Published in final edited form as:

Public Health Nurs. 2014 March ; 31(2): 109–117. doi:10.1111/phn.12072.

Recidivism after Release from a Prison Nursery Program

Lorie S. Goshin, PhD, RN¹, Mary W. Byrne, PhD, DNP, MPH, FAAN², and Alana M. Henninger, PhD(c)³

Mary W. Byrne: mwb4@columbia.edu; Alana M. Henninger: ahenninger@jjay.cuny.edu

¹Associate Research Scientist at Columbia University in New York NY at the time of this research. The author is now an Assistant Professor at the Hunter-Bellevue School of Nursing, New York NY

²Stone Foundation and Elise D. Fish Professor of Clinical Care for the Underserved at Columbia University School of Nursing, New York NY

³Doctoral candidate at John Jay College of Criminal Justice, City University of New York, New York NY

Abstract

Objective—To analyze three-year recidivism after release from a prison nursery, a secure unit that allows imprisoned women to care for their infants.

Design and Sample—Descriptive study of 139 women who co-resided with their infants between 2001–2007 in X prison nursery.

Measurement—Administrative criminal justice data were analyzed along with prospective study data on demographic, mental health, and prison nursery policy-related factors.

Results—Results reflect a sample of young women of color with histories of clinically significant depressive symptoms and substance dependence, who were convicted of nonviolent crimes and had multiple prior arrests. Three years after release 86.3% remained in the community. Only 4% of women returned to prison for new crimes. Survival modeling indicated that women who had previously violated parole had a significantly shorter mean return to prison time than those who were in the nursery for a new crime.

Conclusion—Women released from a prison nursery have a low likelihood of recidivism. Innovative interventions are needed to address incarceration's public health effects. Nurses can partner with criminal justice organizations to develop, implement, and evaluate programs to ensure the health needs of criminal justice involved people and their families are met.

Keywords

prison nursery; prisoners; women; recidivism

The interactions between public health and criminal justice (CJ) involvement are receiving increased attention. Although incarceration rates in the United States appear to be stabilizing after decades of rapid increase, they remain the highest in the world (Tsai & Scommegna, 2012). An estimated one in every 107 adults was incarcerated in 2011 (Glaze & Park, 2012). Estimates increase to one in 31 with the addition of persons under community supervision

Corresponding Author: Lorie S. Goshin, Hunter-Bellevue School of Nursing, 425 East 25th Street, New York NY 10010, lgoshin@hunter.cuny.edu, (347) 277-6793.

This content was presented at the 2012 American Society of Criminology Annual Meeting

(Pew Center On The States, 2009). Public policy decisions and uneven law enforcement have led to endemic levels of CJ involvement in many low-income African American communities (Clear, 2007). The incarcerated population shows disparities in chronic medical conditions (Binswanger, Krueger, & Steiner, 2009), infectious diseases (Harzke et al., 2010), substance dependence and mental health disorders (James & Glaze, 2005). Incarcerated women, when compared to incarcerated men and community-residing women, have a significantly higher prevalence of medical, mental health, and substance dependence disorders (Binswanger et al., 2010). On the last day of 2010, approximately 113,000 women resided in state and federal prisons, a 646% increase from 1980 (Guerino, Harrison, & Sabol, 2011).

The rise in incarceration rates over the past three decades has created a multigenerational public health problem. Approximately 60% of incarcerated women report having an average of 2 children (Glaze & Maruschak, 2008). An estimated 6–10% of women are pregnant upon incarceration (Clarke, Phipps, Tong, Rose, & Gold, 2010). While women represent a smaller proportion of the incarcerated population than men, women are more likely to have been their child's primary caregiver before their last arrest (Glaze & Maruschak, 2008). Incarcerated mothers also overwhelmingly report that they intend to care for their children after release (Stringer & Barnes, 2012).

Children of incarcerated women are at higher risk of behavioral health problems than their peers (Lee, Fang, & Luo, 2013). This population is also more likely to have later personal CJ contact (Huebner & Gustafson, 2007). Affected children also experience parental separation, and often parental illicit substance use, mental illness, and domestic violence, all of which are adverse childhood experiences associated with morbidity and premature mortality (Brown et al., 2009).

Prison Nurseries

A variety of parenting programs within prisons attempt to address these multigenerational effects. Parenting classes of varying designs are now offered in prison settings (Hoffmann, Byrd, & Kightlinger, 2010). For incarcerated women with infants, eight U.S. states currently have a prison nursery, a special unit on which eligible incarcerated women with infants live together (Goshin & Byrne, 2009). This is in contrast to the more prevalent policy of removing infants from the mothers within 48 hours of birth.

General eligibility criteria are that a woman be pregnant on incarceration and have no history of crimes against children (Women's Prison Association, 2009). Women convicted of violent offenses are automatically excluded in most states. Lengths of stay range from 1–36 months, with most programs allowing 12–18 months. Current U.S. programs are described as enriched, developmentally appropriate environments staffed by corrections officers and civilian professionals, including nurses (Fearn & Parker, 2004). Group prenatal and parenting courses are required in most facilities (Goshin & Byrne, 2009). These may be delivered by fellow incarcerated mothers (peer facilitators), professional staff, or through collaborations with community-based organizations. Other resources include: lactation support; civilian experts in child development; a day care center allowing mothers to attend counseling, drug treatment, educational and vocational programs; and advocates who facilitate contact with family members who do not reside in the nursery.

Longitudinal research in the oldest U.S. prison nursery showed positive child outcomes during the nursery and after release. Development during infancy and toddlerhood was within normal limits across domains (Byrne, 2010). Attachment was more likely to be secure than what would be expected by the high proportion of insecurity and unresolved trauma in the mothers' backgrounds (Byrne, Goshin, & Joestl, 2010). During the preschool

period, children who had lived with their mothers in the prison nursery had lower anxious-depressed behavior problem scores than a comparison group of children who were separated from their mothers in infancy or toddlerhood because of incarceration (Author, in Press). Criminal recidivism, or the return to a correctional institution after release, threatens these positive outcomes. Recidivism and drug relapse were the most common causes of separation in dyads released from this prison nursery (Byrne, Goshin, & Blanchard-Lewis, 2012).

Criminal Recidivism as a Public Health Nursing Outcome

Given the connection between health and CJ contact, recidivism is an important public health outcome. An estimated 95% of all prisoners are released (Hughes & Wilson, 2003). Institutional factors within correctional settings create increased risk for injury, infectious disease, and other health threats, potentially leaving people sicker upon exit than entry (Ludwig, Cohen, Parsons, & Venters, 2012). Health conditions untreated during incarceration further complicate the reentry period. After release, those experiencing health problems may continue to cycle in and out of correctional institutions at great cost to their own wellbeing, and the wellness of their families and communities (Baillargeon, Binswanger, Penn, Williams, & Murray, 2009).

Most women released from the general prison population will have subsequent CJ contact. Almost 60% will be rearrested, 38% will be reconvicted, and 30–45% will return to prison within three years (Cloyes, Wong, Latimer, & Abarca, 2010b; Deschenes, Owen, & Crow, 2006). More extensive history of prior arrests, incarceration for property or drug crimes, African American race, younger age, substance dependence, and mental illness are associated with recidivism (Cloyes, Wong, Latimer, & Abarca, 2010a; Deschenes, et al., 2006). Reporting dependent children has not been associated with decreased recidivism in women released from the general prison population (Huebner et al., 2010). In incarcerated mothers with a history of substance dependence, self reported expectation to live with children after release has also not been found to significantly affect recidivism after controlling for important confounders (Robbins, Martin, & Surratt, 2009).

Recidivism rates appear lower for women released from prison nurseries (Carlson, 2009; Rowland & Watts, 2007). Research on recidivism in this population has thus far been limited by small sample sizes, short follow-up time frames, and unsystematic data sources, or a lack of specification for all three. Recidivism has also been analyzed dichotomously without regard to timing. Prevention and delay of recidivism are both important goals. Predictors of time to recidivism in this population have also not been explored. Finally, the effect on recidivism of prison nursery specific policy issues, such as length of stay and whether a woman's child is released before her, has received no attention.

Research Questions and Hypotheses

The aim of this exploratory study was to analyze three-year recidivism in women who co-resided with their infants in X prison nursery. We hypothesized that time to recidivism would be directly associated with younger age at release, history of substance dependence, clinically significant depressive symptomatology during the nursery stay, release of the child without his or her mother, and being in the prison nursery for violation of parole conditions after a previous prison release.

Methods

Design and Sample

This sample is comprised of 139 women from two larger studies of mothers and children in X prison nursery. The first study examined maternal and child characteristics in a cross-sectional approach. The second study measured long-term mother and child outcomes in an interventional study. A university institutional review board approved both studies and the secondary data analysis presented here.

Eligible women from the two studies ($n = 56$ Study 1, $n = 83$ Study 2) are included in this analysis. The first study began in 2001 as a cross-sectional description of maternal mental health, parenting competence, and maternal-child interaction. A convenience sample of 58 prison nursery-residing women were enrolled. In the second study, conducted between 2003 and 2008, 97 women were enrolled and followed during their prison nursery stay and the child's first year in the community. All women living in the prison nursery during this time were invited to participate. Rolling enrollment was used until the projected number of participants was obtained. Only one woman declined. None of the participants enrolled in study 1 were still incarcerated in the prison nursery when study 2 began. During their prison stay and first reentry year women received anticipatory guidance by an advanced practice nurse on child development, responsive parenting, life goals, and coping. Women in the second study were then reenrolled beginning in 2008 for continued intervention and follow-up. No significant difference was found between the cross-sectional and longitudinal groups on time to re-incarceration (Mantel-Cox $\chi^2 = .14$, $p = .71$). Data from these two groups were aggregated in all analyses described below.

Sixteen women from the larger studies were excluded for the following reasons, which either limited their risk of recidivism or the research team's access to administrative CJ data: transferred directly to immigration detention for deportation upon release from nursery incarceration ($N = 7$), transferred directly to prison in another state ($N = 1$), not in the community for three years at the time of this analysis ($N = 4$), or researchers had no access to the adult criminal record because the nursery incarceration resulted from an offense occurring when the woman was a minor ($N = 4$).

Measures

Recidivism—Recidivism for this analysis was defined as return to prison within three years after release from the period of incarceration that included the prison nursery stay. This could include return to prison for a new crime or a parole violation (PV). Three years is the standard amount of time used by state and federal CJ agencies to measure recidivism. This allowed results to be compared to the body of literature on women released from the general prison population.

Administrative CJ data were obtained from the X State Division of Criminal Justice Services. Participants were matched to the state's database using their unique CJ identification number. Data were crosschecked by birth date and the dates of the prison nursery incarceration. All matches passed this test. The use of administrative data prevented self-report bias and allowed for the inclusion of women lost to follow-up, thus preventing attrition bias.

Data were limited to X State. This team's close longitudinal follow-up of women during several reentry years in study two suggested significant within community movement but little migration outside of the state. Deported women were excluded as described above. Sealed records, such as any arrests or incarcerations that occurred before the age of 18 years, were not available for this project.

Predictors—Demographic, mental health, and criminal justice-related predictors were assessed. Variables were chosen based on prior evidence of connection to recidivism and data availability. Data on predictors were obtained during the prison nursery stay in either study one or two and from the administrative database described above.

Demographic variables included age at prison release and race/ethnicity. For race/ethnicity, African American, non-Latina and Latina women comprised one category (Women of Color) and white, non-Latina women another (White, non-Latina). Mental health variables included clinically significant depressive symptomatology during the prison nursery stay and history of substance dependence. Depressive symptomatology was measured using the Center for Epidemiologic Studies-Depression Scale (CES-D; Radloff, 1977). Scores of 16 and above were coded as clinically significant. A dichotomous variable for substance dependence history was created using information obtained from in-prison participant interviews and prison records. The variable was coded as positive if women had any of these indicators: self-report to a study nurse practitioner a history of substance dependence, problem drinking, or previous treatment for substance or alcohol dependence; enrollment in drug or alcohol treatment in the prison; or a positive Michigan Alcohol Screening Test (Selzer, 1971) on intake into the prison.

Three potentially important prison nursery policy factors were also assessed. Using administrative data and the state definition of a violent felony offense (VFO), the conviction for which women were sent to the nursery was dichotomized as violent or non-violent. Using data obtained during both studies, the length of the prison nursery stay was calculated and the child's caregiver on exit from the nursery was coded as mother or alternate caregiver. Twelve women were missing data on this variable. We also assessed these CJ factors with known associations to recidivism. Number of prior arrests was determined using the state administrative data. The prison nursery incarceration spell was also categorized as being for a new crime or for a PV.

Analytic Strategy

Participants were initially coded dichotomously as having returned to prison within three years or not. We then calculated the length of time from release to reincarceration. Survival analysis was used to investigate time to recidivism by each of the predictor variables. For these analyses the outcome variable was the date of the first return to prison within the three years after release from the incarceration spell that included the prison nursery stay. Data from participants who did not return to prison within three years were censored. Multiple returns to prison within this time frame were not taken into account. Mean survival times, standard errors, and 95% confidence intervals (CI) were calculated using Kaplan–Meier for categorical variables and Cox regression for continuous variables. The log-rank statistic was used to compare the difference in survival curves on each variable. This exploratory study was limited to univariate analysis given the relatively small sample size available.

Results

Table 1 presents the descriptive data. Overall, data show a group of young women of color who were convicted of nonviolent crimes and had histories of clinically significant depressive symptomatology, substance dependence, and multiple prior arrests. The average age was 29 years (Range 18 – 49). Three-quarters of participants reported clinically significant depressive symptomatology at some point during their prison nursery stay, and 79% of women had a history of substance dependence. Women spent an average of 7 months in the nursery, and 67% of women left prison with their babies. In the other 33% of families, children were released to an alternate caregiver and their mothers remained in prison.

Women had an average of four prior arrests, but arrest history was heterogeneous. Some women had no history of prior arrests while others had up to 35 prior arrests. Eight-five percent of women were in prison for non-violent crimes, half of which were for drug sales or possession. The remaining women had been convicted of violent crimes, which included aggravated assault, robbery, and possession of a dangerous weapon.

At three years after release, 86.3% of women remained in the community. For women who returned to prison, they did so an average of 21 months after release, but lengths of community tenure ranged widely from 2 weeks to 35 months. Of the 14% of women who returned to prison, the vast majority did so for a PV (74.1%) instead of a new crime. Only one participant was convicted of a VFO (possession of a dangerous weapon) within three years of her release from the prison nursery. The other crimes included drug possession or sales, stolen property, and burglary. The low rate of recidivism complicated our intended use of survival analysis.

Figure 1 shows the survival curve comparing women in the prison nursery for an earlier PV to those who were there for a new crime. Women who had violated parole had significantly shorter mean return to prison time than those in the nursery for a new crime (Mantel-Cox $\chi^2 = 3.8$, $p = .05$). This group returned to prison two months sooner on average. The other CJ predictor, number of prior arrests ($HR = .98$, $p = .82$) was not significantly associated with time to recidivism. Age ($HR = .98$, $p = .59$), race/ethnicity (Mantel-Cox $\chi^2 = .49$, $p = .48$), and clinically significant depressive symptomatology during the nursery stay (Mantel-Cox $\chi^2 = .54$, $p = .46$) were not significantly associated with time to recidivism. Upon analysis of the data we found that only one woman without a history of substance dependence returned to prison within three years. This limited the use of survival analysis for this predictor. The prison nursery policy variables length of prison nursery stay ($HR = 1.0$, $p = .83$), release with mother or an alternate caregiver (Mantel-Cox $\chi^2 = .65$, $p = .42$), and being convicted of a VFO (Mantel-Cox $\chi^2 = .76$, $p = .38$) were also not significantly associated with time to recidivism.

Discussion

Women released from a prison nursery have a low likelihood of recidivism within three years of release. Of the women in this sample, who represented a substantial proportion of the population residing in the X prison nursery between 2001 – 2007, only 4.3% returned to prison for a new offense and 9.4% returned to prison for a PV. In comparison, 8.9% of women released from the general prison population in that state between 1985 and 2007 were re-incarcerated for a new crime and 20.4% returned to prison for a PV (Department Of Corrections And Community Supervision, 2011). Three-year recidivism statistics from across the US range from 24–66% (Pew Center On The States, 2011).

As a group comprised of younger women with drug and property convictions and histories of substance dependence, this population was at high risk for reincarceration. Contrary to our hypotheses we did not find an association between recidivism and younger age at release, clinically significant depressive symptomatology, or release of the child without his or her mother. As expected, no association was found between VFO and recidivism. It must also be noted that none of the women committed a person on person crime in the follow-up time frame. As this is the first analysis of predictors of recidivism in this group, it is not possible to compare our results to others. Given the small number of recidivate women, it is possible that our analyses were underpowered. A lack of association between these variables could also indicate that the prison nursery prevents recidivism across known risk groups. Further research with larger samples, possibly from multiple nurseries across the country, will be needed to confirm these findings.

Consistent with previous findings (Cloyes et al., 2010b), PV drove reincarceration. Common causes of parole violations include positive drug tests, missing parole appointments, moving without notification, and inability or unwillingness to obtain treatment, education, or employment. Strict parole supervision may undermine the positive outcomes the CJ system itself sought to create. Alternately, family-focused supervision that privileges community-based treatment alternatives over reincarceration may better meet the needs of parenting women in general, and former prison nursery residents in particular. In this strength-based approach, women are supported in identifying, mobilizing, and strengthening their support systems. This approach may serve both to prevent reincarceration and provide the important social safety net all families need.

Motherhood may serve as a motivating factor for change, but simply being a mother has not been found to affect recidivism (Robbins et al., 2009). It is possible that low rates of recidivism in this group are related to parenting within a supportive environment and the subsequent secure attachment created during this experience (Byrne et al., 2010). General didactic parenting programs available in most women's prisons may be unable to address relational issues specific to supporting the mothers of infants.

Increased interest exists for family-focused CJ programming. This includes community-based alternatives that divert women with children from incarceration. Jurisdictions in California, New York, Oklahoma, and Washington are now partnering with non-governmental organizations to create supportive housing and home-based alternatives. These newer models have a number of distinct advantages; most notably they keep families together and remove the reentry transition. They also allow for intervention in women with older children. Advocates have long argued that these options are safer, less expensive, and in the children's best interests (Acoca & Raeder, 1999). Research is needed to test these hypotheses.

Study limitations

This was a descriptive study of a cohort of women who participated in two studies of a prison nursery in one state. Criteria used by the state to determine eligibility introduced the potential for selection bias; it also limited generalizability. Eligible women likely differ in important ways from the general prison population, such as lower likelihood of a VFO or a history of crimes against children. Research with women released from the general prison population suggests drug and property offenders, which comprised the majority of this sample, are more likely to recidivate than those incarcerated for VFOs (Deschenes, et al., 2006).

This analysis did not include a comparison group. In fact, a valid comparison group would be difficult to create. Few eligible women refuse to keep their babies in the nursery. Women denied nursery entry likely differ from eligible women in the ways described above. Randomizing women to the nursery with their babies or to the general prison population without them is unethical anywhere and illegal in X State, which has a statute identifying the right to participate in the program when it is in the child's best interest. Finally, while it is the largest study of its kind, low numbers might have limited statistical power.

Implications for public health nursing

Public health nurses (PHN) are well positioned to support the health of CJ-involved persons. Nurses provide the majority of health care within jails and prisons, including case management to support reentry. As key members of interdisciplinary teams working with CJ-involved populations within and outside of correctional facilities, PHN have the requisite skills to provide direct care and to develop and sustain collaborations between multiple

systems (Marlow & Chesla, 2009). For example, some municipal and voluntary nursing agencies near prison nurseries have embraced co-residing women and children as part of their larger community. These groups have partnered with correctional facilities to provide health supervision and developmental screening to mother and child. Broader evaluation and dissemination of these innovations could foster their replication.

PHN participation in policy development and patient advocacy is needed to broaden discussions of adequate service provision and overall CJ system reform. This can include advocacy for prison nurseries or diversion options that allow CJ-involved women to remain with their children. Nurses can also provide expert testimony and respond to media requests, as this team has done in relation to prison nurseries (Byrne, 2012). This work requires long-term relationships between nursing, corrections, and community CJ leadership. While time-consuming to build, they are vital to establishing and sustaining a public health focus within a difficult system.

Nurse researchers can also include recidivism as an important health outcome in studies with CJ-involved populations. Administrative data allow for objective measurement, and reduce the risk of self-report and attrition bias. They provide an effective, inexpensive way to follow participants post-release. These data typically include all arrests, legal charges, convictions, and incarcerations within the given area. The exact recidivism outcome must be chosen carefully for each project. For example, reincarceration is most appropriate for former prisoners, while rearrest may be a better choice for jailed populations.

Conclusion

Innovative interventions are needed to address the multidimensional, multigenerational public health effects caused by mass incarceration. PHN can be trusted partners with CJ organizations to develop, implement, and evaluate programs to ensure the broad health needs of involved people and their families are met. Prison nurseries with supportive services represent one important intervention to support the health and wellbeing of imprisoned women with infants. They can provide quality care that results in positive infant and preschool outcomes, as well as low recidivism rates for participating mothers. Partnership with local non-profits supports cost effectiveness and maintenance of community standards.

While political interest in family-focused CJ interventions is increasing in many places, access to prison nurseries is limited across the US. Similarly, diversion programs that allow women to remain with their children in an alternative to incarceration residence or at home are also rare and widely spread geographically. It remains unclear how co-residence interventions can be brought to scale to meet the needs of more women and their children, especially those with older children. More research is needed on all of the potential options to determine how to support best possible health and social outcomes.

Acknowledgments

These acknowledgements were submitted with the article: "The authors gratefully acknowledge these sources of funding: Columbia University Institute for Child and Family Policy, 2001; New York State Commissioners' Priority Award, 2002; National Institute for Nursing Research (RO1NR007782), 2003–13, to M.W. Byrne, PI.

References

- Acoca L, Raeder MS. Severing family ties: The plight of nonviolent female offenders and their children. *Stanford Law & Policy Review*. 1999; 11:133–154.
- Author (reference blinded for review). Preschool outcomes of children who lived as infants in a prison nursery. *The Prison Journal*. In Press.

- Baillargeon J, Binswanger I, Penn J, Williams B, Murray O. Psychiatric disorders and repeat incarcerations: The revolving prison door. *American Journal of Psychiatry*. 2009; 166:103–109. [PubMed: 19047321]
- Binswanger IA, Krueger PM, Steiner JF. Prevalence of chronic medical conditions among jail and prison inmates in the United States compared with the general population. *Journal of Epidemiology and Community Health*. 2009; 63:912–919. [PubMed: 19648129]
- Binswanger IA, Merrill JO, Krueger PM, White MC, Booth RE, Elmore JG. Gender differences in chronic medical, psychiatric, and substance-dependence disorders among jail inmates. *American Journal of Public Health*. 2010; 100:476–482. [PubMed: 19696388]
- Brown DW, Anda RF, Tiemeier H, Felitti VJ, Edwards VJ, Croft JB, Giles WH. Adverse childhood experiences and the risk of premature mortality. *American Journal of Preventive Medicine*. 2009; 37:389–396. [PubMed: 19840693]
- Byrne, MW. Interventions within prison nurseries. In: Eddy, JM.; Poehlmann, J., editors. *Children of incarcerated parents*. Washington, DC: Urban Institute; 2010. p. 161-187.
- Byrne, MW. Sentences don't have to break families. *The New York Times*. 2012 Dec 18. Retrieved from <http://www.nytimes.com/roomfordebate/2012/12/18/prison-could-be-productive/sentences-dont-have-to-break-families>
- Byrne MW, Goshin LS, Joestl SS. Intergenerational transmission of attachment for infants raised in a prison nursery. *Attachment & Human Development*. 2010; 12:375–393. [PubMed: 20582846]
- Byrne MW, Goshin LS, Blanchard-Lewis B. Maternal separations during the reentry years for 100 infants raised in a prison nursery. *Family Court Review*. 2012; 50:77–90. [PubMed: 22328865]
- Carlson JR. Prison nurseries: A pathway to crime-free futures. *Corrections Compendium*. 2009; 34:17–23.
- Clarke JG, Phipps M, Tong I, Rose J, Gold M. Timing of conception for pregnant women returning to jail. *Journal of Correctional Health Care*. 2010; 16:133–138. [PubMed: 20339130]
- Clear, TR. *Imprisoning communities: How mass incarceration makes disadvantaged neighborhoods worse*. Oxford University Press; USA: 2007.
- Cloyes K, Wong B, Latimer S, Abarca J. Women, serious mental illness and recidivism: A gender-based analysis of recidivism risk for women with SMI released from prison. *Journal of Forensic Nursing*. 2010a; 6:3–14. [PubMed: 20201911]
- Cloyes KG, Wong B, Latimer S, Abarca J. Time to prison return for offenders with serious mental illness released from prison. *Criminal Justice and Behavior*. 2010b; 37:175–187.
- Department Of Corrections And Community Supervision. 2007 releases: Three-year post release follow-up. Albany, NY: Author; 2011. Retrieved from http://www.doccs.ny.gov/Research/Reports/2012/2007_releases_3yr_out.pdf
- Deschenes, EP.; Owen, B.; Crow, J. Recidivism among female prisoners: Secondary analysis of the 1994 BJS recidivism data set. 2006. Retrieved from <https://www.ncjrs.gov/pdffiles1/nij/grants/216950.pdf>
- diZerega, M.; Verdone, J. *Setting an agenda for family-focused justice reform*. New York: Vera Institute of Justice; 2011. Retrieved from <http://www.vera.org/content/setting-agenda-family-focused-justice-reform>
- Fearn NE, Parker K. Washington state's residential parenting program: An integrated public health, education, and social service resource for pregnant inmates and prison mothers. *California Journal of Health Promotion*. 2004; 2:34–48.
- Glaze, LE.; Park, E. *Correctional populations in the United States, 2011* (NCJ Publication No 239972). Washington DC: Bureau of Justice Statistics; 2012.
- Glaze, LE.; Maruschak, LM. *Parents in prison and their minor children*. (NCJ Publication No. 222984). Washington DC: Bureau of Justice Statistics; 2008.
- Goshin LS, Byrne MW. Converging streams of opportunity for prison nursery programs in the United States. *Journal of Offender Rehabilitation*. 2009; 48:271–295. [PubMed: 19865610]
- Guerino, P.; Harrison, PM.; Sabol, WJ. *Prisoners in 2010* (NCJ Publication No 236096). Washington DC: Bureau of Justice Statistics; 2011.

- Harzke AJ, Baillargeon JG, Pruitt SL, Pulvino JS, Paar DP, Kelley MF. Prevalence of chronic medical conditions among inmates in the Texas prison system. *Journal of Urban Health*. 2010; 87:486–503. [PubMed: 20393884]
- Hoffmann HC, Byrd AL, Kightlinger AM. Prison programs and services for incarcerated parents and their underage children: Results from a national survey of correctional facilities. *The Prison Journal*. 2010:1–20.
- Huebner B, Gustafson R. The effect of maternal incarceration on adult offspring involvement in the criminal justice system. *Journal of Criminal Justice*. 2007; 35:283–296.
- Huebner B, Dejong C, Cobbina J. Women coming home: Long-term patterns of recidivism. *Justice Quarterly*. 2010; 27:225–254.
- Hughes, T.; Wilson, DJ. Reentry trends in the United States. Washington DC: Bureau of Justice Statistics; 2003. Retrieved from <http://www.bjs.gov/index.cfm?ty=pbdetail&iid=1138>
- James, DJ.; Glaze, LE. Mental health problems of prison and jail inmates (NCJ Publication No 213600). Washington DC: Bureau of Justice Statistics; 2005.
- Lee RD, Fang X, Luo F. The impact of parental incarceration on the physical and mental health of young adults. *Pediatrics*. 2013; 131:e1188–e1195. [PubMed: 23509174]
- Ludwig A, Cohen L, Parsons A, Venters H. Injury surveillance in New York City jails. *American Journal of Public Health*. 2012; 102:1108–1111. [PubMed: 22515857]
- Marlow E, Chesla C. Prison experiences and the reintegration of male parolees. *Advances in Nursing Science*. 2009; 32:e17–e29. [PubMed: 19461219]
- Pew Center On The States. One in 31: The long reach of American corrections. Washington DC: Pew Charitable Trusts; 2009. Retrieved from http://www.pewtrusts.org/our_work_report_detail.aspx?id=49694
- Pew Center On The States. State of recidivism: The revolving door of America's prisons. Washington DC: Pew Charitable Trusts; 2011. Retrieved from http://www.pewtrusts.org/uploadedFiles/wwwpewtrustsorg/Reports/sentencing_and_corrections/State_Recidivism_Revolving_Door_America_Prisons%20.pdf
- Radloff LS. The CES-D scale a self-report depression scale for research in the general population. *Applied Psychological Measurement*. 1977; 1:385–401.
- Robbins CA, Martin SS, Surratt HL. Substance abuse treatment, anticipated maternal roles, and reentry success of drug-involved women prisoners. *Crime & Delinquency*. 2009; 55:388–411.
- Rowland M, Watts A. Washington State's effort to reduce the generational impact on crime. *Corrections Today*. 2007; 69:34.
- Selzer ML. The Michigan Alcoholism Screening Test: The quest for a new diagnostic instrument. *American Journal of Psychiatry*. 1971; 127:1653–1658. [PubMed: 5565851]
- Stringer EC, Barnes SL. Mothering while imprisoned: The effects of family and child dynamics on mothering attitudes. *Family Relations*. 2012; 61:313–326.
- Tsai, T.; Scommegna, P. US has the world's highest incarceration rate. Washington DC: Population Reference Bureau; 2012. Retrieved from <http://www.prb.org/Articles/2012/us-incarceration.aspx>
- Women's Prison Association. Mothers, infants, and imprisonment: A national look at prison nurseries and community-based alternatives. New York: Author; 2009. Retrieved from <http://www.wpaonline.org/pdf/Mothers%20Infants%20and%20Imprisonment%202009.pdf>

Figure 1.
Survival function curves for women in prison nursery for new crime and parole violation

Table 1Descriptive Data on Combined Prison Nursery Sample ($N = 139$)

	<i>N</i>	%
Predictors		
Demographic		
Age at prison release, Mean (SD)	29	6.4
Race/Ethnicity		
Women of Color	96	69
Mental Health		
Clinically significant depressive symptomatology, % CES-D ≥ 16	103	74
History of substance dependence	110	79
Prison Nursery Policy		
Length of prison nursery stay, Mean (SD)	6.9	4.7
Child released with mother ($n = 127$)	85	66.9
Violent Felony Offense	20	14.6
Criminal Justice		
Number of unsealed prior arrests, mean (SD)	4	5.8
Prison nursery incarceration for parole violation	34	24.6
Recidivism		
Return to prison within 3 years	19	13.7
Return to prison for parole violation	13	9.4
Average time in months to prison return, Mean (SD)	20.8	9.1