Introduction

Overall objectives
This document provides information on how Primary Care Physicians (PCPs), General Practitioners (GPs) in private or public sector and doctors in the outpatient department (OPD) on general duty can fulfill their role in patient care while keeping themselves safe from infections arising out of pandemics like the COVID-19. Primary care facilities and GPs managing patients during the pandemic can use this guide to review their preparedness. These guidelines will also help, if necessary, to update their epidemic response plans and their capacity to implement these plans. Those facilities and practitioners which do not have response plans can use these guidelines to start planning the mitigation process.

Specific objective
The current pandemic because of coronaviruses, hereafter referred to as COVID-19 has spread across countries and territories till date literally sparing none. [1] COVID-19 is stretching health systems across the world and health systems are being confronted by a rapidly increasing demand for health resources. Healthcare professionals will continue to work on the frontlines with a responsibility to look after both low and high-risk patients, identifying suspected cases, preventing spread and providing opportunistic patient education.

Address for correspondence: Dr. Sunil Kumar Raina, Community Medicine, Dr. RP Govt. Medical College, Tanda, Himachal Pradesh, India.
E-mail: ojasrainasunil@yahoo.co.in

Received: 18-06-2020
Revised: 05-09-2020
Accepted: 25-09-2020
Published: 30-01-2021

Abstract

In view of India unlocking, to secure a large population of this country, the healthcare facilities delivering primary care as well standalone health facilities need to be secured from impacts of COVID-19 pandemic. This document dwells on the broader guidelines for primary care practitioners/standalone private health facilities/frontline healthcare facilities to mitigate the impact of COVID-19 Pandemic. The authors understand that the situation is evolving, so the guidelines too will keep evolving.

Keywords: COVID-19 pandemic, frontline healthcare facilities, guidelines, primary care practitioners, standalone private health facilities

How to cite this article: Raina SK, Kumar R, Kumar A, Kumar D, Raina S, Gupta R, et al. Broad guidelines for primary care practitioners/standalone private health facilities/frontline healthcare facilities in view of COVID-19 pandemic. J Family Med Prim Care 2021;10:1-9.
Target audience
The main target audience for this guide is GPs in private or public sector, standalone healthcare facilities, and healthcare professionals in the general OPDs who are at the frontline to maintain health in an epidemic. The information is also relevant for small clinics and hospitals, both public and private. The document, however, has been prepared with a view to reach a wider audience including state and central government health authorities, financial institutions, disaster management organizations, and local supply chain management which support and contribute to healthcare preparedness.

Background of the disease
A pandemic (COVID-19) involving almost all the nations on this planet since it began in December 2019 at Wuhan, the capital of Hubei Province of China, as an outbreak of atypical pneumonia caused by COVID-19 (SARS-CoV-2 or 2019 nCov) has transmitted nationwide and internationally involving about 199 countries and territories.[1] The virus causing the pandemic primary spreads through respiratory droplets when an infected person talks, sings, whistles, coughs, or sneezes. As of now, no specific vaccines or treatments for COVID-19 are available even though a number of clinical trials/vaccine trials evaluating potential benefits are underway.[2]

About the virus
The virus causing COVID-19 belongs to a large family of enveloped viruses that cause illness ranging from the common cold to more severe diseases such as Middle East Respiratory Syndrome (MERS-CoV) and Severe Acute Respiratory Syndrome (SARS-CoV). Coronavirus disease (COVID-19) causing virus is a new strain identified in late 2019 only, with no report suggesting its earlier existence.[2]

Like some other viruses of this family, COVID-19 virus spreads by droplet generally between people who are in close contact with one another (within about 6 feet).[2] People can catch COVID-19 virus also by touching contaminated surfaces or objects—and then touching their eyes, nose, or mouth.

People are thought to be most contagious when they have symptoms and are sick. Despite absence of symptoms, an infected person can still pass the virus.

Current situation
The overwhelmed health delivery systems are likely to influence both direct mortality from the outbreak itself and indirect mortality from other preventable and treatable conditions. Reports regarding 2014–2015 Ebola outbreaks suggested that the increased number of deaths caused by measles, malaria, HIV/AIDS, and tuberculosis could be attributed to health system failures exceeded deaths from Ebola.[1,4] Maintenance of essential health services in presence of a pandemic will depend on our ability and capacity to ensure delivering healthcare, whether primary or emergency care. Nations across the world are realizing the importance of being able to deliver healthcare despite a potential threat to healthcare workers itself.

Symptoms of COVID-19
COVID-19 patients have reported the following signs and symptoms: fever, cough, fatigue, shortness of breath, expectoration, myalgia, rhinorrhea, sore throat, and diarrhea. Loss of smell (anosmia) and or loss of taste (ageusia) preceding the onset of respiratory symptoms has also been reported.

In addition, the older people and patients with chronic lung disease, heart disease, liver disease, renal disease, malignancies, immunocompromised status, post-transplant, hematological disorders, HIV and in those on chemotherapy and long-term steroids as well as pregnant females may present with atypical symptoms such as fatigue, reduced alertness, reduced mobility, diarrhea, loss of appetite, delirium, and absence of fever. Children have not been reporting fever or cough as frequently as adults.[3]

Epidemiology
75–80% of those affected with COVID-19 may develop only mild symptoms and may not require hospitalization. This disease that can occur in all age groups, can spread to children as well through thought the infection is generally mild in children.[3]

Epidemiology of current pandemic; COVID-19 and earlier epidemics like MERS-CoV and SARS clearly point to the fact that hospitals act as amplifying centers for such epidemics. One of the reasons could be a mixing of patients with different risk categorization (for the epidemic) in the high footfall areas of the hospitals and other healthcare facilities like OPDs.

The updated case definitions and contact-categorization[6]
As per the World Health Organization, the following criteria are used for defining cases as suspect, probable, or confirmed.

Suspect Case
1. An individual meeting the following clinical AND epidemiological criteria. Clinical criteria: Acute onset of fever AND cough; OR Acute onset of ANY THREE OR MORE of the following signs or symptoms: Fever, cough, general weakness/fatigue, headache, myalgia, sore throat, coryza, dyspnea, anorexia/vomiting, diarrhea, altered mental status. AND Epidemiological criteria: Residing or working in an area with high risk of transmission of virus; Closed residential settings, humanitarian settings such as camp and camp-like settings for displaced persons; anytime within the 14 days prior to symptom onset; OR Residing or travel to an area with community transmission anytime within the 14 days prior to symptom onset; OR Working in any healthcare setting, including within health facilities or within the community; anytime within the 14 days prior to symptom onset.
2. A patient with severe acute respiratory illness (SARI: Acute respiratory infection with history of fever or measured fever of $\geq 38^\circ C$; and cough; with onset within the last 10 days; and requires hospitalization)

**Probable Case**

1. A patient who meets clinical criteria above AND is a contact of a probable or confirmed case, or epidemiologically linked to a cluster with at least one confirmed case.
2. A suspect case with chest imaging showing findings suggestive of COVID-19 disease like: **Chest radiography**: Hazy opacities, often rounded in morphology, with peripheral and lower lung distribution; chest **CT**: Multiple bilateral ground glass opacities, often rounded in morphology, with peripheral and lower lung distribution; **lung ultrasound**: Thickened pleural lines, B lines (multifocal, discrete, or confluent), consolidative patterns with or without air bronchograms.
3. Recent onset of anosmia (loss of smell) or ageusia (loss of taste) in the absence of any other identified cause
4. Death, not otherwise explained, in an adult with respiratory distress preceding death AND was a contact of a probable or confirmed case or epidemiologically linked to a cluster with at least one confirmed case.

**Confirmed case**

Laboratory confirmation of COVID-19 infection, irrespective of clinical signs and symptoms.

**Contact**

Individual who has experienced any one of the following exposures during the 2 days before and up to 14 days after the onset of symptoms of a probable or confirmed case: 1. face-to-face contact with a probable or confirmed case within 1 m and for at least 15 min; 2. direct physical contact with a probable or confirmed case; 3. direct care for a patient with probable or confirmed COVID-19 disease without using recommended PPE; 4. Situations as indicated by local risk assessments (WHO interim guidelines 20 August).

**Categories of Illness**

**Critical COVID-19**

Acute respiratory distress syndrome (ARDS), sepsis, septic shock, or other conditions that would normally require the provision of life-sustaining therapies, such as mechanical ventilation (invasive or non-invasive) or vasopressor therapy.

**Severe COVID-19**

Any of the following:

- Oxygen saturation $<90\%$ on room air
- Respiratory rate $>30$ breaths per minute in adults and children $>5$ years old; $\geq 60$ in children less than 2 months; $\geq 50$ in children 2–11 months; and $\geq 40$ in children 1–5 years old.

Signs of severe respiratory distress (i.e., accessory muscle use, inability to complete full sentences; and in children, very severe chest wall indrawing, grunting, central cyanosis, or presence of any other general danger signs).

**Non-severe COVID-19**

Absence of any signs of severe or critical COVID-19.

**Testing**

**A. Routine surveillance in containment zones and screening at points of entry:**

Choice of Test (in order of priority):

1. Rapid Antigen Test (RAT) [as per attached algorithm]
2. RT-PCR or TrueNat or CBNAAT

   1. All symptomatic (ILI symptoms) cases including healthcare workers and frontline workers.
   2. All asymptomatic direct and high-risk contacts (in family and workplace, elderly $\geq 65$ years of age, immunocompromised, those with comorbidities, etc.) of a laboratory confirmed case to be tested once between day 5 and day 10 of coming into contact.
   3. All asymptomatic high-risk individuals (elderly $\geq 65$ years of age, those with co-morbidities etc.) in containment zones.

**B. Routine surveillance in non-containment areas**

Choice of Test (in order of priority):

1. RT-PCR or TrueNat or CBNAAT
2. Rapid Antigen Test (RAT)*

   1. All symptomatic (ILI symptoms) individuals with history of international travel in the last 14 days.
   2. All symptomatic (ILI symptoms) contacts of a laboratory confirmed case.
   3. All symptomatic (ILI symptoms) healthcare workers/frontline workers involved in containment and mitigation activities.
   4. All symptomatic ILI cases among returnees and migrants within 7 days of illness.

**C. In Hospital Settings Choice of Test (in order of priority):**

1. RT-PCR or TrueNat or CBNAAT
2. Rapid Antigen Test (RAT)

   1. All patients of Severe Acute Respiratory Infection (SARI).
   2. All symptomatic (ILI symptoms) patients presenting in a healthcare setting.
3. Asymptomatic high-risk patients who are hospitalized or seeking immediate hospitalization such as immunocompromised individuals, patients diagnosed with malignant disease, transplant patients, patients with chronic comorbidities, elderly ≥65 years.

4. Asymptomatic patients undergoing surgical/non-surgical invasive procedures (not to be tested more than once a week during hospital stay).

5. All pregnant women in/near labor who are hospitalized for delivery. Points to be noted:

No emergency procedure (including deliveries) should be delayed for lack of test. However, sample can be sent for testing if indicated as above, simultaneously. Pregnant women should not be referred for a lack of testing facility. All arrangements should be made to collect and transfer samples to testing facilities. Mothers who test positive for COVID-19 should be advised to wear a mask and undertake frequent handwashing while handling their baby for 14 days. They should also be advised on breast cleaning before feeding the neonate. These measures are likely to reduce transmission of COVID-19 to their babies.

All symptomatic neonates presenting with acute respiratory/sepsis like illness. (Features suggestive of acute respiratory illness in a neonate are respiratory distress or apnea with or without cough, with or without fever. Neonates may also manifest with only non-respiratory symptoms like fever, lethargy, poor feeding, seizures, or diarrhea).

Patients presenting with atypical manifestations [stroke, encephalitis, hemoptysis, pulmonary embolism, acute coronary symptoms, Guillain–Barre syndrome, Multiple Organ Dysfunction Syndrome, progressive gastrointestinal symptoms, Kawasaki Disease (in pediatric age group)] based on the discretion of the treating physician.

D. Testing on demand (State Governments to decide simplified modalities):

1. All individuals undertaking travel to countries/Indian states mandating a negative COVID-19 test at point of entry.

2. All individuals who wish to get themselves tested. Tracking and contact tracing mechanisms should be ensured by the testing laboratories by notifying the public health authorities.

Frequency of testing: A single RT-PCR/TrueNat/CBNAAT/RAT positive test is to be considered confirmatory, without any repeat testing. No re-testing is recommended prior to discharge from a COVID-19 facility after clinical recovery, including for transfer from a COVID area/facility to a non-COVID area/facility. If symptoms develop following a negative RAT test, a repeat RAT or RT-PCR should be done.

Points to be noted:

WHO case definition for ILI: Individual presenting with acute respiratory infection with fever ≥38°C AND cough with onset within the last 10 days.

WHO case definition for SARI: Individual presenting with acute respiratory infection with history of fever ≥38°C AND cough with onset within the last 10 days AND requires hospitalization.

All healthcare workers and frontline workers coming in contact with suspect/confirmed COVID-19 patients should ensure use of appropriate PPE. Home quarantine for 14 days is recommended for all individuals before undergoing elective surgery to minimize chances of infection before the procedure.

Algorithm for COVID-19 test interpretation using Rapid Antigen point of care test

E. Personal Protective Equipment (PPE): Personal Protective Equipments (PPEs) are protective gears designed to safeguard the health of workers by minimizing the exposure to a biological agent.[8]

Components of PPE: Goggles, face-shield, mask, gloves, coverall/gowns (with or without aprons), head cover, and shoe cover.

Face shield and goggles: Contamination of mucous membranes of the eyes, nose, and mouth is likely in a scenario of droplets generated by cough, sneeze of an infected person or during aerosol generating procedures carried out in a clinical setting. Inadvertently touching the eyes/nose/mouth with a contaminated hand is another likely scenario. Hence protection of the mucous membranes of the eyes/nose/mouth by using face shields/goggles is an integral part of standard and contact precautions.

The flexible frame of goggles should provide good seal with the skin of the face, covering the eyes and the surrounding areas and even accommodating for prescription glasses.
**Masks**: Respiratory viruses that includes coronaviruses target mainly the upper and lower respiratory tracts. Hence protecting the airway from the particulate matter generated by droplets/aerosols prevents human infection. Contamination of mucous membranes of the mouth and nose by infective droplets or through a contaminated hand also allows the virus to enter the host. Hence the droplet precautions/airborne precautions using masks are crucial while dealing with a suspect or confirmed case of COVID-19/performing aerosol generating procedures.

*Masks are of different types*. The type of mask to be used is related to particular risk profile of the category of personnel and his/her work. There are two types of masks which are recommended for various categories of personnel working in hospital or community settings, depending upon the work environment:

1. Triple layer medical mask
2. N-95 Respirator mask

**Triple layer medical mask**: A triple layer medical mask is a disposable mask, fluid-resistant; provides protection to the wearer from droplets of infectious material emitted during coughing/sneezing/talking.

**Respirator mask**: N-95 respirator mask is a respiratory protective device with high filtration efficiency to airborne particles. To provide the requisite air seal to the wearer, such masks are designed to achieve a very close facial fit. Such mask should have high fluid resistance, good breathability (preferably with an expiratory valve), clearly identifiable internal and external faces, duck bill/cup-shaped structured design that does not collapse against the mouth.

If correctly worn, the filtration capacity of these masks exceeds those of triple layer medical masks. Since these provide a much tighter air seal than triple layer medical masks, they are designed to protect the wearer from inhaling airborne particles.

**Gloves**: When a person touches an object/surface contaminated by COVID-19 infected person, and then touches his own eyes, nose, or mouth, he may get exposed to the virus. Although this is not thought to be a predominant mode of transmission, care should be exercised while handling objects/surface potentially contaminated by suspect/confirmed cases of COVID-19.

Nitrile gloves are preferred over latex gloves because they resist chemicals, including certain disinfectants such as chlorine. There is a high rate of allergies to latex and contact allergic dermatitis among health workers. However, if nitrile gloves are not available, latex gloves can be used. Non-powdered gloves are preferred to powdered gloves.

**Coverall/Gowns**: Coverall/gowns are designed to protect torso of healthcare providers from exposure to virus. Although coveralls typically provide 360° protection because they are designed to cover the whole body, including back and lower legs and sometimes head and feet as well, the design of medical/isolation gowns do not provide continuous whole-body protection (e.g., possible openings in the back, coverage to the mid-calf only). By using appropriate protective clothing, it is possible to create barrier to eliminate or reduce contact and droplet exposure, both known to transmit COVID-19, thus protecting healthcare workers working in close proximity (within 1 meter) of suspect/confirmed COVID-19 cases or their secretions.

Coveralls and gowns are deemed equally acceptable as there is a lack of comparative evidence to show whether one is more effective than the other in reducing transmission to health workers. Gowns are considerably easier to put on and for removal. An apron can also be worn over the gown for the entire time the health worker is in the treatment area. Coveralls/gowns have stringent standards that extend from preventing exposure to biologically contaminated solid particles to protecting from chemical hazards.

**Shoe covers**: Shoe covers should be made up of impermeable fabric to be used over shoes to facilitate personal protection and decontamination.

**Head cover**: Coveralls usually cover the head. Those using gowns, should use a head cover that covers the head and neck while providing clinical care for patients. Hair and hair extensions should fit inside the head cover.

**Use of PPE**: The PPEs are to be used based on the risk profile of the healthcare worker.

The document describes the PPEs to be used in different settings.
Raina, et al.: Broad guidelines for primary care practitioners in view of COVID-19 pandemic

#All hospitals should identify a separate triage and holding area for patients with Influenza like illness. If there is no triage area/holding area for patients because of resource constraints, such hospitals will follow the above guidance for general OPD.

**Risk and Recommendations:**

| Setting                      | Activity                                                                 | Risk            | Recommended PPE | Remarks                                                                 |
|------------------------------|--------------------------------------------------------------------------|-----------------|-----------------|-------------------------------------------------------------------------|
| Triage area                  | Triaging patients Provide triple layer mask to patient.                  | Moderate risk   | N-95 mask Gloves| Patients get masked.                                                     |
| Screening area help desk/    | Provide information to patients                                          | Moderate risk   | N-95 mask Gloves|                                                                         |
| Registration counter         | Record temperature with hand held thermal recorder                       | Moderate Risk   | N-95 mask Gloves|                                                                         |
| Holding area/waiting area    | Nurses/paramedic interacting with patients                               | Moderate Risk   | N-95 mask Gloves| Minimum distance of one meter needs to be maintained.                  |
| Doctor’s chamber             | Clinical management (doctors, nurses)                                    | Moderate Risk   | N-95 mask Gloves| No aerosol generating procedures should be allowed.                     |
| Sanitary staff               | Cleaning frequently touched surfaces/Floor/Cleaning linen                 | Moderate risk   | N-95 mask Gloves|                                                                         |
| Visitors accompanying        | Support in navigating various service areas                              | Low risk        | Triple layer medical mask | No other visitors should be allowed to accompany patients in OPD settings. The visitors thus allowed should practice hand hygiene   |
| young children and elders    |                                                                          |                 |                 |                                                                         |

**Other Supportive/Ancillary Services:**

| Setting                      | Activity                                                                 | Risk            | Recommended PPE | Remarks                                                                 |
|------------------------------|--------------------------------------------------------------------------|-----------------|-----------------|-------------------------------------------------------------------------|
| Laboratory                   | Sample collection and transportation Sample testing                      | High risk       | Full complement of PPE |                                                                       |
| Mortuary                     | Dead body handling                                                       | Moderate Risk   | N95 mask Gloves | No aerosol generating procedures should be allowed.                     |
| Sanitation                   | Cleaning frequently touched surfaces/Floor/cleaning linen in              | High Risk       | Full complement of PPE | No post-mortem unless until specified.                                  |
| CSSD/Laundry                 | Handling linen of COVID patients                                         | Moderate Risk   | N-95 mask Gloves |                                                                         |
| Other Supportive services    | Administrative Financial Engineering Security, etc.                      | Moderate risk   | N-95 mask Gloves | No possibility of exposure to COVID patients. They should not venture into COVID-19 treatment areas. |
**Health Workers in Community Setting**

| Setting                                      | Activity                      | Risk     | Recommended PPE                      | Remarks                                                                                                                                 |
|----------------------------------------------|-------------------------------|----------|-------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| ASHAs/Anganwadi and other field staff        | Field Surveillance            | Low Risk | Triple layer mask Gloves            | Maintain distance of one meter. Surveillance team to carry adequate triple layer masks to distribute to suspect cases detected on field surveillance |
| Doctors at supervisory level conducting field investigation | Field surveillance Clinical examination | Medium risk N95 mask Gloves. |

**Points to remember while using PPE**

1. PPEs are not alternative to basic preventive public health measures such as hand hygiene, respiratory etiquettes which must be followed at all times.
2. Always (if possible) maintain a distance of at least 1 meter from contacts/Suspect/confirmed COVID-19 cases.
3. Always follow the laid down protocol for disposing off PPEs.

**Hand Hygiene**

![Hand Hygiene Diagram]
Establishing epidemic prepared clinic/facility\[^9\]
Advocating basic infection-prevention measures (hand hygiene, respiratory etiquette, physical distancing) among all type of patients attending the facility will be the key through display of information at all key spots of the facility. The facility also needs to highlight information on self-initiated isolation for those with mild respiratory symptoms. This will help limit crowding of the health facility. All healthcare facilities will need to expand their capacity for screening, isolation, and triage. Standard operating procedures in patient care during pandemics like COVID-19 will be crucial in ensuring safety of the healthcare providers.

Infection prevention and control
1. Use of standard precautions like hand hygiene; use of PPE to avoid direct contact with patients’ blood, body fluids, secretions (including respiratory secretions), and non-intact skin and including prevention of needle-stick or sharps injury; safe waste management; cleaning and disinfection of equipment; and cleaning of the environment.\[^9\]
2. All COVID-19 suspects should be given a triple layer surgical mask and directed to separate area, an isolation room if available. Use standard social distancing guidelines between patients. Instruction on respiratory hygiene should be passed on to all patients.\[^9\]
3. Use either disposable or dedicated equipment (e.g., stethoscopes, blood pressure cuffs, and thermometers), if possible. Disinfect equipment if it needs to be shared among patients. Advise health care workers to refrain from touching their eyes, nose, and mouth with potentially contaminated gloved or ungloved hands.\[^9\]

Communication
1. A Plan, a part of the overall Risk Management Program of the facility that identifies communications as an essential function.\[^9\]
2. A risk communication strategy (RCS) that specifies the means required to communicate with patients and with the public.\[^9\]

General guidelines for securing health facility
1. Surfaces like floor, walls and furniture, doors, window handles, etc., to be cleaned using 1% Sodium hypochlorite on regular basis.\[^9\]
2. Elderly (age more than 60 years) pregnant females and children not to permitted entry as attendants.\[^9\]
3. Information material on COVID-19 should be made available at the facility.\[^9\]
4. The Health Care Facility should ensure the availability of materials such as tissues and foot-operated waste bins for adhering to respiratory hygiene and cough etiquette in waiting areas for patients and visitors and make provision for dispensers of Alcohol-Based Hand Rub (hygiene).\[^9\]

---

Five moments for hand hygiene in clinical settings

---

Common cleaning agents and disinfectants for environmental cleaning\[^9\]

| Disinfectants         | Recommended use                                      | Precautions                                                                 |
|-----------------------|------------------------------------------------------|------------------------------------------------------------------------------|
| Sodium hypochlorite   | Disinfection of material contaminated with blood and body fluids | • Should be used in well-ventilated areas  
• Protective clothing required while handling and using unlitigated  
• Do not mix with strong acids to avoid release of chlorine gas  
• Corrosive to metals |
| Bleaching powder      | Toilets/bathrooms – may be used in place of liquid bleach if this is unavailable | Same as above  
| Alcohol (70%) isopropyl, ethyl alcohol, methylated spirit | Smooth metal surfaces, table tops and other surfaces on which bleach cannot be used | • Flammable, toxic – to be used in well-ventilated areas, avoid inhalation  
• Keep away from heat source, electrical equipment, flames, hot surfaces  
• Allow it to dry completely, and avoid dermatitis burns |
| Detergent with enzyme | Cleaning endoscopes, surgical instruments before disinfection is essential |                                                                 |

Biomedical waste management\[^9\]
Categorization and disposal of waste color coded disposal bags
Conclusions

The author’s understand that the situation is evolving, placing some limits on developing long sustainable guidelines. Therefore, the guidelines too will evolve with time and that will stay as the bottom line for these guidelines.

Clinical management protocol COVID-19[10]

Financial support and sponsorship
Nil.

Conflicts of interest
There are no conflicts of interest.

References
1. Raina SK, Kumar R, Galwankar S, Garg S, Bhatt R, Dhariwal AC, et al. Are we prepared? Lessons from COVID19 and OMAG position paper on epidemic preparedness. J Fam Med Prim Care 2020;9:2161-6.
2. Coronavirus disease 2019 (COVID-19)‑World Health. www.who.int/docs/20200402-sitrep-73-covid-19.
3. United Nations Development Programme. Assessing the socio-economic impacts of Ebola Virus Disease in Guinea, Liberia and Sierra Leone: The Road to Recovery. Addis Ababa, Ethiopia: The Programme; 2014.
4. Piot P, Muyembe J-J, Edmunds WJ. Ebola in West Africa: From disease outbreak to humanitarian crisis. Lancet Infect Dis 2014;14:1034-5.
5. WHO COVID-19 Case definition, updated in Public health surveillance for COVID-19, published 7 August 2020. Available from: apps.who.int/iris/rest/bitstreams/retrieve. [Last accessed on 2020 Sep 2020].
6. François L, Thomas A, Helen M, Yee-Sin L, Janet D, Arnav A. A living WHO guideline on drugs for covid-19. BMJ 2020;370:m3379.
7. Advisory on Strategy for COVID-19 Testing in India (Version VI, dated 4th September 2020). Available from: www.icmr.gov.in. [Last accessed on 2020 Sep 2020].
8. Novel Coronavirus Disease 2019 (COVID-19): Guidelines on rational use of Personal Protective Equipment. Ministry of Health and Family Welfare Directorate General of Health Services [Emergency Medical Relief]. Available from: www.mohfw.gov.in.
9. National guidelines for infection prevention and control in healthcare facilities. Ministry of Health and Family Welfare Government of India. Available from: www.mohfw.gov.in.
10. CLINICAL MANAGEMENT PROTOCOL: COVID-19 Government of India Ministry of Health and Family Welfare Directorate General of Health Services (EMR Division) Version 5 03.07.20. Available from: covidindia.org. [Last accessed on 2020 Sep 2020].