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HIV/AIDS Among Female Prison Inmates: A Public Health Concern

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Abstract

Research points to the importance of adequate health care in women's prisons. This is especially important as female inmates are faced with a host of unique and distinct needs, in particular, an increased risk of HIV/AIDS infection. This risk presents a significant public health concern as the majority of female offenders receive limited screening, treatment, education, and counseling related to HIV/AIDS infection and transmission while in prison. Additionally, when these women return to their communities, they are generally ill-equipped to prevent the transmission of their disease. Further, their heath concerns become the responsibility of an already overburdened public health system. Effective medical care in prison alleviates inmates' growing medical needs and protects the public from the transmission of HIV/AIDS. This study identifies the current state of HIV/AIDS among female inmates in correctional institutions nation wide. We argue that mandatory AIDS screening for all inmates and gender-specific educational programming will lower the rate of transmission and the prevalence of high-risk behaviors, thus reducing pre- and post-release health threats. Future research directions and policy implications are discussed.

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Introduction

Existing research has documented that female prison inmates have a host of diverse and unique medical, social and health-related needs. For example, women in prison suffer disproportionately from physical and sexual abuse, mental health problems, substance addiction, and health and medical issues as compared to their male inmate counterparts (see Chesney-Lind & Pasko, 2003; Pollock, 2002; Van Wormer & Bartollas, 2000; Zaitzow & West, 2003). Further, women's prisons lack adequate financial resources (Chesney-Lind & Pasko, 2003; Pollock, 2002), gender-specific programming (Schram, 2003), and appropriate medical services for female inmates (Anderson, 2003; Belknap, 2001). These shortcomings pose a range of administrative challenges, most notably with respect to women's unique health and medical care needs (Waring & Smith, 1991; Zaitzow, 2001; Zaitzow & West, 2003). Decades of scholarly research have called attention to the presence of HIV/AIDS-infected women in prison and their lack of care while under institutional supervision. Additionally, the same body of literature has documented current limitations and called for increased standards of health and medical service in prison (see Zaitzow, 2001; Zaitzow & West, 2003). With the drastically rising female inmate population, the U.S. correctional system is left with a small but significant population of women who suffer both as a result of infection upon entering the criminal justice system, as well as contracting the infection while under correctional custody (see Hammett, Harmon, & Maruschak, 1999; Maruschak, 2004).

The question then remains, have correctional administrators and policy-makers heeded the advice provided by scholarly research, or has the problem of HIV/AIDS infection and lack of adequate prison health care continued to expand, affecting both the female inmates and those they come into contact with upon their release to the community? The purpose of this analysis is to determine the current status of female HIV/AIDS infection in correctional institutions and identify what attempts have been made by prison administration to effectively combat this serious public health threat. For example, do prisons provide adequate health and medical service for women with HIV/AIDS — including screening, testing, and treatment? And, are women being effectively counseled and and educated risk-behavior on viral transmission?

This study builds upon prior research by reviewing the existing literature surrounding the characteristics of female inmates, their unique health needs, and the current state of health care in U.S. correctional institutions. These findings are then contextualized through a presentation of data provided by the following sources: The Census of State and Federal Adult Correctional Facilities, 1990 and 2000 (U. S. Department of Justice, 2001;2004); HIV in Prisons and Jails, 1996 and 2002 (Maruschak, 1999; 2004); and the National Survey of AIDS in Correctional Facilities, 1985-1990, 1992 (Abt Associates, Inc., 1995). We use this information to identify the current state of HIV/AIDS infection and respective health care strategies in correctional institutions. This is done within the specific context of public health where infected (and untreated) women pose a risk to their communities upon release from prison (see Centers for Disease Control and Prevention, 2001). We argue that mandatory AIDS screening and gender-specific educational programming will lower the rate of transmission and the prevalence of high-risk behaviors, thus reducing the post-release public health threat. Future research questions and policy implications are posed.

Characteristics of Female Inmates

Scholars have long contended that female inmates should receive gender-specific treatment and programming that addresses the attributes of incarcerated females (see Belknap, 2001; Chesney-Lind & Pasko, 2003). Women in prison have a host of shared unique needs that shape their experiences as well as their chances of post-release success (Pollock, 2002). The female offender is generally over age 30, unmarried, and under or unemployed with at least one child under the age of 18 years. Further, women in

prison are plagued with poverty and a lack of education and employment-related skills (Belknap, 2001; Chesney-Lind & Pasko, 2003; Franklin & Lutze, forthcoming; Kelley, 2003; Morash & Schram. 2002: Pollack. 2002: Van Wormer & Bartollas, 2000). As a result, they have a history of working minimum wage or low-paying jobs, often times relying on social support or welfare programs (Zaitzow & West, 2003). Moreover, as many as half of these women are victims of physical and sexual abuse generally perpetrated by male family members and intimate partners (see Chesney-Lind & Pasko, 2003: Chesney-Lind & Sheldon, 1998: Franklin & Lutze, forthcoming; Marcus-Mendoza & Wright, 2003; Morash & Schram, 2002; Silbert & Pines, 1981). Female inmates are also likely to suffer from drug and other substance addiction (Kelley, 2003; Pollock, 2002; Snell & Morton, 1994), and mental healthrelated issues such as depression, post-traumatic stress disorder, anxiety, low self-esteem and self-hatred, and impulsive behavior at a greater rate than male inmates (Cauffman, Feldman, Waterman, & Steiner, 1998; Eppright, Kashani, Robison & Reid, 1993; Marcus-Mendoza & Wright, 2003; Zlotnick, 1997).

In addition to this lengthy list of personal in prison experience troubles, women reproductive-related medical problems, high-risk pregnancies, and tuberculosis at an alarming rate (Acoca, 1998; Zaitzow, 2001). Moreover, female inmates suffer from HIV/AIDS infection where the presence of disease is far more prevalent than in the general population (Hammett et al., 1999). Table 1 displays the rate of HIV/AIDS infection in the inmate population as compared to the rate of infection in the general population. Between 1995 and 2002 the rate of infection among inmates has remained significantly higher as compared to those residing outside the prison walls. The most recent data (Maruschak, 2004) indicates that the rate of HIV/AIDS is three and one-half times higher among the prisoner population.

While the rate of infection among inmates has varied over the past seven years, prisons have experienced an overall reduction in the prevalence of HIV/AIDS, despite the increasing prevalence of infection among the general population (Maruschak, 2004). With that said, it is possible that the efficacy of the estimates may be somewhat limited based on the method in which infection is detected. For example, existing research documents wide variation in testing methods across jurisdictions (Hammett et al., 1999; Harlow, 1993). Further, testing all inmates as opposed to testing inmate samples or simply testing on a voluntary basis may yield different outcomes (Amankwaa, Bavon, & Amankwaa, 2001). In addition, testing inmates in urban versus rural areas may yield higher rates of infection where inmates in rural areas have lower rates of the disease. These methodological differences in testing may have an effect on the overall outcome of reported disease prevalence, or lack thereof. There are additional reasons to remain cautious when examining HIV/AIDS estimates in the prison system including short prison stays, limited health care access and limited health care services (see Amankwaa et al., 2001).

Table 1
Comparison of Percentages of HIV/AIDS-infected Inmate Population versus HIV/AIDS-infected
Individuals in the General Population, by Year*

Year	Inmates/ General Population
1995	.51/.08%
1996	.54/.09
1997	.55/.10
1998	.53/.11
1999	.60/.12
2000	.53/.13
2001	.52/.14
2002 (mid year)	.48/.14

* Data are from HIV in Prisons and Jails, 2002. Bureau of Justice Statistics (Maruschak, 2004)

Despite these limitations, it appears as if the rate of HIV-infected inmates has been declining since 1999. Further, the declining infection among inmates has been accompanied by a significant drop (72 percent from the years 1995 through 2002) in the number of AIDS-related deaths in prison (see Table 2) (Maruschak, 2004). During this eight-year time span, death rates for both male and female prisoners saw a slow decline from 1995-1996 and then a more rapid decrease from 1996-1999 (Maruschak, 2004). Following 1999, AIDS-related deaths continued to decrease, but relatively slowly as compared to previous years. The rapid reduction may be partially attributed to advances in the medical treatment of the HIV/AIDS virus. Further, the increased availability of protease inhibitors and combination therapy among the

inmate population may have played a role (Amankwaa et al., 2001). This decrease may also be partly a consequence of compassionate leave policies that release sick and dying inmate patients to their families so that they can be cared for and live out their final days in their homes as opposed to in prison. However, any indication of a decline in AIDS-related mortality among inmates is promising in terms of treatment and viral transmission.

While the concentration of HIV/AIDS in prisons poses a serious threat to inmates in general, research indicates that it poses an increasingly serious threat to female inmates specifically (Acoca, 1998; Hammett et al., 1999; Kassira et al. 2001). Table 3 compares the rates of male and female inmates infected with HIV/AIDS over a twelve-year period. The rate of infected women remains consistently higher than the rate of their male counterparts, with the most current data, 2002, indicating that women are infected at a rate that is approximately 50 percent higher than males (also see Conly, 1998; Gellert, Maxwell, Higgins, Pendergast, & Wilker, 1993; Kassira et al., 2001; Maruschak, 1999).

Table 2
Number and Rate (per 100,000 inmates) of AIDS-Related Deaths among Male and Female Inmates in
U.S. State Prisons, by Year

Year	Number	Rate per 100,000 Inmates
1995	1,010	100
1996	907	90
1997	538	48
1998	350	30
1999	242	20
2000	185	15
2001	256	15
2002	215	22

*Data are from HIV in Prisons and Jails, 2002. Bureau of Justice Statistics (Maruschak, 2004).

Table 3

Number and Percentage of HIV/AIDS-infected Prison Inmates, by Year and Sex

Year	Male / Female (number)	Male / Female (Percentage)
1991		2.2/3.0%
1992		2.6/4.0
1993		2.5/4.2
1994		2.4/3.9
1995		2.3/4.0
1996		2.3/3.5
1998	22,045/2,552	2.2/3.8
1999	22,175/2,402	2.2/3.5
2000	21,894/2472	2.1/3.4
2001	20,415/2,212	1.9/3.1
2002 (midyear)	20,273/2,164	1.9/2.9

* Data are from HIV in Prisons and Jails, 2002. Bureau of Justice Statistics (Maruschak, 2004)

Pre-Incarceration Infection

The ways in which women are exposed to HIV/AIDS reflect their lack of information and education related to infection (see Zaitzow & West, 2003) as well as their propensity to engage in high-risk behavior (Guyon, Brochu, Parent, & Desjardins, 1999). Women are

infected through the use of intravenous drug needles (Tewksbury, Vito, & Cummings, 1998) and unprotected sex with infected partners (Berman & Brown, 1990; Decker & Rosenfeld, 1992; Leigh, 1990; Magura, Kang, Shapiro, & O'Day, 1993). With that said, more women than men suffer from drug addiction and are likely to use more drugs prior to incarceration (Morash & Schram, 2002; Pollock, 2002; Zaitzow & West, 2003). This has a direct affect on the likelihood that women will engage in high-risk drug-related behavior (i.e., intravenous drug use and needle sharing), thus increasing their chances of contracting the HIV/AIDS virus (Guyon et al., 1999; Leh, 1999; Lurigio, Swartz, & Jones, 2003; Marquart, Brewer, Mullings, & Crouch, 1999).

In addition, research has established the alarming rate at which women engage in prostitution in exchange for drugs or money to buy drugs (Polonsky et al., 1994; Steel & Haverkos, 1992). This may contribute to their chances of HIV/AIDS infection (Darrow, 1991; Magura et al., 1993). Additional research, however, has argued that women who engage in prostitution in exchange for money or drugs practice safe sex and are, therefore, not at a significantly higher risk of contracting the infection (see Gossop, Griffiths, Powis, & Strang, 1993; Ouadagno et al., 1991; Taylor et al., 1993). Moreover, when women are the victims of sexual abuse, they may be exposed to infection. Finally, low social and economic status is an additional risk factor influencing the prevalence of HIV infection among female inmates. This is especially the case when women engage in commercial sex to meet their financial needs (Nyamathi et al., 1997).

Contracting HIV/AIDS in Prison

The majority of seropositive female inmates enter prison already having contracted the HIV/AIDS virus (Maruschak, 1999). There are however, women who are infected while under correctional supervision (see Hammett et al., 1999 for a review). This occurs as a result of engaging in high-risk behaviors while incarcerated. Studies have indicated that inmates transmit HIV/AIDS through sexual activity where inmates participate in both consensual and coerced sex (Mahon, 1996; Struckman-Johnson, Struckman-Johnson, Rucker, Bumby, & Donaldson, 1996) presenting the possibility of infection. In addition, inmates engage in illicit intravenous drug use (Darke, Kaye, & Finlay-Jones, 1998; Rotily et al., 2001), often times sharing needles (see Hammett et al., 1999).

further increasing their risk of HIV transmission. Finally, inmates who receive tattoos while in prison increase the possibility of contracting communicable diseases, including HIV/AIDS, due to unsterile needles and inadequate protections against blood-borne transmission (Frost & Tchertkov, 2002; Hammett et al., 1999). Disease infection among the female inmate population remains a particularly poignant concern. Moreover, health care in U.S. correctional institutions and specifically in women's facilities has not adequately kept up with the growing needs of the drastically increasing female inmate population (Zaitzow & West, 2003).

Health Care in U.S. Correctional Institutions

Prior scholarly work has established that the quality and delivery of health and medical care in institutional corrections is poor (Belknap, 2001: Fearn & Parker. 2005: Hammett et al., 1999; Lindquist & Lindquist, 1999; Young & Reviere, 2001; Zaitzow & West, 2003). Inmates have reported extremely low satisfaction with regard to the accessibility and quality of medical services (Lindquist & Lindquist, 1999) from general health concerns to specialized care. This is particularly the case for female inmates (Lindquist & Lindquist, 1999) as medical care offered in women's prisons has failed to provide constitutionally guaranteed standards of health care (see Anderson, 2003; Belknap, 2001; Young & Reviere, 2001 for reviews). For example, specialized health care personnel such as gynecologists, obstetricians, and dietitians are often located off-site (Young & Reviere, 2001; Zaitzow, 2001; Zaitzow & West, 2003). This is specifically relevant where women in prison have a host of medical needs including gynecological concerns such as sexually transmitted diseases, reproductive-related health problems, and high-risk pregnancies and may need access to on-site medical treatment and counseling.

When medical specialists are not available on site, inmates must be transported to receive medical care. This often results in transportation and scheduling conflicts (Belknap, 2001) as well as additional expense and potential safety concerns where the outcome is less immediate health service (Zaitzow & West, 2003). In order to increase access to medical specialists, many prisons have experimented with "telemedicine" where specialists provide consultation to prisoners via video conferencing (see Nacci, Turner, Waldron, & Broyles, 2002).

Research has indicated that roughly twenty-five percent of institutions do not screen or test for HIV or hepatitis (Young & Reviere, 2001). This is confirmed by the data presented in Table 4 which indicates the various screening and testing procedures employed by U.S. correctional facilities. Moreover, most institutions have screening methods that rely on inmate requests for HIV/AIDS testing (Amankwaa, et al., 2001). While some facilities screen inmates based on specific clinical indications, others rely on blind or unlinked studies where blood is tested but there is no identifying information that links the inmate to the results of the test (Hammet et al., 1999). This form of testing provides aggregate numbers of infected inmates but does not allow for any type of medical treatment or educational follow-up. Lack of screening has problematic consequences when a host of women with disease infection are unaware of their seropositive status (Grinstead et al., Project START Study Group, 2003).

Table 4
Screening and Testing Policies for the Identification of Female Inmates with the
HIV/AIDS Virus, as Reported by Correctional Officials.

Population Screened	1990*	2000**
All inmates/residents (at some time)	18.5%	7.6%
High-risk inmates	11.2	14.2
Inmate request	48.5	51.2
Clinical indication	48.9	39.4
Court order	21.0	26.2
At admission	23.6	13.6
At release	7.7	3.1
Random sample	6.0	.8
Other criteria	4.3	10.0
Inmates not tested	14.2	24.7

NOTE: Categories are not mutually exclusive (i.e., some facilities reported having one or more screening/testing policies in place).

*1990—female/coed facilities (N= 233), data from the 1990 Census of State and Federal Adult Correctional Facilities;

**2000—female/coed (N= 381), data from the 2000 Census of State and Federal Adult Correctional Facilities.

In addition, Hammett et al. (1999) conclude that few correctional institutions have comprehensive HIV prevention programming. The costs associated with HIV therapy, in combination with clinical competence and lack of uniform treatment standards, limits the availability of appropriate treatment to HIV positive inmates. Further, prisons generally lack rigorous evaluations in determining the quality of health and medical services (Hammett et al., 1999). Moreover, a significant percentage of institutions do not screen for past physical/ sexual abuse (Young & Reviere, 2001). Neglecting to identify inmates' abuse histories influences the treatment of mental health disorders and substance abuse problems among females. Research has also reported on abusive conditions in prison related specifically to medical service delivery where women in prison have reported that medical staff are underskilled and show little concern for their medical well-being (Fletcher, Shaver, & Moon, 1993). Further, women have voiced problems related to prison medical staff and how they have withheld medical care, prescribed ineffective medication, coerced patients into participating in medical experiments, and indiscriminately performed hysterectomies on female inmates (see Anderson, 2003; Belknap, 2001).

Specific cases of abusive or apathetic care in combination with the general deficiency that is characteristic of the medical care provided in women's correctional facilities poses specific threats to the well-being of such an at-risk population (see Anderson, 2003; Belknap, 2001; Fletcher et al., 1993). The vast number of women in prison who suffer from preincarceration physical/sexual abuse, mental health problems, substance addiction, and HIV/AIDS infection influences the need for increased quality and service availability in health care options (Zaitzow & West, 2003).

Special Needs of Women with HIV/AIDS

Incarcerated women who are HIV or AIDS positive have a specific set of needs related to health care in prison. The prison experience is understood in terms of the "total institution" (Goffman, 1984), thus, infected women are left with little autonomy over their health and medical care (Zaitzow & West, 2003). For example, prison administrators have a financial interest in limiting or rationing the types of treatment and services that are offered, especially as they relate to HIV/AIDS where high medical costs may deter the wide availability of therapies (see Hammett et al., 1999). Women who do not show signs of disease may not request testing and, thus, may not learn of their infection (Grinstead et al., 2003). This results in potentially damaging outcomes related to disease transmission through high-risk behaviors, prison violence, and in utero contraction. In addition, women who do not know they are infected may face grave challenges in dealing with physical deterioration and the loss of childbearing potential (Lawson & Fawkes, 1993; Zaitzow & West, 2003).

Women who are aware of their positive serostatus but do not show symptoms of HIV/AIDS may be limited in their access to quality treatment and gender-specific counseling. This may occur as a result of correctional policies that limit screening to

women with clinical symptoms (Hammett et al., 1999). The lack of both financial and medical resources in women's prisons might affect the degree to which asymptomatic women are Further, women who are in the treated. symptomatic stages of infection may require intensive treatment as well as psychosocial counseling surrounding transmission behaviors and coping strategies for dealing with terminal illness (Zaitzow, 2001; Zaitzow & West, 2003). Aside from the medically relevant special needs of seropositive female inmates, researchers have noted the increasing difficulties that HIV/AIDS infected women face in prison. For example, they must deal with social isolation, physical abuse, and the traumatic repercussions of (Lachance-McCullough, stigmatization Tesoriero, Sorin, & Stern, 1994; Olivero, 1992).

Lack of Adequate Health Care as a Public Health Threat

While current research indicates a decrease in both HIV/AIDS infection and AIDS-related deaths among female prison inmates, infection continues to occur at a disproportionately higher rate among the incarcerated population as compared to the general law-abiding populace (Hammett et al., 1999; Maruschak, 2004). The majority of those infected enter prison having already contracted the virus (Maruschak, 1999). As discussed previously, this is the result of a number of factors, most of which are related to high-risk behaviors (Guyon et al., 1999) and lack of adequate knowledge and education regarding the transmission of the disease (see Zaitzow & West, 2003). Policies regarding the testing and treatment of infection vary according to state and local jurisdiction (Hammett et al., 1999) but have profound effects on the outcome of post-release prevention efforts (see Grinstead et al., 2003 for a brief review). This is the case especially as HIV testing, treatment, and educational programming plays a role in either exacerbating or preventing the spread of infection (see Lurigio et al., 2003).

Research has established the significant degree to which inmates enter the institution without knowledge of their infection (Grinstead et al., 2003). Thus, HIV testing plays a crucial role in informing inmates of their seropositive status. This is also related to STD and hepatitis testing as untreated STDs can increase the risk of HIV infection (Fleming & Wasserheit, 1999) and hepatitis has been found to be related to HIV contraction (Young & Reviere, 1999). Further, infected inmates who have access to educational programming and counseling may reduce highrisk behaviors (Weinhardt, Carey, Johnson, & Bickham, 1999) thus lowering their chances of transmitting the virus upon release back into the community.

While correctional institutions in virtually every state provide some type of HIV/AIDs education program (Hammett et al., 1999), vast differences exist in terms of delivery and content (see Zaitzow & West, 2003). Further, jurisdictions vary in the quality of service and types of programs they provide where many programs supply questionable material or inaccurate information. Institutions are also guilty of failing to deliver information that addresses issues relevant to prison populations and to do so in a way that is easily understood by inmates (Zaitzow & West, 2003). As illustrated in Table 5, we lack specific, contemporary information regarding the treatment and services provided to female inmates, especially those with Although relatively HIV/AIDS. detailed treatment/services information has been collected in the past (Abt Associates Inc., 1995), the most recent data collection projects regarding health and medical services provided in prisons — have been confined to asking broad questions related most often to counseling and "other" programs. Thus, Table 5 presents a wealth of treatment and services information from an AIDS-specific research project conducted from 1985-1992 (Abt Associates Inc., 1995) as well as the most recent general counseling information as provided in the 2000 Census of State and Federal Adult Correctional Facilities (U.S. Department of Justice, 2004). Although not comparable across time, the earlier data indicate that the majority of State Departments of Corrections provided an array of educational, counseling, and drug treatmentrelated services for female inmates. On the other hand, the 2000 data reveal that only a little over half of the prisons reported providing HIV/AIDS counseling to inmates in 2000.

Current HIV medical treatments offer prolonged delay in the progression of the disease. The cost of such treatment however, averages roughly \$12.000 per patient per year according to the 1999). latest figures (Hammett et al., Administering HIV therapies (i.e., protease inhibitors) reduces morbidity and mortality rates among infected patients (Palella, Delaney, Moorman, & Loveless, 1998) but is only effective if done so in a stringent and regimented fashion. Thus, neglecting to do so will promote the development of disease and/or resistance to therapy (Hammett et al., 1999). Limiting access to treatment as a result of inadequate economic resources and ill-trained staff may have significant long-term repercussions in inmate and public health. First, women who are not provided with treatment will become symptomatic and require more intensive medical therapy (Zaitzow & West, 2003). Further, advanced progression of HIV limits immune function and presents the potential for other health ailments. Third, women who have been administered medical treatment in a haphazard manner are presented with a special risk where they may be unable to successfully respond to the protease inhibitors and other therapies (Hammett et al., 1999). Further, when the delay of HIV treatment results in disease progression, female inmates may be unable to care for themselves or their children upon release. As a result, the women and their children will likely become the health and medical responsibility of the social service system.

Gender-Specific HIV/AIDS Education and Counseling

Additional problems with correctional programming relate specifically to the manner and context in which the educational material is delivered. Institutional programming does not always focus content on gender-specific issues such as physical/ sexual abuse, drug addiction, and mental health disorders (Belknap, 2001). The material delivered by educational programs is generally tailored to a male audience and does not differentiate among the different populations that may be involved (Belknap, 2001; Zaitzow & West, 2003). For example, male versus female inmates and inmates of differing ethnic and racial backgrounds may require counseling and educational approaches that focus on riskbehaviors and lifestyle changes specific to their circumstances. This lack of personalization and gender- specific programming may fail to address the needs of women in prison proving to be somewhat irrelevant, or at the very least, less effective in counseling a change in risk behaviors.

Table 5
Percent of Female Inmates with HIV/AIDS Receiving Treatment and Services as
Reported by State Departments of Corrections

Treatment/Services	1992*	2000**
HIV/AIDS Counseling	81.7	54.9
Peer counseling/internal support	39.0	
Staff counseling	41.5	
External counseling	42.7	
Mandatory education on HIV/AIDS	43.9	
Voluntary Education (lectures, Q and A)	75.6	
Written materials on HIV	93.9	
Videos on HIV	86.6	
Education material includes information on:		
Safer sex practices	92.7	
Cleaning drug injection equipment	72.0	
STDs	81.7	
Perinatal transmission	79.3	
Drug treatment/medication	89.0	
Treatment/services at release:		
Health department notified	59.8	
Monitoring referral	62.2	
Drug therapy referral	61.0	
HIV counseling referral	61.0	
Psychological/social support referral	58.5	

*1992: Data are from the National Survey of AIDS in Correctional Facilities, 1992 (N= 82); **2000: Data are from the Census of State and Federal Adult Correctional Facilities, 2000; questionnaires did not ask about specific HIV/AIDS treatment services available/provided.

Public Policy Relevance

With the rising population of female inmates and the significant number of HIV positive women in prison, continued treatment and the promotion of educational programming within the facility presents specific public health and policy relevance. This remains the case despite relatively recent decreases in rates of infection and AIDS-related mortality in prison (Maruschak, 2004). We know that infection rates are higher among prison inmates, thus, it is important to consider the types of crimes committed and length of sentences received among female offenders. For instance, the majority of women in prison are convicted of non-violent drug offenses and petty theft crimes (Chesney-Lind & Pasko, 2003; Pollock, 2002). As such, the majority of these inmates will serve relatively short sentences, after which they will be released from prison and sent back to their communities (see Travis, 2005). When inmates are not aware of their seropositive infection status, they will not take necessary precautions by limiting high-risk behaviors in order to lower chances of viral transmission both in and outside of prison. Even when inmates are aware of their infection, they remain at an increased risk for transmission because they may not know how to effectively prevent sex and drug-related transmission and contraction (Keeton & Swanson, 1998; Zimmerman, Martin, & Vlahov, 1991) or chose to take few precautions within the prison or in the community. They continue with similar behavioral patterns, thus putting the community at risk.

While the majority of female inmates are poor and come from economically distressed communities (Belknap, 2001; Chesney-Lind & Pasko, 2003; Pollock, 2002), they are left with few health care options upon release. Consequently, treatment for infectious and communicable disease becomes the responsibility of an already overburdened public health system (e.g., Medicaid) which bears the brunt of the medical expense. When inmates are released ill-informed of their seropositive status and unfamiliar with how to change high-risk behaviors, they pose a health threat to the community, which in turn, significantly impacts public resources.

Promising programs such as New York State's Criminal Justice Initiative serve as a model for effective prevention and service delivery (Klein, O'Connell, Devore, Wright, & Birkhead, 2002). The purpose of the New York program is to engage inmates in HIV prevention through a government-community partnership. This program consists of collaboration between prison health services, education, empowerment and prevention services, and transitional support for inmates.

It remains the responsibility of the institution to effectively screen and educate inmates, thereby alleviating unnecessary infection and expense. Scholars have argued that incarcerated women are a captive audience where their imprisonment can facilitate attendance in education and counseling programs (Young & Reviere, 2001). Correctional institutions have the responsibility to provide inmates with much-needed viral screening, counseling, and education to make lifestyle changes relevant to their health and medical well-being. Ultimately, this is to the benefit of the individual women, their families, and their communities.

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