



January 15, 2002

Dear Colleague:

We are pleased to present this 5-year edition of the Behavioral Interventions and Research Branch (BIRB), Division of STD Prevention (DSTD), Resource Book describing the scientific and programmatic activities of our branch. This updated edition provides information about BIRB's mission statement, professional staff, technical assistance and policy activities, current scientific projects, and publications. We added a new section entitled, "What BIRB can do for you" that describes the kinds of activities and services that are available from the branch. We hope that you will find the publication to be of interest as it describes the depth and variety of STD related activities in BIRB.

If you would like additional copies, please call our office at (404) 639-8376 and we will send them to you. You can also email Connie Keith, BIRB's lead support staff person, at CKeith@cdc.gov

We are eager to make this document relevant to partners who are vital links to building effective behavioral science in public health STD prevention programs. We welcome your comments and suggestions.

Thank you.

Sincerely,

Janet St. Lawrence, Ph.D.
Chief
Behavioral Interventions and Research Branch
Division of STD Prevention, NCHSTP

Frederick A. Martich, B.S.
Deputy Chief
Behavioral Interventions and Research Branch
Division of STD Prevention, NCHSTP

RESOURCE BOOK OF THE
BEHAVIORAL INTERVENTIONS
AND RESEARCH BRANCH

Division of STD Prevention

PROJECTS, RESEARCH, POLICY, AND TECHNICAL ASSISTANCE
(January 1996 – December 2001)

Prepared by
Frederick A. Martich, Janet St. Lawrence, Tricia Hall and DeKeely Hartsfield

National Center for HIV, STD, and TB Prevention
Centers for Disease Control and Prevention
Department of Health and Human Services
Atlanta, GA, USA

This document is available at: <http://www.cdc.gov/nchstp/dstd/ResourceManual/resource>

TABLE OF CONTENTS

BEHAVIORAL INTERVENTIONS AND RESEARCH BRANCH	Page
Table of Contents-----	3
Mission Statement -----	14
Branch Staff -----	15
Scientific Staff Biographies -----	16
What BIRB can do for you -----	19
<hr/>	
PROJECTS	
CDC Funded Research:-----	20
STD Lay Health Advisors for Migrant and Seasonal Farm Workers: A Feasibility Study-----	20
Feasibility of a Brief, Individualized Intervention in STD Clinics for Clients with Repeat Infections-----	20
Determinants of Reinfection with Gonorrhea or Chlamydia Among Adolescent Females and Males Attending a STD Clinic -----	21
Research to Inform the Development of Women with High Risk HPV and Their Partners-----	21
Impact of High Risk Human Papillomavirus (HRHPV) Positivity on Women: Formative Research-----	21
Women's Emotional and Rational Response to High Risk HPV-----	22
Optimizing Strategies to Provide STD Partner Services:Seattle -----	22
Optimizing Strategies to Provide STD Partner Services: Brooklyn, NY-----	23
Computer-assisted STD Partner Notification Intervention -----	23
Formative Research to Inform the Development of Educational Messages for Women with High Risk Human Papillomavirus Infection and their Partners-----	24
The Participant Agreement for Contact Tracing (PACT) Study: Enhancing Partner Notification Services-----	24
Prospective Trials of Cost-Effectiveness Strategies to Improve Partner Notification-----	25

Framing STD Prevention Messages to Enhance Adolescents' Sexual Health -----	25
Gonorrhea Community Action Project summary (GCAP:Phase II) -----	26
Evaluation of Case Reporting and Partner Notification (PN) for STDs in the United States (Phase I)-----	26
Evaluation of Case Reporting and Partner Notification (PN) for STDs in the United States (Phase II) -----	27
The Sexual Internet: A Newly Emerging Risk Environment ---	27
Development, Delivery, and Evaluation of an Audio-CASI Sexual History Interview in Clinical Settings -----	28
Evaluation of Factors Influencing Health Risks, Prevalence of STDs, and Health Seeking Behavior among Female Sex Workers and their Clients -----	28
WINGS: Women in Group Support -----	29
Peer-to-Peer: HIV/STD Risk Reduction Video-based Intervention -----	30
Computer Aided Visual Case Analysis (CAVCA) Software for Syphilis Prevention -----	30
Northwestern Juvenile Project -----	31
Identifying Practices that Maximize Participation by Infected Persons and their Contacts in Partner Notification -----	31
STARS (Skill Training for Assertiveness, Responsibility, & Safety): An Intervention to Prevent/Reduce Risk Behavior in Sexually Abused, Adolescent Girls -----	32
A Community Perspective on STDs and their Treatment -----	32
Adherence to Abstinence and Condom Use Recommendations following STD Diagnosis -----	33
STD Screening for Homeless Persons-----	33
Project UNITE: Peer-driven Cluster Tracing to Identify STD/HIV in Men who have Sex with Men -----	34
MISTERS Project: STD Intervention for Men Newly Released from Jail -----	34
STD Screening Program for Youth in Detention Facilities----	35
Psychosocial Implications of High Risk Human Papillomavirus (HR-HPV) Diagnosis: Formative Research -	35

Other BIRB Research Projects	35
Repeat Infections: Behavioral Risk Factors, and Clinician Counseling: Findings from Philadelphia STD Clinics -----	35
Philadelphia Behavioral Assessment -----	36
Los Angeles County Behavioral Assessment -----	36
Seattle Rapid Assessment of STD Increases in MSM -----	37
Los Angeles Rapid Assessment of STD Increases in Latinos --	37
The Health Practices Survey for women -----	37
Secondary Analysis: National Sexual Health Survey-----	38
Secondary Analysis: National Longitudinal Survey of Adolescent Health -----	38
Replication of Foxman, Aral, & Holmes (1998) -----	38
Secondary Analysis: Project Respect -----	38
Evaluations of Three Intervention Models' Effectiveness in Lowering STD Risk Behavior of Substance Dependent Adolescents -----	39
Development of an Instrument to Measure Perceived Barriers to Condom use -----	39
Using Condoms to Prevent the Transmission of Sexually Transmitted Infection: Who behaves according to the message? -----	39
Maricopa Rapid Ethnographic Community Assessment Process -----	40
Urine Screening in Juvenile Detention Centers -----	40
Methods of Technology Transfer to STD Field Staff -----	41
Women's Condom use Strategies at the Bridge to Respect ---	41
Designing STD Prevention Programs to Maximize Participation -----	42
Survey of Health Department STD Partner Notification Practices -----	42
TECHNICAL ASSISTANCE-----	43
POLICY DEVELOPMENT-----	47

BIRB COMMITMENT TO TRAINING -----	48
 BIRB PUBLICATIONS	 50
<hr/>	
Published in 2001 Or Currently In Press:	
Reducing sexual risk behavior among low income African American women: A randomized controlled evaluation of three theoretical models -----	50
Changes in perception of quality of life during the course of HIV infection: Gay men's life story narratives -----	50
Child hood sexual abuse and sexually transmitted diseases in adults: A review of and implications for STD/HIV programs -----	50
Learning from clients: An opportunity for sexually transmitted disease programs -----	51
When IRBs disagree: A case study on waiving parental consent for sexual health research on adolescents -----	51
Effect of an STD/HIV Behavioral Intervention on Women's Use of the Female Condom-----	51
Partner notification programs to maximize participation:a factorial survey approach.-----	52
-	
Exploring the context of women's relationships, sexual behavior and contraceptive strategies-----	52
Access to science-related information by federal assignees to STD programs: Results of three surveys-----	53
A prospective study of psychological distress and sexual risk behavior among black adolescent females-----	53
Sexual risk behaviors associated with having older sex partners: A study of black adolescent females -----	54
Correlates of adolescent females' worry about undesired pregnancy: The importance of partner desire for pregnancy-----	54
Correct condom application among African American female Adolescents: The relationship to perceived self-efficacy and the association to confirmed STDs-----	55
Psychosocial correlates of adolescents' worry about STD versus HIV infection: Similarities and differences-----	55
Socioeconomic Status and Self-reported Gonorrhea among African American female adolescents-----	56

Correlates of using dual methods for sexually transmitted diseases and pregnancy prevention among high-risk African American female teens-----	56
Parental monitoring: Association with adolescents' risk behaviors-----	57
Psychosocial and behavioral correlates of refusing unwanted sex among African-American adolescent females-----	57
Sexual risk behavior, drug use, and STD rates among incarcerated women-----	58
The Perinatal Guidelines Evaluation Project: Project overview and baseline results-----	58
HIV and sexually transmitted infection risk behaviors among men seeking sex with men on-line-----	59
Relationship of health literacy to gonorrhea related care-----	59
Perceived versus actual knowledge about correct condom use Among U.S. adolescents: results from a national study-----	59
Associations between adolescents sexual risk behavior and scores on six psychometric scales: Impulsivity predicts risk-----	60
Reducing HIV/STD risk behavior of substance-dependent adolescents: A randomized controlled trial-----	60
Normative studies with the scale for Interpersonal Behavior (SIB)-----	61
The effect of variations in mode of delivery and monetary incentive on physicians' responses to a mailed survey assessing STD practice patterns-----	61
Condom carrying is not associated with condom use and lower prevalence of sexually transmitted diseases among minority adolescent females-----	61
Sexually transmitted diseases and HIV/AIDS-----	62
Legitimized aggression and sexual coercion: Individual differences in cultural spillover-----	62
Reaching the hard to reach: Implications for the new view of women's sexual problems-----	62
Using the Theory of Planned Behavior to understand STD risk behavior of incarcerated women-----	63
The effect of sexual and physical violence on risky behavior and STD among a cohort of HIV-seropositive women-----	63

Published in 2000:

Patterns of conflict resolution within relationships as a function of coercive sexual behavior by men and women-----	63
Correlates of unprotected vaginal sex among African American female adolescents: Importance of relationship dynamics-----	64
Women's negotiation scripts: Strategies for safer sex with their male partners-----	64
Book review – Queer Kids: The challenges and promises for lesbian, gay, and bisexual youth-----	64
A gender specific intervention for at-risk women-----	65
Urine tests for gonorrhea and chlamydia: Great technology but will the community accept it?-----	65
"New Beginnings": A case study of gay men's changing perceptions of quality of life during the course of HIV infection-----	65
Organizational predictors of prenatal HIV counseling and testing-----	65
Infant birth weight of women with or at high risk for HIV infection: The impact of behavior, psycho-social, and demographic factors-----	66
Access to science related information by federal assignees to STD programs-----	66
Soliciting sex on the internet: What are the risks for STD/HIV -----	66
The internet as a newly emerging risk environment for sexually transmitted diseases and HIV -----	67
Observations from the CDC: HIV/STD risk reduction interventions in prison settings -----	67
Modeling intervention efficacy for high-risk women: The WINGS Project -----	68
Misconceptions about STD protective behavior -----	68
-	
Prevention strategies other than male condoms employed by low-income women to prevent HIV infection -----	69
Longitudinal predictions of STDs among adolescents: Results from a national survey -----	69

Adolescents' use of school-based health clinics for reproductive health services: Data from the National Longitudinal Study of Adolescent Health -----	70
Women, Health and the Mind -----	70
-	
Women and HIV -----	70
Sexual victimisation of girls: Implications for women's health and for prevention -----	70
Data collection instrument and procedure for systematic reviews in the guide to community prevention services -----	71
Predictors of time spent on partner notification in four U.S. sites-----	71
Associations between adolescents' sexual risk behavior and scores on psychometric scales -----	72
Perceived versus actual knowledge about correct condom use among U.S. adolescents: Results from a national survey -----	72

Published in 1999:

The influence of HIV-related knowledge and exposure fears on behavior change and incident STDs -----	72
Bringing it all together: Modeling-intervention processes using structural equation modeling -----	73
Adolescent risk for HIV infection: Comparison of four high risk samples -----	73
Perceived monogamy and type of clinic as barriers to seeking care for suspected STD or HIV infection: Results from a brief survey of low-income women attending Women, Infants, and Children (WIC) Clinics in Missouri -----	73
Where do people go for treatment of sexually transmitted diseases?-----	74
Issues involved in using sexually transmitted disease incidence as an outcome measure in behavioral intervention research---	74
Research methods in the study of sexual behavior -----	75
HIV/AIDS in Puerto Rico and the Caribbean: Current status and future directions -----	75
Sexual risk reduction and anger management interventions for incarcerated male adolescents: A randomized controlled trial of two interventions -----	75

Childhood sexual abuse and its relationship to high-risk behavior in women volunteering for an HIV and STD prevention intervention-----	76
-	
Adolescents' recall of sexual behavior: Consistency of self-report and the effect of variations in recall duration -----	76
-	
Emerging behavioral strategies for the prevention of HIV in rural areas -----	76
Measuring perceived barriers to condom use: Development and psychometric evaluation of the Condom Barriers Scale -----	76
Using growth curves to determine the timing of booster sessions -----	77
Frequency and predictors of condom use and reasons for not using condoms among low-income women -----	77

Published in 1998:

Partner notification in the real world: A four site time-allocation study -----	78
Partner notification strategies for sexually transmitted diseases -----	78
Enhanced street outreach and condom use by high-risk populations in five cities -----	78
Relationship of HIV/STD sexual risk behaviors to other health behaviors among a sample of Indiana rural youth -----	79
Preventing HIV infection: The effect of community linkages, time, and money on recruiting women in intervention groups-	79
What We Have Learned from the AIDS Evaluation of Street Outreach Projects: A Summary Document-----	79
Cultural and ethnic issues affecting pediatric service delivery in health care settings-----	80
-	
Behavioral and psycho-social consequences of HIV antibody counseling and testing with African-American women -----	80
Evaluation -----	81
A randomized trial of a brief HIV risk reduction counseling intervention for women -----	81
A storytelling model using pictures for HIV prevention with injection drug users -----	81

Efficacy of risk-reduction counseling to prevent Human Immunodeficiency Virus and sexually transmitted diseases --	81
The effectiveness of coping strategies used by HIV- seropositive women -----	82
Factors influencing condom use among African-American women: Implications for risk reduction interventions -----	82
-	
Die wall zwischen unterschiedlichen paradigm: Aktuelle behaviorale strategien zurpravention von HIV-infektionen. (Translated: Choosing among paradigms: Emerging behavioral strategies for the prevention of HIV disease.) -----	83
-	
Linking injection drug users to medical services: Role of street outreach referrals -----	83
Evaluating HIV prevention interventions among drug abusers: Validity issues -----	83
Condom use as a dependent variable: Measurement issues relevant to HIV prevention programs -----	83
-	
Becoming a responsible teen: An HIV risk reduction program for adolescents -----	84

Published in 1997

Seeking social support in old age as reasoned action: Structural and volitional determinants in a middle-age sample of Argentinean women -----	84
HIV Infection risk behaviors and methadone treatment: Client-reported HIV infection in a follow-up study of injecting drug users in New England-----	84
HIV testing among men who have sex with men-Results of a telephone survey-----	85
Contraceptive practices before and after an intervention promoting condom use to prevent HIV infection and other sexually transmitted diseases among women - selected US sites, 1993-1995 -----	85
Introducing technology into the public STD clinic -----	85
Evaluation of an HIV risk reduction intervention for women entering inpatient substance abuse treatment -----	86
Predicting, understanding, and changing socially relevant behavior: Lessons learned -----	86

Using behavioral theory in HIV prevention -----	86

Interactive multimedia software design: Concepts, process, and evaluation -----	87

Identifying the social contexts of effective sex refusal -----	87

HIV-seropositive men who engage in high-risk sexual behavior: Psychological characteristics and implications for prevention -----	87
HIV risk and sources of information among urban street youth	87
Premature ejaculation: Assessment and treatment -----	88

Sex, drugs, and HIV counseling and testing: A prospective behavior change among methadone maintenance clients in New England -----	88
The impact of HIV on emotional distress of infected women: Cognitive appraisal and coping as mediators -----	88
Using behavioral theory in computer-based health promotion and appraisal -----	89

Centers for Disease Control and Prevention partnerships with external behavioral and social scientists: Roles, extra-mural funding, and employment -----	89
HIV risk reduction for incarcerated women: A comparison of brief interventions based on two theoretical models -----	89

Prevention research in rural communities: Overview and concluding comments -----	90

A striking lack of evidence for nonbelief-based attitude formation and change: A response to five commentaries -----	90

Published in 1996:

Diagnostic HIV antibody testing in the U.S., 1987-1993 -----	90
Continued sexual risk behavior among HIV seropositive, drug-using men—Atlanta, Washington, D.C., and San Juan, Puerto Rico, 1993 -----	90

Epilepsy self-management: A test of a theoretical model -----	91
Customizing interventions for HIV-seropositive persons -----	91
A community support group for HIV-seropositive drug users: Is attendance associated with reductions in risk behavior? -----	91
A factorial survey study to assess the acceptability of HIV vaccine trial designs -----	91
Retention in methadone maintenance treatment programs, Connecticut and Massachusetts, 1990-1993 -----	92
Behavioral risks for HIV-associated with HIV testing decisions-----	92
Predictors of African-American adolescents' condom use and HIV risk behavior -----	92
Tracking the work -----	93
Examination of the relationship between African-American adolescents condom use at sexual onset and later sexual behavior: Implications for condom distribution programs -----	93
Surveying high-risk sexual behaviors -----	93
RECRUITMENT-----	94

MISSION STATEMENT

BIRB, as a part of the Division of STD Prevention, provides a behavioral and social science foundation for research, intervention, and prevention of STDs (including HIV) and their complications.

The Behavioral Interventions and Research Branch (BIRB) of DTSD was formed in 1995. As the smallest of six branches within the division, BIRB faces the challenges of integrating behavioral science into public health in the field of STD prevention through basic research, behavioral epidemiology, program evaluation, qualitative and quantitative science, as well as program relevant research activities that include survey and intervention research.

The BIRB multi-disciplinary team of anthropologists, psychologists, sociologists, epidemiologists, analysts, demographers, and statisticians produces a variety of publications, initiates and completes major research studies, and provides technical assistance domestically and internationally. Recent studies, projects, and publications are documented in this manuscript so that individuals, branches, and agencies can review BIRB's accomplishments and progress.

We welcome your suggestions and comments. They can be addressed to:

Janet S. St. Lawrence, Ph.D.
Chief, Behavioral Interventions & Research Branch
Division of STD Prevention
National Center for HIV, STD, and TB Prevention
Centers for Disease Control and Prevention
Mailstop E-44
1600 Clifton Road, NE
Atlanta, GA 30333
E-mail: nzs4@cdc.gov

BRANCH STAFF

Full Time

Janet S. St. Lawrence, Ph.D., Chief
Fred Martich, Deputy Chief (retired 2002)
Steven L. Middlekauff, Deputy Chief
Constance Keith, Operations Assistant
Tika Grant, Operations Assistant (1/2 time)
Frederick R. Bloom, Ph.D. Medical Anthropologist
Don Dowda, PHA*
Kathleen A. Ethier, Ph.D., Behavioral Scientist
Judith Greenberg, Ph.D., Research Sociologist (retired 2001)
Matthew Hogben, Ph.D., Behavioral Scientist
Jami S. Leichliter, Ph.D., Behavioral Scientist
Donna Hubbard McCree, Ph.D., MPH., R.Ph., Behavioral Scientist
Mary M. McFarlane, Ph.D., Research Psychologist
Catlainn Sioneau, Ph.D. Behavioral Scientist
Samantha P. Williams, Ph.D., Research Psychologist

Fellows-Interns-Students

Richard A. Crosby, Ph.D. STD Fellow
Karen Kroeger, Ph.D. STD Fellow
Nicole Liddon, Ph.D. STD Fellow
Kim Williams, Ph.D. STD Fellow
Son Nguyen, M.D., Fogarty Fellow
Zoe Fludd, MSW, PHP Intern
Joanna Katzman, MPH, PHP Intern
Rachel E. Kachur, ORISE Fellow

Belinda J. Abbruzzese, Emory University SPH Graduate Student
Lisa Aenlle, Emory University SPH Graduate Student
Joanna Wooster, Emory University SPH Graduate Student
Tricia Hall, Emory University SPH Graduate Student
DeKeely Hartsfield, Emory University SPH Graduate Student

*On detail to Epidemiology and Surveillance Branch

SCIENTIFIC STAFF BIOGRAPHIES

Janet St. Lawrence, Ph.D.: *B.A. English literature 1964, Boston University; M.S. Psychometry 1976, Nova University; Ph.D. Clinical Psychology 1980, Nova University.* Dr. Janet S. St. Lawrence is Chief of the Behavioral Interventions and Research Branch. She completed the Ph.D. in Clinical Psychology in 1980, followed by a post-doctoral year as Chief Resident in the Department of Psychiatry and Human Behavior at the University of Mississippi Medical Center from 1980-81. From 1981-1987, she was a professor at the University of Mississippi with a joint appointment at the medical center and then moved to Jackson State University. Dr. St. Lawrence has received numerous awards and recognition: The Association for the Advancement of Behavior Therapy's Outstanding Research Award; NAFEO's National Research Award, and the Mississippi Psychological Association's Research Achievement Award (twice), and Outstanding Teaching of Psychology award. Her research career focused on developing and evaluating STD/HIV risk reduction interventions, primarily in community settings, with grant funding from the National Institute of Mental Health, National Institute of Child Health and Human Development, National Institute on Drug Abuse, and Centers for Disease Control and Prevention. She developed and evaluated an adolescent intervention that became one of the CDC Division of Adolescent and School Health's five national model 'Programs that Work.' While in clinical practice from 1980-1996, her practice specialized in individuals and families who were living with HIV/AIDS. She served on the National Institute of Mental Health's Immunology and AIDS study section that reviewed NIH grant applications and on CDC's Behavioral Science Peer Review Panel in 1994. She is the author of more than 200 books, book chapters, and articles in professional journals.

Frederick A. Martich, B.S. Fred joined the CDC in 1963 as a "Co-Op", a position that later came to be known as Disease Intervention Specialist. Prior to becoming a Program Consultant in Atlanta in 1986, Fred was a first-line supervisor, District Supervisor, and then became an assistant to a state STD Manager. As a program consultant at CDC Atlanta, Fred managed 20 different project areas until he became a Deputy Branch Chief in the Division of HIV/AIDS Prevention. Subsequently, he returned to the Division of STD Prevention as Deputy Branch Chief for the Behavioral Interventions and Research Branch until his retirement in January 2002.

Frederick Bloom, Ph.D.: *B.A. Anthropology 1974, University of Illinois; A.D. in Nursing 1980, Parkland College; M.A. Anthropology 1991, Case Western Reserve University; Ph.D. Anthropology 1996, Case Western Reserve University.* Broad research interests include illness experience and quality of life during chronic illness; immigrants, migrants, and minority groups in the United States; health care utilization; STD preventive sexual behavior and quality of life; and qualitative methods with emphasis on rapid ethnographic assessments. Current research involves the meaning of sexual behavior for gay men with implications for HIV/STD-preventive behavior; exploring probable antecedents to STD outbreaks among gay men in US cities; and STD control and prevention in Latino communities. Recent publications are in *Ethos, Health Education and Behavior* and *Medical Anthropology Quarterly*.

Kathleen Ethier, Ph.D.: *B.A. Psychology 1986, College of New Rochelle; Ph.D. Social and Personality Psychology 1995, The Graduate School and University Center of the City University of New York.* Before coming to CDC in the fall of 1999, she was an Associate Research Scientist in the Department of Epidemiology and Public Health at the Yale University School of Medicine. While at Yale she was PI or Co-PI on several large studies of HIV or STD risk among women and/or adolescents, funded by CDC and NIMH. Her current research focus concerns STD/HIV prevention for adolescents, particularly the integration of prevention of STD, HIV, and teen pregnancy. She has published in the *Journal of Personality and Social Psychology*, the *American Journal of Public Health*, and *AIDS and Behavior*.

Judith Greenberg, Ph.D.: *B.S. Biology & Management 1975, Georgia State University; M.A. Sociology 1979, GSU; Ph.D. Sociology 1984, University of California, San Diego.* Research interests include the psychobiology of risk-taking, early childhood socialization including child sexual abuse and risk-taking, and program evaluation. Clinical background includes: Director of Health Education, Student Health Services, San Diego State University; Executive Director, Family Planning Centers of Greater Los Angeles; and Executive

Director of The Bridge Family Center, Atlanta. Current research addresses STD client satisfaction, a feasibility study of an intervention for young teen girls who have experienced sexual abuse, framing of risk-reduction messages for African American girls, and a video intervention for African American youth. Recent publications are in *Journal of Women's Health, AIDS and Behavior*, and *Evaluation and the Health Professions*. Dr. Greenberg retired from BIRB in 2001.

Matthew Hogben, Ph.D.: *B.A. Psychology 1990, University of Michigan; M.A. 1994, Ph.D. Social Psychology 1996, University at Albany, SUNY; Post-doctoral Fellow, 1997-1999, SUNY Downstate Medical Center.* Broad research interests include aggressive and sexually coercive behavior, psychometric evaluation, application of social cognitive models to health-related behavior, and teaching research-oriented psychology. Current research involves HIV/STD risk reduction among incarcerated women, motivations for condom and dual method use among women, innovation in partner services for STD-infected people, and modeling STD-preventive behavior among at-risk samples. Recent publications are in *Women & Health, Aggressive Behavior*, and *Journal of Women's Health*.

Jami S. Leichliter, Ph.D.: *B.S. Psychology 1994, University of Pittsburgh; M.A. 1996; Ph.D. Applied Experimental Psychology (specialization in Measurement and Evaluation in Public Health) 1999, Southern Illinois University at Carbondale.* Broad research interests include measurement, research design, evaluation, and quantitative data analysis. Past areas of research include ambulatory health center accreditation research (clinical outcome studies, performance measurement, patient and staff satisfaction, and treatment follow-up studies); alcohol & drug use, and sexual violence in adolescents and young adults. Current research activities include the development of brief interventions for recidivists; innovative partner services; STDs in juvenile detainees; the homeless population; health care provider behavior; sexual violence; impact of alcohol & drug use on sexual behavior and sexual violence; behavioral surveillance; performance measurement; evaluation. Recent publications are in *American Journal of Public Health, American Journal of Preventive Medicine* and *Journal of American College Health*.

Donna Hubbard McCree, Ph.D., M.P.H., R.Ph: *B.S. Pharmacy 1982, Howard University; M.P.H. Health Policy and Management, The Johns Hopkins University School of Hygiene and Public Health 1987; Ph.D., Health Policy and Management - Social and Behavioral Sciences, The Johns Hopkins University School of Hygiene and Public Health, 1997, Post-doctoral Fellow, Emory University 1999-2001.* Registered Pharmacist and former faculty member at the College of Pharmacy, Howard University. Training and experience in Behavioral Sciences, Health Education, Health Communication, and Implementation and Management of STD/HIV Behavioral Interventions. Major research interest is HPV, specifically application of behavioral theory to HPV and STD prevention interventions; design, implementation and evaluation of secondary HPV interventions for women of color; psychosocial reactions to HPV diagnosis among women; influence of male-partner sexual behavior on transmission of HPV to women; issues of disclosure surrounding an HPV diagnosis; and HPV knowledge, attitudes and counseling practices of US health care providers.

Mary McFarlane, Ph.D.: *B.S. Psychology 1990, University of Miami (FL); M.A. Psychology 1992, University of North Carolina at Chapel Hill; Ph.D. Psychology 1994, University of North Carolina at Chapel Hill.* Behavioral statistician, joined the Branch in 1996. Primary research interests: internet as an emerging risk environment for STD/HIV; using audio computer-assisted self-interviews to obtain sexual histories in clinical settings; needs assessments and interventions in incarcerated populations.

Stephen L. Middlekauff, B.S. Joined BIRB as Deputy Chief in February 2002 after serving as a Program Consultant in the Program Development and Support Branch of the Division of STD Prevention since 1992. Before coming to headquarters, he was a Senior Public Health Advisor to the State of Massachusetts, and manager of field operations for the Houston STD Prevention Program. He began working with CDC in 1972 as an assignee to the Los Angeles County Health Department and held subsequent assignments in Florida, Oklahoma, and Ohio prior to his management experiences in Texas and Massachusetts.

Catlann Sionéan, Ph.D.: *B.A. Psychology, 1991, Alma College; M.A. 1995; Ph.D., Medical Sociology, University of Kentucky; Post-doctoral Fellow, 1999-2000, Rollins School of Public Health, Emory University.* Primary research interests, broadly defined, include the effects of social context, such as community social and economic conditions, on sexual risk and protective behaviors and disease outcomes; adolescent risk and protective behaviors; and multilevel modeling of contextual factors related to STD-risk behaviors and outcomes. Current research includes multilevel modeling of neighborhood conditions associated with adolescent sexual and other risk behaviors, behavioral intervention to improve partner services for STD prevention, and formative research to develop messages for women diagnosed with

HPV and their partners. Recent publications may be found in *Journal of Adolescent Health*, *Sexually Transmitted Diseases*, *Archives of Pediatrics and Adolescent Medicine*, and *Pediatrics*.

Samantha Williams, Ph.D.: *B.A. Psychology 1989, Norfolk State University; M.A. Social Psychology 1992 & Ph.D. Social Psychology 1994, University of Houston; Post-Doctoral Fellowship 1995-1997, Columbia University.* Training background includes Health Psychology, Human Sexuality and Epidemiology. Research interests include the impact of community change on the health of residents, the impact of body esteem on sexual behavior, the utilization of social exchange theories in public health and sexuality research, and the development of STD risk reduction interventions for hard to reach populations. Current activities include the development and evaluation of Computer Aided Visual Case Analysis (CAVCA) software for syphilis case management, identification of factors which maximize participation in STD prevention programs, the development of a community level intervention for syphilis prevention, an STD screening program for youth in detention centers, an intervention study for men newly released from jail, and the national syphilis elimination initiative. Recent publications can be found in the *Journal of Women and Health*, *Journal of Sexually Transmitted Diseases*, *Women & Therapy*, and *Journal of Psychology and Human Sexuality*.

WHAT BIRB CAN DO FOR YOU...

Staff of the Behavioral Interventions and Research Branch (BIRB) are available for technical assistance in these and other areas:

Focus Groups

Selecting focus-group members
Choosing a moderator
Group dynamics
Asking the right questions
Analyzing the responses

Program Assessments

Identifying sources and cofactors of outbreaks
Ethnographic assessments to develop program recommendations
Conducting community assessments in response to outbreaks

Interviewing

Developing protocols for interviews
Interviewer training
Unstructured interviews, semi-structured interviews, and questionnaires
Selecting interviewees
Analyzing interview data

Surveys

Survey development
Item construction
Writing response alternatives
Determining reliability and validity
Survey analysis

Behavioral Theory

Research reviews and synthesis
Applying theory to STD research and programs

Behavioral Interventions

Developing an intervention plan
Implementing the intervention in the field
Quality assurance for intervention staff
Retaining a study sample over time.
Following up with study participants
Booster sessions
Evaluation of interventions
Analysis of study data
Disseminating results to the public

Statistical Analyses and Evaluation

Analyzing survey data
Evaluating interventions
Behavioral surveillance data analysis
Program evaluation
Dealing with qualitative and quantitative data

PROJECTS

CDC FUNDED RESEARCH PROJECTS

◆ STD Lay Health Advisors for Migrant and Seasonal Farm Workers: A Feasibility Study

Intent: This study explores the feasibility of engaging STD lay health advisors among Hispanic seasonal and migrant farm workers. Ethnographic interviews and observations were conducted to identify existing lay health advisors (e.g. birth attendants or traditional healers espirituistas), who might serve as STD lay health advisors, existing STD prevention and treatment practices of Spanish-speaking seasonal and migrant workers, differences in STD prevention and treatment needs for male and female seasonal and migrant workers, and willingness of Spanish-speaking migrant workers to talk about STDs and other sexual matters with a peer.

Implications for STD Program Operations: Training of lay health advisors has been a successful intervention strategy for maternal and infant health (Baker et al, 2000) and has been shown to be effective in STD prevention among other ethnic groups (Thomas et al, 1998). By demonstrating the feasibility of a lay health advisor approach for STD prevention for this hard to reach population an alternative means of STD prevention can be developed. (Additional research should be conducted to determine the efficacy of lay health advisor programs.)

Location: Southern Dade County, Florida

PI: Frederick Bloom, R.N., Ph.D.

Duration: January 2001 - January, 2002

Source of Funds: DSTDP

Budget: \$15,000

◆ Feasibility of a Brief, Individualized Intervention in STD Clinics for Clients with Repeat Infections

Intent: To develop individual-level intervention strategies that are tailored to clients with repeat STDs and are brief enough to be feasible in STD clinic settings.

Implications for STD Program Operations: Repeat infections account for approximately 20% of STD clinic visits. Individualized, brief interventions implemented by existing program staff could reduce the burden placed on STD clinics as a result of repeat STDs without placing an additional financial strain on programs.

Location: Baltimore, MD

PI: Emily Erbelding, M.D. (Johns Hopkins University); Jami Leichliter, Ph.D. (DSTD, BIRB)

Duration: 10/1/01 – 9/30/04

Source of funds: DSTDP

Budget: \$275,000

♦ **Determinants of Reinfection with Gonorrhea or Chlamydia Among Adolescent Females and Males Attending a STD Clinic**

Intent: To explore psychosocial and contextual factors that may contribute to reinfection with gonorrhea or chlamydia among adolescents attending a STD clinic.

Implications for STD Program Operations: Repeat infections account for approximately 20% of STD clinic visits. A thorough understanding of factors contributing to STD reinfection in adolescents could help STD programs uncover strategies for intervening with this population.

Location: Jacksonville, FL

PI: Karla Schmitt, Ph.D. (Florida Department of Health); Jami Leichliter, Ph.D. (DSTD, BIRB)

Duration: 10/1/01 – 9/30/02

Source of funds: DSTDP

Budget: \$48,000

♦ **Research to Inform the Development of Educational Messages for Women with High Risk HPV and Their Partners**

Intent: To examine the psychosocial implications of an HPV diagnosis in women from different ethnic groups, HIV positive women, and male partners.

Implications for STD Program Operations: Research findings can be used to develop educational messages for women with high risk HPV and their partners

Location: Los Angeles, CA

PI: Peter Kerndt, M.D. (LA County Department of Health Services), Pamina Gorbach, Ph.D. (UCLA); Jami Leichliter, Ph.D. (DSTD, BIRB)

Duration: 10/1/01 – 9/30/04

Source of funds: DSTDP

Budget: \$750,000

♦ **Impact of High Risk Human Papillomavirus (HR- HPV) Positivity On Women: Formative Research**

Intent: The intent of this project is to develop an assessment tool for women diagnosed with HR-HPV to determine their attitudes and beliefs about HPV and the impact of an HPV diagnosis on women and their partners. The project will also explore the attitudes and perceptions of health care providers about women with HR-HPV and their perceived needs.

Implications for STD Program Operations: Outcomes from this project can be used to inform the development of

medical management and psychosocial educational materials for health care practitioners who provide care for women diagnosed with HR-HPV and their partners.

Location: Columbia, South Carolina

PI: Ann L. Coker, Ph.D. (University of South Carolina), Donna Hubbard McCree, Ph.D., M.P.H., R.Ph (DSTD, BIRB)

Duration: 10/01/01 - 09/30/04

Source of funds: DSTDP

Budget: \$721,420

◆ Women's Emotional and Rational Response to High Risk HPV

Intent: The intent of this project is to produce an understanding of the range of knowledge and attitudes regarding high risk HPV infection among women diagnosed with the infection; and to determine the strategies the women use to assure that they (1) are successfully treated, (2) lessen their risk of future infections and (3) prevent spread of HPV to their sexual partners.

Implications for STD Program Operations: Outcomes from this project can be used to inform the development of educational messages for women who are diagnosed with high risk HPV.

Location: Oklahoma City, Oklahoma

PI: Robert M. Hamm, Ph.D. (University of Oklahoma Health Sciences Center) and Donna Hubbard McCree, Ph.D., M.P.H., R.Ph (DSTD, BIRB)

Duration: 10/1/01 – 9/30/04

Source of funds: DSTDP

Budget: \$747,387

◆ Optimizing Strategies to Provide STD Partner Services: Seattle

Intent: The principal goal of this research is to lower the reinfection rate of STD-infected individuals. Participants are randomized to standard partner management or to an expedited condition in which they or their partners receive medication for a diagnosed condition through local area pharmacies. Participants can also come into a clinic for standard evaluation and treatment. Concurrent aims include expansion of partner notification to private settings with minimum disruption of current private provider practice, as well as cost-effectiveness evaluation

Implications for STD Program Operations: If successful, implementation of the experimental protocol will reduce the burden on public clinics and local DIS. Rather than replacing the role of DIS, the protocol would complement their activities. There is also potential to encourage links between public and private providers treating STD.

Location: Seattle, WA

PI: Matthew Golden, M.D. (Harborview Medical Center); Matthew Hogben, Ph.D. (DSTD, BIRB). Technical assistance from Tom Gift, Ph.D. (DSTD, HSREB).

Duration: 10/1/00 – 9/30/02

Source of funds: DSTDP

Budget: \$454,000

◆ **Optimizing Strategies to Provide STD Partner Services: Brooklyn, NY**

Intent: The goal of this project is to implement and test a social-cognitive intervention to increase the effectiveness of patient referral. The intervention is based on the Theory of Reasoned Action/Theory of Planned Behavior. Targeted areas of patient behavior include the patient's motivation and ability to contact his/her partners. The intervention patient referral rates will be tested against standard patient referral as practiced in Brooklyn clinics. The project also has a partner-delivered medication component as a secondary plan for clients who are unable or unwilling to engage in patient referral or who expect their partner(s) not to show up at a clinic.

Implications for STD Program Operations: A NYC Department of Health clinic is already participating in this intervention (but not the partner-delivered medication component), pointing the way to potential adoption of the intervention strategy.

Location: Brooklyn, NY

PI: Tracy Wilson, Ph.D. (SUNY Health Science Center); Catlainn Sionéan, Ph.D. (DSTD, BIRB)

Duration: 10/1/00 – 9/30/04

Source of funds: DSTDP

Budget: \$1,416,346

◆ **Computer-assisted STD Partner Notification Intervention**

Intent: This project uses a computerized interview and assessment to elicit partners from people diagnosed with an STD. There are recall and motivation cues for the primary elicitation, as well as skills modeling (including self-efficacy) for informing partners of their exposure for those clients who are going to engage in patient referral. For provider referral, the program solicits contact information for partners. There are plans to develop several versions of this program, to be tailored to specific sub-populations.

Implications for STD Program Operations: Development of the program is federally funded; therefore many STD programs will have access to the technology. Should the project prove feasible, STD programs might implement the computerized system for general use or for high volume times (many clinics have substantial client back-ups at various points).

Location: Portland, OR

PI: John Noell, Ph.D. (Oregon Research Institute); Fred Bloom, Ph.D. (DSTD, BIRB)

Duration: 10/1/00 – 9/30/04

Source of funds: DSTDP

Budget: \$1,011,948

♦ **Formative Research to Inform the Development of Educational Messages for Women with High Risk: Human Papillomavirus Infection and their Partners**

Intent: The overall goal of this study is to identify counseling and educational needs of female patients tested for high-risk human papillomavirus infection (HR HPV) and their partners, as well as identify psychosocial, behavioral, and demographic factors that need to be addressed in developing effective messages. Focus groups and in-depth interviews will be conducted with a sample of racially and ethnically diverse women. Results of the focus groups and interviews will be used to design and pilot test a quantitative survey assessing constructs such as HPV knowledge, reactions to diagnosis, and perceived stigma. Pilot data will undergo psychometric analyses; results will be used to develop a final quantitative instrument that will be administered to a larger cohort of women.

Implications for STD Program Operations: Results of this project could enhance patient care and counseling for STD clinic clients with HPV infections.

Location: Seattle, WA

PI: Laura Koutsky, Ph.D. (University of Washington); Catlann Sionéan, Ph.D. (DSTD, BIRB)

Duration: 10/1/01 – 9/30/04

Source of funds: DSTDP

Budget: \$750,000

♦ **The Participant Agreement for Contact Tracing (PACT) Study: Enhancing Partner Notification Services**

Intent: Researchers hope to link patient STD screening and diagnostic testing in community health centers and begin partner notification and services through those same centers. Both referral techniques and partner-delivered medication effects will be tested: this implementation is tantamount to extending partner services into a novel setting. DIS from the state of Massachusetts will provide field help. Re-infection and co-infection rates will be compared to an STD clinic operating under current standard guidelines. There is a cost-effectiveness component to the study as well as related research testing enhanced DIS strategies in a jail setting.

Implications for STD Program Operations: The cooperation of the state health department suggests considerable potential for implementation at a systemic level in Massachusetts (contingent upon the success of the project). The researchers also plan to develop specific policy initiatives during the course of CDC funding for this research. A further outcome with program implications is increased cooperation between private and public sector providers.

Location: Boston, MA; Springfield, MA

PI: Peter Rice, M.D., Phillip Braslins, M.D. (Boston Medical Center); Matthew Hogben, Ph.D. (DSTD, BIRB)

Duration: 10/1/00 – 9/30/04

Source of funds: DSTDP

Budget: \$1,352,000

◆ **Prospective Trials of Cost-effectiveness Strategies to Improve Partner Notification**

Intent: To determine the most efficient and effective method of partner services, including identification and treatment, for male urethritis and trichomonas. The male urethritis study will compare three methods of partner services (standard-of-care patient referral, enhanced patient referral with booklet, and patient delivered medication) for female partners of males treated for urethritis. This study will take place in three different practice settings: a public STD clinic, a hospital emergency room, and a college health clinic. The study will also evaluate: (1) the cost-effectiveness of the three interventions and (2) a policy requiring providers to follow specified partner services guidelines for males with urethritis. The female trichomonas study will compare the same three methods of partner services for male partners of females with trichomonas. This study will take place in a public women's health clinic in New Orleans.

Implications for STD Program Operations: In areas with high cost of reaching partners of people with STD, or where those partners are unlikely to seek medical attention at a clinic, a cost-effective version of these trials could be implemented as policy by a health authority.

Location: New Orleans, LA

PI: Patricia Kissinger, Ph.D. (Tulane University); Jami Leichliter, Ph.D. (DSTD, BIRB)

Duration: 10/1/00 – 9/30/04

Source of funds: DSTDP

Budget: 1,000,057

◆ **Framing STD Prevention Messages to Enhance Adolescents' Sexual Health**

Intent: This study evaluates the relative effectiveness of gain- versus loss-framed health promotion messages, using a videotape format, in a sample of African American female adolescents. The gain and loss messages are framed around three different health outcomes (STD infections, HIV infection, and unplanned pregnancy). Additionally, three self-protective actions are compared: condom use, abstinence, versus harm-reduction-mixed message (abstinence and condoms). Thus the study involves 18 messages: 3 health outcomes nested in 2 gain versus loss frames by 3 prevention messages. The research is conducted in cooperation with Georgia State University and will involve 810 teens. The results of this study will be useful to health providers attempting to offer the most effective health promotion messages to African American teen girls.

Implications for STD Program Operations: Will provide guidance for developing the most effective health promotion messages for African American teen girls.

Location: The study is being implemented in Atlanta Georgia, in collaboration with community-based organizations and the public housing authority.

PI: The principal investigator is Lisa Armistead, Ph.D. from the Department of Psychology at Georgia State University. The technical advisor is Judith Greenberg, Ph.D. and Janet S. St. Lawrence, Ph.D. from the Behavioral and Interventions Branch.

Duration: This two-year study began in September 1999 and was completed in 2001. Final manuscript preparation is underway.

Source of Funds: DSTDP

Budget: \$108,592

◆ Gonorrhea Community Action Project Summary (GCAP - Phase II)

Intent: This project evaluates four multi-level interventions designed to increase healthcare seeking and improve care provision in a multi-site study. Each site has targeted the interventions to their site-specific parameters while maintaining a common protocol for theoretically derived cross-site comparisons. A provider-level intervention evaluates the impact of skill training and information provision in a variety of delivery formats and assesses the impact of each format on providers' STD screening and sexual history assessment. An STD clinic-based intervention is evaluating a three intervention designed to increase return rates for re-infection screening by clinic attendees diagnosed with gonorrhea or chlamydia. A community-based individual intervention is evaluating the impact of peer-facilitated sessions that include role-playing, information, and techniques to increase health care seeking (including STD screening) by adolescents and will evaluate their initiation of preventive health care. A fourth intervention takes place at the community level to promote preventive health care as a community value and will be evaluated via street intercept interviews.

Implications for STD Program Operations: GCAP has incorporated program elements throughout the project. Collaborators include three Departments of Health as well as several program-focused community-based organizations. The act of conducting the research in GCAP builds program capacity within these organizations. Moreover, the structures and breadth of the interventions provide programmatic information for a wealth of organizations seeking to promote health-care seeking.

Locations: Prince George County, MD (Academy for Educational Development); New York City, NY (Columbia University); Long Angeles, CA (California State University at Long Beach)

PI's: Susan Middlestadt, Ph.D. (Academy for Educational Development); Nancy VanDevanter, Ph.D. (Columbia University); and Kevin Malotte, Ph.D. (California University at Long Beach). Project officer is Matthew Hogben, Ph.D. (DSTD, BIRB). Technical advisors are Willo Pequegnat, Ph.D. (NIMH) and Janet S. St. Lawrence, Ph.D. (DSTD, BIRB), and Tom Gift, Ph.D. (DSTD, HSREB).

Duration: 10/1/98 – 9/30/02

Source of Funds: DSTDP and NIMH

Budget: \$1,500,000 in Year 3 of second phase (\$400,000 contributed by NIMH)

◆ Evaluation of Case Reporting and Partner Notification (PN) for Sexually Transmitted Diseases (STDs) in the United States (Phase I Methodological Study)

Intent: The purpose of this study is to conduct a systematic evaluation of methods to survey health care providers from a broad spectrum of practice settings in urban, suburban, and rural areas with high and low prevalence of syphilis, gonorrhea, chlamydia, and Human Immunodeficiency Virus (HIV) to determine when, under what conditions, for which diseases, how, and for which patients practitioners notify and/or treat the sexual partners of patients who are diagnosed with STDs. A pretest of the survey conducted to assess whether a return rate of >80% was attainable was completed November 1, 1998 and evaluated the optimal combination of delivery method and incentive payment to yield the desired response rate. Results were as follows:

Incentive Level	Regular Mail	FedEx
No incentive	23.8%	25.0%
\$15 Incentive	63.3%	75.6%
\$25 Incentive	56.3%	80.9%

Implications for STD Program Operations: Not applicable.

Locations: Battelle Institute, Seattle, WA

PI: Danuta Kasprzyk, Ph.D. and Daniel Montano, Ph.D. (Battelle Institute). BIRB technical adviser is Janet S. St. Lawrence, Ph.D.

Duration: Completed in FY 1998

Source of Funds: DSTDP

Budget: \$102,846

◆ **Evaluation of Case Reporting and Partner Notification (PN) for Sexually Transmitted Diseases (STDs) in the United States (Phase II)**

Intent: A nationally representative sample of 7,000 eligible physicians from the AMA master list completed a survey assessing their clinical, reporting, and partner services practices. Seventy percent (70%) of the surveys were returned and data analysis is completed for the primary paper. Findings indicate that STD screening, use of newer diagnostic tests, disease reporting, and partner follow up are all sub optimal, particularly in the private sector, despite substantial STD care that is taking place in the private health care sector.

Implications for STD Program Operations: This national randomized survey of community-based physicians provides program-relevant information regarding current screening, diagnostic, case reporting, and partner management practices for chlamydia, gonorrhea, syphilis, and HIV in the US.

Locations: Battelle Institute; Seattle, WA

PI: Danuta Kaprszyk, Ph.D. and Daniel Montano, Ph.D. (Battelle Institute); BIRB technical advisor is Janet S. St. Lawrence, Ph.D.

Duration: 1998 – 2001. Manuscript in press at American Journal of Public Health.

Source of Funds: DSTDP

Budget: \$500,000

◆ **The Sexual Internet: A Newly Emerging Risk Environment**

Intent: The Internet is a newly emerging risk environment for the transmission of sexually transmitted diseases and HIV. Individuals use the Internet to seek sexual contact from partners who may live anywhere in the United States or beyond. The SexNet project is designed in three parts. Part One comprised a thorough, qualitative study of Internet venues designed to allow users to initiate sexual contacts. Collectively, these sites — mostly chat rooms and bulletin boards — are dubbed ‘the Sexual Internet.’ Part Two of the project comprises an online survey designed to assess the incidence and risk of Internet-initiated sexual contact, as well as psychosocial variables and measures of non-Internet sexual contact. Finally, Part Three of the project is a survey of HIV Counseling and Testing clients, which assesses the incidence of Internet-initiated sexual contact. In addition, clients are asked to report the number of Internet partners and other information regarding the use of the Internet to initiate sexual contact. All of the survey information can be linked to the standard risk assessment performed by HIV Counseling staff, and to the patient’s HIV status. It is hypothesized that the three parts of this project will establish that the Internet is a newly emerging risk environment for the transmission of sexually transmitted diseases, including HIV.

Implications for STD Program Operations: The Internet project has broad implications for program operations. For example, the Internet may be used by public health officials to perform community assessments of environments used for anonymous sex. In addition, the use of the Internet to find anonymous sex partners must be considered as a new risk behavior for STDs. Health officials should assess clients’ use of the Internet for this purpose when performing STD case

interviews. Finally, the Internet has become a new and necessary means of partner notification, as more and more syphilis patients report having met sex partners in chat rooms and other Internet sites.

Location: Denver Department of Health and Hospitals, BIRB

PI: Sheana Bull, Ph.D., M.P.H., Denver Department of Health and Hospitals; Mary McFarlane, Ph.D.. (DSTD, BIRB)

Duration: 10/1/98-09/30/99

Source of Funds: DSTDP

Budget: \$70,998

◆ **Development, Delivery, and Evaluation of an Audio-CASI Sexual History Interview in Clinical Settings.**

Intent: Providers involved with STD care often report that they are uncomfortable and unsuccessful in obtaining sexual histories from patients, particularly when the patients are adolescents. Because recent studies indicate that audio computer-assisted self-interviewing (A-CASI) may be a mechanism for overcoming discomfort with this process and reducing time demands on providers. A-CASI sexual histories will be compared with sexual histories obtained by providers in order to determine whether A-CASI provides a more complete picture of the patient's sexual health and increases screening. In addition, A-CASI will provide emotion management, behavior management, or both. It is hypothesized that patients who are interviewed using an A-CASI system with both behavior management and emotion management will be more satisfied with their clinical experience than patients who are interviewed by physicians or nurses regarding their sexual history.

Implications for STD Program Operations: This project tests the use of an audio computer-assisted self-interviewing program (A-CASI) for obtaining sexual histories from patients in STD clinics and in primary care clinics. The goal is to determine whether using A-CASI to gather sensitive information improves patient satisfaction with health-care experiences. Program officials can use this information to help gather sensitive data in clinics and during interviews.

Location: Indiana University School of Medicine

PI: J. Dennis Fortenberry, Ph.D., Indiana University and Mary McFarlane, Ph.D. (DSTD, BIRB)

Duration: 10/1/98-09/30/01

Source of Funds: DSTDP

Budget: \$750,098

◆ **Evaluation of Factors Influencing Health Risks, Prevalence of STDs, and Health Seeking Behavior among Female Sex Workers and Their Clients in Moscow**

Intent: Formative research was conducted at multiple levels to develop a better understanding of commercial sex work (CSW) in Russia and to identify points-of-entry for prevention interventions with CSWs and their clients. Qualitative interviews were implemented at four levels (a) societal systems such a health care, criminal justice, ministry of internal affairs); (b) community gatekeepers such as policemen, physicians, (c) women who trade sex for money, drugs, or other commodities; and (d) men who represent clients from a variety of social, economic and cultural groups. These interviews accumulated needed information about CSWs and men's risk and protective behaviors, knowledge of STD/HIV, prior history of STDs, sex work in the context of economic and social upheaval, health care seeking behaviors of CSWs, perceived consequences of untreated STDs, perceived risk, symptom recognition, stigma, patterns of prostitution, drug and alcohol use, and self treatment for STDs.

2. Based upon the qualitative findings, a survey instrument was constructed and a cross sectional sample in Moscow is being enrolled to complete the survey interview and provide a biological specimens to assess STD prevalence. Results and treatment will be available free of charge at the Russian Association Against STDs (SANAM) clinic for all participants.

3. In the final stage, a model CSW clinic will be established and evaluated. After CSWs initial free consultation with the SANAM clinic, the impact of having retooled the clinic to include education, risk reduction counseling, partner management, condom distribution, and HIV testing will be assessed in a longitudinal cohort.

Implications for STD Program Operations: Syphilis is increasing at epidemic rates in Russia. This project is evaluating the organizational pattern of commercial sex work, structural patterns contributing to HIV/STD transmission, and differential morbidity rates in distinct population segments. Ultimately, the results will enable the Ministry of Health to better tailor health care delivery to the populations with the highest syphilis prevalence.

Location: Moscow and Saratov, Russia

PI: Caroline Ryan, M.D., (Office of Director-DSTDP); Sevgi Aral (Office of Director-DSTDP); Janet S. St. Lawrence, Ph.D. (DSTD, BIRB); Ana Shakarisville, MD and Kathleen Parker, MA (Office of Director – DSTDP)

Duration: 4/1/99-9/30/01

Source of Funds: USAID

Budget: \$385,000 total

♦ WINGS: Women in Group Support

Intent: The WINGS Project, a collaboration between DSTDP and DHAP and three schools of public health, was a randomized trial of a skill-building intervention for increasing condom use in a sample of women at high risk for sexually transmitted diseases. Participants were recruited from varied sources in Baltimore, MD, New York City, and Seattle, WA. The intervention consisted of a 6-session group intervention focusing on condom and communication skills. Baseline, 3- and 6-month interviews were conducted with all participants. The outcome analysis evaluated the effectiveness of the two strategies—communication and condom skills training—for increasing condom-protected sex in a sample of 510 women aged 17 to 61. WINGS demonstrates that condom skills training can increase protected sex for a heterogeneous group of women, and that booster sessions may need to be incorporated in such interventions.

Implications for STD Program Operations: Findings indicated that condom-skills training increased condom skills and protected sex for participants as a whole and for 6 subgroups: older and younger women, women with a single partner and with multiple partners, and women with and without a history of childhood sex abuse. Findings from the control group suggested that participation in even a brief condom skills demonstration might increase condom skills. Such demonstrations could be easily incorporated into a variety of programs including the STD clinical setting. The effectiveness of communication-skills training was less generalizable and the time devoted to teaching such skills was considerably greater.

Locations: University of Washington, Columbia University, Johns Hopkins University

PI: Virginia Gonzalez, Ed.D., Nancy VanDevanter, Ph.D., and David Celetano Sc.D., M.H.S. Project Officer Judith Greenberg, Ph.D., (DSTD,BIRB). Technical Advisor is Michael Hennessy, Ph.D. (DSTD, BIRB).

Duration: 1993-1998

Source of Funds: Division of HIV Prevention. Funding period completed 9/30/98. Manuscript production is ongoing.

Budget: \$2,877,252

♦ **Peer-to-Peer: HIV/STD Risk Reduction Video Based Intervention**

Intent: Danya International, Inc., has produced a video and facilitator's guide on STD prevention for African American adolescents. Funded through the Small Business Innovation Research Program, with technical assistance from BIRB, the product is geared to young, African American teens and youth are actively involved in developing and producing the video. The goals are to: provide factual information about STDs in general and Chlamydia in particular; and to emphasize and model safe behaviors such as how to correctly use a condom, visit a doctor for STD counseling and testing, and talk to friends about how best to protect yourself from STDs, HIV, and pregnancy. It will introduce difficult topics such as how to say 'no' to sex and facilitate discussion between young people, their friends, and trusted adults about STDs. Currently in Phase II, the final product is being evaluated in a school setting.

Implications for STD Program Operations: Has created and is evaluating a prevention video for young, African American teens that could be incorporated into the clinical setting as well as schools, community programs, and other youth venues.

Locations: Danya International, Inc., Silver Spring, MD

PI: Kathleen Ethier, Ph.D., CDC Project Officer.

Duration: 1999- 2002

Source of Funds: Small Business Innovations in Research, Phase II

Budget: \$693,787

♦ **Computer Aided Visual Case Analysis (CAVCA) Software for Syphilis Prevention**

Intent: The objective of this project was to develop a tool to assist disease intervention specialist (DIS) in the prevention of syphilis. Phase I of the CAVCA project determined the feasibility of developing a computer version of the syphilis visual case analysis methodology. In Phase II, CAVCA was beta tested, and an evaluation of the software was initiated. The final product will have VCA and social networking capabilities. National availability is scheduled for Fall 2002.

Implications for STD Program Operations: CAVCA can assist the DIS in their syphilis case management activities, and program managers in the supervision of DIS activities. The software may also be useful in identifying areas to target interventions.

Locations: Camp-Blair Consulting, Inc., Alexandra, VA

PI: Samantha Williams, Ph.D., CDC Project Officer.

Duration: 1999 – 9/30/2002

Source of Funds: Small Business Innovations in Research (SBIR)

Budget: Phase I - \$60,000; Phase II - \$675,673

◆ **Northwestern Juvenile Project**

Intent: Adolescents with incarceration experience are known to be at risk for many of the diseases studied by CDC researchers (e.g., STDs, HIV, injury, and unintended pregnancy). The NU Juvenile Project recruited over 1,000 adolescents from the Cook County Juvenile Detention Center. Adolescents were interviewed to assess psychological disorders, as well as history of violence, sexual abuse, drug and alcohol use, and risk factors for STDs, HIV, and pregnancy. Adolescents will be re-interviewed every 3.5 years, with a sub-sample re-interviewed every 6 months, until they reach the age of 18. The purpose of this longitudinal study is to determine service needs and intervention requirements for this population.

The baseline sample for this study includes 1832 delinquent youth, stratified by race (African American, non-Hispanic white, and Hispanic), age (10-13 and 14-17) and severity of charge. Researchers are interviewing youth at baseline, at three years after baseline, and at 4.5 years after baseline. In addition, a sub-sample of 1000 youths will be re-interviewed every six months after baseline. Data from these interviews will be crucial to developing behavioral interventions in this very risky population.

Implications for STD Program Operations: The Northwestern Juvenile Project is a thorough and detailed needs assessment of the population of adolescent detainees in Chicago. This needs assessment will reveal the service needs as well as the service utilization of this important population. STD officials may respond to this needs assessment by tailoring services to meet the adolescents' needs and by partnering with other services to best meet the needs of the detainees.

Location: Cook County Juvenile Detention Center, Chicago, IL

PI: Linda A. Teplin, Ph.D., Northwestern University and Mary McFarlane, Ph.D., CDC Scientific Advisor

Duration: The study is a five-year project co-funded by CDC, NIMH, NIH, Office of Research on Women's Health, NIDA, NIAAA, and OJJDP.

Source of Funds: NCHSTP

Budget: \$225,000 per year

◆ **Identifying Practices that Maximize Participation by Infected Persons and their Contacts in Partner Notification**

Intent: To identify the features of current and potential methods for PN so that locally acceptable alternatives to standard practice (where necessary) can be designed and implemented and to estimate the costs of each component of revised PN activities. Partner notification methods have been essentially unchanged for decades. Syphilis elimination will require locally tailored and extremely effective efforts at partner location and the delivery of partner treatment (to infected partners) if syphilis is to be controlled. Given the political context of syphilis control, it is also likely that tailored methods for PN will have to be developed with the cooperation of the affected community. Vignette surveys are one way to elicit the preferences of community members, STD program staff, and other public health stakeholders for potential alternative methods of PN.

Implications for STD Program Operations: Identification of practices that can assist in maximizing STD programs and DIS's partner notification efforts. Enhanced partner notification efforts can contribute to the identification, treatment, and prevention of STD cases.

Location: University of California - Long Beach

PI: Kevin Malotte, Ph.D., University of California-Long Beach; Samantha Williams, Ph.D., M.P.H. (DSTD,BIRB)

Duration: FY 1999-2000

Source of Funds: DSTDP

Budget: \$15,000

◆ **STARS (Skill Training for Assertiveness, Responsibility, & Safety) Group Intervention To Reduce Risk Behavior In Sexually Abused Girls: A Feasibility Study**

Intent: Numerous studies show that adolescent girls and women who report childhood sexual abuse (CSA) report more risky sexual behaviors than their non-abused counterparts. This feasibility study conducted with the Philadelphia Department of Health and Philadelphia Health Management Corporation focused on sexually abused girls ages 13 to 16. Objectives were to develop a small group risk reduction intervention for adolescent girls with a history of CSA.

Implications for STD Program Operations: Will create a small group risk-reduction intervention for teen girls who report a history of childhood sexual abuse.

Location: Philadelphia

PI: Kathleen Ethier, Ph.D.

Duration: October 1999 - September 2002

Source of Funds: DSTDP

Budget: \$300,000

◆ **A Community Perspective on STDs and Their Treatment**

Intent: This study characterizes knowledge and attitudes about STDs and STD treatment in communities with high STD prevalence and seeks to understand population-based information on social, economic, demographic characteristics, and treatment utilization in these communities. In this pursuit, community attitudes, general knowledge about symptoms and types of STDs, patterns of health care seeking behavior by individuals, social context factors, beliefs about STDs, risk behaviors, and response to symptoms by individuals are assessed. A two-framed data collection approach was used: community based and STD client based. This study identified characteristics that are more or less unchangeable such as social context and status variables and those that can be addressed by public health practitioners. Qualitative and quantitative responses from 397 surveys are being analyzed.

Implications for STD Program Operations: Initial findings from clinical interviews in all three clinics suggest the need for continuing education about the asymptomatic nature of STDs and the association between HPV and cervical cancer. The high percentage of clients who report prior STD infection suggest that prevention counseling needs to be strengthened.

Location: Philadelphia, PA; Bronx, NY; and Erie, NY

PI: Bruce Coles, D.O.; Lenore Asbel, M.D., and Judith Greenberg, Ph.D. (DSTD, BIRB)

Duration: FY 1996-2000

Source of Funds: DSTDP

Budget: \$150,000

♦ **Adherence To Abstinence And Condom Use Recommendations Following STD Diagnosis.**

Intent: This project is assessing whether STD patients are differentially adherent to short-term abstinence and condom use recommendations following an STD diagnosis and treatment, depending on the professional qualifications of the provider who delivers patient treatment and/or recommendations. Return visits to the clinic will assess rates of re-infection following the initial diagnosis.

Implications for STD Program Operations: This project proposes to demonstrate that short term condom use, recommended by the treating clinician as part of the treatment regimen, by males after treatment for gonorrhea or chlamydia reduces re-infection of the male and ping pong infection between him and his sex partner(s).

Location: Miami, FL.

PI: Richard Crosby, Ph.D. Nicole Liddon, Ph.D. and Fred Martich, B.S.

Duration: FY 2000 and 2001

Source of Funds: DSTDP

Budget: \$100,000

♦ **STD Screening for Homeless Persons**

Intent: Homeless persons are more likely to be substance abusers and engage in high-risk sexual behaviors (e.g., exchanging sex for drugs or money). These high-risk activities place the homeless at a greater risk for STDs. This project will examine the use of urine-based ligase chain reaction test (LCR) in screening the homeless (predominantly adolescents) for gonorrhea and chlamydia. In a partnership with The Night Ministry (TNM), an organization providing health care services to the homeless and sex workers, the Chicago Department of Health will use a mobile health unit staffed by a nurse to access three high prevalence sites per night (2 hours each site).

In addition to providing screening, both locating and descriptive information will be collected. The locating information will be used for follow-up and treatment, and the descriptive information will be used to determine the characteristics and behaviors of the homeless population that accessed TNM services by location. A total of 2,500 clients will be tested and treated, if necessary, for gonorrhea and chlamydia.

Implications for STD Program Operations: This project will demonstrate the effectiveness of the LCR urine test in screening homeless people, and the use of a mobile unit to provide STD services to hard to reach populations.

Location: Mobile unit: 3 sites in Chicago, IL

PI: Deborah Beete, M.P.H., Chicago Department of Health; Susan DeLisle, A.R.N.P., M.P.H., CDC PI; Jami Leichliter, Ph.D., CDC Scientific Advisor

Duration: 1999 through December 2001

Source of Funds: DSTDP and non-DSTDP

Budget: \$118,890

♦ **Project UNITE: Peer-driven Cluster Tracing to Identify STD/HIV in Men who have Sex with Men**

Intent: Seattle, WA has an STD clinic at an urban hospital in a community with above average HIV and gonorrhea morbidity, particularly among men who have sex with men (MSM). This project tests a program in which MSM who are diagnosed with an STD are encouraged to refer persons known to them *who they consider to be at risk for HIV/STD*. That is, the STD clinic seeks to make use of the knowledge and intuition of persons already at risk (based on their STD status) to uncover new cases of STD and HIV. The means through which this case finding is encouraged are a brief behavioral intervention and case-finding strategy session as well as a monetary incentive for each referral. The applicant plans to evaluate the cost-effectiveness of this approach to case finding against the traditional approach in which professional staff elicit names of sex partners of infected persons and attempt to trace those partners. This application is rooted in a network approach to STD/HIV control, using convenient network components (i.e., MSM with STD in an STD facility) to induce the remaining elements of the network and thus the remaining STD and HIV within that network.

Implications for STD Program Operations: If successful, implementation of the experimental protocol will reduce the burden on public clinics and local DIS as well as provide continually updated information of the prevalence and route of spread of STD and HIV. The project collaboration with community partners should also encourage links between public health providers and non-profit client-centered operations.

Location: Seattle, WA

PI: Matthew Golden, M.D. (Harborview Medical Center); Matthew Hogben, Ph.D. (DSTD, BIRB). Technical assistance from Tom Gift, Ph.D. (DSTD, HSREB).

Duration: 10/1/01 – 9/30/02

Source of funds: DSTDP

Budget: \$149,593

♦ **MISTERS Project: STD Intervention for Men Newly Released from Jail**

Intent: Little has been published about the sexual behaviors and resultant STD infection in men released from short-term jail incarceration. This project offers the opportunity to test the feasibility of a theory driven, multi-session behavioral intervention using a local community-based organization (CBO) that is already working with this population. The goal is to develop an intervention to reduce STD acquisition and transmission that can be included in post-detention services programs.

Implications for STD Program Operations: STD interventions for men newly released from jail would impact the rates of STDs among the specific population and the communities to which the men are released.

Locations: Atlanta, GA.

PI: STAND, Inc. and the GA Department of Health. Project Officer: Samantha Williams, Ph.D., CDC Project Officer.

Duration: 10/1/02 – 9/30/04

Source of Funds: DSTDP

Budget: \$450,000

◆ **STD Screening Program for Youth in Detention Facilities**

Intent: This screening program is being carried out in Jackson, Mississippi. Youth in two correctional facilities will be counseled, screened for sexually transmitted diseases, and treated. All youth detained in the facilities at the onset of the program as well as those newly admitted to the facility will be tested for CT, GC, Syphilis, and HIV. Screening services will include pre and posttest counseling. Treatment will be given to all youth who test positive.

Implications for STD Program Operations: Results of this program would demonstrate the importance of making STD screening a part of standard care for incarcerated youth.

Locations: Mississippi

PI: Mississippi Department of Health. Project Officer: Samantha Williams, Ph.D., CDC Project Officer.

Duration: 10/1/01 – 9/30/02

Source of Funds: DSTDP

Budget: \$51,000

◆ **Psychosocial Implications of High Risk Human Papillomavirus (HR-HPV) Diagnosis: Formative Research**

Intent: The intent of this project is to assess women's knowledge, attitudes and beliefs about HPV, as well as the psychosocial impact of an HPV diagnosis on women and their partners.

Implications for STD Program Operations: Outcomes from this project can be used to inform the development of medical management and psychosocial educational materials for health care practitioners who provide care for women diagnosed with HR-HPV and their partners.

Location: Tampa, Florida

PI: Robert McDermott, Ph.D., Ellen Daley, PhD (University of South Florida); Mary McFarlane, Ph.D. (Project Officer)

Duration: 10/01/01 - 09/30/04

Source of funds: DSTDP

Budget: approximately \$700,000

OTHER BIRB RESEARCH PROJECTS

◆ **Repeat Infections, Behavioral Risk Factors, and Clinician Counseling: Findings from Philadelphia STD Clinics**

Intent: Patient records from Philadelphia STD clinics between 1994 and 2000 were reviewed to identify patients with a repeat (between 30 days - 2 years) gonorrhea and chlamydia infection. These data were matched with reports of behavioral sexual risk factors and clinician counseling messages received (e.g., partner notification, contraception, drug use) to identify predictors of repeat infections.

Implications for STD Program Operations: Identifying predictors of repeat infections can inform programs to reduce them in STD clinic clients.

Location: Philadelphia Department of Public Health, Philadelphia, PA

PI: Martin Goldberg B.S., Jami Leichliter Ph.D., and Nicole Liddon Ph.D.

Duration: Began 9/00 ongoing until termination

♦ Philadelphia Behavioral Assessment

Intent: Rapid Assessment Procedures (RAP) developed by S. C. M. Scrimshaw were adapted and piloted as a means to assist program areas by assessing factors contributing to increased disease rates and make recommendations to state or local health departments. This process was conducted in Philadelphia following an outbreak of syphilis in gay men, many of whom were HIV+. Findings were shared with program consultants and the local health department and recommendations were made collaboratively to improve STD prevention and treatment.

Implications for STD Program Operations: This project demonstrates the practical value of RAP in conducting rapid assessments and providing recommendations. Findings and recommendations have been useful to the program area to identify additional avenues to address STDs in this population. This project demonstrates the efficacy of RAP for identifying the needs of this hard to reach populations, and improving prevention and treatment efforts.

Location: Philadelphia, PA

PI: Frederick Bloom, Ph.D. (DSTD, BIRB)

Duration: 1999

♦ Los Angeles County Behavioral Assessment

Intent: Rapid Assessment Procedures piloted in the Philadelphia Behavioral Assessment were implemented in Los Angeles County in response to an outbreak of syphilis in gay men, many of whom were HIV+. BIRB scientists conducted ethnographic interviews and observations. Findings were shared with program consultants and the local health department and recommendations were made collaboratively to improve STD prevention and treatment. Additional technical assistance was provided over the following year and on an ongoing basis to assist with implementation of recommendations.

Implications for STD Program Operations: This project provided valuable information for the program area to support implementation of structural interventions including use of a community coalition to improve integration of private and public STD service provision to gay men in Los Angeles, use of existing liaisons with HIV providers to improve STD prevention and treatment for HIV+ gay men. This project demonstrates the efficacy of RAP for assessment and recommendation of interventions, and technical assistance in implementation of interventions to improve prevention and treatment efforts for this population.

Location: Los Angeles, CA

PI: Frederick Bloom, Ph.D. (DSTD, BIRB)

Duration: 2000 – ongoing

◆ **Seattle Rapid Assessment of STD Increases in MSM**

Intent: Rapid Assessment Procedures were implemented in Seattle/King County in response to an outbreak of syphilis in gay men, many of who were HIV+. BIRB scientists in collaboration with DHAP and PDSB field staff conducted ethnographic interviews and observations. Findings were shared with program consultants and the local health department and recommendations were made collaboratively to improve STD prevention and treatment.

Implications for STD Program Operations: This project provided valuable information for the program area to support implementation of structural interventions. This project demonstrates the efficacy of RAP for assessment and recommendation of interventions providing a foundation for the local health department to implement interventions to improve prevention and treatment efforts for this population.

Location: Seattle, WA

PI: Frederick Bloom, Ph.D. (DSTD, BIRB)

Duration: February - September, 2001

◆ **Los Angeles Rapid Assessment of STD Increases in Latinos**

Intent: Rapid Assessment Procedures were implemented in Los Angeles County in response to persistent increases in syphilis in Latinos in LA County and responding to findings from the Los Angeles County Behavioral Assessment. Scientists and fellows from BIRB conducted ethnographic interviews and observations. Findings are being analyzed and will be shared with program consultants and the local health department and recommendations will be made collaboratively to improve STD prevention and treatment. Additional technical assistance will be provided as needed to assist with implementation of recommendations.

Implications for STD Program Operations: This project will provide valuable information for the program area to support implementation of interventions to improve STD prevention and treatment of Latinos in LA County. This project will demonstrate the efficacy of RAP for assessment and recommendation of interventions, and technical assistance in implementation of interventions to improve prevention and treatment efforts for Latinos.

Location: Los Angeles, CA

PI: Frederick Bloom, Ph.D. (DTSD, BIRB)

Duration: October 2001 - ongoing

◆ **The Health Practices Survey for Women**

Intent: This survey of low-income women attending WIC clinics in Missouri assessed the STD/HIV prevention needs of 2256 respondents and has resulted in three published manuscripts and an article in the New York Times.

Implications for STD Program Operations: Low-income women experience multiple and diverse barriers to condom use and seeking care for a suspected STD.

Location: Missouri Department of Health

PI: Richard A. Crosby, Ph.D.

Duration: 10/97 - 12/98

♦ **Secondary Analysis: National Sexual Health Survey**

Intent: Working with Joe Catania, Ph.D. at CAPS in San Francisco, analyses of rural respondents (n= 1989) were compared against urban peers' condom use behaviors on a national health survey. Manuscript is under review by *Journal of AIDS*.

Implications for STD Program Operations: HIV prevention efforts are needed in rural as well as urban areas.

Location: Center for AIDS Prevention Studies, UCSF

PI: Joe Catania, Ph.D., University of California at San Francisco and Richard A. Crosby, Ph.D.

Duration: 6/97 - 12/98

♦ **Secondary Analysis: National Longitudinal Survey of Adolescent Health**

Intent: Data from Wave 1 assessed predictors of subsequent infections with sexually transmitted diseases identified by wave 2 using logistic regression analyses. Manuscript published in *American Journal of Preventative Medicine*.

Implications for STD Program Operations: Adolescents with a history of STD are highly likely to have a subsequent STD.

Location: University of North Carolina, Chapel Hill

PI: Richard A. Crosby, Ph.D., Jami Leichliter Ph.D, and Robert Brackbill, Ph.D.

Duration: 10/98–3/00

♦ **Replication of Foxman, Aral, & Holmes (1998)**

Intent: This study will be replicating Interrelationships among douching practices, risky sexual practices, and history of self-reported STD in an urban population using a rural population.

Implications for STD Program Operations: Interrelationships among douching practices, risky sexual practices, and history of self-reported STD may also exist within rural populations.

Location: Rural Center for AIDS/STD Prevention at Indiana University

PI: William L. Yarber, PhD and Richard Crosby, Ph.D.

Duration: Ongoing until termination

♦ **Secondary Analysis: Project Respect**

Intent: A portion of the baseline and follow-up questionnaires was analyzed to assess methods other than male condom use that women employ in their efforts to prevent STD infection.

Implications for STD Program Operations: Counseling can reduce clients' misconceptions about STD prevention.

Location: Centers for Disease Control and Prevention

PI: Richard A. Crosby, Ph.D. and Mary Kamb, M.D.

Duration: 10/98 – 03/00

♦ **Evaluation of three intervention models' effectiveness in lowering STD risk behavior of substance dependent adolescents**

Intent: Substance dependent adolescents were randomly assigned to three intervention conditions based on the IMB model of Fisher & Fisher (1992). Each youth participated in 12 sessions of either a Health Education intervention (I), Health Education plus Behavior Skills Training (I + B), or the combined program supplemented with a risk sensitization component (I+M+B). The risk sensitization component was presented in the 10th week and involved a morphed image of the participant that displayed how he or she might appear in late stages of AIDS and discussion about the emotional impact of the image. Youth were followed for one year after discharge from drug treatment facilities. Data analyses are completed and the manuscript is in preparation.

Implications for STD Program Operations: This project is assessing potential risk reduction methods for a group of adolescents at very high STD risk.

Location: State of Mississippi

PI: Janet S. St. Lawrence, Ph.D.

Duration: 1996 - 2002

Funding: NIDA

♦ **Development of an instrument to measure perceived barriers to condom use**

Intent: Perceived barriers are a key theoretical construct in health behavior conceptual models, but there is currently no standardized instrument to assess this construct. An instrument was developed and assessed for its factor structure, validity, and reliability in a sample of minority woman and cross validated with a second sample from a different state.

Implications for STD Program Operations: Develop measurement instruments with established validity and reliability that can be available to STD programs.

Location: Mississippi and Tennessee

PI: Janet S. St. Lawrence, Ph.D.

Duration: 1996-1998

Funding: NICHD

♦ **Using Condoms to Prevent the Transmission of Sexually Transmitted Infection: Who Behaves According to the Message?**

Intent: Unlike most other contraceptives, male condoms are protective against both bacterial and viral STDs and with perfect use, condoms would be both an excellent contraceptive and barrier to disease transmission. However, the failure rate for condoms as a contraceptive is relatively high, probably because men typically do not use condoms correctly and consistently. A contraceptive “trade-off dilemma” results when women have other contraceptives available that they can control directly, but these methods offer little or no protection from disease transmission. The public health message is

a recommendation to use two methods, one for contraception and the other for disease prevention. The National Survey of Family Growth, a periodic survey of fertility and family formation, permits a thorough understanding of the issue of condom use for disease prevention. First, it includes a series of questions specific to using condoms consistently for disease prevention in the past 12 months, reasons why condoms were not used, and using condoms for disease prevention with multiple sex partners. Second, up to four contraceptive methods are elicited so that women can be grouped into categories of multiple method users. Third, a parallel data set contains contextual data about the area in which the respondent resides. The primary intent of this project is to model contextual and individual influences on women choosing to use male condoms for disease prevention, especially women who also use long lasting or oral contraceptives.

Implications for STD Program Operations: The contexts in which women live influence condom use.

Location: DSTDP, Atlanta; National Center for Health Statistics, Hyattsville

PI: Robert Brackbill Ph.D and Linda Piccinino

Duration: 6/1/98 to 12/31/99

◆ **Maricopa Rapid Ethnographic Community Assessment Process**

Intent: A core curriculum and manual developed for the RECAP was piloted in Maricopa County, Arizona in response to elevated syphilis prevalence. CDC personnel trained individuals from the Maricopa Health Department and selected CDC employees to conduct the RECAP. Progress and activities of the trainees and new trainers following training were monitored. Data analysis and a report of the RECAP outcomes will be produced. The manual will then be revised for dissemination through Prevention & Training Centers.

Implications for STD Program Operations: This project demonstrates the practical value of RECAP when accompanied by TA from a social or behavioral scientist experienced in applied ethnographic research. Recommendations were made based on RECAP findings for Maricopa County. Implementation of recommendations followed up with site visits and an ongoing relationship was developed between Maricopa County Department of Public Health and the CDC scientist. Changes have resulted in increased screening and case finding for syphilis and improved access to services for selected target populations. This project demonstrates the efficacy of RECAP coupled with scientific TA for identifying the needs of hard to reach populations, improving screening efforts, and improving patient access to care.

Location: Maricopa County Health Department (Arizona) & BIRB

PI: Frederick Bloom, Ph.D. (DSTD, BIRB); Jo Valentine M.S.W (DSTD, ESB); Molly Parece M.P.H. (DSTD, PDSB); Madeline Sutton, M.D. (DSTD, ESB); and Maureen Sinclair, M.P.H. (DSTD, BIRB)

Duration: 9/15/98-ongoing

◆ **Urine Screening in Juvenile Detention Centers**

Intent: Adolescents entering a juvenile detention center in Cook County have been screened for gonorrhea and chlamydia. Initially, rates of gonorrhea and chlamydia were quite high; however, due to intensive efforts to locate and treat these adolescents both in and out of the detention center, rates seem to be decreasing over time. This screening and treatment program is an example of the type of effort needed to decrease rates in the high-risk, adolescent population. As screening continues, the representatives of the Behavioral Interventions Research Branch will work with the Program Development Support Branch and with the state and local health departments to develop a brief behavioral risk survey for these adolescents. By adding behavioral data to an existing screening program, we can more successfully design behavioral interventions for implementation in this community. The combination of a screening and treatment program

with a behavioral intervention will become a potent tool for reducing the STD rates in the high-risk, adolescent population.

Implications for STD Program Operations: This project reveals that youth in juvenile detention centers are in need of sexual health education programs. To begin to develop such programs, Chicago Department of Public Health has implemented a Needs Assessment that asks juveniles about knowledge, attitudes, and behaviors regarding STDs. Other local health departments can take the information gathered in Chicago and apply it to their own juvenile detention centers and other correctional facilities.

Location: Cook County Juvenile Detention center

PI: Jami Leichliter, Ph.D. (DSTD, BIRB), Mary McFarlane, Ph.D. (DSTD, BIRB), Steve Middlekauff, B.S, Rich Voigt, M.A, Janet S. St. Lawrence, Ph.D. (DSTD, BIRB), Dawn Broussard, M.P.H (Chicago), and state and local health departments in Cook County.

Duration: 1999

♦ Methods of Technology Transfer to STD Field Staff

Intent: Current interviews with STD program consultants as well as feedback from the 1999 DSTDP Research Programs Review, have identified technology transfer as a major issue. Moreover, we know very little about the types of technical information and venues for technology transfer that are being accessed by field staff in STD clinics and the perceived usefulness of this information.

Research Questions: 1) What specific Division informational publications do program managers and DIS use and how useful do they perceive these? 2) What other sources do program managers and DIS rely upon for technical information (i.e., conferences, journal articles, program consultants from CDC) and how useful do they perceive these? 3) What is the best way for the Division to transfer technology to staff in the field?

A brief close-ended survey will be mailed to a sample of STD Program Managers and DIS (both federal and state) with a small telephone sample to estimate method bias. The sampling scheme will include a cross-sectional representative sample of all regions. Predictive variables include the locality of STD programs, demographics of respondents and clinic caseload. The outcome will be preferred sources of technology transfer.

Implications for STD Program Operations: Provides information on Internet access and its use by the DSTD field staff, their access to and use of certain Division and journal publications, and guidance on the best ways to get information, especially behavioral science information, to federal assignees in the field.

Location: STD Programs Nation-wide

PI: Judith Greenberg, Ph.D. (DTSD, BIRB) and Belinda J. Abbruzzese, M.P.H. (DSTD, BIRB)

Duration: 1999

♦ Women's Condom Use Strategies At The Bridge To Respect

Intent: This project will assess the personalized risk reduction strategies of homeless and medically under served women to estimate the actual efficacy of their strategies.

Implications for STD Program Operations: The Bridge to Respect project is an ongoing program evaluation of an HIV/STD risk reduction intervention funded through DHAP/PERB. The research contribution from this condom use strategies component will be applied throughout the risk reduction program to refine its effects.

Location: Brooklyn, NY

PI: Kelly Bartholow M.P.H. (DHAP, PERB) and Matthew Hogben Ph.D. (DSTD, BIRB). Technical Advice from Richard Crosby, Ph.D. (DSTD, BIRB).

Duration: FY 2000-2002

◆ **Designing STD Prevention Programs To Maximize Participation**

Intent: Much of the formative research used to design STD programs focuses on identifying manipulable attitudes that are predictive of health promotion or risk taking (e.g., self-efficacy for condom use and other psychosocial variables). Participants are rarely asked about their preferences regarding the elements of a STD prevention program. In this research, factorial survey methodology and analysis will identify which components of STD prevention programs maximize program participation by persons at risk for STDs.

Implications for STD Program Operations: Identification of strategies that can assist in maximizing STD prevention programs. Enhanced STD prevention strategies can contribute to the identification, treatment, and prevention of STD cases.

Location: Bellflower Clinic; Indianapolis, IN

PI: Samantha Williams, Ph.D. (DSTD, BIRB), Janet Arno, MD (Bellflower Clinic); and Michael Hennessy, Ph.D. (DSTD, BIRB)

Duration: FY 1999-2000

◆ **Survey of Health Department STD Partner Notification Practices**

Intent: This survey will capture the partner notification practices of the health departments with jurisdiction over the 50 highest STD morbidity areas (59 areas incorporate the 50 highest for gonorrhea, chlamydia, and syphilis), plus a random sample of 100 other health departments stratified by state. Information collected pertains to actual partner notification practices, diagnosing sites for STDs, and respondent opinions on partner notification practices.

Implications for STD Program Operations: As this is a survey of programs, the information alone will shed light on program practices and may lead to identification of areas needing resources/attention. Moreover, the survey presents an opportunity for programs to give feedback to the CDC with respect to their evaluations of the general state of partner notification.

Location: Harborview Medical Center, University of Washington, Seattle, WA.

PI: Matthew Golden, M.D. (U Washington); Matthew Hogben, Ph.D. (DSTD, BIRB)

Duration: FY 2000-2002

TECHNICAL ASSISTANCE

BIRB provides a variety of technical assistance activities, as illustrated. We want program areas to be aware of our willingness to collaborate in the conduct local assessments in response to emerging problems.

BIRB conducts rapid ethnographic assessments (RAPs) using an open-ended, unstructured, broadly exploratory approach that focuses on particular populations. Examples of how this model has been used to address STD issues for different programs includes three assessments conducted following syphilis outbreaks in gay men (many of whom were HIV+) in Philadelphia, Los Angeles, and Seattle. One was conducted as a follow up to information gleaned from the LA gay men's assessment and focused on Latino (male and female) issues related to persistently high STD rates in that population.

CDC scientists and staff conduct assessments with collaboration from the program area, and local health department (where applicable and desired). This collaboration is based on a technical assistance model, rather than a train the trainer model. In general, BIRB offers to do the bulk of the assessment work and asks the program only to provide us with time to talk with them about their needs, perceptions of existing problems, and areas/issues about which they would like to get additional information. If desired, we are more than happy to have additional ethnographers from the health department or program area and will conduct a brief training as needed to allow them to conduct interviews.

Following the assessment and debriefing with the program area BIRB scientists work with the program area, state and local health department (where applicable), program consultants in the Division's PDSB branch, and other behavioral scientists in our branch to develop recommendations. The recommendations have essentially been collaboratively developed as a structural intervention. The collaboration continues with willingness to provide assistance in implementing the recommendations. Several RAPs also have led to improving the connections between governmental and non-governmental agencies or individuals on a model of building social capital through collaborative work.

1. **New York City Department of Health:** Planning Behavioral Interventions. 1998 (Janet St. Lawrence, BIRB)
2. **New York City Department of Health:** Planning for Evaluation of the Lydia Chlamydia Campaign. 1998 (Janet St. Lawrence, BIRB)
3. **County Health Department (Arizona):** Conducting a Community Assessment for Maricopa 1998-1999 (Frederick Bloom, BIRB; Jo Valentine, ESB; Molly Parece, PDSB; Madeline Sutton, ESB; and Maureen Sinclair, BIRB)
4. **Campaign for the Mississippi Department of Health:** Evaluating a Condom Social Marketing Campaign. 1998-1999 (Janet St. Lawrence, BIRB)
5. **Innovations in Syphilis (Prevention Project):** Evaluation of the Expanded vs. Standard Case Interview. 1998-1999 (Mary McFarlane, BIRB; Emily Koumans, ESB)

6. **Chicago Department of Health:** STD Prevalence in Female Adolescents in the Cook County Predetention Center. 1999 (Mary McFarlane and Janet St. Lawrence, BIRB; Dawn Broussard, Steve Middlekauf and Rich Voigt, PDSB)
7. **Integration of STD, HIV, and Teen Pregnancy Programs.** This cross divisional activity includes: (1) an ongoing collaborative workgroup to sponsor research and a plan a national consultants meetings to integrate future programs, to restructure or modify existing programs, and to develop a set of guidelines to facilitate the integration of STD, HIV, and pregnancy prevention programs for adolescents, and (2) a separate (but overlapping) workgroup to review published literature on programs for prevention of STDs, HIV or teen pregnancy and to prepare an integrated review paper on these issues. (Kathleen Ethier and Richard Crosby, BIRB)
8. **Philadelphia Department of Public Health:** Conducting a Targeted Community Assessment. 1999 (Frederick R. Bloom, BIRB; Mary Yetter, BIRB; Kata Chillag, HSREB)
9. **STD clinic clients (Newark, NJ Health Department):** Development of a Needs Assessment Survey. 1999 (Samantha Williams, BIRB)
10. **Behavioral Risk Factor Surveillance System (CDC-BRFSS Working Group):** Revising the HIV and Sexual Behavior modules. 1999-2000 (Jami Leichliter, BIRB and Amy Lansky, DHAP)
11. **Chicago Department of Health:** STD Screening for the Homeless. 1999-2000 (Jami Leichliter, BIRB; Deborah Beete, CDOH; Steve Middlekauff, PDSB)
12. **Charlotte NC, 4/24-26/2000; Nashville TN, 5/15-19/2000; Detroit MI, 6/12-15/2000:** Syphilis Elimination Program Assessments. Assess the health department's involvement with the community, including community-based organizations, and their health education and promotion program. (Samantha Williams, BIRB)
13. **National Center for HIV, STD, and TB Prevention, CDC:** Review of missions and research and configuration of the DHAP research and surveillance branches. 1/2000 – 6/2000 (Janet St. Lawrence, BIRB)
14. **American School Health Association:** Consultation in preparation of health, mental health, and safety guidelines for schools. 2000 (Janet St. Lawrence, BIRB)
15. **MS Magazine.** One time, technical assistance/information sexual behavior questions in CDC research. 2000 (Janet St. Lawrence, BIRB)
16. **American Academy of Pediatrics.** Federal advisor to the task force from 33 organizations that is preparing for school health guidelines. Ongoing (Janet St. Lawrence, BIRB)
17. **Los Angeles Syphilis Outbreak:** Behavioral Science Consultation. Provided assistance on the Los Angeles syphilis outbreak Epi AID and made recommendations for the next-steps in the investigation and in refining intervention activities. 2000 (Rich Wolitski, Gordon Mansergh and Fred Bloom, BIRB)
18. **Washington, D.C., STD Program:** Re-designing a current client satisfaction instrument and developing a plan to administer. 2001 (Judith Greenberg, BIRB)
19. **Chicago Department of Public Health.** Consultation on reading level appropriate scales for adolescents in juvenile detention. 2001 (Kathleen Ethier, BIRB)
20. **DHAP: Review of IRB documents.** Mt. Sinai Hospital's proposed study of an intervention for sexually compulsive men and consultation on necessary revisions. 2001 (Judith Greenberg, BIRB)
21. **University of Washington Harborview Medical Center, Seattle, Washington:** Project design (behavioral component). 2001 (Matthew Hogben, BIRB)

-
- 22. **Universidad Centrale del Caribe, Bayamon, Puerto Rico:** Consultant on NIH-funded HIV central registry. 1994 - ongoing (Janet St. Lawrence, BIRB)
 - 23. **Emory University, Atlanta, Georgia.** Consultant/faculty on NIMH HIV training grant. 2001 (Janet St. Lawrence, BIRB)
 - 24. **University of Washington, Seattle:** Provided a STD seminar and met with Fellows. 2001 (Janet St. Lawrence, BIRB)
 - 25. **Jackson State University, Mississippi:** Consultation on adolescent intervention. 2001 (Janet St. Lawrence, BIRB)
 - 26. **Emory University:** Consultation on adolescent intervention. 2001 (Janet St. Lawrence, BIRB)
 - 27. **Battelle Centers for Public Health Research and Evaluation, Seattle, Washington.** Consultant on C-POL intervention in Zimbabwe. 2001 (Janet St. Lawrence, BIRB)
 - 28. **Mississippi State University:** Consultation for an NIH funded project to intervene with delinquent youth. 2001 (Janet St. Lawrence, BIRB)
 - 29. **University of Arizona:** Consultation on risk reduction research for Hispanic adolescents. 2001 (Janet St. Lawrence, BIRB)
 - 30. **Mustard Seed (a faith-based organization) Jamaica:** Provided referral to training videos or printed materials to caregivers at an orphanage in Jamaica that has started accepting HIV-positive children and need information on universal precautions. 2001 (Mary McFarlane, BIRB)
 - 31. **New Jersey Department of Health:** Provided information on pharyngeal GC. 2001. (Matthew Hogben, BIRB)
 - 32. **Massachusetts Department of Public Health:** Provided information and assistance about Sex and the Internet. 2001 (Mary McFarlane)
 - 33. **University of Washington:** Provided consultation and assistance about a plan to evaluate incentives for HIV/STD testing through mobile outreach and culturally competent community organizations. 2001 (Matthew Hogben, BIRB)
 - 34. **Zambian Ministry of Health:** Workshop on behavioral methods in public health. Lusaka, Zambia. 2002 (Janet St. Lawrence, BIRB)
 - 35. **NIMH:** Participation in Intervention Workgroup for International Multisite Trial 2000 - present (Janet St. Lawrence, BIRB)
 - 36. **University of Nebraska:** Co-Investigator on Fogarty Grant to Fund Zambian scholars for a rotation at CDC. 2001 – present (Janet St. Lawrence, BIRB)
 - 37. **Emory University Fogarty Grant:** Training of Vietnamese scholars participating in the Fogarty program. 2001 - present (Janet St. Lawrence, BIRB)
 - 38. **Jackson State University:** Consultation on NICHD research grant. 2001 - present (Janet St. Lawrence, BIRB)
 - 39. **University of Arizona:** Consultation on NIMH grant assessing the relevance of fuzzy trace theory to adolescents' decision-making. 2001 - present (Janet St. Lawrence, BIRB)
 - 40. **Ministry of Health, Uruguay.** Workshop on behavioral epidemiology, measurement, and interventions. 2000 - present (Janet St. Lawrence BIRB with Sevgi O. Aral, OD)
-

41. **Battelle Centers for Public Health and Research Evaluation:** Participation in CPOL intervention trial in 32 rural villages of Zimbabwe. 2000 - present (Janet St. Lawrence, BIRB)
42. **Ministry of Health, Russia:** Rapid assessments of commercial sex work as a contributing factor to escalating rates of STDs and HIV in Moscow and Saratov Oblast, Russia. 1998 - present (Janet St. Lawrence, BIRB with Sevgi O. Aral, OD)
43. **Emory University School of Public Health HIV/STD Training Grant:** Advisory Committee. 1999 - present (Janet St. Lawrence, BIRB)
44. **Indiana University:** Advisory Board, Adolescent Research Center. 1999 - present (Janet St. Lawrence, BIRB)
45. **University of Pittsburgh School of Medicine:** Advisory Board, Substance Abuse Research Center. 1999 - present (Janet St. Lawrence, BIRB)
46. **University of Miami School of Medicine:** Consultation on interventions for adolescents and for Haitian women. 1998 - present (Janet St. Lawrence, BIRB)
47. **DHAP:** MSM consultation. 2000 (Frederick Bloom, BIRB)
48. **DHAP:** Regional meetings on STD/HIV Prevention in MSM. 2001-2002 (Frederick Bloom, BIRB)
49. **DHAP:** YMSM Working Group. 2001 (Frederick Bloom, BIRB)
50. **Los Angeles County Department of Public Health:** MSM community Coalition. 2001 (Frederick Bloom, BIRB)
51. **Dartmouth Medical School.** Consultation for the development of a CD-ROM intervention for adolescents. 2001- present (Janet St. Lawrence, BIRB)
52. **Battelle Centers for Public Health Research and Evaluation; University of Zimbabwe, and National Institute of Mental Health.** Collaboration on the delivery of a community opinion leader intervention in 32 growth point villages located in rural Zimbabwe. 2001 – present (Janet S. St. Lawrence, BIRB)
53. **Robeson County (NC) Assessment.** Technical assistance addressing a syphilis outbreak. 2001-2002 (Janet S. St. Lawrence, BIRB with Sevgi Aral, OD and John Potterat)

POLICY DEVELOPMENT

A. Reproductive Health Guidelines

Location: Atlanta

Principal BIRB Investigators: Lisa Belcher and Judith Greenberg.

Project Period: 1997-1998

Project Description: Develop evidence-based guideline for reproductive health counseling.

B. Partner Notification Guidelines

Location: Atlanta

Principal BIRB Investigator: Beth Macke

Project Period: 1997-1998

Project Description: Develop evidence-based review of partner notification.

C. Consultation: Ministry of Health, Russia, and USAID

Location: Moscow, Russia

Principal BIRB Investigator: Janet St. Lawrence with Sevgi, Aral, Caroline Ryan, Anna Shakarishvili, and Kathleen Parker, OD

Project Period: 1999

Project Description: Conduct formative community assessment to develop recommendations for reducing STD in Moscow.

D. Consultation: Ministry of Health, Russia, and USAID

Location: Saratov, Russia

Principal BIRB Investigator: Janet St. Lawrence with Sevgi Aral, Office of the Director, DSTP

Project Period: 2000

Project Description: Conduct formative community assessment to develop recommendations for reducing STD in Saratov region.

E. Behavioral Surveillance Recommendations, NCHSTP

Location: Atlanta

Principal BIRB Investigator: Catlainn Sioneau

Project Period: 2001

Project Description: Convene and co-chair expert committee to develop recommendations for future behavioral surveillance activities in NCHSTP.

BIRB Commitment To Training

Since 1997, the following persons receiving training in behavioral sciences and behavioral science research while temporarily assigned to BIRB. All of them worked for 3 to 6 months or longer on projects related to the Branch or their personal interests.

EMPLOYEE/AFFILIATION **WHERE ARE THEY NOW?**

• PHPS Fellows

Maureen Sinclair, MPH	CDC, EPO
Tonya Lang, MPH	Dekalb County Health Dept
Michelle Mercier, MPH	
Zoe Flood, MSW	Currently assigned to BIRB
Joanna Katzman, MPH	Currently assigned to BIRB

• DSTD Fellows

Rob Pack, Ph.D.	University of West Virginia School of Medicine
Matthew Hogben, Ph.D.	CDC, BIRB (full time)
Tracey Wilson, Ph.D.	State University of NewYork Brooklyn Downstate Medical Center
Richard Crosby, Ph.D.	Emory University
Donna McCree, Ph.D.	CDC, BIRB (full time)
Nicole Liddon, Ph.D.	Currently assigned to BIRB
Karen Kroeger, Ph.D.	Currently assigned to BIRB
Catlainn Sionnean	CDC, BIRB (full time)
Kim Williams, Ph.D.	Currently assigned to BIRB
Delia Lang, Ph.D.	To be assigned in 2003

• NIH K-Awards

Lydia Shrier, MD	Harvard University School of Medicine
------------------	---------------------------------------

• Work Study Students

Misha Kilpatrick	
Robbie Wesley	
Tika Grant	CDC, BIRB and HSREB
Belinda Abbruzzese	State of Massachusetts, DOE/AIDS Program
Lisa Aenlle	Michigan State University, Medical School
Joanna Wooster	Emory University
Tricia Hall	Currently assigned to BIRB
DeKeely Hartsfield	Currently assigned to BIRB

• International Fellows

Godfrey Woelk, Ph.D.(Zimbabwe)	University of Zimbabwe School of Medicine
Sun Nyugen, MD (Vietnam)	Currently assigned to BIRB
Shenaz Kutluk, MS (Turkey)	Turkish Ministry of Health, AIDS Program

• ATPM Fellows and Interns

Serigne Ndiaye, Ph.D. Fellow CDC National Immunization Program
Peter Thomas, BS Intern Graduate School,
 University of Michigan

BIRB PUBLICATIONS

Note: BIRB author(s) and titles are highlighted in bold.

PUBLISHED IN 2001 OR EARLY 2002 OR IN PRESS

St. Lawrence, J.S., Wilson, T., Eldridge, G., Brasfield, T.L., and O'Bannon, R.E. (2001). **Reducing sexual risk behavior among low income African American women: A randomized controlled evaluation of three theoretical models.** *American Journal of Community Psychology, 29(6)*, 937-964.

A community-based sample of disadvantaged African-American women ($n = 445$) participated in one of three theoretically-driven experimental interventions based on either the theory of gender and power, social learning theory, or cognitive behavioral theory. Intervention outcomes were compared with a waiting list control condition. From baseline to post-intervention, women in the experimental interventions showed differential change on cognitive indices (knowledge and attitudes) and skill acquisition (partner negotiation skills, correct condom application, lubricant selection, and information-provision to social networks) while control participants were unchanged. Women in the three experimental interventions also completed follow-up assessments for one year following the interventions. In all three experimental conditions, condom use increased relative to the control group and there were no differences between the experimental interventions. Women who participated in one of the theoretically grounded interventions continued to increase condom use over the following year. Women entering new relationships reported significantly more condom use than did women who remained in ongoing relationships. The findings suggest that intervention models that have proven effective for women who engage in high risk behavior may be less effective for women in established relationships for whom risk is primarily derived from the extra-relationship behavior of their partners.

Bloom, F. (2001). **Changes in Perceptions of Quality of Life During the Course of HIV Infection: Gay Men's Life Story Narratives.** *Medical Anthropology Quarterly, 15(1)*, 38-57.

This manuscript reports the results of an ethnographic study designed to develop an understanding of how a cohort of gay men living with HIV infection evaluated and worked to preserve or improve the perceived quality of their lives. Themes of life story narratives were identified, each with an associated stylistic self-orientation to living with HIV infection. Changes in thematic content of a selected participant's life story narratives are discussed, demonstrating how events of his daily life are integrated into his life story narratives. Resultant concurrent shifting of themes and stylistic orientations are linked to his improved perception of quality of life.

Greenberg, J. (2001). **Childhood sexual abuse and sexually transmitted diseases in adults: A review of and implications for STD/HIV programs.** *International Journal of STD and AIDS, 12*, 777-783.

Objective: To review the literature, including findings from a recent intervention study of high-risk women, and offer suggestions for professionals working in STD/HIV prevention.

Methods: Comprehensive literature review of data on prevalence, risk factors for abuse, long-term effects of CSA on risky sexual behavior, links between CSA and adult sexual health and screening and intervention data.

Results: The literature demonstrates that a history of CSA is associated with many risky behaviors in adulthood that may lead to acquiring an STD. While a number of factors may explain this linkage, findings from a skill-building

intervention for high-risk women provide scientific encouragement to healthcare professionals working in prevention programs.

Conclusions: Because the WINGS study indicated the usefulness of a general skill-building intervention for promoting condom use with women reporting a history of CSA, even a brief skill-building session conducted during a clinic visit could be useful.

Greenberg J.B., Bloom F.R., Coles.B., Asbel. L.E., Goldberg.M., Braxton. J.R, Brackbill.R., (in press). Learning from Clients: An opportunity for sexually transmitted disease programs. *Journal of Public Health Management and Practice.*

Objective: To summarize STD knowledge, health care-seeking behaviors, and perceived advantages to seeking STD care from the perspective STD clinic clients interviewed between 1997 and 1999 in three northeastern cities.

Methods: Convenience samples of clients were recruited and interviewed by Disease Intervention Specialists in Philadelphia, The Bronx, New York, and Buffalo, New York for a total sample of 397.

Results: Over one-half reported a prior STD. Mean days delay in seeking treatment was 10.8. Reasons for delay included lack of knowledge especially about symptoms (44%) and inconvenience especially clinic hours. Major disadvantages to receiving care centered around embarrassment and stress (24%).

Conclusions: Programs need to develop more intensive counseling for repeat clients, offer more flexible hours, address sources of stress inherent in their services, and develop better marketing strategies. Successful behavioral interventions, behavioral training, and creative approaches from the popular literature may be helpful.

Risjord.M., Greenberg.J., (In Press). When IRBs disagree: A case study on waiving parental consent for sexual health research on adolescence. *IRB.*

Conclusions: The experience of the HELP study with local and federal IRBs has left us with three lessons for researchers and IRB member. The first is that “minimal risk” needs to be contextualized when applied to adolescents. Adolescents are able to engage in some, but not all, adult activities without incurring risks greater than those faced by normal adults. Whether a particular activity is minimally risky for adolescents among adolescents into account when designing the research protocol. In this case, a mechanism needed to be in place that would have strongly encouraged the adolescents to consult with trusted adults about their participation. Second, there needs to be some way in which IRBs can communicate both their recommendations and the motivating considerations to each other. Finally, the primary responsibility of an IRB is to protect research subjects, even if the necessary protections open the institution to liability. IRBs therefore need to refer issues of institutional liability to a more appropriate body.

Nancy Van Devanter, DrPH, Virginia Gonzales, EdD, Cheryl Merzel, DrPH, Nina S. Parikh, MPH, David Celantano, PhD and **Judith Greenberg, PhD** (2002) Effect of an STD/HIV Behavioral Intervention on Women's Use of the Female Condom, American Journal of Public Health, 92, (1), 109-115

Objectives. This study assessed the effectiveness of a sexually transmitted disease (STD)/HIV behavior change intervention in increasing women's use of the female condom.

Methods. A total of 604 women at high risk for STDs and HIV in New York City, Baltimore, Md, and Seattle, Wash, enrolled in a randomized controlled trial of a small-group, skills-training intervention that included information and skills training in the use of the female condom.

Results. In a logistic regression, the strongest predictors of use were exposure to the intervention (odds ratio [OR] = 5.5; 95% confidence interval [CI] = 2.8, 10.7), intention to use the female condom in the future (OR = 4.5; 95% CI = 2.4, 8.5), having asked a partner to use a condom in the past 30 days (OR = 2.3; 95% CI = 1.3, 3.9), and confidence in asking a partner to use a condom (OR = 1.9; 95% CI = 1.1, 3.5).

Conclusions. Clinicians counseling women in the use of the female condom need to provide information, demonstrate its correct use with their clients, and provide an opportunity for their clients to practice skills themselves.

Hennessy, M., Williams, S.P., Mercier, M., Malotte, K. (in press). Partner notification programs to maximize participation: a factorial survey approach. *Journal of Sexually Transmitted Diseases.*

Background and Objectives: This paper reports on research that identifies the preferences of clients and potential clients for different features of partner notification programs.

Study Design: A factorial survey investigated which aspects of current and potential PN programs increase the likelihood of cooperation. Six dimensions defined the hypothetical programs: (1) the gender, (2) the ethnicity of the person meeting with the client,(3) the location of the first meeting with the client, (4) the method of collecting data on sexual partners, (5) the contact and referral methods for partners, and (6) how infected sex partners receive medical treatment. Respondents (N=186) were recruited from a county-run STD clinic, a community clinic, and a community-based organization that primarily provided drug treatment. Each respondent evaluated five different vignettes from two different perspectives: (1) as an infected person and (2) as a sex partner of an infected person.

Results: Regression analysis of the responses showed that most experimental approaches to PN were negatively evaluated relative to the conventional program description. There were some differences between the two sets of results depending on the role of the respondent, suggesting that as a sex partner of an infected person, respondents are less concerned about confidentiality at the notification stage but more concerned about it at the treatment stage. Finally, there was no effect of the ethnic or gender match between the Disease Intervention Specialist program staff and the client; this demonstrates that professionalism and training can overcome cultural or ethnic disparities between program staff and clients.

Hogben, M. & Williams, S.P. (in press). Exploring the context of women's relationships, sexual behavior and contraceptive strategies. *Journal of Psychology and Human Sexuality.*

We explored personalized disease and pregnancy avoidance strategies of college women at a diverse, urban college. We analyzed women's contraceptive and STD/HIV-preventive sexual behaviors and relating these to their estimates and evaluations of their relationships, sexual behavior, and condom use. Women were classified as abstinent, condom-only users, contraceptive-only users, dual method users, or no/ineffective method users. These groups were matched to potential STD/HIV/pregnancy avoidance strategies. Directed contrasts in an ANOVA framework revealed that women using condoms were less invested in relationships and had more sex than women not reporting condom use. Condom users also felt more vulnerable to pregnancy. Contrary to non college-based research, however, dual method users did not differ from condom-only users in their condom use frequency. Results support message integration in campus health care facilities, as well as nearby health care organizations that serve college students.

Greenberg, J., Haecker, S., & Wooster, J. (2001). Access to science-related information by federal assignees to STD programs: Results of three surveys. Division of STD Prevention, CDC, July 2001.

A similar survey to the one distributed in October 1999 was passed out to assignees attending a special session at the 2000 National STD Prevention Conference in December 2000. 71 of those present completed questionnaires. In February 2001, a follow-up email with the survey as an attachment was sent to all 218 federal field assignees requesting that those who had not completed it at the meeting do so. This resulted in 9 additional surveys for a total of 80 or a response rate of 33%. This report compares the 1999 and 2000 responses to examine the changes once all field staff received computers and could access the Internet. On May 3, 2001 the Division's Web Master emailed a follow-up technical survey to 218 federal assignees. Email addresses were taken from the STD Field PHA's - All group in CDCs global address book as of April 24, 2001. 76 federal assignees responded out of 219 emails sent for a response rate of 34.7%.

Conclusions from this survey are that field staff have increased access to the Internet and are beginning to use it regularly, and they are requesting computer-based training in Microsoft Office products. In general, there are numerous problems in communicating with field staff by email. Recommendations are to 1) provide additional training to Federal field assignees in accessing and use of the Intranet, 2) conduct ongoing assessments of technology issues that impact access to information by field staff, 3) create a series of "tips and tricks" emails on computer issues raised by respondents or identified by the help desk, and 4) updating the field staff email list every six months.

DiClemente, R.J., Wingood, G.M., **Crosby, R.A., Sioneau, C.**, Brown, L., Rothbaum, B., Zimand, E., Cobb, B.K., Harrington, K., & Davies, S. (2001). **A Prospective Study of Psychological Distress and Sexual Risk Behavior Among Black Adolescent Females.** *Pediatrics*, 108(5): e85.

Objective: The purpose of the study was to examine the association between adolescents' psychological distress and their STD/HIV-associated sexual behaviors and attitudes.

Method: Sexually active African-American adolescent females (N=522) completed, at baseline and again 6 months later, a self-administered questionnaire that assessed sexual health attitudes and emotional distress symptoms (using standardized measures, $\alpha = .84$), a structured interview that assessed STD/HIV-associated sexual risk behaviors, and a urine screen for pregnancy.

Results: In multivariate analyses, controlling for observed covariates, adolescents with significant distress at baseline were more likely than their peers, after 6 months, to be pregnant (AOR=2.1; p=.04), have had unprotected vaginal sex (AOR=1.9; p=.02), have non-monogamous sex partners (AOR=1.7; p=.03), and not use any form of contraception (AOR=1.5, p=.06). Additionally, they were also more likely to: perceive barriers to condom use (AOR=2.2; p=.0001), be fearful of the adverse consequences of negotiating condom use (AOR=2.0; p=.0001), perceive less control in their relationship (AOR=2.0; p=.0001), have experienced dating violence (AOR=2.4; p=.04), feel less efficacious in negotiating condom use with a new sex partner (OR=1.4; p=.08), and have norms non-supportive of a healthy sexual relationship (OR=2.0; p=.0001).

Discussion: The findings suggest that psychological distress is predictive over a 6-month period of a spectrum of STD/HIV-associated sexual behaviors and high-risk attitudes. Brief screening to detect distress or depressive symptoms among adolescent females can alert the clinician to the need to conduct a sexual health history, initiate STD/HIV-preventive counseling, and refer for comprehensive psychological assessment and appropriate treatment. Among adolescents receiving STD treatment, those with even moderate emotional distress may be at heightened risk for further unhealthy outcomes. STD/HIV interventions should also consider psychological distress as one potential risk factor that may impact program efficacy.

DiClemente, R.J., Wingood, G.M., **Crosby, R.A.**, Sionean, C., Cobb, B.K., Harrington, K., Davies, S.L., Hook, E.W., & Oh, M.K. (2002). **Sexual Risk Behaviors Associated With Having Older Sex Partners: A Study Of African Black Females.** *Sexually Transmitted Diseases*, 29, 20-24.

Objective: Examine associations between having male sex partners who were typically older (by at least 2 years) and adolescent females' STD/HIV-associated sexual risk behaviors.

Design: Cross-sectional study of 522 sexually active African American adolescent females.

Setting and Participants: A volunteer sample recruited from neighborhoods characterized by high rates of unemployment, substance abuse, violence and STDs.

Main Outcome Measures: Frequency of condom use and unprotected vaginal sex with steady partners during various time periods over the past 6-months.

Methods: Adolescents completed a questionnaire and structured interview. A portion of the interviewed assessed the age difference between adolescents and their typical sex partners. Adolescents' age and their use of hormonal contraception were identified as covariates. Adjusted odds ratios (AOR), their 95% confidence intervals, and respective *P*-values were calculated to detect significant associations.

Results: Sixty-two percent of the adolescents reported their typical sex partners were at least 2 years older. These adolescents were more likely to report never using condoms during the most recent sexual encounter (AOR=2.0), during the last 5 sexual encounters (AOR=2.0) and during the past month (AOR=2.2). Similarly, having older partners was associated with greater odds of reporting any unprotected vaginal sex in the past 30 days (AOR=1.7) or the past 6 months (AOR=1.5).

Conclusion: Our findings suggest that many adolescent females have sex partners who are at least 2 years older and that the relationships dynamics of these partnerships do not favor the adoption and maintenance of STD/HIV protective behavior. Prevention programs could include training designed to help adolescent females overcome barriers to safer sex with older male partners.

Crosby, R.A., DiClemente, R.J., Wingood, G.M., **Sionean, C.**, Cobb, B.K., Harrington, K., Davies, S.L., Hook, E.W., & Oh, M.K. (2001). **Correlates of adolescent females' worry about undesired pregnancy: The importance of partner desire for pregnancy.** *Journal of Pediatric and Adolescent Gynecology*, 14, 123-127.

Objective: The purpose of this study was to determine correlates of worry about pregnancy among a high-risk sample of low-income African-American adolescent females. Specifically, we tested the hypothesis that perceived male partner desire for pregnancy and level of sexual communication would be independently associated with adolescent females' worry about becoming pregnant.

Design: A survey of sexually active African-American adolescent females, 14-18 years of age.

Setting: Recruitment was conducted in low-income neighborhoods of Birmingham, AL characterized by high rates of unemployment, substance abuse, violence, and teen pregnancy.

Participants: Adolescents (N = 522) completed a survey, face-to-face interview, and provided a urine specimen for pregnancy testing.

Main Outcome Measure: Non-pregnant adolescents, reporting steady relationships with a male sex partner (over the past 6 months), and indicating no immediate desire to become pregnant were included in the analysis (N=196). Two questionnaire items assessed level of worry about becoming pregnant.

Results: Compared to adolescent females reporting their partner did not desire pregnancy, those perceiving their partner desired pregnancy were nearly three time more likely to experience high-worry about becoming pregnant (AOR = 2.85; $P = .009$). Engaging in sex unprotected by a condom was an equally important correlate of high-worry (AOR = 2.84; $P = .013$). Level of communication between partners about pregnancy prevention was not significant.

Conclusions: Adolescent females may experience high-worry about becoming pregnant due to desires of their male partner as well as their recent sexual risk behavior.

Crosby, R.A., DiClemente, R.J., Wingood, G.M., Sionean, C., Cobb, B.K., Harrington, K., Davies, S.L., Hook, E.W., & Oh, M.K. (2001). Correct condom application among African American female adolescents: The relationship to perceived self-efficacy and the association to confirmed STDs. *Journal of Adolescent Health, 29*(3):194-199

Objective: To assess condom application ability and the relationship between perceived ability and demonstrated ability. Also, to examine the association between high-demonstrated condom application ability and recent sexual risk behaviors and laboratory-diagnosed sexually transmitted diseases (STDs) among African-American adolescent females.

Methods: A purposeful sample of sexually active African-American females ($n = 522$) completed a structured interview and provided vaginal swab specimens for STD testing. Subsequent to the interview, adolescents demonstrated their condom application skills using a penile model. A 9-item scale assessed adolescents' perceived self-efficacy to apply condoms. Sexual risk behaviors assessed by interview were noncondom use at last intercourse and the last five intercourse occasions for steady and casual sex partners as well as any unprotected vaginal sex in the past 30 days and the past 6 months.

Results: Approximately 28% of the sample tested positive for at least one STD and nearly 26% self-reported a history of STDs. Controlled analyses indicated that adolescents' self-efficacy for correct use was not related to demonstrated skill. Adolescents' demonstrated ability was not related to any of the sexual risk behaviors. Likewise, recent experience applying condoms to a partner's penis and demonstrated ability were not related to laboratory-diagnosed STDs or self-reported STD history.

Conclusions: Adolescents may unknowingly be at risk for human immunodeficiency virus and STD infection owing to incorrect condom application. Further, high-demonstrated ability to apply condoms was not related to safer sex or STDs. Reducing sexual risk behaviors may require more than enhancing adolescent females' condom application skills and may require addressing other relational skills.

Crosby, R.A., DiClemente, R.J., Wingood, G.M., Sionean, C., Harrington, K., Davies, S.L., Hook, E.W., & Oh, M.K. (2001). Psychosocial correlates of adolescents' worry about STD versus HIV infection: Similarities and differences. *Sexually Transmitted Diseases, 28*(4), 208-213.

Background: Adolescents' worry (perceived threat) of sexually transmitted diseases (STDs) and HIV infection may have different correlates. This study examined associations between selected psychosocial and behavioral constructs and adolescents' worry about STD and HIV infection.

Goal: To assess levels and correlates of worry about STD and HIV among a high-risk sample of black adolescent females.

Study Design: High-risk black females ($n = 522$), enrolled in a randomized, controlled HIV and STD prevention trial, completed a questionnaire and structured interview at baseline. Worry about STD and HIV infection, recent risk behaviors, and several measures potentially related to worry were assessed.

Results: Levels of worry for both STD and HIV were low. Recent history of STD infection was associated with STD worry (OR, 4.6) and HIV worry (OR, 2.0). Infrequent communication about sex (OR, 2.0) and low perceived ability to negotiate condom use (OR, 2.0) were related to STD worry; whereas, only partner-specific barriers were related to HIV worry (OR, 1.9).

Conclusions: Despite high risk, adolescents were generally complacent about the threat of infection with STD and HIV. Adolescents' worry about STD and HIV infection had different sets of correlates.

Sionean, C., DiClemente, R.J., Wingood, G.M., Crosby, R., Cobb, B.K., Harrington, K., Davies, S.L., Hook, E.W., & Oh, M.K. (2001). Socioeconomic Status and Self-reported Gonorrhea Among African American Female Adolescents. *Sexually Transmitted Diseases, 28*(4), 236-239.

Background: Socioeconomic status is often used to explain race differences in sexually transmitted diseases (STDs), yet the independent association of socioeconomic status and STDs among adolescents has been understudied.

Objective: To examine the associations between socioeconomic status and self-reported gonorrhea among black female adolescents, after controlling sexual risk behaviors.

Methods: Interviews and surveys were completed by 522 sexually active black adolescent females residing in low-income urban neighborhoods.

Results: Adolescents whose parents were unemployed were more than twice as likely to report a history of gonorrhea, compared with those with employed parents. Adolescents living with two parents were less likely to report a history of gonorrhea.

Conclusions: The results of this study indicate that gonorrhea is associated with low socioeconomic status among black adolescent females regardless of the level of sexual risk behaviors. Lower socioeconomic status may be a marker for risky sociosexual environments.

Crosby, R.A., DiClemente, R.J., Wingood, G.M., Sionean, C., Cobb, B.K., Harrington, K., Davies, S.L., Hook, E.W., & Oh, M.K. (2001). Correlates of using dual methods for sexually transmitted diseases and pregnancy prevention among high-risk African-American female teens. *Journal of Adolescent Health, 28*(5): 410-414.

Objective: To identify correlates of consistent dual-method use among African-American female adolescents at risk of sexually transmitted diseases (STDs) and pregnancy.

Methods: A convenience sample of 522 sexually active female teens attending adolescent medicine clinics, health department clinics, and school health classes volunteered. Recruitment sites were in low-income neighborhoods of Birmingham, Alabama. Adolescents completed a questionnaire and a face-to-face interview and provided vaginal swab specimens for laboratory diagnosis of STDs. Those reporting use of condoms and at least one other method of contraception, for each of the last five occasions they had sex were classified as consistent dual-method users. The questionnaire assessed frequency of adolescents' communication with their parents and partners about sex. The questionnaire also assessed two measures of parental supervision and adolescents' desire to avoid pregnancy. Multiple logistic regression assessed the independent contribution of each correlate of consistent dual-method use.

Results: Seventy-one adolescents (13.6%) were classified as consistent dual-method users. A strong desire to avoid pregnancy was the most influential correlate of consistent dual-method use [odds ratio (OR) = 2.3]. Adolescents reporting that their parents generally knew whom they were with (OR = 2.0) and those reporting more frequent communication with parents (OR = 1.9) were also more likely to be consistent dual users.

Conclusions: The findings suggest the need for research to examine the efficacy of interventions building an adolescent females' desire to avoid pregnancy. Study findings also suggest that interventions promoting improved parent-adolescent communication and improved parental supervision may contribute to adolescents' use of dual methods for STD and pregnancy prevention.

DiClemente, R.J., Wingood, G.M., **Crosby, R.**, Sionean, C., Cobb, B.K., Harrington, K., Davies, S.L., Hook, E.W., & Oh, M.K. (2001). **Parental monitoring: Association with adolescents' risk behaviors.** *Pediatrics*, 107(6), 1363-1368.

Context: Contemporary threats to adolescents' health are primarily the consequence of risk behaviors and their related adverse outcomes. Identifying factors associated with adolescents' risk behaviors is critical for developing effective prevention strategies. A number of risk factors have been identified, including familial environment; however, few studies have examined the impact of parental monitoring.

Objective: To examine the influence of less perceived parental monitoring on a spectrum of adolescent health-compromising behaviors and outcomes.

Setting: A family medicine clinic.

Participants: To assess eligibility, recruiters screened a sample of 1130 teens residing in low-income neighborhoods. Adolescents were eligible if they were black females, between the ages of 14 and 18 years, sexually active in the previous 6 months, and provided written informed consent. Most teens ($n = 609$) were eligible, with 522 (85.7%) agreeing to participate.

Main Outcome Measures: Variables in 6 domains were assessed, including: sexually transmitted diseases, sexual behaviors, marijuana use, alcohol use, antisocial behavior, and violence.

Results: In logistic regression analyses, controlling for observed covariates, adolescents perceiving less parental monitoring were more likely to test positive for a sexually transmitted disease (odds ratio [OR]: 1.7), report not using a condom at last sexual intercourse (OR: 1.7), have multiple sexual partners in the past 6 months (OR: 2.0), have risky sex partners (OR: 1.5), have a new sex partner in the past 30 days (OR: 3.0), and not use any contraception during the last sexual intercourse episode (OR: 1.9). Furthermore, adolescents perceiving less parental monitoring were more likely to have a history of marijuana use and use marijuana more often in the past 30 days (OR: 2.3 and OR: 2.5, respectively); a history of alcohol use and greater alcohol consumption in the past 30 days (OR: 1.4 and OR: 1.9, respectively); have a history of arrest (OR: 2.1); and there was a trend toward having engaged in fights in the past 6 months (OR: 1.4).

Conclusions: The findings demonstrate a consistent pattern of health risk behaviors and adverse biological outcomes associated with less perceived parental monitoring. Additional research needs to focus on developing theoretical models that help explain the influence of familial environment on adolescent health and develop and evaluate interventions to promote the health of adolescents.

Sionean, C., DiClemente, R.J., Wingood, G.M., **Crosby, R.**, Cobb, B.K., Harrington, K., Davies, S.L., Hook, E.W., & Oh, M.K. (2002). **Psychosocial and behavioral correlates of refusing unwanted sex among African American adolescent females.** *Journal of Adolescent Health*, 30, 55-63.

Objective: To identify psychosocial and behavioral correlates of refusing unwanted sex among African-American female adolescents. We hypothesized that greater power in relationships, less concern about negative emotional consequences, supportive family and peers, positive self-perceptions, greater perceived risk, and fewer sexual risk behaviors would be associated with increased odds of refusing unwanted sex.

Methods: Data regarding demographics, sexual behaviors, communication with parents, and psychosocial factors relevant to romantic and sexual partnerships were collected both via self-administered questionnaire and structured interview from a clinic- and school-based sample of 522 African-American adolescent females ages 14-18 in Birmingham, Alabama. Adjusted odds ratios were calculated using logistic regression.

Results: Of those who had experienced pressure for unwanted sex (n=366), 69% consistently refused to engage in unwanted sexual sex. Adolescents with high safer sex self-efficacy and low perceived partner-related barriers (i.e., concerns about partners' negative emotional reactions) to condom negotiation were over 2.5 times more likely to consistently refuse unwanted sex than were those reporting low safer-sex self-efficacy and high partner-related barriers. Adolescents who spoke more frequently with their parents about sexual issues were nearly twice as likely to consistently refuse unwanted sex than were those who spoke less frequently with their parents.

Conclusions: Sexual-risk reduction efforts directed toward adolescent females should seek to build self-efficacy to negotiate safer sex and provide training in social competency skills that may help to reduce or eliminate partner barriers to condom use. Further, sexual risk-reduction programs may be more effective if they include parents as advocates of safer sexual behaviors.

Hogben, M., St. Lawrence, J.S., & Eldridge, G.D. (2001). Sexual risk behavior, drug use, and STD rates among incarcerated women. *Women and Health, 34*, 63-78.

Objective: To present a profile of long-term incarcerated women in two southern states.

Methods: 472 women responded to interview questions assessing their arrest histories, STD rates, sexual risk behaviors, and drug/alcohol use.

Results: Lifetime sexual behaviors were risky and drug use was high: 38.9% had been told they had an STD over the course of their lifetimes. Current risk behaviors were fewer: 17.8% of incarcerated women were sexually active while incarcerated (mostly with other women), and reported drug use was low.

Conclusion: The drop in the number of risk behaviors among long-term incarcerated women presents an opportunity for risk reduction interventions aimed at post-release.

Ethier, K.A., Fernandez, M.I., Wilson, T., Walter, E., Ickovics, J.R. & Koenig, L. (in press). The Perinatal Guidelines Evaluation Project: Project Overview and Baseline Results. *Public Health Reports*.

Objective: The HIV and Pregnancy Study of the Perinatal Guidelines Evaluation Project (PGEP) is a prospective, longitudinal, multi-site study established to: (1) assess the implementation of PHS guidelines regarding the prevention of perinatal HIV transmission and (2) evaluate the psychosocial consequences of HIV infection among pregnant women. A distinctive aspect of this study is the use of an HIV-negative comparison group, matched on relevant characteristics. Here we describe the methodology and baseline characteristics of the sample.

Methods: HIV-infected (n=336) and uninfected (n=298) pregnant women were enrolled from four geographic areas: Connecticut, North Carolina, Brooklyn, NY and Miami, FL. The study included three structured face-to-face interviews from late pregnancy to 6 months post-partum for HIV-infected and uninfected women. Among the HIV-infected participants we collected additional self-reports of medication adherence, electronic monitoring of medication adherence, and medical record review.

Results: The groups were successfully matched on relevant characteristics, including risk for HIV-infection. Although there were not high rates of current drug use in either group, more than half of the uninfected women had a risky sexual partner. Baseline comparisons indicated that both the HIV-infected and uninfected women had high levels of depressive symptoms, stress and recent negative life events.

Conclusions: This study provides a unique description of the psychosocial and behavioral characteristics of a population of women about whom little is known. The results of this study suggest that HIV-infection is one of a collection of stressors faced by the women in this study.

Bull, S.S., Rietmeijer, C., & **McFarlane, M.M.** (2001). **HIV and Sexually Transmitted Infection Risk Behaviors Among Men Seeking Sex With Men On-Line.** *American Journal of Public Health, 91(6)*, 988-989.

Objective: To identify HIV/STI risk among men who use the Internet to seek sex with men (MSM) and men who use the Internet to seek sex with women (non-MSM).

Methods: An online survey of HIV/STI risk. Data from 3248 men are considered.

Results: More MSM respondents have had sex with someone they met on the Internet compared to non-MSM, and MSM was the strongest predictor of having sex with an Internet partner. MSM had more Internet partners, and more history of STI, although more MSM used a condom for their last anal sex compared to non-MSM using condoms for vaginal sex.

Conclusions: Risk behaviors were prevalent with online sex partners, illustrating the Internet can be a facilitator of HIV/STI risk. Interventions that consider online risk are needed.

Fortenberry, J.D., **McFarlane, M.M., Hennessy, M.,** Bull, S.S., Grimley, D.M., **St. Lawrence, J.S.,** Stoner, B.P., & VanDevanter, N. (2001). **Relationship of health literacy to gonorrhoea related care.** *Sexually Transmitted Infections, 77(3)*, 206-211.

Objective: To assess the relation between health literacy and receipt of a screening test for gonorrhea in the past year.

Methods: Study design was multisite, cross sectional survey of subjects enrolled from clinics, from community based organizations, and by street intercept. Data were obtained using face-to-face interview. The dependent variable was self reported receipt of a test for gonorrhea in the past year. Health literacy was measured by the Rapid Estimate of Adult Literacy in Medicine (REALM), recorded to represent 8th grade or lower reading or 9th grade and higher reading level. Statistical analyses were adjusted to account for selection bias in literacy assessment.

Results: 54% of the sample reported at least one gonorrhea test in the previous year. 65% of the sample read at a 9th grade level or higher. REALM score was moderately correlated with the respondent's years of education. After adjustment for missing REALM data, past suspicion of gonorrhea, self inspection for gonorrhea, self efficacy for care seeking, REALM score of 9th grade reading level or higher, and younger age were independently associated with gonorrhea testing in the previous year. For the average respondent, REALM reading grade level of 9th grade or higher is associated with a 10% increase in the probability of having a gonorrhea test in the past year.

Conclusions: Low literacy appears to pose a barrier to care for sexually transmitted infections such as gonorrhea.

Crosby, R.A. and Yarber, W.L. (2001). Perceived Versus Actual Knowledge About Correct Condom Use Among U.S. Adolescents: Results From a National Study. *Journal of Adolescent Health (28)*, 415-420.

Objective: To assess the prevalence of three misconceptions about correct condom use and determine whether prevalence of these misconceptions varied by gender, sexual intercourse experience, experience using condoms, and the

relationship between adolescents' actual and perceived knowledge about correct condom use. Variables that predicted misconceptions about correct condom use were also identified.

Methods: Data from the National Longitudinal Study of Adolescent Health were analyzed to determine prevalence of misconceptions among 16,677 adolescents. Misconceptions were: (a) no space at the tip of the condom, (b) vaseline can be used with condoms, and (c) lambskin protects against the acquired immunodeficiency virus better than latex. Chi-square analyses determined differences in prevalence of misconceptions between male and female adolescents based on their sexual and condom use experience as well as their level of perceived knowledge about correct condom use. Logistic regression models identified predictors of reporting misconceptions.

Results: Depending on intercourse experience and experience using condoms, about one-third to one-half believed the first two misconceptions and about one-fifth believed the latter one. Perception of knowledge about correct condom use was infrequently related to actual knowledge. Misconceptions were less likely among older adolescents, those ever having intercourse, those reporting four or more lifetime intercourse partners, those who had used condoms, females, and those not reporting a religious affiliation.

Conclusions: Misconceptions about correct condom use are common among adolescents. Sexually active adolescents need more complete information about correct condom use.

Pack, R., Crosby, R., & St. Lawrence, J.S. (2001). Associations between adolescents sexual risk behavior and scores on six psychometric scales: Impulsivity predicts risk. *Journal of HIV/AIDS Prevention & Education*, 4(1), 33-48.

The objective of this study was to identify associations of six paper-and-pencil instruments with a composite index of sexual risk behavior among adolescents. Adolescents (N=478) were sampled from community-based organizations, two homeless shelters, a detention center, and a drug treatment center. Participants completed a battery of 12 risk behavior questions and six scales: Attitudes Toward Prevention, Social Provision Scale, AIDS Knowledge Test, Condom Attitude Scale for Adolescents, Impulse Control Scale, and the Risk Taking Propensity Inventory. Multiple linear regression assessed associations for males and females separately. The Million Impulse Control Scale and the Risk Taking Propensity Inventory were associated with risk outcome for males and females. The Condom Attitudes Scale predicted risk outcome in males. For both genders, the Risk Taking and the Million Impulse Control Scales were collinear. The Million Impulse Control Scale was the best measure of risk outcome for both genders, but cannot be relied upon in the absence of other supporting evidence for risk behavior.

St. Lawrence, J.S., Crosby, RA, Brasfield, TL, O'Bannon, RE, et al. (in press). Reducing HIV/STD risk behavior of substance-dependent adolescents: A randomized controlled trial. *Journal of Consulting and Clinical Psychology*.

A randomized, controlled trial assessed the additive benefit of each of the three constructs within the Information-Motivation-Behavior Skills (IMB) theoretical model. This research also evaluated the efficacy of three interventions designed to increase safer sex behaviors of substance-dependent adolescents. Participants' (N = 161) average age was 16 years, 75% were Caucasian and about two thirds were male. Participants received 12 sessions of either a health information intervention (I only), an intervention consisting of information plus skills-based, safer sex training (I + B), or the same experimental condition with the addition of a risk-sensitization motivational manipulation (I + M + B). Measures of knowledge, attitudes, and beliefs, direct measures of behavioral skill, and self-reported behavior measures indicated that the I + B and the I + M + B conditions were more effective than the I condition. An unexpected finding was that the I + B and the I + M + B produced substantial increases in sexual abstinence that sustained well into the following year. The I + B and I + M + B conditions, as compared to the information condition: (1) produced more favorable attitudes toward condoms; (b) reduced the frequency of unprotected vaginal sex, and (3) increased behavioral skill performance, frequency of condom protected sex, percent of intercourse occasions that were condom protected, and the number of adolescents

who abstained from sex. The intervention that included a novel, risk-sensitization procedure was more resistant to decay between the 6- and 12-month follow-up periods on several variables.

Arrindell, W.A., Bridges, K.R., van der Ende, J., **St. Lawrence, J.S.**, Gray-Shellberg, L., Harnish, R., Rogers, R., & Sanderman, R. (2001). **Normative studies with the Scale for Interpersonal Behavior (SIB): II. U.S. Students.** *Behavior Research and Therapy*, 39, 1461-1479

The scale for interpersonal Behaviour (SIB), a multidimensional, self-report measure of state assertiveness, was administered to a nationwide sample of 2,375 undergraduates enrolled at 11 colleges and universities scattered across the U.S.A. The SIB was developed in the Netherlands for the independent assessment of both distress associated with self-assertion in a variety of social situations and the likelihood of engaging in a specific assertive response. This is done with four factorially-derived, first-order dimensions: (I) display of negative feelings (Negative assertion), (II) Expression of and dealing with personal limitations, (III) Initiating assertiveness and (IV) Praising others and the ability to deal with compliments/praise of others (positive assertion). The present study was designed to determine the cross-national invariance of original Dutch factors and the construct validity of the corresponding dimensions. It also set out to develop norms for a nationwide sample of U.S. students. The results provide further support for the reliability, factorial and/or construct validity of the SIB. Compared to their Dutch equivalents, U.S. students. The results provide further support for the reliability, factorial and/or construct validity of the SIB. Compared to their Dutch equivalents, U.S. students had meaningfully higher distress in assertiveness scores on all SIB scales (medium to large effect sizes), whereas differences on the performance scales reflected small effect sizes. The cross-national differences in distress scores were hypothesized to have originated from the American culture being more socially demanding with respect to interpersonal competence than the Dutch, and in perceived threats and related cognitive appraisals that are associated with such demands.

Kasprzyk, D., Montano, D.E., & **St. Lawrence, J. S.**, & Phillips, W.R. (2001). **The effect of variations in mode of delivery and monetary incentive on physicians' responses to a mailed survey assessing STD practice patterns,** *Evaluation and the Health Professions*, 24, 3-17.

High response to physician surveys is crucial for obtaining valid information about clinical practice. Many survey features and procedures have been identified as important in improving response. These include provision of a monetary incentive and use of delivery methods that will get the physician's attention. However, there is no current information about the optimal incentive amount, nor has there been any study on the effect courier service delivery. Three hundred physicians were randomly assigned to six delivery by incentive study conditions: Delivery: FedEx or regular mail; Incentive: \$0, \$15, or \$25). Provision of a monetary incentive resulted in much greater response than no incentive. The mode of delivery had virtually no effect on response when no monetary incentive was provided. Among physicians who were provided a monetary incentive, FedEx delivery resulted in a higher response rate than first class mail. The highest response rate (81%) was obtained from physicians who received \$25 enclosed with the survey sent by FedEx. This study provided information about the effects of delivery mode and incentive amount on physician response to a mailed survey. Additional research is needed to address whether a smaller or larger incentive may have resulted in much greater response.

DiClemente RJ., Wingood GM., **Crosby R.**, Sionean C., Cobb BK., Harrington K., Davies SL., Hook EW 3rd. Oh MK. (2001). **Condom carrying is not associated with condom use and lower prevalence of sexually transmitted diseases among minority adolescent females.** *Sexually Transmitted Diseases*. 28(8):444-7.

Background: Most of the studies associated with condom carrying and use have been conducted with adults. Because minority teenage females are particularly at risk for STD/HIV infection, further investigations specifically focusing on this population are warranted.

Goal: To determine whether observed condom carrying among adolescent females was associated with multiple measures of self-reported condom use, self-reported history of sexually transmitted diseases, and prevalence of biologically confirmed sexually transmitted diseases.

Methods: For this study, 522 sexually active African American adolescent females were recruited from low-income neighborhoods in Birmingham, Alabama. Measures of self-reported condom use, STD history, and condom carrying were collected. Adolescents were also tested for three prevalent sexually transmitted diseases.

Results: At the time of the assessment, 8% of the adolescents were observed to have a condom with them. Condom carrying was not found to be significantly associated with condom use and prevalence of sexually transmitted diseases.

Conclusion: Condom carrying may not be an important outcome of sexually transmitted disease/HIV prevention programs designed to reduce HIV/sexually transmitted disease risk among adolescent females.

St. Lawrence, J.S., St. Lawrence, J.B., & Aranda-Nranjo, B. (2001). Sexually transmitted diseases and HIV/AIDS. In K. Lundy & S. Janes, (Eds.), *Community Health Nursing: Caring for the Public's Health*. Sudbury, MA: Jones & Bartlett Publishers, pp 436-463.

This book chapter is written for community nurses and provides information about STDs, stressing the importance of screening, prompt treatment, and partner services.

Hogben, Byrne, Hamburger, & Osland. (2001). Legitimized aggression and sexual coercion: Individual differences in cultural spillover. *Aggressive Behavior, 27*, 26-43.

Correlations between aggressive attitudes and sexual coercion have consistently been found in numerous empirical studies across social science disciplines. Extrapolating from sociological research linking indices of legitimate aggression by state to statewide frequencies of rape, we have extended the investigation of legitimate aggression and coercive sexuality to the individual level. The specific purposes of this research were to index the breadth and level of endorsement of legitimized aggression at the individual level and to measure the association between such an index and coercive sexual behavior. These purposes were achieved across the course of three studies in which we (Study 1) created a new dispositional measure, the Proclivity for Legitimized Aggression Questionnaire (PLAQ) and replicated a socio-cultural level correlation with coercive sexual behavior (Study 2), assessed the individual differences level construct validity of the PLAQ, and (Study 3) tested whether endorsement of items on the PLAQ were related to content-relevant behaviors. The PLAQ was internally consistent, modestly but significantly correlated with a measure of self-reported coercive sexual behavior, and characterized by promising construct validity.

Williams, S.P. (in press). Reaching the hard to reach: Implication for the New View of women's sexual problems. *Women and Therapy*.

Much of the research regarding women's sexual issues has focused on accessible groups of women. Women who are marginalized are often harder to reach. Thus, their needs and challenges are not as visible, nor as well addressed as those who have access to resources. This commentary describes the contribution the document "A New View of Women's Sexual Problems" can make in addressing the sexual problems of women who are hard to reach.

Hogben, M., St. Lawrence, J.S., Hennessy, M.H., Eldridge, G.D. (in press). Using the Theory of Planned Behavior to understand STD risk behaviors of incarcerated women. *Criminal Justice and Behavior.*

Background and Objectives: Women in American correctional facilities constitute an at-risk group for STD/HIV, both in terms of disease history and STD risk behaviors. Using a sample of incarcerated women in two southern states, we describe and test a theoretically driven model of incarcerated women's risk behaviors prior to and during incarceration. The model is based on links among beliefs, attitudes, perceived behavioral control and norms, and behavioral intentions.

Study Design: We used observed variables (i.e., questionnaire items related to the variables described above) to serve as indicators of latent constructs in a path analysis model. We constrained the analytic model to reflect the theoretical model and measured path strength, model fit to data and various mediating factors.

Results: Results indicated that beliefs related to condoms were associated with favorable attitudes toward condoms. Condom attitudes were related to positive behavioral intentions to use condoms and also mediated some belief-intention associations. Perceived behavioral control and norms were also associated with intentions; norms were especially strongly related.

Hogben, M., Gange, S.J., Watts, D.H., Robison, E., Young, M., Richardson, J., Cohen, M., & DeHovitz, J. (in press). The effect of sexual and physical violence on risky sexual behavior and STD among a cohort of HIV-seropositive women. *AIDS & Behavior.*

Background and Objectives: HIV seropositive women are subject to physical and sexual violence over the course of time. Of interest in this paper is (a) whether recent experience of violence predicts STD incidence among HIV-positive women and (b) whether risky sexual behavior and depression mediate such a relation.

Study Design: The cohort of HIV-positive women has been followed prospectively for several years. We measured baseline and incident rates of exposure to physical and sexual violence and regressed those variables onto subsequent STD rates, depression scores, and risky sexual behaviors. We also ran a series of regressions using the Baron and Kenny three-step process to test for mediation.

Results: Results indicated both forced sexual contact and experience of physical violence predicted STD, incidence, number of partners, and depression. Number of partners mediated the relation between physical violence and STD incidence, although only a distinct minority of both abused (7.7%) and non-abused (3.9%) women had incident STDs. Also noteworthy was that women appeared generally able to alleviate conditions of abuse across visits.

PUBLISHED IN 2000

Hogben, M., & Waterman, C.K. (2000). Patterns of conflict resolution within relationships as a function of coercive sexual behavior by men and women. *Sex Roles: A Journal of Research, 43*, 341-357.

Conflict tactics within relationships and coercive sexual behavior are separate phenomena that are empirically related. To answer why they should be related, we drew upon two theoretical frameworks; an individualized form of cultural spillover and feminist control theory. Using an ANOVA framework, we constructed hypotheses through which we could (1) test for relations among constructs, and (2) discriminate between the predictions of cultural spillover and feminist theory. We hypothesized that the severity of individuals' coercive sexual behavior would be related to the violence level of conflict tactics in relationships and also to a pattern of generalized psychological abuse within relationships. We also hypothesized that men, compared to women, would engage in more physically coercive sexual behavior and use more violence in conflict tactics. University students (50% women, 93% < 23 years old, from a school

with 73% Caucasian students) responded to the measures. With the exception of the last hypothesis, these predictions were supported by the overall data, although not universally within levels of gender. Based on the pattern of hypothesis confirmation and inconsistencies, we discussed the mix of support and potential moderators that would resolve inconsistencies for each theory.

Crosby, R.A., DiClemente, R.J., Wingood, G.M., Sionean, C., Cobb, B.K., & Harrington, K. (2000). Correlates of unprotected vaginal sex among African American female adolescents: Importance of relationship dynamics. *Archives of Pediatrics and Adolescent Medicine, 154*, 893-899.

Objective: To determine the associations between the frequency of unprotected vaginal sex (UVS) and female adolescents' perceptions, particularly their perceptions of relationship dynamics.

Design: Cross-sectional study of 522 African American female adolescents enrolled in a sexually transmitted disease (STD) and human immunodeficiency virus prevention intervention trial.

Setting and Participants: A volunteer sample of adolescents recruited from neighborhoods characterized by high rates of unemployment, substance abuse, violence, and STDs; 28% tested positive for STDs as assessed by DNA amplification or culture.

Main Outcome Measure: Frequency of UVS assessed by interview using a 6-month recall period.

Results: Among adolescents having steady relationships, those spending more time with their boyfriends and having longer relationships reported a significantly greater frequency of UVS. Other significant correlates included perception of more girlfriends using condoms, no history of STDs, stronger normative beliefs favoring male decision making in relationships, greater pregnancy worry, and greater perceived invulnerability to STDs. For adolescents reporting casual relationships, personal barriers to condom use, no history of STDs, and reporting that their boyfriends typically decide when to have sex were associated with more frequent UVS.

Conclusions: Adolescents' perceptions, particularly their perceptions of relationship dynamics, played an integral role in explaining female adolescents' frequency of UVS with both steady and casual partners. Female adolescents in steady relationships differ from those in casual relationships relative to their preventions needs. These findings have implications for clinic- or community-based STD and human immunodeficiency virus prevention programs.

Williams, S.P., Gardos, S.P., Tross, S. & Ehrhardt, A.A. (2000). Women's negotiation scripts: Strategies for safer sex with their male partners. *Women & Health, 33(3/4)*, 133-148.

Heterosexual transmission of HIV is growing at an increasing rate. One primary prevention strategy is to consistently use condoms. With the exception of female condoms, women do not "wear" condoms and therefore must negotiate condom use with their male partners. This present study examines the strategies women believe they would use in a safer sex negotiation with a male partner including 1) initiating negotiations, 2) resolving conflict, and 3) maintaining the intention to practice safer sex. The findings highlight the importance of understanding women's patterns of negotiation as well as their repertoire of negotiation skills prior to their exposure to behavioral interventions and prevention programs.

Williams, S.P. (2000). Book Review – Queer Kids: The challenges and promise for lesbian, gay, and bisexual youth. *The Journal of Nervous and Mental Disorders, 188(4)*, 247-248.

Adolescence can be a very difficult time in a child's development. It is often marked by such diverse and dramatic changes that youth may have a difficult time sorting out their feelings. This may be particularly true for gay, lesbian, and

bisexual youth. The article reviews, "Queer Kids", which may be a resource for youth who are exploring the sexual orientation and coming out.

Miller, S., Exner, T., Williams, S.P., & Ehrhardt, A.A. (2000). A gender specific intervention for at-risk women. *AIDS Care, 12(5)*, 603-612.

Women are the fastest growing group in the USA to become infected with HIV. Also, the mode of transmission is changing with heterosexual behaviour being the predominant source. As these changes occur, HIV infection becomes more common in women who have not typically been considered at high risk. This paper describes an intervention designed to decrease unsafe sexual encounters and to focus on a highly meaningful concern in the lives of these women: relationships with men. The sessions encouraged making decisions, choice, partner selection, sexual rights, refusal of any unwanted sex, female controlled methods and other elements of empowerment. An eight-session and a four-session curriculum were created to assess dose factors as well.

Smith, L.V., Larro, M.L., Malotte, C.K., and St. Lawrence, J.S. (2000). Urine tests for gonorrhea and chlamydia: Great technology but will the community accept it? *International Quarterly of Community Health Education, 19*, 133-143.

Semi-structured interviews were conducted with 311 respondents in seven inner-city communities within the United States in an effort to examine factors that promote regular urine-based screening for chlamydia and gonorrhea. Results suggested that the majority of respondents were in favor of the use of urine-based testing for the detection of sexually transmitted infections (STIs), indicating that regular urine testing is important for diagnosis, early detection, prevention, and treatment of STIs. The most common concerns reported were stigma associated with STIs, the time required for testing, the possibility of receiving inaccurate laboratory results, and the higher cost of urine testing. The ease and accuracy of urine testing in addition to its high acceptance suggest that screening programs for STIs using urine-based testing could be implemented and used quite effectively to control the transmission of STIs.

Bloom, F.R. (2000). "New Beginnings": A Case Study in Gay Men's Changing Perceptions of Quality of Life During the Course of HIV Infection. *Medical Anthropology Quarterly, 15(1)*, 1-19.

This manuscript reports results of an ethnographic study that sought to understand how a cohort of gay men living with HIV infection evaluated and worked to preserve or improve the perceived quality of their lives. Themes of life story narratives were identified, each with an associated stylistic self-orientation to living with HIV infection. Changes in thematic content of a selected participant's life story narratives are discussed, demonstrating how events of his daily life are integrated into his life story narratives. Resultant concurrent shifting of themes and stylistic orientations are linked to his improved perception of quality of life.

Ethier, K.A., Fox-Tierney, R., Nicholas W.C., Salisbury, K.M., Ickovics, J.R. (2000). Organizational Predictors of Prenatal HIV Counseling and Testing. *American Journal of Public Health, 90(9)*, 1448-1451.

Objective: Efforts to prevent perinatal transmission of HIV include implementation of prenatal counseling and testing programs. The objective of this study was to assess organizational predictors of HIV counseling and testing.

Methods: Surveillance records were collected on 5900 prenatal patients from 9 hospital and community clinics in Connecticut.

Results: Some organizational factors (e.g., type of clinic, dedicated staff) that enhanced counseling rates had the opposite effect on test acceptance. For instance, patients were more likely to be counseled when counseling was conducted by providers; however, test acceptance was more likely when dedicated counselors were available.

Conclusions: These results provide important information concerning clinic resources needed as HIV counseling and testing services continue to be incorporated into prenatal care.

Ickovics, J.R., Ethier K.A., Koenig, L.J., Wilson, T.E., Walter, E.B., Fernandez, M.I. (2000). **Infant Birth Weight Of Women With or At High Risk for HIV Infection: The Impact of Behavioral, Psychosocial, and Demographic Factors.** *Health Psychology, 19(6)*, 515-523.

The purpose of these analyses was to provide a prospective examination of the impact of HIV on birth weight using clinical, behavioral, psychosocial, and demographic correlates. HIV-positive ($n = 319$) and HIV-negative ($n = 220$) pregnant women matched for HIV risk factors (i.e., drug use and sexual risk behaviors) were interviewed during the 3rd trimester of pregnancy and 6 weeks postpartum. Medical chart reviews were also conducted for the HIV-seropositive pregnant women to verify pregnancy-related and birth outcome data. In a logistic regression analysis, model χ^2 (9, $N = 518$) = 124.8, $p < .001$, controlling for parity and gestational age, women who were HIV seropositive were 2.6 times more likely to have an infant with low birth weight. In addition, Black women and those who did not live with their partners were more than 2 times as likely to have infants with low birth weight, and those who smoked were 3.2 times more likely to have infants with low birth weight. Knowing that women with HIV, those who are Black, and those not living with a partner are at highest risk for adverse birth outcomes can help those in prenatal clinics and HIV specialty clinics to target resources and develop prevention interventions. This is particularly important for women with HIV because birth weight is associated with risk of HIV transmission from mother to child.

Greenberg, J., Abbruzzese, B., (May 2000). Access to Science-Related Information by Federal Assignees to STD Programs. Division of STD Prevention, CDC.,

In October 1999, a survey was mailed to all 256 federal field assignees to STD programs on their access to and use of scientific information. The survey consisted of six questions on the following topics: the Internet, including the STD Web Page; journals available through the workplace; Division publications; and assignees' three preferred avenues for gaining access to behavioral science information. No names were requested and a stamped return envelope was provided. Program managers received a follow-up request either by phone or email in early January 2000, to return their surveys and remind other assignees in their programs to do the same, yielding a response rate of 48%. All states with federal assignees were represented in the database. We concluded that field staff members have limited access to the Internet and science journals, and those who do have access do not use them regularly. Journals featuring behavioral science articles are seldom available or read in the field. Field staff prefer workshops, presentations, and printed materials as sources of behavioral science information.

Implications for STD Programs are that the Division should expand Internet access for all federal assignees and should provide guidance in its usefulness (e.g., downloading treatment guidelines, getting surveillance information, and staying current on recent research). Such guidance could be provided in a series of emails with links to helpful sites. Increased use of the Internet could enhance work performance and reduce paper consumption. The Division should summarize research findings that have implications for the field and provide such summaries both in printed materials and on the STD Web Page. BIRB should explore developing and piloting workshops on the implications of behavioral research for the field.

Bull, S.S. and McFarlane, M. (2000). Soliciting sex on the internet: What are the risks for STD/HIV? *Sexually Transmitted Diseases, 27(9)*, 545-550.

Background: Strategies to meet sexual partners have been augmented by the Internet. This medium is an environment of potential risk for acquiring or transmitting sexually transmitted disease.

Methods: Participant observations of 175 chat rooms targeting men who have sex with men (MSM), heterosexuals, and couples seeking sex partners.

Results: Findings indicate evidence of past meetings by members of these groups (in 9% of MSM room and 15% of couple room observations) and solicitation of sex in 9% of heterosexual, 17% of MSM, and 36% of couple room observations. Safer sex or risk-reduction behaviors were not frequently mentioned, but were sometimes acknowledged through solicitation of drug and disease free partners.

Conclusions: People use the Internet to solicit sexual partners, making it a risk environment for STD. The Internet offers fast and efficient encounters resulting in sexual contact, which may translate into more efficient disease transmission. However, it also offers many possibilities for innovative technological approaches to promote STD and HIV prevention.

McFarlane, M., Bull, S.S., and Rietmeijer, C.A. (2000). The internet as a newly emerging risk environment for sexually transmitted diseases and HIV. *Journal of the American Medical Association, 284(4)*, 443-446.

Context: Outbreaks of sexually transmitted diseases (STD) and continued transmission of HIV are associated with unprotected sex among multiple, anonymous sex partners.

Objective: To compare the risk for STD and HIV for persons seeking sex partners on the Internet with persons who do not seek sex partners on the Internet.

Design: Cross-sectional survey of clients seeking HIV counseling and testing.

Setting and Participants: Clients (N=856) of the Denver Public Health HIV Counseling and Testing Site were surveyed regarding the use of the Internet to find sex partners. Survey data were linked to HIV risk assessment and test records.

Main Outcome Measures: Self-reports of: logging on to the Internet with the intention of finding sex partners; having sex with partners who were originally contacted via the Internet; number of, and condom use with, these partners; time since last sexual contact with Internet partners.

Results: Of the 856 clients, most were White (78%), male (69%), heterosexuals (65%) between the ages of 20 and 50 (84%). Sixteen percent had sought sex partners on the Internet, and 65% of these reported having sex with a partner initially met over the Internet. Almost 40% of those with Internet partners had more than 3 such partners, with 71% of the contacts occurring within 6 months prior to the client's HIV test. Internet sex-seekers were more likely to be male and homosexual than non-Internet sex-seekers. Internet sex-seekers reported more previous STDs, more partners, more anal sex, and more exposure to males, to men who have sex with men, and to partners known to be HIV-positive than non-Internet sex-seekers.

Conclusions: Seeking sex partners over the Internet is a common practice in the study sample. Clients who seek sex on the Internet are at greater risk for STDs and HIV than clients who do not seek sex on the Internet.

Hogben, M., and St. Lawrence, J.S. (2000). Observations from the CDC: HIV/STD risk reduction interventions in prison settings. *Journal of Women's Health, 9(6)*, 587-592.

Women in prison present both opportunities and challenges for reducing behaviors that create risk for HIV/STD. Incarcerated women frequently have a history of health risk behaviors, as shown by data on the increasing numbers of incarcerated women in the United States. We use a current risk reduction project to provide examples of the personal and institutional challenges to effective risk reduction in prison settings. Challenges include assuring women's genuine consent for participation, prison rule-based constraints on intervention content, the relationships among prisoners, guards, and researchers, and the need to build capacity (e.g., permanent programs).

Greenberg, J., Hennessy, M., MacGowan, R., Celentano, D., Gonzales, V., Van Devanter, N., and Lifshay, J. (2000). Modeling intervention efficacy for high-risk women: The WINGS Project. *Evaluation and the Health Professions*, 23(2), 123-148.

This study evaluates the effectiveness of two strategies -- communication and condom skills training -- for increasing condom-protected sex in a sample of 510 high-risk women aged 17 to 61. Baseline, 3- and 6-month post-intervention interview data were gathered in three cities participating in a randomized trial of a six-session, group skill-building intervention. This analysis was conducted for the entire sample and for six subgroups categorized by age, single or multiple partners, and history of childhood sexual abuse. The dependent variable was the odds ratio of protected sex acts at each follow-up. Structural equation modeling was used to estimate effects for two intervention pathways. The pathway through condom skills increased the odds of protected sex for the intervention group (χ^2 difference = 35, df = 2, p < .05) as well as for all subgroups. The pathways through communication were significant for the intervention group (χ^2 difference = 23, df = 3, p < .05) but fully effective only for participants under 30 and participants who reported childhood sexual abuse. The effectiveness of both pathways diminished at 6 months. WINGS demonstrates that condom skills training can increase protected sex for a heterogeneous group of women. Further research needs to examine how such skill training translates into use of condoms by male partners. To increase the duration of intervention effects, booster sessions may need to be incorporated.

Crosby, R.A., Newman, D., Kamb, M.L., Zenilman, J., Douglas, Jr., J.M., and Iatesta, M. (2000). Misconceptions about STD protective behavior. *American Journal of Preventive Medicine*, 19(3), 167-173.

Context: Misconceptions about STD-protective behaviors have not been studied before and after STD counseling. Further, to the best of our knowledge, the relationship of these misconceptions to condom use and STD incidence has not previously been described by published report.

Objective: To determine the prevalence of misconceptions about STD prevention, among STD clinic attendees (N = 3498) in five large cities and to determine if misconceptions decreased after STD diagnosis and/or STD counseling. The study also identified predictors of persistent misconceptions and determined the relationship of STD incidence and unprotected sex to persistent misconceptions.

Methods: Data from a randomized controlled trial evaluating HIV/STD counseling interventions (Project RESPECT) were used for the present analyses. Participants completed an interview upon study enrollment and every three months following enrollment for a one-year period. A portion of the interview assessed participants' misconceptions about STD-protective behaviors.

Results: At baseline, 16.3% believed that washing the genitals after sex protected from STDs. Likewise, urinating after sex (38.7), douching (45.7), and use of oral contraceptives (19.9%) were believed to prevent STD. Prevalence of misconceptions was significantly diminished at 3-month follow-up (p<.001). Those persisting to have misconceptions were more likely to be 24 years or older and African American. Those persisting to have these misconceptions did not have higher STD incidence.

Conclusions: Misconceptions about STD-protective behaviors are common and the event of an STD and/or STD counseling generally reduces these misconceptions. Although these misconceptions may not directly translate into risky behavior, they may preclude movement toward safer sex.

Crosby, R.A., Yarber, W.L., and Meyerson, B. (2000). Prevention strategies other than male condoms employed by low-income women to prevent HIV infection. *Public Health Nursing*, 17(1), 53-60.

Objective: To determine strategies other than male condom use employed by low-income women who have sex with men (WSM) to prevent HIV infection and to identify variables that predict use of these strategies.

Methods: A cross-sectional survey of over 4000 women receiving WIC benefits in 23 Missouri counties was conducted. The response rate was 58% and 2256 completed questionnaires were returned. Women were asked to indicate one or more of nine methods they had ever used thinking the method would prevent HIV infection. Women were also asked about their use of male condoms, preference for male condoms versus female condoms, and which partner usually made decisions about STD/HIV prevention.

Results: 1532 WSM indicated use of at least one HIV prevention strategy other than condom use. Strategies were: being tested for HIV (55%), partner being tested for HIV (36%), asking partner about his sex history (34%), using oral contraceptives (15%), asking him if he has HIV (12%), douching (9%), withdrawal (8%), and having anal or oral sex (4%). Common predictors of these strategies were race, education, history of STD, condom use, and not being married.

Conclusions: Basic misunderstandings about HIV prevention are common in specified sub-populations of low-income women. HIV prevention programs for low-income WSM should capitalize on women's efforts to prevent HIV by designing programs to help women replace ineffective prevention strategies with effective prevention strategies.

(This study was supported, in part, by the Rural Center for AIDS/STD Prevention, a joint project of Indiana University and Purdue University.)

Crosby, R.A., Leichliter, J., and Brackbill, R. (2000). Longitudinal predictions of STDs among adolescents: Results from a national survey. *American Journal of Preventive Medicine*, 18(4), 312-17.

Background: Although adolescent use of condoms has been increasing, incidence of sexually transmitted diseases (STDs) among young people remains high. To identify adolescent behavioral risk factors for acquiring STDs, this study assessed adolescent self-reports of acquired chlamydia, gonorrhea, syphilis, and trichomoniasis within 1 year after a baseline interview.

Methods: We used data from the National Longitudinal Survey of Adolescent Health for this study. Data were collected in the homes of survey respondents, using audio-computer-assisted self-interview (audio-CASI) technology and interviews. Participants were enrolled in grades 7-11 from 134 U.S. schools. A cohort of 4593 sexually experienced adolescents was followed for 1 year. We conducted separate analyses for both genders.

Results: About 3.1% of the male adolescents and nearly 4.7% of the female adolescents reported having had at least one STD after the baseline interview. For both genders, self-reported STD infection before baseline interview was the best predictor of self-reported STD infection 1 year after baseline interview. Female adolescents were more likely to report diagnosis with an STD after baseline if they self-identified as a minority race (other than Asian) and perceived that their mother did not disapprove of their having sex. Female adolescents were less likely to report STDs if they perceived that adults care about them. No additional variables predicted STD diagnosis after baseline for male adolescents.

Conclusions: We conclude that past history of STD infection is the most important indicator of subsequent STD infection among adolescents. Thus, this study suggests the benefit of specific clinical efforts designed to promote preventive behavior among adolescents newly diagnosed with an STD.

Crosby, R.A. and St. Lawrence, J. S. (2000). Adolescents' use of school-based health clinics for reproductive health services: Data from the National Longitudinal Study of Adolescent Health. *Journal of School Health, 70(1)*, 22-27.

Offering reproductive health services to students through school-based clinics (SBCs) may be a valuable public health strategy. Using data from the National Longitudinal Study of Adolescent Health, this report describes adolescents' use of SBCs for family planning and STD-related services. Of more than 1,200 students receiving reproductive health services in the year preceding the survey, 13.3% received family planning services from a SBC and 8.9% received STD-related services. Rural residence, no driver's license, younger age, and minority ethnicity increased the likelihood of using a SBC for family planning services. Rural residence, minority ethnicity, male gender, having a physical exam from a SBS, and less perceived parental approval of sex increased the likelihood of using a SBC for STD-related services. Further research should determine factors that increase adolescents' acceptance of reproductive health services from a SBC.

Sherr, L. and St. Lawrence, J. S. (Eds.). (2000). Women, Health and the Mind. New York: John Wiley & Sons, Ltd.

This book deals with both theory and applied issues in the psychology of women's health. Written by an international team of professionals and academics in the field of Women's health, Gender Studies, and Psychology, the concepts highlighted within the book are of universal interest. Some of the areas covered are gender issues, consent, violence, women and mental health, grief and bereavement, stress and coping, depression, reproductive health, HIV, exercise, physical health, and preventative health. Students and professionals of Health Psychology, Sociology, Anthropology, Public Health, Health Sciences, Gender Studies, Nursing, Counseling, and Social Work would benefit greatly from this comprehensive text.

Belcher, L. and St. Lawrence, J. S. (2000). Women and HIV. In L. Sherr and J. St. Lawrence (Eds.), *Women, Health, and the Mind* (pp. 305-326). New York: John Wiley & Sons, Ltd.

This book chapter provides a comprehensive literature review regarding HIV/AIDS among women. The discussion highlights the existing literature about women's risk factors, HIV prevalence, and outcomes from prevention intervention trials, as well as current medical management of women with HIV and with AIDS.

Greenberg, J. (2000). Sexual victimisation of girls: Implications for women's health and for prevention. In L. Sherr and J. St. Lawrence (Eds.), *Women, Health, and the Mind* (pp. 249-274). New York: John Wiley & Sons, Ltd.

This chapter provides a literature review of child sexual abuse (CSA) and its implications for women's health. The discussion highlights prevalence, risk factors, outcomes of sexual abuse for children, long-term effects of CSA, revictimisation, links between CSA and adult health problems, prevention, and screening and intervention, including intervention with offenders. In particular, prevention is discussed with respect to primary prevention of abuse including providing parenting support to high-risk families, secondary prevention or helping those who do experience CSA to prevent adoption of risky behaviors, and tertiary prevention in the form of studies that can indicate which components of therapy are associated with successful outcomes for which clients.

Zaza, and Hennessy, M. (2000). **Data collection instrument and procedure for systematic reviews in the guide to community prevention services.** *American Journal of Preventive Medicine*, 18(1S), 44-48.

Introduction: A standardized abstraction form and procedure was developed to provide consistency, reduce bias, and improve validity and reliability in the *Guide to Community Preventive Services: Systematic Reviews and Evidence-Based Recommendations* (the *Guide*).

Data Collection Instrument: The content of the abstraction form was based on methodologies used in other systematic reviews; reporting standards established by major health and social science journals; the evaluation, statistical and meta-analytic literature; expert opinion and review; and pilot-testing. The form is used to classify and describe key characteristics of the intervention and evaluation (26 questions) and assess the quality of the study's execution (23 questions). Study procedures and results are collected and specific threats to validity of the study are assessed across six categories (intervention and study descriptions, sampling, measurement, analysis, interpretation of results and other execution issues).

Data Collection Procedures: Each study is abstracted by two independent reviewers and reconciled by the chapter development team. Reviewers are trained and provided with feedback.

Discussion: What to abstract and how to summarize the data are discretionary choices that influence conclusions drawn on the quality of execution of the study and its effectiveness. The form balances flexibility for the evaluation of papers with different study designs and intervention types with the need to ask specific questions to maximize validity and reliability. It provides a structured format that researchers and others can use to review the content and quality of papers, conduct systematic reviews, or develop manuscripts. A systematic approach to developing and evaluating manuscripts will help to promote overall improvement of the scientific literature.

Macke, B.A., Hennessy, M.H., and McFarlane, M. (2000). **Predictors of time spent on partner notification in four U.S. sites.** *Sexually Transmitted Infections*, 76, 371-374.

Objective: To identify determinants of time spent on partner notification clients in four STD programs in the United States.

Methods: Eleven disease intervention specialists (DIS) in each of three urban sites (N=33) and seven DIS in one rural site recorded their activities and clients for fourteen working days. The total amount of time for partner notification activities was computed for each client. Data were analyzed using random effects regression.

Results: Across sites 429 of 2,506 or 37.4% recorded hours were spent on partner notification (PN) activities with 1148 clients. Client type, STD diagnosis, outcome, demographic characteristics, mileage, and study site explained 33.7% of the variance in the total time spent on partner notification clients. Clients who took significantly more time than the reference case included: clients who were both contacts and original patients, HIV/AIDS clients, non-primary and secondary (P&S) syphilis clients, STD clients who were infected and treated, and clients for whom travel was necessary. Demographic characteristics of both client and worker were not associated with the time spent on partner notification.

Conclusions: These data document the labor-intensive nature of partner notification, especially for HIV and non-P&S syphilis clients. STD programs that have a higher number of these clients are likely dedicating more resources to partner notification. More research is needed on additional predictors so that programs can better understand and allocate staff and financial resources to partner notification activities.

Pack, R., Crosby, R., & St. Lawrence, J.S. (2001) **Associations between adolescents sexual risk behavior and scores on six psychometric scales: Impulsivity predicts risk.** *Journal of HIV/AIDS Prevention & Education, 4(1)*, 33-48.

The objective of this study was to identify associations of six paper-and-pencil instruments with a composite index of sexual risk behavior among adolescents. Adolescents (N=478) were sampled from community-based organizations, two homeless shelters, a detention center, and a drug treatment center. Participants completed a battery of 12 risk behavior questions and six scales: Attitudes Toward Prevention, Social Provision Scale, AIDS Knowledge Test, Condom Attitude Scale for Adolescents, Impulse Control Scale, and the Risk Taking Propensity Inventory. Multiple linear regression assessed associations for males and females separately. The Million Impulse Control Scale and the Risk Taking Propensity Inventory were associated with risk outcome for males and females. The Condom Attitudes Scale predicted risk outcome in males. For both genders, the Risk Taking and the Million Impulse Control Scales were collinear. The Million Impulse Control Scale was the best measure of risk outcome for both genders, but cannot be relied upon in the absence of other supporting evidence for risk behavior.

Crosby, R.A. and Yarber, W.L. Perceived Versus Actual Knowledge About Correct Condom Use Among U.S. Adolescents: Results From a National Study. *Journal of Adolescent Health (28)*, 415-420.

Objective: To assess the prevalence of three misconceptions about correct condom use and determine whether prevalence of these misconceptions varied by gender, sexual intercourse experience, experience using condoms, and the relationship between adolescents' actual and perceived knowledge about correct condom use. Variables that predicted misconceptions about correct condom use were also identified.

Methods: Data from the National Longitudinal Study of Adolescent Health were analyzed to determine prevalence of misconceptions among 16,677 adolescents. Misconceptions were: (a) no space at the tip of the condom, (b) vaseline can be used with condoms, and (c) lambskin protects against the acquired immunodeficiency virus better than latex. Chi-square analyses determined differences in prevalence of misconceptions between male and female adolescents based on their sexual and condom use experience as well as their level of perceived knowledge about correct condom use. Logistic regression models identified predictors of reporting misconceptions.

Results: Depending on intercourse experience and experience using condoms, about one-third to one-half believed the first two misconceptions and about one-fifth believed the latter one. Perception of knowledge about correct condom use was infrequently related to actual knowledge. Misconceptions were less likely among older adolescents, those ever having intercourse, those reporting four or more lifetime intercourse partners, those who had used condoms, females, and those not reporting a religious affiliation.

Conclusions: Misconceptions about correct condom use are common among adolescents. Sexually active adolescents need more complete information about correct condom use.

PUBLISHED IN 1999

Hogben, M., Wilson, T.E., Feldman, J., Landesman, S., and DeHovitz, J. (1999). The influence of HIV-related knowledge and exposure fears on behavior change and incident STDs. *Women and Health, 30(2)*, 25-37.

Using a sample of 678 HIV-seronegative women, we measured self-reports of HIV-related cognitions, specifically knowledge, perceived exposure risks, and outcome expectations. We also ascertained prevalent and incident bacterial STDs and measured self-reports of behavioral risk reductions. We tested for associations between (a) cognitions and STD prevalence, (b) cognitions and incident STDs, (c) cognitions and behavioral risk reductions, and (d) risk reductions and incident STDs. Symptom knowledge was associated with lower prevalence, but not incidence. Beliefs in the

efficacy of risk reductions showed a protective effect against incident STDs. Perceived exposure risk and symptom knowledge were associated with risk reduction behavior.

Hennessy, M. and Greenberg, J. (1999). Bringing it all together: Modeling-intervention processes using structural equation modeling. *American Journal of Evaluation, 20(3)*, 471-480.

The combination of programmatic theory and structural equation modeling (SEM) can act as the basic intellectual machinery for designing and evaluating behavioral interventions. As an example of the integration, we consider a case study of a randomized experiment to reduce sexual risk taking, the WINGS Project. Barriers to combining systematic use of SEM with programmatic improvement and assessing program effectiveness are also discussed.

St. Lawrence, J.S., Crosby, R.A., and O'Bannon, III, R. (1999). Adolescent risk for HIV infection: Comparison of four high risk samples. *Journal of HIV/AIDS Prevention and Education for Adolescents and Children, 3(3)*, 63-86.

Adolescents ($N = 482$) at elevated risk for sexually-transmitted diseases, including HIV/AIDS, were assessed on theoretically-derived measures of knowledge and attitudes toward precautionary behavior, frequencies of high risk sexual and substance use behaviors, and other psycho-social factors implicated in adolescents' risky behavior such as impulsivity, risk-taking propensity, and social support. The adolescent samples included drug-dependent adolescents ($n=77$), incarcerated youth ($n = 194$), homeless and runaway youth ($n = 55$), and urban African-American adolescents ($n = 156$). Drug-dependent and incarcerated youth evidenced exceedingly high HIV-risk and less favorable psychosocial profiles, with drug-dependent females reporting the highest levels of overall risk. Youth in homeless shelters were lower in HIV-risk and had more favorable psycho-social profiles than drug-dependent and incarcerated youth and were slightly higher on these measures than African-American youth sampled from the community. Gender differences varied by sample. Findings suggest that HIV prevention programs for high-risk youth should be tailored according to gender and the specific type of high-risk audience involved. Implications of the findings for tailoring risk reduction interventions for each group of at-risk adolescents are discussed.

Crosby, R.A., Yarber, W.L., and Meyerson, B. (1999). Perceived monogamy and type of clinic as barriers to seeking care for suspected STD or HIV infection: Results from a brief survey of low-income women attending Women, Infants, and Children (WIC) Clinics in Missouri. *Sexually Transmitted Diseases, 26(7)*, 399-403.

Context: Barriers to seeking care for sexually transmitted diseases (STDs) have not been assessed for low-income women. We sought to determine barriers to seeking care for STDs among women receiving Women, Infants, and Children (WIC) benefits in 21 Missouri counties.

Methods: A survey of 2,256 women was conducted; 491 reported a history of at least one STD. These women indicated possible barriers to seeing a doctor about a suspected STD and preference for type of clinic providing STD services.

Results: More than one fifth (21.3%) of those reporting an STD also reported barriers, the most common barrier was "I only have sex with my steady" (36.2%) followed by being asymptomatic (33.3%), embarrassment (22.8%), and cost (25.7%). Most (63.8%) preferred seeing their own doctor, with others reporting preference for community health centers (14.8%), family planning clinics (16.8%), and STD clinics (4.6%).

Conclusions: Low-income women experience multiple barriers to seeking care including perceptions about a protective value of monogamy. Also, STD services in locations providing other health services for women were preferred.

Implications: It may be useful to design prevention messages emphasizing to women the value of seeking care for a suspected STD or HIV infection even if they are in a steady, seemingly monogamous,

relationship. The data also support offering affordable STD/HIV-related services in locations already providing other health services to women.

Brackbill, R.M., Sternberg, M.R., and Fishbein M. (1999). Where do people go for treatment of sexually transmitted diseases? *Family Health Perspectives*, 31(1), 10-15.

Context: Major public health resources are devoted to the prevention of sexually transmitted diseases (STDs) through public STD clinics. However, little is known about where people actually receive treatment for STDs.

Methods: As part of the National Health and Social Life Survey, household interviews were performed from February to September 1992 with 3,432 persons aged 18-59. Weighted population estimates and multi-nominal response methods were used to describe the prevalence of self-reported STDs and patterns of treatment utilization by persons who ever had a bacterial or viral STD.

Results: An estimated two million STDs were self-reported in the previous year, and 22 million 18-59-year old persons self-reported lifetime STDs. Bacterial STDs (gonorrhea, chlamydia, non-gonococcal urethritis, pelvic inflammatory disease and syphilis) were common than viral STDs (genital herpes, genital warts, hepatitis and HIV). Genital warts were the most commonly reported STD in the past year, while gonorrhea was the most common ever-reported STD. Almost half of all respondents who had ever had an STD had gone to a private practice treatment (49%); in comparison, only 5% of respondents had sought treatment at an STD clinic. Respondents with a bacterial STD were seven times more likely to report going to an STD clinic than were respondents with viral STD—except for chlamydia, which was more likely to be treated at family planning clinics. Men were significantly more likely than women to go to an STD clinic. Young, poor, or black respondents were all more likely to use a family planning clinic for STD treatment than older, relatively wealthy or white respondents. Age, sexual history and geographic location did not predict particular types of treatment seeking.

Conclusions: The health care utilization patterns for STD treatment in the United States are complex. Specific disease diagnosis, gender, race, and income status all affect where people will seek treatment. These factors need to be taken into account when STD prevention strategies are being developed.

Belcher, L. (1999). Issues involved in using sexually transmitted disease incidence as an outcome measure in behavioral intervention research. *The Health Psychologist*, 21(1), pp. 4-6, 22.

Recently there has been increasing attention paid to the issue of using biological markers as outcome measures in behavioral HIV/STD prevention research. This issue has been present particularly within the context of sexual risk reduction intervention studies. Biological markers, such as incident STD or HIV infection, represent opportunities for more objective outcome measurement in assessing the effectiveness of behavioral interventions designed to prevent sexually transmitted disease. Although the use of HIV as an intervention outcome measure is not often likely to be a feasible outcome due to its relatively low incidence rate, the assessment of other sexually transmitted diseases has recently attracted many intervention STD/HIV prevention researchers who are interested in alternative outcome measurement strategies.

With the development of increasingly feasible, objective STD diagnostic technology, biological data are beginning to be viewed by many behavioral researchers as preferable to indicators of risk that are more vulnerable to bias and/or inaccurate report, such as self-reported sexual behavior and condom use. However, the use of biological markers as a primary intervention outcome measure is still a somewhat new and controversial topic, and one that will require considerable thought and discussion among researchers in this field. To date, only a handful of behavioral intervention studies have implemented this outcome strategy (NIMH Multi-site HIV Prevention Group, 1998; Kamb et al, 1997; Boyer et al 1997; Shain et al, 1996), and the results have led scientists into new areas of discussions and debate...

Conclusions: There are clearly many issues related to the use of biological outcomes in behavioral intervention research that remain in need of further discussion and debate. These issues range in scope from largely philosophical and

conceptual to tediously minute and methodological. This issue presents an opportunity for many challenging scientific debates from which the field of behavioral intervention research can only gain.

St. Lawrence, J.S., and McFarlane, M. (1999). Research methods in the study of sexual behavior. In P.C. Kendall, J.N. Butcher, and G.N. Holmbeck (Eds.), *Handbook of Research Methods in Clinical Psychology* (2nd ed., pp. 584-615). New York: John Wiley & Sons.

This chapter explores the knowledge of the techniques that are used in sexual research and their limitations. This knowledge can help to evaluate studies that are cited as evidence for various conclusions and to decide whether to accept the conclusions that are drawn. Even more important, an understanding of methodological issues will help to plan and evaluate future research. In this chapter, we briefly review the history of research efforts in human sexuality, discuss methodological issues that arise in sex research, and apply these methodological choices to develop an intervention of sexual behavior change.

St. Lawrence, J.S., and Crosby, R. A. (1999). HIV/AIDS in Puerto Rico and the Caribbean: Current status and future directions. *Journal of Puerto Rican Medical Association*, 91, 22-28.

The AIDS epidemic continues unabated around the world, with an estimated 5.8 million people newly infected in 1998. More than one half of a million HIV infections have occurred in the Caribbean, with rates of AIDS incidence in Puerto Rico being higher than most of the United States. A four-step public health approach to HIV/AIDS in Puerto Rico is outlined: surveillance, risk factor identification, intervention evaluation, and dissemination of interventions. Surveillance systems in Puerto Rico are well developed, with 21,999 AIDS cases being recorded by the Puerto Rican Department of Health as of October 1998. Risk factor identification activities are conducted by several organizations, with the HIV Central Registry in the Bayamon Health Region being a primary source of this information. Evaluation of biomedical and behavioral interventions is less well developed in Puerto Rico. Issues related to treatment of HIV-infected persons, HIV testing and counseling, and behavioral interventions designed to lower HIV incidence are discussed. Effective interventions need to be widely distributed throughout Puerto Rico and the Caribbean, with accompanying training in their delivery to the target audiences.

St. Lawrence, J.S., Crosby, R.A., Belcher, L., Yazdani, N., and Brasfield T.L. (1999). Sexual risk reduction and anger management interventions for incarcerated male adolescents: A randomized controlled trial of two interventions. *Journal of Sex Education and Therapy* 24(1/2), 9-17.

The present study evaluated a behavioral STD/HIV risk reduction and a violence prevention intervention for incarcerated adolescent male offenders. Participants were 428 male juvenile offenders entering a state reformatory and randomly assigned to either a six session anger management (AM) intervention or a six session sexual risk reduction skills-training (ST) intervention. Assessments prior to and immediately following the intervention included cognitive mediating measures such as AIDS knowledge, condom attitudes, self-efficacy, perceived risk, conflict tactics, anger management, and impulsivity. Behavioral skill in correct condom use also was evaluated at baseline and immediately following the interventions. Participant's sexual behavior, drug use, and recidivism in the youth correctional system were assessed at baseline and six months after release. At post-intervention, ST participants evidenced significantly higher levels of AIDS knowledge and condom use self-efficacy, more positive attitudes about condoms and significantly greater condom use skill than AM participants. The violence prevention intervention produced no changes in attitudes or knowledge following the intervention. Significant decreases in sexual risk behaviors and drug use were present in both groups at the follow-up. Possible explanations, including informal peer teaching, are discussed.

Greenberg, J., Hennessy, M., Lifshay, J., Kahn-Krieger, S., Bartelli, D., Downer, A., and Bliss, M. (1999). Childhood sexual abuse and its relationship to high-risk behavior in women volunteering for an HIV and STD prevention intervention. *AIDS and Behavior*, 3, 149-156.

This study examined the extent of childhood sexual abuse and its relationship to risky sexual and drug-using behaviors, condom use, and lifetime sexually transmitted diseases (STDs) in women volunteering for the WINGS intervention in New York City, Baltimore, and Seattle. Responses to structured interviews from 825 eligible women recruited from the community, clinics, and drug programs in 1995 and 1996 were analyzed. Thirty-eight percent to 66% of women across sites reported childhood sexual abuse before age 18. *Q* statistics and *t* tests measured the bivariate relationships between sexual abuse and outcomes. Regression analysis was used to control for ethnicity and race, age, age at first intercourse, and site in predicting the adjusted effects of sexual abuse. Compared to unabused women, abused women reported more lifetime partners, more episodes of different STDs, lower odds of using condoms at most recent sexual intercourse with main partners, and increased odds of using drugs or alcohol before sex. Researchers need to develop and test STD and HIV interventions tailored for victims of early sexual abuse and compare them with more general interventions for at-risk women.

McFarlane, M. and St. Lawrence, J.S. (1999). Adolescents' recall of sexual behavior: Consistency of self-report and the effect of variations in recall duration. *Journal of Adolescent Health*, 25, 199-206.

The purposes of this research was (1) to describe the relationship between adolescents' 2-week, 2-month, and 12-month recall of sexual behavior; (2) to assess the variability of adolescents' self-reported sexual behaviors over a period of one year; and (3) to draw conclusions regarding the use of recall periods in measuring self-reported sexual behavior in adolescents. Data from 296 African-American adolescents (age 12 to 19 years; 28% male) were analyzed. Baseline data comprise 2-week, 2-month, and 12-month recall of number of partners and frequency of condom-protected and -unprotected vaginal, oral, and anal sex. Self-reported frequency of refusal of unprotected sex during the 2-week and 2-month recall periods are also included. To assess variability in self-reports of number of partners and frequency of behaviors over time, repeated measures of 2-week and 2-month recall were collected from a subset of the sample ($n = 129$; 24% male).

The strength of correlations from the three recall periods is dependent upon (1) the difference in length of the recall periods; and (2) the nature of the construct being recalled (e.g., number of partners vs. number of behaviors). Longitudinally, the variability of 2-week recall responses is generally larger than the variability in 2-month recall responses. Consistent estimates of adolescents' sexual behavior over a one-year period may be obtained from several assessments of 2-week recall, or from relatively fewer assessments of 2-month recall data.

St. Lawrence, J.S. (1999). Emerging behavioral strategies for the prevention of HIV in rural areas. *Journal of Rural Health*, 15(3), 335-343.

HIV/AIDS prevention efforts have been concentrated in urban areas, despite increase in HIV in non-metropolitan areas. This paper reviews behavioral prevention programs initiated in rural areas and programs that could be adapted for rural contexts. Outcomes from these interventions demonstrate that preventive interventions at the population, community, targeted population subgroups, and small-group levels can reduce high-risk behavior in rural environments and are cost effective to deliver.

St. Lawrence, J., Chapdelaine, A., Devieux, J., O'Bannon, R., Brasfield, T., and Eldridge, G.D. (1999). Measuring perceived barriers to condom use: Development and psychometric evaluation of the Condom Barriers Scale. *Assessment*, 6(4), 391-400.

A programmatic series of three studies developed and evaluated the Condom Barriers Scale (CBS), an instrument measuring women's perceived barriers to condom use for prevention of HIV and other sexually transmitted diseases.

Following item generation and selection, Study 1 evaluated the CBS in a sample of minority women (N=178), reduced the number of items, assessed the factor structure, evaluated the internal consistency, and explored the convergent validity of the CBS. In Study 2, the CBS was administered to a cross validation sample (N=278). Confirmatory factor analysis and internal consistency were compared against the original sample and construct, criterion, and discriminant validity were assessed. In Study 3 (N=30), temporal stability of the CBS was evaluated. The resulting instrument appears to have sound psychometric properties and can be used to measure a key construct in the leading theoretical models of health behavior for which a measure with known psychometric properties previously has not been available.

Hennessy, M., Bolan, G.A., Hoxworth, T., Iatesta, M., Rhodes, F., and Zenilman, J.M. (1999). Using growth curves to determine the timing of booster sessions. *Structural Equation Modeling*, 6(4), 262-279.

Booster sessions are often recommended to re-establish or reinforce the cognitive messages and behavior changes due to therapeutic and behavioral interventions. The major purpose of booster sessions appears to be one of “relapse prevention.” But a major unresolved barrier to the rational implementation of such sessions is their appropriate timing. To plan intervention-relevant booster sessions, researchers need to know the pattern(s) of individual change over time in intervention-relevant variables and for intervention-relevant groups. Growth curve analysis of repeated measures data can estimate these patterns for different categories of intervention participants. This paper demonstrates an application of this method using data from a recently completed multi-site randomize experiment that compared three different counseling and testing methods for prevention of HIV infection and other sexually transmitted diseases, Project RESPECT. Reported self-efficacy for condom use declined for both female and male respondents soon after exposure to the intervention. The paper closes with some recommendations for both prospective and retrospective use of growth curves to rationally plan the timing of booster sessions.

Crosby, R.A., Yarber, W.L., and Meyerson, B. (1999). Frequency and predictors of condom use and reasons for not using condoms among low-income women. *Journal of Sex Education and Therapy*, 24(1/2), 63-70.

The problem of this investigation was to (1) assess the frequency and predictors of condom use for HIV prevention among low-income women, (2) assess the reasons for not always using condoms for HIV prevention and predictors of these reasons for low-income women. Data were collected at 27 WIC clinics in 21 Missouri counties. To be included in the study women had to indicate a primary relationship with a male partner. Data were subjected to univariate and multivariate analyses. The sample (N=2010) was predominately white and rural, with median age being 25 years. Findings revealed that women surveyed in the study were unlikely to use condoms, particularly those living in rural communities, who were pregnant, and who were either married or co-habitating with a primary male partner. The major reason for not using condoms was a belief that their male partner was not HIV infected, either because she believed he had been tested or because she simply believed that he was HIV negative. Other reasons for not using condoms included diminished sexual pleasure from condom use for both partners and believing that condom use after having unprotected sex is not effective. Reasons for not using condoms were predicted by several variables: length and type of relationship, urban versus rural location, beliefs about condom use, perceived risk of HIV infection, reliance on male partner income, frequency of sex, and age.

(This study was supported, in part, by the Rural Center for AIDS/STD Prevention, a joint project of Indiana University and Purdue University.)

PUBLISHED IN 1998

Macke B., Hennessy M., McFarlane M., and Bliss M. (1998). Partner notification in the real world: A four site time-allocation study. *Sexually Transmitted Diseases* 25(10), 561-568.

Background and Objectives: Although partner notification has been a long-standing intervention and prevention strategy for sexually transmitted diseases (STD), variations in partner notification practice across sites have never been documented.

Goals of the Study: To describe provider-assisted partner notification practices in four STD programs in the United States.

Study Design: Eleven disease intervention specialists (DIS) in each of three urban sites and seven DIS in one rural site documented their activities and clients for fourteen working days using a personal digital assistant.

Results: Of 2,506 recorded activity hours across sites, 37.4% of the recorded time was spent on partner notification (PN) activities with 1148 clients. Field visits to locate contacts accounted for the largest proportion of time spent on PN. Overall, PN clients were cases of or were contacts to non-primary and secondary (P&S) syphilis (39.6%), gonorrhea (25.5%), chlamydia (18.0%), HIV/AIDS (10.4%), and P&S syphilis (6.4%).

Conclusion: The activities that constitute PN, the diseases for which PN is used, and the time spent on each PN client vary across sites. More research is needed on the determinants of these variations and their association with the ultimate goal of disease prevention.

Macke, B.A., Keenan, H.A., and Kassler, W. J. (1998). Partner notification strategies for sexually transmitted diseases. *Sexually Transmitted Diseases*, 329-330.

Although partner notification is a routine STD control and prevention strategy, no data describe actual partner notification practices. Therefore, we used data from a nationally representative survey of local health departments' (LHD) STD directors conducted by the Allan Guttmacher Institute to describe partner notification strategies used in public STD clinics. (response rates, 77% or 587/765) These data show that with exception of partner notification for syphilis in high-incidence area, patient referral is a common partner notification strategy: more than two-thirds of LHDs report using patient referral, either exclusively or with provider referral, for all three STDs.

Anderson, J.E., Greenberg, J., and MacGowan, R. (1998). Enhanced street outreach and condom use by high-risk populations in five cities. In J.B. Greenberg and M. Neuman (Eds.), *What We Have Learned from the AIDS Evaluation of Street Outreach Projects: A Summary Document* (pp.83-109). Atlanta, GA: Department of Health and Human Services, Centers for Disease Control and Prevention.

This multi-site, five-year study used a quasi-experimental design before and after enhancement of outreach activities to measure changes in HIV-related risk behavior, to measure changes in exposure to street outreach workers, and to measure the association between interaction with outreach workers and condom use. Data are from five groups of researchers: two that focused on youth in Los Angeles and San Francisco, and three groups that focused on IDUs in Chicago, Los Angeles County, and Philadelphia. The main dependent variables were 6 measures of condom use for vaginal, anal, and oral sex, and for main and casual partners. Predictor variables included time period (pre- versus post-enhancement), location (intervention or control community), sex behavior variables (i.e., carrying a condom), and exposure to street outreach programs in the past 6 months (talking with outreach workers or receiving materials from them). The quasi-experimental design did not identify many areas in which there was a change in condom use behaviors associated with enhanced programs;

these effects were seen only in Chicago and Los Angeles County. At every site, however, having a condom at interview was associated with higher odds of using condoms, and with having received condoms from outreach workers. Given that a wide array of customized enhancements to established programs had very limited effect on increasing behavioral change over a six month period, these data suggest that a creative focus on condom distribution should be a major goal of street outreach programs.

Crosby, R. A., Yarber, W.L., and Kanu A.J. (1998). Relationship of HIV/STD sexual risk behaviors to other health behaviors among a sample of Indiana rural youth. *The Health Education Monograph*, 16(2), 51-59.

Few studies correlating high-risk sexual behaviors to other health behaviors among adolescents have been reported. The investigation, conducted in an Indiana rural community, examined associations between selected HIV/STD sexual risk behaviors and other health behaviors among 241 female and male tenth graders. These associations were contrasted to national data. Subjects completed a questionnaire that assessed whether they had engaged in eleven sexual risks and other health behaviors. Several health behaviors were associated with HIV/STD risk behaviors. The strongest associations with HIV/STD risk-increasing behaviors for both genders were the unhealthy behaviors. For the one HIV/STD risk-reducing behavior, condom use during last intercourse, those using the condom were less likely to engage in some of the unhealthy behaviors. Unique differences between the rural and national sample were found. The study suggests that altering HIV/STD risk behaviors may be achieved by decreasing other health risk behaviors.

Greenberg, J., Lifshay, J., Van Devanter, N., Gonzales, V., and Celentano, D. (1998). Preventing HIV infection: The effects of community linkages, time, and money on recruiting and retaining women in intervention groups. *Journal of Women's Health*, 7, 587-596.

Few studies have addressed recruitment and retention for HIV-related preventive interventions, and these have generally not focused on women. In this study, part of the Women in Group Support Project, we examine the experience of three sites in recruiting 444 high-risk women for a small group intervention to reduce risky sexual behavior. The intervention included six structured sessions followed by a continuing series of client-focused, drop-in sessions. Incentives for participants included childcare, food, and transportation tokens. Attendees at each structured session also received a cash incentive of \$10 to \$20. Forty-six percent of the women were recruited from community sources, 35% from clinics, and 19% from drug programs. Across all recruitment sources, almost a third of the women reported an STD in the past year; 88% to 94% reported a risky male partner (who they believed had sex with other partners or with sex workers, was an injecting drug user or was HIV positive); and 10% to 36% reported trading sex for money or drugs. During 18 months of recruitment each site averaged 34 screening interviews monthly to secure 8 eligible women a month who completed baseline interviews and reported for randomization. The average number of paid sessions attended by participants was 5 of 6 (83%). Average attendance at unpaid sessions was 1 of 12 (8%). Key facilitators to recruitment and retention included linkages with community agencies and monetary incentives. Our findings suggest that researchers and community service providers need to explore alternative strategies to paying women for attending group sessions (e.g., incorporating group interventions into existing program requirements) and balance these against the costs and recruitment effectiveness.

Greenberg, J. B. and Neumann, M. (Eds.). (1998). *What We Have Learned from the AIDS Evaluation of Street Outreach Projects: A Summary Document*. Atlanta, GA: Department of Health and Human Services, Centers for Disease Control and Prevention.

This document summarizes AESOP, a 5-year study designed by CDC in collaboration with researchers representing outreach agencies at eight sites. This cooperative study, which included community-based organizations and health departments, was conducted from October 1991 through September 1996. Its purpose was to support studies to describe outreach services to injection drug users (IDUs) and youth in high-risk situations, calculate the costs of such services, and develop and evaluate enhanced on-the-street services for these populations. Included in this compilation are the following: a description of the study methods and enhancements; key findings and implications for researchers and

service agencies; an annotated bibliography of all study publications; and five previously unpublished articles from AESOP focusing on: probability sampling for outreach to street youth, a storytelling model for HIV prevention with IDUs, elements of an intensive outreach program for homeless and runaway youth, the association between self-identified peer-group affiliation and HIV risk behaviors among street youth and an outcome analysis of the relationship between enhance street outreach and condom use by high risk populations in five cities. A list of products and contacts for intervention replication is included.

Eldridge, G. D. and St. Lawrence, J. S. (1998). **Cultural and ethnic issues affecting pediatric service delivery.** In R.T. Ammerman and J.V. Campo (Eds.), *Handbook of Pediatric Psychology and Psychiatry: Vol. I* (pp.41-71). New York: Allyn & Bacon.

Cultural and racial diversity in the U.S. is increasing rapidly, bringing with it the demand for changes in health care. Members of the Anglo-American majority culture, increasingly will find themselves providing services for members of other racial and cultural groups whose first language is not English and who may have markedly different beliefs about illness, help-seeking, treatment, and the relationship between health practitioners and health care consumers. Cross-cultural health care places additional demands on health care practitioners and parents to provide effective care for minority children in need of health services.

Provision of health care services for minority children in the U.S. is profoundly influenced by the relationship between minority status, poverty, and racism. Minority children and poor children are exposed to greater health risk than children from White majority culture, but are less likely to have access to timely and appropriate health care, including preventive services. Minority parents, in turn, face cultural and institutional barriers to gaining access to culturally sensitive, accessible, and affordable health care services for their children. Differences in ethnic and cultural backgrounds between parents and providers often result in communication problems that negatively affect the health services received by minority children.

In contrast to the view that the problems inherent in cross-cultural health care services must be solved at the level of the individual family and practitioner, a broader view is that solution to the problem of providing quality health care services for minority children must include changes at the socio-political and institutional levels as well as at the personal level. The process of change demands much from families, practitioners, institutions, and communities as they pursue a better understanding of the broad diversity within cultures, learn to value differences across cultures, and develop a willingness to work together to produce solutions to the shared problems of providing effective health care for minority children.

St. Lawrence, J.S., Eldridge, G.D., and Brasfield, T.L. (1998). Behavioral and psycho-social consequences of HIV antibody counseling and testing with African-American women. *Women's Health: Research on Gender, Behavior, and Policy*, 4(2), 135-153.

This study compared a sample of low-income African American women in the southeastern United States who had and had not yet undergone HIV counseling and testing on risk-related cognitive mediating variables and self-reported sexual behaviors.

Four hundred sixty (N=460) African American women were recruited from health clinics and community settings in a southern city. Forty-five percent of the women (n=207) had undergone HIV counseling and testing, whereas 55% (n=253) had never been tested. Women who were seropositive were excluded from the analyses. After providing informed consent, the women completed a battery of cognitive mediating measures assessing AIDS knowledge, attitudes theoretically relevant to risk reduction, and self-reported sexual behavior. In addition, each participant demonstrated condom application skills using a penile model.

Women who had undergone testing were younger, rated HIV disease as more serious, considered AIDS a greater health concern, had more positive attitudes toward HIV prevention, expressed greater intentions to use condoms, and evidenced a greater commitment to self-protective behavior than women who were not yet tested. Women who had undergone HIV antibody testing, however, showed no differences in sexual behavior from women who were never tested. Sexual

behavior, including numbers of partners, frequency of unprotected intercourse, and inconsistent condom use, left women in both groups at significant and comparable risk for HIV and sexually transmitted disease infection.

Hennessy, M. (1998). **Evaluation.** In D. Stroup and S. Teutsch (Eds.), *Statistics in Public Health* (pp.193-219). New York: Oxford University Press.

This chapter first discusses the types of evaluations typically done and the evaluation tasks appropriate to each stage of the empirical research. It then uses Cook and Campbell validity types (e.g., statistical conclusion, construct, internal, and external) to identify statistical problems often encountered in evaluation. Each validity type is explained and methods for addressing weakness of each (i.e., threats to validity) are identified. Then the four types are applied as a case study to Project RESPECT, a multi-site intervention study to reduce HIV/STD risk taking and subsequent infection. The chapter closes with a discussion of the interrelationships between the research priorities reflected by the four types of validity.

Belcher, L., Kalichman, S., Topping, M., Smith, S., Emshoff, J., Norris, F., and Nurss, J. (1998). **A randomized trial of a brief HIV risk reduction counseling intervention for women.** *Journal of Consulting and Clinical Psychology*, 66, 856-861.

There is an urgent need for the development and implementation of effective and feasible behavioral HIV and STD interventions. The purpose of the present randomized controlled trial was to evaluate the effectiveness of a single-session, skill-based sexual risk reduction intervention for women. Participants were assessed at baseline and at 1 month and 3 months following the intervention on measures of AIDS knowledge, behavioral intentions, self-efficacy, and sexual risk behavior. Compared with women in an AIDS-education-only condition, women receiving the skill-based intervention reported significantly higher rates of condom use at 3-month follow-up. Results suggest that brief sexual risk reduction programs are feasible and effective within a community setting.

Long, A., **Greenberg, J.**, Bonilla, G., and Weathers, R. (1998). **A storytelling model using pictures for HIV prevention with injection drug users.** In J.B. Greenberg and M. Neuman (Eds.), *What We Have Learned from the AIDS Evaluation of Street Outreach: A Summary Document* (pp. 29-45). Atlanta, GA: Department of Health and Human Services, Centers for Disease Control and Prevention.

This article describes a unique outreach intervention strategy featuring a storytelling model. Outreach workers showed a series of abstract illustrations related to themes of HIV risk and risk-prevention behaviors to injection drug users and encouraged them to tell their own stories related to the scenes. The storytelling served as a prelude to questions that specified each of the five stages of change through which people typically progress when changing behaviors. Once clients had been placed in one of the five stages, a clear and succinct risk-reduction message for that stage was given. The article describes how the themes and illustrations were developed, and how the outreach workers were trained to use them. Advantages of this approach include: its flexibility for a variety of settings and literacy levels, and that it can easily be adapted to the cultural needs of each segment of the target population.

Kamb, M. L., **Fishbein, M.**, Douglas, Jr., J.M., Rhodes, F., Rogers, J., Bolan, G., Zenilman, J., Hoxworth, T., Malotte, C.K., Latesta, M., Kent, C., Lentz, A., Graziano, S., Byers, R.H., and Peterman, T.A. (1998). **Efficacy of risk-reduction counseling to prevent Human Immunodeficiency Virus and sexually transmitted diseases.** *Journal of American Medical Association*, 280(13), 1161-1167.

Project RESPECT was a randomized controlled trial specifically designed to assess the efficacy of HIV prevention counseling in reducing high-risk sexual behaviors and preventing new sexually transmitted infections. We studied counseling approaches believed by experts to have the highest likelihood for success and, thus, evaluated risk reduction

counseling models that used interactive process between counselor and client. We were also concerned about feasibility and coverage of the interventions that were acceptable to participants and able to be replicated in busy public clinic settings. This project evaluated one-on-one HIV/STD prevention counseling models—one with 4 sessions (200 minutes total) and the other with 2 sessions (40 minutes total). We compared the counseling models with each other and with brief, didactic messages that approximate the one-on-one prevention approach typically used in STD clinics and other HIV test sites.

At the 3- and 6-month follow-up visits, self-reported 100% condoms use was higher ($P<.05$) in both the enhanced counseling and brief counseling arms compared with participants in the didactic messages arm. Through the 6-month interval, 30% fewer participants had new STDs in both the enhanced counseling (7.2%; $P=.002$) and brief counseling (7.3%; $P=.005$) arms compared with those in the didactic messages arm (10.4%). Through the 12-month study, 20% fewer participants in each counseling intervention had new STDs compared with those in the didactic messages arm ($P=.008$). Consistently at each of the 5 study sites, STD incidence was lower in the counseling intervention arms than in the didactic messages intervention arm. Reduction of STD was similar for men and women and greater for adolescents and persons with an STD diagnosed at enrollment. Short counseling intervention using personalized risk reduction plans can increase condom use and prevent new STDs. Effective counseling can be even in busy clinics.

Moneyham, L, Hennessy, M., Sowell, R., Demi, A., Seals, B., and Mizumo, Y. (1998). The effectiveness of coping strategies used by HIV-seropositive women. *Research in Nursing and Health, 21*, 351-362.

The effectiveness of active and passive coping strategies was examined in a sample of 264 HIV+ women. Coping was measured concurrent with, and 3 months prior to, measurement of physical symptoms and emotional distress. Two casual models were tested: one for active coping and one for passive coping. Active coping strategies examined included seeking social support, managing the illness, and spiritual activities. Avoidance was used as an indicator of passive coping. In both models, physical symptoms and emotional distress were positively and significantly related. The immediate effects of active coping appeared to serve a protective function in that emotional distress decreased with greater use of active coping, even as physical symptoms increased. Avoidance coping had no such protective effect for emotional distress. In addition, the use of avoidance coping decreased and active coping increased as physical symptoms increased, suggesting that active coping is more likely to be used with increasing levels of physical symptoms. The findings suggest that interventions that support attempts to use active to use active coping strategies as physical symptoms increase may be effective in promoting positive adaptation to HIV disease.

St. Lawrence, J.S., Eldridge, G.D., Reitman, D., Little, C.E., Shelby, M.C., and Brasfield, T.L. (1998). Factors influencing condom use among African-American women: Implications for risk reduction interventions. *American Journal of Community Psychology, 26(1)*, 7-28.

Examined factors associated with condom use in a community-based sample of 423 sexually active African American women. Measures were selected to reflect the components in prevailing models of health behavior. Condom users were higher on AIDS health priority, prevention attitudes, stage of change, behavioral intentions, reported more frequent and comfortable sexual communication with partners, perceived greater partner and peer approval for condom use, and reported that peers also used condoms. Women in exclusive relationship evidenced earlier stage of change, lower intentions to use condoms, fewer peers who engaged in preventive behaviors, perceived themselves to have lower risk, and had lower rates of condom use, higher education, and family income. Women in fluid relationships were at particularly high risk, with lower rates of condom use relative to women not in a relationship and greater sexual risk of HIV. Implications for HIV-risk reduction interventions with African American women are discussed.

St. Lawrence, J.S. (1998). **Die wall zwischen unterschiedlichen paradigm: Aktuelle behaviorale strategien zur pravention von HIV-infektionen.** (Translated: **Choosing among paradigms: Emerging behavioral strategies for the prevention of HIV disease.**) In G. Amann and R. Wipplinger (Eds.), *Gesundheitsforderung - ein multidimensionales Tatigkeitsfeld* (pp.485-514). Tübingen: DGVT-Verlag.

This chapter addresses the issues related to the various paradigms and theoretical models from around the world for AIDS prevention and interventions at the level of populations, targeted outreach, small groups, dyads, and individuals. The material is directed to health professionals.

Greenberg, J., MacGowan, R., Long, A., Cheney, R., Fernando, D., Sterk, C., and Wiebel, W. (1998). **Linking injection drug users to medical services: Role of street outreach referrals.** *Journal of Social Work and Health*, 298-309.

Street outreach workers in HIV prevention have expanded their role to include referring injection drug users to medical services. However, little is known about whether drug users act on these referrals. In this study we examined the level of exposure to street outreach reported by injection drug users, the most common medical referrals acted on as a result of such contacts, and the predictors of acting on these referrals. We analyzed data on contact with outreach workers from 3237 structured interviews with injection drug users in five cities between January 1994 and October 1995. We used bivariate correlation and multiple regression to identify key predictor variables for acting upon medical referrals. Over the previous six months, outreach workers had reached 42% to 67% of injection drug users interviewed and provided referrals to a number of medical services, especially HIV counseling and testing and substance abuse treatment. Injection drug users with 4 or more contacts with workers during the previous six months were more likely to report acting upon referrals. To maximize the relevance of outreach for encouraging medical treatment, both street outreach workers and social workers in health care could benefit from cross training that focuses on strengthening the referral process.

Malow, R.M., Gustman, S.L., Ziskind, D., McMahon, R., **St. Lawrence, J.S.** (1998). **Evaluating HIV prevention interventions among drug abusers: Validity issues.** *Journal of HIV/AIDS Prevention & Education for Adolescents and Children*, 2(3/4), 21-40.

Recent literature identifies many difficulties in validity measuring sex and drug use behavior associated with HIV risk, particularly among adolescents. In evaluating HIV risk reduction interventions, this literature emphasizes that, in addition to the more obvious determinants of self-reporting bias (e.g., response style, interviewing characteristics, social desirability, the interview setting), other factors require careful consideration (e.g., whether the person is assigned to a treatment or companion group; whether the interview occurred at in-take, in treatment, or post-discharge; and the severity of the respondent's drug use). It also emphasizes the importance of including toxicologic STD and drug use measures in treatment outcome research to validate respondents' self-reports of risk behavior and adjust them for under-reporting. Guided by the literature, this article suggests procedures for more validity measuring HIV risk reduction, particularly among drug abusing adolescents. These include medical record abstraction, qualitative interviews, and extensive data validity checks to detect illogical or inconsistent responding.

Crosby, R. (1998). **Condom use as a dependent variable: Measurement issues relevant to HIV prevention programs.** *AIDS Education and Prevention*, 10(6), 548-557.

The value of condoms in efforts to slow the spread of HIV infection has been well established in the literature. Behavioral science faces the challenge of promoting condom use through intervention programs. As these programs are evaluated, multiple issues should be considered in relation to measuring participant use of condoms for the purpose of preventing HIV infection. Lack of attention to these issues is likely to create a large number of Type I and Type II errors. Ten common sources of error are described and corresponding recommendations for eliminating these errors are

offered. A review of published studies shows that there is little consistency relevant to controlling for these sources of error. Incorporation of standardized methodology will allow for more accurate program evaluation and benefit researchers by facilitating comparisons across studies.

St. Lawrence, J.S. (1998). *Becoming A Responsible Teen: An HIV Risk Reduction Program For Adolescents*. San Jose, CA: ETR Associates.

This 228-page book is an HIV and AIDS-prevention curriculum that works. Originally designed to be used in non-school settings with African American adolescents ages 14-18, "Becoming A Responsible Teen" (B.A.R.T.) presents accurate, useful information about HIV and AIDS. In addition, it involves teen participants in building the skills they need to clarify their own values about sexual activity and make decisions that help them avoid the risk of becoming infected with HIV, the virus that causes AIDS.

The eight-session curriculum is presented in the form of a guide for leaders, with participant handouts that can be duplicated and distributed. Participants meet once a week for one and a half to two hours, for eight weeks; young men and women meet in groups segregated by gender to focus on skill development. Two co-leaders lead each group.

PUBLISHED IN 1997

Albarracin, D., Fishbein, M., and Muchnik, E. (1997). *Seeking social support in old age as reasoned action: Structural and volitional determinants in a middle-age sample of Argentinean women.* *Journal of Applied Social Psychology, 27(6)*, 463-476.

Given that the availability of social support influences physical and psychological well-being, the provision of positive contact is often critical for older women. The purpose of the present study was to test the ability of both structural and volitional factors as determinants of support-seeking intentions. Two intentions to seek social support were studied in a group of 106 middle-aged women: (a) the intentions to go to a doctor at least once a year after age 55; and (b) the intention to visit a family member at least once a week after age 55. The structural variables of interest were age, education level, presence of partner, number of children, and the number of grandchildren. The volitional factors addressed were intentions, beliefs, attitudes, and norms. There was little evidence that structural factors influenced support seeking. In contrast, as predicted from the theory of reasoned action (Ajzen & Fishbein, 1980; Fishbein and Ajzen, 1975) intentions to go to a doctor and to visit a family member could be successfully predicted from attitudes and norms.

Brackbill, R.M., MacGowan, R.J., and Rugg, D. (1997). *HIV infection risk behaviors and methadone treatment: Client-reported HIV infection in a follow-up study of injecting drug users in New England.* *American Journal of Drug and Alcohol Abuse, 23(3)*, 397-411.

There is wide variation in reported risk factors for HIV incidence among injecting drug users by community. Available HIV sero-prevalence and incidence data indicate that nearly 60% of HIV infection is associated with injecting drug use in Connecticut and 48%

in Massachusetts. Using 12-month follow-up data on 354 initially HIV-negative New England (Massachusetts and Connecticut) methadone treatment clients, we assessed the association between baseline drug use practices, sexual behavior, and client-reported HIV infection during follow-up. Variables that predicted client-reported positive HIV antibody test results were modeled by Cox proportional hazards regression. HIV infection among those tested was 14.2 per 100 person years (PY) [95% Confidence interval (CI) = 9.5 to 21.3]. For each injection the relative risk (RR) was 1.1 (95% CI = 1.1 to 1.2), for males 3.0 (95% CI = 1.2 to 7.3), for blacks 5.0 (95% CI = 1.6 to 15.5), for Hispanics 3.6 (95% CI = 1.2 to 10.5). Men who used more than one unclean needle per day and had an HIV-infected steady partner had a RR of 28.4 (95% CI = 4.4 to 176.4). For women, using speedball (RR = 6.1, 95% CI= 1.2 to 38.8) and being black (RR = 4.4, 95% CI= 1.0 to 19.8) predicted self-reported HIV infection; having steady partner who ever injected increased this risk substantially (RR = 65.3, 95% CI = 4.0 to 1046.5). These findings for IDUs in this risk substantially.

Campsmith, M.L., Goldbaum, G.M., Brackbill, R.M., et.al. (1997). **HIV testing among men who have sex with men - Results of a telephone survey.** *Preventive Medicine, 26*, 839-844.

Background: This article describes the testing behavior for Human Immunodeficiency Virus (HIV) antibody among an urban population of men who have sex with men (MSM) and the reasons given for not being tested for HIV.

Methods: A random digit dialing telephone survey of men living in selected neighborhoods of Seattle, Washington, was conducted from June through August 1992.

Results: Of 603 MSM interviewed, 82% had ever been tested for HIV: 19% of tested men were seropositive. MSM who were older, nonwhite, with lower income, or currently sexually active were less likely to have been tested. Among non-testers, 57% believed their risk of infection was too low to justify testing; 52% said they had not tested due to fear of learning the results. Testers and non-testers had similar rates of unprotected sexual behavior.

Conclusion: Most MSM who had not been tested for HIV believed they were not at risk of infection and/or were fearful of learning the results. To increase the proportion of MSM who test, public health agencies may need to emphasize that unexpected infection does occur and that new therapies are available for those testing positive. Innovation programs may be necessary to reach those who have not yet decided to be tested.

CDC (Fishbein, M. contributing author). (1997). Contraceptive practices before and after an intervention promoting condom use to prevent HIV infection and other sexually transmitted diseases among women - selected US sites, 1993-1995. *MMWR, 46(17)*, 373-377.

The findings of this report indicate that, among reproductive-aged women who were encouraged to use condoms for HIV/STD prevention, consistent condom use for HIV/STD prevention increased among women using each contraceptive method studied. In addition, although some women who are encouraged to use condoms for HIV/STD prevention may discontinue use of hormonal contraceptives, 75% of participants in this study who were using hormonal contraceptives at enrollment continue to use them after the condom-promoting intervention. From enrollment to follow-up, only 12% of women changed from using hormonal contraceptives to using condoms for contraception. Furthermore, approximately half of the women who were using minimally effective or no contraceptive methods at enrollment changed to using more effective contraceptive methods after the condom-promotion intervention, and of women using condoms for contraception, the proportion using them consistently nearly doubled from enrollment to follow-up. Thus, for women who were neither sterilized nor using hormonal contraceptive methods at enrollment, the risk for unintended pregnancy at follow-up was reduced because of the increase in consistent condom use for HIV/STD prevention or the use of other effective contraceptive methods.

Conlon, R.T. (1997. Introducing technology into the public STD clinic. *Health Education & Behavior, 24(1)*, 12-19.

Each year, thousands of people seek testing and treatment for sexually transmitted diseases (STD) such as syphilis, gonorrhea, and Human Immunodeficiency Virus (HIV). These freestanding STD clinics play an increasingly important role in public health as they treat millions of clients each year for STDs. The scope of services and number of people served increasingly challenges the limited resources available to sustain clinic operations. Given constraints on government funds, all of these revenue sources are currently fixed or diminishing. Local STD programs have few options for increasing their support for STD prevention and must rely on external funding sources such as CDC grants to maintain operations or expand into new areas. Parallel with competition for funds at these levels is the downsizing of the federal government and the resulting shrinkage of Federal staff. The confluence of budget and staffing reductions underscore the importance, if not the urgency, for introducing new efficiencies into clinic operations through computer support of STD clinic services. Implementing modern computer technology into the clinic setting can decrease the

number of support staff and essentially do away with paper functions such as record keeping and laboratory surveillance, and also supplement behavioral risk assessments of clients and deliver interventions such as counseling.

Eldridge, G.D., St. Lawrence, J.S., Little, C.E., Shelby, M.C., and Brasfield, T.L. (1997). **Evaluation of an HIV risk reduction intervention for women entering inpatient substance abuse treatment.** *AIDS Education and Prevention, 9A*, 62-76.

Objectives: Interventions to lower HIV risk behavior among drug users have concentrated on reduction of high injection practices. Less attention has been directed to non-injecting drug users and drug-involved women. Female non-injecting drug users (e.g., women who abuse alcohol or crack cocaine) are also at substantial risk for sexual transmitted of HIV due to multiple partners, partners who self-inject and share needles, exchange of sex for drugs, coerced sex, high rates of sexually transmitted diseases, and low rates of condom use. This study compared the effectiveness of an educational intervention (EC) against a behavior skills training intervention (BST) in reducing sexual risk against a behavior among women (N=117) court-ordered into inpatient drug treatment.

Methods: Participants were assessed at baseline, post intervention, and 2 months after discharge from the drug treatment facility.

Results: Women in both conditions reported high rates of sexual risk behavior prior to the intervention. Women in both conditions had more positive attitudes toward HIV prevention and reported greater partner agreement with condom use at the post intervention assessment. However, these changes were not maintained at follow-up for women in the EC condition, whereas women in BST continued to show improvement post discharge. Women in the BST condition showed marked, while women in EC showed little improvement in communication skills and no improvement in condom application skill. At follow-up, women in both conditions had reduced drug use and drug-related high risk sex activities. BST women had increased their condom use while women in EC evidenced a decrease. Condom use increased from 35.7% to 49.5% of vaginal intercourse occasions for BST women and decreased from 28.8% to 15.8% for women in EC.

Conclusions: Results suggest a brief skills training intervention embedded in drug treatment programs can reduce sexual risk for HIV-infection after discharge.

Fishbein, M. (1997). Predicting, understanding, and changing socially relevant behavior - Lessons learned. In C. McGarty and A. Haslam (Eds.), *The Message of Social Psychology* (pp. 77-91). Oxford, England: Blackwell Publishers.

Attitude is a relatively simple construct that refers to a person's overall favorableness or unfavorableness with respect to an object. Although there are increasing claims for non-cognitive determinants of attitude, it would appear that, in general, attitudes towards an object are primarily based on one's beliefs about it. The more one associates the object with positive characteristics, qualities, and attributes the more favorable is one's attitude toward the object. Similarly, the more one associates the object with negative characteristics, qualities, and attributes, the less favorable is one's attitude toward the object. Although one's attitude toward an object does seem to have a strong and significant influence on the pattern of behaviors one engages in vis-a-vis the object, it rarely determines any specific behavior with respect to the object

Fishbein, M. and Rhodes, F. (1997). Using behavioral theory in HIV prevention. In N.H. Corby and R.J. Wolitski (Eds.), *Community HIV Prevention: The Long Beach AIDS Community Demonstration Project* (pp. 21-30). Long Beach, CA: California State University Press.

In this second decade of the global HIV/AIDS epidemic, public health programs and campaigns to reduce the spread of HIV are commonplace. Universally, these initiatives attempt to directly or indirectly influence the behaviors responsible for transmission of HIV from one person to another. This chapter describes how behavioral theory can be used to

improve the design and implementation of HIV prevention programs. Examples of how behavioral theory was applied in the development, implementation, and evaluation of the AIDS Community demonstration Project are also provided.

Hardin, P. and Reis, J. (1997). Interactive multimedia software design: Concepts, process, and evaluation. *Health Education & Behavior, 24(1)*, 35-53.

This article provides the health educator with a review of the design and construction of computer-based health education materials. Specifically, this review considers questions of instructional objectives as defined in the field of instructional design, a body of expertise not often deployed in the area of health education. It discusses in some detail the computer materials development process, associated documentation, and the range of personnel required. This article also briefly updates discussion of the costing process, and current costs for multimedia hardware. The review touches on, but not synthesize, emerging possibilities with the Internet.

Hennessy, M.B., Manteuffel, B., DiIorio, C., and Adame, D. (1997). Identifying the social contexts of effective sex refusal. *Journal of American College Health, 46*, 27-34.

A factorial survey was conducted to identify social situations that inhibit or promote college students' sex-refusal skills. Respondents evaluated five different situations in which sexual intercourse might occur and ranked each according to how certain the respondent would be to refuse to have sexual intercourse in that context. Regression analysis of the survey data showed that knowing the other person well, being with one's boyfriend or girlfriend, having condoms available, wanting to have sex, and both persons' wanting to have sex reduced the probability of refusal. On the other hand, having no condoms and the presence of drugs in the situation increased the probability the individual would refuse to have sex. In addition, men, individuals with previous sexual experience, and drinkers displayed diminished ability to refuse sex. However, the lack of condoms, when combined with these three respondent characteristics, acted to increase the ability to refuse sex.

Kalichman, S., Greenberg, J., and Abel, G. (1997). HIV-seropositive men who engage in high-risk sexual behavior: Psychological characteristics and implications for prevention. *AIDS Care, 9(4)*, 441-450.

A minority of people who test HIV seropositive continue to engage in sexual behaviour that places their partners at high risk from HIV infection. However, little is known about factors that contribute to sexual risk behaviour among HIV-seropositive men. In this study, HIV-seropositive men participating in substance abuse support groups and HIV prevention programmes (n=223) completed measures of demographic characteristics, sexual behaviour history, sensation-seeking (the propensity to seek optimal stimulation), and sexual compulsivity (persistent sexual preoccupation). Twenty-six per cent of the sample reported having recent multiple unprotected sexual intercourse partners. Across support group and prevention programme participants, men with multiple unprotected partners reported greater sexual compulsivity than men with one or no unprotected partners, but groups did not differ in terms of sensation-seeking. Results suggest that intensive therapeutic interventions are needed for a relatively small number of people who may contribute significantly to the HIV epidemic.

Leach, M.P., Wolitski, R.J., Goldbaum, G.M., Fishbein M. (1997). HIV risk and sources of information among urban street youth. *Psychology, Health, & Medicine, 2(2)*, 119-134.

HIV risk characteristics and sources of HIV information were examined in a sample of 430 sexually active street youth recruited in Seattle, Washington. Overall, 40% of these youth were living on the street or in a shelter at time of interview. The majority (80%) reported having multiple sex partners in the prior 30 days. Condom use was reported more frequently for non-main partners versus main partners. More than one-third had ever injected drugs and almost all reported use of alcohol or other substances. Basic HIV knowledge and recent exposure to HIV information were relatively high—63% of street youth had received HIV information from two or more sources in the prior 3 months.

Small media (e.g. brochures, flyers) were the most frequently-mentioned channel of HIV information (77%), followed by interpersonal (60%), and mass media sources (41%). HIV information from street-based small media had been received by 63% of the sample, and were the only specific source of HIV information to reach more than half of street youth. Significant differences in sources of HIV information were observed for gender and homeless status. Recent exposure to HIV information via small media channels was positively associated with several psycho-social variables pertaining to condom-use with the respondent's main sex partners, while exposure to any source was not related to variable associated with condom use with non-main partners. Implications of these findings for prevention communication campaigns targeting street youth are discussed.

Madakarsira, S. and St. Lawrence, J.S. (1997). Premature ejaculation: Assessment and treatment. In A. Halaris (Ed.), *Sexual Dysfunction* (pp. 91-113). London: Balliere Tindall Ltd.

This chapter presents an historical review of premature ejaculation prevalence and incidence. It contains a synthesis of current diagnostic paradigms and treatment interventions.

McGowan, R.J., Brackbill, R.M., Rugg, D., Swanson, N., Weinstein, B., Couchon, A., Scibak, J., Molde, S., McLaughlin, P., Barker, T., and Voigt, R. (1997). Sex, drugs, and HIV counseling and testing: A prospective behavior change among methadone maintenance clients in New England. *AIDS*, 11, 229-235.

Objective: To determine whether changes in injecting drug use and sexual behavior over a 12-month follow-up are associated with HIV counseling and testing (C & T) of injecting drug users in methadone maintenance treatment programs (MMTP) in Massachusetts and Connecticut.

Methods: Clients were invited to participate in a longitudinal study involving five interviews. Data were also obtained by ethnographers and from clinical records. Behavioral outcomes of interest were number of drug injections, sharing of unclean 'works' (injecting equipment), number of unprotected sex partners, and number of unprotected sexual episodes. Data analyses included multiple regression, odds ratio, and quantitative analysis of text-based data.

Results: Subjects reported reductions in both injecting drug use and sexual behavior. Primary associations with reduced injecting drug use were remaining in the MMTP and attending HIV-positive support groups. A reduction in high-risk sexual behavior was associated with an HIV-positive test result and duration of HIV counseling in the MMTP. Increase in drug injecting use was associated with an HIV-positive test result. Inconsistent condom use was associated with enrollment in the MMTP where condoms were available only upon request and abstinence and monogamy between uninfected partners were promoted.

Conclusions: Injecting drug users who self-select to participate in MMTP and HIV C & T, two public health HIV-prevention interventions, reduce their HIV-risk behaviors. Clients should be encouraged. To remain in MMTP and HIV-infected clients should attend support groups for HIV-positive persons. MMTP staff should promote a variety of safer sex behaviors and provide condoms without request.

Moneyham, L., Seals, B., Sowell, R., Hennessy M., Demi, A., and Brake, S. (1997). The impact of HIV on emotional distress of infected women: Cognitive appraisal and coping as mediators. *Scholarly Inquiry for Nursing Practice*, 11(2), 135-145.

This study examined the role of psychological factors as mediators of the impact of HIV-related stressors on emotional distress of a clinic-based sample of 264 HIV+ women. Based upon Lazarus and colleagues' cognitive oriented theory of stress and coping, causal modeling was used to test for mediating effects of cognitive appraisal (intrusive thoughts and perceived stigma) and coping variables (avoidance and fatalism) on emotional distress within the context of HIV-related stressors (functional impairment and work performance impairment.) The findings supported the mediating effects of

cognitive appraisal but not of the coping variables. Consistent with theory, the effect of HIV-related stressors on emotional distress was indirect through cognitive appraisal; however, there were no significant direct effects of HIV-related stressors, fatalism or avoidance on emotional distress. The casual model accounted for significant portions of variance in emotional distress ($r^2 = .49$) and the model fit, as a whole, was more than adequate. The findings indicate that how HIV+ women think about HIV-related stressors is an important factor that may account for individual variability in the ability to maintain a sense of subjective well being in the face of a devastating fatal illness.

Rhodes, F., Fishbein, M., and Reis, J. (1997). Using behavioral theory in computer-based health promotion and appraisal. *Health Education Quarterly, 24*(1), 20-34.

This article explores how behavioral theory can facilitate the development, implementation, and evaluation of health promotion software packages intended to influence personal health practices and/or assess health risk. Current behavioral theories and models are reviewed, and the relevance to developing health promotion software is discussed. A series of six steps is suggested for developing and evaluating health promotion and appraisal software within a behavioral theory framework. These steps should help to facilitate direct application of the theory-based process to health promotion software development.

Rugg, D., Levinson, R., DiClemente, R., Fishbein, M. (1997). Centers for Disease Control and Prevention partnerships with external behavioral and social scientists: Roles, extramural funding, and employment. *American Psychologist, 52*(2), 147-153.

The Centers for Disease Control and Prevention (CDC) must have strong external partnerships with behavioral and social scientists to refine and carry out its research and programmatic mission. This article examines funding, employment, and other mechanisms used to develop and foster such partnerships. The authors describe in detail funding mechanisms (especially the often-used cooperative agreement and contracting mechanism) and identify specific sources of information about funding opportunities. Furthermore, they describe several different long- and short-term employment mechanisms that can be used to link CDC staff and external behavioral scientists. Finally, external behavioral and social scientists can serve in important roles as members of CDC advisory committees, peer reviewers of funding applications, and consultants; examples of these opportunities are also provided.

St. Lawrence, J.S., Eldridge, G.D., Shelby, M.C., Little C.E., Brasfield, T.L., and O'Bannon, R.E. (1997). HIV risk reduction for incarcerated women: A comparison of brief interventions based on two theoretical models. *Journal of Consulting and Clinical Psychology, 65*, 504-509.

Although female inmates are seropositive at rates that exceed those of male inmates, few studies have evaluated HIV risk reduction interventions for incarcerated women. This demonstration project compared an intervention based on social cognitive theory against a comparison condition based on the theory of gender and power. Incarcerated women (N=90) were assessed at baseline, post-intervention, and again 6 months later. Both interventions produced increased self-efficacy, self-esteem, Attitudes Toward Prevention Scales scores, AIDS knowledge, communication skill, and condom application skills that maintained through the 6-month follow-up period. Participants in the intervention based on social cognitive theory showed greater improvement in condom application skills, and women in the program based on the theory of gender and power evidenced greater commitment to change. The results suggest brief interventions in prison settings are feasible and beneficial. However, it is not yet known whether the changes will generalize into the natural environment after the women's release into the community.

St. Lawrence, J.S. and Ndiaye, S.M. (1997). Prevention research in rural communities: Overview and concluding comments. *American Journal of Community Psychology*, 25(4), 545-561.

This paper provides an overview of the challenges that confront researchers in rural settings, synthesizing the manuscripts in this special issue of The American Journal of Community Psychology. Researchers typically focus on issues of research design, measurement, and data analyses. However, when applied research is conducted in rural settings, greater time and attention are required to identify how the research can be conducted successfully. In this overview of the challenges that confront researchers in rural contexts, qualitative differences between rural and urban environments are described with particular attention to their implications for the conduct of rural research. Finally, theoretical and research topics that can better inform future rural research efforts are discussed.

Fishbein, M. and Middlestadt, S.E. (1997). A striking lack of evidence for nonbelief-based attitude formation and change: A response to five commentaries. *Journal of Consumer Psychology*, 6(1), 107-115.

In a recent article, (Fishbein & Middlestadt, 1995) we attempted to show that much of the evidence supporting nonbelief-based models of attitude formation and change could be viewed as methodological artifacts. Perhaps not surprisingly, the article has stimulated a number of responses. Unfortunately, many commentaries appear to be more of a defense of a dual processing model of attitude formation and change than an attempt to address a fundamental methodological issue in attitude research-namely, can one demonstrate nonbelief-based attitude formation or change without appropriately assessing the belief structure that theoretically underlies the attitude? In this article, we review the three types of evidence that were presented in support of nonbelief-based attitude formation and change, and we conclude that there is little empirical evidence to support a nonbelief-based view. .

PUBLISHED IN 1996

Anderson, J.E., Brackbill, R.M., and Wilson, R.W. (1996). Diagnostic HIV antibody testing in the U.S., 1987-1993. *AIDS*, 10(3), 342-343.

Testing blood for HIV antibody has become common in the United States. Tests are performed to determine infection status, as part of voluntary blood donation and during job application, military induction and application for insurance coverage. HIV counseling and testing (antibody testing accompanied by pretest and post-test counseling) has constituted one of the largest HIV prevention activities supported by the US federal government.

We have analyzed data on HIV testing from the 1993 National Health Interview Survey (NHIS). The NHIS is an annual, nationally representative household-based sample survey of the civilian, non-institutionalized US population that has collected information related to HIV/AIDS since 1987. The NHIS provides data on the extent of HIV testing in the general population (and in those at increased risk of HIV infection) from both public programs and private providers - data that are not available from other sources. In 1993, 20,607 NHIS respondents answered questions on HIV/AIDS.

CDC (Judith Greenberg: Lead author). (1996). Continued sexual risk behavior among HIV seropositive, drug-using men—Atlanta, Washington, D.C., and San Juan, Puerto Rico, 1993. *MMWR*, Vol. 45(7), 151-2.

The findings in this report underscore that some persons with HIV infection need on-going assistance and support to acquire and maintain safer sex practices. Men who reported not using condoms were more likely than men who reported using condoms to trade sex for money or drugs. This finding indicates the need for further characterization of the behavioral and environmental determinants of continued unsafe sexual behavior among HIV-seropositive, illicit-drug users. The findings indicate opportunities for strengthening prevention because most of these men already were linked

to ongoing community programs that provide drug treatment, mental health services, health care, and psychological support. Such programs also should educate, motivate, and assist patients in acquiring skills to maintain safer practices.

Dilorio, C., Hennessy, M., and Manteuffe, B. (1996). Epilepsy self-management: A test of a theoretical model. *Nursing Research*, 45(4), 211-217.

This study examines the role of social support, self-efficacy, outcome expectancy, and anxiety as predictors of medication management in persons with epilepsy. A model based on social cognitive theory was constructed to explain managing medications under conditions of scarcity. A survey was sent to 450 individuals who participated in job training programs for persons with epilepsy. One hundred ninety-five completed questionnaires were returned. The proposed structural model was tested using structural equation modeling. The assistance aspect of social support was positively related to regimen-specific support. The paths from self-efficacy to outcome expectancy and anxiety were significant and in the predicted directions, as was the path from anxiety to self-management.

Greenberg, J.B., Kalichman, S.C., and Treadwell, P.E. (1996). Customizing interventions for HIV-seropositive persons. In Schenker (Ed.), *AIDS Education* (pp. 35-46). New York: Plenum Press.

In this chapter, the authors examine several types of potential interventions beyond counseling and testing for reducing transmission of HIV by infected persons. These include: support groups, which have often been used in an attempt to meet the psychological needs of persons with HIV; psychoeducational groups which have proved successful in reducing sex risk behavior in uninfected persons; and interventions for individuals who may have a biological propensity for risk taking.

Greenberg, J.B., Johnson, W.D., and Fichtner, R.R. (1996). A community support group for HIV-seropositive drug users: Is attendance associated with reductions in risk behavior? *AIDS Care*, 8, 529-540.

Although support groups for HIV-seropositive persons are a potential source of emotional support and information, there has been little assessment of such groups as to their role in changing risk behavior for transmission. The present study combines observations from over 52 group sessions with baseline and follow-up interview data to assess changes in sex and drug behaviour among seropositive drug users participating in an on-going group for African-Americans. The sample of 100 adults was recruited from drug treatment centers and from the community in Atlanta, Georgia. At the 6-month interview, frequency of group attendance was associated mainly with healthier drug behaviour, the topic most frequently discussed by members. Findings suggest that training for support group facilitation needs to target two areas for technology transfer: successful strategies for reducing both high-risk sex and drug behaviour and methods for introducing these behavioural change tools into a setting designed for socio-emotional support. We conclude that community support groups are an untapped opportunity for low-cost prevention services.

Hennessy, M., MacQueen, K., McKirnan, D., Buchbinder, S., Judson, F., Douglas, J., Bartholow, B., and Sheon, A. (1996). A factorial survey study to assess the acceptability of HIV vaccine trial designs. *Controlled Clinical Trials*, 17(3), 209-220.

To aid in the design of Human Immunodeficiency Virus (HIV) vaccine trials that maximize voluntary participation, factorial surveys were administered to 73 gay men who were participants in a larger study assessing HIV vaccine trial feasibility. Factorial surveys are "vignettes" that are randomly constructed through the combination of descriptive statements (dimensions) that reflect essential features. In this study, the dimensions define components of clinical trials to assess the efficacy of hypothetical HIV vaccines. Regression analysis shows that anticipation participation was decreased by a sustained vaccine-induced antibody response lasting 3 years, absence of gay men as research subjects in

earlier phase trials for the product's being tested, and rectal vaccine administration. Three years of scientific experience with the vaccine encouraged participation.

We conclude that willingness to participate in vaccine trials varies systematically with some of their characteristics. Where there are design alternatives for identifying negative components, these should be considered. If this is not possible, options for decreasing aversion to such features will need to be evaluated, including appropriate education regarding both the benefits and the risks associated with negatively evaluated features.

MacGowan, R.J., Swanson, N.M., Brackbill, R.M., et.al. (1996). Retention in methadone maintenance treatment programs, Connecticut and Massachusetts, 1990-1993. *Journal of Psychoactive Drugs, 28(3)*, 259-265.

The goal of this study was to identify factors associated with six-and12-month retention in methadone maintenance treatment programs (MMTPs) in Massachusetts and Connecticut. Data was obtained from 674 participants, clinic records, and clinic staff. Ethnographic and logistic regression analyses were conducted. Overall, 69% and 48% of the clients remained in treatment at six months and 12 months, respectively. The MMTPs were categorized as either a 12-Step, case management, or primary care model. Factors independently associated with retention in treatment at six months were each one-year increase in age of client (OR 1.05), injecting at three months (OR 0.47), and enrollment in the primary care model (OR 2.10). The same factors were associated with 12-month retention treatment. To retain clients MMTPs—which should, in turn, help reduce drug use and prevent HIV transmission among IDUs—younger IDUs and clients still injecting at three months after entering drug treatment may need additional services from the staff, or alternative treatment regimens. MMTP directors should consider differences between these programs and, if appropriate, make changes to increase retention in treatment.

Miller, K., Hennessy, M., Wendell, D., Webber, M., and Schoenbaum, E. (1996). Behavioral risks for HIV associated with HIV testing decisions. *AIDS Education and Prevention, 8(5)*, 394-402.

Adolescents and adult women were offered HIV testing as a part of a clinic-based research program on HIV/AIDS in New York City. Sixty-four percent consenting to testing and 87% of those tested returned to receive their results. This paper uses two-stage regression methods to identify sexual behavioral risk factors for HIV infection associated with the decision to accept the HIV test and subsequently to return for the results. Of the risk factors examined, having more than a single sex partner and never using a condom in the last year were strong predictors of taking the test; three or more sex partners had the strongest effects on the decision to return for the HIV test results. We conclude that voluntary HIV testing in this group can identify women with behavioral risks of HIV infection. Thus, voluntary HIV testing may be effective in targeting persons at high risk because of behavioral risks are associated with the decision to take the HIV test.

Reitman, D., St. Lawrence, J.S., Jefferson, K.W., Alleyne, E., Brasfield, T.L., and Shirley, A. (1996). Predictors of African-American adolescents' condom use and HIV risk behavior. *AIDS Education and Prevention, 8(6)*, 499-515.

This study evaluated predictors of risky and safer behavior in a sample of low-income African American adolescents, assessed their perceptions of the risk associated with their sexual behavior, and examined differences between adolescents who used condoms consistently, inconsistently, or engaged only in unprotected intercourse. African American adolescents (N=312) completed measures related to AIDS knowledge, frequency of condom use, attitudes toward condoms, and sexual behavior over the preceding 2 months. Multiple regression analyses for the sexually active youths (N=114) revealed that lower self-efficacy, higher perceived risk, and male gender were associated with high-risk behavior. Positive attitudes toward condoms and younger age had the strongest association with condom use. Consistent condom users were more knowledgeable and held more positive attitudes toward condoms, and nonusers were older. Regardless of their behavior, the adolescents generally did not perceive themselves to be at risk for HIV infection. The findings suggest that precautionary practices (condom use) and high-risk behavior (protected sex with

multiple partners) may have different correlates. In addition, the data indicate that theoretical models developed with homosexual male populations may also be generalizable to African American adolescents' sexual behavior.

Short, L., Hennessy, M., and Campbell, L. (1996). Tracking the work. In *Family Violence: Building a Coordinated Community Response* (pp.59-72). Chicago: American Medical Association.

This chapter will cover program evaluation from both the program manager's and evaluator's perspective and will discuss appropriate situations for conducting several types of program evaluations. In developing and conducting useful evaluations, multiple issues should be considered: (1) dissimilar motivations for evaluations, (2) new kinds of program partnerships, (3) stages of the program to be evaluated, (4) development of collaborative relationships between program and staff, (5) design of evaluations for the real world, (6) use of multiple methods to collect data, (7) consideration of cultural competence and other ethical concerns, (8) design of the evaluation study, (9) selection of evaluators, and (10) completion of the study and continuation of relationships. Each of these is discussed below.

St. Lawrence, J.S. and Scott, C.P. (1996). Examination of the relationship between African-American adolescents condom use at sexual onset and later sexual behavior: Implications for condom distribution programs. *AIDS Education and Prevention, 8(3)*, 258-266.

School-based condom distribution programs have generated considerable controversy across the country. In the present study 249 sexually active African American adolescents who did (n=119) and did not (n=130) use a condom during their initial sexual experience were compared to assess whether condom use at the onset of sexual activity was associated with later differences in sexual behavior. The results indicated that youths who used a condom from the onset of sexual activity were more likely to have used a condom in the most recent intercourse occasion, less likely to be diagnosed with a sexually transmitted disease (STD) or to combine substance use with sexually activity, endorsed more positive attitudes toward condoms, and were older when they initiated sexual activity. The findings have implications for condom availability programs and indicate that initial condom use was not associated with earlier onset of sexual activity and was associated with higher rates of precautionary behavior among sexually active minority adolescents.

Brackbill, R.M. (1996). Surveying high-risk sexual behaviors. *The Behavioral Measurements Letter, 4(1)*, 4-7.

Soon after the AIDS epidemic was identified, specific sexual practices were reported as risk factors for AIDS. As a result, a new era began when human sexual behavior was a major focus of epidemiological and prevention research. Until this time, work by Kinsey and associates provided the dominant theoretical and methodological approach to human sexual behavior. Their focus was primarily on the multiple dimensions of individual sexuality. However, with the increasing incidence of AIDS and other sexually transmitted diseases, a new, public health approach was needed to understand sexual behavior as social interaction.

RECRUITMENT

**The Behavioral Interventions and Research Branch
Division of STD Prevention
National Center for HIV, STD, and TB Prevention
Centers for Disease Control and Prevention**

As positions become available in the Branch, we are seeking individuals for our research team who possess the following experience and expertise:

- I. Experience in STD field operation at the state and/or local level,
- II. Familiarity with operations research, particularly process, qualitative, and quantitative evaluation of operations,
- III. Familiarity with concepts of behavioral social science theory and methods,
- IV. Ability to conduct sophisticated analysis of data, such as MANOVA and structural equation modeling,
- V. Acquaintance with other forms of data analysis,
- VI. Ability to work with diverse, multi-disciplinary teams of research and program personnel, and
- VII. Ability to manage and oversee multi-site research projects involving both program and research personnel.

If you are interested in a position and possess these qualifications, please send a resume to:

Janet S. St. Lawrence, Ph.D.
Chief, Behavioral Interventions & Research Branch
Division of STD Prevention, NCHSTP
Centers for Disease Control and Prevention
Mailstop E-44
1600 Clifton Road, NE
Atlanta, GA 30333
E-mail: nzs4@cdc.gov
Fax (404) 639-8622