

# Science & innovation Department: Service and Innovation REPUBLIC OF SOUTH AFRICA

# CoE-HUMAN NEWSLETTER April 2025





Freedom Day, celebrated annually on the 27th of April, commemorates the first democratic elections held in South Africa in 1994. This day is observed every year to remember the unsung heroes and heroines who fought for our independence and paved the way for an equal, representative, and non-racial nation.

Freedom Day marks the liberation of our country and its people from 300 years of colonisation, white minority dominance, politically imposed racism, and Apartheid. Under the harsh Apartheid regime, indigenous people of colour in South Africa were denied the right to vote, and had no influence in the country's political governance and administration.

Although much has changed since 1994, more work remains to be done. It is now up to each of us to continue the road that began in 1994 and create a better nation for all.

The research presented below, undertaken by CoE-HUMAN grantees Dr Takana Silubonde and Dr Asanda Mtintsilana, investigates knowledge and behaviours related to health and the healthcare system in South Africa.

### Equality and Healthcare in the democratic South Africa

#### Dr. Takana Silubonde

A survey of perceptions and behavioural responses towards the COVID-19 pandemic in South Africa.



The coronavirus disease 2019 (COVID-19) pandemic significantly impacted people's lives globally. Governments urged people to change their social behaviours in order to stop the spread of the virus. Governments implemented precautionary measures such as closing businesses and schools, limiting travel, issuing stay-at-home orders, and prohibiting gatherings.

This study by Dr. Takana Silubonde et al. (2025) sought to determine the publics' views and behavioural responses to the COVID-19 pandemic.

South Africa served as the study's location. Due to the legacy of colonialism and apartheid, the country still has significant economic disparities, and prevalent socioeconomic issues include high unemployment, poverty, and food insecurity.

According to this study, the probability of following government policies was boosted by sources of information, government trust, and favourable prior government experiences. Self-reported vaccination, on the other hand, did not seem to be positively impacted by government trust, pleasant government experiences, or information sources. Rather, they were linked to a lower chance of vaccination. A startling discovery, considering that vaccination and following government regulations are both preventative measures, one would think that the behaviour around both would be comparable, yet this is not the case.

The current study's findings demonstrated the favourable correlation between vaccine uptake and socioeconomic position. Additionally, research in South Africa reported a lower risk perception among lower socioeconomic groups, and that COVID-19 is perceived as "a disease of privilege." Similarly, the findings demonstrated a positive and indirect relationship between socioeconomic status and compliance with government preventive measures including mask wearing and social distancing.

This study has identified the importance of socioeconomic position in these concerns and added to the body of literature demonstrating the complexity of issues like vaccination uptake and adherence to government efforts in connection to a pandemic. According to the authors, this means that in a country as diverse as South Africa, future pandemic preparation cannot be approached in a "one-size-fits-all" approach, especially considering the enormous disparities that still exist across income levels. *https://doi.org/10.4102/phcfm.v17i1.4702* 

#### Dr. Asanda Mtintsilana

Self-reported hypertension prevalence, risk factors, and knowledge among South Africans aged 24 to 40 years old.



Approximately 1.3 billion people between the ages of 30 and 79 suffer from arterial hypertension, which is defined as having a systolic blood pressure (SBP) of at least 140 mmHg and/or a diastolic blood pressure (DBP) of at least 90 mmHg (140/90 mmHg), or are receiving therapy for hypertension.

Dr. Mtintsilana et al. (2025) conducted this research to evaluate the prevalence, potential risk factors, and knowledge related to self-reported hypertension among South African young adults. Across-sectional online survey was administered to 1000 young individuals in South Africa (ages 24 to 40; 51.0% of them were female).

Demographic factors and measures of socio-economic status (SES) such as age, gender, ethnicity, household assets, housing density, employment, and educational status were included in an online demographic questionnaire written in English and administered through IPSOS in the respondent's preferred language (e.g., English, IsiXhosa, IsiZulu, Setswana, and Tshivenda). Participants were asked if they had been informed by a physician or other health care provider if they had any of the following conditions: high blood pressure, high cholesterol, diabetes, obesity, chronic kidney disease, and/or common mental health conditions like depression and anxiety. This information was used to collect self-reported medical history data.

Additionally, the frequency and current smoking status were recorded and divided into four groups: (i) 0-1; (ii) 1-5; (iii) 6-10; and (iv) 11 or more. Participants were also asked if they had a first- or second-degree family who had a history of high blood pressure, high cholesterol, diabetes, heart disease, heart attack, stroke, or mental health issues.

The vast majority of participants are from the provinces of KwaZulu-Natal (13.60%), Western Cape (14.8%), or Gauteng (47.6%). There were no discernible gender variations in the highest level of education acquired, with the majority of participants (59.6% of women vs. 53.5% of men) obtaining a tertiary, university, or college degree. Overall, 48.0% of research participants (n = 480) reported smoking cigarettes or vaping, with 61.0% of them being men. Additionally, 20.3% of participants reported consuming alcohol two to three times per week, with men drinking more than women. Even though the frequency of hypertension in this study is somewhat lower than in earlier research, the results nevertheless reveal a substantial unmet demand for care and a worrying prevalence of hypertension among young adults.

The World Health Organization (WHO) has identified modifiable risk factors for hypertension, including excessive alcohol use and physical inactivity. Thus, the results of this study, which show that engaging in physical exercise six to seven days a week and abstaining from alcohol, are both protective against hypertension and significant as possible indicators for avoiding and managing hypertension. According to the authors, effective public health preventative efforts are necessary to counteract later-life cardiovascular disease (CVD) because of the high incidence of hypertension, the lack of information about hypertension, and the documented risk factors within this age group. *https://doi.org/10.1371/journal.pone.0300160* 

#### Facts about Freedom Day

The day was first commemorated in 1995.
Before 1994, South Africa was ruled by apartheid, a system of racial segregation.
19.7 million people voted in the elections.

#### Quote of the month

"The fight for freedom must go on until it is won; until our country is free and happy and peaceful as part of the community of man, we cannot rest. We seek to create a united democratic and non-racial society. We have a vision of South Africa in which black and white shall live and work together as equals in conditions of peace and prosperity. Using the power you derive from the discovery of the truth about racism in South Africa, you will help us to remake our part of the world into a corner of the globe of which all of humanity can be proud." - Oliver Tambo

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## Publications

- Jasmine, U. H., Nduna, M., & Nkala-Dlamini, B. (2025). Intergenerational continuity of protective parenting practices in Dhaka, Bangladesh. PLOS ONE, 20(2), e0300160. https://doi.org/10.1371/journal.pone.0300160
- Mhlambi, T. N. (2025). "Opening Up the Future." The Journal of Musicology, 42(1), 63–89. https://doi.org/10.1525/jm.2025.42.1.63
- Mtintsilana, A., Mapanga, W., Craig, A., Dlamini, S. N., & Norris, S. A. (2025). Self-reported hypertension prevalence, risk factors, and knowledge among South Africans aged 24 to 40 years old. Journal of Human Hypertension. *https://doi.org/10.1038/s41371-024-00957-8*
- Silubonde, T. M., Draper, C. E., & Norris, S. A. (2025). As urvey of perceptions and behavioural responses towards the COVID-19 pandemic in South Africa. African Journal of Primary Health Care & Family Medicine, 17(1). *https://doi.org/10.4102/phcfm.v17i1.4702*
- Nwaila, G. T., Rose, D. H., Frimmel, H. E., & Ghorbani, Y. (2025). An Integrated Geodata Science Workflow for Resource Estimation: ACase Study from the Merensky Reef, Bushveld Complex. Natural Resources Research. *https://doi.org/10.1007/s11053-025-10471-4*

