

South Africa's first national vaccination coverage survey since 1994

To the Editor: On 8 March 2019, the Minister of Health, Dr Aaron Motsoaledi, launched the new e-Road-to-health-booklet (RTHB) and South Africa (SA)'s first national vaccination coverage survey to be held since 1994. The survey covers all 52 districts, with 1.1 million households to be visited to reach a sample size of 55 120 children aged 24 - 35 months. In addition to vaccination coverage data, sociodemographic data and reasons for missed vaccinations will be collected. The survey is expected to be completed by 30 June 2019.

Recognising that population-based vaccination coverage surveys are vital for identifying gaps and improving immunisation programmes,^[1] the SA National Department of Health (NDoH) started planning this survey in 2012. However, national surveys are very costly,^[1] and funding was secured only in 2018. It is therefore unlikely that the NDoH will conduct another national survey within the next decade.

This historic survey will prove invaluable for providing the first reliable vaccination coverage estimates since the launch of the Expanded Programme on Immunisation of SA in 1995. Serendipitously, it is being conducted in the same year that the World Health Organization declared vaccine hesitancy (a planned delay in, or refusal of vaccination) as one of the top 10 threats to global health.^[2] While the survey was not designed to specifically measure vaccine hesitancy,^[1] it will collect data on reasons why vaccinations have been missed, which is the first time this will be done on a national scale. It will thus provide baseline data to inform future studies on vaccine hesitancy and interventions conducted thereafter to reduce vaccine hesitancy.

This survey will identify all poorly performing districts, providing many opportunities for SA programme managers and researchers to improve vaccination coverage. Districts with high coverage can be used for benchmarking and implementing best practice in poorly performing districts. Historically, there have been relatively few published SA studies using household surveys for investigating vaccination coverage, and none specifically measuring vaccine hesitancy. This may be because even district-level household surveys are costly, while more affordable small sub-district and community-based studies, often carried out for postgraduate research, often lack validity.^[3] Also, these studies are seldom published because of small sample sizes. However, postgraduate research on vaccination coverage can be very affordable and have very high validity if conducted using modern technology. This includes using aerial satellite images; photographing RTHBs using cellphone cameras with global positioning system locator technology to ensure data validity; and emailing these photographs to remote supervisors to facilitate real-time supervision.^[3]

The authors hope that at least some academic researchers working in the field of infectious disease control will heed our call to build on

the foundations laid by this essential but very costly national survey. Also, since access to gated communities and security complexes has proved impossible in a number of household surveys,^[3] it is hoped that health professionals who read SAMJ will encourage parents with age-eligible children within their network to participate in this survey.

Rosemary J Burnett

South African Vaccination and Immunisation Centre, and Department of Virology, School of Medicine, Sefako Makgatho Health Sciences University, Pretoria, South Africa
rose.burnett@smu.ac.za

Nonhlanhla R Dlamini

Child, Youth and School Health: National Department of Health, Pretoria, South Africa

Johanna C Meyer

South African Vaccination and Immunisation Centre, and Division of Public Health Pharmacy and Management, School of Pharmacy, Sefako Makgatho Health Sciences University, Pretoria, South Africa

Portia Mutevedzi

Respiratory and Meningeal Pathogens Research Unit, Faculty of Health Sciences, University of the Witwatersrand, Johannesburg, South Africa

Dan K Kibuuka

Health and Vital Statistics Division, Statistics South Africa, Pretoria, South Africa

M Jeffrey Mphahlele

South African Medical Research Council, Pretoria; and South African Vaccination and Immunisation Centre, and Department of Virology, School of Medicine, Sefako Makgatho Health Sciences University, Pretoria, South Africa

Shabir A Madhi

Respiratory and Meningeal Pathogens Research Unit, Faculty of Health Sciences, University of the Witwatersrand, Johannesburg, South Africa

1. Burton A, Monasch R, Lautenbach B, et al. WHO and UNICEF estimates of national infant immunization coverage: Methods and processes. *Bull World Health Organ* 2009;87(7):535-541. <https://doi.org/10.2471/blt.08.053819>
2. World Health Organization. Ten threats to global health in 2019. <https://www.who.int/emergencies/ten-threats-to-global-health-in-2019> (accessed 26 March 2019).
3. Burnett RJ, Dlamini NR, Meyer JC, et al. Progress towards obtaining valid vaccination coverage data in South Africa. *S Afr J Sci* (in press).

S Afr Med J 2019;109(5):289. DOI:10.7196/SAMJ.2019.v109i5.14020