COVID-19 Infection Prevention and Control *Sameeksha*

WHO Country Office for India | 15 August 2020 | Volume 5

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

Publications from scientific journals

Use of medical face masks versus particulate respirators as a component of personal protective equipment for health care workers in the context of the COVID-19 pandemic

- Predominant route of human-to-human transmission of the SARS-CoV-2 is through respiratory droplets and/or contact routes.
- Based on scientific evidence till date, the authors' view is that SARS-CoV-2 is not spread by the airborne route to any significant extent and the use of particulate respirators offers no advantage over medical masks as a component of personal protective equipment for the routine care of patients with COVID-19 in the health care setting.

BMC | Commentary | 6 August 2020 | Online link

The Long Road Toward COVID-19 Herd Immunity: Vaccine Platform Technologies and Mass Immunization Strategies

- In-spite of widespread infection the extremely low seroprevalence in Spain has been worrying.
- Public health measures to prevent spread of infection in the community need to be continued earnestly.
- These may be our only hope to contain the spread of COVID-19 in the immediate future.

Frontiers in Immunology | Review article | 21 July 2020 | Online link

Reduction of Anti-SARS-CoV-2 Antibodies

- In infectious diseases with large number of asymptomatic cases, serological surveys are the best tool to estimate community spread of the disease, and development of herd immunity.
- This study corroborates the earlier study by Long et al. in the Chinese population, which demonstrated that 40% of asymptomatic patients were seronegative for IgG at 8 weeks.
- The decline in protective antibody titre is quicker than that reported for SARS-CoV-1.

AIIMS | Literature appraisal | 29 July 2020 | Online link

Clinical and Immunological responses of asymptomatic SARS-CoV-2 patients

- This study has important public health implications and shows the risk of using COVID-19 'immunity passport'.
- Since immunological responses may vary among different ethnic groups, such temporal seroprevalence surveys in the community are required in different populations.

AIIMS | Literature appraisal | 20 July 2020 | Online link

Tuberculosis in the era of COVID-19 in India

- Lockdown, social distancing, isolation strategies and public health guidelines to prevent viral transmission impacted the delivery of all aspects of Tuberculosis care both in primary care and hospital settings.
- Simultaneous testing for both TB and COVID-19 should be performed on atypical symptomatic patients.
- COVID-19 pandemic should not affect the continuity of tuberculosis national programs and surveillance, monitoring and treatment services should run simultaneously for an effective and rapid response to both COVID-19 and TB.

Science Direct | Article | 18 July 2020 | Online link

Non-pharmaceutical interventions to prevent transmission of COVID-19: A systematic review and meta-analysis

- The appraisal of the systematic review and meta-analysis analyses the available evidence on effectiveness of 3 important non-pharmaceutical interventions to prevent person-to-person transmission in healthcare and non-healthcare settings:
    - physical distancing of 1 m has significant protective effect, and distances of 2 m could be more effective against viral transmission,
    - use of face masks, and
    - eye protection.

AIIMS | Literature appraisal | 9 July 2020 | Online link

WHO and other guidelines

Transmission of SARS-CoV-2: implications for infection prevention precautions

- Update to the scientific brief published on 29 March 2020 entitled "Modes of transmission of virus causing COVID-19: implications for IPC precaution recommendations"
- It includes new scientific evidence available on transmission of SARS-CoV-2, the virus that causes COVID-19
- The scientific brief suggests that the virus is primarily spread through contact and respiratory droplets, however under some circumstances airborne transmission may occur (such as when aerosol generating procedures are conducted in health care settings or potentially, in indoor crowded poorly ventilated settings elsewhere).

WHO | Scientific brief | 9 July 2020 | Online link

Water, sanitation, hygiene, and waste management for SARS-CoV-2, the virus that causes COVID-19

- Provision of safe water, sanitation and waste management and hygienic conditions is essential for preventing and for protecting human health during all infectious disease outbreaks, including of COVID-19.
- Ensuring evidenced-based and consistently applied WASH and waste management practices in communities, homes, schools, marketplaces, and healthcare facilities will help prevent human-to-human transmission of pathogens including SARS-CoV-2.

WHO | Interim guidance | 29 July 2020 | Online link

Home care for patients with suspected or confirmed COVID-19 and management of their contacts

- This document is an update of the guidance published on 17 March 2020 entitled "Home care for patients with COVID-19 presenting with mild symptoms and management of their contacts".
- Interim guidance has been updated with advice on safe and appropriate home care for patients with COVID-19 and on the public health measures related to the management of their contacts.

WHO | Interim guidance| 13 August 2020 | Online link

Status of environmental surveillance for SARS-CoV-2 virus

- Environmental surveillance by testing of wastewater for evidence of pathogens has a long history of use in public health, particularly for poliovirus and more recently antimicrobial resistance (AMR)
- In the context of the ongoing COVID-19 pandemic, it is being used for the detection of SARS-CoV-2 shed into wastewater from the upper gastrointestinal and upper respiratory system and via faeces.

WHO | Scientific brief | 05 August 2020 | Online link

Considerations for the provision of essential oral health services in the context of COVID-19

- This document addresses specific needs and considerations for essential oral health services in the context of COVID-19 based on WHO operational guidance on maintaining essential health services
- WHO advises that routine non-essential oral health care – which usually includes oral health check-ups, dental cleanings and preventive care – be delayed until there has been sufficient reduction in COVID-19 transmission rates from community transmission to cluster cases or according to official recommendations at national, sub-national or local level.

WHO | Interim guidance | 03 August 2020 | Online link

Preventing and managing COVID-19 across long-term care services

- In many countries, evidence shows that more than 40% of COVID-19 related deaths have been linked to long-term care facilities, with figures being as high as 80% in some high-income countries.
- This policy brief provides 11 policy objectives and key action points to prevent and manage COVID-19 across long-term care.

WHO | Policy brief | 24 July 2020 | Online link

Global COVID-19 Clinical Platform

- Global COVID-19 anonymized clinical data platform will help enable WHO Member States to implement the International Health Regulations to share with WHO anonymized clinical data related to patients with suspected or confirmed infections with SARS-CoV-2.
- Includes new scientific evidence available on transmission of SARS-CoV-2.

WHO | Scientific brief | 13 July 2020 | Online link

How to use WHO risk assessment and mitigation checklist for mass gatherings in the context of COVID-19

- Provides a COVID-19 risk assessment and mitigation checklist for use by host countries and mass gathering organizers.

WHO | Tool | 13 July 2020 | Online link

WHO mass gathering COVID19 risk assessment tools

- The content of this Risk Assessment tool has been updated to reflect new WHO guidance and new evidence on both COVID-19 and mass gatherings, as well as feedback from end-users.
    - Generic events; religious events; sports events

WHO | Scientific brief | 10 July 2020 | Online link

Maintaining a safe and adequate blood supply during the pandemic outbreak of coronavirus disease (COVID-19)

- This document provides interim guidance on the management of the blood supply in response to the pandemic outbreak of coronavirus disease (COVID-19).
- It emphasizes the importance of being prepared and responding quickly and outlines key actions and measures that the blood services should take to mitigate the potential risk to the safety and sufficiency of the blood supplies during the pandemic.

WHO | Interim guidance | 10 July 2020 | Online link

Investing in and building longer-term health emergency preparedness during the COVID-19 pandemic

- This document is to help Member States build on actions taken during the COVID-19 pandemic to improve national medium- to long-term preparedness for future threats.
- It maps COVID-19 preparedness and response actions to the building of sustainable International Health Regulations (2005) core capacities; locates relevant supporting WHO resources that are not specific to the pandemic; and advocates for the conscious and effective allocation of COVID-19 funds to also meet countries' longer-term needs

WHO | Interim guidance | 6 July 2020 | Online link

COVID-19 Overview and Infection Prevention and Control Priorities in Non-US Healthcare Settings

- This overview was created for healthcare workers in non-US healthcare settings and non-US national government officials working on the COVID-19 response.
- Based on CDC guidance documents on Infection Prevention and Control (IPC) priorities for the response to COVID-19 in healthcare settings that can be used in non-US contexts.

CDC | Guidance | 11 August 2020 | Online link

COVID-19 mitigation in non-US settings

- Suggestions for mitigating COVID-19 transmission in low-resource settings
    - Global Community Mitigation Framework – actions that individuals, partners, and ministries of health can take to slow the spread of COVID-19.
    - Market settings
    - Humanitarian settings
    - Schools
    - Home based healthcare
        - Taking care of sick people with COVID-19 at home (English & Hindi)
        - Possible items to include in home-based care kit (English & Hindi)
    - Safe & dignified burial

- Engaging faith leaders

CDC | COVID resources | 11 August 2020 | Online link

MoHFW/GoI guidelines

Guidelines on Preventive Measures to Contain Spread of COVID-19 in Yoga Institutes & Gymnasiums

- This document outlines various generic precautionary measures to be adopted in addition to specific measures to be taken at yoga institutes and gymnasiums to prevent spread of COVID-19.
- All yoga institutes and gymnasiums in containment zones shall remain closed for public. Only those outside containment zones will be allowed to open.

MoHFW | Guidelines | 03 Aug 2020 | Online link

Guidelines for international arrivals

(in supersession of guidelines issued on the subject dated 24th May 2020)

- Guidelines for travellers for planning travel, before boarding, during travel, and on arrival
- States can develop their own protocol with regards to quarantine and isolation as per their assessment post arrival of passengers in the state concerned.

MoHFW | Guidelines | 02 Aug 2020 | Online link

Guidelines for Gated Residential Complexes Desirous of Setting Up Small COVID Care Facility by Resident Welfare Associations / Residential Societies / Non-Governmental Organizations

- The community living in gated complexes may create small COVID Care Facility within the residential complex
- These guidelines will help reduce the burden on existing facilities for managing suspect / pre-symptomatic / asymptomatic / very mild cases of COVID-19.

MoHFW | Guidelines | 17 July 2020 | Online link

Clinical management protocol: COVID 19 (version 5)

- Ministry of health & family welfare has revised the clinical management protocol
- Infection prevention control (IPC) is a critical and integral part of clinical management of patients and should be initiated at the point of entry of the patient to hospital (typically the Emergency Department)

MoHFW | Advisory | 3 July 2020 | Online link

Revised guidelines for home isolation of very mild/pre-symptomatic /asymptomatic COVID-19 cases

- These supersede the home isolation guidelines issued on 10 May 2020 and extend the guidelines to asymptomatic positive cases also besides very mild and pre-symptomatic cases, in view of large number of asymptomatic cases being detected.
- Patients should be clinically assigned as very mild/mild, moderate or severe and accordingly admitted to COVID Care Centre, Dedicated COVID Health Centre or Dedicated COVID Hospital respectively.

MoHFW | Guideline | 2 July 2020 | Online link

Trainings / IEC resources

Guidelines for home quarantine of COVID-19 suspected persons

- Developed for professionals and public

AIIMS | IEC | 23 July 2020 | Online link

Guidelines for home isolation of asymptomatic and mild COVID-19 patients

- Developed for professionals and public

AIIMS | IEC | 23 July 2020 | Online link

A/V on 15 COVID appropriate behaviours

- Video suggests on 15 behaviours to follow against war in COVID-19
- Available in Hindi and English

MoHFW | IEC | 15 July 2020 | Online link

Hindi video on COVID appropriate behaviours during COVID-19

- Hindi video on appropriate behaviour to wear masks for preventing COVID-19.

MoHFW | IEC | 3 July 2020 | Online link

Video on home isolation for very mild/pre-symptomatic COVID-19 patients

- Hindi video on what to do during home isolation for very mild/pre-symptomatic COVID-19 patients

MoHFW | IEC | 2 July 2020 | Online link

Antimicrobial Resistance and COVID-19

Tackling antimicrobial resistance in the COVID-19 pandemic

- The current COVID-19 pandemic can potentiate threats that could affect antimicrobial stewardship activities and drive antimicrobial resistance.
- Review of hospitalized COVID-19 patients showed that while 72% (1450/2010) of patients received antibiotics, only 8% (62/806) had superimposed bacterial or fungal co-infections.
- Antimicrobial stewardship activities should be integrated into the pandemic response across the broader health system through specific measures.

WHO Bulletin | Editorial | July 2020 | Online link

Hazardous mismatch between pulmonary pathogens and antibiotic treatments in COVID-19 patients

- Most COVID-19 patients present non-specific respiratory symptoms and chest radiography abnormalities, and empirical antibiotic treatments are commonly prescribed before and during hospitalisation.
- Authors suggest tracheal aspirates should be obtained as soon as possible in mechanically ventilated COVID-19 patients undergoing immunomodulatory therapy.
- Antibiotic therapy potentially withheld until microbiology results become available, because of the low rate of positive tracheal aspirates.

Brit J Anaesthesia | Correspondence | 28 July 2020 | Online link

PRO: The COVID-19 pandemic will result in increased antimicrobial resistance rates

- Broad-spectrum antibiotic use is common among hospitalized COVID-19 patients and in excess of reported secondary infection rates, suggesting unnecessary prescribing.
- The authors anticipate that the impact of COVID-19 on AMR will be uneven, varying between epicentres and non-epicentres, by geographic region, hospital-to-hospital within regions and within specific hospital units.
- The authors suggest AMR screening programmes to be implemented for asymptomatic hosts and livestock following antibiotic exposure.

JAC-AMR | Opinion | 17 July 2020 | Online link

CON: The COVID-19 pandemic will not result in increased antimicrobial resistance rates

- Antimicrobial resistance (AMR) is affected by many factors, but too much our focus has been on antimicrobial usage.
- The major factor that drives resistance rates globally is its spread. The COVID-19 pandemic should lead to improved infection prevention and control practices, both in healthcare facilities and the community. COVID-19 will also have ongoing and profound effects on local, national and international travel. All these factors should lead to a decrease in the spread of resistant bacteria.
- In wealthier and developed countries, resistance rates will likely decrease, but in many other countries there are already too many factors associated with poor controls on the spread of bacteria and viruses (e.g. poor water and sanitation, poor public health, corrupt government, inadequate housing, etc.).
- In these countries, if economies and governance deteriorate further, we might see even more transmission of resistant bacteria.

JAC-AMR | Opinion | 17 July 2020 | Online link