COVID-19 Infection Prevention and Control Sameeksha

Volume 11 | WHO Country Office for India | 15 March 2021

A compilation of recent publications on COVID-19 relevant for IPC and AMR containment in India

Publications from scientific journals

Principles and practice for SARS-CoV-2 decontamination of N95 masks with UVC

- Efficacy of UV-C decontamination for N95 masks has been reviewed based on UV transmittance to different layers of the mask, viral sensitivity to UV-C, and potential photodegradation of masks.
- UV-C decontamination of N95 masks is feasible and superior to chemical decontamination.

Biophysical Journal | Article | 23 February 2021 | Online link

Cloth masks in public places: an essential intervention to prevent COVID-19 in Brazil

- Widespread use of cloth masks in public spaces is an effective health intervention to reduce the spread of COVID-19, when combined with social distancing and hand hygiene.
- Cloth masks are cheaper, easier to make, easily accessible to the public, environment friendly and help to avoid the overuse of medical masks.

Science & Public Health | Article | 12 February 2021 | Online link

Universal use of face masks and related challenges during COVID-19 in developing countries

- Universal use of face masks combined with strict hand hygiene and social and physical distancing can contribute to containment of the virus in the community.
- Awareness generation on correct usage of face masks, capacity to produce standardized masks locally and appropriate disposal after use improved their accessibility and effectiveness.

Risk Management and Healthcare Policy | Review | 10 February 2021 | Online link

Factors associated with SARS-CoV-2 infection and outbreaks in long-term care facilities (LTCF) in England: a national cross-sectional survey

- Data from 5126 LTCF, 160,033 residents and 248,594 staff was analysed on characteristics,
 staffing factors, use of disease control measures, and number of confirmed cases of infection.
- Reduced transmission from staff was associated with adequate sick pay, minimal use of agency staff, an increased staff-to-bed ratio, and staff cohorting. Increased transmission from residents was associated with an increased number of new admissions to the facility and poor compliance with isolation procedures.

The Lancet | Article | 11 February 2021 | Online link

WHO and other guidelines

Roadmap to improve and ensure good indoor ventilation in COVID-19 context

- Aimed at facility managers, building managers, and those providing home care or home quarantine and complements other guidance and plans.
- Focuses on three different settings, i.e. health care, non-residential and residential spaces for ensuring adequate ventilation that may reduce risk of COVID-19 infection.

WHO | Guidance | 1 March 2021 | Online link

WHO living guideline: Drugs to prevent COVID-19

- Target audience includes clinicians and health care decision-makers.
- Makes a strong recommendation against the use of hydroxychloroquine prophylaxis to individuals who do not have COVID-19 (high certainty evidence).

WHO | Interim guidance | 2 March 2021 | Online link

Updated healthcare infection prevention and control recommendations in response to COVID-19 vaccination

- Applies to all healthcare personnel while at work and all patients and residents while they are being cared for in a healthcare setting.
- Updated recommendations pertain to visitation and work restriction for asymptomatic healthcare personnel and quarantine for asymptomatic patients and residents.

CDC | Guidance | 10 March 2021 | Online link

Using face masks in the community: Effectiveness in reducing transmission of COVID-19 (first update)

- The report based on current evidence recommends wearing a medical or non-medical face mask in confined public places and crowded outdoor settings.
- Use of medical face masks is also recommended as PPE for people vulnerable to COVID-19.

ECDC | Technical Report | 15 February 2021 | Online link

MoHFW Guidelines

SOPs/guideline on preventive measures to contain spread of COVID-19

- Generic preventive measures include physical distancing (at least 6 feet), proper use of face cover/mask, hand washing/sanitization, respiratory etiquette, self-monitoring of health and reporting, strict prohibition on spitting in public places, use of the *Aaroyga Setu* app and closure of the place in containment zones.
- Additional precautions are detailed in each individual document; following SOPs and guidelines have been released by MoHFW:
 - Guidelines on preventive measures to contain spread of COVID-19 in yoga institutes and gymnasiums

- Religious places and places of worship
- Skill or entrepreneurship training institutions, higher educational institutions conducting doctoral courses and post graduate studies in technical & professional programs requiring laboratory /experimental work
- Shopping malls
- Entertainment parks and similar places
- Restaurants
- Hotels and other hospitality units

MoHFW | Guideline and SOPs | 1 March 2021 | Online link

Standard operating procedures on preventive measures to contain spread of COVID-19 in offices

- Generic preventive measures focus on non-pharmaceutical interventions physical distancing (at least 6 feet), hand hygiene, face covers/masks, respiratory etiquette, self-reporting and *Aarogya Setu* app.
- Specific preventive measures for offices, measures to be taken on occurrence of case(s) and management of premises are detailed.

MoHFW | SOP | 13 February 2021 | Online link

Trainings / IEC resources

Frequently asked questions for healthcare workers and front-line workers

- These include common questions and answers relevant to the Covid-19 vaccines, their composition, cold chain requirements, efficacy and protection, side-effects, precautions, followup and booster doses.
- Includes questions and answers on immune response and protection, contraindications, etc.

MoHFW | FAQ | 2 March 2021 | Online link

Guidance on mask use in the context of COVID-19

- Based on scientific evidence and WHO guidance on use of masks.
- Targets decision-makers, IPC professionals, healthcare workers and the public.

WHO | OpenWHO training course | Online link

COVID-19 and work: Staying healthy and safe at work during the COVID-19 pandemic

- Intended to guide workers and their representatives, business leaders and managers.
- Includes 5 modules with focus on basic of IPC, risk assessment, responding to Covid-19 at the workplace. Safer and healthier teleworking and reopening the workplace.

WHO | OpenWHO training course | Online link

Antimicrobial Resistance and COVID-19

Antimicrobial resistance and COVID-19: Intersections and implications

- Reviews the impact of COVID-19 in terms of antimicrobial usage, infection prevention, and health systems – that shall affect the emergence, transmission and burden of AMR.
- Increased hand hygiene, lesser international travel and elective hospital procedures may reduce AMR pathogen selection and spread in the short term, but AMR may increase if antibiotics are more widely used as standard healthcare pathways break down.

Epidemiology and Global Health | Review Article | 16 February 2021 | Online link

Doctors' perceptions, attitudes and practices towards the management of multidrug-resistant organism (MDRO) infections after the implementation of an antimicrobial stewardship programme (ASP) during the COVID-19 pandemic

- Shows a positive impact of ASP implementation in managing patients with MDRO infections.
- Most respondents wanted ASP to be continued and developed further despite increased workload due to the pandemic.

Tropical Medicine and Infectious Disease | Article | 5 February 2021 | Online link

To push or to pull? In a post-COVID world, supporting and incentivizing antimicrobial drug development must become a governmental priority

- Current incentive strategies for antimicrobial drug development are analysed, with focus on "pull" incentives to improve revenue generation and resolve the market failure challenge.
- Reiterates the importance of international cooperation, coordination across antimicrobial research, and sustained funding in tackling AMR.

ACD Infectious Diseases | Perspective | 19 February 2021 | Online link

COVID-19 drug practices risk antimicrobial resistance evolution

- Management of COVID-19 is increasingly dependent on pharmacological interventions, with a higher risk for accelerating the evolution and spread of antimicrobial resistance.
- The authors urge vigilance and caution so that the fight against COVID-19 does not invite another significant threat to humankind in the form of AMR.

The Lancet Microbe | Comment | 24 February 2021 | Online link

Investigating the impact of COVID-19 on primary care antibiotic prescribing in North West London across two epidemic waves

- Individual prescribing records between 2015 and 2020 for 2 million residents in north west
 London were analysed, and prescribing records were linked to SARS-CoV-2 test results.
- A sustained reduction in community antibiotic prescribing was observed since the first lockdown.
 Investigation of community-onset infectious diseases are needed.

Clinical Microbiology and Infection | Original Article | 15 February 2021 | Online link