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EVALUATION OF SERVICES AND RESOURCES AVAILABLE TO DOWNSTATE ILLINOIS INMATES INFECTED WITH HIV/AIDS

By

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Abstract

The rate of HIV/AIDS in the incarcerated population is substantially higher than in the general population. While there have been reports for a few states describing plans with viable treatment options, little is known about the treatments available to this population in downstate Illinois. The purpose of this study was to investigate what services and resources are available to the jailed downstate Illinois population. Telephone interviews were conducted with key employees of local correctional facilities who had information on services provided to inmates with HIV/AIDS. Of the 102 facilities, there were 87 (85%) participants who responded. HIV testing was provided at 77% of the jails in downstate Illinois, 70% offered counseling, and almost one quarter of the facilities use the local health department as their resource of choice for inmate HIV counseling and testing (24.49%). Condoms were provided at only 6% of the sites. These findings show a deficit in education, treatment, and prevention of HIV/AIDS transmission in Illinois jail facilities. This information may be used to identify areas where further funding and training would benefit the community.

Evaluation of Services and Resources Available to Downstate Illinois Inmates Infected With HIV/AIDS

The rate of AIDS in the incarcerated population is substantially higher than in the general population (Baugerman, Ward, Eldred, & Swetz, 2001). In the United States 2.0% of local jail inmates were infected with HIV at the end of 2003 (Bureau of Justice Statistics, 2005). This translates into 22,028 infected prisoners by the end of December 2003. Of these infected prisoners, 5,643were diagnosed with AIDS (Bureau of Justice Statistics). The rate for HIV/AIDS is three times higher for inmates than for the general population, and deaths due to AIDS related sequelae accounted for 213 deaths in 2003 (Bureau of Justice Statistics).

As of 2003, 0.2% of inmates in Illinois were infected with HIV/AIDS, down from 0.3% for the previous year (Bureau of Justice Statistics, 2005). In Illinois there were 12 deaths attributed to AIDS in state correctional facilities in 2003 (Bureau of Justice Statistics). The number of cases of prisoners with AIDS nationwide had decreased less than 1% between 2002 and 2003, while the overall prison population grew 1.6% (Bureau of Justice Statistics). The rate of HIV infection was higher in incarcerated women than in men at the end of 2003, with 2.3% of Illinois incarcerated women being HIV positive, compared to 1.2% of incarcerated men (Bureau of Justice Statistics).

Although services for HIV/AIDS infected inmates have been addressed in some states, no studies have been done to evaluate what services, treatments, or resources are offered to Illinois downstate inmates, or who is providing these services, if any. Knowledge of this information would be instrumental in designing programs to address problems of simplifying the complicated treatment regimes of AIDS/HIV infected

inmates. It could also show what areas might benefit the most from increased funding, and what parts of downstate Illinois are providing for continuity of care for these people upon their release from jail.

While there have been reports from a few states describing successful treatment options for incarcerated populations, little is known about the treatments available to this population in downstate Illinois. In addition, the culture surrounding correctional facilities focuses on security, and access to jails and inmates by those outside the system is not easily obtained.

The purposes of this study were to determine what services are available to the HIV/AIDS population of downstate Illinois county, state, and city correctional institutions; the use of these services by infected prisoners; and what type of discharge planning is done with prisoners upon release from these facilities. Cook County was purposefully excluded from this study due to discrepancies in available funding.

Conceptual framework

The conceptual framework for this study is the Model of Health Service Use (Appendix A) designed by Ronald M. Andersen (Andersen, Rice & Kominski, 2001). This model is comprised of four parts: (a) environmental factors, (b) population characteristics, (c) health behaviors, and (d) health outcomes. The interaction and reflection of these components help in understanding the use of health care services. Environmental factors include economic climate, stress and violence, and the norms of society. Population characteristics reflect demographics, social structure, and beliefs; enabling factors such as personal and community support, and need**.** Individual

perception of need as well as what others may see as the person's health care needs comprises the need concept.

Personal health practices and use of services are described as health behaviors. The personal experience of disease, injury, or other illness reflects on how the person administers self-care. It also reflects the person's perception of their need of services and use of health care. The fourth component, health outcomes, has to do with how people perceive their own health, how the person's health care provider evaluates that person's health, and how satisfied the patient is with the services provided.

Most of the components of this model are interrelated, i.e. a change in one area may necessitate a change in another. For instance, a change in personal health practices may increase perceived health status and change overall patient satisfaction with services. Dissatisfaction or approval of health care services in turn may lead to involvement with different health care systems, etc.

This model is appropriate for this study. It can help to explain the use of health care services provided to and used by jail populations, or the refusal of such services. Environmental factors in incarcerated societies are different than those found in society outside of the walls of these facilities. This difference can impact health-seeking behaviors of inmates positively and negatively. Social structure within this population is different than in normal society. High-risk behaviors such as unsafe sexual practices are common, and used to establish a hierarchy among inmates (Spaulding, Lubelczyk, & Flanigan, 2001). The fear of disclosure of HIV or AIDS status to other inmates or correctional facility personnel may be seen as a reason to refuse testing or treatment due to the stigma attached to the disease.

This study will evaluate health behaviors as demonstrated by personal health practices. These include use of HIV testing opportunities, availability and use of condoms, education concerning HIV/AIDS and counseling if offered. There are high-risk behaviors among jail populations, and knowledge of their concepts of disease may be a predictor of the use of health care services provided upon release. The experience of the disease(s) involved may change how prisoners care for themselves after release in seeking and participating in follow up care if provided. Compassionate care may change the perception of their health; perhaps from the thought of dying from the disease to one of living with it, and possible increase satisfaction and use of services.

Review of the Literature

Full text articles for review were obtained using on-line searches with CINAHL, FirstSearch, MEDLINE, ECO and Ovid full text journals. Key words used were “HIV or AIDS”, “incarcerated”, and/or “jail population”, “correctional facilities”, or “inmates”. None of the articles addressed downstate Illinois in particular. The search yielded 38 published articles that were deemed appropriate for inclusion. Emphasis was placed on articles that demonstrated the health care behaviors and outcomes of inmates within the environment of the prison and after release to the community

Population Characteristics and Environment

More studies are being done concerning HIV/AIDS in the incarcerated population throughout the United States every year. This group is considered a vulnerable population and permission for research is not easily obtained (Conklin, Lincoln & Flanigan, 1998; Schady, Miller & Klein, 2005). However, in the published articles there are some recurring themes about health status of these people. One of these themes focuses on the

high incidence of HIV/AIDS in the jail/prison population when compared to the general population (Baugerman, Eldred, Swetz, & Ward, 2001; Miranda, St. Louis, Vargas, & Viana, 2000; Wohls et al, 2000; Rich, Dickinson, Flanigan, & Marclino, 1999; Dean-Gaitor, Fleming, 1999; Altice et al, 1998; Leh, 1999; Pollack, Altice, & Khoshnood, 1999; McClelland, Teplin, Abram, & Jacobs, 2002; Krebs, Simmons, 2002). Another theme found in the literature concerned the increase in the number of women incarcerated with HIV/AIDS. Several authors commented on this phenomenon. Women have more high risk behaviors in the form of IV drug use and having unprotected sex while in prison than men, and the number of women with HIV/AIDS in jails is increasing at a faster rate that that of men (de Ravello, Brantly, LaMarre, Qayad, Aubert, & Beck-Sague, 2005; McClelland et al, 2002; Hammett, Harmon, & Rhodes, 2002; Leh, 1999; Heywood, Freeman, Goldman, & Krautz, 2000).

Health Behaviors

The incidence of HIV/AIDS is not only an issue in American jails and prisons. Currently the spread of the disease in correctional facilities is thought to be mainly through the use of contaminated needles, but homosexual behavior was also identified. The main risk of the spread of STDs in Irish prisons is through male homosexual activity and the sharing of IV drug paraphernalia (Allwright et al, 2001). In Scotland the main cause of HIV in prisoners has also been found to be shared IV drug equipment (Ashworth, 2001). The use of condoms may help reduce the transmission of HIV/AIDS and other sexually transmitted diseases (Spaulding et al, 2001), although in one study 98% of the inmates who had access to these did not use them (May & Williams, 2002). In most jails in the U.S. condoms are considered as contraband (Krebs & Simmon, 2002).

One author recommended providing condoms and bleach to prisoners to decrease transmission of fluid borne diseases (Ward, 1996). These disinfectants are not widely available in the U.S. (Dean-Gaitor & Fleming, 1999). IV drug use is common in California prisons and was found to be associated with risk for HIV infection (Wohl et al, 2000). Wohl's study also found that there was an inverse proportion of HIV risk with the number of months incarcerated.

Most authors agree that there continues to be high-risk behaviors among prisoners (Spaulding, Flanigan, & Lubelczyk, 2001; Allwright, Bradley, Barry, Long, Parry, & Thornton, 2000; Ashworth, 2001; Wohl et al, 2000; Dean-Gaitor, Fleming, 1999; Haywood, et al, 2000; Leh, 1999; McClelland, et al, 2002; Krebs, Simmons, 2002; Macalino, Vlahov, Sanford-Colby, Patel, Sabin, Sala, & Josiah, 2004). Several authors addressed high-risk behaviors, especially IV drug use, and included male and female inmates. Education may help reduce this type of behavior, and nurses were seen as the best staff personnel to instruct inmates on the potential for disease transmission as a result of these behaviors (Dubik-Unruh, 1999).

Health Outcomes

Another overriding theme was considerable concern over the quality of health care available to incarcerated populations and the lack of continuity of health care after inmates were released (Skolnick, 1998; Mertens, 2001; Spaulding et al, 2001; Silberstein, Coles, Greenburg, Singer, & Voight, 2000; Dean-Gaitor et al, 1999; DeGroot, 2000; Frank, 1999; Leh, 1999; Pollack et al, 1999; Klein, O'Connell, Devore, Wright, & Birkhead, 2002; Schady, et al, 2005; Hammett, et al, 2002; Conklin, et al, 1998; Macalino, et al, 2004;). Several states now require testing for HIV/AIDS and testing is

available at the remainder, either voluntarily or upon request (Rapposelli, K., Kennedy, M., Miles, J., Tinsley, M., Rausch, K., Austin, L., Dooley, S., Artanda-Naranjo, B., Moore, R., 2002),

Giving good health care and follow up treatment on release is a cost effective way to lower the rate of STDs in the community (Skolnick, 1998; DeGroot, 2000; Schady, et al 2005; Klein et al, 2002). Due to the incidence of repeat incarceration, the treatment of infected inmates has a direct effect on the health and well being of the community into which they are released as well as society at large (Rapposelli et al, 2002). One area that had little or no information concerned who treated inmates in these facilities. This information could greatly affect the success of antiretroviral therapy and other medical treatments that may be provided to inmates. One article addressed the lack of sustained treatment of antiretrovirals upon release, but did not detail the training or education of those administering the medications

The high prevalence in a controlled setting is an opportunity for secondary prevention if identified and treated (Baugerman et al, 2001; Silberstein et al, 2000; Springer, Pesanti, Macura, Doros & Altice, 2004; Conklin, Lincoln & Flanigan, 1998; Hammett, Harmon & Rhodes, 2002). The time served in jail or prison was seen as an excellent opportunity to provide education and risk reduction information, and to provide a link to follow-up services upon release. However, this education was seen by correctional officials to be less important than medical care while incarcerated (Rapposelli et al, 2002, Ehrmann, 2002). Less than one third of correctional facilities routinely made appointments for HIV/AIDS inmates for medical, psychological or counseling upon release. Lack of knowledge by correctional administrators concerning

funds that are available for service delivery to these inmates and for palliative and end-of-life care reduced the use of these funds for those that may have benefited by them (Rapposelli et al). Employing a case management system could help in reducing these oversights (Ehrmann; Rapposelli et al).

The articles found in the literature review fit with the conceptual framework used for this study. Health care behaviors may be changed by education and other factors in the controlled setting of jails. High-risk behaviors, which can be seen as a type of self-care, can be included in health care behavior. Complete and consistent follow-up care upon release from jails may reduce the transmission of the disease, and enable the prisoner to return to a higher quality of life and better satisfaction with the health care system. There appear to be no published articles that presented what type of care is provided to inmates in downstate Illinois who are infected with HIV/AIDS.

Methodology

Research design

This study is a secondary analysis of data gathered as part of a larger needs assessment of AIDS/HIV infected persons in downstate Illinois, (Baldwin, Rogers, Lewis & Grinslade, 2001) and presents an investigation of AIDS therapies and their use by inmates as evaluated by correctional facility employees via telephone interview (Appendix B). This original study used a cross-sectional design. The design is appropriate for describing phenomena at a fixed point when such phenomena may be changing over time (Polit & Hungler, 1999).

Study Sample

The state was divided into geographical areas by counties (Appendix C). Of the 102 counties in downstate Illinois, 100 had sheriffs and 91 had county jails. Informants in four counties refused participation in the study. In the remaining counties there were 87 participants who responded. Sixteen stated they had never had an HIV/AIDS inmate, while 71 reported that at least one inmate with the disease had been in their facility.

Data Collection

Data were collected by means of telephone questionnaire by interviewers in contact with local sheriffs and deputies from April to November of 2000. Three research assistants administered the interviews. Training of interviewers was done by one of the investigators, who provided instruction and had interviewers rehearse how questions were to be asked.

Respondents in this study were key employees of local correctional facilities who had information on services provided to inmates with HIV/AIDS and the problems experienced by these inmates while incarcerated, and also agreed to be interviewed by telephone. Prior to the interview a letter was sent to each participant describing the study (Appendix D). Those contacted to participate were under no obligation to respond and could refuse if not willing to provide information. No risks were associated with the interview and no identifying information was gathered concerning either the respondents or the inmates. No direct benefit to respondents or inmates was intimated. The University of Illinois at Chicago Institutional Review Board approved the original study (Baldwin, Rogers, Lewis, & Grinslade, 2001) and deemed the secondary analyst exempt (Appendix E).

Instrumentation

The instrument used for data gathering was a telephone interview questionnaire adapted from one designed in 1997 by Busch et al, which rated responses on the types of services available to inmates, and what follow up resources were available to them upon release (Busch). The interview consisted of 23 questions, and used both dichotomous and open-ended questions. One probing question in the form of possible other resources was included. Demographics of infected inmates were part of the questionnaire but the data from these questions will not be included in the table. There were 86 respondents in the original sample, which covered 102 counties in downstate Illinois. At the time of this study the known ages of HIV/AIDS infected inmates ranged 23 to 60 with a mean of 33 years, 40% were black, 47% were white and the remainder were recorded as Cuban or Hispanic.

Results

A representative overview of selected services available to downstate Illinois inmates is shown in Table 1. As noted in the table, the majority of correctional facilities in downstate Illinois are providing very basic services to infected inmates. Services provided included a) testing, b) education, c) counseling, d) condom distribution (limited) and e) connection to follow-up care upon release.

HIV testing was provided at 77% of the jails in downstate Illinois, most frequently on request (47.6%) or as part of a screening (11.9 %). Many sites (70%) offered counseling to these prisoners. Almost one quarter of the facilities use the local health department as their resource of choice for inmate HIV counseling and testing (24.49%). Doctors (20%) and nurses (19%) employed directly by the jail and local hospitals (16%)

also provide a significant amount of HIV testing for the surveyed jail facilities. HIV status of inmates was not known at 47% of jails. Fifty percent stated this question was not applicable to their site. Those infected with HIV/AIDS were segregated in 42 % of jails surveyed; infected prisoners in 44 % of these jails were housed with the general population. The remaining facilities segregated "sometimes" or did not respond to the question. Condoms were provided at only 6% of the sites.

Resources on release of these prisoners varied, but health departments were the resources suggested to one quarter of inmates. An equal amount of jails provided no referral resources for inmates on their release. Fifty-three percent of the respondents had no knowledge of additional resources that could be provided released prisoners. Some requested additional funding for educational materials, counseling, and medications.

Blood-borne pathogen training was listed as the education used for 35% of the sites reporting. Eleven percent gave the health department as the source of training for prison health care providers. Subjects also listed nurses (8%), local physicians (8%), and enforcement personnel (8%) as sources of training and information. Five percent had no training for employees caring for HIV/AIDS inmates. The remaining sites had widely varied types of training, from correctional journals to private health production services. While no consortia area's jails provided a full constellation of services certain consortia provided more services during incarceration and planning for follow-up care after incarceration. Consortium #4 (Peoria area) had perhaps the best profile, providing several resources for follow-up, including a clinic, a "release packet," and a medical school clinic as well as local county health departments. A variety of training was available to employees in this area, besides basic blood-borne pathogen training. Consortium #6

(Springfield area) was notable in that it was the only consortium to list an AIDS support chapter as one of its resources.

Comments from subjects showed a concern that inmates were being given medication by untrained staff. Over 25% of the respondents stated that medications were given by staff with little or no training about these drugs. The schedule of medication for treatment of HIV/AIDS is complicated and difficult at best (CDC MMWR, 1999). Several respondents were concerned with the uncertainty of the health status of inmates.

Discussion

Limitations

The possibility of responder bias exists with self-reporting questionnaires (Polit & Hungler, 1999). However this threat was reduced because there was no identification of respondents or the facilities where they were employed. This study has a limitation shared by all secondary analyses-- that is the inability to contact informants after data was gathered to possibly clarify responses. This information may be generalized to Illinois jail or prison populations but not necessarily to similar populations in other states or in Federal correctional facilities.

In spite of these limitations this study shows definite deficits in services being provided to inmates in downstate Illinois jails. Training of personnel and education of inmates are area that could be improved. Other states have much more progressive and aggressive programs installed in areas of education and follow-up care once the inmate is released to society (Bauserman et al, 2003). As shown in other studies, this follow-up care is essential to help slow the spread of the disease (Baugerman et al, 2001; Silberstein et al, 2000; Springer, Pesanti, Macura, Doros & Altice, 2004, Conklin, Lincoln &

Flanigan, 1998; Hammett, Harmon & Rhodes, 2002). Community-based centers have been shown to be useful in follow-up (Conklin, Lincoln, & Flanigan, 1998; Ehrmann, 2002). But findings show there is little in the way of availability of these in downstate Illinois, apart from a few county health departments.

Most jails in Illinois offered HIV testing up on request by inmates. Condom accessibility in jails may help to decrease transmission of STD's (Spaulding, et al, 2001): however very few jails in Illinois offered them to prisoners. While it has been shown that availability of condoms can help prevent the spread of HIV/AIDS (Krebs & Simmons, 2002), the inmates in Illinois jails were discouraged or prevented from having these.

The lack of training provided to those administering medications is a serious concern. It does not seem the best use of medication resources to have these given by employees who have little or no training on the importance of timing of these medications, fasting requirements and drug interactions.

Andersen's Model of Health Service Use posits that changes in one area of a person's health status may change their perception and use of health care services. The literature supports that education provided in correctional facilities and consistent follow-up care helps in making cognitive differences that can improve health outcomes (Ehrmann, 2002; Springer, Pesanti, Macura, Doros & Altice, 2004). Education is also urgently needed for those jail employees who administer medications. The eradication of this vacuum is necessary not only to provide better quality of care, but also to make better use of available funds. Additional funding for local health departments for training and services to care for inmates upon release seems a plausible option for better continuity of care. Since these facilities are already in place, further training and education of health

care workers to administer and care for released inmates would seem a wise investment of public funds to control the spread of disease to the community. As research has shown, high-risk behaviors occur in correctional facilities. Making condoms available to inmates is a low-tech method to prevent the spread of the disease.

The implication is that it is beneficial and cost-effective to the community at large to treat, educate, and follow-up on with these inmates on release. This is an area where increased funding for the training of health care providers and improving facilities in the community may be best allotted for the greater good of the general population.

It would be an interesting endeavor to repeat this questionnaire to discover if improvements had been made in the care of the incarcerated population with HIV/AIDS in downstate Illinois jails since the initial data collection was done in 2000. A comparison with other states with similar population of HIV/AIDS inmates and their treatments and continuity of care would be enlightening, as well as comparisons made with Illinois state and federal correctional facilities. Public awareness of the disease and its implications to the community may make it possible to provide more funding for treatment. Including the community population in an awareness campaign may help change the stigma associated with this disease and encourage infected inmates and others in the community with the disease to seek care and treatment.

Table 1. HIV Services in Illinois County Correctional Facilities by Geographic Area

	Geographic area									
Services	1 (n=10) #, %	2 (n=16) #, %	3 (n=15) #, %	4 (n=11) #, %	5 (n=8) #, %	6 (n=17) #, %	7 (n=7) #, %	8 (n=8) #, %	9 (n=9) #, %	Total (n=101) #, %
HIV Testing	8, 80%	7, 44%	6, 40%	10, 90%	6, 75%	11, 65%	5, 71%	7, 88%	7, 78%	78, 77%
Counseling	6, 60%	10 63%	6, 40%	7, 63%	6, 75%	13, 76%	6, 86%	8, 100%	9, 100%	71, 70%
Education	1, 10%	3, 19%	3, 20%	6, 55%	6, 75%	8, 47%	2, 27%	6, 75%	4, 44%	39, 39%
Condoms	1, 10%	0, 0%	0, 0%	1, 9%	1, 2.5%	1, 6%	0, 0%	1, 12.5%	1, 11%	6, 6%

Note: Excludes Cook County; see map in Appendix E for explanation of geographic areas

References

Allwright, S., Bradley, F., Long, J., Barry, J., Thornton, L., Parry, J. (2000). Prevalence of antibodies to Hepatitis B, hepatitis C and HIV and risk factors in Irish prisoners: results of a national cross sectional survey. *British Medical Journal, 321,* 78-87.

Anderson, R., Rice, T., Kominski, G., Editors. (2001). *Changing the U.S. health care system. Key issues in health services, policy and management.* San Francisco: Jossey-Bass Publishers.

Ashworth, A. (2001). Management of prisoners with HIV infection: Prevention would be better than care. *British Medical Journal, 323,* 230-231.

Baldwin, K., Rogers, L.R., Lewis, P., & Grinslade M.S. (2001). HIV/AIDS needs assessment for downstate Illinois: A final report. Springfield: Illinois Department of Public Health.

Baugerman, R., Ward, M., Eldred, L., Swetz, A. (2001). Increasing voluntary HIV testing by offering oral tests in incarcerated populations. *American Journal of Public Health, 91,*1226-1229.

Bauserman, R., Richardson, D., Ward, M., Shea, M., Bowlin, C., Tomoyasu, N. & Solomon, L. (2003). HIV prevention with jail and prison inmates: Maryland's prevention case management program. *AIDS Education and Prevention, 15,* 465-480.

Braithwaite, R., Arriola, K (2003). Male prisoners and HIV prevention: A call for action ignored. *American Journal of Public Health, 93,* 759-763.

Bureau of Justice Statistics. (2005). HIV in prisons, 2003. Accessed October 25, 2005. Available at: http://www.ojp.usdoj.gov/bjs/pub/pdf/hivp03.pdf

Busch, P., Graham, L., Hinegartner, J., Mackoway, D., Stutzman, J. & Wong, S. (1997). An assessment of the HIV/AIDS community in Central Illinois. Unpublished manuscript. Peoria, IL: University of Illinois at Chicago College of Nursing.

Center for Disease Control MMWR. (1999). Decrease in AIDS-related mortality in a state correctional system-N.Y. 1995-1998. *JAMA, 281,*506-507.

Conklin, T., Lincoln, T., & Flanigan, T. (1998) A public health model to connect correctional health care with communities. *American Journal of Public Health, 88,* 1249-1250.

Dean-Gaitor, H., Fleming, P. (1999). Epidemiology of AIDS in incarcerated person in the United States, 1994-1996. *AIDS, 13,* 2429-2435.

DeGroot, A. (2000). HIV infection among incarcerated women: Epidemic behind bars. *AIDS Reader, 10,* 287-95.

De Ravello,L., Brantley, M., LaMarre, M., Qayad, M., Aubert, H., Beck-Sague, C., (2005). Sexually transmitted infections and other health conditions of women entering prisons in Georgia. *American Sexually Transmitted Diseases Association, 32,* 247-251.

Dubik-Unruh, S. (1999). Peer education programs in corrections: Curriculum,

Ehrmann, T., (2002). Community-based organizations and HIV prevention for incarcerated population: Three HIV prevention program models. *AIDS Education and Prevention, 14, Supplement B,* 75-84.

Frank, L. (1999). Prisons and public health: Emerging issues in HIV treatment adherence. *Journal of the Association of Nurses in AIDS Care, 10,*24-32.

Hammett, T., Harmon, M., Rhodes, W., (2002) The burden of infectious disease among inmates of and release from US correctional facilities, 1997. *American Journal of Public Health, 92,* 1789-1794.

Haywood, T., Krautz, H., Goldman, L., Freeman, A. (2000). Characteristics of women in jail and treatment orientations. A review. *Behavior Modification, 24,* 307-324.

Klein, S., O'Connell, D., Devore, B,.Wright, L.& Birkhead, G., (2002). Building an HIV continuum for inmates: New York State's criminal justice initiative. *AIDS Education and Prevention, 14 (Supplement B*), 114-123.

Krebs, C., Simmons, M., (2002). Intraprison HIV transmission: an assessment of whether it occurs, how it occurs and who is at risk. *AIDS Education and Prevention, 14, (Supplement B),* 53-64.

Leh, S. (1999). HIV infection in the U.S. correctional system: Its effect on the community. *Journal of Community Health Nursing, 16,* 53-63.

Macalino, G., Vlahov, D., Sanford-Colby, S., Patel, S., Sabin, K., Sala, C., Josiah, D., (2004). Prevalence and incidence of HIV, hepatitis B virus, and hepatitis C virus infections among males in Rhodes Island prisons. *American Journal of Public Health, 94,* 1218-1223.

May, J., Williams, E., (2002). Acceptability of condom availability in a U.S. jail. *AIDS Education and Prevention, 14, (Supplement B),* 85-91.

McClelland, G., Teplin, L., Abram, K., Jacobs, N., (2002). HIV and AIDS risk behavior among female jail detainees: Implications for public health policy. *American Journal of Public Health, 92,* 818-825.

Merterns, D., (2001). Pregnancy outcomes of inmates in a large county jail setting. *Public Health Nursing, 18,* 45-53.

Mirands, A., Vargas, P., St. Louis, M., Viana, M. (2000). Sexually transmitted disease among female prisoners in Brazil: Prevalence and risk factors. *Sexually Transmitted Diseases, 2,* 491-495.

Polit, D. & Hungler, B. (1999). *Nursing research principles and methods.* Philadelphia: Lippencott.

Pollack, H., Khoshnood, K., Altice, F. (1999). Health care delivery strategies for criminal offenders. *Journal of Health Care Finance, 26,* 63-77.

Rapposelli, K., Kennedy, M., Miles, J., Tinsley, M., Rausch, K. Austin, L., Dooley, S., Aranda-Naranjo, B & Moorse, R. (2002). HIV/AIDS in correctional settings: A salient priority for the CDC and HRSA. *AIDS Education and Prevention, 14, (Supplement B),* 103-113.

Rich, J., Dickinson, B., Marclino, G., Flanigan, T., Towe, C., Spaulding, A & Vlahov, D. (1999). Prevalence and incidence of HIV among incarcerated women in Rhode Island. *Journal of Acquired Immune Deficiency Syndrome, 22,* 161.

Schady, F., Miller, M., Klein, S., (2005) Developing practical “tips” for HIV/AIDS service delivery in local jails. *Journal of Public Health and Practice, 11,* 554-558.

Silberstein, G., Coles, F., Greenburg, A., Singer, L., Voight, R. (2000).Effectiveness and cost benefit of enhancement of a syphilis screening and treatment program at a county jail. *Sexually Transmitted Disease, 27,* 508-517.

Skolnick, A. (1998). Looking behind bars for keys to control of STD's. *JAMA, 279,* 97-98.

Spaulding, A., Lubelczyk, R., Flanigan, T. (2001). Can unsafe sex behind bars be barred? *American Journal of Public Health, 91,*1176-1177.

Springer, S., Pesanti, E., Macura, T., Doros, G., Altice, F. (2004), Effectiveness of antiretroviral therapy among HIV infected prisoners: Reincarceration and lack of sustained benefit after release to the community. *Clinical Infectious Diseases, 38,* 1754-1760.

Ward, K. (1996). HIV in prison: The importance of prevention. *Nursing Standard, 11,* 51-52.

Wohl, A., Johnson, D., Jordan, W., Lu, S., Beall, G., Curner, J., Kerndt, P. (2000). High-risk behaviors during incarceration in African American men treated for HIV at three Los Angeles public medical centers. *Journal of Acquired Immuno-Deficiency Syndrome, 24,*386-392.

APPENDIX A

ANDERSEN MODEL OF HEALTH SERVICE USE

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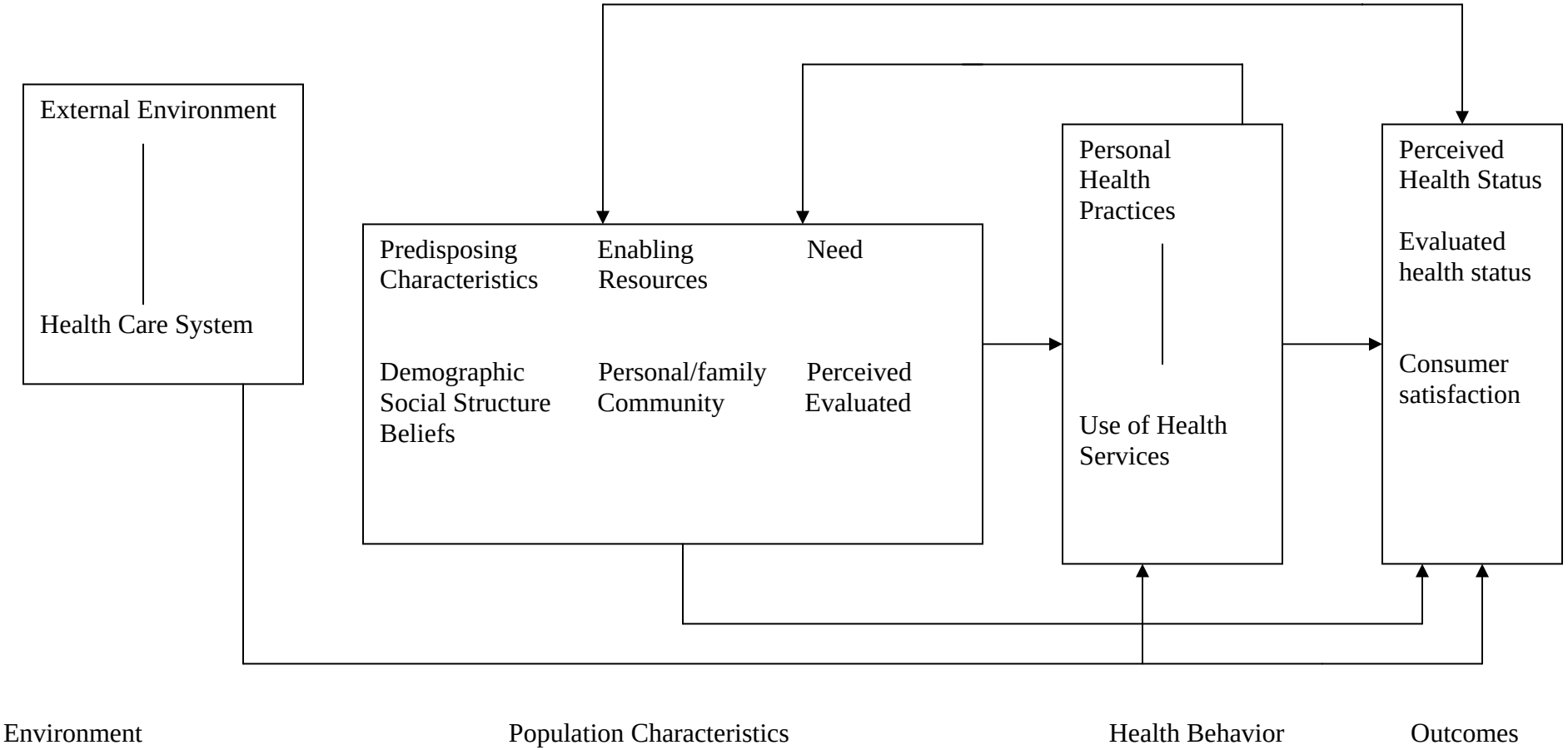

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APPENDIX B

TELEPHONE SURVEY

Telephone Questionnaire for Jails

Do you offer HIV testing to inmates? _____yes ___no If so, how do they qualify?

Are counseling services offered to inmates who have HIV/AIDS?

What health care sources are available to inmates who have HIV/AIDS?

What is the HIV/AIDS status of inmates known to other inmates? Accepted?

Is the HIV/AIDS population segregated?

Is education concerning HIV/AIDS offered to inmates?

If HIV/AIDS resources are offered to inmates, are they used?

Are condoms provided to inmates? ___yes ___no If yes, what is the process for obtaining condoms?

When HIV/AIDS inmates are released to society what resources, if any, are offered to them?

Do you know of any other resources you could offer?

How many inmates that you know of currently have HIV/AIDS in _____jail?

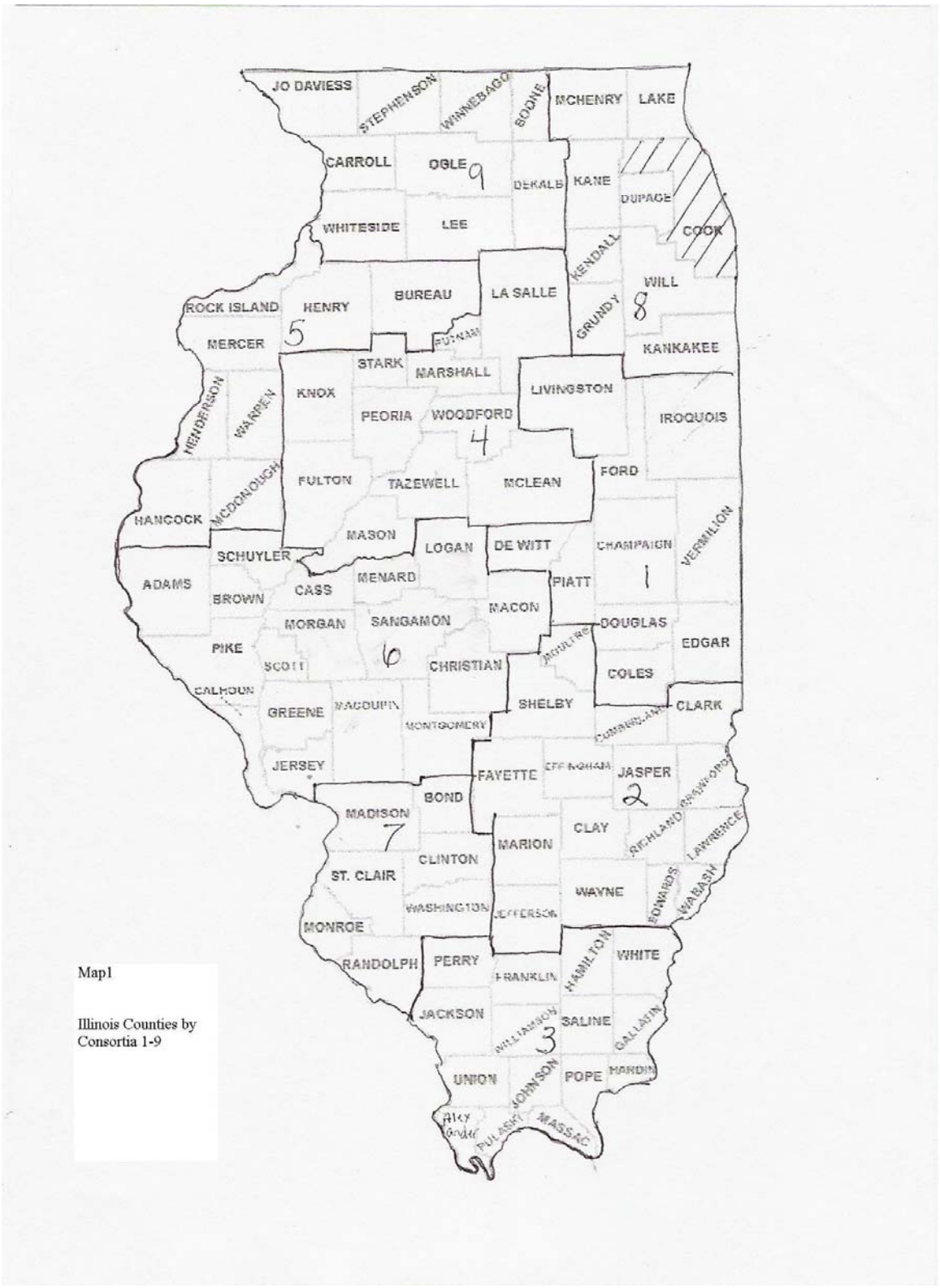
If any, what are their ages? Marital status? Permanent county of residence? Race? Education? Occupation? Housing?

What training have prison health care providers had in HIV/AIDS, particular medication regimens?

Do you feel medication regimens are current?

APPENDIX C

CONSORTIA TABLE



Map1

Illinois Counties by Consortia 1-9

APPENDIX D

INTRODUCTORY LETTER

UNIVERSITY OF ILLINOIS
AT CHICAGO

College of Nursing
Peoria Regional Program
One Illini Drive
Box 1649
Peoria, Illinois 61656-1649

_____,

As a prison or jail representative who may incarcerate people with HIV infection and/or AIDS, you will be contacted and requested to participate in a telephone interview to determine services provided for inmates who have HIV / AIDS. This research is being conducted under the direction of Kathy Baldwin, Ph.D., RN, Larry Rogers, M.S.W., and Patricia Lewis, Ph.D., RN who are affiliated with the University of Illinois at Chicago's Peoria and Rockford Campuses.

The purpose of this research is to determine services that are available for inmates living with AIDS / HIV in downstate Illinois. As a prison or jail representative, who may house inmates with HIV infection and/or AIDS, you will be asked to respond to questions about services provided and problems experienced by inmates living with HIV / AIDS in downstate Illinois prisons or jails.

There are no risks associated with your participation in this interview, as no identifying information will be obtained. However, the outcomes of this research have the potential of benefiting inmates living with AIDS / HIV in downstate Illinois. Following the assessment process, the researchers with the help of a Community Advisory Board will make recommendations concerning resources and services. Participation in this research project is completely voluntary. You may refuse to participate or you may withdraw your participation at any time.

If you have any questions about the research being conducted you may contact Kathleen A. Baldwin, Ph.D., R.N. at 309-671-8467. Any questions concerning subject rights may be directe to the Office for the Protection from Research Risks: Institutional Review Board (IRB) of the University of Illinois Chicago at 312-996-1974.

Information gathered from this project will only be used for research purposes. Information wil be shared only with the Illinois Department of Public Health. All information gathered through this research project would be kept confidential. Participants will not be identified by name or through demographic data.

Your input is extremely important and will have an effect on future funding of services to persons living with HIV / AIDS, when contacted, please participate in this telephone interview.

Thank You,

Kathleen A. Baldwin, Ph.D., R. N.

UIC

Phone (309) 671-8463 • Fax (309) 671-8436

APPENDIX E

IRB APPROVAL

UNIVERSITY OF ILLINOIS
COLLEGE OF MEDICINE AT PEORIA

Community Institutional Review Board
One Illini Drive
Box 1649
Peoria, Illinois 61656-1649

FWA00005172
IRB #00000689
IRB #00003461
IRB #00000688

November 07, 2005

Hollie Kaufman
University of IL College of Medicine at Peoria
One Illini Drive, Box 1649
Peoria, IL. 61656-1649

RE: IRB Study # 05-213

Dear Ms. Kaufman:

Meeting Date: 12/8/2005 **At:** IRB I

Protocol Title:
Evaluation of Services and Resources Available to Downstate Illinois Inmates Infected with HIV/AIDS

This is to advise you that the above referenced Study has been presented to the Institutional Review Board, and the following action taken subject to the conditions and explanation provided below.

Internal #:	New Appl
Expiration Date:	
On Agenda For:	Exempt
Reason 1:	
Description	Date Received- 11/2/2005; Date Exempted- 11/2/2005; Reason Exempt- 45 CFR 46.101 (b) (4) -
IRB ACTION:	**Approved**
Action Explanation:	Thank you for the opportunity to review the above referenced research proposal. This study has been found to be exempt pursuant to 45CFR46.101(b)(4) "Research involving the collection or study of existing data, documents, records, pathological specimens, or diagnostic specimens, if these sources are publicly available or if the information is recorded by the investigator in such a manner that subjects cannot be identified, directly or through identifiers linked to the subjects." The date of this letter reflects the date of exemption for this study. The "Meeting Date" heading and its corresponding date indicate the time at which the board will be presented with the exempted item as an informational item ONLY. If any revisions are made to the protocol that may exclude it from an exempt category of research, the revision must be reported to the IRB prior to implementation.

Sincerely,

Frank L. Gold, MD
Co-Chairperson
Institutional Review Board

FLG/mar