Improving Healthcare for Incarcerated Women

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THE ARTICLE BY Nijhawan et al.¹ in this issue of the *Journal of Women's Health* evaluated the important aspect of identifying preventive healthcare needs of incarcerated women. Unequal access to healthcare unfortunately continues to plague our nation's prison population, currently totaling almost 2 million people.^{2,3e} The overall incarceration rates of state and federal prisoners continue to rise; at midyear 2007, 509 of 100,000 U.S. residents were incarcerated, up from 480 of 100,000 at end of year 2003.^{3,3a} By the end of year 2007, the number of female inmates has continued to rise since the end of year 2000 at a greater rate (3.2%) compared to male inmates (2%).^{3b} Although women account for approximately 7% of the total inmate population in state and federal prisons, female incarceration rates reveal racial and ethnic differences similar to those of male inmates. Black women (with a prison and jail rate of 348 per 100,000) were nearly two and a half times more likely than Hispanic women (146 per 100,000) and over 4.5 times more likely than white women (95 per 100,000) to be incarcerated in midyear 2007.^{3a}

Not only do the majority of these inmates carry a racial disparity, but they also carry considerable disparity in the burden of disease within the correctional system as well as in the community upon release. Prevalence rates within the correctional setting of mental illnesses are 30%–50% compared with 11% in the general population,⁴ and alcohol and drug problems occur in 30%–70% of the incarcerated population compared with 3%–6% in the general population.⁵ Furthermore, certain communicable infectious diseases occur at higher rates in the incarcerated population than in the community. HIV/AIDS is three to four times greater; tuberculosis (TB) occurs in 40% of incarcerated populations, and chronic hepatitis C viral (HCV) infection occurs in almost 50%.^{6,7} In the article by Nijhawan et al.,¹ of the 70% incarcerated women who reported being tested for HCV, almost 40% reported testing positive, which is 20 times greater than in the general population (1.6%).⁷ The authors do not state in the article if the HCV-positive inmates received treatment or evaluation for treatment for chronic HCV infection; however, it is unlikely given previous low reports of HCV treatment in correctional settings.⁸ Previous studies have demonstrated that prisoners adhere to antiretroviral therapy regardless of the antiretroviral regimen,⁹ causing the majority to have undetectable HIV viral loads.¹⁰ Extrapolating from these results, it would be expected that HCV treatment adherence rates with weekly injections of

pegylated interferon and daily oral ribavirin would likely be high within incarcerated populations. Future work should be done to begin the evaluation process of detecting chronic HCV infection (i.e., checking HCV viral load and HCV genotype, imaging of the liver, liver biopsy) and initiating treatment for all inmates who meet the criteria and then developing linkages with HCV treatment providers in the community upon release.

Although women comprise only 7% of the incarcerated population in the country,^{3a} they have a higher prevalence of HIV and other sexually transmitted diseases (STDs) than male prisoners.^{11,12} In terms of HIV, the Centers for Disease Control and Prevention (CDC) now reports that heterosexual contact is the most common mode of acquiring HIV in women (83%),¹³ and most women tend to be incarcerated for drug-related and sex work crimes that put them at risk for acquiring HIV and other STDs.¹² Most prisoners have a high degree of other STDs besides HIV upon entrance to correctional facilities, including gonorrhea, syphilis, and *Chlamydia* infection.⁷ Furthermore, cervical cancer most commonly caused by another STD, human papillomavirus (HPV), is more prevalent within the incarcerated population.¹⁴ As highlighted in Nijhawan et al.'s article,¹ known preventive screening Pap smears were reported in only 62% of the studied population, and of that screened population, 40% reported an abnormal Pap smear, which is six times greater than that reported in the general community. Routine preventive age-appropriate cancer screening should be offered to all inmates in order to detect and treat cancers earlier to prevent unnecessary deaths.

An estimated seven to eight million prison and jail inmates are released to the community every year, often for a sentence of less than 2 years.^{3a} It is known that upon release to the community, HIV-infected prisoners do not pick up their antiretroviral prescriptions¹⁶ and, therefore, are nonadherent and develop higher HIV-1 viral loads,^{10,17} thus becoming more infectious to noninfected persons.¹⁸ It is also known that prisoners, unfortunately, return to high-risk behaviors upon release to the community, such as shared needles and unprotected sex, that subsequently lead to greater transmission and acquisition of communicable blood-borne infectious diseases, such as HIV and HCV.^{19,20} All correctional facilities should offer mandatory HIV testing as recommended by the CDC in 2006²¹ and counseling to prevent future acquisition and transfer of STDs within the community. Given the

revolving door of prison, better linkages to care for diagnosed medical and psychiatric conditions need to be developed to prevent the loss of any potential benefit acquired during the incarceration period.

Injection drug use (IDU) is one of the most common risk factors for blood-borne viruses, such as HIV and HCV, and drug charges tend to be the most common offense for which people are arrested in the United States.^{3,15} It is, therefore, not surprising that rates of HIV and other communicable diseases are higher in incarcerated populations, as they target the same communities. Between 30–80% of incarcerated persons have a history of substance abuse or dependency.^{3c,5} After release to the community, 85% of opioid-dependent inmates will relapse to drug use within 1 year of release regardless of the total time incarcerated.^{22–24} Opioid agonist treatments, such as methadone and buprenorphine, have been found to be highly successful in preventing relapse to opioid use and decreasing recidivism in incarcerated populations within other countries outside the United States.^{25–30} Unfortunately, very few state and federal prisons offer opioid agonist treatment during incarceration.^{3d,31,32} Relapse to alcohol use occurs at similar rates as relapse to drug use in released prisoners; however, no pharmacological treatment, such as naltrexone, the number one FDA-approved medication to prevent relapse to alcohol use within the community,³³ has been studied in the prison population. Future studies, therefore, should evaluate whether treatment of opioid dependency and alcohol dependency within incarcerated settings within the United States and upon release can prevent relapse to drug and alcohol use and concomitantly reduce HIV and other STD risk-taking behaviors.

As studied by Nijhawan et al.,¹ correctional facilities are also an ideal area to test and integrate primary and secondary prevention-based programs to decrease high-risk STDs (hepatitis C, HIV, gonorrhea, *Chlamydia* infection, and syphilis) as well as provide optimal primary care screening for cervical cancer and breast cancer. Nijhawan et al.¹ highlights the important point that female inmates want to have STD testing (39%), to undergo Pap smears (70%), and to have hepatitis A and B vaccinations (67%) to prevent future infections; >60% reported an interest in quitting smoking. What better place to provide screening and testing than in the incarcerated setting, where people are free from the chaos that surrounds them in the community.³⁴ Upon release to the community, prisoners face social instability, with the majority being homeless as well as uninsured.³⁵ Medicaid and Medicare are revoked upon arrest and incarceration in 90% of states, meaning that prisoners upon release have to reapply for Medicaid and Medicare.^{36,37} The insurance reenrollment process may take up to 3 months in some cases. Without adequate insurance, released prisoners cannot access routine medical appointments and undergo important screening and testing as well as potential treatment of chronic diseases.

In conclusion, upon incarceration, important screening and prevention services should be offered universally to all prisoners, including immediate STD screening, including HIV and HCV testing; vaccination against hepatitis A and B; cervical cancer screening with Pap smears; breast cancer screening with mammograms; and offering not only treatment of nicotine dependency but also pharmacotherapies for drug and alcohol abuse and dependency. Such all-encompassing preventive testing and treatment programs in correctional settings linked with continuity of care clinics in

the community upon release would likely not only decrease the morbidity and mortality of disease among released prisoners but also potentially decrease transmission of STDs and other communicable diseases to noninfected persons within the community.

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