Additional Resources
Interdisciplinary Institute on the Reproductive Health of Incarcerated Women in Minnesota, October 20th, 2014

Institute speakers’ names are in BOLD.

   - Incarceration affects individuals’ perception and involvement in society, which has an impact on overall health. There are implications for health inequities among different populations disproportionately affected by incarceration. Despite a link between incarceration and well-being, the current measure of incarceration rate for the United States maintains some issues and public health impact has not been reliably and validly defined.

   - Bell and colleagues matched incarcerated women with Medicaid-funded births in the community. Incarcerated women between 30-39 years were more likely to have infants of low birth weight and born prematurely than women in the community, while incarcerated women older than 39 years were less likely than women in the community to experience low birth weight and premature delivery. Prenatal care was associated with lower rates of preterm birth; case management was associated with higher birth weight. Researchers suggested that jails can serve as an avenue for intervention via prenatal care and case management.

   - Women who gave birth in jail were compared to women who had been incarcerated, but were not pregnant during custody. Time spent in jail increased the likelihood of receiving prenatal and support services but correlated with less total visits for prenatal care and support. Previous pregnancy in jail was related to less prenatal visits, more support visits, and a longer period of time in case management. Jails and public health officials can collaborate to ensure that women receive necessary services upon release, positively impacting future pregnancies.

   - Researchers measured attachment, depression, self-reported parenting competency, and availability of support among pregnant women participating in a prison nursery program. Compared to other at-risk populations, mothers in prison presented greater rates of insecure attachment. Mothers with preoccupied attachment reported increased depressive symptoms, low parenting competency, and low support upon leaving the nursery program as compared with mothers labeled with other insecure attachment forms. Future research should examine attachment among incarcerated mothers as a mechanism to improve psychological outcomes.

   - Buchanan explores issues regarding abortion, prenatal care, parenting support, and reproductive rights among pregnant, incarcerated women in the United States and California. Recommendations are also made regarding medical practices, shackling, drug use, and nurseries in prisons.
   - This paper examines the process by which a uniquely multi-disciplinary project, Prison Alternatives in Community Treatment (PACT), rolled out an initiative to create an apartment-style, urban building, the Drew House, where women could serve time for felonies while living with their children, as opposed to the alternative of serving time separated in a state prison. The paper provides support for such an intervention by explaining the positive outcomes of prison nurseries.

   - Attachment was measured among mothers and infants participating in a prison nursery. The majority of the infants presented secure attachments, despite many mothers having insecure attachments; mothers’ attachment did not predict infants’ attachment. A larger proportion of infants had secure attachments as compared to infants from the community with mothers with similar risk factors (e.g., low income, depressive symptoms, substance use). This study indicates that infants raised in prison nurseries can develop secure attachments comparable to the general population, despite their mothers’ internalized insecure attachment.

   - Byrne discusses prison nurseries, dispelling inaccuracies and presenting perspectives from history and internationally. Information from some studies is also presented, highlighting prison nurseries as an effective intervention for the United States.

   - Byrne and colleagues examine separations between mothers and infants in a prison nursery program. Most were separated due to Corrections’ protocol requiring infants be removed from the nursery once they turn one year. Recidivism and relapse relating to substance use also led to separation. This paper highlights the importance of collaborative services in the prison and reentry for the years following release.

    - This paper examines the increase in the population of incarcerated women in the United States and Corrections’ difficulties in meeting women’s needs, notably those who are pregnant. Some studies indicate that serving time in custody results in better pregnancy outcomes for women with multiple risk factors as compared to giving birth in the community. Clarke and Adashi examine prison for a pregnant inmate, the issues and benefits related to incarceration of pregnant women, and the importance of continuing services following release.

    - Clinicians must examine the special health needs of pregnant, incarcerated women, along with the detrimental impact of shackles on the women’s pregnancy, birth, and postpartum periods presented in this paper.
   - Dallaire, Zeman, and Thrash seek to examine the risk for social and emotional problems among children with incarcerated mothers. Children’s experiences relating to incarceration and environmental risk factors were reported by mothers, children, and their caregivers and examined with psychological outcomes. Children’s incarceration-related risk factors predicted internalizing and externalizing behavioral issues; environmental risk did not predict psychological outcomes. These findings suggest that incarceration has a greater impact on children’s psychological well-being as compared to general environmental risk factors; future research must examine children in the context of maternal incarceration.

   - Women delivering a baby in prison were compared to a control group, matched for demographic factors and start dates for prenatal care. Of the incarcerated women, 36% indicated that they used drugs during pregnancy as compared to 3% of the control group. Most, 60%, of incarcerated women smoked cigarettes during pregnancy, as did 20% of the control group. Still, incarcerated women tended to have better birth outcomes, as they had a decreased likelihood of premature delivery and premature membrane rupture.

   - Despite the negative attention surrounding shackling in the past, the practice continues in the United States. This paper explores the current use of shackling, associated risks, and methods to advocate for the vulnerable population impacted by the practice.

   - Despite established protocol for the health care of pregnant, incarcerated women, no entity oversees practices. Ferszt and Clarke reached out to wardens from 50 women’s state prisons; only 19 completed a survey. Results indicated that health providers across state prisons failed to use standards in prisons. More must be done to establish best practices and ensure that they are adhered to among the vulnerable population of pregnant, incarcerated women.

   - This study examined whether an association between prenatal care and birth weight among pregnant, incarcerated women existed. By analyzing medical records, researchers concluded that each prenatal visit resulted in an increase in birth weight among mothers who were in prison during the first trimester. This finding did not hold among women who entered the facility following the first trimester.

   - Researchers interviewed women incarcerated in prison and identified themes. Women completed surveys regarding psychological well-being and relationships with their mothers. The women reported depressive symptoms and hostility. In addition, they perceived their mothers as controlling and lacking warmth. Women who presented depressive symptoms tended to discuss separation, attachment, visits, negative feelings toward their children’s caregivers, and coping in the interviews. Women who reported their mothers as low in warmth were more likely to think about being united with their babies. Those with controlling mothers were more confident in their parenting abilities. These results reveal psychological well-being among incarcerated women for future interventions.
   - This study examined the risk factors and birth outcomes among women pregnant and incarcerated in prison. The women presented multiple risk factors throughout their pregnancy (e.g., substance use, poor nutrition, negative past birth experiences, anxiety, depression, poor prenatal care). The results highlight the importance of prenatal care and education along with mental health services for incarcerated, pregnant women.

   - Birth outcomes were compared between pregnant incarcerated women with a history of drug use, women who were not incarcerated but participating in a methadone program, and a control group. The group in the methadone program had less prenatal visits compared to the other groups. All of the women in the incarceration and methadone groups smoked cigarettes; 12.5% of controls smoked. All of the methadone group used drugs, 78%, of incarcerated women reported using drugs before incarceration, and 4.11% of the control group used drugs. All of the groups had significantly different birth weight outcomes compared to one another. The study suggests that quitting drugs, committing to healthy choices, and prenatal care led to positive birth outcomes among incarcerated women.

   - Knight and Plugge present a review of papers regarding birth outcomes among pregnant, incarcerated women as compared to control populations. Incarcerated women were more likely to be single, be of an ethnic minority, smoke, use substances, and have not finished high school. Incarcerated women were more likely to have a medical issue affecting pregnancy and less likely to receive prenatal care. Knight and Plugge concluded that incarcerated pregnant women constitute a high-risk group in the field of obstetrics.

   - Birth weight was compared among three groups of women: women incarcerated throughout pregnancy, women incarcerated at a time other than the pregnancy, and women who had never been incarcerated. Birth weight was not significantly different among women who were incarcerated throughout pregnancy and those who had never been incarcerated. Birth weight was significantly worse among women incarcerated for part of the pregnancy as compared to those incarcerated throughout the entire pregnancy and never incarcerated.

   - Researchers examined birth outcomes among women incarcerated during one pregnancy and not incarcerated during another. After controlling for multiple factors, results indicated that time spent incarcerated was associated with birth weight. Aspects of the prison environment may be more favorable for women from vulnerable populations as compared to the general environment in the context of pregnancy and birth.

   - Poehlmann and Shlafer examine risk factors and intervention programs related to poverty along with incarceration and its impact on pregnant women and their children, two groups who share similar risk factors. The researchers present innovative interventions for pregnant, incarcerated women.

- Rossi provides a comprehensive manual outlining the care of incarcerated pregnant women in the state of Minnesota from a nurse’s perspective. The Manual includes information regarding the context, prenatal care, nutrition, comfort measures, medications and substance use, pregnancy outcomes, postpartum care, discharge, and addressing complaints from pregnant women.


- Shlafer, Gerrity, and Duwe present lessons learned from a pilot study of a prison-based pregnancy and parenting support program based on a community-university-corrections partnership. The pilot study evaluated women’s physical and mental health along with perceptions of the program. Researchers noted that a collaborative partnership was necessary to effectively provide services to pregnant, incarcerated women.


- This paper examines the feasibility of a prison doula program through doulas’ birth narratives. Narratives revealed key themes: empowerment of clients, trusting relationships, normalization of pregnancy and birth, and support as mothers were separated from their infants. The researchers determined that the intervention was feasible and appropriate for pregnant, incarcerated women.


- Pregnant incarcerated women were compared to a control group of women who were not incarcerated. More incarcerated women used drugs as compared to the control group. In addition, more incarcerated women gave birth to low birth weight and premature infants. Pregnancy outcomes (i.e. cesarean section, premature birth, low birth weight) improved as the time spent in prison increased. Prenatal care in prison and reduction in high risk behavior may have beneficial effects for some incarcerated, pregnant women.


- Wilper and colleagues examined chronic medical and mental illness among inmates in the United States. Those impacted by a chronic condition included 38.5% of inmates in federal prisons, 42.8% in state prisons, and 38.7% in local jails. Few inmates with a mental health condition who had been treated with medication in the past were taking medication upon arrest in federal (25.5%) prison, state (29.6%) prison, and local jails (38.5%). Upon entry to facilities, 69.1%, 68.6%, and 45.5%, respectively, received psychiatric medication. Findings suggest that inmates with illnesses are not receiving adequate care prior to and during incarceration.

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