or above the federal poverty level.

Some women who enter treatment may need prenatal or postpartum services and child care assistance postpartum. Fewer pregnant women with children younger than 5 years in their household engaged in opioid misuse than pregnant women without children younger than 5 years in their household. However, increased child care offerings among the nation's opioid and substance use treatment facilities may decrease barriers to treatment for all women with children, particularly for those living below the federal poverty level. N-SSATS data indicate that compared with other types of treatment facilities, residential treatment facilities provided child care services most frequently, regardless of whether they offered specially designed programs for pregnant/postpartum women. Notably, the TEDS analysis showed that a greater proportion of medication-assisted opioid therapy was planned for pregnant female admissions than for other female admissions.[9,13]

TEDS data showed relatively high health insurance gaps among pregnant substance use treatment admissions, compounding the issue of greater opioid misuse found among pregnant women living below the federal poverty level. Although pregnant female admissions were more likely than other female admissions to have Medicaid coverage and were less likely to be uninsured, nearly one-third of pregnant female admissions reported no health insurance coverage at the time of treatment entry. At the same time, N-SSATS data indicate that between 61 percent (residential treatment facilities) and 79 percent (hospital inpatient treatment facilities) of facilities that offered specialized programs or groups to pregnant or postpartum women accepted Medicaid as a form of payment. The expense of substance use treatment can be a financial barrier for people in need of opioid misuse treatment, and this may be especially daunting for pregnant women and mothers. Assistance in navigating the health insurance and health service opportunities provided by the Affordable Care Act may be especially helpful to pregnant women and adult women of childbearing age.

Access to opioid misuse treatment[16] within a continuum of obstetric and medical care is vital for pregnant women.[4,5,6,7] In addition to expanded substance use treatment coverage, one of the key reforms of the Affordable Care Act is comprehensive coverage of preventive services for women and young children, including preconception and prenatal care visits. Helping pregnant women who need opioid misuse treatment access these newly available substance use treatment resources as well as expanded prenatal medical care resources may improve health outcomes for mothers and infants. For example, participation in opioid misuse treatment programs could provide pregnant women with improved access to the larger health care system, including obstetric and medical care.

Pregnant women who need assistance with an opioid misuse issue may use the SAMHSA Behavioral Health Treatment Services Locator found at http://findtreatment.samhsa.gov/. For substance use treatment professionals seeking information on the specific substance use treatment needs of adult women of childbearing age, please visit http://store.samhsa.gov/product/TIP-51-Substance-Abuse-Treatment-Addressing-the-Specific-Needs-of-Women/SMA14-4426.

ENDNOTES

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7. Respondents were shown a "pill card" displaying the names and photographs of specific pain relievers and asked to indicate which, if any, they had ever used without a doctor's prescription or simply for the feeling of experience the drug caused. The pill card can be found at http://www.samhsa.gov/data/sites/default/files/NSDUH2012MRB/NSDUH2012MRB/2k12PillCards.pdf. Note that although the majority of drugs listed on the pill card are opioids, some of them are not considered as such (e.g., Fioricet®, Fiorinal®). Moreover, respondents were asked about their nonmedical use of any other pain relievers not included in this list and were asked to specify the names of the drugs that they had ever used nonmedically.
8. In NSDUH, because "any pain relievers" can include drugs other than opioid-based ones (see endnote 7), it is possible that the percentage for nonmedical use of any other pain reliever dependence/abuse is inflated if the respondent indicated use for nonopioid-based drug(s) only.
9. Methadone and buprenorphine (Suboxone® and Subutex®) have been approved by the U.S. Food and Drug Administration for the effective treatment of opioid dependence. Methadone, in use since 1964 for opioid dependence, may be dispensed only in federally approved opioid treatment programs (OTPs). Treatment protocols require that a client take the medication at the clinic where it is dispensed daily; take-home dosages are allowed only for clients who have been in treatment for a specified period of time and if other conditions are met. Any OTP patient may receive a single take-home dose for a day when the OTP is closed for business, including Sundays and state/federal holidays. Beyond this, decisions on dispensing take-home medication are determined by the medical director in accordance with criteria specified in federal regulation 42 CFR, Part 8 §12[i]. Buprenorphine may be prescribed by physicians who obtain specialized training, so it is possible for buprenorphine-trained physicians to operate through substance use treatment facilities/programs and out of private practices.
10. At the time of publication, extended release injectable naltrexone is not used for pregnant women. TEDS data are not collected about inclusion of naltrexone in the treatment plan of opioid-dependent women admitted for treatment.
11. Within N-SSATS, outpatient treatment can include regular outpatient treatment, intensive outpatient treatment, day treatment or partial hospitalization, detoxification, and methadone maintenance therapy. Residential treatment can include long-term care (more than 30 days), short-term care (30 days or fewer), and residential detoxification. Hospital inpatient treatment can include inpatient treatment and inpatient detoxification. Notably, these facilities can simultaneously offer outpatient, residential, and hospital inpatient care.
12. OTPs include facilities in which all clients were in a maintenance or detoxification treatment program, as well as facilities in which some clients were in a maintenance or detoxification program, whereas other clients received other forms of treatment. Maintenance therapy involves substituting a long-acting orally administered opioid, such as methadone, for the shorter-acting opioids, such as heroin, that are usually injected. Because methadone is long acting, it may be taken once a day and can eliminate withdrawal symptoms for 24 to 36 hours.
13. For more information about OTPs and the types of other services they offer, please visit the Medication-Assisted Treatment page on the SAMHSA website: http://www.dpt.samhsa.gov/index.aspx.
14. Because heroin use and nonheroin opioid misuse may be endorsed as primary, secondary, or tertiary substances of misuse for any given TEDS treatment episode, it is possible for one admission to report both substances of misuse.
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16. Opioid misuse treatment may include varying strategies, including pharmacotherapy.

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SUMMARY

Background: Opioid dependence during pregnancy is associated with increased risk of low birthweight, neonatal mortality, and maternal complications. Methadone or buprenorphine maintenance therapy can prevent the effects of repeated withdrawals on the fetus and improve outcomes for infants and mothers. **Method:** This report uses the combined 2007 to 2012 National Surveys on Drug Use and Health (NSDUHs), the 2012 Treatment Episode Data Set (TEDS), and the 2012 National Survey of Substance Abuse Treatment Services (N-SSATS) to examine opioid misuse and treatment among women of childbearing age (aged 15 to 44). **Results:** An annual average of 21,000 pregnant women aged 15 to 44 misused opioids in the past month. Among pregnant women aged 15 to 44, those who were younger and those living below the federal poverty level were more likely than other pregnant women to be past month opioid misusers. Of the pregnant female treatment admissions, 22.9 percent reported heroin use and 28.1 percent reported nonheroin opioid misuse. About half of pregnant female admissions with heroin use had methadone or buprenorphine as a part of their treatment plan compared with less than one-quarter of nonpregnant female admissions with heroin use. For female admissions aged 15 to 44 reporting nonheroin opioid misuse, rates for having methadone or buprenorphine as a part of their treatment plan were comparatively lower. About 13 percent of outpatient-only substance use treatment facilities and residential treatment facilities offered a special program or group for pregnant/postpartum women. Between 61 and 79 percent of facilities that offered specialized programs or groups to pregnant or postpartum women accepted Medicaid as a form of payment. **Conclusion:** The findings suggest that outreach and educational resources targeting younger pregnant women and women living below the federal poverty level about the dangers of misusing prescription pain relievers may be especially beneficial. The health insurance gap among pregnant treatment admissions suggests that these women may need assistance in navigating the health insurance and health service opportunities provided by the Affordable Care Act to ensure critical access to the health care system.

Keywords: buprenorphine, heroin, medication-assisted treatment for opioid use disorder, methadone, opioid treatment, opioid disorder, postpartum, poverty, pregnant, prescription drug use, substance abuse, substance use treatment, treatment facility, treatment setting, specialty treatment for women, women

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The Substance Abuse and Mental Health Services Administration (SAMHSA) is the agency within the U.S. Department of Health and Human Services that leads public health efforts to advance the behavioral health of the nation and to reduce the impact of substance use and mental illness on America's communities.

The National Survey on Drug Use and Health is an annual survey that collects data from a representative sample of the population through face-to-face interviews at their place of residence. For more information, see http://www.samhsa.gov/data/population-data-nsduh.

Treatment Episode Data Set (TEDS) data are collected through state administrative systems and then submitted to SAMHSA. TEDS substance use treatment admissions are primarily from facilities that receive some public funding. For more information, see http://www.samhsa.gov/data/client-level-data-teds/reports.

Trained DAWN staff review medical records (charts) of emergency department (ED) visits on an ongoing basis at a nationally representative sample of hospitals to find drug-related ED visits that meet the DAWN case criteria. For more information, see: http://www.samhsa.gov/data/emergency-department-data-dawn/reports.

The CBHSQ Report is prepared by the the Center for Behavioral Health Statistics and Quality, SAMHSA, and by RTI International in Research Triangle Park, North Carolina. (RTI International is a trade name of Research Triangle Institute.) For other substance use reports, see : http://www.samhsa.gov/data.

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