Factors associated with success at COVID-19 vaccination sites in South Africa

To the Editor: Goga et al.\(^1\) recently reported lessons learnt for COVID-19 vaccination scale-up in South Africa (SA) from the Sisonke vaccine implementation study for healthcare workers. Despite this important study, SA did not achieve its target of providing COVID-19 vaccination for 67% of the population by December 2021. Furthermore, during 2022, vaccination rates have decreased substantially, with only 46% and 12% of SA adults and children aged 12 - 17 years being fully vaccinated, respectively (as at August 2022).\(^2\) Vaccine hesitancy in the country is an important issue, with a substantial proportion of vulnerable people being unsure of or unwilling to receive COVID-19 vaccination.\(^3\)\(^,\)\(^4\) Achieving high population vaccination coverage is further challenged by approximately one-third of the population being aged <18 years.\(^5\)

Large variations in the numbers of individuals vaccinated per site in the national vaccine programme have been apparent, and little attention has been paid in the literature to assessing site-level determinants of vaccine site success. To understand which factors improve the performance of COVID-19 vaccination sites and vaccination teams, we conducted key informant interviews with vaccination programme managers and key staff members in a non-profit organisation that provided >280 000 COVID-19 vaccinations utilising donor funding, in partnership with the Department of Health (DoH), in 11 districts in the Eastern Cape, Western Cape and KwaZulu-Natal provinces between September 2021 and June 2022. Forty-six vaccination teams were in the programme, which included small mobile teams that serviced rural areas and schools. Six key factors emerged as important determinants of how successful a site/team was in reaching high daily numbers of individuals vaccinated.

1. **Active support and buy-in from the DoH:** This emerged as a key enabler. Co-operative involvement in and close co-ordination of activities by the DoH (including managers of local hospitals) substantially improved vaccine team efficiency. Where DoH support was fragmented and not well co-ordinated, motivation and morale of vaccine team staff suffered.

2. **Demand creation:** Closely linked with vaccination activities, this was vital to increase numbers vaccinated. Vaccination staff needed to be immediately ready to provide vaccinations following demand creation, and needed to work together with demand creators. Demand creation activities included using loud-hailers, going door-to-door, education at clinics and scheduling times at schools for vaccine education. Demand creation using social media was viewed as being important to reach adolescents going forward, including to address vaccine hesitancy.

3. **Weekly site performance reviews and team planning:** Performance reviews comparing results v. targets, and understanding and using site data, were an important part of successful teams.

4. **Buy-in from local stakeholders:** Meeting and receiving buy-in from local stakeholders, including ward counsellors, with discussion of proposed demand creation activities in the local area improved the reach of teams.

5. **Staff recruitment and team leads:** Recruiting mature/senior professional nurses as team leads enabled more efficient performance of the team. Recruiting staff with previous vaccine programme experience resulted in much smoother operations (including data capturing), while inexperienced staff members were less efficient and poorer with programme data capturing and management.

6. **Initial and ongoing staff training and management:** Staff required intensive initial training, as well as ongoing mentoring and management to improve programme outcomes.

Although COVID-19 vaccination uptake has dropped in SA during 2022, improving vaccination teams/outputs will provide scope to improve the current inadequate population vaccination coverage, together with targeting young people in particular, and addressing vaccine hesitancy.

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