

Behavioral HIV Research, Interventions, and Community-Based Trials



RTI International has established an unparalleled reputation in HIV/AIDS behavioral research and interventions as well as in community-based and clinical trials. We bring together multidisciplinary teams, encompassing numerous fields of inquiry, for innovative research, program evaluation, and policy analysis.

Leadership in Innovative Research

RTI has been active in the fight against HIV/AIDS since 1984 and remains at the forefront of behavioral and intervention research, as well as community-based and clinical trials. RTI's research experience in this area includes

- Using multi-level approaches—individual, family, and/or community—to examine social and behavioral issues related to HIV/AIDS
- Studying HIV/AIDS health issues of special populations worldwide, such as substance users, youths, low-income and poor women, ethnic minorities, and criminal populations
- Employing mixed methods in our studies—quantitative and qualitative data collection, biological testing, and repeated measures
- Serving as a data coordinating center for several HIV/AIDS-related studies with responsibilities such as statistical and operational leadership; overall study coordination; design and implementation of the data collection, data management, and data analysis; quality control; and dissemination of study results

Supporting Clients and Collaborators Around the World

RTI advises and collaborates with a variety of multilateral and U.S. government health agencies, as well as health organizations within the governments, nongovernmental organizations, and communities in countries in which we conduct research:

- Centers for Disease Control and Prevention (CDC)
- U.S. Department of Health and Human Services (DHHS)
- National Institutes of Health (NIH)
- U.S. Agency for International Development (USAID)
- World Health Organization (WHO)
- Canadian Institutes of Health Research
- Naval Health Research Center (NHRC)
- International Partnership for Microbicides
- The Medical Research Council of South Africa
- Sizanang Centre for Research and Development

Research Highlights

Behavioral Research

With implications for social marketing and the behavioral and social sciences, the field of health behaviors and interventions is a major component of RTI's health promotion work. The following projects exemplify RTI's approach to better understanding HIV/AIDS health-related behaviors in diverse populations that are especially vulnerable to HIV infection.

Data Coordinating Center for a Male Circumcision Trial in Kenya

RTI International serves as the data coordinating center for a randomized controlled trial of male circumcision to reduce HIV incidence in Kisumu, Kenya. The study is funded jointly by the U.S. National Institute of Allergy and Infectious Diseases (NIAID) and the Canadian Institutes for Health Research. RTI is funded through the NIAID grant to the Principal Investigator at the University of Illinois at Chicago.

The trial has involved young adult, HIV-negative heterosexual male volunteers assigned at random to immediate circumcision performed by trained medical professionals in a clinical setting or circumcision delayed for at least 24 months of the trial. Based on the recommendation of a data and safety monitoring board reviewing results of an interim analysis of the study, the NIAID has halted the trial early, concluding that circumcision is safe and effective in reducing HIV acquisition. All men are now offered circumcision at the study clinic and follow-up continues, most specifically to monitor risk behavior in response to a recognized risk reduction with circumcision.

Acceptability of Microbicides Across Risk Groups and Time

With funding from the National Institute of Child Health and Human Development (NICHD), RTI is measuring the acceptability of vaginal microbicides designed to provide a woman-controlled form of protection against STIs including HIV. The study involves a qualitative and quantitative methodology in a local health department with patients at high risk of acquiring an STI and/or HIV.

Understanding Sexual Risk Among Young Female Drug Users in California

With funding from the National Institute on Drug Abuse (NIDA), RTI is seeking to establish a more comprehensive understanding of female methamphetamine (MA) users and the factors associated with sexual risk among them. MA use is a rapidly growing problem nationwide and this

trend has sparked exploration of the association between MA use and sexual risk among high-risk groups. Little is known about MA use among women, even though they represent 40% of MA treatment admissions in the U.S. RTI will develop recommendations for gender-specific and culturally appropriate interventions.

Modeling HIV Diffusion Through Networks of Drug Users

RTI is one of four research sites participating in the NIDA-funded Sexual Acquisition and Transmission of HIV Cooperative Agreement Program (SATH-CAP). The program seeks to better understand the behavioral, biological, and environmental factors associated with the sexual transmission of HIV and other STIs among drug users and the diffusion of infections from traditional high-risk groups (e.g., drug users, men who have sex with men) to more general population groups.

Health Surveillance Research in Foreign Military Populations

The Naval Health Research Center has the mission and significant challenge of understanding and performing the research necessary to improve the health, wellness, and readiness needs of a worldwide deployed force of over 725,000 active-duty and reserve Sailors and Marines. RTI is helping NHRC staff of the U.S. Department of Defense HIV/AIDS Prevention Program (DHAPP) to develop and implement an HIV Behavioral Health Surveillance Program for the armed forces in two participating DHAPP nations: Uganda and Mozambique.

Coordinating a Collaborative HIV/STD Prevention Trial

Working on behalf of the National Institute of Mental Health, RTI serves as the coordinating center for this two-armed, randomized, community-level trial. Conducted in China, India, Peru, Russia, and Zimbabwe, this study tests the effectiveness of the Community Popular Opinion Leader (C-POL) intervention model in reducing risk behaviors that can increase HIV and STI incidence. In this study, C-POLs serve as behavior change agents among friends and neighbors. The intervention is expected to strengthen norms about safer sexual behavior and encourage risk reduction. Currently, this study is implementing public health behavior change initiatives in all five countries, measuring both behavioral and biological results, and documenting the lessons learned. Study results will be shared for a global perspective on preventing the spread of HIV/STIs.



Intervention Research

Research has demonstrated that science-based prevention interventions are effective in reducing risky behaviors among populations at risk for HIV. RTI scientists design, develop, and field-test HIV prevention interventions that can be adapted to specific target populations. The following project descriptions illustrate RTI's leadership in developing, implementing, and evaluating innovative interventions for diverse at-risk populations.

Evidence-Based Woman-Focused HIV Prevention

Intervention research has demonstrated that HIV is preventable for women through safer drug and sexual practices and that risk for HIV can be reduced in utero and at birth. However, African-American women who live in poverty experience unique social contexts that may challenge their attempts to reduce drug use and HIV risk, which also jeopardizes their children. With NIDA funding, RTI has developed, implemented, and evaluated innovative interventions that target hard-to-reach populations such as crack-using urban African-American women. CDC has found the Women's Co-Op intervention to be evidence-based. The Women's Co-Op cohort has been studied for more than 8 years. A similar intervention is being developed, in collaboration with community service providers, for pregnant African-American women who abuse crack and are at risk for HIV or are HIV positive. The project will also test the feasibility and relative efficacy of the newly developed intervention in a traditional substance abuse treatment clinic.

Examining the Effectiveness of HIV Prevention Messages

The CDC has been at the forefront of HIV prevention for over 20 years and has compiled a compendium of effective interventions. These efforts have helped decrease the number of new HIV infections in the United States from over 150,000 per year to about 40,000 per year. However, CDC's goal is to reduce the number of new HIV infections in the United States to 20,000 per year. One of the objectives to achieve this goal is to increase the proportion of individuals who consistently engage in behaviors that decrease their risk for HIV infection or transmission. To achieve this objective, further research is needed to develop, test, and evaluate new HIV prevention interventions targeted at individuals at high risk of acquiring or transmitting HIV. As the lead in this new initiative, RTI is conducting research to assess the effectiveness of HIV prevention messages with high-risk populations.

Adapting Interventions Internationally

Since 2001, RTI has been conducting community-based randomized trials adapted from the Woman-Focused HIV Prevention intervention in several regions of South Africa. NIDA and the National Institute on Alcohol Abuse and Alcoholism have supported these adaptations for both Black and Coloured women at risk for HIV. The objective of these community-based randomized trials is to understand the relationship between alcohol and other drug use, violence against women, and HIV risk. Preliminary study outcomes indicate that RTI's innovative research strategy to conduct outreach and brief interventions with active substance abusers in South Africa may lead to reductions in substance use and HIV risk behaviors. RTI researchers also evaluated the feasibility of abbreviating the original four-session intervention to a two-session individual intervention or a two-session group intervention. Results indicated that positive changes in sexual risk behavior, substance use, and experiences with victimization occurred with either format, which shows promise for cultural adaptations and application of this intervention.

Role of Housing in HIV Prevention

The threat of HIV infection is disproportionately high among homeless adults and adolescents. Studies have revealed that HIV positive rates and risk behaviors vary significantly by living arrangement and that homeless drug users are an important risk group for acquisition and transmission of HIV infection. The intervention implemented in this study assesses the role of housing in reducing HIV/AIDS transmission and disease progression. Findings from this project will contribute to knowledge about how to prevent further spread of HIV and improve the health of homeless or unstably housed persons living with HIV.

Motivational Interventions for Drug Users

RTI is developing and evaluating a motivational intervention that addresses HIV, hepatitis C virus (HCV), and hepatitis B virus (HBV) in a sample of out-of-treatment injecting drug users. The primary objectives of this NIDA-funded intervention project are to eliminate injecting practices that transmit bloodborne pathogens and eliminate sexual behaviors associated with STIs. The project also focuses on reducing alcohol use among participants with chronic HCV infection since heavy alcohol use greatly increases both the rate and probability of HCV infections progressing to serious liver disease.



RTI International is dedicated to conducting research and development that improves the human condition by turning knowledge into practice. These dedicated professionals offer innovative research and technical services to governments and businesses worldwide in the areas of health and pharmaceuticals, education and training, surveys and statistics, advanced technology, governance, economic and social development, energy, and the environment. RTI is the nation's second largest independent nonprofit research organization.

RTI's staff of more than 2,600 people work in interdisciplinary teams and collaborate with clients to meet their unique needs, providing cost-effective research that makes a tangible difference in people's health and economic well-being. RTI's domestic and international experience spans nearly 50 years and over 140 countries.

Headquartered in Research Triangle Park, North Carolina, RTI has established corporate offices in the United States and abroad to better meet the needs of our clients. Locations include Washington, DC, Maryland, Virginia, Georgia, Massachusetts, Illinois, and California in the United States, as well as Indonesia, the United Kingdom, South Africa, El Salvador, and the United Arab Emirates. RTI also maintains subsidiaries in Poland and Canada and project offices in more than 40 countries.

RTI is dedicated to improving the human condition through multidisciplinary research, development, and technical services that meet the highest standards of professional performance.

For More Information

For more information on RTI's global HIV research capabilities visit www.rti.org or contact

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