Highlights of CIRA-Supported HIV/AIDS Research
A NOTE FROM CIRA’S DIRECTOR

“The first case of AIDS was diagnosed in a gay man in Los Angeles nearly 30 years ago, in June 1981. The HIV epidemic now affects the entire globe with an estimated 33.3 million persons living with HIV/AIDS worldwide. Although we have made great progress since HIV was identified, many challenges still face us as we try to prevent the spread of HIV and optimize outcomes for infected individuals. CIRA is proud to have contributed to the knowledge about how to prevent and treat HIV infection, both domestically and globally, but continuously strives to do more. This new issue of CIRA-Supported HIV/AIDS Research Highlights summarizes recent efforts of our scientists and community partners to investigate and find solutions to a range of HIV/AIDS prevention and care issues. Addressing the gross HIV infection and treatment disparities is an important aspect of many of these studies. We hope that the research featured here will provide useful information that can be used by HIV prevention and care providers, policy makers, and other community members.”

Paul D. Cleary, Ph.D., CIRA Director

ABOUT CIRA AND THESE RESEARCH HIGHLIGHTS

The Center for Interdisciplinary Research on AIDS (CIRA) was established in 1997 with funding from the National Institute of Mental Health (NIMH) and the National Institute on Drug Abuse (NIDA) and is currently funded through a grant from the NIMH. The Center’s mission is to support the conduct of interdisciplinary research focused on the prevention of HIV infection and the reduction of the negative consequences of HIV disease in vulnerable and underserved populations nationally and abroad. There are over 62 active research and training grants affiliated with CIRA and 87 affiliates representing 24 different disciplines. The Center unites three Connecticut research institutes: Yale University in New Haven, The Institute for Community Research (ICR) in Hartford, and the University of Connecticut’s Center for Health, Intervention, and Prevention (CHIP) in Storrs. This publication includes new, on-going, and completed research conducted by CIRA-affiliated researchers. Some of the studies are small pilot projects and others are major, multi-year research studies. Some have generated significant findings that can be applied in practice and others are still in the developmental stages. It is not meant to be comprehensive of all CIRA-affiliated research. For further information, visit www.yale.edu/cira.

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Addressing Adherence to PMTCT and Early Care of Women and Infants in South Africa

Principal Investigator: Brian Forsyth, MB, ChB, FRCP(C)
Funded by: National Institute of Mental Health
Project Period: 08/05/2009 – 07/31/2011

OVERVIEW
The overall goal of this study is to improve the effectiveness of programs to prevent mother-to-child HIV transmission (PMTCT) in resource-limited countries through the piloting and further development of a targeted intervention aimed at addressing adherence to the different components of PMTCT, and the early care of HIV-infected women and their children.

The specific aims of the study are to:

1) Implement an intervention in a single health care sub-district in South Africa to improve the delivery of PMTCT.

2) Conduct a qualitative evaluation to assess the acceptability and feasibility of the intervention and identify factors that either impede or facilitate implementation.

3) Conduct a quantitative evaluation to examine the extent to which there is change in each of the activities involved in the PMTCT journey, identify variables that have a mediating effect, and determine to what extent these are modified by the intervention.

The study is presently on-going and results are not yet available.

RESEARCH IMPLICATIONS
We anticipate that the results of this study will provide a model for intervening to improve PMTCT in resource-poor countries and thus decrease the rate of HIV infection among children.

COMMUNITY BENEFITS
With future demonstration of the efficacy of this intervention and further dissemination, the intervention developed in this research could have a substantial impact on improving the health of HIV-infected women and their children and prevent high rates of death in early infancy.
Addressing Partner Violence Among People Living with HIV

Principal Investigators: Nathan Hansen, Ph.D. and Shawn Lang, B.A.
Funded by: Center for Interdisciplinary Research on AIDS – Community Research Partnership Program
Project Period: 12/06/2010 – 06/30/2011

OVERVIEW

Research has documented the strong correlation between Intimate Partner Violence (IPV) and HIV risk and infection, substance misuse, and negative mental and physical health consequences for women, but there is little to suggest that the HIV care systems are screening for or have the capacity to address the issue. In fact, the role of IPV on HIV prevention, access and adherence to care, and mental health and substance use issues often is not recognized.

Presently, there is little known about the capacity of AIDS Service Organizations/AIDS Housing Programs (ASOs/AHPs) to recognize and address their clients’ histories of IPV. Thus we aim to:

1) Conduct a statewide, web-based survey of all ASOs/AHPs in Connecticut;
2) Conduct in-depth interviews with 20 key staff (Executive Directors, Program Managers, and Case Managers) at CT ASOs/AHPs;
3) Conduct in-depth interviews with 10 clients at CT ASOs/AHPs who have previously experienced IPV; and
4) Conduct in-depth interviews with 10 clients at CT ASOs/AHPs who are currently experiencing IPV.

Our short-term goal is to assess the capacity of ASOs/AHPs to screen for and address IPV, and identify facilitators and barriers to screening for and addressing IPV from both a staff and client perspective.

RESEARCH IMPLICATIONS

Findings from this project will inform National Institutes of Health (NIH) research proposal, including an R21 application to assess ASO/AHP capacity and service strategies to address IPV on the national level. The findings may also inform proposals to develop appropriate behavioral interventions, staff education and training curriculums, and structural interventions to increase organizational sensitivity and capacity for addressing IPV.

COMMUNITY BENEFITS

The outputs of this project will include:

1) A report on the current capacity and organizational needs of ASOs/AHPs in the State of Connecticut;
2) Preliminary evidence of the impact of IPV on consumers relative to their risk behaviors, medical care, and medication adherence that could guide future interventions; and
3) A conceptual model of the facilitators, barriers, and organizational and client needs for addressing IPV in people living with HIV.

The Community Principal Investigator on this project is Shawn M. Lang, the Director of Public Policy for the Connecticut AIDS Resource Coalition (CARC).
Adverse Migration Experiences and HIV Vulnerability Among Male Migrant Laborers in Pretoria, South Africa

Principal Investigator: Jhumka Gupta, M.P.H., Sc.D.
Funded by: Center for Interdisciplinary Research on AIDS – Development Core Pilot Project Program
Project Period: 07/01/2012 – 06/30/2013

OVERVIEW
Epidemiologic research investigating the hypothesis that adverse migrant experiences increase South African male labor migrants’ vulnerability to engaging in HIV risk behaviors is woefully lacking. This is true despite the large numbers of studies that point to male labor migration as a critical factor in the spread of HIV in South Africa, growing concern regarding the high levels of adverse experiences faced by migrants, and calls for greater consideration of such contextual factors in the HIV field. To date, research and interventions targeting migrants have overwhelmingly focused on individual determinants of HIV risk behavior (e.g. HIV awareness, attitudes towards risk). However, work examining contextual factors is critical to begin to inform culturally-tailored programs to reduce HIV risk behavior among this population and ultimately reduce the spread of HIV from this bridge population to lower prevalence settings. Historically, migrant populations have been difficult to access by public health researchers.

To fill these gaps in knowledge, this study proposes to examine potential relationships between adverse migration experiences and HIV risk behaviors among male labor migrants in Pretoria, South Africa, through the following specific aims:

1) To identify optimal methods for recruiting male labor migrants into public health/HIV-related research.

2) To explore the feasibility of using a novel narrative-based interview technique with male labor migrants in Pretoria to learn about forms of migration-related adverse experiences (e.g. hazardous work conditions, discrimination/oppression, isolation, violence victimization, threats to masculinity) and HIV risk behaviors (multiple partnering, condom non-use, engagement in transaction sex, forced unprotected sex, HIV and STI testing behaviors).

3) To pilot a quantitative survey with male labor migrants assessing adverse migration experiences and sexual risk behavior.

RESEARCH IMPLICATIONS
The objectives of this pilot study are: (1) to obtain critical information on the feasibility of recruiting diverse samples of male labor migrants into HIV research and optimal methods for learning about the full range of adverse migration-related experiences of male labor migrants, and (2) to gather preliminary data on potential associations between contextual factors (i.e. adverse migration experiences) and HIV risk behavior. If data indicate a relationship between adverse migration experiences and HIV risk behavior, findings from the proposed pilot study will be used to develop a larger study proposal focusing on understanding the mechanisms surrounding adverse migration experiences and HIV risk behavior.

COMMUNITY BENEFITS
Data yielded from the pilot study may inform the development of more comprehensive and culturally tailored HIV intervention programs targeting male migrant laborer populations.
Alcohol and HIV Risk Reduction in St. Petersburg, Russia

Principal Investigator: Nadia Abdala, D.V.M., Ph.D.
Funded by: National Institute on Alcohol Abuse and Alcoholism
Project Period: 09/30/2007 – 06/30/2011

OVERVIEW

This developmental research project is aimed at culturally adapting and field-testing a risk-reduction intervention for men and women in the city of St. Petersburg, Russia, who use alcohol and are at risk for HIV infection.

The 60-minute, face-to-face intervention was guided by an Information-Motivation-Behavioral Skills model of health-promoting behaviors that was developed and tested in the United States. The experiment consisted of three phases:

1) In the research phase, initial interviews, focus groups, and quantitative surveys with 66 male and female patients were conducted from a sexually transmitted infection (STI) clinic in the city of St. Petersburg. The information gathered was used to culturally adapt the American risk-reduction intervention to the Russian context.

2) The feasibility and acceptability of the culturally-adapted intervention was tested on a small sample of 15 men and women who sought medical services at the STI clinic.

3) The last phase of the project, which is not complete, is a randomized, controlled trial to determine the efficacy of the risk-reduction intervention among approximately 300 men and women seeking medical services at the STI clinic in St. Petersburg. The participants have been randomly assigned either to a group which received the culturally-adapted intervention or to a comparison group which received the standard local health care. At the end of a six-month follow-up period, the project will identify and measure the differences between the two groups according to sexual behavioral outcomes.

RESEARCH IMPLICATIONS

This project will increase our understanding of the dynamics of HIV risk practices among individuals who are non-intravenous drug users (non-IDUs) who are at risk for STIs/HIV. The prevalence of HIV in Russia has increased fast in the last decade and although the HIV epidemic is currently concentrated among IDUs, interventions to prevent the spread of HIV beyond the IDU population are needed.

Data collected from the study will:

- Help explain the role of alcohol in HIV risk-related behaviors and other health-related risk behaviors (such as reproductive health and contraceptive practices) and attitudes of individuals who are at risk for HIV.
- Identify gender differences in terms of the types of risky behaviors that occur (such as alcohol use and domestic violence) and the cultural differences that may influence HIV risk.
- Test the feasibility of providing interventions to reduce HIV risk behaviors among high-risk groups.

COMMUNITY BENEFITS

The results of this study will provide data and infrastructure that facilitate future research on interventions to reduce the risk for HIV transmission in Russia.

- The project has the potential to strengthen the scientific links between the U.S. and Russia, laying the groundwork and building the infrastructure for further collaborations.
- As Russia’s health care system is strictly separated by disciplines, this study may serve to foster collaborations across disciplines in the Russian medical setting. Such collaboration can generate productive conversations about the changes that are needed to better integrate the various areas of medical and counseling services, especially to more vulnerable populations. It also has the potential to provide insight into the barriers that prevent such integration from taking place in Russia, and foster the actions needed to overcome these barriers.

Study logo in St. Petersburg, Russia, which means “Consulting Project: Perspective”.

6 CIRA–SUPPORTED RESEARCH HIGHLIGHTS
Alcohol Associated Outcomes Among HIV–Positive/Negative Aging Veterans

Principal Investigator: Amy Justice, M.D., M.Sc., Ph.D.
Funded by: National Institute on Alcohol Abuse and Alcoholism
Project period: 09/30/2001 – 08/31/2011

OVERVIEW

The Veterans Aging Cohort Study (VACS) includes a “virtual cohort” (VACS VC) of 40,594 HIV-infected individuals (HIV+), one to two demographically matched to 81,188 uninfected individuals (HIV-) and a nested, 8 site sample (VACS 8) of 7,312 HIV+/-. VACS is the largest single HIV cohort in North America. VACS 8 has in-depth, longitudinal data, spanning nearly a decade, on alcohol, substance use, and health and behavioral outcomes. Of HIV+ in VACS 8, 63% currently drink alcohol and 32% have unhealthy alcohol use – defined as at-risk, binge, or abuse or dependence. Because VACS includes HIV-, we are able to characterize the role of HIV infection in determining alcohol associated outcomes. VACS includes large, well characterized subsamples of understudied, but important subgroups: middle aged and older individuals, people of color, Black men who have sex with men, those with Hepatitis C Virus infection (HCV+), and those new to care. We have conducted observational research, operations research (OR) modeling and intervention studies focused on the role of alcohol in determining modifiable outcomes among HIV+/- for 9 years.

RESEARCH IMPLICATIONS

Our current primary focus is on the validation of the VACS Risk Index and demonstrating that it can improve clinical management and be used to motivate behavior change.

COMMUNITY BENEFITS

The research group’s mission is to build and disseminate the evidence needed to optimize health care for those aging with HIV infection through coordinated, integrated, and externally validated observational, or modeling, and intervention studies. So far more than 100 widely cited publications have been produced. The study also has a network of investigators and collaborators that spans North America and Europe, and a highly effective Coordinating Center at the West Haven VA Medical Center. It has also conducted education programs, training and career development support to clinician researchers and methodologists.
Commercial Sex Work, Sex Partners, and Drug Use: Potential for HIV Bridging in Russia

Principal Investigator: Linda Niccolai, Ph.D.
Funded by: National Institute on Drug Abuse
Project Period: 09/01/2008 – 08/31/2011

OVERVIEW

In Russia, sexual transmission of HIV is increasing and street-based female sex workers (FSW) have a high HIV prevalence, but the role of their male clients in HIV transmission and bridging to the general population has not been studied. Therefore, a pilot study was conducted to explore these issues in St. Petersburg, Russia, in collaboration with the Non-Governmental Organization (NGO) Stellit.

Sixty-two male clients were interviewed during February to March of 2010 in St. Petersburg, Russia. A majority of clients (74%) reported having non-FSW sex partners during the past 12 months, and nearly half (47%) of clients reported having regular sex partners. Consistent condom use was reported by 61% of clients with their FSW partners and 43% with their non-FSW partners. A majority of clients (58%) was classified as active or potential bridgers based on having both FSW and non-FSW partners and reporting inconsistent condom use with their non-FSW partners. A majority (61%) also reported simultaneous (concurrent) partnerships with FSW and non-FSW partners. Nearly half (48%) of last reported sex contacts with FSW involved consumption of alcohol by the client. Non-injection and injection drug use in the past 30 days were reported by 15% and 7% of clients, respectively. Twenty-nine percent reported history of an STI and 74% reported a previous HIV test. Active or potential bridgers were significantly less likely to have ever been tested for HIV.

These data signal the potential for HIV/STI transmission among male clients of street-based FSW in St. Petersburg, Russia, due to their variety of partner types, sub-optimal condom use, and concurrent partnerships.

RESEARCH IMPLICATIONS

Future research must strive to better understand the epidemic trajectory of HIV in Russia. With an estimated adult HIV prevalence now exceeding 1%, this vast nation may be poised for a generalized epidemic. The role of all bridging populations (e.g. clients of FSWs, sex partners of injection drug users, and female sex partners of men who have sex with men) needs to be better understood to prevent widespread transmission. Future research should also focus on defining optimal strategies for risk reduction in the general population. Areas of focus may include risk perception and alcohol use.

COMMUNITY BENEFITS

Greater efforts are needed to reduce HIV prevalence in one of the most vulnerable populations in Russia: street-based sex workers who inject drugs. Recent estimates indicate HIV prevalence of nearly 50%. Effective prevention strategies are currently limited by inadequate substance abuse treatment programs and restricted access to anti-retroviral therapy for drug users. These changes will be difficult to bring about in the current political and social climate of Russia; in the meantime, outreach and social support by NGOs remain crucial, and the provision of condoms and clean needles remains essential.
Computer Simulation of HIV Epidemic in Sub-Saharan Africa

Principal Investigator: Scott Braithwaite, M.D., M.Sc
Funded by: National Institute on Alcohol Abuse and Alcoholism
Project period: 09/30/2007 – 08/31/2012

OVERVIEW

- This research project aims to create a computer simulation of the HIV pandemic that can evaluate the benefit and value of interventions funded by the National Institute on Alcohol Abuse and Alcoholism (NIAAA) in Sub-Saharan Africa.

- The study uses the International Epidemiologic Databases to Evaluate AIDS cohort of 34,000 patients to ensure that the simulation has good predictive validity (e.g. the extent to which a score on a scale or test predicts scores on some criterion measure) and design the simulation to represent important social features of HIV transmission in Sub-Saharan Africa (e.g. high prevalence of sexually transmitted infections, social network characteristics, etc.).

- After constructing the simulation and ascertaining that it can predict individual level and population level Sub-Saharan outcomes, the simulation will be used to investigate whether NIAAA-funded interventions (1) lead to clinically significant benefits; (2) deliver greater value than World Health Organization (WHO) guidelines; and (3) deliver greater value than current care.

RESEARCH IMPLICATIONS

Modeling is a method that is particularly well suited to assess the value of NIAAA-funded Sub-Saharan Africa interventions because clinical trials will only provide short-term behavioral data, and comparing their benefit and value on a “level playing field” requires estimation of longer term clinical outcomes.

COMMUNITY BENEFITS

Modeling is becoming increasingly relevant as a method for informing policy. Due to statistical considerations, the short-term data provided by clinical trials will be limited to intermediate outcomes (e.g. condom use, intention to drink alcohol) rather than clinical outcomes (e.g. HIV, AIDS, death). Comparing the value of these interventions on a “level playing field” requires modeling to estimate how this short-term, intermediate data is likely to impact clinical outcomes in the long-term, as well as to estimate how the costs and benefits are likely to compare with the costs and benefits of alternative resource uses.

“Comparing the value of these interventions on a ‘level playing field’ requires modeling to estimate how this short-term, intermediate data is likely to impact clinical outcomes in the long-term.”
OVERVIEW

The epidemics of multiple and extensively drug resistant (MDR and XDR) TB and HIV continue to cause enormous morbidity and mortality in the province of KwaZulu-Natal (KZN), South Africa. In addition, during the past year, the Sub-Saharan and global importance of these epidemics has been more widely recognized. The rural site of Tugela Ferry, where our research and clinical work is situated remains the global epicenter of the convergence of these intertwined epidemics.

The project is directed towards reducing transmission of drug susceptible and drug resistant TB, particularly in the context of HIV coinfection. The program has expanded and shows early success. These include identifying TB and HIV patients in the community earlier in the course of their disease through community-based intensive case finding. The extremely high and rapid mortality associated with MDR and XDR TB and the continuing spread of infection of both is a function of delayed recognition of active cases. Patients appear for hospital admission very late in the course of their disease, long after exposing others in the community and outpatient health care settings.

The goal of this project is to develop, expand, and evaluate a community-based intensive case finding strategy to enable earlier identification of patients with HIV, TB, and MDR/XDR TB.

Led by Dr. Sheela Shenoi, the study has now convincingly demonstrated that community-based case finding for HIV and TB is not only feasible, but acceptable to community members. From March 1 to November 30, 2010, employing this strategy at congregate community sites, 2040 community members were screened for TB and HIV. Of these, 1,913 or 93.7%, accepted HIV testing in this setting and 192 HIV–positive individuals (10%) have been identified. The median CD4 cell count was 347 cells/mm3 among screened patients, indicating that half are appropriate for initiating antiretroviral therapy according to new South African Treatment Guidelines. A total of 408 TB suspects (20%) were identified based upon TB symptoms. Of these, 16, or 3.9%, thus far have TB positive sputum smears, including many with MDR TB. These extraordinarily high rates clearly demonstrate the large extent to which HIV and TB have penetrated the community.

RESEARCH IMPLICATIONS

The research team continues to define the epidemiology and clinical consequences, and to develop and test innovative strategies to combat these epidemics. During the past year, we have been able to see gratifying success in some of these efforts. There is now evidence that the tuberculosis control program in our area has been strengthened, and with higher cure and treatment completion rates, generation of new cases of drug resistance will be decreased. Strategies for follow-up on patients have been developed and piloted, including tracking tools, follow up instruments, and study databases, with the intention of demonstrating that early identification significantly improves survival.

COMMUNITY BENEFITS

This project expanded our success in introducing antiretroviral therapy to HIV/TB co-infected patients in rural South Africa. The strategy also helped build local clinical, administrative, and laboratory capacity in each of these areas. Other active projects include development, implementation, and testing of airborne infection control strategies appropriate for the African resource limited rural setting in hospital and traditional Zulu home sites, and continuation of an innovative community-based treatment program for MDR TB.
Counseling for Primary Care Office-Based Buprenorphine

Principal Investigator: David A. Fiellin, M.D.
Funded by: National Institute on Drug Abuse
Project Period: 08/20/2005 – 07/31/2011

OVERVIEW
Our work focuses on the effect of different types and frequency of counseling for individuals who are addicted to prescription opiates or heroin and who are receiving treatment with a medication called buprenorphine. Buprenorphine is unique in that it can be prescribed by a physician, such as a primary care physician, and obtained from a pharmacy. In addition to medications like buprenorphine, patients who are receiving treatment for addiction to prescription opioids or heroin often benefit from counseling that helps them reach and stay in recovery. Recovery from opiate addiction allows people to avoid infection with HIV, Hepatitis C, criminal behavior, and to meet their goals in society.

RESEARCH IMPLICATIONS
This work focuses on the impact of counseling on drug use, compliance with treatment, and changes in risk for HIV. By completing this research we hope to help improve the care of individuals who receive buprenorphine for the treatment of opiate addiction.

COMMUNITY BENEFITS
Helping to find the best type and frequency of counseling will help define the role of professional evidence-based drug counseling in expanding access to treatment with buprenorphine.

“We hope to help improve the care of individuals who receive buprenorphine for the treatment of opiate addiction.”
David A. Fiellin, M.D.
Economic Evaluation of Drug Abuse Treatment and HIV Prevention Services for Pregnant Women

Principal Investigator: Jennifer Prah Ruger, Ph.D.
Funded by: National Institute on Drug Abuse
Project Period: 01/15/2009 – 12/31/2012

OVERVIEW

- Economic and policy research on the efficiency of drug abuse treatment and HIV prevention services among vulnerable populations, such as women, is necessary to improve drug abuse and HIV/AIDS services. The objective of this study is to conduct an economic evaluation of an innovative behavioral approach integrating Motivational Enhancement Therapy (MET) with Cognitive Behavioral Therapy (CBT) compared to standard Brief Advice (BA) in a prenatal clinical setting to decrease substance use, reduce HIV risk behavior, and to achieve better infant health outcomes.

- This study aims to: (1) conduct cost analyses of the two intervention arms; (2) conduct incremental cost-effectiveness analyses of the two study arms; and (3) conduct incremental cost-utility analyses to determine and compare the net cost per Quality-Adjusted Life Years saved by each intervention.

- To date, 115 participants have been enrolled in the study. Patient recruitment and data collection are ongoing.

RESEARCH IMPLICATIONS

The study methodology is grounded in sound microeconomic principles and uses standardized techniques recommended by the U.S. Panel on Cost Effectiveness in Health and Medicine. It offers a systematic theoretical and methodological framework for conducting meaningful and useable analyses for economic evaluations of drug abuse treatment and HIV prevention programs. In addition, this research will help to improve the evidence base on the unit costs and cost-effectiveness of substance abuse treatment and HIV prevention services.

COMMUNITY BENEFITS

Drug use and high risk HIV behaviors during pregnancy have deleterious effects on individual users, their children, and the surrounding community. Drug abuse and HIV prevention programs have the potential to be cost-beneficial due to significant health benefits to mothers and their children. Understanding the costs and cost-effectiveness of these interventions to individuals, the healthcare system, and society will help identify programs that are more effective and sustainable. In particular, this study examines the costs and cost-effectiveness of BA compared to an innovative behavioral approach which integrates MET-CBT within prenatal care, offering promise to improve access to and strengthen substance use treatment and HIV prevention services targeted at drug-using pregnant women who are highly susceptible to HIV/AIDS.
Enhancing HIV Prevention through Multi-Level Community Intervention to Promote Women-Initiated Prevention Options

Principal Investigator: Margaret R. Weeks, Ph.D.
Funded by: National Institute of Mental Health
Project Period: 01/15/2009 – 12/31/2012

OVERVIEW

This 4-year study is designed to increase female condom (FC) availability, accessibility, and support in Hartford, Connecticut through creation of a local Community Action and Advocacy Board (CAAB), a coalition of clinicians, social/health service providers, and community residents, who are trained and supported by a community/research collaborative Steering Committee. The Steering Committee facilitates CAAB capacity to design, develop, implement, and document interventions on the community, organizational, and individual/peer levels that encourage promotion, support, accessibility, and use of FC in the community. Intensive ethnographic methods document the pre/post intervention community context, the development and capacity building of the CAAB, the CAAB’s own designing and implementation of multi-level FC promotion/advocacy intervention(s), and sustained changes in the city resulting from CAAB efforts. Repeated quantitative community assessments and surveys of the city population also measure CAAB intervention implementation and efficacy.

Thus far, the study has completed two annual cross-sectional surveys of 400 Hartford residents each; three semi-annual community assessments of FC availability; developed the CAAB capacity-building training curriculum; and finalized creation of the CAAB. This diverse group of providers and community advocates has evolved into a semi-independent group with a leadership structure, identity, and a clear mission. While it was initially anticipated that a small core group would remain active after completion of the day-long retreat and 10-session training, 13 of the original 20 members have remained active, committed, and enthusiastic to successfully implementing their interventions. Currently, the group is finalizing creative interventions at each of the three levels:

1) Community – a Facebook page with interactive messages/games, and mechanisms for social marketing of the FC to local friends/networks.

2) Individual – a Girls’ Night Out, one-hour women’s empowerment and FC educational and skills building session targeting women, that focuses on condom use negotiation and sensualization of the FC for female and male pleasure.

3) Organizational – a 30-minute FC presentation to be delivered to local health and service organizations to encourage incorporation of FC education/promotion and support into standard practice.

RESEARCH IMPLICATIONS

Evidence increasingly supports the development of multi-level interventions, using a community-empowerment intervention model to mobilize sectors of the community who have an interest in or desire to move an issue forward in a sustained way. Such a mobilized force constitutes a community-embedded change mechanism able to address local issues. The most promising approach to meet the challenges of developing and testing community-empowerment multi-level interventions is through community-based collaborative research.

COMMUNITY BENEFITS

Community mobilization offers great promise for building interventions that utilize existing resources (human, political, economic), creating appropriate mechanisms to design and test multi-level community programs to promote social change relevant to those communities, while addressing ethical considerations relevant to communities. Through this process of community mobilization and capacity building, we have seen CAAB members, as change agents, incorporate their training not only into intervention implementation, but also into their work and personal lives.
Evaluating the Link Between HIV Prevention and Treatment

Principal Investigator: A. David Paltiel, Ph.D.
Funded by: National Institute of Mental Health
Project Period: 07/01/2002 – 08/31/2011

OVERVIEW
This study examined the potential benefits of routine HIV testing in the United States, France, South Africa and other settings.

- A critique of the methods of the U.S. Food and Drug Administration (FDA) in considering an over-the-counter, rapid HIV test for home use found that the performance of the home HIV test depends critically on the manufacturer’s retail price, a consideration that the FDA currently ignores.

- The project estimated the budget impact of expanded HIV screening to U.S. government discretionary, entitlement, and testing programs and found that expanded screening will increase costs to government programs by $2.7 billion over five years. Discretionary programs will be most affected; entitlement programs will observe small but increasing savings.

- Using data from Washington, DC, the project evaluated the survival benefits of a comprehensive HIV detection and care strategy and found that “test and treat” will increase the life expectancy of HIV-infected patients but will have a modest impact on HIV transmission over the next five years and is unlikely to halt the HIV epidemic.

- The project found that revision of state consent laws in accordance with CDC’s HIV screening recommendations would yield 261,595 additional years of life.

- A one-time, routine, voluntary HIV test may be cost-effective in the general population in France. In target populations with higher prevalence, incidence and rate of late presentation to care, more frequent screening generated higher survival benefits and was reasonably cost-effective.

- Routine, voluntary HIV screening of South African adults every five years offers substantial clinical benefit and is very cost-effective, even when taking into account such barriers as stigma and severely limited access to treatment.

RESEARCH IMPLICATIONS
The work of this research team has a proven record of publishing and disseminating findings that inform national priority setting in HIV patient care, clinical trial design, practice guideline development, and HIV testing and prevention policy. According to a recent review, the evaluation of expanded HIV screening in the U.S. (Paltiel, NEJM, 2005) is one of the ten “Most Cited Cost-effectiveness Analyses” from 1976 to 2006 (see Greenberg, Medical Decision Making 2010).

COMMUNITY BENEFITS
Of the estimated one million Americans who are currently infected with HIV, as many as 300,000 remain unaware of their infection. These individuals receive neither life-prolonging care nor counseling to prevent the further spread of the virus. The significance of the project lies in the formal framework it proposes to inform patients, medical providers, guideline developers, and policy makers of the clinical and preventive benefits, costs, and cost-effectiveness of alternative strategies for HIV counseling, testing and referral, and the impact of behavioral interventions on those strategies.

“Test and treat will increase the life expectancy of HIV-infected patients but will have a modest impact on HIV transmission over the next five years and is unlikely to halt the HIV epidemic.”
Food Insecurity and HIV Prevention and Risk Reduction Among Individuals Recently Released from Prison

Principal Investigator: Emily Wang, M.D., M.A.S.
Funded by: Center for Interdisciplinary Research on AIDS – Development Core Pilot Project Program
Project Period: 12/01/2009 – 06/30/2011

OVERVIEW

- HIV infection has become concentrated in prisons and jails with nearly 25% of all people with HIV spending time in a correctional facility. Because of the widespread incarceration of persons with or at risk for HIV infection, prevention efforts are increasingly focused on correctional facilities, including identification and treatment of inmates with HIV/AIDS. Less attention has been directed to what happens upon release and the socioeconomic determinants of their health. Many states prohibit individuals convicted of drug felonies from receiving government entitlements, including food stamps. Individuals released from prison who lack access to food stamps may be at greater risk of food insecurity, defined as the absence of “access at all times to enough food to meet their dietary needs for a productive and healthy life.”

- Using a community-based participatory research approach, this study examines the association between food insecurity and HIV risk behaviors in a population of recently-released inmates differentially impacted by lack of access to food stamps in three U.S. states (Texas, Connecticut, and California). We hypothesized that: (1) individuals released from prison who are prohibited from obtaining food stamps will have higher rates of food insecurity compared to those with access to food stamps; and (2) that food insecurity is associated with increased HIV risk behaviors in this population.

- One hundred and forty surveys have been completed, with a participation rate of 98%. Our goal was to complete and analyze 150 surveys. Among the 110 surveys received, 45% were women, 75% non-white, and 52% reported being homeless since being released from prison. Twenty-eight percent reported having been incarcerated more than 10 times. Eighty-eight percent met criteria for food insecurity since being released from prison (55% reported having had one day in the past month where they didn’t have enough money to eat). In spite of high rates of food insecurity, only 52% receive food stamps. The average food stamp benefit per month was $184 ± $91.

- Future plans include further analysis of the data—specifically examining the association between incarceration and food insecurity—and dissemination of our findings.

RESEARCH IMPLICATIONS

Several lessons have been learned that will inform future community-based participatory research practice. First, it is difficult to capture the timing of food insecurity and high risk behavior using standard instruments in this population. Future studies need to address whether current instruments measuring high risk behavior (e.g., HIV Risk Behavior Scale) and food insecurity (e.g., Current Population Survey Food Security Supplement) are appropriate to use in this population. Secondly, hiring, paying, and retaining community research assistants was difficult. In the future, community research assistants may be paired with college trained research assistants to maximize the efficiency of the study while retaining the important aspects of using community based participatory research methods. Depending on the findings, this study may lead to a larger scale study looking at the impact of food insecurity on HIV risk behaviors among recently released individuals.

COMMUNITY BENEFITS

The study may enable us to work with a partner organization – All of Us or None – and policy leaders who support legislation addressing food assistance to reintegrate former incarcerated persons. Future collaborations with local advocacy groups may also improve enrollment of individuals released from prison to public entitlements.
High-Risk Establishments and Women’s HIV Prevention in Southern China

Principal Investigator: Margaret R. Weeks, Ph. D.
Funded by: National Institute of Mental Health
Project Period: 02/01/2007 – 01/31/2012

OVERVIEW

This 5-year project is a study of HIV risk and social dynamics in sex-work establishments which tests a multi-level, site-based intervention conducted within those establishments in two rural towns (R1 and R2) and two small cities (C1 and C2) in Hainan and Guangxi Provinces, China. It is designed to promote use of the female condom (FC) for HIV/STI prevention among women who work in these establishments.

In each town, the study conducts intensive formative and process ethnography to assess the characteristics and dynamics of sex workers and sex-work establishments, and the feasibility, process, and outcomes of the site-based intervention conducted in those establishments. Cross-sectional surveys of female sex workers are conducted in all towns at baseline, six, and 12 months post-intervention to assess intervention outcomes.

FC had never been available in any of the towns prior to the study. Preliminary analysis of the first three study sites (R1, R2, C1) in which one year of intervention has been completed indicate that despite no prior knowledge of, or experience with, FC before this intervention began, 20% – 50% of participants reported having used FC at least once by the follow-up surveys; among them, 10% – 30% had used FC more than once. This varied by town. Likewise, the sex worker population in these three towns increased their general knowledge of FC. However, their responses to specific FC characteristics associated with direct experience using FC showed somewhat less improvement.

RESEARCH IMPLICATIONS

Early analysis suggests several key factors as potential influences on successful FC promotion in sex work establishments, and potential for increased FC uptake among subsectors of the sex worker population. The first three towns started the intervention in different contexts, such as the demographic and sexual features of the women, the capacities of the local staff and local collaborative institutes, previous and concurrent experience with other intervention programs, and other community characteristics. Further exploration of their multi-faceted influences warrants examination and multi-level testing. Questions worth further exploration about the role of FC to promote protection include whether women consider the FC in itself to offer sufficient barrier protection, or see it as a tool to facilitate male condom (MC) negotiation. Also important is whether the promotion and delivery of both MC and FC options may ease the introduction of the somewhat challenging new FC product.

COMMUNITY BENEFITS

This initial introduction of FC into the sex industry through a community-based public health effort suggests the promise of the FC as a viable, acceptable, and efficacious alternative to MC for HIV and STI as well as unwanted pregnancy prevention. Key lessons from this international, participatory, community-based study to test a multi-level HIV prevention intervention include:

1) Partnership between international researchers and key stakeholders from local communities to develop and test HIV prevention interventions enhances the feasibility and cultural congruence of the prevention effort, and increases the likelihood of continued implementation after the research endeavor has concluded.

2) To further increase the feasibility, cultural congruence, effectiveness, and sustainability of prevention efforts in real-world community settings, it is necessary to build on what local people do routinely, such as their mission to provide public health education and services, while increasing their capacity to expand their repertoire and enhance rigor in applying best scientific knowledge to intervention designs and methods.

3) Strong research/community cooperation, shared research responsibilities, and complementary roles facilitate the team’s ability to conduct ethical research, minimize adverse events, ensure informed consent, and resolve ethical dilemmas in the field in an international setting, including participant concerns about engaging in research.
HIV and Substance Use Prevention Among Russian Adolescents

Principal Investigator: Nathan Hansen, Ph.D.
Funded by: Center for Interdisciplinary Research on AIDS - Development Core Pilot Project Program
Project Period: 03/01/2011 – 02/28/2012

OVERVIEW
This project aims to gather preliminary data to support our long term goal of developing HIV and substance use prevention interventions for Russian adolescents. We will conduct interviews with: (1) 20 key stakeholders in government, law enforcement, health care, research, and education; and (2) 30 adolescents (15 male and 15 female) and their parents (at least 1 parent per adolescent), including 10 non-injection drug using adolescents and their parents and 20 injection drug using adolescents and their parents, to:

1) Develop a culturally informed conceptual model of key risk and protective factors related to both the initiation and sustained engagement in injection drug use and HIV risk behavior among Russian adolescents.
2) Identify the legal, ethical, cultural, and practical issues relevant to conducting research on drug and alcohol use and sexual behavior among Russian adolescents.
3) Identify key methodological factors for conducting longitudinal research with Russian adolescents and their parents, including recruitment and retention strategies, incentives, assessment format and frequency, and strategies for tracking participants across time.

RESEARCH IMPLICATIONS
We plan to follow this project with both epidemiological research into factors that increase both risk and resiliency among Russian adolescents, as well as prevention intervention research with Russian adolescents, including both family and school-based intervention models.

COMMUNITY BENEFITS
Given that Russia is experiencing one of the most rapidly expanding HIV epidemics in the world which is predominately driven by injection drug use, and that substance use treatment in Russia is ineffective, prevention interventions are desperately needed. Effective approaches to reducing injection drug use and sexual risk among Russian adolescents appear to be desired by Russians as an avenue to slowing the epidemic.
Integrating Prenatal Care to Reduce HIV/STIs Among Teens: A Translational Study

Principal Investigator: Jeannette Ickovics, Ph.D.
Funded by: National Institute of Mental Health
Project Period: 08/18/2006 – 07/31/2011

OVERVIEW

The long-term goal of this study is to reduce risk for HIV and other Sexually Transmitted Infections (STIs) during and after pregnancy among adolescents and young women receiving prenatal care. This study evaluates an innovative model of group prenatal care that integrates an HIV prevention intervention. This new model of care is called Centering Pregnancy Plus (CP+).

Fourteen community hospitals and health centers in New York City serving predominantly Black and Latina communities were recruited for this study. One-half of these sites were randomly assigned to deliver prenatal care using the CP+ model, and one-half continued to provide usual individual prenatal care during study recruitment. “Delayed intervention” sites were trained to provide CP+ once recruitment for the study was completed. In November 2010, we completed recruitment at all 14 sites, with 1,255 teens and young women ages 14 to 21 years old enrolled.

Specific aims of the study are to:

1) Translate an efficacious HIV prevention intervention to 14 clinical sites.
2) Test the effectiveness of this intervention by examining behavioral and biological outcomes via prospective measurement throughout the prenatal period and up to one year postpartum (n=1,255), and identifying potential mechanisms of the effects of group prenatal care.
3) Conduct a rigorous process evaluation to identify factors that influence the uptake, fidelity, and sustainability of this intervention.

We hypothesize that CP+ will be effectively translated to community clinical sites, and that it will result in significant reductions in HIV-related risk behaviors, significantly lower rates of STIs and repeat pregnancies, as well as improvements in perinatal outcomes.

RESEARCH IMPLICATIONS

While extensive resources have been devoted to efficacy trials, fewer resources have been devoted to identifying the effectiveness of programs implemented in “real world” settings, such as community health centers, where many women – including many at highest risk for HIV/STIs – receive prenatal care. This research represents an important advance in interdisciplinary HIV prevention research for adolescent women. Integrating a theoretically-driven and empirically-validated program for HIV/STI prevention into prenatal care is a promising way to provide sustainable care and disease prevention in a culturally-tailored setting.

COMMUNITY BENEFITS

Underserved patients and the clinicians who care for them represent the ideal beneficiaries of translating clinical research into clinical practice for the reduction of risk and transmission of HIV and other STIs, as well as the elimination of health disparities. We hope the study findings will lead to the adoption of sustainable, innovative models of care that help to reduce risk for HIV and other STIs, as well as improve birth outcomes, among high risk young women.

Healthcare providers from NYC centers gather for a 2-day training to learn to deliver CP+, which integrates HIV prevention into a group model of prenatal care. Here, they participate in a closing exercise emphasizing the interconnected web of care and community.
An Interactive Video Game for HIV Prevention in Early Adolescents

Principal Investigator: Lynn Sullivan, M.D.
Funded by: National Institute of Child Health and Human Development
Project Period: 08/10/2009 – 07/31/2014

OVERVIEW

- The project’s goal is to develop and evaluate an interactive video game designed to provide at-risk young teens the opportunity to acquire and practice skills in order to avoid or reduce their risk behaviors.
- The video game will be built incorporating evidence-based tools for behavior change, including message framing delay discounting, social learning theory, and self-efficacy. During the initial phase of the project, 15 interviews and six focus groups were conducted to understand the perspectives and experiences of adolescents on taking part in and preventing high risk behaviors. Participants included a purposeful sample of African-American and Latino young adolescents who were participating in an afterschool or summer enrichment program (n=41), 21 boys and 20 girls, ages 10-15 years. Data were analyzed using a grounded theory approach.
- Preliminary findings include: (1) boys and girls both describe pregnancy and its associated impact as the major consequence of sexual risk-taking behavior with very limited discussion of sexually transmitted infections, including HIV; (2) risk-taking behaviors described by both boys and girls include sexual violence, gun violence, and bullying; (3) factors associated with avoiding high-risk behaviors include internal strength, a connection with a mentor figure, and a supportive, safe environment; and (4) both boys and girls prefer sexual risk reduction and HIV prevention messages that include positive and negative message framing.

RESEARCH IMPLICATIONS

An essential component of developing an interactive video game to reduce sexual risk and optimize HIV prevention is to recognize teens’ perceptions of sexual consequences, the factors that promote avoidance of high-risk behaviors, and strategies for effective messaging. This project provides an important model for future research projects that are developing interactive video games with at-risk youth.

COMMUNITY BENEFITS

Video games possess several advantages as a method of delivering educational information or an intervention. They are engaging, they allow the player to repeatedly practice or rehearse a new skill, and they are transportable-potentially traveling with the player via cell phone or other mobile device. Aside from HIV prevention, this project has the potential to influence other behavior change interventions through the use of interactive video game play.
**Off-Site Sexually Transmitted Infection Testing for Connecticut Men Who have Sex with Men**

**Principal Investigators:** Edward White, Ph.D., M.P.H., and Christopher Cole  
**Funded by:** Center for Interdisciplinary Research on AIDS – Community Research Partnership Program  
**Project Period:** 08/13/2010 – 08/12/2011

**OVERVIEW**

- The primary goals of this pilot project are to evaluate the feasibility of Community-Based STI testing (CBT) in gay venues in smaller cities such as New Haven, and to develop within AIDS Project New Haven (APNH) the capacity to provide HIV testing. The pilot will determine: (1) whether provision of CBT can provide HIV testing to 80 men who have sex with men (MSM) over 12 months; and (2) whether provision of CBT results in detecting undiagnosed HIV among men who do not present for testing through currently available public or private services.

- Over 12 months we anticipate enrolling (1) 80 participants who will receive rapid oral HIV antibody testing and complete a questionnaire; (2) another 80 who will complete a questionnaire but not be tested; and (3) another five who will participate in a discussion group. The discussion group took place in September 2010; recruitment of other participants is anticipated to begin in March 2011.

**RESEARCH IMPLICATIONS**

If CBT is determined to be feasible and practicable in New Haven, and to have the capacity to test MSM currently underserved by existing testing services, it would have the impact on public health research of prompting the examination of other alternative testing strategies to reach underserved MSM. Important to the goals of CIRA’s Community Research Partnership Program, it would further establish APNH as a partner in community-based research, particularly in its capacity to serve as an HIV testing provider in collaborative projects.

**COMMUNITY BENEFITS**

The success of CBT may impact the public health practice of supporting wider provision of CBT to MSM outside large cities.
PARTNRS (Parenting And Relationship Transition And Risk Study)

Principal Investigator: Trace Kershaw, Ph.D.
Funded by: National Institute of Mental Health
Project Period: 09/26/2006 – 07/31/2012

OVERVIEW

PARTNRS seeks to understand sexual and reproductive health among young expectant couples as they transition from pregnancy to parenthood. Our goal is to better understand the context of relationships and health among young parents, and to build programs that will strengthen families, improve sexual and reproductive health, and decrease the incidence of HIV and other sexually transmitted infections (STIs).

Three hundred couples have provided us with critical insight into the interpersonal context in which decisions are made about sexual behavior, personal health, and relationships during pregnancy. We continue to follow these couples, interviewing them at six and 12 months postpartum as they transition to parenthood.

Preliminary results show that our couples are experiencing high levels of relationship stress and sexual risk during pregnancy; in 80% of couples, at least one person reported a risk factor for HIV and 97% of couples had unprotected sex in the previous month. We are also finding that relationship functioning is associated with STI incidence, relationship turnover, new partner acquisition, and sex communication – all factors associated with HIV risk.

RESEARCH IMPLICATIONS

Future research into interventions that incorporate emotion and relationship factors into risk reduction may demonstrate that increasing relationship functioning among young couples reduces HIV/STI risk by reducing partner concurrency and increasing condom use. We may find that the effectiveness of cognitive approaches is limited in couple contexts, where emotions have a significant impact on relationship and sexual decision-making, and that emotion-focused interventions can more effectively reduce risk among couples.

COMMUNITY BENEFITS

Sexual risk among heterosexual men and women mostly occurs within the context of romantic relationships. Only a handful of couple-based HIV prevention interventions exist, however, and they are limited in scope and approach. In the future, couple-based interventions that both strengthen relationships and increase condom use may more effectively reduce multiple sources of HIV and STI risk among young heterosexual couples.
PARTNERS Supplement to Expand the Role of Dr. Gordon in Investigating the Socio-Cultural Factors Influencing Health Care Access and Use, and HIV/STI Risk Behaviors Among Young Men

Principal Investigator: Trace Kershaw, Ph.D.
Funded by: National Institute of Mental Health
Project Period: 08/14/08 – 09/30/11

OVERVIEW

This project is a supplement to the PARTNERS study and provides funding to support Dr. Derrick Gordon, Assistant Professor of Psychiatry, in building his skills as an academic researcher and to examine the role men play in the health and sexual decision-making of young couples transitioning to parenthood. Dr. Gordon is examining socio-cultural influences on health care experiences, access, and use, including HIV/STI testing and prevention.

In the first two of three years of this supplement, Dr. Gordon conducted four focus groups, engaging 40 young African American and Hispanic men and women to gain qualitative information regarding health care access and use, and to provide context for the question of how the socio-cultural factors of masculinity, peer norms, and racial socialization and racism impact the health of young fathers and their partners.

Preliminary results show that for these Black and Hispanic young men, entry into preventive healthcare services is impacted by:

- access to adequate insurance
- masculine socialization, including toughness and anti-femininity
- experiences of discrimination
- avoidance of health institutions
- poor family support for preventative health
- personal stress

health assessments of young men in his future research to better understand the disparity in perceived versus actual health status.

Noticing through his supplement work that some subsets of men are particularly at risk for health undermining behaviors, Dr. Gordon is also planning to investigate the impact of the socio-cultural context of young Black and Hispanic Men who have Sex with Men (MSM) on sexual health promoting behaviors, and is particularly interested in adapting the effective behavioral intervention, “d-up: Defend Yourself!” for this purpose.

COMMUNITY BENEFITS

Understanding the socio-cultural factors impacting young men’s use of preventive health services and the mediating role of perceived health and coping strategies will help guide the development of interventions to increase young men’s use of these services by removing barriers to access. In addition, a better understanding of the socio-cultural context of sexual health behaviors among young minority MSM will inform the adaptation of a proven sexual risk reduction intervention for this group. Adapting and tailoring the intervention will likely improve its appropriateness and effectiveness among young minority MSM who are at increased risk for HIV and STIs.

Preliminary findings suggest that for young African American and Hispanic men, entry into preventative healthcare services is impacted by:

- access to adequate insurance
- masculine socialization, including toughness and anti-femininity
- experiences of discrimination
- avoidance of health institutions
- poor family support for preventative health
- personal stress
Population Size, Characteristics, and HIV Risk Among Transgender Individuals in Hartford and Surrounding Towns

Principal Investigators: Linda Estabrook, M.P.H., Jerimarie Liesegang, Ph.D., and Margaret R. Weeks, Ph.D.
Funded by: Center for Interdisciplinary Research on AIDS – Community Research Partnership Program
Project Period: 01/06/2010 – 01/05/2011

OVERVIEW

The aims of the study are to: (1) estimate the transgender population size and characteristics in the Hartford area (catchment areas of the Connecticut TransAdvocacy Coalition and the Hartford Gay and Lesbian Health Collective); (2) assess HIV risk behaviors and prevention needs among the subpopulations of this community; and (3) develop a deeper understanding of a subset of this population engaged in high risk behaviors, specifically transgender sex workers, through knowledge generation on specific aspects of sex work.

Project objectives include: (a) developing a survey to assess transgender population characteristics, risks, and health service utilization; (b) piloting it with a small number of transgender participants and conducting a focus group with those participants to gather feedback on survey content; (c) using Respondent Driven Sampling (RDS) to recruit up to 200 transgender people from the greater Hartford area to complete the survey online; and (d) using Capture-Recapture coupled with RDS to estimate the size of the transgender population in the Hartford area.

Starting with survey instruments used in other states to assess transgender peoples’ health, HIV risks, and health service utilization, we developed our own survey for this study, adding substantial questions to define transgender subpopulations, as well as network questions for RDS, coupled with Capture-Recapture, related analyses of population size, and characteristics. Our pilot test of this survey and focus group with four transgender people provided important feedback on how to improve the survey, especially language describing sexual activities, references to genitalia, and references to types of transgender people. We prepared the survey for online use in SNAP, online survey software. We initiated RDS recruitment using the four pilot participants as “seeds,” but needed to increase the incentive to have any success with the referral process. However, after six months, only 15 participants (the four originals seeds, two additional seeds, and their nine referrals) entered the study and completed the survey. We have insufficient resources and opportunity to pursue reasons for the low RDS success rate with this population.

RESEARCH IMPLICATIONS

A key lesson is that to achieve our research aims we need substantially more funding than is available. However, though we could not achieve our aims, we accomplished substantial foundational work that could be applied to future research, including a quantitative instrument piloted and ready for use. We also tested RDS but were unable to reach the proposed sample size primarily due to the limited resources available for the project. This will guide us in future decisions about recruitment options. Findings from the single RDS network question of how many transgender people are in each participant’s network suggests that our small sample had the potential to reach a very large hidden population, if we had additional resources for the study.

COMMUNITY BENEFITS

Our experience with this project confirms the difficulty we had anticipated with reaching the transgender community, even within a large urban environment such as Hartford. Though this understanding was recognized when we undertook this study, we had hoped that employing recruitment techniques used for other hard to reach populations would overcome this obstacle to some degree. Our preliminary findings reveal that in order to reach, and therefore serve, the transgender community, we must go directly to the community where they are in order to engage, understand, and meet their needs. We have also learned that the networks of the transgender individuals participating in the study are relatively large and diverse, though they remain invisible to providers.
OVERVIEW

These projects are focused on HIV transmission risk reduction among newly HIV diagnosed Men who have Sex with Men (MSM).

Positive Choices is a three session intervention given to men within the first three months following a new HIV diagnosis, and includes risk reduction and disclosure decision-making skill building and a focus on integrating into HIV primary care. We are currently conducting a randomized controlled trial of this intervention in New York City in collaboration with the Callen Lorde Community Health Center and have enrolled 80 participants into the study.

Positive Living adds four additional mental health-focused sessions to the Positive Choices intervention and addresses the acute stress of receiving an HIV diagnosis. In a prior pilot study of the Positive Choices intervention we found that all men who engaged in transmission risk behavior in the six months following an HIV diagnosis had clinically meaningful levels of traumatic stress. Thus, the Positive Living intervention seeks to enhance the ability of newly diagnosed men to respond to risk reduction messages and enter HIV primary care.

RESEARCH IMPLICATIONS

We hope to conduct a future randomized controlled trial comparing Positive Choices, Positive Living, and current post test counseling practice guidelines to determine relative efficacy, as well as to begin to identify parameters to inform a stepped-care approach that will match intervention selection to patient need.

COMMUNITY BENEFITS

Given the current emphasis on testing to identify those who are living with HIV and providing appropriate care to those with new diagnoses, there is a need for behavioral interventions that can facilitate this process and integrate HIV prevention into primary care from the outset of treatment. Further, the early provision of preventive interventions may reduce future mental health problems, such as depression and traumatic stress, which may influence HIV transmission risk behavior and adherence to treatment.

Positive Choices/Positive Living

Principal Investigators: Nathan Hansen, Ph.D., and Kathleen Sikkema, Ph.D.

Funded by: National Institute of Mental Health


The research team – Patrick Wilson (top left), Melissa Watt, Nathan Hansen, Kathy Sikkema, Arlene Kochman (bottom left) Christina Mead, Allyson DeLorenzo, and Anya Drabkin – just outside the Callen Lorde Community Health Center in New York City.
The Prevalence of HIV Drug Resistance and Transmission Risk in Opioid Agonist Treatment

Principal Investigator: David A. Fiellin, M.D.
Funded by: Center for Interdisciplinary Research on AIDS – Development Core Pilot Project Program
Project Period: 08/23/07 – 12/31/2010

OVERVIEW
Medications such as methadone and buprenorphine are effective ways to decrease the spread of HIV among injection drug users. Opioid addicted HIV-positive patients receiving methadone or buprenorphine with poor adherence to highly active antiretroviral therapy (HAART) may have and transmit HIV that is resistant to medications. Inconsistent or ineffective methadone treatment can be associated with poor HAART adherence (and the development of HIV drug resistance) and ongoing HIV transmission risk behaviors.

RESEARCH IMPLICATIONS
This study is determining the prevalence of HIV transmission risk behaviors and HIV drug resistance among HIV-positive opiate addicted patients receiving methadone or buprenorphine treatment.

COMMUNITY BENEFITS
The results of this study will help inform policies and guidelines regarding the appropriate use of methadone and buprenorphine in combination with HAART to improve prevention efforts among HIV-positive opioid dependent patients.
Project Choices: Targeted Capacity Expansion Program for Substance Abuse Treatment and HIV/AIDS

Principal Investigator: Frederick Altice, M.D.
Funded by: Center for Substance Abuse Treatment
Project Period: 12/01/2008 – 09/29/2013

OVERVIEW

- Project Choices is a novel demonstration program for managing HIV-positive or at-risk for HIV clients that were formerly incarcerated, have opiate dependency, and a history of mental health issues.
- The goals of Choices are five-fold: (1) to increase routine HIV testing with individuals that are at risk of HIV; (2) to develop a unique community model utilizing community-based case managers, opiate substitution therapy, and community outreach that results in improved HIV treatment or HIV prevention, substance abuse, and social services outcomes; (3) to adapt a money management (MM) program for substance users being released from jail; (4) to determine the acceptability of MM services for HIV-positive or at-risk of HIV individuals with substance dependency and mental health issues; and (5) to compare the HIV, substance abuse, and social services outcomes for those who receive MM services compared to those who do not. Original target enrollment was 150 individuals, and current enrollment is 60.

RESEARCH IMPLICATIONS

This project can lead to more research on service interventions that could eventually lead to greater evidence-based practices for formerly incarcerated individuals having access to better linkages to care. It may also lead to greater HIV prevention research by better supporting those individuals at risk of HIV with substance dependency.

COMMUNITY BENEFITS

This project may identify more individuals with HIV/AIDS, and improve linkage to care by reexamining the case management model, and using medication assisted therapy as a means of HIV prevention.
Project INSPIRE: Alcohol Dependence Treatment for HIV-Positive Inmates

Principal Investigator: Sandra A. Springer, M.D.
Funded by: National Institute on Alcohol Abuse and Alcoholism
Project Period: 09/30/2009 – 08/31/2014

Project NEW HOPE: Naltrexone for Opioid Dependent Released HIV-Positive Criminal Justice Populations

Principal Investigator: Frederick Altice, M.D. and Sandra A. Springer, M.D.
Funded by: National Institute on Drug Abuse
Project Period: 09/30/2010 – 08/31/2015

OVERVIEW

Project INSPIRE and Project NEW HOPE are double blind, placebo-controlled, randomized trials of extended-release naltrexone (XR-NTX) among HIV positive persons in jails or prisons who are transitioning to the community and who meet (Diagnostic and Statistical Manual on Mental Disorder) criteria for alcohol dependence or criteria for hazardous drinking per the Alcohol Use Disorders Identification Test (Project INSPIRE) or opioid dependency (Project NEW HOPE).

Project INSPIRE is recruiting 125 prisoners and jail detainees in Connecticut. Project New Hope is recruiting 150 prisoners and jail detainees in Connecticut and Massachusetts through a partnership between the Yale School of Medicine and Baystate Medical Center.

The primary outcomes are HIV treatment outcomes: HIV-1 RNA levels, CD4 count, highly active antiretroviral therapy adherence and retention in care. The secondary outcomes are substance abuse (e.g. time to relapse to alcohol or opioid use, percent of opioid negative urines, and alcohol or opioid craving), adverse side effects and HIV risk behavior (e.g. sexual and drug-related risks). Participants will be randomized two to one to either XR-NTX or injectable-naltrexone. They will receive six monthly injections, and then be followed for an additional six months of interviews.

RESEARCH IMPLICATIONS

The study will have important implications on future study designs and replication of the proposed interventions in other settings. Furthermore, it will help determine whether monthly injectable-naltrexone is an effective intervention for HIV-positive released prisoners, and serve as a basis for other studies of naltrexone among vulnerable populations.

COMMUNITY BENEFITS

The study will establish the efficacy, safety, and tolerability of pharmacological therapy using naltrexone treatment among HIV-positive persons and establish extended release naltrexone treatment as an effective, evidence-based treatment for alcohol or opioid dependence for released HIV-positive prisoners. This population shares a disproportionate burden of morbidity and mortality and has fared poorly using the existing standard of care.

Sandra A. Springer, M.D., “These studies will establish the efficacy, safety, and tolerability of pharmacological therapy using naltrexone treatment among HIV-positive persons and establish extended release naltrexone treatment as an effective, evidence-based treatment for alcohol or opioid dependence for released HIV-positive prisoners.”
Project Transitions: Enhancing Linkages to HIV Primary Care in Jail

Principal Investigator: Frederick Altice, M.D.
Funded by: Health Resources and Services Administration
Project Period: 09/01/2007 – 08/31/2011

OVERVIEW
- Project Transitions is a novel demonstration program for managing HIV-positive clients as they transition from the jail to the community setting.
- The goals of Transitions are five-fold: (1) to increase routine HIV testing within the jail setting; (2) to develop a unique jail-release model utilizing a jail-based referrals coordinator, community-based case managers, opiate substitution therapy, and community outreach that results in improved HIV treatment, substance abuse, and social services outcomes; (3) to adapt a money management (MM) program for inmates being released from jail; (4) to determine the acceptability of MM services for released HIV-positive jail detainees; and (5) to compare the HIV, substance abuse, and social services outcomes for those who receive MM services compared to those who do not. Original target enrollment was 70 individuals, but we have managed to continue to enroll and anticipate an additional year of funding. Enrollment is currently at 110.

RESEARCH IMPLICATIONS
This project can lead to more research on service interventions that could eventually lead to greater evidence-based practices for formerly incarcerated individuals having access to better linkages to care.

COMMUNITY BENEFITS
This project is a multisite project across the country which could lead to greater review and changes to HIV testing programs within the criminal justice system, identify more people living with HIV/AIDS, and improve linkage to care by re-examining the case management model.

Frederick Altice, M.D., “This project is a multisite project across the country which could lead to greater review and changes to HIV testing programs within the criminal justice system.”
Promoting Resilience in Young Children of HIV-Infected Mothers in South Africa

Principal Investigator: Brian Forsyth, MB, ChB, FRCP(C)
Funded by: National Institute of Mental Health
Project Period: 09/30/2005 – 08/31/2011

OVERVIEW
The primary aims of this study are to:

1) Demonstrate the extent of psychosocial effects of parental HIV disease on young children living in poor urban communities in South Africa, by comparing them to other children whose parents are not HIV-infected, but living in the same communities.

2) Assess the effectiveness of a theory-based support intervention for HIV-infected mothers and their children designed to improve maternal functioning and help mothers promote resilience in children at two different ages and stages of development – very young children (aged three years), and school-aged children (ages six to ten years).

3) Identify maternal psychological and medical factors (including initiation of antiretroviral treatment), and child-related mediating variables that contribute to changes in the adaptive functioning of children of HIV-infected parents over a 24-month interval.

We have completed the first part of the study comparing children of HIV-infected mothers with similarly aged children from the same community whose mothers are not HIV-infected. The results of these analyses demonstrated that the older HIV-affected children (ages six to ten years) had a significant increase in externalizing behaviors on the Child Behavior Checklist than did children whose mothers were not HIV-infected. More important, however, was the finding that the younger children born to HIV-infected mothers (aged three years) were not functioning as well as their non-HIV-affected peers: they have significantly poorer socialization and poorer daily living skills, as well as increased externalizing behaviors. An important difference between the two age cohorts is that for the older children, the mothers had only known they were HIV-infected for an average of one year, whereas all of the mothers of the younger children had found out in pregnancy that they were HIV-positive. Further analyses demonstrated that the quality of parenting has an important effect on child outcomes. We are now in the final year of the study and have not yet completed the analyses to determine the efficacy of the intervention.

RESEARCH IMPLICATIONS
The results of our research to date suggest that there may be previously unidentified developmental and behavioral effects on uninfected infants born to HIV-infected mothers. Future research will be needed to confirm this finding and to identify whether this might be due to biologic effects of the intra-uterine environment or due to the psychological effects on a woman of finding out in pregnancy that she is HIV-infected.

COMMUNITY BENEFITS
The results demonstrate that special attention needs to be paid to the uninfected children of HIV-infected parents, and highlights the need to address issues to do with parenting.
A Randomized Trial of Nursing Telephone Support to Improve Medication Self-Management and Viral Outcomes of ART-Experienced Patients

Principal Investigator: Nancy R. Reynolds, R.N., Ph.D., F.A.A.N.

Funded by: National Institute of Nursing Research

Project Period: 09/01/2007 – 08/31/2012

OVERVIEW

The overall purpose of this ongoing study is to evaluate whether a telephone-based adherence intervention will improve outcomes (e.g., viral, adherence) of antiretroviral (ARV) treatment-experienced persons living with HIV.

The multi-site randomized controlled trial is conducted at AIDS Clinical Trial Group sites throughout the U.S. Participants (n=296) are randomized to one of two arms as they initiate a new antiretroviral treatment (ART) regimen: usual site care plus telephone support or usual site care. The theory (self-regulation) guided telephone counseling intervention is delivered by registered nurses with HIV health care expertise at regular intervals for 48 weeks. Repeated observations are attained at weeks 0, 12, 24, 48, and 72.

The primary endpoint is virologic suppression (i.e., HIV-1 RNA <200 copies/mL) at week 48. Secondary outcomes include antiretroviral medication adherence, ART discontinuations, quality of life (QOL), CD4+ cell count, cost, morbidity, and mortality. Data will be analyzed with intention-to-treat analysis. If the intervention has a positive effect on virologic outcomes, a separate cost-effectiveness evaluation will be conducted.

RESEARCH IMPLICATIONS

The efficacy of potent regimens combining ARV medications has resulted in remarkable improvement in the treatment of HIV. Consequently, people with HIV now have the potential for near-normal longevity. However, many persons fail to achieve maximum benefit from ART because of suboptimal medication adherence. Our prior research has shown the telephone-based intervention approach to be efficacious among persons naïve to antiretroviral therapy at baseline. However, it has been less successful among persons who are treatment-experienced. This study will extend the prior work by testing an adapted version of the intervention in a treatment-experienced sample. If successful, findings will support the value of a telephone-based intervention guided by self-regulation theory. The approach may have other applications that merit exploration.

COMMUNITY BENEFITS

Identifying measures to effectively support adherence to ARV medication regimens is a critical clinical challenge. To date, there are few research findings that demonstrate efficacy of adherence interventions that are both clinically practical and improve virologic outcomes.

A telephone intervention has excellent potential for integration into most HIV clinical care settings. The telephone is an efficient, low cost delivery method that is appropriate to the ecology of clinics. The intervention is delivered by nurses who are widely available in most HIV health care settings. Further, it is convenient and can enhance access to care. Most adherence interventions are tied to episodic clinic visits. This may not be the most appropriate model for supporting adherence behavior and the accompanying challenges that largely occur between visits and away from health care settings. One-to-one phone contact with a trained health care professional allows for prompt intervention personalized to the patient and the situational variation of his/her home environment. This intervention approach also allows for frequent, repeated contact over time to reinforce and coach the individual through threats to adherence that may manifest over time. The usefulness of the telephone approach is enhanced by the now widespread use of cell phones, even in resource-limited settings. Lastly, the telephone intervention is feasible, acceptable to most HIV patients, and suitable to persons with lower levels of literacy.
Reducing Heavy Drinking to Optimize HIV/AIDS Treatment and Prevention

Principal Investigator: Lynn Sullivan, M.D.
Funded by: National Institute on Alcohol Abuse and Alcoholism
Project Period: 09/30/2009 – 08/31/2014

OVERVIEW

Few treatments have been evaluated to reduce the impact of heavy drinking, alcohol abuse, and dependence on HIV-infected patients. Unhealthy alcohol consumption is associated with decreased adherence to highly active antiretroviral therapy (HAART), an increased likelihood of viral mutations, enhanced disease progression, promotion of liver injury, and increased sexual risk taking. Naltrexone, when combined with counseling, is an effective treatment for heavy drinking, yet there are no data on its use or efficacy in HIV-infected patients.

This multi-center study compares extended-release naltrexone to placebo in a 24-week randomized double-blind placebo-controlled trial in HAART-non-adherent HIV-infected patients with heavy drinking, alcohol abuse or dependence (n=154). To determine the long-term impact of treatment, all patients will undergo follow-up at nine and 12 months. Patients will be randomized to either placebo or extended-release naltrexone, administered as monthly intramuscular injections. Patients will also receive the counseling platform of Medication Management (MM) combined with Medication Coaching (MC), a series of evidence-based brief interventions suitable for implementation in an HIV primary care setting.

The primary study outcome is adherence to HAART medications, while secondary study outcomes include frequency of heavy drinking, alcohol-HAART hepatotoxicity, change in CD4 lymphocyte counts and HIV RNA levels, HIV viral mutations, and sexual risk behaviors. In addition, we will be screening all participants for the presence of the receptor gene that has been identified in numerous retrospective studies as highly correlated with responsiveness to naltrexone.

RESEARCH IMPLICATIONS

Our study incorporates several cutting edge research techniques, including ultra-deep sequencing for characterizing HIV drug-resistance patterns, phosphatidyl ethanol (PEth) testing for quantifying weekly alcohol consumption, and mu-opioid receptor genotyping to assess the purported allelic susceptibility to naltrexone. In addition to furthering the scientific literature on the use of these tools, our study represents one of the first to investigate the use of naltrexone in HIV-infected individuals.

COMMUNITY BENEFITS

The present study evaluates a novel approach at bolstering HAART adherence in poorly adherent HIV-infected patients with heavy drinking. We hope to better define the role of naltrexone and evidence-based counseling in curbing heavy drinking and, ultimately, improving HIV outcomes for this challenging population.
REGIMES: Access to Prevention and Treatment Services for HIV in Russia and Estonia

Principal Investigator: Robert Heimer, Ph.D., and Anneli Uusküla, M.D., Ph.D.
Funded by: National Institute on Drug Abuse
Project Period: 09/01/2010 – 06/30/2015

OVERVIEW
We will use a three-phase approach to understand access to services and the influences of laws, regulations, ethnic status, and perceived stigma in presenting barriers to access to prevention and care for injections drug users (IDUs) in St. Petersburg, Russian, and Kohtla-Järve, Estonia.

- In phase one, we will explore the roles of laws and regulations using a rapid policy assessment framework.
- In phase two, we will undertake key informant interviews with officials, service providers, and IDUs to get a sense of how services are perceived by the authorizers, the controllers, the providers, and the recipients.
- In phase three, we will enroll approximately 1,100 IDUs in St. Petersburg and 700 in Kohtla-Järve and use the data from the first two phases to collect and analyze data on factors associated with accessing or failing to access services.

RESEARCH IMPLICATIONS
We expect that the findings will be useful in developing interventions to enhance access and lower the barriers to obtaining services for IDUs.

COMMUNITY BENEFITS
We hope that our findings can: (1) influence policy makers and service providers to take measures to make services more available, accessible, and acceptable to the target population; and (2) provide guidance to IDUs and their advocates to help lower the threshold to obtaining services.

Assisted injection of heroin in the former Soviet Union.
SHERPA: HIV and Related Risks in Suburban Environments

Principal Investigator: Robert Heimer, Ph.D.
Funded by: National Institute on Drug Abuse
Project Period: 07/01/2007 – 04/30/2012

OVERVIEW

This longitudinal study of injection drug users (IDUs) who reside outside the six urban areas in New Haven and Fairfield, CT, seeks to determine the risks, prevalence, and incidence for HIV, hepatitis B virus (HBV), Hepatitis C Virus (HCV), and opioid overdose in a population that has increased in the past decade but has never before been studied on such a large scale. We are also looking at the role of where people obtain and inject drugs and their interactions with the criminal justice and drug treatment systems on risk and disease transmission. We have reached the halfway point in our goal of enrolling 600 IDUs.

Of the 311 participants, 61.7% were male, 87.3% were white, 10.3% were Hispanic, and 6.8% were African American. Mean age was 35.6 years. Mean income for the past 30 days was $1,263, but only a third (29.3%) were currently employed; 60.8% of those report an income derived in part from selling drugs.

There were no significant differences in HBV, HCV, and HIV prevalence or knowledge by modal injection locale. Injecting in urban locales was associated with an arrest history. Participants reporting no history of having been arrested or jailed were significantly more likely to have been infected with HBV. Participants were poorly informed about hepatitis and overdose risk, although those with an arrest history had significantly better overdose knowledge.

RESEARCH IMPLICATIONS

We are hopeful that interventions can be developed and researched that seek to reduce the negative consequences of injection drug use.

COMMUNITY BENEFITS

Currently, injection drug and opioid addiction are considered to be exclusively urban problems (except when a suburban teenager dies of an overdose). We hope that by disseminating the findings of our study broadly in the state of Connecticut, we can persuade lawmakers and other officials who previously considered their constituencies safe from, or immune to, these problems to engage more productively in changing laws and practices to reduce the negative consequences of injection drug use.

STAY Healthy (Sexual Trauma And Your Health)

Principal Investigator: Nathan Hansen, Ph.D.
Funded by: National Institute of Mental Health
Project Period: 01/01/2006 – 02/28/2011

OVERVIEW

This is a pilot study of a 16 session individual psychotherapy intervention for people living with HIV who experienced sexual abuse as a child or adolescent. Childhood sexual abuse has been linked to multiple negative health outcomes, substance misuse, and sexual risk. Further, the negative mental health consequences of childhood sexual abuse appear to be a critical barrier blocking receptivity and responsiveness to risk reduction messages and interventions. Thus, our goals are to address the traumatic stress of sexual abuse to increase health protective behavior and decrease traumatic stress, depression, and substance use.

To date, we have had 27 of 40 planned participants complete the study’s activity, with an additional 15 participants currently enrolled. Preliminary findings are positive and include reductions in alcohol and cocaine/crack use, and in traumatic stress. Also, at baseline, 71.4% of participants were adherent to HIV medication in the past week, which increased to 89.3% at post intervention.

Furthermore, 87.7% of the sample reported at least transient dissociative experiences during sexual behavior. 33.3% reported clinically meaningful levels of dissociation during sex, including numbness, detachment, reduced awareness of one’s surroundings, and impaired memory, which interfere with safe sex practice, increase vulnerability for sexual re-victimization, and pose a critical barrier for standard risk reduction interventions.

RESEARCH IMPLICATIONS

We hope to conduct a future randomized controlled trial of STAY Healthy to determine the efficacy of the intervention to increase positive health outcomes and reduce negative health outcomes among people living with HIV. Additionally, as traumatic stress appears to be an important barrier to risk reduction, we aim to adapt the intervention for people at risk for HIV infection and assess the utility of the intervention to reduce risk and prevent HIV infections.

COMMUNITY BENEFITS

Few empirically-supported mental health interventions exist for people with sexual abuse histories, particularly for people living with HIV and for men. Thus, developing empirically supported interventions for these groups will provide much needed tools for mental health professionals who work with people living with HIV.

“As traumatic stress appears to be an important barrier to risk reduction, we aim to adapt the intervention for people at risk for HIV infection.”
Study of Sustained Safe Behavior Among High Risk Women

Principal Investigator: Margaret R. Weeks, Ph.D.
Funded by: National Institute of Mental Health
Project Period: 02/06/2004 - 01/31/2008

OVERVIEW

This five year study of high-risk women in Hartford, Connecticut, conducted by the Institute for Community Research, explored factors that enhance or impede initial and sustained female condom (FC) use once initial barriers (awareness of FC, basic insertion knowledge/skill, availability of some to try) are removed.

The study included: (a) a prospective, cohort study of 461 women to examine personal, HIV risk, peer, and sexual/gender relationship factors affecting their initial and sustained FC use through a survey conducted at baseline, one month, and 10 months; and (b) a partners’ FC trial of 45 couples, who used FC for two weeks, to assess relationship factors affecting their potential FC use. All participants in the survey cohort and partners trial received a brief demonstration of proper FC use after completion of the baseline survey and were given four FC to use if they wished (more for couples in the trial).

Reported FC use changed significantly from baseline to one month surveys and from one month to 10 month surveys. Nearly six times as many women reporting having used FC in the prior 30 days at one month compared to baseline, and 152 women, representing 33% of those in the study, reported having used FC for the first time. Initial FC use by the one month survey did not vary significantly by any of our measured demographic and risk variables, except high alcohol users who were less likely to initiate FC use. The overall number of times women reported using FC also changed dramatically (e.g. the number of women who reported using it 2-10 times more than doubled between baseline and one month, and the percent of women reporting FC use 10 or more times doubled between the one month and 10-months surveys). Nearly a quarter of the 10-month sample reported sustained FC use. This also did not vary significantly by any demographic variables, though more women who were HIV-positive, and fewer who had only a single or primary sex partner, reported sustained FC use. Accurate FC knowledge and positive FC attitudes had the strongest associations with FC initial and sustained use.

This study provides strong evidence that women in virtually any circumstances will at least try FC if basic barriers are removed, and many will choose to use it repeatedly as a viable prevention method.

RESEARCH IMPLICATIONS

Community availability and support for FC, not women’s and men’s negative attitudes and rejection, were demonstrated to be the greatest barriers to participants’ initial and sustained FC use. Thus, in addition to individually-focused behavioral interventions, trials of theoretically driven, multi-level intervention approaches that change the community environment to increase availability, accessibility, and support for the FC are needed to significantly expand women’s options to protect themselves from HIV/STI and unwanted pregnancy.

COMMUNITY BENEFITS

Our brief FC demonstration and education session could feasibly be incorporated as standard practice in clinical and service settings, though it exceeds what is currently provided in most health and social service venues in our study city. The 10-15 minute session included no focused behavioral or social change approach, such as motivational interviewing, repeated skills building sessions, or peer delivery, though addition of such enhancements might further the effects of FC promotion substantially. Yet this minimal face-to-face session quadrupled the number of women who tried FC, and increased the number of women who reported using it 10+ times by 43% at the 10-month surveys, suggesting continued commitment to use FC despite ongoing limited support in service settings.

Margaret R. Weeks, Ph.D., “Our brief female condom demonstration and education session could feasibly be incorporated as standard practice in clinical and service settings.”
Substance Abuse, HIV, and HCV Treatments to Improve Health Outcomes in Drug Users

Principal Investigator: R. Douglas Bruce, M.D., M.A., M.Sc.
Funded by: National Institute on Drug Abuse
Project Period: 08/01/2006 – 06/30/2011

OVERVIEW

- This study aimed to integrate Hepatitis C Virus (HCV) treatment in the setting of methadone maintenance and found such integration feasible.
- HCV is a prevalent chronic blood-borne infection among opioid dependent patients on methadone maintenance treatment (MMT) programs. Experience with HCV treatment in MMTs is limited to case reports and case control studies. The lack of an existing randomized controlled trial (RCT) to optimize HCV treatment and adherence in an MMT was the impetus for this ongoing pilot RCT examining modified directly administered therapy for HCV treatment that is integrated within a MMT.
- Participants were randomized one to one to receive HCV treatment as modified directly observed therapy (mDOT) into the MMT program or at a liver specialty clinic as self-administered therapy (SAT). Randomization was stratified based on HIV status and HCV genotype.
- Twenty participants to date have enrolled in this pilot. The mDOT participants have had greater success in starting treatment and seven of the 11 mDOT participants achieved early viral response (EVR) at week 12. Of the nine SAT participants, only three achieved an EVR at week 12.

RESEARCH IMPLICATIONS

Adherence to HCV therapy will be more complex with the new HCV protease inhibitors which are slated for approval this year. The next challenge in research will be assisting methadone patients with HCV on adhering to a more complex HCV therapy.

COMMUNITY BENEFITS

Hepatitis C treatment can be successfully integrated into a methadone maintenance clinic and modified, directly – observed therapy can be implemented with existing staff. Patients struggling with concurrent substance use and mental illness co-morbidity may be successfully addressed in such settings, and facilitate access to, and completion of, treatment through the utilization of on-site clinical services for HCV treatment and adherence support with modified, directly-observed therapy. The exact importance of site of services and adherence support remain important areas of future investigation.

R. Douglas Bruce, M.D., M.A., M.Sc., “Hepatitis C treatment can be successfully integrated into a methadone maintenance clinic and modified, directly-observed therapy can be implemented with existing staff.”
Structures, Health and Risk Among Re-Entrants, Probationers, and Partners (SHARRPP)

Principal Investigator: Kim M. Blankenship, Ph.D.
Funded by: National Institute on Drug Abuse
Project Period: 09/15/2009 - 07/31/2014

OVERVIEW

Structures, Health and Risk among Re-Entrants, Probationers, and Partners (SHARRPP) analyzes connections between the movement between the criminal justice system and the community and race disparities in HIV-related sexual risk. It will also consider how drug policies contribute to this movement, and how the degree of social disorganization in the communities to which individuals return mediate its impact on HIV risk. This study builds on the research methodology and findings produced in a related project that was conducted between 2005 and 2007.

- SHARRPP is a multi-methods study that will include longitudinal surveys with 300 people who are on parole or probation and/or are recently released from prison, as well as longitudinal semi-structured interviews with a sub-set of these individuals (n=40). Data collection will begin in early spring 2011. In fall 2011, these participants will be asked to refer sexual partners to the study and longitudinal surveys (n=100), and semi-structured interviews (n=30) will be conducted with these partners.

- Surveys and interviews will cover such topics as criminal justice histories, sexual relationships, social support and family networks, drug use behavior, traumatic experiences, economic vulnerability, housing insecurity, access to public support, and health services utilization.

- An active Community Advisory Board, including policymakers and program administrators, provides guidance in conducting this research and identifying structural interventions to reduce race disparities in HIV based on study findings.

The specific aims of the study are to:

- Analyze the relationship between coercive mobility – the migration between the criminal justice system and the community – and race disparities in HIV-related sexual risk among drug offenders in Connecticut.

- Examine whether the association between coercive mobility and HIV-related sexual risk is affected by the degree of social disorganization in the re-entrants’ communities.

- Study the feasibility of recruiting and retaining sexual partners of these individuals to better understand the impacts of criminal justice systems on partners’ HIV-related risk.

RESEARCH IMPLICATIONS

This study challenges investigators to account for social structures, especially the criminal justice system, when studying HIV risk as well as race disparities in that risk. Study instruments developed will suggest ways to measure structural risk. The lessons learned about recruiting sex partners within this population may inform future projects.

COMMUNITY BENEFITS

This project seeks to inform both criminal justice and HIV prevention policies. Specifically, it intends to explore the implications of drug policies for coercive mobility and understand variations in HIV risk behaviors between people who are incarcerated and people who are sentenced to community supervision.
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