

RAMP Project Abstract: NEW YORK, US

Project Title: Influence of medical mistrust, health literacy, and racism on uptake of COVID-19 vaccinations among men who have sex with men living with HIV

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 (NYC) 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 Member of the Laboratory of Infectious Disease Prevention/Project ACHIEVE at the New York Blood Center (NYBC), Jorge Soler, PhD, MPH, Melonie Walcott, DrPH, MPH, 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 a research project to analyze data from an ongoing cohort study among men who have sex with men (MSM) living with HIV in NYC to evaluate (a) willingness to participate in COVID-19 vaccine trials and barriers and facilitators to participation prior to emergency use authorizations by the US FDA of COVID-19 vaccines, and (b) the influence of medical mistrust, health literacy, and racism on uptake of COVID-19 vaccinations.

The specific aims of the project are to:

1. Describe willingness to participate in COVID-19 vaccine trials and barriers and facilitators to participation among a cohort of MSM living with HIV prior to emergency use authorizations by the US FDA of COVID-19 vaccines
2. Describe the rates of COVID-19 vaccinations and reasons for deferrals of vaccinations
3. Evaluate the association between medical mistrust, health literacy, and racism in health care and COVID-19 vaccination rates

Project Summary:

This study uses data from the Neighborhoods, Networks and HIV Care Study. NNHIV is an ongoing NIH R01-funded longitudinal study that examines neighborhood and social network factors that influence HIV care outcomes (retention in care, antiretroviral therapy adherence, and viral suppression) using spatial analysis and multilevel modeling among over 300 men who have sex with men (MSM) living with HIV in NYC, of which over 70% self-identify as Black and/or Hispanic/Latinx.

Participants are screened using a brief online eligibility form. Eligibility criteria are: (1) at least 16 years old; (2) biological male sex at birth (self-reported); (3) HIV positive; (4) report anal sex with a man in the past 6 months; (5) consent to a blood draw (CD4 T cell count test and an HIV viral load test) (6) reside in NYC; (7) read and respond in English; and (8) provide written informed consent. The participants complete a neighborhood locator survey with Google mapping, social network inventory, and computer-assisted survey instrument (CASI) and have blood collected for HIV viral load and CD4 T cell testing at the baseline visit and at follow-up visits every 6 months for a total of 24-36 months.

The following measures are assessed on the CASI 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

General medical mistrust and racism in medicine are measured using LaVeist and colleague's "General medical mistrust" and "racism in medicine" scales. LaVeist 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.

COVID-19 Specific-Factors:

A section in the CASI survey was developed and administered to participants at study visits after March 2020 on the COVID-19 pandemic, which also includes questions about *willingness to participate in COVID-19 vaccine trials, barriers and facilitators to participation in COVID-19 vaccine trials, receipt of COVID-19 primary vaccinations, booster vaccinations, and reasons for not receiving vaccinations.*

The research project seeks to analyze data from the ongoing NNHIV study among MSM living with HIV in NYC to evaluate (a) willingness to participate in COVID-19 vaccine trials and barriers and facilitators to participation prior to emergency use authorizations by the US FDA of COVID-19 vaccines, and (b) the influence of medical mistrust, health literacy, and racism on uptake of COVID-19 vaccinations.

The specific aims of the project are to:

1. Describe willingness to participate in COVID-19 vaccine trials and barriers and facilitators to participation among a cohort of MSM living with HIV prior to emergency use authorizations by the US FDA of COVID-19 vaccines
2. Describe the rates of COVID-19 vaccinations and reasons for deferrals of vaccinations among a cohort of MSM living with HIV
3. Evaluate the association between medical mistrust, health literacy, and racism in health care and COVID-19 vaccination rates

The insights from this study will help gain knowledge on the barriers and facilitators to participate in COVID-19 research trials prior to EUA by the US FDA of COVID-19 vaccines, as well as on the influence of

medical mistrust, health literacy and racism in health care on COVID-19 vaccination rates among MSM living with HIV. The findings may help inform approaches to enhance vaccinations in this population, particularly among MSM of color.

Regulatory requirements for the project and plans for completing them: IRB approval has been obtained from the New York Blood Center Institutional Review Board for the cohort study. The RAMP Scholar will complete CITI and required IRB training before they are allowed to participate in the study. This analysis is focused on secondary data analysis of completed CASI data. 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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