

Project Brief: South African Population Research Infrastructure Network (SAPRIN): A GRT-INSPIRED Sub Study of COVID-19 Perceptions, Impacts and Seroprevalence Among Residents of Atteridgeville, Melusi and Hillbrow in Gauteng, South Africa

Full Title of Study/Programme	<p>A GRT-INSPIRED sub study: A Survey of COVID-19 perceptions, Impacts and Seroprevalence Among Residents of Atteridgeville, Melusi and Hillbrow in Gauteng Province, South Africa of</p> <p>Short Title: SAPRIN Sub Study: GRT Inspired</p>
Technical Focus Area/Key Words	<p>Percentage of previously infected with SARS-CoV-2, Attitudes, Perception and Practices related to COVID-19</p>
Rationale	<p>The global COVID-19 pandemic is an exceptional emergency, and presents a serious risk to human health and livelihoods, especially in countries with complex economic and political problems, such as South Africa. While the pandemic in sub-Saharan Africa began later than in Asia, Europe and the United States, the number of cases in the sub-continent continues to escalate. Factors prevalent in South Africa such as malnutrition, HIV, tuberculosis and limited access to healthcare, among others, may worsen both transmission dynamics and disease progression of SARS-CoV-2 compared to other countries, as well as the burden on the healthcare system. The United Nations Department of Economic and Social Affairs describes the pandemic as ‘... a tragedy, killing more than half a million people and bringing the economy and life to a standstill in many parts of the world. The containment measures have had profound impacts on people and their livelihood. Economic growth has slowed, unemployment increased, and poverty and hunger raised. The World Bank noted that ‘In addition to its immediate impact on health outcomes and, tragically, on lives, it is now clear that the coronavirus (COVID-19) outbreak is likely to have long-lasting economic and social impacts of global proportions stemming from the direct and indirect effects of illness, the preventive behaviours of people and the transmission control policies of governments. Several individual-level risk factors for severe COVID-19 disease and death have been identified especially within the major metropolitan areas. The pandemic is disproportionately affecting the poor, less educated and other vulnerable groups, and has aggravated existing social, economic, and health inequities, and long-standing systemic inequalities. Transmission of SARS-CoV-2 appears heightened in certain types of urban areas, for example areas with high-rise apartment buildings, such as Hillbrow. Residents of informal settlements are also particularly vulnerable because of ‘lack of basic needs such as water,</p>

	toilets, sewers, drainage, waste collection, and secure and adequate housing' and because of '... space constraints, violence, and overcrowding in slums (that) make physical distancing and self-quarantine impractical, and the rapid spread of an infection highly likely
Primary Objectives	<ol style="list-style-type: none"> 1. Describe knowledge, attitudes, perceptions and practices related to COVID-19, including around prevention and the potential uptake of the COVID-19 vaccine 2. Explore the economic, social and health impacts of mitigation measures, and changes in health care seeking during the first wave of the COVID-19 pandemic 3. Determine the percentage of the population previously infected with SARS-CoV-2 following the first wave of the pandemic, by type of urban setting, age group and gender
Secondary Objectives	<ol style="list-style-type: none"> 1. Identify individual-level risk factors for SARS-CoV-2 infection, including age, gender and underlying illnesses or comorbidities, as well as knowledge and behaviours related to COVID-19 2. Explore household-level risk factors for SARS-CoV-2 infection, including household size and water source 3. Estimate the extent of intra-household transmission (percent of household who are SARS-CoV-2 seropositive)
Tertiary Objectives	Not applicable
Primary Endpoints/Outcomes	Knowledge, attitudes, perceptions and behaviours on COVID-19 as well as perceptions towards a future COVID-19 vaccine.
Secondary Endpoints/Outcomes	Not applicable
Tertiary Endpoints/Outcomes	Not applicable
Study Design	Cross-sectional questionnaire-based and sero survey among residents in randomly selected dwellings in three urban sites in Gauteng Province
Study arms	Not applicable
Study population	Households residents in dwellings within the study area
Study sample size	750
Follow up/duration	Ongoing
Study/Programme sites	Hillbrow, Johannesburg Atteridgeville, Pretoria Melusi, Pretoria
Study/Programme duration	2 months
Intervention	Not applicable
Operations	The study team, in coordination with the funders will define key metrics
Investigators	<p>Wits RHI Dr. Thesla Palanee-Phillips, Principal Investigator Ms. Krishnaveni Reddy, Sub-Investigator</p> <p>SAPRIN</p>

	Dr Abraham Jacobus Herbst, Co-Principal Investigator Associate Professor Mark Collinson, Co-Principal Investigator Mr Tinofa Mutevedzi, Co-Investigator
Other Partners & Collaborators	The Gauteng Research Triangle University of Johannesburg University of Pretoria HDSS Nodes
Sponsors/Donors	Department of Science and Innovation South African Medical Research Council
Linked Sub Studies and post grad projects	Not applicable
Publications/key presentations to date	Not applicable
Progress Update as at 21 Oct 20	Research protocol, informed consent and assent forms, information sheets, surveys developed and submitted to Wits RHI Research Review Committee (RRC). Ethics approval pending
Frequency of donor narrative report	Every 3-6 months (To be decided)
Overall Study/Project Contact	Dr. Thesla Palanee-Phillips (tpalanee@wrhi.ac.za)
Briefing owner and date	Sibusisiwe Gumede, 23 October 2020