

Sameeksha* – Infection Prevention and Control for COVID-19

* **Sameeksha** is a Hindi word, meaning review. This compilation of recent key IPC resources on COVID-19 includes brief summary of relevant publications from scientific journals; guidelines from WHO, Ministry of Health and Family Welfare and others; training and IEC resources; and links between COVID-19 and AMR. The intended target audience for this includes clinical and public health professionals interested in IPC at both public and private sector in India. Kindly note: inclusion of publications/resources in this review/compilation does not imply an endorsement by WHO.

Key highlights of volume 25

- Laboratory capacities and IPC practices across India during the pandemic
- Benchmarking of hand hygiene compliance among healthcare workers in COVID-19 ICUs and wards
- Draft global strategy on infection and prevention control
- Management and safe disposal of COVID-19 vaccination waste at health facility level
- Effect of COVID-19 pandemic on antibiotic consumption

Publications from scientific journals

Indian microbiology EQAS registered laboratory's capacity building and infection control practices during the COVID-19 pandemic in India: lessons learnt and gaps identified

- A national online survey of 721 EQAS registered laboratories showed that they were able to set up molecular assays for early detection, isolation and management of patients during the pandemic.
- The authors propose sustained strengthening of these laboratories to adapt and use these molecular platforms for future pandemics.

Indian Journal of Medical Microbiology | Original research article | 17 October 2022 | [Online link](#)

Secondary bacterial infections in mucormycosis-COVID-19 cases: experience during the second COVID-19 wave in India

- A retrospective observational study was done to assess secondary infections among COVID-19 patients with mucormycosis in a tertiary care hospital in North India.
- All 55 patients with mucormycosis had diabetes mellitus and received corticosteroids for managing their COVID-19 infection, of which 12 patients developed secondary infections due to multi-drug resistant organisms.

Microbiology Spectrum | Research article | 17 October 2022 | [Online link](#)

Comparison of hand hygiene compliance among healthcare workers in intensive care units and wards of COVID-19: a large scale multicentric study in India

- Hand hygiene audits were conducted in COVID ICUs and wards across 92 public and private health care facilities over a 6-month period using a mobile application based on WHO hand hygiene audit tool.
- Hand hygiene adherence rates were higher in COVID wards of private hospitals, COVID wards of the West zone, cleaning staff in COVID wards and among healthcare workers following exposure to body fluids or touching a patient.

American Journal of Infection Control | Research article | 9 October 2022 | [Online link](#)

Incidence and source of COVID-19 infection among health care workers in a tertiary hospital in South India – a prospective cohort study

- Incidence of COVID-19 transmission among HCWs and personnel at a tertiary hospital was found to be 9.3%.
- Main source of transmission was from infected colleagues (41%), mainly in hostels rather than the workplace, highlighting the need for COVID appropriate protocols in non-COVID areas and hostels.

International Journal of Preventive Medicine | Original article | 8 August 2022 | [Online link](#)

Portable biosafety barrier innovations to limit transmissibility of infectious diseases during patient care in resource-limited settings during the COVID-19 pandemic.

- Four innovative biosafety barriers using clear plastic and steel bars were tested by simulations to ensure safety of patients and healthcare workers during the pandemic.
- These included barrier devices for patient care in ICU, as well as safe transport and management of patients.

Indian Journal of Critical Care Medicine | Clinical technique | September 2022 | [Online link](#)

Factors predicting proper handwashing practice amidst the COVID-19 pandemic in India: a field-based cross-sectional study

- Handwashing practices of rural residents before the third COVID wave showed that only 24% of residents regularly washed their hands with soap and water after defecation, urination, before eating and upon returning home from outside.
- Higher socioeconomic status or education and working from home were linked with better handwashing practices.

Journal of Water and Health | Research article | 29 September 2022 | [Online link](#)

Face mask use and disposal behaviour of frontline young doctors during the COVID-19 pandemic: a two-year study

- A survey of post graduate trainees (PGTs) at a medical college in West Bengal found that while PGTs donned increasingly high-quality masks across the 3 waves of the pandemic, extended use of N95 masks and improper disposal of masks persisted.
- Highlights the need to ensure adequate supply of good quality masks and training of frontline workers.

The Journal of Infection in Developing Countries | Research article | 31 October 2022 | [Online link](#)

Survey of healthcare worker perceptions of changes in infection control and antimicrobial stewardship practices in India and South Africa during the COVID-19 pandemic

- An online survey undertaken during the first wave of COVID pandemic in India among healthcare workers in India and South Africa (majority from Kerala and Western Cape, respectively) showed higher prescription rates of antibiotics.
- Common first line treatment for COVID-related pneumonia included azithromycin and co-amoxiclav, and Ceftriaxone.
- Respondents indicated need for more trainings on case management, proper use of PPE and optimal prescribing of antibiotics.

IJID Regions | Research article | 28 November 2022 | [Online link](#)

Assessment of the awareness about COVID-19 and the following-up of guidelines for biomedical wastes in Jaipur city

- The study showed that people were aware about the COVID-19 infection, precautions to protect themselves and biomedical waste.
- However, the awareness did not translate into action while disposing biomedical waste.

Vegetos | Research article | 15 December 2022 | [Online link](#)

Guidelines

Draft global strategy on infection and prevention control

- Country- and stakeholder-driven IPC strategy that provides Member States with strategic guidance to reduce the risk of healthcare-associated infections and limit infectious disease outbreaks by 2030.
- Highlights the central role of IPC in combating AMR and in outbreak preparedness, readiness and response, and identifies the target audience for adoption and implementation of the strategy.

WHO | Technical document | 16 December 2022 | [Online link](#)

Management and safe disposal of COVID-19 vaccination waste at health facility level

- COVID-19 vaccination waste management includes timely and proper packing, marking, storage, treatment and disposal of COVID-19 vaccine vials, sharps and other waste.
- Reiterates that used and unused COVID-19 vaccine vials are not infectious waste and do not require special treatment.

WHO | Job Aide | 12 October 2022 | [Online link](#)

Hand Hygiene Acceleration Framework Tool (HHAFT)

- Tool developed by UNICEF, WHO and WaterAid as part of the Hand Hygiene for All (HH4A) initiative.
- Aims to help governments track progress on hand hygiene improvements while fostering international cooperation in meeting global goals.

WHO | Technical document | 23 November 2022 | [Online link](#)

Training / IEC resources

Surgical site infections

- Free online training course of approximately 5 hours that covers global surgical site infections (SSI) rates and burden, risk factors for SSI, prevention measures to reduce SSI, and adaptive and technical approaches to improving and applying the WHO multimodal strategy.
- Supplements the module on [WHO Core Components and Multimodal Strategies](#).

OpenWHO | Online course | 2022 | [Online link](#)

COVID-19 and Antimicrobial Resistance

Effect of the COVID-19 pandemic on antibiotic consumption: a systematic review comparing 2019 and 2020 data

- A systematic review of 16 studies examined changes in antibiotic consumption between 2019 and 2020 in multiple countries, showed decrease in antibiotic consumption at national level and in communities, but mixed findings of antibiotic consumption in hospitals.
- Hospitals with disruption of antimicrobial stewardship programs during the COVID-19 pandemic reported an increase in antibiotic consumption.

Frontiers in Public Health | Systematic review | 18 October 2022 | [Online link](#)

Gaps and barriers in the implementation and functioning of antimicrobial stewardship programmes: results from an educational and behavioural mixed methods needs assessment in France, the United States, Mexico and India

- Gaps in AMS knowledge was highest among pharmacologists and gaps in skills were highest in infection control specialists.
- Key barriers to implementation of AMS programmes include adequate time, funding and training – and reported gaps were highest in India and France.

JAC-Antimicrobial Resistance | Journal article | 30 September 2022 | [Online link](#)