

# **Capricorn District vaccination catch-up campaign**

KT Mabilo, RL Maluleke, K Muyambu

Pharmaceutical Society of South Africa, Limpopo Branch

### **Background**

The Pharmaceutical Society of South Africa (PSSA) Limpopo Branch together with Limpopo Department of Health, Capricorn District conducted a vaccination catch-up campaign on 28 and 29 May 2025 at Nobody & Perskebult Clinics, Polokwane. Vaccination is the most cost-effective public health intervention available as opposed to paid treatments. For example, the eradication of smallpox alone has resulted in savings of over US\$ 2 billion each year globally.¹ Although the campaign only occurred a month later, it was conducted as part of the African Vaccination Week (AVW) and the World Immunisation Week which are celebrated on the last week of April every year. AVW highlights the collective efforts required to strengthen vaccination programmes, increasing vaccination coverage in order to protect people from Vaccine Preventable Diseases (VPDs). It aims to achieve this through advocacy and partnerships, while promoting delivery of other lifesaving interventions.

## **Factors affecting vaccination coverage**

The aim of the campaign was to catch-up all children under the age of five (5) that had missed their doses. The reasons for missed doses and poor vaccine coverage are complex and can be attributed to many factors. Such factors may be divided into three categories namely: the healthcare system factors, knowledge/awareness of caregivers and practices of healthcare workers (HCWs).<sup>2</sup>

**Healthcare system factors** can be further divided into four namely, vaccine availability and supply chain management;<sup>2</sup> Healthcare worker training and knowledge about vaccines;<sup>3</sup> Clinic operating hours, waiting times and scheduling appointment easiness;<sup>4</sup> Vaccine administration and record keeping practices, referral systems and communication between HCWs.<sup>5</sup>

**Knowledge and awareness of caregivers** may include: Understanding of VPDs and their risks; Knowledge of recommended vaccination schedules and guidelines; Perceptions of vaccine safety, efficacy and side effects; Influence of misinformation or myths about vaccines; Access to reliable information sources and trusted healthcare providers.<sup>6</sup>

**Practices of healthcare workers** can also have an influence on vaccination coverage. While the above factors cut across all levels of care, there is also a greater involvement of primary healthcare (PHC)



Figure 1: Maud Mathivha and Comfort Mthombeni

as this is the point of provision of most vaccination services. Vaccine uptake can greatly impact on the ability of a country or region to eliminate a disease, which could be detrimental to society if allowed free reign. Low vaccine coverage or uptake may pose a public health risk in that diseases that were controlled by routine vaccination would resurface, whereas a high vaccine coverage can produce herd immunity, which confers protection upon the unvaccinated individuals within the population.<sup>7</sup> This is why the Limpopo Department of Health, the Pharmaceutical Society of South Africa (PSSA) Limpopo Branch and other stakeholders found it necessary to conduct this catch-up campaign.

#### **Child Health**

The campaign included services such as child deworming and Vitamin A supplementation. In areas where there are high rates of intestinal helminth infections, the National Department of Health (NDOH)



Figure 2: Receiving of vaccines in the facility

recommends biannual deworming for children aged between 12 and 60 months.8 Vitamin A plays a crucial role in children's health, supporting vision, bone growth, immune function, and overall development. Vaccination coverage in children aged 12-59 months is generally low. These children tend to access health services less frequently than children under 1 year of age therefore reaching these children requires additional interventions. That means, HCWs must use every opportunity available to them to provide Vitamin A supplementation. That is why in this campaign, child health services were comprehensive in that vaccination was offered together with deworming and Vitamin A supplementation. This intervention included dieticians' participation, among other child health screening programmes. The Limpopo Department of Health provided all vaccines and sundries, supplements, HCWs and deworming tablets.

#### **Community Outreach**

The campaign included outreach activities whereby pharmacy students from the University of Limpopo, pharmacists and other HCWs went into homes to educate patients on general health matters such as taking their medicines appropriately, returning obsolete and expired medicines to their nearest healthcare facilities, etc.

#### Young Pharmacists' Group (YPG) perspective

The PSSA Limpopo YPG representative, Ms Khanyisile Muyambu writes: "As an early career pharmacist, taking part in the vaccination catch-up campaign was both meaningful and eye opening. It took me out of my comfort zone and into a role beyond my usual setting - the counter. This campaign was about more than just vaccines. It also included doing basic health screenings and reaching out to the surrounding communities. Through this, I realised the vital role that pharmacists can play in the promotion of health. They do this not only by ensuring the safety of medicines and adherence, but by also empowering the community with knowledge.

This experience highlighted the importance of involving young pharmacists in public health campaigns. Our training gives us the skills and knowledge we need to fill in the gaps in patient education, health literacy and promotion, as well as in the use of medicine.



Figure 3: Desmond Ngobeni (ULAPS) and Khanyisile Muyambu (YPG)

Campaigns like these give us the opportunity to put what we've learned into practice while gaining wisdom and insight from those who have walked the path before us - which helps us shape us into well rounded pharmacists. This is the kind of learning that goes beyond any textbook. The campaign further emphasised the importance of interdisciplinary collaboration in order to improve health outcomes. Each profession brought something special to the campaign which helped it to succeed. It showed that when we all work together with respect and a shared goal - patient-centred care, the community benefits."

## **Acknowledgements**

The campaign was supported by the Pharmaceutical Society of South Africa (PSSA) Limpopo Branch through offering logistical and technical support.

The University of Limpopo Association of Pharmacy Students (ULAPS) came in numbers to offer basic screening services and perform home visits in the community. Other stakeholders such as Biovac, Cipla and Sanofi also participated in the campaign.



Figure 4: Pharmacy students from the University of Limpopo



Figure 5: Left to right: Khanyisile Muyambu, Kagiso Moekeletsi, Tumelo Mabilo, Xolisile Maxaulane, Rhulani Maluleke, Maud Mathivha, Solly Rasekele, Motlatso Letshokgohla, Comfort Mthombeni

#### References

- Ehreth, J., 2003. The value of vaccination: a global perspective. Vaccine, 21(27-30), pp.4105-4117.
- Hill, A.B., Kilgore, C., McGlynn, M. and Jones, C.H., 2016. Improving global vaccine accessibility. Current opinion in biotechnology, 42, pp.67-73.
- Tuckerman, J., Riley, K., Straube, S., Mohammed, H., Danchin, M. and Marshall, H.S., 2023. Interventions for increasing the uptake of immunizations in healthcare workers: A systematic review. Vaccine
- Goentzel, J., Russell, T., Carretti, H.R. and Hashimoto, Y., 2023. Vaccine network design to maximize immunization coverage. Journal of Humanitarian Logistics and Supply Chain Management, 13(2), pp.140-156.
- Akwataghibe, N.N., Ogunsola, E.A., Broerse, J.E., Popoola, O.A., Agbo, A.I. and Dieleman, M.A., 2019. Exploring factors influencing immunization utilization in Nigeria—a mixed methods study. Frontiers in public health, 7, p.392.
- Ameen, H.A., Musa, S., Ibraheem, R.M., Oladiji, F., Musa, O.I. and Salaudeen, A.G., 2023. Routine Immunization Uptake and Knowledge of Caregivers in Selected Rural Communities in North western Nigeria. Nigerian Journal of Basic and Clinical Sciences, 20(2), pp.135-141
- Downey, T., Moore, J.E. and Millar, B.C., 2021. Factors affecting vaccine uptake rate: the story of measles, mumps and rubella. Reviews and Research in Medical Microbiology, 32(3),
- National Department of Health (NDoH). 2023. Standard Treatment Guidelines and Essential Medicines List. Paediatric Hospital Level 2023 Edition. NDoH: Pretoria. South Africa.