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Pregnant Women in Prison and Jail Don't Count: Data Gaps on Maternal Health and Incarceration

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At the end of 2015, an estimated 210 595 women were in state or federal prison[1] or jail[2] in the United States, a 645% increase since 1980, when approximately 28 240 women were incarcerated.[3] Nearly three-quarters of incarcerated women are aged 18-44[1]—prime childbearing years—and two-thirds of incarcerated women are mothers and primary caregivers to minor children.[4] Given these demographic characteristics, it is likely that some women will enter prison or jail while pregnant or during the postpartum period.

Women who face the greatest likelihood of incarceration are disproportionately non-Hispanic black and Hispanic. Although the overall imprisonment rate for non-Hispanic black women has declined, in 2014, the imprisonment rate per 100 000 population for non-Hispanic black women (109) was twice the rate of non-Hispanic white women (53). The imprisonment rate for Hispanic women was 64.[5]

Similar racial/ethnic disparities are also seen with unintended pregnancies, inadequate access to prenatal care, maternal mortality, and health complications due to pregnancy and its termination.[6] Furthermore, when compared with women in the general US population, women in prison or jail are more likely to have ever had a chronic condition, an infectious disease, any disability, a cognitive disability, or a mental health or substance use disorder.[7-10] These coexisting health conditions can complicate pregnancies and lead to higher pregnancy-related medical care needs during incarceration.[5] Poor mental health may pose a particular challenge for pregnant women in prison or jail. Research shows that the mental health effects of being incarcerated can compound existing problems or create new problems during pregnancy.[11,12]

Despite what is known about the risks for adverse pregnancy-related outcomes (ie, hemorrhage, preterm birth, maternal mortality) and how they coincide with risks for incarceration, little data on the prevalence of pregnancy or pregnancy-related outcomes among women in prison or jail are available.[13] To provide pregnancy-related services and accommodations (eg, additional calories at mealtime, appropriate prenatal care, special housing, or a bottom bunk) and optimize pregnancy outcomes for these vulnerable women, accurate and comprehensive pregnancy data are needed. This commentary is designed to bring attention to the lack of data on maternal health among women in prison and jails and offer suggestions to remedy these gaps.

What Is Known About Pregnant Women in Prison or Jail?

Data on pregnancy among incarcerated women are both outdated and, when available, often limited to prevalence estimates and births. In 1998, the American Correctional Association surveyed 43 prison systems and reported 1400 births during the previous year (1997).[14] Data from the US Department of Justice, Bureau of Justice Statistics estimated that, in 2002, 5% of women in jail were pregnant at admission.[15] Bureau of Justice Statistics data from 2004 showed that 4% of women in state prisons and 3% of women in federal prisons were pregnant at admission.[16] These estimates have not been updated since 2004. A further limitation of these data is that incarcerated women can become pregnant while incarcerated via conjugal visits with their husbands, work-release programs, permitted home visits, or weekend release. Women also can become pregnant while incarcerated because of rape by correctional staff members, volunteers, or employees.[6]

Data from the Association of State Correctional Administrators estimated that 2852 pregnant women were admitted to state and federal prisons during a 10-month period in 2010 (unpublished data, Association of State Correctional Administrators, 2010). The same report found that among states

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asked to report the percentage of births that were "other than normal births" (ie, the mother and/or infant had complications), 4 states (Massachusetts, Montana, New York, and West Virginia) reported that more than three-quarters of births to women in prison were considered "other than normal births."

It should be noted that several of these data sources do not include women in jail, and to our knowledge, parallel estimates for births to women incarcerated in jail are not available. The unavailability of these data is important because, although the words *prison* and *jail* are often used interchangeably, they are not the same type of facility. Prisons are long-term confinement facilities monitored by the federal or state government or by an entity contracted by the government to operate the facility. Persons in prison typically have been convicted of a felony and have received a sentence of 1 or more years; most inmates stay an average of 2 years. Jails are short-term facilities managed by a local or county government. In 2013, approximately 60% of persons in jails were unsentenced.[17] Of persons in jail who receive a sentence, most are convicted of a misdemeanor and have a sentence of <1 year. Among all persons in jail, including those with and without a sentence, the average length of stay is approximately 23 days.[18] Filling this gap in data from jails is essential to understanding the true prevalence of pregnancy among incarcerated women, because the differences between prisons and jails affect health care delivery. For example, a study of pregnant women in a large jail found that the median length of stay was 14 days, which offers little opportunity to provide prenatal care to pregnant women.[19]

Some pregnant women who enter jail are held until transfer to prison to finish their sentence, some will stay in jail for many months, some will reenter the community after only a few days, and some will be incarcerated more than once during their pregnancy. Such changes can disrupt a woman's access to pregnancy care. Although prisons and jails are constitutionally required to provide health care to incarcerated persons, no mandatory standards exist for what health care services must be provided, including for pregnancy care.

In addition to missing data on pregnant women incarcerated in prison or jail, to our knowledge no systematic assessment of miscarriages, abortions, stillbirths, preterm births, or neonatal and maternal deaths has been conducted among incarcerated women in the United States. The Centers for Disease Control and Prevention (CDC) collects these data for the general US population annually but without designating the incarceration status of women.[14] Although not within the scope of this article, data on the health and placement of infants born to incarcerated women are also scarce.

Given the high number of women of childbearing age in prisons and jails and that many incarcerated women may be at risk for adverse pregnancy-related outcomes, accurate data on pregnancy-related health and outcomes among this population are essential. Data would illuminate how incarceration affects a pregnant woman's health, enable maternal health comparisons with the broader US population, identify the needs of these women, and help inform interventions to improve pregnancy care programs and services for incarcerated women. These data would also help inform correctional facilities' policies and accommodations related to pregnant women, such as policies for transporting women in labor to hospitals, increasing staff member awareness of policies on treatment and management of pregnant inmates, and ensuring an appropriate environment for the delivery of medical care.

Overview of Maternal Health in the United States

To further understand the importance of data on pregnancy-related health among incarcerated women, we must place the need for these data in the larger context of maternal health in the general US population. Maternal health is the health of women during pregnancy, childbirth, and the postpartum period.[20] Although women in the United States live in a society with a highly advanced medical system that facilitates safe pregnancies and births, they face a host of adverse pregnancy-related outcomes (ie, maternal deaths, infant mortality, preterm births) at higher rates than many other developed countries. Although a full discussion of maternal health in the United States is not possible in this commentary, we offer several health indicators to illustrate the issue.

Pregnancy-related death is one measure of maternal health (ie, the health of a woman during pregnancy, childbirth, and the postpartum period). Pregnancy-related death is defined as "the death of a woman while pregnant or within 42 days of termination of pregnancy, regardless of the duration or site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management, but not from accidental or incidental causes."[21] CDC data show that in 2013, the pregnancy-related mortality rate in the United States was 17.3 deaths per 100 000 live births.[21] Another measure of maternal health is severe maternal morbidity (ie, unexpected outcomes of labor and delivery that cause short- or long-term consequences to a woman's health), which increased about 200%, from a rate of 49.5 per 100 000 delivery hospitalizations in 1993 to 122.3 in 2014.[22] In 2013, pregnancy-related complications were the 10th leading cause of death for US women aged 18-44,[23] and in 2014, nearly 50 000 women had severe maternal morbidity.[24]

However, national estimates of maternal health obscure the racial/ethnic disparities in pregnancy-related outcomes between non-Hispanic white women and non-Hispanic black and Hispanic women. Given the disproportionate number of women of color who are incarcerated, racial/ethnic disparities in pregnancy-related outcomes among the general US population are likely reflected in the incarcerated population. For example, non-Hispanic black women in the general US population have a 3- to 4-fold higher risk of dying from pregnancy-related causes than non-Hispanic white women—a disparity that cannot be fully explained by factors such as insurance status, health status, or income level.[25-27] A 2018 state-level analysis showed a correlation between state maternal mortality rankings and the percentage of non-Hispanic

black women in the delivery population.[27] During 2011-2013, CDC reported the pregnancy-related mortality rate as 12.7 deaths per 100 000 live births for non-Hispanic white women and 43.5 deaths per 100 000 live births for non-Hispanic black women.[22] Disparities in maternal health care access and services also exist among the general population; in 2015, an estimated 75% of non-Hispanic black women and 76% of Hispanic women received prenatal care in the first trimester compared with 89% of non-Hispanic white women.[28]

Maternal Health Care While Incarcerated

Access to proper prenatal care and nutrition is essential to a healthy pregnancy, but little is known about prenatal care received by incarcerated women. Data on this subject can inform the scope of prenatal needs of women in jail or prison and can help inform or improve the delivery of prenatal care services. In 2004, 54% of pregnant women in prison reported receiving some type of pregnancy care while incarcerated.[8] A 2010 report from the Rebecca Project found that 38 states had no policies requiring that incarcerated pregnant women receive basic prenatal care, and 41 states did not ensure adequate prenatal diets for incarcerated women,[29] a finding supported by a study of 19 state prison systems.[30] The 2015 National Survey of Prison Health Care reported that, of the 34 participating states with on-site and off-site obstetric services available, 29 sent women off-site (eg, to a community hospital) for labor and delivery.[31]

Information about access to certain pregnancy-related care services (eg, abortion) is also scarce. Despite the 1973 Supreme Court case *Roe v. Wade*, which makes it legal for women, including incarcerated women, to access abortion services, only California has a statue that affirms the rights of women in prison or jail to access an abortion service.[32] A 2008 report on jails in New York State found that nearly half of jails had no written abortion policy, and only 23% of jails offered pregnant inmates full access to pregnancy-related care services.[33]

The use of restraints during pregnancy, labor, and childbirth is a practice with well-established medical risks, such as an increased likelihood of falls, increased risk of placental abruption, poor circulation, and potential interference with urgent medical procedures. Restraints are defined as "any physical hold or mechanical device (eg, flex cuffs, soft restraints, hard metal handcuffs, a 'black box', club cuffs, ankle cuffs, belly chains, security chain, or convex shield) used to limit the movement of a person's body and limbs."[34] Although restraints are condemned by major medical organizations, as of 2018, only 26 states had laws restricting the use of restraints on pregnant women during labor and delivery; some of these laws also restrict restraints at other points during pregnancy and the postpartum period.[35] Moreover, reports by watchdog groups document that even in states with antirestraint laws, pregnant women are illegally restrained during medical procedures and/or labor and delivery.[36] Data on such incidents can help inform the design of interventions (eg, training for prison, jail, and hospital staff members) to eliminate this risky practice.

The variability in availability and scope of the evidence documenting the provision of health care during pregnancy reflects the lack of mandatory standards for correctional health care, including pregnancy care. Although groups such as the American Correctional Association and the National Commission on Correctional Health Care publish and update health care standards, including standards on pregnancy care, prisons and jails are not required to follow these standards.[37,38] The American Correctional Association also recommends standards for almost every aspect of facility management, including safety, security, food service, and inmate programs; however, correctional facilities are not obligated or mandated to adopt or implement them.[39]

Why Are These Data Difficult to Collect?

One reason for the lack of data on pregnancy-related outcomes among incarcerated women is that national health statistics surveys do not inquire about incarceration at the time of the outcome. For example, CDC's National Vital Statistics System, which compiles all data from state birth certificates, does not assess maternal incarceration status. Likewise, the Nationwide Inpatient Sample, which is the largest all-payer hospital inpatient care database of discharges in the United States and largest source of pregnancy-related outcomes, does not assess maternal incarceration status.[40] Another data source, the Pregnancy Risk Assessment Monitoring System, collects data on maternal attitudes and experiences before, during, and after pregnancy.[41] Although the core questionnaire asks the respondent if she, her husband, or her partner went to jail in the 12 months before the infant was born, the answer does not clarify whether the woman or her intimate partner was incarcerated.[42] Two other national-level surveys that collect data on pregnancy, the National Survey of Family Growth and the National Health and Nutrition Examination Survey, do not include an indicator of incarceration or recent involvement in the criminal justice system.[43,44] In addition, these surveys are household based and do not include persons currently incarcerated in prison or jail. Conversely, although the National Survey on Drug Use and Health includes an indicator of criminal justice involvement in the past year, it does not collect data on pregnancy and does not sample persons in prisons or jails.[45]

In addition to the lack of national health data sets assessing incarceration status, other challenges impede the collection of data on pregnancy among incarcerated women. Inmate surveys are one avenue for collecting data on incarcerated pregnant women, but national-level surveys impose logistical challenges and burdens on correctional facilities, their staff members, and inmates. These challenges include ensuring inmate safety and security while they are transported to and from the interview room, minimizing response

burden on inmates, tasking correctional officers to assist with inmate management related to the survey, and having researchers in the facility for 1-3 days to administer the survey. In addition, the surveys are costly and time-consuming. Moreover, other data needs that must be fulfilled, such as current offense information and history of criminal justice involvement, generally take precedent over collecting data on inmate health, particularly the health of pregnant inmates.

Collecting data from inmate medical records is another option for assessing the pregnancy status of female inmates, but correctional medical records systems are not standardized. For example, some correctional facilities use electronic systems, others use paper charts, and each system tracks medical outcomes differently. Moreover, data-tracking efforts at correctional facilities sometimes fall to general facility administrators who are not necessarily medical staff members. However, collecting data on pregnancy requires access to Health Insurance Portability and Accountability Act–protected information, which presents ethical and health information access challenges for data reporters who are not medical staff members. Another data collection challenge that is especially salient for jails, as compared with prisons or correctional facilities, is how to count the women who enter and leave the facility several times during their pregnancy. In other words, if a jail collects data on the number of pregnant women admitted in a given year, and one woman is admitted multiple times during a single pregnancy, she may be counted once or each admission could be counted as a unique data point. Finally, many correctional facilities have not prioritized collecting data on pregnancy. Accordingly, correctional health data collection has been a low priority for national data systems, as evidenced by the lack of available data.

Where Do We Go From Here?

It is essential that data on pregnancy among incarcerated women be collected in a standardized way so that data can be compared among prisons and jails and also with the general nonincarcerated US population. Several strategies could help to systematize the collection of data on pregnant incarcerated women. One effort currently underway is a multisector research collaboration, the Pregnancy in Prison Statistics (PIPS) project.[46] Twenty-two state departments of correction, the nation's 5 largest jails, and the Bureau of Prisons are reporting annually the aggregate numbers of pregnant women, births, miscarriages, stillbirths, abortions, maternal and neonatal deaths, and other, more detailed pregnancy-related outcomes, such as preterm births, cesarean sections, and medical and mental health conditions (eg, gestational diabetes, hypertensive disorders of pregnancy, HIV infection, substance use disorder). Each PIPS site developed a tracking system for prospectively recording each pregnancy-related outcome at the prison or jail; a designated site reporter from each participating prison or jail then reports these data monthly to the study database. The outcomes tracked in PIPS are for pregnant women while they are in custody; as such, no data on the outcomes of these women's pregnancies are collected if the women are still pregnant upon release. The PIPS project relies on each site to commit to prospectively tracking these outcomes and to having a designated person who oversees data collection at the facility. The PIPS project aims to fill the data gap in pregnancy-related outcomes for women who are pregnant in prison or jail, while also demonstrating that a substantial number of correctional systems are willing and able to monitor pregnancy-related outcomes for incarcerated women. With additional funding, the PIPS project could expand to other prisons and jails and provide technical assistance and training to help them similarly devise tracking systems for pregnant women.[46]

In addition to maintaining facility-level monitoring systems for pregnancy-related outcomes, current criminal justice system and health care surveys can add questions on pregnancy and incarceration. Health agencies can partner with justice agencies to collect data on pregnancy by adding questions to surveys of the incarcerated population. Another option is to add an indicator of incarceration to national surveys and surveillance systems that collect data on pregnancy and maternal health. Local maternal and neonatal mortality surveillance efforts could also collect data on incarceration status. Legislation to require prisons or jails to collect data on pregnancy, as was done in Texas for its jails,[47] is another strategy for collecting data on pregnant incarcerated women, although such data collection efforts would require additional funding, staff, and time to support these efforts. Lastly, the development of more robust intrastate linkage systems, such as linking prison or jail records to data from birth certificates, hospital discharges, Medicaid claims, and enrollment in the Special Supplemental Nutrition Program for Women, Infants, and Children, could also provide data on the needs of pregnant incarcerated women. All these efforts require political will, time, and resources for implementation.

The physicist Lord Kelvin once wrote, "If you cannot measure it you cannot improve it."[48] Incarcerated pregnant women comprise one of the most vulnerable populations in the United States. Collecting data on pregnancy-related outcomes and on how many women and newborns are affected by incarceration is important for devising strategies that will optimize their access to quality care and improve outcomes. Ensuring that these women have healthy pregnancy outcomes is part of a larger strategy of reducing disparities in maternal and infant mortality and working toward health equity for all.

Authors' Note

The views expressed in this article do not necessarily represent the views of the Bureau of Justice Statistics or the US Department of Justice.

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