

## **Highlights from the Meeting of the Strategic Advisory Group of Experts (SAGE) on Immunization 22-24 March 2021**

(Full report will be published in the Weekly Epidemiological Record on 4 June 2021, and only the wording of the full report should be considered as final.)

### **Ebola Vaccines**

- Two Ebola vaccines have been licensed. One has been WHO prequalified (rVSVΔG-ZEBOV-GP vaccine) and the other is under review (Ad26.ZEBOV and MVA-BN-Filo Ebola vaccines administered as a heterologous prime boost 8 weeks apart).
- In the context of an Ebola Vaccine Disease (EVD) outbreak response, SAGE made a recommendation for off-label use of the two Ebola vaccines to include infants and children from birth to 17 years of age, as well as pregnant and lactating women.
- SAGE reconfirmed its previous recommendation to use a ring vaccination strategy for EVD outbreak response.
- Given current vaccine supply constraints and the unknown duration of protection, widespread preventive use of Ebola vaccines in the absence of an outbreak is currently not recommended.
- SAGE requested the development of a learning agenda to more broadly examine the potential preventive role of Ebola vaccines and to provide more clarity on vaccine use and vaccine demand in the longer term.
- SAGE urged manufacturers to increase production capacity to meet the expected vaccine demand resulting from the recommendations.

### **Polio**

- SAGE was pleased to note a significant drop in wild poliovirus detections in the endemic areas during the past 6 months. However, SAGE expressed concern about the inability of the program to effectively control outbreaks of circulating vaccine-derived poliovirus type 2 (cVDPV2) in Africa and Asia. SAGE noted that the first cVDPV2 outbreak response campaign with novel oral polio vaccine type 2 (nOPV2) was conducted in Nigeria in March 2021.
- SAGE recommended that WHO prequalified Sabin-based IPV may be used interchangeably with the traditional Salk-based IPV.
- SAGE agreed with the Global Polio Eradication Initiative plan for transition from initial to wider nOPV2 use for response to cVDPV2 outbreaks, contingent on safety and genetic stability reviews.
- SAGE recommended that vigorous efforts be made to improve inactivated polio vaccine (IPV) coverage in locations at risk of cVDPV2 outbreaks to reduce the number of susceptible children before transmission or outbreaks can occur.
- SAGE urged all countries at risk of cVDPV2 outbreaks to prepare to meet the criteria for use of nOPV2 and to complete a readiness assessment.
- SAGE emphasized that the priority for countries experiencing cVDPV2 outbreaks is to conduct high quality outbreak responses without delay, with whichever oral polio vaccine is available to them.

## COVID-19 Vaccines

### *Review of interim data on Sinopharm and Sinovac COVID-19 vaccine products*

- Interim analyses of clinical trial data for two inactivated COVID-19 vaccines, one from Sinovac and one from Sinopharm, were presented to SAGE. Both vaccines are already in use in many countries, but neither product has received authorization by a stringent regulatory authority. Both companies have submitted dossiers for their products to WHO for emergency use listing. SAGE will consider policy recommendations for each vaccine once emergency use listing by WHO is obtained. The vaccines demonstrated safety and good efficacy against symptomatic COVID-19 disease but both vaccines lacked data in older age groups and in persons with comorbidities. Post-introduction vaccine effectiveness and safety studies will be needed to address the impact on those sub-populations.

### *Review of case definitions and clinical endpoints used in trials for COVID-19 vaccines*

- SAGE noted that COVID-19 vaccine efficacy results from different trials cannot be directly compared against each other. They must be interpreted in the context of study designs (including case definitions, clinical endpoints, access to testing), target populations, and COVID-19 epidemiologic conditions (including circulation of variants of concern).
- SAGE therefore requested that COVID-19 vaccine communications avoid direct comparisons of vaccine efficacies between COVID-19 vaccine products and instead discuss vaccines in their totality, taking into consideration their characteristics with regards to vaccine logistics, programmatic ease and safety in addition to vaccine efficacy.

## COVID-19 Variants

- SAGE requested that data on performance against variants of concern (VOCs) be gathered for all COVID-19 vaccines.
- Methods and approaches to collect data on vaccine performance against VOCs should be harmonized and laboratory, clinical and observational data should be triangulated.
- If VOCs significantly change the performance of vaccines, implications for vaccination strategies will need to be considered.

## COVID-19 Vaccination and Early Learning

- SAGE noted that it was valuable for countries to share lessons learned from COVID-19 vaccine rollout in order to benefit from each other's experiences.
- Introduction of COVID-19 vaccination and reaching adults for vaccination is complex. This effort benefits from strong political will; comprehensive communication and community engagement; robust microplanning; interoperable digital tools which allow registration, safety monitoring, vaccine stock management, follow-up reminders, and vaccination certificates; and which engages partners and stakeholders, including the private sector.
- Introduction of COVID-19 vaccination should be taken as an opportunity for strengthening broader immunization and health systems to resolve existing weaknesses and to meet future needs for robust essential health services.

### **COVID-19 Vaccine safety**

- To date, post-introduction safety data from COVID-19 vaccines give assurance that safety surveillance is performing well and that rare adverse events are being captured. The response to the global pandemic has contributed to the strengthening of safety monitoring systems at global, regional and national levels.
- Safety signals for the four COVID-19 vaccines with WHO interim recommendations for use that were analysed by the Global Advisory Committee for Vaccine Safety COVID-19 subcommittee show that the overall benefits in preventing severe disease and deaths from SARS-COV-2 infection remain favourable and outweigh any identified risks with these vaccines.
- Appropriate communication on the benefit-risk profile of COVID-19 vaccines remains crucial to maintain confidence in immunization programmes and to avoid vaccine hesitancy. Furthermore, there is a need to carefully consider the negative consequences of rigorously applying precautionary principles to suspend vaccinations while a safety signal is still being investigated.

### **Measles Rubella**

- SAGE recognized that measles control and elimination efforts need significant improvement. Current measles and rubella policies are appropriate, but there are major issues related to policy implementation and sub-national heterogeneity. Given the ongoing and increasing risk of measles outbreaks, SAGE supported urgent implementation of the Measles Outbreaks Strategic Response Plan.
- SAGE strongly advised WHO and partners to maintain resources for measles and rubella efforts and to restore those that have been redeployed to the COVID-19 response, given the growing immunity gaps and increasing risk of measles outbreaks.
- SAGE strongly advocated more research and innovation on measles and rubella, including faster progress on subnational data science and the development of measles rubella microarray patch vaccines and Rapid Diagnostic Tests as potential game-changers.
- SAGE recommends measles rubella and COVID-19 vaccine co-administration studies be planned and executed to facilitate health worker immunization and eventually measles rubella vaccination catch-up as COVID-19 vaccination roll out extends to younger age groups.

### **Vaccine Acceptance and Uptake**

- SAGE was presented with an update on the field of work in relation to acceptance and uptake of vaccination, and a summary of work currently underway to develop tools and guidance to measure and address behavioural and social drivers of vaccination. Work outputs will include core indicators as well as corresponding interventions most likely to affect attitudes, intentions and uptake.
- Much has been learned in recent years on how to equitably and sustainably drive vaccine acceptance and uptake for vaccination, particularly with regards to childhood vaccination.
- The latest evidence and knowledge have enabled development of a framework to illustrate that uptake is affected by what people think and feel, social influences, motivation, and

practical/logistical factors. This framework enables a holistic determination of the full range of possible drivers to enable comprehensiveness in the measures.

- The current context (given the challenges and opportunities for both routine immunization and for COVID-19 vaccination) highlights the importance of supporting programmes to gather and use behavioural and social data to determine how different factors contribute to under-vaccination, and to identify evidence-based interventions that are prioritized and adapted locally.