

RAMP Project Abstract: NEW YORK, US

Project Title: Evaluating awareness of monkeypox virus infections and rates of uptake of monkeypox vaccinations among gay, bisexual and other men who have sex with men in NYC

Project Type: Short-term Project 8-10 weeks On-site

Proposed Project Dates: Flexible 8 -10 weeks On-site between May 2023 – September 2023

Project Site: New York Blood Center, New York

Project Overview:

The goal of Project ACHIEVE/New York Blood Center Clinical Research Site based in New York City is to work on novel ways to prevent HIV and other infectious diseases, including the SARS-CoV-2 virus that causes COVID-19. As part of the research site, you will have the opportunity to work with a diverse team of clinical investigators, epidemiologists, social scientists, community engagement and recruitment staff, and more and be immersed in innovative clinical, socio-behavioral, and epidemiologic research.

As a RAMP scholar you will have the opportunity to work with Hong Van Tieu, MD, MS, Lab Head and Associate Member of the Laboratory of Infectious Disease Prevention/Project ACHIEVE at the New York Blood Center (NYBC), Jorge Soler, PhD, and the Project Achieve research team consisting of co-investigators, clinicians, counselors, recruiters, and community educators who are experienced in recruitment, community engagement, study implementation and conduct, and retention in research studies among general and at-risk populations.

While participating in this 8 to 10-week program, you will work with the team to conduct an online survey-based study to examine awareness about monkeypox virus infections and rates of uptake of monkeypox vaccinations among gay, bisexual and other men who have sex with men (MSM) in NYC. You will be integrally involved in all aspects of the study including developing the surveys and recruitment materials, programming the surveys, recruiting, analyzing the data, and preparing the manuscript. You will also be required to complete online human subject trainings before joining the study team.

Project Summary:

Monkeypox virus infections have recently spread across several countries including the U.S., mostly through close, intimate contact with someone who has monkeypox. As of July 28, 2022, 1,251 people in NYC have tested positive for infection with orthopoxvirus/monkeypox. Cases in NYC continue to rise, particularly among social and sexual networks of gay, bisexual and other men who have sex with men (MSM). The CDC and NYC Department of Health and Mental Hygiene recommend vaccination for people who have been exposed to monkeypox and those who are at higher risk of monkeypox exposure, although supply of vaccines is currently limited. The spread of monkeypox virus infections, similar to the spread of HIV and other infectious diseases, has been associated with misinformation and stigmatization of gay, bisexual and other MSM.

We are proposing to conduct an online survey-based study with an embedded social and sexual network inventory among a community-recruited sample of 250 gay, bisexual and other MSM living in the NYC area, which will include those living with and without HIV, to evaluate:

- (1) Awareness of monkeypox virus infections
- (2) Recent or past infection with monkeypox, along with exposures

- (3) Uptake of monkeypox vaccinations
- (4) Barriers and facilitators to monkeypox vaccinations
- (5) Social and sexual networks, including those with known monkeypox infections or exposures

This investigation will assess the characteristics of social and sexual networks and the relationship of network characteristics to monkeypox virus infections and exposures. We will evaluate sociodemographics (e.g., age, race/ethnicity) and other factors such as HIV serostatus and care engagement, stigma, medical mistrust, health literacy, and racism in health care that may be associated with monkeypox awareness and vaccine uptake. The insights from this study will provide more insights into awareness of monkeypox virus infections, vaccination uptake and barriers and facilitators, and transmission pathways within social and sexual networks of gay, bisexual and other MSM.

Eligibility criteria are: (1) at least 18 years old; (2) biological male sex at birth; (3) report anal sex with a man in the past 12 months; (4) reside in NYC area; (5) read and respond in English. The participants will complete an online survey, which will have a section with an embedded social and sexual network inventory. The social and sexual network inventory will ask the participant to nominate up to 10 people with whom they have had a social relationship and up to 15 sexual partners with whom they have had anal and/or vaginal sex in the last 3 months. For the social network inventory, the participant will be asked to delineate persons whom he could rely on for support in the following domains: intimate interactions, material assistance, social interaction, and health support. Basic demographic information of the social network members and frequency of communication with the social network members will also be obtained. For the sexual network inventory, the following about each nominated sexual partner will be asked: (1) demographics, (2) HIV serostatus, (3) known or suspected monkeypox infection, (4) if the partner is also in the social network, (5) frequency in the last 3 months of anal (receptive or insertive) or vaginal sex, condom use and drug and/or alcohol use with sex with the partner; level of skin-to-skin contact and potential exposure to open lesions, etc., (6) start and end dates of the sexual relationship, (7) number of people with whom he had anal or vaginal sex while he was sexually involved with that partner in the last 3 months.

The following measures are assessed on the online survey that will be analyzed for this research project:

Sociodemographics: age, gender, sexual orientation, race/ethnicity, Hispanic/Latinx identity, education, employment, household income, health insurance status, and homelessness

Medical history: HIV serostatus, HIV treatment, self-reported CD4 T cell count, medical co-morbidities

General medical mistrust and racism in medicine are measured using LaVeist and colleague's "General medical mistrust" and "racism in medicine" scales. LaViest et al.'s scale measures perceptions of unfair treatment by the medical establishment on a number of axes (e.g., general, wealth/class, sex), with statements such as "Patients have sometimes been deceived or misled" and "Rich patients receive better care at hospitals than poor patients do." Higher scale scores indicate higher levels of general medical mistrust. Earnshaw and colleagues' subscales for both anticipated and experienced (enacted) stigma by healthcare workers based on the HIV Stigma Framework are used.

General health literacy is measured using Chew and colleague's brief screening measure, with a higher score meaning higher general health literacy. Participants are asked about their confidence in filling out medical forms, how often they needed help reading medical information, and how often they have difficulty learning about their condition due to problems understanding written information.

Internalized homonegativity, internalized homophobia

Internalized HIV stigma (for those who are living with HIV) will be measured using Kalichman et al.'s Internalized AIDS-Related Stigma Scale, a six-item scale that measures the internalization of HIV-related stigma, including items such as "being HIV makes me feel dirty" and "I hide my HIV status from others."

A stigma scale will be developed for monkeypox, to be adapted from the internalized HIV stigma scale.

Monkeypox Specific-Factors:

We will include questions about recent or past monkeypox virus infections, include routes of exposure, symptoms, and treatment, receipt of monkeypox vaccinations including number of doses, reasons for not receiving vaccinations, and barriers and facilitators to monkeypox vaccinations.

Regulatory requirements for the project and plans for completing them: IRB approval will be obtained from the New York Blood Center Institutional Review Board before the start of this study. The RAMP Scholar and all members of the research team will complete Human Subjects Protection and required IRB training before they are allowed to participate in the study. Online informed consent will be obtained from all research participants before they are directed to the main survey study. Electronic data will be stored on password protected computers at the NYBC; hard copies will be stored locked filing cabinets accessible to members of the research team only.

Expected Deliverables:

- HVTN Full Group Meeting – presentation
- Abstract submission to a scientific conference
- Manuscript for submission to a peer-reviewed journal

Project Contact Person(s):

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