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# IDCR: Infectious Diseases in Corrections Report, Vol. 9 No. 6/7

Infectious Diseases in Corrections

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### ABOUT IDCR

IDCR, a forum for correctional problem solving, targets correctional physicians, nurses, administrators, outreach workers, and case managers. Published monthly and distributed by email and fax, IDCR provides up-to-the moment information on HIV/AIDS, hepatitis, and other infectious diseases, as well as efficient ways to administer treatment in the correctional environment. Continuing Medical Education credits are provided by the Brown University Office of Continuing Medical Education. IDCR is distributed to all members of the Society of Correctional Physicians (SCP) within the SCP publication, *CorrDocs* ([www.corrdocs.org](http://www.corrdocs.org)).

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## AT THE INTERSECTION BETWEEN POVERTY, RACE, AND HIV INFECTION: HIV-RELATED SERVICES FOR INCARCERATED WOMEN

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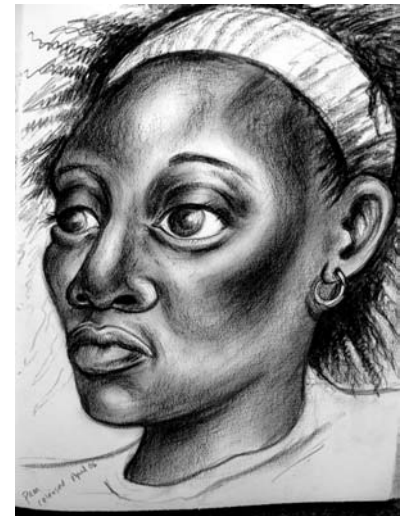
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This article contains concepts that will be included in a soon to be published book by the authors, *Health Issues among Incarcerated Women* (Rutgers University Press).

risk (e.g., sex while under the influence of drugs or alcohol, anonymous sex); they are sometimes reevaluating their life choices; they have access to medical and mental health services;



**"Pam" - Sue Coe**  
(Artist's Statement on page 7)

The prevalence of HIV infection among incarcerated women is disproportionately high, when compared with non-incarcerated populations and also when compared with the prevalence of HIV among incarcerated men. For example, at the end of 2003, 2.6% of female state and federal prison inmates were reported to be HIV-infected in contrast to 1.8% of males.<sup>1</sup> Similarly, in a 2002 survey, 2.3% of female jail inmates self-reported being HIV-infected as compared to 1.2% of males.<sup>2</sup> The reasons why incarcerated women are disproportionately impacted by HIV/AIDS are complex, but it is notable that many of the same life circumstances that increase risk for HIV infection (e.g., poverty, exposure to violence and abuse, substance abuse, unemployment, unstable living conditions) also increase the likelihood of criminal behavior (e.g., drug use and sex work) and therefore incarceration. Many researchers argue that incarceration offers an ideal opportunity for the delivery of health education programs and especially HIV prevention messages that focus on high risk behaviors.<sup>3-11</sup> In contrast to when they were in the community, incarcerated individuals are logistically easier to reach with prevention and education programs; and in theory, they are encountering fewer situations of

and they have fewer demands being made on their time. Yet to make important strides towards reducing HIV prevalence among incarcerated women requires a comprehensive approach to HIV prevention, treatment and care.

This article will explore the complexities surrounding the delivery of HIV-related services to

**Continued on page 3**

### WHAT'S INSIDE

Editor's Letter .....	pg 2
IDCR-o-GRAM .....	pg 6
Spotlight .....	pg 6
HPV 101 .....	pg 8
Save The Dates .....	pg 9
News and Reviews .....	pg 9
Self-Assessment Test .....	pg 11

## LETTER FROM THE EDITOR *(continued from page 2)*

Dear Corrections Colleagues,

When I read about "gender entrapment", a concept put forth by Dr. Kim Arriola and colleagues in this issue of IDCR, I thought about the life stories that I have heard in my 15 years of correctional HIV practice. There were many variations on a common theme - the women were sold by their mothers to neighbors for crack, or used as sex toys by stepfathers, or locked up in their own homes by their lovers, or beaten with two by fours by their legal husbands, or verbally abused by their own children, or dumped out of cars and left for dead, or gang raped and then set on fire. These women have had their dogs and their children killed in front of their own eyes. These women bear children that are their own siblings. And these stories are true. I have listened to stories in my clinic that made me want to escape the telling of them - that made me wonder how the woman sitting with me was strong enough to survive, to have children, and to get out of bed every day. These stories were being told by women that had been entrapped by their life circumstances, and could not see outside the room of pain that they had been locked into.

For the fortunate few, prison was a route of escape from those lives, a path leading to a safer haven after release. For those few, a prison clinic could be a place where, for the first time in their lives, they could feel as valued and as precious as they were on the day that they were made. But for many, the experience of prison was just part of a cycle of abuse that was never ending, and never changing, and hidden from all but a few. That is what Dr. Arriola means when she says that "women often engage in illegal behavior as a logical extension of their marginalized social positions, culturally expected gender roles, and the violence that surrounds them". And while she also states that the entrapment model does not absolve individuals from personal responsibility; she suggests that it is time that we acknowledge and address the social, cultural, financial, and political conditions that lead to illegal behavior, thus compelling women to crime.

We health care providers have two choices when faced with this type of exposé. We can either continue our same behaviors, and, like so many women in prison, never find a way to modify the certain outcome (repeated incarcerations, continued marginalization, unending exposure to HIV risk). Alternatively, we can seek a way to pry open that room of pain and help incarcerated women find a path to safe haven. We may need to reach outside of prison and jail walls, telling their true stories and calling attention to the roots of the problem as described by Dr. Arriola. Models for change exist - and as prescribed, we can start by bearing witness, admitting that the system has failed, find strength in our shared vision to improve correctional health care, establish common goals, and then seek a way to start anew.

Readers of this issue of IDCR can expect to be able to identify the root causes of the higher prevalence of HIV infection in US correctional institutions. They also can become familiar with recent reports on the projected cost of halting the epidemic (as estimated by UNAIDS), which would require \$22 billion a year by 2008 and possibly more in the following years.

And, as always, we are pleased to have coordinated and written this issue for you, our valued colleagues who work in correctional settings all over the US and abroad. We welcome your comments, and in order to make it easier for you to share your thoughts with your peers, we have added a new feature on the website - letters to the editor. Please send your letters to your editors, Annie De Groot (AnnieD@Brown.edu) and David Wohl (Wohl@med.unc.edu).

Annie DeGroot, MD

### Faculty Disclosure

In accordance with the Accreditation Council for Continuing Medical Education Standards for Commercial Support, the faculty for this activity have been asked to complete Conflict of Interest Disclosure forms. Disclosures are listed at the end of articles. All of the individual medications discussed in this newsletter are approved for treatment of HIV and hepatitis unless otherwise indicated. For the treatment of HIV and hepatitis infection, many physicians opt to use combination antiretroviral therapy which is not addressed by the FDA.

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## SERVICES FOR INCARCERATED WOMEN... (continued from page 1)

incarcerated women. In doing so, it will explore three questions: (a) How do race, class, and gender intersect to confer risk for HIV/AIDS among incarcerated women? (b) What types of HIV-related services are needed for incarcerated women? and (c) What aspects of correctional health care policy are relevant to incarcerated women?

### Intersection of Race, Class and Gender

Black women living in poverty are at increased risk for HIV/AIDS and they are disproportionately incarcerated. For example, in 2004, African American and Hispanic women together in the U.S. represented about 25% of the United States population<sup>12</sup> yet they accounted for about 81% of the estimated total AIDS diagnoses among women.<sup>13</sup> At the same time, when examining the racial composition of female prison population, two-thirds of women confined in local jails, state, and federal prisons are black, Hispanic, or of other non-white ethnic groups.

In the United States, race, class and gender are linked to risk of HIV infection. Researchers increasingly acknowledge that the disproportionate rates of HIV/AIDS among poor black women compared to white women are due to the social inequalities that exist within the United States.<sup>15,16</sup>

There are at least two important ways in which the effects of race, poverty and gender converge in the lives of black women: trauma (or the experience of physical or sexual violence) and sexuality. First, the combination of racism, classism and sexism influences the nature and range of violence experienced by poor black women, the male-female gender roles that may promote violence against women, the structure of social institutions that condone this violence, and the extent to which the victims engage in help-seeking behavior.<sup>17</sup> Second, black women's limited control over their own sexuality has direct implications for their ability to protect themselves from contracting HIV/AIDS. For example, they may be less able to insist on condom use or they may feel forced to use their bodies to secure drugs or other desired goods.

Research has confirmed the relationship between trauma and HIV risk behavior. Child physical and sexual abuse, intimate partner violence, and rape are interrelated and are associated with risk for HIV/AIDS among black women.<sup>18-24</sup> Specifically, this research has found these types of trauma are associated with engaging in sex with a risky partner,<sup>18,21</sup> and may contribute to other risks including: having sex with more than one partner,<sup>21</sup> using drugs,<sup>18</sup> engaging

in sex without a condom,<sup>23</sup> and exchanging sex for drugs, money, or shelter among women of color.<sup>18</sup> However, most of the research performed to date is cross-sectional, so the directional nature of the relationship between trauma and HIV risk-taking is unclear.

One explanation of the link between intimate partner violence and illegal behavior is provided by the 'gender entrapment' model.<sup>25</sup> This theory suggests that African-American battered women often engage in illegal behavior as a logical extension of their marginalized social positions, culturally expected gender roles, and the violence that surrounds them. This model does not absolve individuals from personal responsibility; instead it acknowledges the social, cultural, financial and political conditions that set them up for illegal behavior, thus compelling them to crime.<sup>25</sup>

### HIV-related services for incarcerated women

Given the heightened risk of HIV infection among women who are incarcerated, it is imperative that prevention approaches be focused on this population. A public health approach to HIV prevention among incarcerated women would entail implementing aggressive primary, secondary and tertiary HIV prevention services. *Primary prevention* is based on HIV prevention education delivered to the general population of incarcerated women for the purpose of preventing infection. *Secondary prevention* focuses on offering infectious disease screening (i.e. screening for sexually transmitted infections [STIs] and HIV/AIDS) to facilitate early detection and intervention. *Tertiary prevention* is accomplished by providing HIV treatment to those identified as being infected to improve health and reduce the likelihood of further spreading the infection.

### Primary Prevention

HIV and STI education and prevention programs are delivered through a variety of modalities in correctional settings: instructor-led education, peer-led programs, multi-session prevention counseling, pre-test/post-test individual counseling, the use of audiovisual materials, and the dissemination of written materials.<sup>26</sup> HIV and STI education programs have been widespread in correctional facilities for both men and women,<sup>26,27</sup> although few have been systematically evaluated making it difficult to ascertain their true impact.<sup>14</sup>

### Bedford Hills "ACE"

Model HIV prevention programs targeting women have been described at several facilities including the Bedford Hills Correctional Facility in New York,<sup>27</sup> where a

widely recognized peer education program is being implemented. The AIDS Counseling and Education (ACE) program<sup>6</sup> was founded in a New York prison in 1988 and soon thereafter the program was recognized as a model program that could be replicated in other facilities and began to receive funding from the New York State Department of Health AIDS Institute. ACE functions as a collaborative effort among inmates, medical and nursing staff, and the facility administration. Participants developed a curriculum of nine education workshops (e.g. "What is HIV/AIDS?", "HIV/AIDS: Sexual transmission," "HIV/AIDS: Transmission and risk-reduction activities"). The curriculum entails presenting issues as problems that are to be examined and draws from the knowledge and experience of the peer educators to empower participants to resolve these problems.<sup>27</sup> The ACE program continues and has become integrated into the reception process in New York State.

Despite the great promise that primary prevention programs such as the ACE program hold, much more work needs to be done in this area. Firstly, there is a need for rigorous evaluation of existing HIV primary prevention services. Secondly, educational and prevention programs must be tailored to meet the unique needs of the relevant correctional system and the needs of the target population. Regarding the correctional system, there may be policies that dictate how, when and where HIV prevention education is delivered and what the content entails; these rules should be respected. Regarding the target population, educational messages should be developed in a culturally appropriate manner. Thirdly, there needs to be consideration of the possibility that HIV prevention may not be a priority for many high-risk women because they are focusing on meeting other needs. Therefore, substance abuse treatment, vocational training, high school equivalency classes, transitional and long-term housing, legal services, and family services may positively impact a woman's life in a manner that results in less HIV risk.

### Secondary Prevention, HIV Testing

Screening for infectious diseases is a necessary component of any comprehensive HIV prevention program. HIV screening services that are made available to incarcerated women in the United States vary greatly (see IDCR April, 2006). HIV antibody testing may be mandatory (i.e. required of all inmates at a particular point in time, such as, upon entrance to or release from a facility), routine (i.e. patients are informed that they will be tested unless

### SERVICES FOR INCARCERATED WOMEN... (continued from page 3)

they specifically refuse), offered (i.e. staff recommends testing to an inmate based on a health history and assessment), on request (i.e. no testing unless initiated by the inmate), or a combination of these strategies.<sup>24</sup> The issue of HIV testing in correctional facilities is controversial as it requires attention to both public health and individual rights (see IDCR March, 2006). It is further complicated by difficulties with maintaining confidentiality in a correctional setting, the highly stigmatized nature of HIV/AIDS, and the potential for the use of results to segregate those who test positive from those who test negative.<sup>3,11,28</sup>

#### Tertiary Prevention

Issues surrounding the medical management of the HIV-infected incarcerated woman are complex and have been reviewed in detail elsewhere.<sup>29,30</sup> Treatment with combination antiretroviral therapy is the standard of care and the Department of Health and Human Services (DHHS) has issued clinical guidelines for the care of HIV-infected adults - including specific guidance on managing incarcerated women. DHHS guidelines highlight the importance of early intervention, multiple drug regimens, and adherence to treatment. In addition, given that injection drug use and unprotected consensual and non-consensual sex are not uncommon in prisons, the accessibility of post exposure prophylaxis to incarcerated persons is particularly important.<sup>31</sup>

#### Gynecological Care

Gynecological care of HIV-infected and at-risk incarcerated women is important. The presence of HIV infection increases women's susceptibility to reproductive tract infections and vice versa. Furthermore, the presence of any STI should suggest that the patient may also be at risk for other STIs, including HIV. Thus, diagnosis of an STI should prompt referral for HIV counseling and testing. In addition, the prevalence of cervical cytological abnormalities, including cervical dysplasia, a precursor to cancer, among HIV-infected women and the recommendation for early intervention confirm the need for access to colposcopy.<sup>32</sup>

#### Mother to Child HIV Transmission Prevention

Perinatal HIV transmission can occur at any time during pregnancy, labor, delivery and breast feeding. Antiretroviral therapy is a highly effective means of reducing the risk of prenatal transmission and has been recommended by the US Public Health Service (Centers for Disease Control and Prevention, 1995). Thus, testing pregnant women for HIV is recommended, and antiretroviral therapy is a critically important

component of the health of pregnant HIV-infected women and their children. (See Spotlight on "Perinatal Testing and HIV Prevention" in this issue).

In light of these recommendations and research demonstrating the reduced likelihood of perinatal transmission with the introduction of antiretroviral therapy,<sup>33</sup> policies to facilitate pregnancy testing for female inmates and HIV antibody testing for pregnant inmates have become increasingly common.<sup>24</sup> The majority of state and federal prison systems provide pregnancy testing upon inmate request and less than half provide routine testing on entry. Less than a third of city/county jail systems routinely test all incoming female inmates. In terms of HIV antibody testing, it is relatively common for state and federal prison systems to require mandatory HIV antibody testing for pregnant female inmates (39%). By contrast, the most common practice for city/county jail systems is to offer HIV antibody testing to pregnant inmates (51%), with only one jail system requiring mandatory HIV antibody testing for pregnant female inmates.

Ultimately, it would take the combination of aggressive pregnancy policies and aggressive HIV antibody testing policies to ensure that infected pregnant inmates are started on antiretroviral therapy as early as possible in pregnancy in order to reduce the likelihood of perinatal transmission.<sup>24</sup>

#### Discharge Planning

When the proper medical therapy is initiated during incarceration, it is important that measures be put in place to ensure continuity of care and follow-up upon release. After release, many HIV-infected ex-offenders will lack housing, employment, transportation and monetary resources. As a result, HIV treatment and medication adherence may not be a high priority. One study suggests that being released from prison may, perversely, have a negative impact on disease progression as indicated by rising viral loads and falling CD4 cell counts - risking individual and public health.<sup>34</sup> Furthermore, efforts at continuity of care should be informed by evidence that intensive discharge planning (i.e. making an appointment for an inmate as opposed to simply a referral) results in a greater likelihood of follow-up.<sup>3</sup>

#### Considerations for Health Care Policy

Bold and progressive policy action is required by correctional policymakers to advance the health and well-being of incarcerated women. Examples of such policy initiatives are presented below.

#### 1. Develop HIV prevention and screening services with the full participation of

incarcerated women. Following the ACE model, services should be developed and implemented by incarcerated women for incarcerated women. It is likely that these services will be more heavily utilized if the women feel a sense of ownership. Moreover, peer education programs have received support in the research literature.<sup>35</sup> However, for a grass-roots HIV prevention program to develop, there must be support among correctional administrators.

**2. Encourage HIV screening** as a routine part of medical care. In keeping with the CDC guidelines to develop new strategies to control the spread of HIV/AIDS<sup>36</sup>, correctional health care providers should work to create an environment in which voluntary HIV testing is an accepted and regular part of health care. Given that the population being served in correctional facilities is at such high risk for contracting HIV, there needs to be multiple opportunities for inmates to agree to voluntary HIV testing during incarceration. This could occur in the context of routine medical visits, particularly when inmates present with STIs. What is key is that there is a perception that testing is common among inmates (i.e. just because one consents to testing does not mean that she is positive), that results are handled with the strictest confidentiality, and that the correctional environment not impose punitive policies towards those who are infected (e.g. mandatory segregation).

**3. Continued improvement** of HIV management and gynecologic care is an important component of Correctional Health Care policy.

**4. Support an increase in discharge planning initiatives** that reinforce continuity of care for HIV infected inmates returning to community settings. Continuity of care for African-American and Latina female offenders is especially daunting, given their low representation among the health insured. Deliberate action is needed to extend the responsibility for medical treatment from the prison to community settings. Interagency collaboration between corrections and municipal health providers will need to be legislated to ensure extended post-release care.

**5. CBO engagement.** Improved opportunities for community-based organizations and AIDS service organizations are needed to gain access to incarcerated populations for delivery of HIV/AIDS education and prevention programs. Many state departments of corrections and local jails allow these organizations to offer preven-



## SERVICES FOR INCARCERATED WOMEN... (continued from page 4)

tion programs. Allowing community organizations that provide transitional services in correctional settings to bill for reimbursement for such services will remove a substantial obstacle to community continuity of care.

**6. Increase training.** Increased medical and correctional staff training and education designed to modify attitudes about HIV among correctional personnel would reduce stigmatization and improve access to care, while improving the coordination of services for HIV infected incarcerated women.

### Conclusions

A number of advances have been made in the quality of HIV-related health care delivered to incarcerated women, due in part to improvements in correctional health care in general but also due to court mandates and advocacy. Court mandates aside, as

researchers, health care providers, correctional officials and policymakers, we should care about the health of female inmates. Female inmates are human beings whose rates of HIV/AIDS far exceed rates among the general population and incarcerated men. There are professional organizations and accrediting bodies that help ensure the quality of care delivered in correctional facilities. The National Commission on Correctional Health Care offers health services accreditation that correctional facilities may obtain on a voluntary basis and has issued a position statement on women's health care in correctional settings.<sup>37</sup> The American Psychiatric Association, American Public Health Association, the National Commission on Correctional Health Care and American Correctional Association have guidelines for the delivery of services in correctional settings. All of these guidelines point to the importance of comprehensive health services being made available to women in need.

It is the case that the majority of HIV-infected incarcerated women will return to society. Thus, it is crucial that all efforts are made to prepare these women for reentry into society and not have them return to the circumstances that led them to seroconversion, jail or prison. Without reentry assistance, women are likely to return to the criminal and health risk behavior that lead to their incarceration. Health concerns not addressed during incarceration will still exist once the ex-offender has returned to the community. Upon release, any infectious disease that an ex-offender has, for example, may be transmitted to individuals in the general population. It is for this reason that many public health professionals argue that HIV prevention programs implemented by correctional policymakers to advance the health and well-being of incarcerated populations will ultimately impact the community at-large.

### References:

1. Maruschak LM. Bureau of Justice Statistics, US Department of Justice. 2005, NCJ 210344.
2. Maruschak LM. Bureau of Justice Statistics, US Department of Justice. 2004, NCJ 205333.
3. Braithwaite RL, Hammett TM, Mayberry, RM. *Prisons and AIDS*. San Francisco, California: Jossey-Bass, 1996.
4. Braithwaite RL, Arriola KJ. *Am J Public Health*. 2003;93(5):759-763.
5. Farley JL, Jennifer AM, Michelle AL, et al. *Journal of Women's Health & Gender-Based Medicine*. 2000;9:51-6.
6. Flanigan TP, Josiah DR, Spaulding A. *AIDS*. 1999;13(17):2475-76.
7. Grinstead OA, Zack B, Faigles B, et al. *Criminal Justice and Behavior*. 1999;26(4):453-65.
8. Hammett T. National Institute of Justice Centers for Disease Control and Prevention, Research in Brief. 1998;NCJ 169590.
9. Hammett, Theodore M, Harmon P, et al. *Am J Public Health*. 2002;92:1789-94.
10. MacDougall DS. IAPAC Mon. April 1998. Available at: [www.thebody.com/iapac/prisons.htm](http://www.thebody.com/iapac/prisons.htm). Accessed March 27, 2006.
11. Polonsky S, Kerr S, Harris (initial), et al. *Public Health Rep*. 1994;109(5):615-25.
12. Hammett TM, Harmon P, Maruschak LM. *National Institute of Justice, Issues and Practices*. 1998, NCJ 176344.
13. CDC. *HIV/AIDS Surveillance Report, 2004*. Vol. 167. Atlanta: US Department of Health and Human Services, CDC; 2005:1-46.
14. Richie, B. (2001). *Challenges Incarcerated Women Face as They Return to Their Communities: Findings from Life History Interviews. Crime and Delinquency* 47:368-389.
15. Amaro H. Love, sex, and power. *Am Psychol* 1995;50:437-47.
16. Zierler S, Krieger N. Reframing women's risk: social inequalities and HIV infection. *Annu Rev of Public Health* 1997;18:401-36.
17. West CM. *Black battered women: new directions for research and black feminist theory*. In: Collins LH, Dunlap MR, Chrisler JC, editors. *Charting a new course for feminist psychology*. Westport (CT): Praeger; 2002.
18. Cohen M, Deamant C, Barkan S, Richardson J, Young M, Holman S, et al. Domestic violence and childhood sexual abuse in HIV-infected women and women at risk for HIV. *Am J Public Health* 2000;90(4):560-565.
19. El-Bassel N, Witte SS, Wada T, Gilbert L, Wallace J. Correlates of partner violence among female street-based sex workers: substance abuse, history of childhood abuse, and HIV risks. *AIDS Patient Care STDs* 2001;15:41-51.
20. Parillo KM, Freeman RC, Collier K, Young P. Association between early sexual abuse and adult HIV-risky sexual behaviors among community-recruited women. *Child Abuse Negl* 2001; 25:335-346.
21. El-Bassel N, Gilbert L, Krishnan S, Schilling RF, Gaeta T, Purpura S, et al. Partner violence and sexual HIV-risk behaviors among women in an inner-city emergency department. *Violence Vict* 1998;13(8):377-93.
22. Kalichman SC, Williams EA, Cherry C, Belcher L, Nachimson D. Sexual coercion, domestic violence, and negotiating condom use among low-income African American women. *J Womens Health* 1998;7:371-378.
23. Wingood GM, DiClemente RJ. The effects of an abusive primary partner on the condom use and sexual negotiation practices of African American women. *Am J of Public Health* 1997;87:1016-18.
24. Wyatt G, Myers HF, Williams JK, Kitchen CR, Loeb T, Carmona JV, et al. Does a history of trauma contribute to HIV risk for women of color? Implications for prevention and policy. *Am J Public Health* 2002;92:660-65.
25. Ritchie BE. *Compelled to crime: the gender entrapment of battered black women*. New York: Routledge; 1996.
26. DeGroot, A. (2000). HIV infection among incarcerated women: Epidemic behind bars. *AIDS Reader*, 10, 287-295.
27. Members of the AIDS Counseling and Education (ACE) Program of the Bedford Hills Correctional Facility. *Breaking the walls of silence*. New York: Overlook Press, 1998.
28. Kantor E. HIV InSite. Knowledge Base Chapter. February 2003. Available at: <http://hivinsite.ucsf.edu/InSite? pate=kb-07-04-13>. Accessed March 27, 2006.
29. Stephenson B. Adherence to antiretroviral therapy in HIV-infected incarcerated women. In R. L. Braithwaite, K. R. J. Arriola, & C. Newkirk (eds.), *Health issues of incarcerated women*. Piscataway, NJ: Rutgers University Press, 2006: 248-58 (in press).
30. De Groot AS, Maddow R. HIV/AIDS infection among incarcerated women. In R. L. Braithwaite, K. R. J. Arriola, & C. Newkirk (eds.), *Health issues of incarcerated women* Piscataway, NJ: Rutgers University Press, 2006: 237-47 (in press).
31. CDC. HIV transmission among male inmates in a state prison system--Georgia, 1992-2005. *MMWR*, 21;55(15):421-6. April 2006.
32. Heard I, Tassie JM, Schmitz V, Mandelbrot L, Kazatchkine MD, Orth G. Increased risk of cervical disease among human immunodeficiency virus-infected women with severe immunosuppression and high human papillomavirus load. *Obstet Gynecol*. 2000;96:403-409.
33. Connor EM, Sperling RS, Gelber R et al. *N Eng J Med*. 1994;331(18):1173-80
34. Stephenson BL, Wohl DA, Golin CE, et al. Effect of release from prison and re-incarceration on the viral loads of HIV-infected individuals. *Public Health Rep*. 2005;120(1):84-8.
35. Freudenberg N. (2002). Adverse effects of US jail and prison policies on the health and well-being of women of color. *American Journal of Public Health*, 92, 1895-1899.
36. *Advancing HIV prevention: New strategies for a changing epidemic-United States, 2004*. *MMWR*, 52(15). April 18, 2003.
37. National Commission on Correctional Health Care. 2005. Available at: [www.ncchc.org/resources/statements/womenshealth.html](http://www.ncchc.org/resources/statements/womenshealth.html). Accessed March 27, 2006.

# SPOTLIGHT - PREVENTION OF MOTHER-TO-BABY HIV TRANSMISSION: THE ENVIRONMENT OF CARE

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## Introduction

Despite tremendous success in reducing perinatal HIV transmission in the United States, medical and pharmacological interventions have proven insufficient to eradicate this route of HIV infection.<sup>1</sup> Most HIV-infected women engage in comprehensive medical care with utmost concern for the health of their anticipated newborn.<sup>2</sup> Those who do not are at very high risk for vertical transmission.<sup>3</sup>

In 2000, the Pediatric AIDS Chicago Prevention Initiative (PACPI) assembled HIV advocates, social service providers, and medical personnel to identify strategies to eradicate perinatal HIV transmission in Chicago. They identified common experiences and characteristics of Chicago women who gave birth to HIV-exposed and infected babies. The most prevalent kind of institutional contact among this group of HIV-infected women was with the child welfare system, either as a ward or as a parent of an involved child. PACPI then provided funding to investigate the forces affecting care for HIV-infected women involved with the Illinois Department of Children and Family Services (IDCFS).

An interdisciplinary research team designed a qualitative study to explore the barriers to care perceived by childbearing, HIV-infected women with current or prior IDCFS involvement. Using a feminist theoretical perspective, our inquiry regarded these women as expert informants on their own condition and accepted their views as valid explanations for the conditions that inhibit access to and engagement in care that could prevent HIV transmission to their children. The details of this study were published in the *Journal of Social Science and Medicine*.<sup>4</sup> Here, we briefly summarize aspects relevant to providers working with incarcerated women with HIV.

## Methods

With the IDCFS and the University Chicago institutional review boards' approval, we used the IDCFS HIV mothers database to identify 32 women who knew their HIV status and had given birth to at least two children since 1997 (the year zidovudine use to prevent vertical transmission became widespread). Fourteen of these women were located by IDCFS personnel (under the supervision of our IDCFS collaborator), and 12 agreed to participate. Three additional women meeting these criteria and pregnant at the time of recruitment were also enrolled. Respondents' identities remained anonymous to the co-investigators. A professional interviewer conducted the interviews to further protect participants' anonymity. Semi-structured, in-depth interviews probed three major domains: 1) motivations for childbearing; 2) experiences with the health and child welfare systems; 3) perspectives on strategies to eradicate vertical transmission.

## Results

The women described life conditions at the extreme margin of poverty and deprivation. Most were chronically unemployed, living below the U.S. poverty line. Many had experienced homelessness and physical, sexual and/or emotional abuse as children and/or as adults. Substance use and dependence were prevalent. Exhibiting an average birth rate of more than twice the U.S. average, 62 men had fathered 78 children (9 HIV infected) to these 15 women. Although we did not explicitly inquire about contact with the criminal justice system, several women referred to such contact, particularly among their sexual partners and children's fathers. Nearly every woman indicated that she had no friends. Figure 1 provides a composite simplified life event history of these women.

Many women asserted their desire to give birth to and parent a healthy child, but most did not use contraception and described their pregnancies as unplanned. Only 3 received appropriate prenatal care. Motivations for childbearing included a desire to replace children removed from custody, to demonstrate capacity to parent, and to fill an emotional void. Two women talked about childbearing as a way to "fight" HIV or avoid the appearance of being HIV-infected. One woman commented: "If I didn't have the baby, people would wonder why and what was wrong. I was trying to prove to people that I wasn't what I really was."

Every woman knew her HIV status prior to the birth of at least two of her children,

# IDCR-o-GRAM

Figure 1. Life Histories of HIV+ Mothers

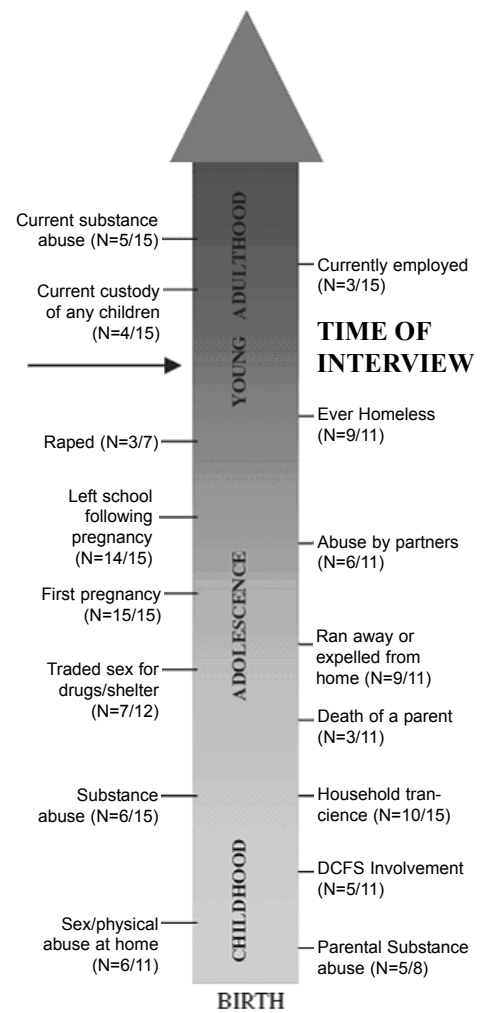


Fig. 1. Reprinted from *Social Science and Medicine*, Vol. 62 Issue 1, Lindau S T, et al., *Mothers on the margins: Implications for eradicating perinatal HIV*, pp. 59-69, 2006, with permission from Elsevier.

knew of the availability and importance of antiretroviral therapy and prenatal care and most believed that such therapy could substantially reduce the likelihood of infecting the newborn. However, descriptions of contact with the health and child welfare systems were largely negative. Women routinely experienced interactions as disrespectful, judgmental and dehumanizing. They avoided care because of negative practices by medical personnel, including disrespectful and condescending treatment, lack of privacy, and egregious breaches of confidentiality. These experiences included expressions of disdain or disgust from medical personnel, discrimination with regard to medical treatment due to HIV status, inadequate explanations regarding disease process and treatment, and diminution of rights to privacy and confidentiality. One woman stated, "A person

*Continued on page 7*

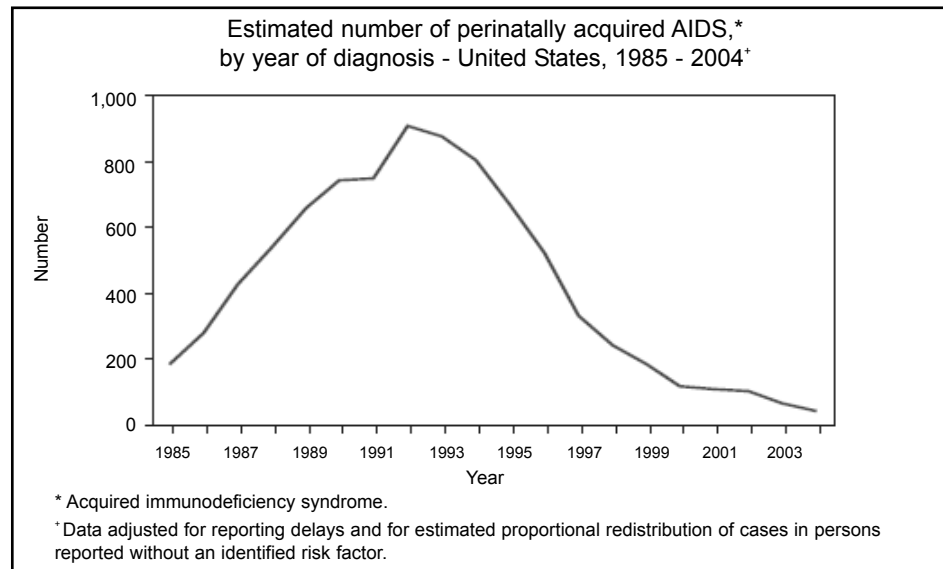
**SPOTLIGHT...****(continued from page 6)**

who is positive should have control over who they decide to tell and who not...Other people seemed to just know. Medical staff would just talk about it right in front of me at the hospital and with other staff around." Women also felt betrayed and/or confused by what was perceived as collusion between the child welfare and the medical

**"Pam and Babies" - Sue Coe**

system around sharing of client/patient information. As a consequence, many women related that a major hindrance to engagement in prenatal care was an inability to confidentially disclose their HIV status to providers.

Substance use and denial about HIV status were cited as important barriers to prenatal care. More than half described such periods

**Source: CDC**

of denial or being "in a daze;" two-thirds claimed current or past substance use. Several women described substance use as a way to escape the reality of HIV infection. "When you first find out you are positive, you go through a state of denial and depression. You get mad. You tell the doctor you are not HIV+...At first I was in a state of denial. I went out there and used. I felt like I just wanted to do my thing."

Participants were asked how to improve HIV-infected women's participation in prenatal care. Women desired respectful and humane treatment and messages promoting prenatal care which emphasized the health of the newborn or the consequences to the newborn should care be neglected. Several women commented that they want-

ed explicit and detailed information about therapies and about the impact of these on markers of disease status (e.g. T-cell counts). Although social support was absent or scant for most participants, six women depended on positive relationships with health or social service professionals for accessing and accepting medical care. Several women also suggested the value of peer counselors to motivate care.

**Discussion**

Stigma combined with economic and social poverty threaten the possibility that highly efficacious medical interventions can accomplish eradication of vertical transmission of HIV in the U.S.<sup>5</sup> Efforts to accomplish eradication must address the environment of care for marginalized women.

**Artist's Statement**

These are portraits drawn from life with the enthusiastic consent of the Texas women prisoners involved. They have agreed to share their personal stories to increase awareness about risks that contribute to HIV infection. Dr. Eric Avery and Sue Coe, spent a week at UTMB interviewing and drawing six women who are HIV Positive, at the invitation of Dr. David Paar. The women are peer group educators, supportive of other women within the prison system who have found out they are also positive, but their support is probably most effective in talking with those negatives who remain at risk.

The drawings, 15 inches x 10 inches, done in conte crayon, are a type of visual journalism: they reconstruct events from the women's life stories. A selection of these works can be seen at <http://graphicwitness.org/coe/utmb.htm>. Sue, Eric and David, had worked together previously at UTMB at the beginning of the AIDS pandemic, showing through art the patients in the Infectious Disease Ward. In those days all the patients Sue drew died. When the work is completed it will be published as a book entitled "Through Her Own Eyes".

**References:**

1. Lallemand M, Jourdain G, Le Coeur S, Kim S, Koetsawang S, Comeau AM, Phoolcharoen W, Essex M, McIntosh K, Vithayasai V. A trial of shortened zidovudine regimens to prevent mother-to-child transmission of human immunodeficiency virus type 1. *Perinatal HIV Prevent Trial (Thailand) Investigators [see comments]* *New England Journal of Medicine*. 2000;343(14):982-991.
2. Silverman NS, Tohner DM, Turner BJ. Attitudes toward health-care, HIV infection, and perinatal transmission interventions in a cohort of inner-city, pregnant women. *American Journal of Perinatology*. 1997;14(6):341-46.
3. Mofenson LM. Tale of two epidemics-the continuing challenge of preventing mother-to-child transmission of human immunodeficiency virus. *Journal of Infectious Diseases*. 2003;187(5):721-24.
4. Lindau ST, Jerome J, Miller K, Monk E, Garcia P, Cohen M. Mothers on the Margins: Implications for Eradicating perinatal HIV. *Social Science and Medicine*. 2006;62:59-69.
5. Lindau ST, Jerome J, Miller K, Monk E, Garcia P, Cohen M. Eradication of Vertical Transmission of HIV: A Response to Mayaoux, et al. *Journal of Acquired Immune Deficiency Syndrome*. 2004;37(4):1541-1542.



## HUMAN PAPILLOMAVIRUS (HPV) 101

### Microbiology

- Non-enveloped DNA virus
- More than 35 HPV subtypes that cause anogenital infection
- Immunity not cross-reactive (from one subtype to the next)
- Exposure to virus almost universal among sexually active adults

### Sites of Infection

- Vagina/Perineum
- Cervix (Particularly at the squamo-columnar junction)
- Anus (Particularly among men who have sex with men (MSM) and Women)
- Penis/Scrotum

### Most Common Modes of Transmission

- Sexual contact

### Risk Behavior

- Sexual behavior is the principal risk factor for infection. Women with multiple sexual partners have a higher risk of contracting HPV than monogamous women. Almost all adults are HPV infected by late middle age.
- Immune suppression is a risk factor for all people exposed to HPV. A person with a pre-existing immuno-compromised state and/or concurrent genital infection has a 17-fold increased risk of developing HPV-associated diseases.

### Clinical

- The majority of HPV infections are both asymptomatic and subclinical.
- Genital warts are most frequent with strains 6 and 11.
- Cervical, anal intraepithelial lesions, and vaginal vulvar dysplasia and malignancies are most often associated with oncogenic strains 16, 18, 31, 33, and 35.
- HIV: Clinical manifestations occur at any CD4; more advanced disease associated with persistence of oncogenic strains. Lower CD4 T cell count associated with persistence and increased risk of premalignant and malignant lesions. Increasing risk of squamous intraepithelial lesions, and manifestations where standard therapy may not be as effective.
- Anogenital warts are usually detected by visual inspection; Bx is required to rule out malignancy or to confirm HPV-related epithelial changes if Dx unclear visually.
- Intraepithelial lesions (cervical, anal, etc) indicated by "Pap smear" followed by colposcopy or high resolution anoscopy with biopsy.
- Cervical Pap smear in HIV+ women has utility similar to that in HIV- women for identification of high-grade cervical lesions.
- In HIV+ women, cervical Pap recommended at baseline evaluation and 6 mos; then annually after 2 sequential normal tests. Any abnormal result (atypical cells of undetermined significance [ASCUS], low grade squamous Intraepithelial lesion [L-SIL], high grade squamous Intraepithelial lesion [H-SIL], atypical cells, cannot exclude H-SIL [ASC-H], and atypical glandular cells [AGC]) should lead to colposcopy with biopsy.
- High rates of anal dysplasia in men who have sex with men and can also occur in women; cytologic screening ("anal Pap") may be useful for cancer prevention. However, the most effective screening intervals and management of abnormal cytology has not been established. In a

### Clinical Continued...

number of centers screening at 6-12 month intervals is the practiced standard. Abnormal Pap results are managed with high resolution anoscopy and biopsy of suspicious lesions and are performed with any abnormal PAP result.

### Treatment - Genital Warts

- Podophyllotoxin/podofilox (0.5% gel, solution or cream) topical application once every week x 6 weeks
- Imiquimod topical administration 3 times a week to the wart (leave on for 6-10 hrs, then wash off). Continue until complete resolution.
- Cryotherapy: liquid nitrogen (applied by clinician)
- Bichloroacetic acid or trichloroacetic acid (applied by clinician)
- Wart clearance and recurrence rates similar for treatments cited, though patient-applied therapies less costly overall.

### Treatment - Premalignant and malignant lesions - managed by Gyn Oncologist

- Local excision (i.e. LEEP), confirm that margins are clear.
- Cryotherapy also acceptable for mild neoplasia (i.e. CIN 1) with no disease in the endocervical canal.
- Wide excision and chemotherapy if invasive.

### Prevention

- Condom use (incomplete protection due to possible transmission of HPV from contact with perineum, scrotum and peri-genital area).
- Regular Pap tests for women and men who have sex with men.
- HPV vaccine prior to "sexarche" (onset of sexual activity) to help prevent genital HPV infection as well as HPV-associated diseases such as genital warts and cervical cancer. However, existing HPV vaccines will not prevent all types of HPV infection and therefore should not replace other prevention strategies.

### HPV Vaccine

- Merck's recombinant vaccine, Gardasil, was FDA approved on 06/08/06.
- This vaccine prevents cervical cancer, precancerous genital lesions, and genital warts caused by HPV types 6, 11, 16 and 18.
- Gardasil is approved for use in women ages 9-26. It is administered as three injections within a 6-month period.
- Immunization before the onset of sexual activity offers the most protection since women are most likely to be naïve to all 4 HPV types (6,11,16,18) covered by the vaccine prior to sexual debut, although studies of sexually active women, ages 9-26, who received Gardasil, show that they still achieved protection from vaccination (because these women were still naïve to one or more of the HPV types included in the vaccine after sexual debut).
- Gardasil does not protect against other less common types of HPV, so women will continue to need regular PAP tests or HPV screening.

## SAVE THE DATES

### Correctional Mental Health: Cultivating Quality Care

A Continuing Education Conference for Correctional Health Professionals  
July 9-10, 2006

San Diego, California

Visit: <http://www.ncchc.org/education/MH2006/sandiego.html>

### American Correctional Association Conference

August 12-17, 2006

Charlotte, NC

Visit: <http://www.aca.org/conferences/summer06/>

### XVI International AIDS Conference

August 13-18, 2006

Toronto, Canada

Visit: <http://www.aids2006.org/>

### Correctional Medicine Institute's 2006 Intensive Review in Correctional Medicine

September 15-17, 2006

Baltimore, MD

Visit: <http://www.cmi2006.org/>

### "Managing Addiction in the HIV-infected Patient" Live Satellite Video Conference

Part of Management of HIV/AIDS in the Correctional & Community Setting

October 18, 2006

Albany Medical College 12:30-2:30

CMEs & Nursing credits available

Visit: [www.amc.edu/patient/hiv/hiv-conf/index.htm](http://www.amc.edu/patient/hiv/hiv-conf/index.htm)

E-mail: [ybarraj@mail.amc.edu](mailto:ybarraj@mail.amc.edu)

Call 518.262.4674

### Infectious Disease in Corrections Report (IDCR) Symposium

Pre-conference before the NCCHC Conference

Saturday Afternoon, October 28, 2006

CME provided- Intensive review of ID in Correctional Health

Atlanta, GA

Visit: <http://www.ncchc.org/education/national2006/atlanta.html>

### National Commission on Correctional Health Care (NCCHC) Conference

October 28-November 1, 2006

Atlanta, GA

Visit: <http://www.ncchc.org/education/national2006/atlanta.html>

## NEWS AND LITERATURE REVIEWS

### Merck's HPV Vaccine Approved by the FDA

On June 8, 2006 the Food and Drug Administration approved the first Human Papillomavirus (HPV) vaccine. Merck's Gardasil is the first recombinant vaccine to prevent cervical, vulvar, and vaginal cancer, precancerous genital lesions, and genital warts associated with HPV types 6, 11, 16 and 18. In four studies of 21,000 women, Gardasil was nearly 100% effective against precancerous cervical lesions, precancerous vaginal and vulvar lesions, and genital warts caused by the HPV types the vaccine was created to prevent. The vaccine was approved for use in women ranging in age from 9-26 years and consists of three immunizations within a 6-month window.

Although the vaccine is effective against 70% of the HPV types (16 and 18) that cause cervical cancer and 90% of the HPV types (6 and 11) that cause genital warts, the vaccine does not prevent HPV in those previously exposed to the virus before they were immunized. Given this limitation, providers suggest that the vaccine be given to females before the onset of sexual activity. What's more, since the vaccine does not prevent against other less common types of HPV, regular PAP tests remain vitally important.

*The U.S. Food and Drug Administration. FDA News. Available at: <http://www.fda.gov/bbs/topics/NEWS/2006/NEW01385.html>. June 8, 2006.*

### Release from Jail: Moment of Crisis or Window of Opportunity for Female Detainees

A study by McLean and colleagues in Baltimore suggests that pre-release planning and a continuum of care are crucial to the success of female detainees once released from jail. To identify the factors associated with perceived availability of material and social resources upon release, the authors of the study conducted a cross-sectional study of 148 female inmates in the Baltimore City Detention Center in 2005. Interviews of the detainees centered on drug use and sexual histories, socio-demographic backgrounds, and the perceived availability of material and social resources the women will have upon release.

The majority of the subjects (69%) were African-American and 67% reported having an income less than \$400 a month. Less than half had their high school degree or GED certificate. A monthly income of more than \$400 and significant familial support positively affected participant's perceptions of housing stability upon release. Moreover, an estimated one third of the subjects were former sex workers. Wanting a support group for issues surrounding former engagement in sex work was negatively associated with perceptions regarding housing ability. This finding suggests that female sex workers may be alienated from vital social and economic services that are essential to successful reentry. Other factors that negatively affected perceptions of post-release housing stability included recent daily use of heroin, cocaine or benzodiazepines and lack of health insurance and inability to afford drug treatment.

The authors suggest that the study results highlight areas where interventions can be applied to help ensure successful community re-entry such as vocational training and other methods to help releasees generate legal income post-release, as well as family-based interventions to help develop and strengthen family support. Special attention is needed to address the needs of those women who have been engaged in sex work. Given the brief time most women spend in jail, correctional system and the public health sector should collaborate to provide female detainees a continuum of care between jail and communities.

*McLean RL, Robarge J, and Sherman SG. Release from Jail: Moment of Crisis or Window of Opportunity for Female Detainees. Journal of Urban Health: Bulletin of the New York Academy of Medicine. 2006;83(3):382-383.*

### Poverty Fuels HIV among African American Heterosexuals With and Without High Risk Behaviors

Rates of HIV transmission via heterosexual sex is much higher among African-Americans than whites - particularly among African-American women (see next report) - and the racial disparity in heterosexual acquisition of HIV infection is most pronounced in the South. To determine risk factors for HIV infection among heterosexual African-American men and women in North Carolina, Adimora and colleagues conducted a cross-sectional study of 206 African-American HIV-positive men and women (cases) recruited during HIV post-test counseling sessions and 226 HIV-negative adults (controls) selected from a random sample identified through state motor vehicle records. Controls were tested for HIV infection at enrollment. All participants reported being heterosexual and denied injection drug use.

In-depth one-on-one interviews were conducted and revealed that cases were more likely to be unmarried, have less than a high school education, earn less than \$16,000 per year, be uninsured, have been homeless, have spent at least 24 hours incarcerated, and be concerned about having enough food. In addition, although both groups had high levels of unprotected sex with recent partners, cases reported having other high risk behaviors such as more sex partners, concurrent partnerships, anal sex, sex for drugs/money, use of crack cocaine, and heavy alcohol use.

While greater risk behavior among cases was not unexpected, about a quarter of the cases denied significant risk factors. Compared to low-risk controls, cases were more likely to be young and unmarried, report lower education level, have been incarcerated and, importantly, be poor as measured by annual income and food insecurity.

The finding that a substantial proportion of heterosexual African-Americans with HIV-infection report low risk behaviors suggests that HIV infection has become endemic in the rural South. Further, the association of HIV infection in the group as a whole and among the significant proportion low risk individuals with low socioeconomic status supports a major role of economic inequality as a facilitator of transmission. While education about personal risk factors and greater condom use is key to preventing the spread of HIV, the researchers conclude, public policy also needs to address the social and economic disparities that put African-Americans at greater risk of infection.

*Adimora AA, Schoenbach VJ, Martinson FEA, et al. Heterosexually Transmitted HIV Infection Among African Americans in North Carolina. JAIDS Journal of Acquired Immunodeficiency Syndromes. 2006;41(5):616-624.*

### HIV-Infection among Women: African-American Women in the South at Greatest Risk

The majority of the HIV infection cases reported among women in the United States between 1999 and 2003 are in the South and among racial/ethnic minorities, according to officials from the Centers for Disease Control and Prevention (CDC) and reported in USA Today. Data from the 32 states reporting HIV infection (rather than only AIDS) to the CDC indicate that 76% of new cases of HIV infection among women occurred in women in the South - even though only 29% of women in the country live in that region. Further, it is minority women who are disproportionately becoming infected. Lisa Fitzpatrick, an author of the report, quoted in the USA Today article, highlighted that, "HIV diagnoses were four times higher among Hispanic women and 18 times higher in black women than white women" and that, "seventy-one percent were infected through heterosexual sex." In addition, girls ages 13 to 19 in the South are increasingly affected by HIV; 8% of new HIV diagnoses in the South occur in that age group, four times the rate found in other parts of the country.

*Continued on page 10*

## NEWS AND LITERATURE REVIEWS *(continued from page 9)*

Fitzpatrick proposed several next steps in reducing acquisition of HIV by young black women. First, is the engagement of male partners with initiatives aimed at enhancing testing and prevention. Further study of the prevention needs of men should be undertaken as should investigations of the role incarceration and the 'down low' phenomenon on HIV rates among women. Second, primary prevention (see main article) for young women and girls must be supported and strengthened. Lastly, HIV and sexually transmitted infection education and testing must be better integrated to reduce missed opportunities to detect HIV infection.

*The Kaiser Daily Health Policy Report. Available at [http://www.usatoday.com/news/health/2005-06-14-hiv-south\\_x.htm](http://www.usatoday.com/news/health/2005-06-14-hiv-south_x.htm) or [http://www.kaisernetwork.org/daily\\_reports/rep\\_index.cfm?hint=1&DR\\_ID=30762](http://www.kaisernetwork.org/daily_reports/rep_index.cfm?hint=1&DR_ID=30762). June 15, 2006.*

### The Survival Benefits of AIDS Treatment in the United States

Combination HIV therapy is potent, increasingly well-tolerated and has led to a dramatic decline in progression to AIDS and death. However, HIV care and treatment is expensive costing the United States government alone billions of dollars per year. On the 10th anniversary of the approval of the first protease inhibitor, Walensky and colleagues analyzed the cumulative survival benefits of AIDS care in the United States since 1989 to 2003 - a period that spans the eras of offering only PCP prophylaxis to patients with AIDS to highly active antiretroviral therapy.

Incremental advances in HIV care including prophylaxis of opportunistic infections, the adoption of interventions to prevent mother to child HIV transmission, the advent of combination antiretroviral therapy and the sequencing of HIV therapy to provide opportunities for salvage have each led to increases in per person survival. The authors estimate that treatment has saved almost 3 million years of life and 2,900 averted cases of pediatric HIV infection.

The quantification of the benefits of antiretroviral therapy at the population level complements the data on decreasing death rates and lower AIDS case

report in the United States. A typical person living with HIV infection receiving potent combination antiretrovirals can expect to live at least 13-14 years longer than if she or he were to pass up this therapy or if it were unavailable. In comparison, similar analyses have found that chemotherapy for non-small cell lung cancer yields an average survival benefit of 7 months and bone marrow transplantation for relapsing non-Hodgkins lymphoma 92 months.

A major finding of this analysis is that the economic and humanitarian benefits of HIV care are even greater than were previously appreciated. Given the vast amount of life-years saved by HIV care, the authors suggest that testing must become a routine element in medical screening so that the benefits of care can be enjoyed by those unaware of their HIV infection. Further, the results demonstrate the potential to save hundreds of millions of lives if HIV care were accessible to the millions living in nations where such care is lacking.

*Walensky RP, Paltiel AD, Losina E, et al. The Survival Benefits of AIDS Treatment in the United States. The Journal of Infectious Diseases. 2006;194(1):11-19.*

### Updated Guidelines on Initial Treatment of HIV Released by the US DHHS

The Department of Health and Human Services updated the Guidelines for the Use of Antiretroviral Agents in HIV-1-Infected Adults and Adolescents on May 4, 2006. The revised guidelines strengthen the recommendation that genotypic resistance testing be performed among those yet to receive HIV therapy including patients with acute HIV infection, patients with chronic HIV infection prior to initiation of HIV therapy and pregnant women with HIV infection prior to therapy initiation. These recommendations follow data that suggest substantial rates of transmitted drug resistant HIV and the effectiveness of treatment based on baseline genotype results. Revised recommendations regarding treatment interruption were also included in the update and include considerations for short and long term treatment discontinuation as well as in patients with active HBV infection receiving antiretrovirals with anti-HBV activity.

*Available at [www.aidsinfo.nih.gov](http://www.aidsinfo.nih.gov). May 4, 2006.*

### UNAIDS 2006 Report on the Global AIDS Epidemic

A report by UNAIDS released on May 30th, 2006 while citing positive trends in HIV prevention and treatment, calls for significant acceleration of the AIDS response. The report contends that halting the epidemic will require \$22 billion a year by 2008 and possibly more in the following years. This figure is almost triple the \$8.3 billion spent last year by all sources, including governments and the private sector and half would be aimed at prevention efforts and a quarter for treatment and care of infected people. The remainder of the funds would be for care of orphans, children at risk of becoming infected and program costs.

United Nations Secretary General Kofi Annan, speaking to the General Assembly at the onset of a three-day meeting aimed at renewing the political commitment to combating the HIV epidemic, pushed for nations to recognize that a costlier and more sustained effort was needed because AIDS "has spread further, faster and with more catastrophic long-term effects than any other disease."

In 2003, the World Health Organization (WHO) launched its 3 by 5 initiative to bring HIV therapy to 3 million people living with HIV infection in low and middle income nations by the end of 2005. However, by this deadline little more than a million people in developing countries received HIV treatments.

Peter Piot, Executive Director of UNAIDS urged nations to demonstrate "sustained attention and the kind of 'anything it takes' resolve that member states apply to preventing global financial meltdowns or wars," in fighting HIV.

*Lawrence KA. UN Urges Tripling of Funds by '08 to Halt AIDS. The New York Times. Available at [http://www.nytimes.com/2006/06/01/world/01aids.html?\\_r=1&n=Top%2fReference%2fTimes%20Topics%2fPeople%2fA%2fAltman%2c%20Lawrence%20K%2e&oref=slogin](http://www.nytimes.com/2006/06/01/world/01aids.html?_r=1&n=Top%2fReference%2fTimes%20Topics%2fPeople%2fA%2fAltman%2c%20Lawrence%20K%2e&oref=slogin). June 1, 2006.*

## RESOURCES

### Bureau of Justice Prison Statistics

<http://www.ojp.usdoj.gov/bjs/prisons.htm>

### CDC. Genital HPV Infection Fact Sheet

<http://www.cdc.gov/std/HPV/STDFact-HPV.htm>

### CDC. HPV Vaccine Question and Answer

<http://www.cdc.gov/std/HPV/STDFact-HPV-vaccine.htm>

### CDC. HIV/AIDS Surveillance in Women

May 2006

<http://www.cdc.gov/hiv/topics/surveillance/resources/slides/women/index.htm>

### AIDS Education and Training National Resource Center. Maternal-Child HIV Transmission Guide

<http://www.aids-ed.org/aidsetc?page=et-30-19&catid=mtct&pid=1>

### Maternal-Child HIV Transmission Perinatal Guidelines

<http://www.aidsinfo.nih.gov/Guidelines/GuidelineDetail.aspx?MenuItem=Guidelines&Search=Off&GuidelineID=9&ClassID=2>

### Women, Children, and HIV: Resources for Prevention and Treatment

<http://womenchildrenhiv.org/>

### MTCT Plus Initiative (Mailman School of Public Health at Columbia University Maternal-Child HIV Transmission Initiative)

<http://www.mtctplus.org>

### International Community of Women with HIV/AIDS

[http://www.icw.org/tiki-view\\_articles.php](http://www.icw.org/tiki-view_articles.php)

### AIDS Alliance for Children, Youth & Families

[http://www.aids-alliance.org/aids\\_alliance/index.html](http://www.aids-alliance.org/aids_alliance/index.html)

### The Well Project: Health Information for Women with HIV and AIDS

<http://www.thewellproject.org/>

## SELF-ASSESSMENT TEST FOR CONTINUING MEDICAL EDUCATION CREDIT

Brown Medical School designates this educational activity for one hour in category one credit toward the AMA Physician's Recognition Award. To be eligible for CME credit, answer the questions below by circling the letter next to the correct answer to each of the questions. A minimum of 70% of the questions must be answered correctly. This activity is eligible for CME credit through October 31, 2006. The estimated time for completion of this activity is one hour and there is no fee for participation.

1. According to Arriola and colleagues, ways in which the effects of race, poverty and gender converge in the lives of Black women include:
  - A. Trauma, such as physical or sexual violence
  - B. Limited control over sexuality including limited ability to negotiate condom use and pressure to engage in sex work
  - C. A and B
  - D. None of the above
  
2. Which of the following statements regarding HIV prevention services are TRUE:
  - A. Primary prevention includes education to prevent uninfected people from acquiring HIV
  - B. Secondary prevention includes screening for infection to enable early detection and intervention
  - C. Tertiary prevention involves the treatment of HIV to improve health and reduce the likelihood of transmission
  - D. All of the above
  
3. The AIDS Counseling and Education (ACE) program in New York State:
  - A. was created by correctional officers to provide information regarding post-exposure prophylaxis
  - B. is a program designed to provide one-on-one counseling to young pregnant women entering the jail at Riker's Island
  - C. includes a series of peer-led workshops aimed at educating inmates regarding HIV
  - D. B and C
  
4. In a recent report, UNAIDS stated:
  - A. Current funding levels are sufficient to meet the costs of providing HIV care to those in developing nations
  - B. A tripling of current funding from public and private sources was now required to adequately combat the global HIV epidemic
  - C. The world has met the World Health Organization goal of providing HIV therapy to 3 million people in developing countries by the end of 2005 (i.e. the 3 x 5 initiative)
  - D. None of the above

5. Condoms offer complete protection against infection of HPV (TRUE or FALSE)?
  - A. True
  - B. False

### IDCR EVALUATION

*5 Excellent 4 Very Good 3 Fair 2 Poor 1 Very Poor*

1. Please evaluate the following sections with respect to:

	educational value	clarity
Main Article	5 4 3 2 1	5 4 3 2 1
In the News	5 4 3 2 1	5 4 3 2 1
Save the Dates	5 4 3 2 1	5 4 3 2 1

2. Do you feel that IDCR helps you in your work?

Why or why not?

3. What future topics should IDCR address?

4. How can IDCR be made more useful to you?

5. Do you have specific comments on this issue?

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