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Introduction: Health Equity Among Incarcerated Female Adolescents and Adult Women: Infectious and Other Disease Morbidity

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The number of persons under correctional supervision in the United States increased in the mid-1970s and peaked in 2009 (Bureau of Justice Statistics, 2013). Though in subsequent years, incarcerated populations declined slightly, the United States continues to have one of the highest rates of incarceration among developed nations, and in the world, with 1 in 4 American adults behind bars (Pew Center on the States, 2012). Though detained populations are predominantly male, in the past 30 years, the number of women inmates in correctional facilities has increased dramatically. From 1977–2004, the number of U.S. female prisoners serving more than a year grew by 757%, while during the same period, the number of male prisoners grew by 388% (Frost, Greene, & Pranis, 2006). The growth of women in jails and prisons has surpassed male inmate population growth in 50 states (Frost, Greene, & Pranis, 2006). From 2000 to 2009, the number of women incarcerated in state or federal prisons rose by 21.6%, compared to a 15.6% increase for men (Mauer, 2013).

Nationally, there are more than eight times as many women under correctional supervision as there were in 1980 (American Civil Liberties Union, 2006). The United States has the highest incarceration rate for women in the world. In 2006, the rate was approximately 123 per 100,000 for women, which is much higher than those of England (17 per 100,000), France (6 per 100,000), Russia (73 per 100,000), and Thailand (88 per 100,000) (Hartney, 2006).

Like their male counterparts, a majority of incarcerated women are from minority racial and ethnic backgrounds, undereducated, and have incomes below the federal poverty line. Most are serving time for nonviolent crimes, primarily low level drug offences (American Civil Liberties Union, 2013). A number of studies suggest that correctional populations have higher rates of infectious diseases, including chlamydia, gonorrhea, syphilis, hepatitis C, HIV, and tuberculosis (Cropsey et al., 2012; Golembeski & Fullilove, 2005; Marks & Turner, 2014; Kramer & Comfort, 2011; Harner & Riley, 2013). In addition, incarcerated

persons are disproportionately affected by chronic diseases, poor mental health, and substance use disorders (Cropsey et al., 2012). In addition, female detainees are likely to have experienced physical or sexual violence in childhood or adulthood (Johnson & Lynch, 2013). According to a report from the Bureau of Justice Statistics, 62% of state and 56% of federal female inmates reported having at least one child, and a majority of inmate mothers with children live in single parent households before arrest (Glaze & Maruschak, 2010). According to Bureau of Justice statistics, in 2004, 4% of women in state prisons, 3% of women in federal prisons, and 5% of women in local jails were pregnant at the time of admittance (Maruschak, 2006a, 2006b). The increasing numbers of women behind bars has public health and other implications for policy development to meet a growing list of medical, psychological, and social welfare needs. The health of women detainees is an important topic not only while they are incarcerated, but also when they return to their communities, and potentially back into correctional settings. In addition, young adults experience high rates of recidivism, with three-quarters returning to prison within three years of release (Federal Interagency Forum on Child and Family Statistics, 2014). To date, concentrated efforts to address the physical and mental health, social determinants of infectious diseases, and methods to achieve health equity among this vulnerable population have not been adequately explored.

A health equity approach emphasizes identification of social and economic structural barriers to opportunities and calls for the reduction of avoidable disparities in poor health outcomes associated with relative ranking in the social gradient (Braveman, 2014). To explore the health challenges faced by incarcerated women, our editorial group issued a national call for papers in March of 2013 for a special issue of *Women & Health* on infectious and other disease morbidity among incarcerated women and adolescent girls. Our goal was to provide a broad audience of academic researchers, public health professionals, health care providers in detention centers, health departments, and community-based organizations that serve correctional populations with a resource for greater understanding of the health needs of this vulnerable and underserved population. Although this volume represents a fraction of possible concerns for incarcerated women, we hope the papers presented in this volume help stimulate continuing research and will inform policies for humane and thoughtful disease prevention, treatment, and services among this population.

Fogel and colleagues, in “Context of Risk for HIV and Sexually Transmitted Infections Among Incarcerated Women in the South: Individual, Interpersonal and Societal Factors,” provide the results of a study assessing the behavioral, social, and contextual conditions that contribute to continuing sexual risk behaviors among women incarcerated in state prisons to inform the adaptation of an evidence-based behavioral intervention. Interviews conducted among current and former female prisoners identified three focal points for understanding drivers of sexual risk behaviors: individual risk (substance abuse, emotional need, self-worth, perceptions of risk, and safer sex practices); interpersonal risk (partner pressure, betrayal, and violence); and risk environment (economic self-sufficiency and preparation for reentry) (Fogel et al., 2014).

Satterwhite and colleagues, in “Chlamydia Screening and Positivity in Juvenile Detention Centers, United States, 2009–2011,” present the results of a national chlamydia screening

program in 126 geographically dispersed juvenile detention centers. These facilities reported screening 55.2% of females entering the facilities (149,923), and a positivity rate of 14.7%. Because many facilities had suboptimal screening coverage, suggestions for increased coverage are provided (Satterwhite et al., 2014).

DiClemente and co-workers, in “Efficacy of an HIV/STI Sexual Risk-Reduction Intervention for African American Adolescent Girls in Juvenile Detention Centers: A Randomized Controlled Trial,” present the results of an evaluation of the efficacy of a gender- and culturally tailored intervention, “Imara,” to reduce incident sexually transmitted infections (STIs), improve HIV-preventive behaviors, and enhance psychosocial outcomes among African American adolescent girls (13–17 years, $N = 188$) in juvenile detention centers. At the 6-month assessment (3-months post-intervention) Imara participants reported higher condom use self-efficacy ($p < 0.001$), HIV/STI knowledge ($p < 0.001$), and condom use skills ($p < 0.001$) compared to control participants. No significant differences were observed between trial conditions in incident chlamydia or gonorrhea infections, condom use, or number of vaginal sex partners indicating a critical need for interventions to reduce sexual risk remains (DiClemente et al., 2014).

Reisner, Bailey, and Sevelius, in “Racial/Ethnic Disparities in History of Incarceration, Experiences of Victimization, and Associated Health Indicators Among Transgender Women in the U.S.,” present an analysis of selected variables from the National Transgender Discrimination Survey, a large convenience sample of transgender adults in the U.S. Respondents who indicated a trans feminine gender identity were included in this study ($n = 3,878$). Overall, 19.3% reported having ever been incarcerated. Black and Native American/Alaskan Native transgender women were more likely to report a history of incarceration than White (non-Hispanic) respondents, and those with a history of incarceration were more likely to report negative health-related indicators, including self-reporting as HIV-positive. Among previously incarcerated respondents, 47.0% reported victimization while incarcerated. Black, Latina, and mixed race transgender women were more likely to report experiences of victimization while incarcerated (Reisner, Bailey, & Sevelius, 2014).

Visher and Bakken, in “Reentry Challenges Facing Women with Mental Health Problems,” examine mental health status among a sample of 142 women leaving confinement in state prisons and the role that mental health problems play in shaping their reentry outcomes. In the year after leaving prison, women with mental health problems report poorer health, more hospitalizations, more suicidal thoughts, greater difficulties securing housing and employment, more involvement in criminal behavior, and less financial support from family than women with no indication of mental health problems (Visher & Bakken, 2014).

Nowotny and colleagues, in “Risk Profile and Treatment Needs of Women in Jail with Co-Occurring Serious Mental Illness and Substance Use Disorders,” present data from a multi-site, multi-method project funded by the Bureau of Justice Assistance (2011–2012) to determine the risk profile of women in jail ($n = 491$) with a current co-occurring serious mental illness (i.e., major depressive disorder, bipolar disorder, schizophrenia spectrum disorder) and substance abuse disorders (i.e., abuse, dependence). The study spanned multiple geographic regions, and structured diagnostic interviews were used to understand

better the women that comprised this vulnerable population. One-in-five of the women had a current co-occurring disorder (CCOD). The findings revealed that significantly more women with a CCOD had been exposed to violence and were exposed to drugs at a younger age. Further, about one-third of women with a CCOD had received no treatment from a health care professional in the past year, demonstrating a substantial unmet need (Nowotny et al., 2014).

Kuo et al., in “Emotional Dysregulation and Risky Sex Among Incarcerated Women with a History of Interpersonal Violence,” present qualitative data from four focus groups with a sample of $n = 21$ incarcerated women (18+ years) from state prison facilities in urban New England. Qualitative data were analyzed using a thematic analysis approach. Findings indicated that incarcerated women reported engaging in a variety of maladaptive responses for emotion management during sexual encounters. These maladaptive responses for emotion management appear to increase sexual risk behaviors and alter women’s ability to implement STI protective behaviors, such as sexual negotiation and condom use. Preventive interventions to reduce sexual risk behaviors should incorporate strategies to promote emotional regulation among incarcerated women with histories of interpersonal violence (Kuo et al., 2014).

Mukherjee and coworkers, in “Mental Health Issues Among Pregnant Women in Correctional Facilities: A Systematic Review,” present the results of a systematic review conducted to examine the prevalence and correlates of mental health issues among pregnant inmates incarcerated in jails, state or federal prisons. Findings suggest that mental health among pregnant prisoners is a huge concern that has not been adequately addressed (Mukherjee et al., 2014).

The manuscripts presented here demonstrate the complexity and difficulties of studying incarcerated populations and challenges in developing interventions that will adequately address female inmates’ mental, physical, emotional, and psychological health requirements and disease prevention needs within the system and after their release. One glaring finding of this collection of research is the dearth of empirical evidence on disease morbidity and mortality among incarcerated women. Improved data collection and additional research are sorely needed for this population.

Given that incarcerated women primarily come from severely disadvantaged communities, poor communities of color, fragile families—those characterized by multigenerational teenage pregnancies and multigenerational involvement with the criminal justice system, and are likely to be involved with substance abuse, survivors of multiple kinds of abuse, unmarried mothers of children, and marginally educated and skilled (Bloom, Owen, & Covington, 2002)—more responsive public policies are required to address the complex life circumstances of this vulnerable population to prevent criminal justice involvement. Comprehensive research strategies targeting this population and their families are required to probe the trajectories that lead to the negative social outcomes referenced above, and heightened chronic and infectious disease morbidity for these women. Future studies will hopefully lead to greater understanding of and response to the health needs of women while incarcerated, and will support development of strategies for shoring up stability for the

growing number of women who have not found ways to achieve healthy and safe lives for themselves and their families.

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