**GUIDELINES AND RESEARCH UPDATES**

**TECHNICAL DOCUMENTS:**

**D1. Enhancing Readiness for Omicron (B.1.1.529): Technical Brief and Priority Actions for Member States** *(WHO, 28 November 2021)* [LINK]

- The publication provides a technical brief on emergence of a new SARS-CoV-2 variant named “Omicron” including brief on mutagenic changes the variant has reported. Further, it outlines need of enhanced surveillance and sequencing efforts to better understand circulating SARS-CoV-2 variants along with field investigations and laboratory assessments to improve understanding of the characteristics of Omicron.

**D2. Living guidance for clinical management of COVID-19** *(WHO, 23 November 2021)* [LINK]

- This COVID-19 Clinical management living guidance contains the WHO’s most up-to-date recommendations for the clinical management of people with COVID-19. This updated (third) version contains two new recommendations regarding hospitalized children with Multisystem Inflammatory Syndrome (MIS-C).

**D3. Interim recommendations for use of the Moderna mRNA-1273 vaccine against COVID-19** *(WHO, 7 December 2021)* [LINK]

- This interim guidance provides recommendations on the use of the mRNA-1273 vaccine (Moderna) against COVID-19. These technical recommendations have been developed on the basis of advice issued by the Strategic Advisory Group of Experts on Immunization (SAGE) and the evidence summary included in the background document.

**D4. Assessment of HIV testing services and antiretroviral therapy service disruptions in the context of COVID-19: lessons learned and way forward in sub-Saharan Africa** *(WHO, 22 November 2021)* [LINK]

- This document focuses on current country needs, as well as plans for prioritization and potential surge support needs in the event of future disruptions. Although the data and implications are specific to sub-Saharan Africa, key principles and lessons can be applied in other geographies as well.
D5. WHO third global infodemic management conference: whole-of-society challenges and approaches to respond to infodemics (WHO, 23 November 2021) [LINK]

- This report covers the 3rd Virtual Global Infodemic Management Conference between 20 October and 11 December 2020, in an extended series of virtual conversations. Its goal was to define and kick-start a true whole-of-society response to the infodemic. It prioritized sharing lessons and identifying concrete problems and answers that everyone, across all societies, can commit to addressing immediately.

D6. COVID-19 vaccine trial designs in the context of authorized COVID-19 vaccines and expanding global access: ethical considerations (WHO, 29 November 2021) [LINK]

- This document highlights ethical issues implicit in conducting placebo control COVID-19 trials in the context of multiple authorized vaccines and expanding global vaccination coverage.

D7. Global vaccine safety blueprint 2.0 background research (WHO, 1 December 2021) [LINK]

- This report synthesizes the findings of research and provide recommendations for the drafting of the Global Vaccine Safety Blueprint 2.0. Information collected from more than 200 stakeholders that work in vaccine safety indicated that many of the challenges discovered during the creation of the first Global Vaccine Safety Blueprint in 2011.

JOURNAL ARTICLES

J1. Emergence of new SARS-CoV-2 Variant of Concern Omicron (B.1.1.529) - highlights Africa's research capabilities, but exposes major knowledge gaps, inequities of vaccine distribution, inadequacies in global COVID-19 response and control efforts (International Journal of Infectious Diseases, 1 December 2021) [LINK]

- This scientific editorial highlights the risk associated with emergence the VOC Omicron variant and its rapid spread which reflects the legacy of wealthy nations’ failure to equitably distribute COVID-19 vaccines globally. It also outlines how vaccine inequity contributes to prolonging the pandemic and how it has further placed the whole world at continued risk of COVID-19 and continuing impact on their economies.

J2. Protection against Covid-19 by BNT162b2 Booster across Age Groups (NEJM, 8 December 2021) [LINK]
The authors compared the rates of confirmed Covid-19, severe illness, and death among those who had received a booster dose at least 12 days earlier with the rates among those who had not received a booster. They conclude that across the age groups studied, rates of confirmed Covid-19 and severe illness were substantially lower among participants who received a booster dose of the BNT162b2 vaccine than among those who did not.


This prospective observational cohort study assessed the duration, neutralizing activity, and protection against the alpha variant of previous SARS-CoV-2 infection in home residents and staff infected more than 6 months previously. The findings highlight that SARS-CoV-2 reinfections were rare in older residents and younger staff. Protection from SARS-CoV-2 was sustained for longer than 9 months, including against the alpha variant. Reinfection was associated with no or low neutralizing antibody before reinfection, but significant boosting occurred on reinfection.

J4. Antibacterial and antiviral high-performance nano-systems to mitigate new SARS-CoV-2 variants of concerns (Current Opinion on Biomedical Engineering, 1 December 2021) [LINK]

The study aims to propose the fabrication of nano-enabled protective gears, masks, gloves, sheets, filtration units, nano-emulsified disinfectants, paints, and detection systems to facilitate improved quarantine or isolation spaces. It further asserts that well-designed nano-systems in protective gears seem to be the most efficient method to tackle infectious SARS-CoV-2 variants.

J5. COVID-19 vaccinations: The unknowns, challenges, and hopes (Journal of Medical Virology, 29 November 2021) [LINK]

In this study, the authors review the unknowns of the COVID-19 vaccination, such as its longevity, asymptomatic spread, long-term side effects, and its efficacy on immunocompromised patients. In addition, it also discusses challenges associated with the COVID-19 vaccination, such as the global access and distribution of vaccine doses, adherence to hygiene guidelines after vaccination, the emergence of novel SARS-CoV-2 variants, and vaccine resistance.

J6. The contested meaning of “long COVID” - Patients, doctors, and the politics of subjective evidence (Social Science & Medicine, 30 November 2021) [LINK]

This exploratory study addresses two questions- firstly, how the mobilization of subjective evidence leads to the recognition of long COVID and the development of
treatment interventions in medicine; and secondly, what distinguishes these developments from other examples of subjective evidence. It argues that the long COVID movement was able to fill crucial knowledge gaps in the pandemic discourses, making long COVID a legitimate concern of official measures to counter the pandemic.

J7. Effectiveness of public health measures in reducing the incidence of covid-19, SARS-CoV-2 transmission, and covid-19 mortality: systematic review and meta-analysis (BMJ, 18 November 2021) [LINK]

• The study reviewed the evidence on the effectiveness of public health measures in reducing the incidence of covid-19, SARS-CoV-2 transmission, and covid-19 mortality. The authors suggest that several personal protective and social measures, including handwashing, mask wearing, and physical distancing are associated with reductions in the incidence covid-19.