



UGANDA NATIONAL ACADEMY OF SCIENCES

Recommendation Report: Allocation Strategy for the Multiple COVID-19 Vaccines in Uganda

Ratified Recommendation of the Interim Report
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By

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Introduction

The UNITAG received a request from the Vaccine Advisory Committee (VAC) to provide a recommendation on the allocation of the multiple COVID-19 vaccines expected in Uganda in the next couple of months. This recommendation aims to assist the Ministry of Health in planning for equitable allocation of vaccines against COVID-19.

In response to this request, the NITAG has conducted a preliminary literature review on the issue globally and domestically. We have also conducted some preliminary analysis of data available from phase one vaccination targeting high-risk groups in Uganda to consider what criteria should be used to set priorities for equitable distribution among groups of potential vaccine recipients. We have taken into account factors such as population health disparities; individuals at higher risk because of health status, occupation, or living conditions; and geographic distribution of active virus spread. In addition, the committee has considered how the population can be assured of equitable access to COVID-19 vaccines in Uganda and recommended strategies to mitigate vaccine hesitancy among the Ugandan public.

The following observations were noted:

Current evidence from the phase one COVID-19 vaccination targeting high-risk groups showed that the country had reached 19% of the targeted high-risk groups, including 64.4% of the health workers, 57.2% of the security, 29.3% of the teachers, 8.5% of the elderly, and 4.9% of persons with co-morbidities. Cumulatively, it was reported that 1,152,874 (101%) doses were administered during vaccination, where 79.3% of these were administered as first dose and 27.6% as second dose. Moreover, only 86 districts had consumed more than 90% of the vaccines allocated to them (Ministry of Health COVID-19 vaccination performance updates August 05, 2021).

According to the government of Uganda's vaccine pipeline and proposed allocation strategy, more vaccines, including 300,000 doses of the Sinovac vaccine, 286,080 doses of the AstraZeneca vaccine from Norway, 299,000 doses of AstraZeneca from the United Kingdom, a consignment of the Pfizer vaccine were in the pipeline in addition to the expected two million (2M) doses of the Johnson and Johnson (J&J) vaccine, all aimed at prioritizing organized groups and high-risk individuals.

Prioritizing the most at risk of severe disease and death comes with benefits, including reducing risk of severe morbidity thus freeing up the health system and reducing mortality as the most critical indicators. There was an urgent need to develop a vaccine allocation strategy that focuses on vaccine efficacy and safety and ensures equity and the potential impact on the pandemic as important public health parameters.

Evidence from a survey conducted by the secretariat on behalf of the UNITAG indicated that although the majority of the respondents agreed to the proposed allocation strategy, issues concerning freedom of choice were raised and need to be considered to avoid vaccine hesitancy among the population.

Recommendations on allocating the different vaccines to the population

The UNITAG recommended that priority groups for covid-19 vaccine allocation should be maintained while allocating all the different vaccines, including targeting health care workers, teachers, security forces, the elderly, and persons with high-risk co-morbidities.

The specific vaccine allocation recommendations were as follows:

1. Pfizer vaccine;

- a) Given its ultra-cold-chain logistics requirements that are only available at the National Medical Stores (whilst acknowledging that it can be stored at fridge temperatures for 31 days), and the nature of its preparation and administration, which is new to Ugandan health workers and therefore has intense training requirements, the UNITAG recommended that the Pfizer vaccine should be introduced in a phased manner starting with the Kampala Metropolitan area first, because of the highest burden of disease, as well as to allow for a learning process.
- b) In addition to the Kampala Metropolitan Area (KMA), the immunization program may, with time, further extend to other areas as guided by the disease burden data, given that the Pfizer vaccine can be stored for up to 31 days at the normal cold-chain temperature of 2-8°C.

Note: While the Pfizer vaccine was considered safe for children (12-17 years), UNITAG's recommendation on administering the vaccine to children with co-morbidities (12-17 years) was to be addressed upon revision of the prioritization framework using updated disease epidemiology evidence that was under analysis (Ratified Recommendation on Prioritisation of Risk Groups in Uganda, September 09, 2021).

2. Sinovac vaccine

- a) The Sinovac vaccine should target groups that are well organized for example security forces and teachers to enable easy traceability for second dose administration for the same group of people to avoid mix and match effects. Also, given that it is a one-time donation, and the country was unsure of the next consignment, it was recommended that the vaccine doses should be rolled out in such a way that all those given a first dose were able to get their second dose from the same batch.
- b) The Ministry of Health (MoH) should sufficiently educate targeted groups to address quality perceptions before rolling out the vaccine to avoid potential issues of hesitancy.

3. AstraZeneca vaccine

- a) The MoH should prioritize high-risk groups for their first dose but also give second dose to those that are due (over 12 weeks).
- b) Given its short life span, a campaign mode should be used to give a first dose on a first-come, first-serve basis.

4. Johnson and Johnson (J&J) vaccine

- a) The program should continue targeting high priority groups and increase coverage from the current 19% of the target population to approximately 80% before opening up to other population groups.

In addition to the above vaccine-specific recommendations, UNITAG made the following general recommendations:

- i. The messages going out to the population on who should get the second or first dose of the vaccine should be very clear.
- ii. The program should ensure that each vaccination center has only one vaccine type at a time to minimize confusion.
- iii. The health care workers, through the District Health Officers (DHOs) and the public should be educated on why a particular approach is preferred.
- iv. Given changes in the context, there is a need to review the communication approaches used in the Expanded Program for Immunisation (EPI) in the face of COVID-19. The program should use systematic evidence-based approaches that suit the COVID-19 pandemic.
- v. MoH should provide adequate funding to actualize the COVID-19 communication plan.
- vi. The Immunisation Program should use COVID-19 vaccination campaigns to strengthen routine immunization.
- vii. MoH should develop long-term vaccine projections in terms of need and supply for the country.
- viii. The Ministry should establish a mechanism for contacting individuals due for follow up vaccination if a second dose will be delayed beyond the recommended waiting interval.