

Proposed Project Title: Understanding factors impacting on uptake of childhood and recommended adult vaccines in the post COVID-19 pandemic era in South Africa

Preferred Scholar On-Site Project Dates: 10 weeks (1 July – 13 September 2024)

Project Site: Soshanguve, Tshwane, Gauteng Province, South Africa (Setshaba Research Centre (SRC))

Project Overview:

Under the Expanded Programme on Immunization (EPI), many life-threatening and disabling diseases have been prevented globally by administration of routine childhood vaccinations. However, gains in vaccination coverage made in the previous two decades were reversed or its trajectory altered downward since the beginning of the COVID-19 pandemic. While there is no mandated schedule for routine vaccinations for adults in South Africa, vaccinations against COVID-19, influenza, hepatitis and human papilloma virus are highly recommended, particularly by the elderly, people with underlying chronic diseases, health care workers and young girls and women. The recent focus on the factors influencing the uptake of COVID-19 vaccination has highlighted the lack of confidence among the public on preventative vaccines. While there has been extensive research on COVID-19 vaccination hesitancy in South Africa, there is inadequate research on its impact on the childhood immunization program and vaccine uptake among adults. We therefore aim to investigate the factors influencing the uptake of childhood and adult vaccines by undertaking a qualitative study to explore the willingness and practices of parents to vaccinate their children and themselves with age- and sex-appropriate vaccines, and the factors that influence their decision based on their experiences of COVID-19 vaccines and vaccination.

Setshaba Research Centre (SRC), based in Soshanguve, Tshwane, Gauteng Province, South Africa, conducts vaccine and prevention trials in HIV, TB, COVID-19 and RSV, under both the NIH-funded HIV Vaccine Trials Network and HIV Prevention Trials Network and private pharma companies. In addition, SRC conducts socio-behavioral studies which includes a community engagement program. In this project, the scholar will gain research skills in Community-Based Participatory Research approaches, and qualitative data collection and analysis methods by working with a multidisciplinary team. The methodologies will help the scholar to gather data on parents' knowledge of childhood and adult vaccines, their exposure to and experiences of COVID-19 vaccines and vaccinations, the impact of these on the willingness to vaccinate their child and/or themselves with the EPI and/or other vaccines appropriate for their age and sex. The project will be for 8 months but the scholar will be required to spend approximately 10 weeks at SRC. In the first month, the scholar will travel to the recruitment sites to recruit participants and to participate jointly with site interviewers in conducting in-depth interviews. The in-depth interviews will be conducted face to face with consent and complying with ethics requirements. In the second month, the scholar will be involved in data entry using qualitative software with training and guidance from their mentor, co-mentor and co-investigators. In the final two weeks, the scholar will be introduced to data coding and analysis. The scholar will also receive training and support on manuscript writing and poster and oral presentations. After the on-site visit, the scholar will continue to be involved in the study remotely and work towards scientific outputs such as a poster, an oral presentation and a publication with guidance and support from their mentor, co-mentor and co-investigators.

Project Summary: The study aims to understand the uptake of childhood and adult vaccines in the post COVID-19 pandemic era to explore the willingness and practices of parents to vaccinate their children and for adults to vaccinate themselves, and the factors that influence their decision. The study objectives are:

1. To explore the willingness and practices of parents to vaccinate their children and the factors that influence their decision

2. To explore the willingness and practices of adults to vaccinate themselves and the factors that influence their decision

We aim to achieve the objectives by conducting in-depth face-to-face interviews with 40 participants. Women and their partners, 18 years and older, attending antenatal and general outpatient clinics in the public sector in Soshanguve, Tshwane, will be recruited. With respect to childhood vaccines, we aim to recruit a mix of both parents and single parents, which will include women who are expecting for the first time and those who have had children prior to or during the COVID-19 pandemic to explore how decision-making regarding vaccinations occurs in a broader sense. With regard to adult vaccines, the above-mentioned parents and elderly people will be recruited. The in-depth interviews will be used to gather information on socio-demographics, including the number, age and sex of the participants' children, parents' knowledge of childhood and adult vaccines, their exposure to and experiences of COVID-19 vaccines and vaccinations, the impact of these on the willingness to vaccinate their child and/or themselves with the EPI and/or other vaccines appropriate for their age and sex. The data will be analyzed using appropriate qualitative methodologies.

Regulatory and ethical requirements for the project and plans for completing them:

The proposal will be submitted to the University of Witwatersrand Human Research Ethics Committee in January 2024. Approval will be obtained before the project starts in May as it generally takes 3 months for approval. The scholar will be required to complete Good Clinical Practice (GCP) and ethics training; online and virtual courses are available.

Expected Deliverables:

The scholar will receive training, skills and mentorship on all study implementation reporting procedures:

- Obtaining informed consent
- Collection of socio-demographic and clinical data
- Analysis of data and preparation of results
- Manuscript writing
- Community engagement and ethical considerations in research

A poster and oral presentation at an HVTN Full Group meeting (May 2025)

Publication in a peer-reviewed journal.

Communication of study outcomes to community, participants and vaccine service providers

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