



health

Department:
Health
REPUBLIC OF SOUTH AFRICA



Enquiries: Prof B Schoub
E-mail: barry.schoub@gmail.com

Date:	28 September 2021		
To:	Honourable Minister Dr Joe Phaahla, Minister of Health	From:	Ministerial Advisory Committee (MAC) on COVID-19 Vaccines

**ADVISORY ON BOOSTER JOHNSON & JOHNSON VACCINE FOR HEALTHCARE
WORKERS
- 2ND VERSION -**

Problem Statement

- The Sisonke roll out for healthcare workers started on the 17th February 2021 with a single dose of Johnson & Johnson vaccine.
- Consideration has now become necessary as to whether healthcare workers must receive a second dose of Johnson & Johnson.

Points considered

1. Experience with single dose Johnson & Johnson vaccine.
 - How long immunity and efficacy following a single dose of Johnson & Johnson will last is unknown. Current information suggests that a single Johnson & Johnson vaccine dose induces immunity for about 6-8 months. <https://www.nejm.org/doi/full/10.1056/NEJMc2108829>
 - A full or quarter dose booster dose of Johnson & Johnson at 6 months elicited rapid and robust increases in spike binding antibody levels. The anamnestic responses after booster immunization imply development of robust immune memory. <https://www.medrxiv.org/content/10.1101/2021.08.25.21262569v1.full.pdf>
 - Ninety-four percent of healthcare workers who experienced breakthrough infections following vaccination as a part of the Sisonke rollout programme with the Johnson & Johnson vaccine exhibited mild to moderate symptoms (cut-off date for data analysis was 5-6 months after first enrolment).
 - The vaccine effectiveness was 65% in reducing hospitalization*, which was lower than that seen following the two dose Pfizer-BioNTech vaccine**. [*https://sacoronavirus.co.za/wp-content/uploads/2021/08/Sisonke-Provisional-Results-6-August-2021GG2.pdf](https://sacoronavirus.co.za/wp-content/uploads/2021/08/Sisonke-Provisional-Results-6-August-2021GG2.pdf)
[**https://pubmed.ncbi.nlm.nih.gov/33964222/](https://pubmed.ncbi.nlm.nih.gov/33964222/)
 - At present there is no strong evidence from clinical trials or well-designed effectiveness studies that the efficacy/effectiveness of the Johnson & Johnson

vaccine against severe disease, hospitalisation and death is waning over time. However, this is likely to change with time.

- Opinion is emerging that Johnson & Johnson vaccine should be delivered in a 2-dose primary schedule to optimize immunity.

2. Why a booster Johnson & Johnson vaccine for SA health care workers is necessary.

- There is a strong public health rationale for administering a booster dose for health care workers not only to enhance protection against severe disease and death, but also to enhance protection against infection. If effective, this will help to maintain the health care workforce, reduce transmission in health care facilities and reduce health care worker absenteeism because of isolation if infected.
- Boosters will be needed at some stage of the pandemic especially considering new variants emerging. Boosted immune responses may translate into improved protection, including against variants of concern. Boosters may potentially impact on reducing breakthrough infections and may increase protection against hospitalisation.
- The SA health care services have had significant and, in some cases, very severe capacity constraints in managing the flood of coronavirus cases during the first 3 waves.
- The pandemic has had a major impact on the emotional and psychological well-being of staff on the frontline of service provision. Morale of staff is at an all-time low. Many have agitated for a booster dose and in some cases have had an unauthorised booster Pfizer-BioNTech.
- Vaccine supply is not constrained at present or in the near future thus there will be no competition for vaccine supply or administration in the booster healthcare worker rollout with the ongoing national rollout programmes, where our priority remains to get as many first doses into our adult population and in particular the at-risk groups including the elderly.
- However, the delivery of vaccines would need to be well coordinated so that this does not divert resources from the vaccination of the general population

Recommendations

1. While scientific evidence is not conclusive on the absolute need for the booster dose, the VMAC is of the opinion that there is currently sufficient scientific evidence from laboratory investigations as well as from clinical observations, of waning immunity to warrant the additional dose.
2. Healthcare workers should be offered a booster dose of Johnson & Johnson vaccine 56 or more days after their first Johnson & Johnson dose.
3. The vulnerability of the healthcare workers to COVID infection with resulting absenteeism from illness or from isolation requirements, particularly with the increased burden of infection expected with the forthcoming fourth wave at the end of the year is a further reason to protect them.

4. Further advisories will address the issue of booster Johnson & Johnson dose for non-healthcare workers who received them.
5. Healthcare workers who have had unauthorized booster doses of Pfizer-BioNTech after Johnson & Johnson are strongly encouraged not to accept an additional booster Johnson & Johnson vaccine as there are no safety data for such a schedule and this will also be a waste of vaccines.
6. SAHPRA approval will be required for a booster vaccine dose.
7. The administration of booster doses to healthcare workers who received the single dose Johnson & Johnson vaccine should be accompanied by intensified efforts to ensure all health care workers have received a primary series of either Johnson & Johnson or Pfizer-BioNTech.

Thank you for consideration of this request.

Kind regards,



PROFESSOR BARRY SCHOUB

CHAIRPERSON: MINISTERIAL ADVISORY COMMITTEE ON COVID-19 VACCINES

DATE:28/09/2021

CC:

- » **Dr S Buthelezi (Director-General)**
- » **Dr T Pillay (Deputy Director-General: Health Regulations and Compliance Management)**