

Taking
small

Strategic

steps to move a mountain



DR TUMISO MALATJI

Rural Institutional Award

University of Limpopo

To enable the set-up of a project to evaluate the management of non-communicable diseases (concentrating on cardiovascular diseases and diabetes) and to implement measures to improve the capacity of healthcare professionals to manage these diseases at primary healthcare level using implementation research principles at selected clinics in Limpopo.

Conducting potentially game-changing research on the prevention and management of non-communicable diseases, (NCDs), at primary healthcare level in Limpopo, public health medicine specialist, Tumiso Malatji, does several daily high-wire acts.

One is balancing the care of her two sons with her career. Another is convincing overworked clinicians and nurses at district clinics to work closely together by appropriately matching tasks to competencies. Perhaps one of the most challenging, yet most rewarding acts is providing the right resources and NCD training to clinic staff. By slowly providing the right skill-set, vital resources and changing the environment in which clinic healthcare staff work, she believes change is possible. Her long-term vision is to relieve the overburdened hospital departments by strengthening primary healthcare.

Personal development

Tumiso grew up in Mankweng Township, just 30km from where she now works and lives. Her father is a Vice Rector at the nearby Limpopo University and her mother a high school teacher. The youngest of four siblings, she dared to dream about studying Medicine at the University of Cape Town, and this was made possible through the Limpopo Department of Health Bursary for medical students. "I always wanted to help people and still love to, I just didn't know it could sometimes be so complicated," she chuckles.

She counts herself fortunate to be doing public health medicine, having first been introduced to research, while completing her Family Medicine speciality.

Finding solutions for Africa

She's driven by the University of Limpopo's vision of finding solutions for Africa. Her aim is to develop and pilot context-specific interventions to strengthen the management of hypertension and diabetes. This will create a network of referring facilities where health professionals will be able to more effectively manage these two top diseases.

The gravitas of her task is illustrated by a recent South African National Health and Nutrition Survey, which estimates that in Limpopo 32% (1.8 million people) and 5% (300 000 people) of the population are affected by hypertension and diabetes respectively. Using a 2016 grant from the Medical Research Council, Tumiso premised her baseline work on the findings from a prevalence study conducted in the Dikgale area. The study reported a startling 40% prevalence of hypertension and an over 10% prevalence of type 2 diabetes. However, little or no research exists on how clinics are responding to this disease profile.

I think I've moved from wanting to change one person at a time through Family Medicine to changing communities and the health system through public health. The impact is far larger and I can make more of a difference. However it's much more complex and extremely challenging in a resource constrained environment. This is why I've focused on raising funds outside of the public sector to do the things I want to do. That's given me a lot of satisfaction. Public health has given me a platform I'd never have had as a pure clinician.

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Stark difference between the disease and treatment profile

Tumiso's study found that at the four clinics in the district, patients are predominantly women older than 50, among whom 67% are hypertensive, with 25% of this group suffering from both hypertension and diabetes. Her audit of 427 treatment files at the clinics revealed only 11.2% had an overall audit score above 50%. More than 90% of the files she reviewed had no annual eye examination, no annual urine test for kidney function or a cardiac risk assessment. For patients with diabetes, the standard HbA1c test was recorded in 37% of the patient records, whereas annual foot exams were recorded in only 2% of the files. Only 23% of the records had an annual weight and waist circumference noted in the file.

Tumiso strongly emphasises that she worked from recorded notes and that the doctors and nurses surveyed did not have the basic equipment needed to carry out these tests.

Tumiso says the skewed HIV/TB treatment competence versus NCD treatment competence, while once highly appropriate, needs adjustment in the new ARV therapy era. "The longer you live with HIV, the more you're at risk of hypertension and diabetes, so having sub-optimal management of these conditions at primary healthcare level is a problem," she explains. She backs this up by citing the latest (2018) SA Mortality Report that reveals deaths from NCDs as a group have exceeded deaths from HIV/TB since 2010.

Patient overload

"So I've quantified the problem and now through this grant, I can begin addressing it with this NCD training and capacity development project," she says. Further explaining that another reason doctors and nurses can't manage patients properly is simply because the patient load is so large. "Mankweng Hospital gets overloaded with stroke and ischaemic heart disease patients, because we are so ineffective at preventing complications at primary healthcare level. Once complications develop, for example, with ischaemic heart disease we have to refer patients to Gauteng. Access to dialysis for chronic kidney diseases is severely constrained with one dialysis centre in Polokwane for only 200 patients.

Therefore, it's absolutely critical that we prevent these complications. If you're not treating these things at primary healthcare level, it's virtually impossible and very expensive to treat at the Mankweng hospital level, and people die unnecessarily," she stresses.

Tumiso says poverty-reduction and good education systems are fundamental to mitigating the situation. "If we empower people and ensure access to healthy, affordable foods and encourage them to exercise more, it would drastically reduce pressure on the health system. Yet, you'd need to be very smart to design interventions that are affordable, culturally sensitive and accessible for rural communities," she says.

