

Understanding COVID-19 Vaccine Hesitancy Among Healthcare Workers in South Africa

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ISSUE BRIEF

SUMMARY

- Healthcare workers were the first population group to be offered coronavirus disease 2019 (COVID-19) vaccines in South Africa because they were at higher risk of infection.
- This study wanted to determine vaccine uptake and attitudes among HCWs in South Africa whilst identifying what drives vaccine hesitancy among HCWs.
- We used a multi-methods design including a web-based survey and in-depth interviews with HCWs.
- We found that most HCWs were vaccinated, with hesitancy highest among younger HCWs, males, and those working in the private sector.
- Among those who were hesitant, HCWs raised concerns about the safety and effectiveness of the vaccines. These concerns included witnessing patients presenting with side-effects, concern over perceived lack of scientific rigor in developing the vaccine, confidence in the body's immune system, and both a general lack of information and distrust in available sources of information.
- HCWs are key role players in the national COVID-19 vaccination programme, making it critical for this workforce to be well trained, knowledgeable, and confident if they are going to improve the uptake of vaccines among the general population in South Africa, which currently remains low.

This brief is based on:

George, Gavin, Phiwe Babalo Nota, Michael Strauss, Emma Lansdell, Remco Peters, Petra Brysiewicz, Nisha Nadesan-Reddy, and Douglas Wassenaar.

"Understanding COVID-19 Vaccine Hesitancy among Healthcare Workers in South Africa." *Vaccines* 11, no. 2 (2023): 414.

Scan the QR code to see the published paper.



INTRODUCTION

HCWs are a vital component of the health system and play an important role in the success of a vaccination programme targeting the public. Low vaccination rates among HCWs and high levels of vaccine hesitancy can have a ripple effect, resulting in decreased vaccination uptake by those who engage with HCWs clinically and personally.

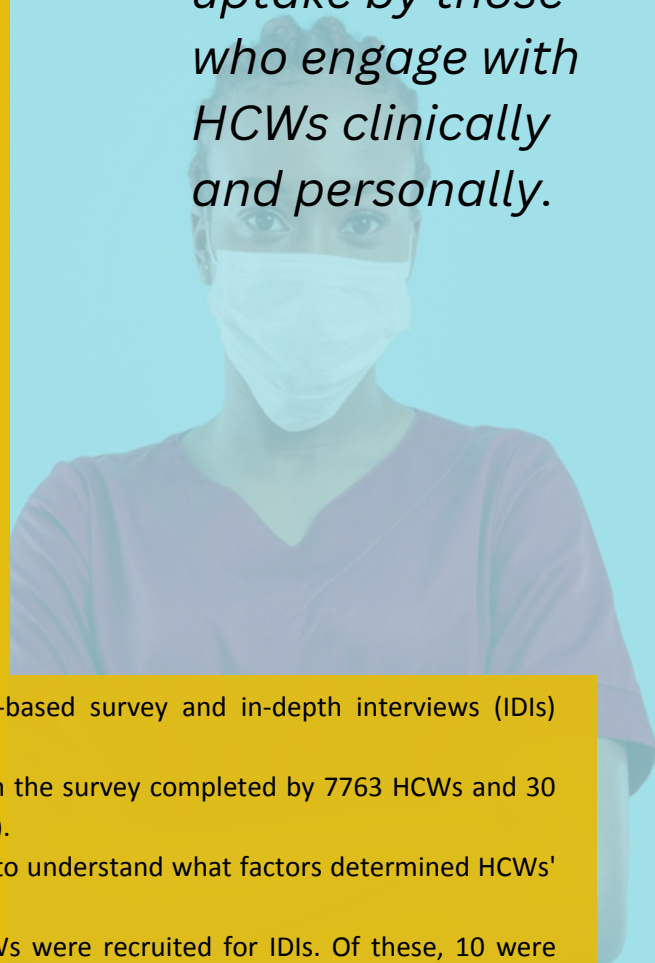
Most research on COVID-19 vaccine hesitancy among HCWs has been conducted in high-income countries, with studies in Africa, showing mixed responses to vaccine uptake. HCWs' COVID-19 vaccine hesitancy vary across contexts, with various factors associated with vaccine hesitancy. In several studies, HCWs reported safety and efficacy concerns, resulting in vaccine hesitancy. Several studies show that HCWs, also reported that they would prefer to wait to review further data to see how vaccines affected others. This shows the need for more information about the safety and effectiveness of vaccines for HCWs. These concerns persisted despite assurances from public health experts.

Given that vaccines are now globally available, it remains important to determine whether vaccine acceptance has translated into uptake. HCWs play a crucial role in influencing public confidence in vaccines, therefore there it is an urgent need for data on vaccine uptake and the prevalent concerns of HCWs in Africa.

In this study, we examined sociodemographic and health factors associated with vaccine uptake among HCWs across South Africa. We present the results of a qualitative exploration of the drivers of hesitancy, with the aim of identifying and exploring concerns raised by HCWs. This study is expected to contribute to the design and implementation of interventions aimed at ensuring that HCWs operate as effective vaccine advocates and public health promoters.



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RESEARCH METHODS

- We adopted a multi-methods approach, we used both a web-based survey and in-depth interviews (IDIs) amongst HCWs in South Africa.
- Data collection occurred between August and October 2022, with the survey completed by 7763 HCWs and 30 HCWs participating in the IDIs (10 vaccinated and 20 unvaccinated).
- Univariate and multivariate logistic regression models were used to understand what factors determined HCWs' vaccination behaviours.
- A total of 7763 surveys were completed, and a total of 30 HCWs were recruited for IDIs. Of these, 10 were vaccinated and 20 HCWs were not vaccinated at the time of the interviews.

WHAT WE FOUND



- The vast majority (89%) of this sample of HCWs was vaccinated.
- Males and the younger cohort were less likely to vaccinate.
- Doctors and other HCWs displayed higher levels of hesitancy compared to nurses.
- HCWs working in the private sector were also less likely to vaccinate.
- HCWs who had self-reported chronic conditions were more likely to vaccinate than those not reporting any chronic conditions.

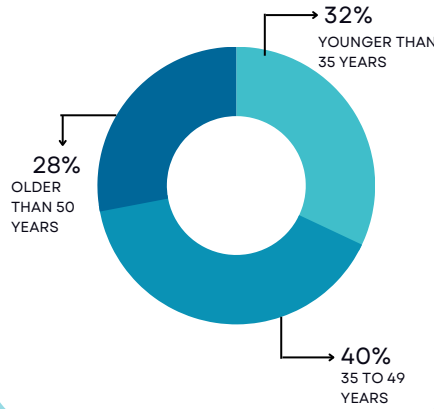
VACCINATED SA POPULATION

51%

VACCINATED HCWs

89%

AGE

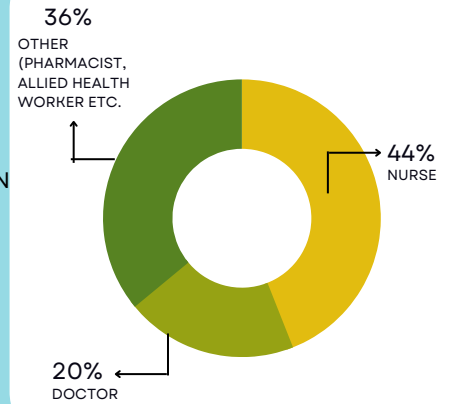


70%
WOMEN



30%
MEN

OCCUPATION



Insights from HCWs: Reasons for Vaccine Hesitancy

The Perceived Speed at Which COVID-19 Vaccines Were Developed



Observing Patients Present with Side-Effects following Vaccination



Confidence in Natural Immunity



Lack of Trust in Sources of Information

- 1 Hesitant HCWs expressed concern about the perceived speed in which clinical trials for COVID-19 vaccines were undertaken and the rapid vaccine development process.
- 2 HCWs were concerned about vaccine side-effects. Most of the HCWs who reported this concern gave anecdotal accounts of patients who had reportedly experienced adverse side effects post vaccination.
- 3 Among unvaccinated HCWs, there were assertions that natural immunity against COVID-19 was sufficient, deeming the vaccine unnecessary.
- 4 Some hesitant HCWs expressed mistrust in the government and pharmaceutical companies, citing these as reasons for not getting vaccinated.

IMPLICATIONS FOR IMMUNIZATION PROGRAMMES



If HCWs are to play a key role in promoting vaccination to the public, their own concerns will need to be addressed, their knowledge levels improved, and they will need the skills to effectively communicate to the public.



HCWs will need clear information about vaccine development pathways, regulatory and safety oversight procedures and standards, efficacy data, common and rare side-effects, and realistic effectiveness targets.



Whilst multiple strategies are needed in a vaccination programme, it is key to recognise the important role of HCWs, ensuring that they are adequately capacitated to both motivate for vaccine uptake and address public concerns with scientifically accurate and clinically relevant information.

ACKNOWLEDGEMENTS

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