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Workplace Vaccination Program – Experiences from Sisonke 1



Fellow healthcare workers, as well as President Cyril Ramaphosa and National Health Minister Zweli Mkhize, vere amongst the first South Africans to be given the phosons & Johnson COVID-19 vaccine, yesterday February 2021.

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Schuur Hospital	40
Hospital	12
Oay Hospital	23



cinateWC and register for vaccination nic Vaccine Data System (EVDS) here: proll.health.gov.za/#/

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#### Outline

- Introduction
- Registration of sites
- Prioritisation based on risk
- Setting up the vaccine site
- Process flow
- Staff and training
- Vaccine acceptance and hesitancy
- Management of Adverse Events
- Challenges and Successes
- Impact



### Introduction

Covid-19 Vaccination was rolled out as a major component of the National Department of Health's (NDOH) overall COVID 19 response

On the 17<sup>th</sup> February 2021, the first covid-19 vaccines were administered in South Africa

Due to the initial limited supply of vaccines, vaccines had to be rationed using a risk-based approach

It was decided that first access be given to health workers and with this two things to consider:

- Who is a health care worker?
- Who has the greatest risk?

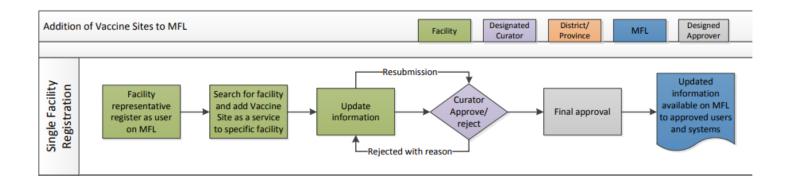
The rationale was to protect the health system and ensure it remains responsive and capable of meeting demand for care

As a result, the vaccination centres were initially located at health facilities but have now become decentralized.

### South Africa's Vaccine Rollout Plan Phase 1: Frontline healthcare workers Target population: 1 250 000 Phase 2: Essential workers Target population: 2 500 000 People in congregate settings Target population: 1100 000 People over 60 years old Target population: 5 000 000 People over 18 years old with Target population: 8 000 000 co-morbidities Phase 3: Other persons over 18 years old Target population: 22 500 000

# Registration of Site

- Prior to commencement each province had to estimate the number of health workers within its borders to ensure equal distribution of vaccines
- Ensure that there would be equitable distribution between public and private facilities alike
- Province then had to identify suitable sites for vaccination
- Each vaccination site had to register for accreditation and inclusion on the Master Facility List run by the NDOH
- Each vaccination site had to appoint a facility representative





- There were a number of uncertainties in the beginning and relied on planning, evidence and agility to be able to cope with changes
- For example, the change from the Astrazeneca to the J&J vaccine resulted in a few ripple effects:
  - Slight change to the vaccinator training material
  - Changes to the Electronic vaccine data system (EVDS)
  - Changes in processes as now sites had to work with and accommodate researchers and their processes

# Prioritisation based on risk

Advice from Expert Advisory committee at province and NDOH

Carried out by line managers

#### Risk scoring was based on:

- Individual vulnerability by age
- Individual vulnerability by co-morbidities
- Risk of exposure of staff
- Criticality of setting within the facility

## Setting up the vaccination site

Suitable venue- taking into account COVID-19 restrictions for social distancing and adequate air flow

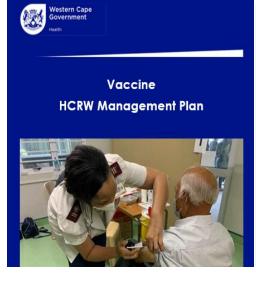
Equipment & IT- computers, network lines, furniture, bins, resuscitation equipment, sufficient cold storage

Consumables – alcohol hand rub, cotton buds, strapping

Information material – staff and persons receiving the vaccine

Handling of waste

Defining flow through the centre



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<u>co</u>	NTENT PAGE: VACCINATION SITE PREPAREDNESS PACK	
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#### ANNEXURE A - VACCINE SITE CHECKLIST (VERSION 5.2)

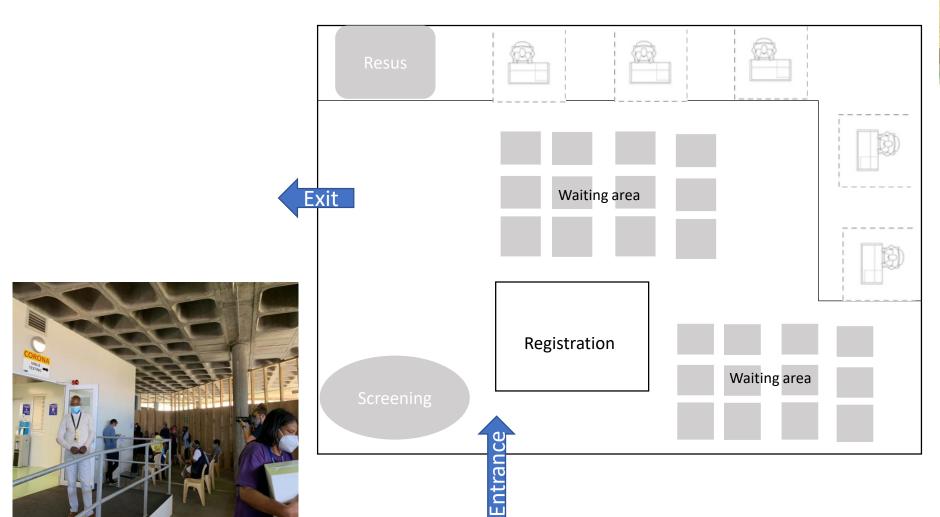
#### **VACCINATION SITE ENROLMENT**

The South African National COVID-19 Vaccine Implementation Plan describes multiple scenarios where vaccines will be administered. Vaccination sites will be located in both public and private sector settings, and will include fixed, mobile and temporary locations.

All COVID-19 vaccination sites are required to be enrolled with the National Department of Health (NDoH). Enrolment will assist with planning, distribution, communication, monitoring and reporting on progress of the vaccination roll-out plan.

Prepared by Yamanya Tembo

### Site Layout









This is the official South African COVID-19 Vaccination Programme registration portal.

- · Vaccination is voluntary.
- Everyone who registers will be offered vaccination. We will start with people 60 years and older and move down the age groups as quickly as we can.
- . When it is your turn, you will receive an SMS with the date, time and place for your vaccination.
- HWs had to register on EVDS
- Once registered, receive invitation to participate in the trial based on eligibility/ prioritization
- Acceptance of invitation and completeconsent form online Are you 60 and above?
- Once complete would receive voucher and invitation to present to a named facility
- HW rostered on appointment schedule

Register for Vaccination

For more information, terms and conditions please visit:

https://sacoronavirus.co.za/evds/tscs/

### Process flow at vaccination site

#### Screening

- On arrival, eligible
  HW presents
  voucher and
  checked off
  appointment list
- Screening for covid-19 symptoms done
- HW directed to registration
- Some HWs would be assisted to register at this point

#### Registration

- HW presents documentation to verify who they are
- Details checked against EVDS records
- Additional point for helping staff to get registered on EVDS
- HW directed to waiting are prevaccination

#### Vaccination

- HWs asked medical screening questions and receive consent to proceed
- Vaccinator administers vaccine
- Details captured on vaccination card and EVDS
- HW directed to observation area

#### Observation

- HW observed for 15mins
- Adverse events managed and where necessary referred to emergency centre
- Once time elapsed HW allowed to leave



## Your COVID-19 vaccination journey

6 steps to getting vaccinated

- 1. Register on EVDS system at vaccine.enroll.health.gov.za
- 2. Apply to Sisonke Vaccine Programme at https://sisonke.samrc.ac.za/
- 3. Receive vaccination voucher number
- 4. Attend vaccination site for vaccination
- 5. Get the vaccine
- 6. Receive final SMS with vaccination proof code

**#VaccineRolloutSA** 



https://www.thenewhumanitarian.org/analysis/2021/4/28/sou th-africas-daunting-COVID-19-vaccine-rollout

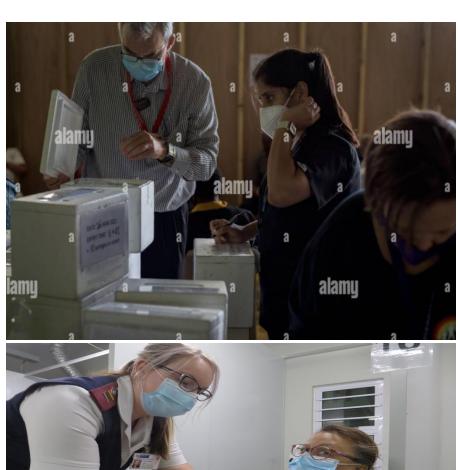
### DOZENS OF WC PRIVATE SECTOR GPS LINE UP TO RECEIVE THEIR VACCINE JABS

Many say they're feeling hopeful and relieved to have reached this point, less than a year since the first COVID-19 cases were recorded in the country.



Private sector general practitioners line up on Sunday, 21 February 2021, to receive their inoculations at Groote Schuur and Tygerberg Hospitals in the Western Cape. Picture: Lizell Persens/Eyewitness News.

https://ewn.co.za/2021/02/21/dozens-of-wc-private-sector-gps-line-up-to-receive-their-vaccine-jabs





#### lectronic Vaccination Data System

**g** ing Instance



### Staff and Training

- Relied on volunteers (clinical staff) for staffing
- Managing schedules
- Training training modules provided by the NDOH and adapted to provide comprehensive but summarized information
- Visual guides- developed for staff to act as job aids and pasted at each vaccination station
- Training and access to EVDS- training also provided on how to use EVDS and

# Vaccine acceptance and hesitancy

- Understanding of perceptions around new product
- Provincial Health Office carried out survey prior to commencement of vaccination program
- Province led vaccine information sessions
- Local information sessions at GSH run daily
- Sessions were run by MDT comprised of staff who work at the hospital giving advice to fellow staff
- Break down the information into simplified language for easy understanding
- As more people got vaccinated with no adverse effects, more people encouraged to vaccinate

BACKGROUND We assessed willingness to accept vaccination against coronavirus disease 2019 (COVID-19) among healthcare workers(HCWs) at the start of South Africa's vaccination roll-out.

RESEARCH DESIGN AND METHODS We conducted a cross-sectional survey among HCWs in Cape Town in March-May 2021 and assessed predictors of vaccination intentions.

RESULTS We recruited 395 participants; 64% women, 49% nurses, and 13% physicians. Of these, 233(59.0%) would accept and 163 (41.0%) were vaccine hesitant i.e. would either refuse or were unsure whether they would accept COVID-19 vaccination. People who did not trust that COVID-19 vaccines are effective were the most hesitant (p = 0.038). Older participants and physicians were more likely to accept vaccination than younger participants (p < 0.01) and other HCWs (p = 0.042) respectively. Other predictors of vaccine acceptance were trust that vaccines are compatible with religion (p < 0.001), consideration of benefits and risks of vaccination (p < 0.001), willingness to be vaccinated to protect others (p < 0.001), and viewing vaccination as a collective action for COVID-19 control (p = 0.029).

CONCLUSIONS COVID-19 vaccine hesitancy is high among HCWs in Cape Town. Reducing this would require trust-building interventions, including tailored education.

#### ARTICLE HISTORY

Received 23 November 2021 Accepted 23 December 2021

#### **KEYWORDS**

COVID-19 vaccines, vaccine attitudes, vaccine confidence, vaccine hesitancy, healthcare workers, South Africa

EXPERT REVIEW OF VACCINES 2022, AHEAD-OF-PRINT, 1-11 https://doi.org/10.1080/14760584.2022.2023355





#### COVID-19 vaccine acceptance and hesitancy among healthcare workers in South Africa

Charles S Wiysonge o a,b,c,#, Samuel M Alobwede d,#, Patrick de Marie C Katoto a,e, Elvis B Kidzeru o f,g, Evelyn N Lumngwena h,i,j, Sara Cooper o a,b, Rene Goliathk, Amanda Jacksonk, and Muki S Sheyd,h,k

# Managing Adverse Events

- For immediate reactions resuscitation area fully equipped and 2 nursing staff managing this area.
- Doctor always on duty in vaccine centre on standby
- Conveniently located next to EC
- Based on most likely symptoms staff were advised on what to do to ameliorate symptoms
- For later onset symptoms, staff presented themselves to staff clinic
- Given about 2 days off
- Referred to Sisonke help desk and to GP if any concerns
- Very few staff experiencing adverse side effects

The majority (81%) of adverse events reported were expected mild-to-moderate reactogenicity events. Fifty health care workers had adverse events that met the criteria of being serious or of special interest<sup>3,4</sup>; a full list of these events is provided in Table 1 in the **Supplementary Appendix**, available with the full text of this letter at NEJM.org. Among these 50 workers, 12 (24%) had coronavirus disease 2019 (Covid-19), which occurred within 28 days after vaccination; 12 (24%) had allergic reactions, of which one met the criteria for anaphylaxis; and 6 (12%) had neurologic conditions, including a 40-year-old man who received a diagnosis of Guillain–Barré syndrome and a 53-year-old woman with Bell's palsy.

#### Just had the COVID-19 vaccine?

Well done and thank you for protecting yourself!

#### Side effects are common. Here's what to look out for.









Fatigue





Arm is sore or red at the injection site

Fever/chills

Headache

Muscle aches

- Side effects can start around 6 hours after the vaccine. peak at 24 hours and resolve in 2-3 days.
- · If you need to, treat pain and fever with paracetamol.
- · Side effects may be more noticeable if you are young, healthy or had COVID-19 before.

These side effects show your body is mounting an immune response. The technical term for this is 'reactogenicity'. No side effects does not mean your body is not mounting an immune response.

#### Allergy is rare

Perhaps you will have a mild allergic reaction like a rash that gets better by itself. Severe allergic reactions are extremely rare.

#### Contact the Sisonke Safety Desk if:

- · You have any concerns or questions about Sisonke programme or the vaccine.
- · You develop an allergic reaction, even if mild.
- · Vaccine side effects get worse or do not resolve after 3 days.
- You test positive for COVID-19.
- You are admitted to hospital for any reason.
- · You become pregnant within 3 months of receiving the vaccine.
- You need a COVID-19 antibody test.
- · You participate in another study.

Sisonke Safety Desk 0800 014 956









#### You might still get COVID-19. Here's why.

- You cannot catch COVID-19 from the vaccine as there is no live coronavirus in it.
- · It is still possible to get COVID-19 as no vaccine is 100% effective.
- You might have caught COVID-19 before being vaccinated (it can take up to 14 days before COVID-19 symptoms start).
- · You might catch it within the first 2 weeks after being vaccinated while your immune system is being trained up to fight COVID-19.

COVID-19 **Public Hotline** 0800 029 999



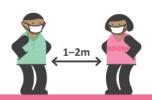
#### Don't confuse vaccine side effects with COVID-19 symptoms!

- · If your fever lasts more than 2 days or you develop a continuous cough, sore throat, or changes in your ability to taste or smell after your vaccination, you may have COVID-19.
- Isolate yourself and arrange to get a COVID test. Contact your healthcare provider, COVID-19 hotline or Safety Desk.

Even if you do get COVID-19, you are very unlikely to get severely ill or die from COVID-19.

#### We still don't know if the vaccine will stop the spread. Don't forget COVID-19 prevention!

- Wear a mask in public.
- Keep apart from others outside your home as much as possible.
- · Avoid crowds and confined spaces have small gatherings outside.
- · As a healthcare worker, continue to wear standard PPE at work.



We are not safe until we are all safe.







### Challenges

#### Governance:-

• Overall governance lay with NDOH and hence sometimes difficult to effect changes on the ground during implementation

#### Data management/information:

• Almost as a direct result of that early on it was difficult to retrieve reports from EVDS and therefore change strategies to ensure reach of HCWs

#### Infrastructure

• Long queues, social distancing and the weather

#### Risk communication

Vaccine hesitancy

#### Risk Categorization

• Who is a health worker? Who is exposed? Delays in approvals for prioritization

#### Logistics and planning

- Delays experienced due to the requirements of the research component accountability of each dose
- Staffing relied heavily on volunteers

### Successes

#### Governance:-

- MDT managing the site
- Our feedback laid the groundwork for some of the governance arrangements to change

#### Data management/information:

- Kept parallel records of activities on the ground
- Enabled access for those without smart phones

#### Infrastructure

• Well ventilated, managed queues and ability to make additions to support the network infrastructure needed

#### Risk communication

• Information sessions were well received

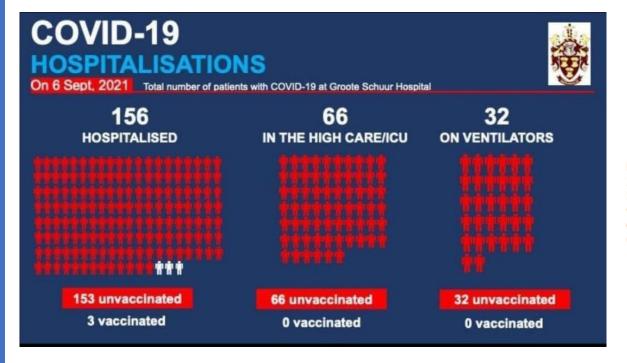
#### Communication

• Both internal and external communication was daily and ongoing facilitated swift changes and contributed to low vaccine wastage

### **Impact**

## Effectiveness of the Ad26.COV2.S vaccine in health-care workers in South Africa (the Sisonke study): results from a single-arm, open-label, phase 3B, implementation study

Linda-Gail Bekker, Nigel Garrett, Ameena Goga, Lara Fairall, Tarylee Reddy, Nonhlanhla Yende-Zuma, Reshma Kassanjee, Shirley Collie, Ian Sanne, Andrew Boulle, Ishen Seocharan, Imke Engelbrecht, Mary-Ann Davies, Jared Champion, Tommy Chen, Sarah Bennett, Selaelo Mametja, Mabatlo Semenya, Harry Moultrie, Tulio de Oliveira, Richard John Lessells, Cheryl Cohen, Waasila Jassat, Michelle Groome, Anne Von Gottberg, Engelbert Le Roux, Kentse Khuto, Dan Barouch, Hassan Mahomed, Milani Wolmarans, Petro Rousseau, Debbie Bradshaw, Michelle Mulder,



Findings Between Feb 17 and May 17, 2021, 477102 health-care workers were enrolled and vaccinated, of whom 357401 (74·9%) were female and 119701 (25·1%) were male, with a median age of 42·0 years (33·0-51·0). 215813 vaccinated individuals were matched with 215813 unvaccinated individuals. As of data cutoff (July 17, 2021), vaccine effectiveness derived from the total matched cohort was 83% (95% CI 75-89) to prevent COVID-19-related deaths, 75% (69-82) to prevent COVID-19-related hospital admissions requiring critical or intensive care, and 67% (62-71) to prevent COVID-19-related hospitalisations. The vaccine effectiveness for all three outcomes were

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