

COVID-19 and Women's Health

OGSB Guidelines

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OGSB

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Preface

Coronavirus Disease-2019 (COVID-19) outbreak started in Wuhan, China, in December 2019. The World Health Organization (WHO) has officially declared the outbreak of COVID-19 a pandemic on 11th March 2020, after the new coronavirus spread to more than 100 countries.

Bangladesh has started the preparation to control and contain the pandemic in the country from the very beginning based on National Preparation and Response Plan. As a part of the preparation process, Obstetrical and Gynecological society of Bangladesh (OGSB), with the stakeholders, has developed precise guidelines for clients and service providers and incorporated those into the national management guidelines on COVID-19, which was uploaded in dghs.gov.bd. (Appendix 4 & 5).

We know that, everyone will not be affected by the disease and vast majority of COVID-19 infections will result in very mild or no symptoms; not everybody is at risk of severe disease. And we will be treating all women who may be free of disease; but they also be suspected or confirmed cases. However, maternity services should continue to be prioritized as an essential core health service; and other aspects of care of women's sexual and reproductive health care such as family planning, emergency contraception, treatment of sexually transmitted diseases, post-abortion care and menstrual regulation services also need to remain available as core health services.

Pregnant women do not appear more likely to contract the COVID- 19 infection than the general population. Pregnancy itself alters the body's immune system and response to viral infections in general, which can occasionally be related to more severe symptoms and this will be the same for COVID-19.

Women, especially pregnant women with suspected, probable, or confirmed COVID-19, including women who may need to spend time in isolation, should have access to woman-centred, respectful skilled care, including obstetric, fetal medicine and neonatal care, as well as mental health and psychosocial support, with readiness to care for maternal and neonatal complications.

Maternity care providers have the right to full access for all personal protective equipment (PPE), sanitation and a safe and respectful working environment and there should always be provision of IPC facilities for them.

The purpose of developing this comprehensive guideline is to help care givers of women's health with proper evidence based guidelines for prevention and clinical management of COVID-19 disease and keep clients and service providers safe.

This is a living document. It will be updated from time to time to incorporate latest evidence and recommendations. Every constructive comment on this document is most welcome.

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Objectives of this guideline

- To provide evidence based guidance in the management of pregnant women with COVID-19 diseases
- To standardize the management protocol in the management of COVID -19 in pregnancy
- To maintain the safety of clients, patients and all service providers by following the safety rule and IPC

Guideline Intended to all

- Specialist, doctors, nurses, others health care providers working in obstetrics and Gynecology who are directly involve for the management of COVID-19 disease in pregnancy
- Program personnel who are involved for prevention of COVID-19 in pregnancy
- Health care managers and policy makers for the planning and implementation of plans, operations, program activities
- Medical and nursing students and residents for customizing the working knowledge.

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Abbreviations

ACOG American College of Obstetrics and Gynecology
AGP Aerosol Generating Procedure
ARI acute respiratory infection
ASRM American Society of Reproductive Medicine
CAP Community Acquired Pneumonia
CBC Complete Blood Count
COVID-19 Coronavirus Disease 2019
DGHS Director General of Health Services
DGFP Director General of Family Planning
ESHRE European Society of Human Reproduction and Embryology
FIGO International Federation of Gynecology and Obstetrics
GGO Ground-glass Opacity
GOB Govt. of Bangladesh
HCP Health Care Provider
HCW Health Care Worker
HDU High Dependency Unit
ICU Intensive Care Unit
IGCS International Journal of Gynecological Society
IJGO International Journal of Gynecology and Obstetrics
Ipas. International Organization on SRH
MERS-CoV Middle eastern respiratory syndrome
MOHFW Ministry of Health and Family Welfare
MR Menstrual Regulation
MRM Menstrual Regulation with Medication
OGSB Obstetrical and Gynecological Society
PAC Post Abortion Care
PPE Personal Protective Equipment
RT-PCR Real time- Polymerase Chain Reaction
SARS Severe Acute Respiratory Syndrome
SARS-CoV-2 Severe Acute Respiratory Syndrome Coronavirus 2
SMC Social Marketing Company
VAW Violence Against Women

Executive Summary

A key fact about COVID-19 is that the vast majority of infections will result in very mild or no symptoms. Not everybody is at risk of severe disease. Maternity services should continue to be prioritized as an essential core health service. And other sexual and reproductive health care such as family planning, emergency contraception, treatment of sexually transmitted diseases, post-abortion care and where legal, safe abortion services to the full extent of the law, also need to remain available as core health services.

SARS-CoV-2 is spread by respiratory droplets and direct contact (when bodily fluids have touched another person's eyes, nose, or mouth, or an open cut, wound, or abrasion). Contamination can also occur from virus transmitted from surfaces to nose and mouth. It should be noted that the SARS-CoV-2 virus has been found to be viable on plastic and stainless steel surfaces for up to 72 hours, whereas on copper and cardboard it is viable for up to 24 hours [8]. Contamination

Fever is common in COVID-19-infected patients. Nucleic acid testing is the preferred method for diagnosing COVID-19. From nasal or oropharyngeal swabs. Supportive investigations are a high-resolution CT Chest and Complete Blood Count (lymphopenia (83%), leukopenia (9–25%), leukocytosis (24–30%) and thrombocytopenia).

- At present healthy women of childbearing age and pregnant women are not at high risk for moderate to severe disease if they develop COVID-19 infection
- However, pregnant women are potentially at increased risk of complications from any respiratory disease due to the physiological changes that occur in pregnancy
- There is no evidence at present of an increased risk of miscarriage, teratogenicity (abnormalities of physiological development) or in-utero (vertical) transmission of the COVID-19 virus.
- There is no evidence demonstrating transmission by breastfeeding however, research is underway to investigate this further.
- There is no clear evidence of risk of preterm birth.
- Products of conception, the placenta, amnion etc. have not been shown to have congenital coronavirus exposure or infection, and do not pose risk of coronavirus infection, however it must be properly disposed of, maintaining infection prevention protocols.
- Babies born to mothers with coronavirus can potentially become infected with the virus after birth (through droplet exposure)

KEY POINTS FOR CONSIDERATION

- Pregnant women with confirmed COVID-19 infection should be managed by designated tertiary hospitals and should be counseled on the risk of adverse pregnancy outcome.
- All possible attempts should be made for isolation and infection control. Negative pressure isolation rooms are preferred for safe labor and delivery and neonatal care.
- During the COVID-19 pandemic period, a detailed history regarding exposure relevant to COVID-19 and clinical manifestations should be acquired routinely from all pregnant women attending for routine care.
- Chest CT scan should be included in the work-up of pregnant women with suspected/probable/ confirmed COVID-19 infection.

- Suspected/probable cases should be treated in isolation and confirmed cases should be managed in a negative pressure isolation room. A woman with confirmed infection who is critically ill should be admitted to a negative pressure isolation room in the ICU.
- Human traffic around this room should be limited when it is occupied by an infected patient.
- All medical staff involved in management of infected women should wear appropriate PPE as required.
- Management of COVID-19-infected pregnant women should be undertaken by a multi-disciplinary team (obstetricians, maternal–fetal medicine subspecialists, intensivists, obstetric anesthetists, internal medicine or respiratory physicians, midwives, virologists, microbiologists, neonatologists, infectious disease specialists).
- Timing and mode of delivery should be individualized, dependent mainly on the clinical status of the patient, gestational age, and fetal condition.
- At present, limited data suggest that there is no evidence of vertical mother-to-baby transmission in women who develop COVID-19 infection in late pregnancy.
- If the patient is asymptomatic or mildly affected, breastfeeding and rooming-in may be considered by the mother in coordination with healthcare providers. There is currently insufficient evidence regarding the safety of breastfeeding and the need for mother/baby separation. If the mother is severely or critically ill, separation appears the best option, with attempts to express breast milk to feed the baby and to maintain milk production.
- All Contraceptives can be used during COVID 19 and are safe.
- It is better to avoid pregnancy during this period.
- Safe MR, MRM and Post Abortion Care must be provided during COVID 19 Period.
- Emergency and urgent management for Gynecological Cancer should be continued, in favour of radiation and chemotherapy.
- All should be aware of VAW and try to mitigate it at all level.
- Educational Activities Should Continue.
- Web based technology should be widely used for telehealth, management information system, educational purpose, planning meetings, awareness development and communication.
- COVID-19 Health service providers should be given all kinds of support and encouragement.

1. Introduction

COVID-19, caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), is a global public health emergency.

Coronavirus disease 2019 (COVID-19) is a respiratory tract infection caused by a newly emergent coronavirus, that was first recognized in Wuhan, China, in December 2019. Genetic sequencing of the virus suggests that it is a betacoronavirus closely linked to the SARS virus.

While most people with COVID-19 develop only mild or uncomplicated illness, approximately 14% develop severe disease that requires hospitalization and oxygen support, and 5% require admission to an intensive care unit. In severe cases, COVID-19 can be complicated by the acute respiratory distress syndrome (ARDS), sepsis and septic shock, multiorgan failure, including acute kidney injury and cardiac injury.

Pregnancy is a physiological state that predisposes women to viral respiratory infection. Due to the physiological changes in the immune and cardiopulmonary systems, pregnant women are more likely to develop severe illness after infection with respiratory viruses. SARS-CoV and MERS-CoV are both known to be responsible for severe complications during pregnancy, including the need for endotracheal intubation, admission to an intensive care unit (ICU), renal failure, and death. Currently, however, there is no evidence that pregnant women are more susceptible to COVID-19 infection or that those with COVID-19 infection are more prone to developing severe pneumonia. Over and above the impact of COVID-19 infection on a pregnant woman, there are concerns relating to the potential effect on fetal and neonatal outcome; therefore, pregnant women require special attention in relation to prevention, diagnosis, and management.

In addition to the care of pregnant women and newborns, other aspects of women's health including sexual and reproductive health, contraception, infertility, cancer, interpersonal violence, mental health are the area of concern in the field of obstetrics and gynecology.

2. Pathophysiology

Coronaviruses are enveloped, nonsegmented, positive-sense ribonucleic acid (RNA) viruses belonging to the family Coronaviridae, order Nidovirales. Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) is a novel severe acute respiratory syndrome coronavirus, first isolated from three people with pneumonia connected to the cluster of acute respiratory illness cases in Wuhan.

In the acute phase of SARS-CoV infection, rapid reduction of lymphocytes in peripheral blood [6], mainly T lymphocytes, was observed, and both CD4⁺ and CD8⁺ T lymphocytes were decreased. The loss of lymphocytes precedes even the abnormal changes on the chest X-ray.

The virus might pass through the mucous membranes, especially nasal and larynx mucosa, then enters the lungs through the respiratory tract. The early most common symptoms of infection are fever and cough. The virus may enter the peripheral blood from the lungs, causing viremia. Then

the virus would attack the targeting organs that express ACE2, such as the lungs, heart, renal, gastrointestinal tract.

Dawei Wang et al found that the median time from symptom onset to ARDS was about 8 days [40]. We speculate that in this way, the virus begins a second attack, causing the patient's condition to aggravate around 7–14 days after onset.

Based on the above assumptions, the clinical phase is divided into three: the viremia phase, the acute phase (pneumonia phase) and the recovery phase. We speculate that B lymphocyte reduction may occur early in the disease, which may affect antibody production in the patient. In severe type patients, lymphocytes were significantly reduced. T cells, B cells were further reduced, while inflammatory cytokines and D-Dimer continued to increase in severe type patients.

SARS-CoV-2 is spread by respiratory droplets and direct contact (when bodily fluids have touched another person's eyes, nose, or mouth, or an open cut, wound, or abrasion). It should be noted that the SARS-CoV-2 virus has been found to be viable on plastic and stainless steel surfaces for up to 72 hours, whereas on copper and cardboard it is viable for up to 24 hours [8]

3. Transmission

Transmission takes place by respiratory droplets and by fomite. Virus found in respiratory secretions and saliva. Viral shedding by asymptomatic people may represent 25–50% of total infections. Viral shedding may antedate symptoms by 1–2 days. Someone is infected when they have virus-infected droplets touch their mucous membranes in their eyes, nose or mouth. This can happen directly by having someone cough, sneeze, or talk expelling the droplets or indirectly by touching a surface with the virus-infected droplets and then touching their eyes, nose or mouth.

4. Diagnosis (Case definition: Appendix 1)

Symptoms

Patients with uncomplicated upper respiratory tract viral infection may have nonspecific symptoms such as fever, fatigue, cough (with or without sputum production), sore throat, nasal congestion, anorexia, malaise, or headache. Rarely, patients may also present with diarrhoea, nausea, and vomiting. The elderly and immunosuppressed may present with atypical symptoms. Symptoms due to physiologic adaptations of pregnancy or adverse pregnancy events, such as dyspnea, fever, GI-symptoms or fatigue, may overlap with COVID-19 symptoms.

Testing for COVID-19

Nucleic acid testing is the preferred method for diagnosing COVID-19 (All Suspected cases, according to the case definition). In our country viral nucleic acid is detected by RT-PCR.

Specimen type include:

- Upper airway specimens: Oropharyngeal swabs, nasal swabs, nasopharyngeal secretions,
- Lower airway specimens: sputum, bronchoalveolar lavage fluid, airway secretions

Radiology and imaging.

- CT Chest- a high-resolution CT is highly preferable.
- Chest Xray- Is not as sensitive as HRCT.
- USG of chest- there are specific sonographic findings however it requires a skilled operator who has training on Pulmonary Ultrasonograph.

All of the above techniques (CXR, CT, sonography) are nonspecific. Patchy ground-glass opacities may be caused by a broad range of disease processes (e.g. viral and bacterial pneumonias). Ultimately, the imaging is only one bit of information which must be integrated into clinical and epidemiological context.

Supportive investigations:

CBC: lymphopenia (83%), leukopenia (9–25%), leukocytosis (24–30%) , thrombocytopenia.

5.Effect of pregnancy on COVID 19

To date, there are limited data on clinical presentation and perinatal outcomes after COVID-19 during pregnancy or the puerperium. There is no evidence that pregnant women present with different signs or symptoms or are at higher risk of severe illness. So far, there is no evidence on mother-to-child transmission when infection manifests in the third trimester, based on negative samples from amniotic fluid, cord blood, vaginal discharge, neonatal throat swabs or breast milk. Similarly, evidence of increased severe maternal or neonatal outcomes is uncertain, and limited to infection in the third trimester, with some cases of premature rupture of membranes, fetal distress, and preterm birth reported .

At present healthy women of childbearing age and pregnant women are not at high risk for moderate to severe disease if they develop COVID-19 infection. However, pregnant women are potentially at increased risk of complications from any respiratory disease due to the physiological changes that occur in pregnancy. Given the higher risk of infection and poorer outcomes, including very high mortality, among the elderly population and those with comorbidities (in particular diabetes, hypertension, etc. as noted by Yang et al., it is important to consider the potential impact of pre-existing hyperglycemia and hypertension on the outcome of COVID-19 in pregnant women.

6.Effect of COVID 19 on pregnancy

Pregnancy may also modify the clinical manifestation, for example lymphocytopenia may be even more marked. To date, summarized data from five small series including 56 pregnant women diagnosed with COVID-19 during the second and third trimester demonstrated that the most common symptoms at presentation were fever and cough; two-thirds of patients had lymphopenia and increased C-reactive protein, and 83% of cases had chest CT scan showing multiple patches of ground-glass opacity in the lungs. A case series of 12 pregnant women with SARS-CoV in Hong Kong, China, reported three maternal deaths; four of seven patients who presented in the first trimester had miscarriage; four of five patients had preterm birth; and two mothers recovered without delivery but their ongoing pregnancies were complicated by FGR.

There is no definite evidence at present of an increased risk of miscarriage, teratogenicity (abnormalities of physiological development) or in-utero (vertical) transmission of the COVID-19 virus. Currently no evidence that COVID-19 infection is associated with fetal or placental complications, also there are no data on the risk of congenital malformation when COVID-19 infection is acquired during the first or early second trimester of pregnancy. There is no evidence demonstrating transmission by breastfeeding. There is no clear evidence of risk of preterm birth though there are chances of spontaneous and therapeutic preterm births. Products of conception, the placenta, amnion etc. have not been shown to have congenital coronavirus exposure or infection, and do not pose risk of coronavirus infection. Babies born to mothers with coronavirus can potentially become infected with the virus after birth (through droplet exposure).

7. IPC

Screening and triage: early recognition of patients with SARI associated with COVID-19

Screen and isolate all patients with suspected COVID-19 at the first point of contact with the health care system (such as the emergency department or outpatient department/clinic). Consider COVID-19 as a possible etiology of patients with acute respiratory illness under certain conditions (Appendix 1 and 2). Triage patients using standardized triage tools and start first-line treatments. (Appendix 2).

Immediate implementation of appropriate IPC measures

IPC is a critical and integral part of clinical management of patients and should be initiated at the point of entry to hospital (<https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance/infection-prevention-and-control>).

Suspected COVID-19 patients should be given a mask and directed to separate area. Keep at least 1 m distance between suspected patients. Standard precautions should always be applied in all areas of health care facilities.

Standard precautions include hand hygiene and the use of personal protective equipment (PPE) when in indirect and direct contact with patients' blood, body fluids, secretions (including respiratory secretions) and non-intact skin. Standard precautions also include prevention of needle-stick or sharps injury; safe waste management; cleaning and disinfection of equipment; and cleaning of the environment.

In addition to standard precautions, health care workers should do a point-of-care risk assessment at every patient contact to determine whether additional precautions (e.g. droplet, contact, or airborne) are required.

Table 3. How to implement IPC measures for patients with suspected or confirmed COVID-19

Instructions for patients

Give suspect patient a medical mask and direct patient to separate area; --aan isolation room if available. Keep at least 1 m distance between suspected patients and other patients. Instruct all patients to cover nose and mouth during coughing or sneezing with tissue or flexed elbow and perform hand hygiene after contact with respiratory secretions.

Apply droplet precautions

Droplet precautions prevent large droplet transmission of respiratory viruses. Use a medical mask if working within 1 m of the patient. Place patients in single rooms, or group together those with the same etiological diagnosis. If an etiological diagnosis is not possible, group patients with similar clinical diagnosis and based on epidemiological risk factors, with a spatial separation. When providing care in close contact with a patient with respiratory symptoms (e.g. coughing or sneezing), use eye protection (face mask or goggles), because sprays of secretions may occur. Limit patient movement within the institution and ensure that patients wear medical masks when outside their rooms.

Apply contact precautions

Contact precautions prevent direct or indirect transmission from contact with contaminated surfaces or equipment (i.e. contact with contaminated oxygen tubing/interfaces). Use PPE (medical mask, eye protection, gloves and gown) when entering room and remove PPE when leaving and practice hand hygiene after PPE removal. If possible, use either disposable or dedicated equipment (e.g. stethoscopes, blood pressure cuffs, pulse oximeters, and thermometers). If equipment needs to be shared among patients, clean and disinfect between each patient use. Ensure that health care workers refrain from touching their eyes, nose, and mouth with potentially contaminated gloved or ungloved hands. Avoid contaminating environmental surfaces that are not directly related to patient care (e.g. door handles and light switches). Avoid medically unnecessary movement of patients or transport. Perform hand hygiene.

Apply airborne precautions when performing an aerosol-generating procedure

Ensure that health care workers performing aerosol-generating procedures (e.g. open suctioning of respiratory tract, intubation, bronchoscopy, cardiopulmonary resuscitation) use the appropriate PPE, including gloves, long-sleeved gowns, eye protection, and fit-tested particulate respirators (N95 or equivalent, or higher level of protection). A scheduled fit test should not be confused with a user's seal check before each use. Whenever possible, use adequately ventilated single rooms when performing aerosol-generating procedures, meaning negative pressure rooms with a minimum of 12 air changes per hour or at least 160 L/second/patient in facilities with natural ventilation. Avoid the presence of unnecessary persons individuals in the room. Care for the patient in the same type of room after mechanical ventilation begins.

8. General Principles for the management of pregnant and recently pregnant women

- Considering asymptomatic transmission of COVID-19 may be possible in pregnant or recently pregnant women, as with the general population, all women with epidemiologic history of contact should be carefully monitored.
- Pregnant women with suspected, probable, or confirmed COVID-19, including women who may need to spend time in isolation, should have access to woman-centred, respectful skilled care, including obstetric, fetal medicine and neonatal care, as well as mental health and psychosocial support, with readiness to care for maternal and neonatal complications.

Remark 1: Appropriate IPC measures and prevention of complications as described above also apply to pregnant and recently pregnant women, including those with miscarriage, late pregnancy fetal loss, and postpartum/postabortion women. These IPC precautions should be applied for all interactions between an infected caregiver and a child.

Remark 2: Mode of birth should be individualized based on obstetric indications and the woman's preferences.

WHO recommends that caesarean section should ideally be undertaken only when medically justified

(https://apps.who.int/iris/bitstream/handle/10665/161442/WHO_RHR_15.02_eng.pdf?sequence=1)

Emergency delivery and pregnancy termination decisions are challenging and based on many factors such as gestational age, severity of maternal condition, and fetal viability and well-being.

Remark 3: Multidisciplinary consultations from obstetric, perinatal, neonatal and intensive care specialists are essential.

- All recently pregnant women with COVID-19 or who have recovered from COVID-19 should be provided with information and counseling on safe infant feeding and appropriate IPC measures to prevent COVID-19 virus transmission.
- At this point, there is no evidence that pregnant women present with increased risk of severe illness or fetal compromise. Pregnant and recently pregnant women who have recovered from COVID-19 should be enabled and encouraged to attend routine antenatal, postpartum, or postabortion care as appropriate. Additional care should be provided if there are any complications.

Remark 1: All pregnant women with or recovering from COVID-19 should be provided with counseling and information related to the potential risk of adverse pregnancy outcomes.

Remark 2: Women's choices and rights to sexual and reproductive health care should be respected regardless of COVID-19 status, including access to contraception and safe abortion to the full extent of the law.

- Infants born to mothers with suspected, probable, or confirmed COVID-19 should be fed according to standard infant feeding guidelines, while applying necessary precautions for IPC.
- Mothers and infants should be enabled to remain together and practice skin-to-skin contact, kangaroo mother care and to remain together and to practice rooming-in throughout the day and night, especially immediately after birth during establishment of breastfeeding, whether they or their infants have suspected, probable, or confirmed COVID-19.

Caring for infants and mothers with COVID-19: IPC and breastfeeding

- Infants born to mothers with suspected, probable or confirmed COVID-19 infection, should be fed according to standard infant feeding guidelines, while applying necessary precautions for IPC.
- As with all confirmed or suspected COVID-19 cases, symptomatic mothers who are breastfeeding or practising skin-to-skin contact or kangaroo mother care should practise respiratory hygiene,

including during feeding (for example, use of a medical mask when near a child if with respiratory symptoms), perform hand hygiene before and after contact with the child, and routinely clean and disinfect surfaces which the symptomatic mother has been in contact with.

- Breastfeeding counseling, basic psychosocial support and practical feeding support should be provided to all pregnant women and mothers with infants and young children, whether they or their infants and young children have suspected or confirmed COVID-19.
- In situations when severe illness in a mother due to COVID-19 or other complications prevent her from caring for her infant or prevent her from continuing direct breastfeeding, mothers should be encouraged and supported to express milk, and safely provide breastmilk to the infant, while applying appropriate IPC measures.
- Mothers and infants should be enabled to remain together and practice skin-to-skin contact, kangaroo mother care and to remain together and to practice rooming-in throughout the day and night, especially immediately after birth during establishment of breastfeeding, whether they or their infants have suspected, probable or confirmed COVID-19 virus infection
- Parents and caregivers who may need to be separated from their children, and children who may need to be separated from their primary caregivers, should have access to appropriately trained health or non-health workers for mental health and psychosocial support.

Important Information of using Pharmacological agents:

- Treat each symptom accordingly.
- Use paracetamol as fever-lowering agent.(if temperature is more than 102oF)
- Avoid steroids (From mild cases to severe pneumonia cases but may be given as indicated above) and NSAID

Chemoprophylaxis

The following recommendation for the use of hydroxychloroquine as a prophylactic agent against SARSCoV-2 infection is based on limited in vitro and anecdotal clinical data in several case series, and observational studies, as well as risk-benefit consideration, under exceptional circumstances that call for the protection of high-risk individuals: frontline healthcare workers.

Dosage:	Candidate Drug, Dose and Duration	Remark
Asymptomatic healthcare workers involved in the care of suspected or confirmed cases of COVID-19	Hydroxychloroquine 400 mg BD on Day 1, followed by 400 mg once weekly for next 7 weeks	To be taken with meals
N.B: HCW with pre-existing heart condition, should do ECG before starting HCQ and also repeat it every week		

CHEST RADIOGRAPHY DURING PREGNANCY

Chest imaging, especially CT scan, is essential for evaluation of the clinical condition of a pregnant woman with COVID-19 infection . FGR, microcephaly, and intellectual disability are the most common adverse effects from high-dose (> 610 mGy) radiation exposure . According to data from the American College of Radiology and the American College of Obstetricians and Gynecologists, when a pregnant woman undergoes a single chest X-ray examination, the radiation dose to the fetus is 0.0005–0.01 mGy, which is negligible, while the radiation dose to the fetus is 0.01–0.66 mGy from a single chest CT or CT pulmonary angiogram . Chest CT scanning has high sensitivity for diagnosis of COVID-19. In a pregnant woman with suspected COVID-19 infection, a chest CT scan may be considered as a primary tool for the detection of COVID-19 in epidemic areas . Informed consent should be obtained and a radiation shield applied over the gravid uterus.

9.MEDICAL TREATMENT OF PREGNANT WOMEN WITH SUSPECTED OR CONFIRMED COVID-19

Place of care

Suspected, probable, and confirmed cases of COVID-19 infection should be managed initially by designated tertiary hospitals with effective isolation facilities and protection equipment. Suspected/probable cases should be treated in isolation and confirmed cases should be managed in a negative pressure isolation room / COVID 19 designated hospital/ COVID 19 designated Area of a hospital. In general, critically ill confirmed cases should be admitted to an ICU. All attending medical staff should wear appropriate PPE (respirator, goggles, face-protective shield, water-resistant surgical gown, gloves) when providing care for suspected/probable/confirmed cases of COVID-19 infection.

Pregnant women with a mild clinical presentation may not initially require hospital admission, and home confinement can be considered provided that this is possible logistically and that monitoring of the woman's condition can be ensured without compromising the safety of her family. Patients should be isolated in single rooms or grouped together once COVID-19 infection has been confirmed.

For transfer of confirmed cases, the attending medical team should wear appropriate PPE and keep themselves and their patient a minimum distance of 2 meters or 6 feet from any individuals without PPE.

Treatment of suspected/probable cases

- ☐ General treatment: maintain fluid and electrolyte balance; symptomatic treatment, such as antipyretic, antidiarrheal medicines.
- ☐ Maternal surveillance: close and vigilant monitoring of vital signs and oxygen saturation level to minimize maternal hypoxia; conduct arterial blood-gas analysis; repeat chest imaging (when indicated); regular evaluation of complete blood count, renal and liver function testing, and coagulation testing.
- ☐ Fetal surveillance: undertake cardiotocography (CTG) for fetal heart rate (FHR) monitoring when gestational age is beyond the limit of viability based on local practice (23–28 weeks).

The pregnancy should be managed according to the clinical findings, regardless of the timing of infection during pregnancy. All visits for obstetric emergencies should be offered in agreement with current local guidelines. All routine follow-up appointments should be postponed by 14 days or until positive test results (or two consecutive negative test results) are available.

5.3. Treatment of Confirmed Cases

(National Guidelines on Clinical Management of Coronavirus Disease 2019 (Covid-19), Version 5.0, APRIL 9, 2020, MOHFW & WHO to be followed)

5.3.1. Mild disease

- ☐ The approach to maintaining fluid and electrolyte balance, symptomatic treatment, and surveillance is the same as for suspected/probable cases.

- Currently there is no proven antiviral treatment for COVID-19 patients, although antiretroviral drugs are being trialed therapeutically on patients with severe symptoms [48,49]. If antiviral treatment is to be considered, this should be done following careful discussion with virologists; pregnant patients should be counseled thoroughly on the potential adverse effects of antiviral treatment for the patient herself as well as for the risk of FGR.
- Monitoring for bacterial infection (blood culture, midstream or catheterized specimen urine microscopy and culture) should be done, with timely use of appropriate antibiotics when there is evidence of secondary bacterial infection.
- Fetal surveillance: undertake CTG for FHR monitoring when gestational age is beyond the limit of viability (after 28 weeks).

5.3.2. Severe and critical disease

- Severe pneumonia is associated with a high maternal and perinatal mortality rate, therefore aggressive treatment is required, including supporting measures with hydration and oxygen therapy. The patient may need oxygen therapy and ICU support, preferably in a left lateral position, with the support of a multidisciplinary team (obstetricians, maternal–fetal medicine subspecialists, intensivists, obstetric anesthetists, internal medicine or respiratory physicians, midwives, virologists, microbiologists, neonatologists, infectious disease specialists)
- Antibacterial treatment: appropriate antibiotic treatment in combination with antiviral treatment should be used promptly when there is suspected or confirmed secondary bacterial infection, following discussion with microbiologists.
- Appropriate blood pressure monitoring and fluid balance management to be continued.
- Oxygen therapy: supplemental oxygen should be used to maintain oxygen saturation equal to or greater than 95% [52,53]; and method of ventilation should be according to the patient’s condition and following guidance from the intensivists and obstetric anesthetists.
- Fetal surveillance: if appropriate, CTG for FHR monitoring should be undertaken when gestational age is beyond the limit of viability based on local practice (28 weeks).
- Medically indicated preterm delivery should be considered by the multidisciplinary team on a case-by-case basis. For women with severe disease who are at less than 32 weeks of pregnancy (but are beyond the threshold of viability), a transfer to a center with a level 2 or level 3 neonatal ICU should be considered, if this service is not available at the local center) due to the increased risk for indicated preterm birth.

10. ANTENATAL CARE IN OUTPATIENT CLINICS

Special attention should be given to women with associated comorbidities like hyperglycemia and hypertension and existing management protocols must be followed, with the exception that women with COVID-19 pneumonia and associated hyperglycemia in pregnancy requiring medical therapy should preferably be shifted to insulin therapy.

Supplementation of folic acid, iron and folic acid and calcium should be continued / supplied in adequate amount

Ultrasonogram Scan for diagnosis of early pregnancy, anomaly scan should be performed at set time. May be delayed for 2-4 weeks if necessary.

Tetanus Toxoid vaccination should be done following national protocol.

Several precautions should be taken to minimize the risk of transmission between pregnant women, healthcare providers, and other patients in the hospital. The number of clinic visits in low-risk women with uncomplicated pregnancy can be decreased and replaced by virtual visits using phone or video calls. Women may be advised to check their blood pressure at home if possible, with appropriate advice given when to seek medical assistance.

Clients are request to arrive without a companion, as well as to screen them for symptoms or exposure relevant to COVID-19. In cases of positive screen, the visit should be deferred by 14 days unless the visit is urgent for maternal and/or fetal reasons, in which case the healthcare providers should be made aware and they should use proper personal protection procedures.

All patients must undergo screening at the entrance to the clinic or hospital. All patient should be asked to wear a mask. The patient should be identified as screen positive to ensure that the team takes the necessary precautions and to ensure that the patient is seen with high priority to minimize her time in the waiting area. In addition to the routine obstetrical care, patients that screen positive should be evaluated for the presence and severity of symptoms, and testing for COVID-19 should be considered based on local protocols. Patients should be educated regarding monitoring symptoms and indications for seeking urgent care.

Although there is currently no evidence that COVID-19 infection is associated with fetal or placental complications, until more data become available we advise closer fetal monitoring of women with confirmed COVID-19 infection, with monthly ultrasound for fetal growth, amniotic fluid, and fetal anatomy . Currently there are no data on the risk of congenital malformation when COVID-19 infection is acquired during the first or early second trimester of pregnancy. Nonetheless, a detailed morphology scan at 18–23 weeks of pregnancy is indicated for pregnant women with confirmed COVID-19 infection.

11.ASSESSMENT OF WOMEN IN OBSTETRICAL TRIAGE for respiratory or obstetrical reasons

When a patient presents to the obstetrical triage or emergency department for respiratory or obstetrical reasons, she should be screened for symptoms or exposure relevant to COVID-19 infection. In cases of positive screen, the patient should be asked to wear a mask and the team should take the necessary contact precautions. The patient should be assessed in an isolation or private room. Symptoms and vital signs should be evaluated, and testing for SARS-CoV-2 should be considered based on local criteria.

Assessment should also include evaluation of comorbidities and other risk factors for severe COVID-19 infection. Women with mild symptoms with no risk factors for severe disease may be discharged home after being advised to monitor symptoms and to seek care in case the symptoms worsen.

Women with moderate disease or those who have comorbidities or other risk factors for severe COVID-19 infection should undergo detailed assessment including physical examination, laboratory testing, and chest radiography as indicated.

Decision regarding further management should be individualized based on the symptoms, risk factors, and the results of the assessment. Women with severe symptoms should undergo detailed assessment by a multidisciplinary team that includes obstetricians, maternal–fetal subspecialists, intensivists, obstetric anesthesiologists, internal medicine or respiratory physicians, midwives, virologists, microbiologists, neonatologists and infectious disease specialists and should be managed as per the national protocol.

12. INTRAPARTUM MANAGEMENT OF SUSPECTED OR CONFIRMED COVID-19

□ COVID-19 infection itself is not an indication for delivery, unless there is a need to improve maternal oxygenation. For suspected/probable/confirmed cases of COVID-19 infection, delivery should ideally be conducted in a negative pressure isolation room. For suspected/probable/confirmed COVID-19 patients, birthing partners should not be permitted to reduce risk exposure (they are likely to be infected). The number of staff members caring for the patient should be as low as possible.

□ The timing and mode of delivery should be individualized, dependent mainly on the clinical status of the patient, gestational age, and fetal condition [57]. Vaginal delivery is not contraindicated in suspected/probable/confirmed COVID-19 patients. Shortening the second stage by operative vaginal delivery can be considered, as active pushing while wearing a surgical mask may be difficult for the woman to achieve [58]. In case of fetal distress, poor progress in labor, and/or deterioration in maternal condition the delivery has to be expedited.

□ Septic shock, acute organ failure, or fetal distress should prompt emergency cesarean delivery (or termination, if legal, before fetal viability) [59]. Cesarean delivery should be performed ideally in an operating room with negative pressure.

□ Both regional anesthesia and general anesthesia (preferred method) can be considered, depending on the clinical condition of the patient and after consultation with the obstetric anesthesiologist, in accordance with recommendations of obstetric anesthesia societies [60]. **Regional anesthesia is preferable given the risk to the staff.** Staff should consider extending PPE to cover aerosols in case of aerosol-producing procedures such as intubation. This is why most units around the world are trying to avoid Cesarean delivery under general anesthesia where at all possible.

□ For preterm cases requiring delivery, we urge caution regarding the use of **antenatal corticosteroids** for fetal lung maturation in a critically ill patient, because this can potentially worsen the clinical condition [61] and the administration of antenatal steroids would delay the delivery that is necessary for management of the patient. The use of antenatal steroids should be considered in discussion with infectious disease specialists, maternal–fetal medicine subspecialists, and neonatologists [55,62]. In the case of an infected woman presenting with spontaneous preterm labor, tocolysis should not be used in an attempt to delay delivery to administer antenatal steroids.

□ Miscarried embryos/fetuses and placentae of COVID-19-infected pregnant women should be treated as infectious tissues and they should be disposed of appropriately; if possible, testing of these tissues for SARS-CoV-2 by qRT-PCR should be undertaken.

13. POSTPARTUM AND NEONATAL CARE IN SUSPECTED OR CONFIRMED COVID-19

- Regarding neonatal management of suspected, probable, and confirmed cases of maternal COVID-19 infection, the umbilical cord should be clamped promptly and the neonate should be transferred to the resuscitation area for assessment by the attending pediatric team.
- The contact precautions and use of PPE should be maintained during the postpartum period, until the mother tests negative for COVID-19.
- There is currently insufficient evidence regarding the safety of breastfeeding and the need for mother/baby separation. If the patient is asymptomatic or mildly affected, breastfeeding and rooming-in) can be considered by the mother in coordination with healthcare providers, or may be necessary if facility limitations prevent mother/baby separation. Since the main concern is that the virus may be transmitted by respiratory droplets rather than breast milk, breastfeeding mothers should ensure that they wash their hands and wear a three-ply surgical mask before touching the baby. If the mother is severely or critically ill, separation appears to be the best option, with attempts to express breast milk to maintain milk production.
- The majority of **postpartum visits** may be conducted remotely as long as the patient does not have specific concerns that require in-person examination. Certain concerns (breast, abdominal scar) may be assessed over video or photos. Decreasing the number of visits may be also valuable in the event of shortage of healthcare providers as it is possible that a considerable proportion of healthcare workers need to be isolated due to unexpected exposure to COVID-19.

14. Follow-up of COVID-19 clients

A specialized doctor should be arranged for each discharged patient's follow-ups. The first follow-up call should be made within 48 hours after discharge. The outpatient follow-up will be carried out 1 week, 2 weeks, and 1 month after discharge.

- Examinations include liver and kidney functions, blood test, nucleic acid test of sputum and stool samples, and pulmonary function test or lung CT scan should be reviewed according to the patient's condition. Follow-up phone calls should be made 3 and 6 months after discharge.

Management of patients tested positive again after discharge:

- Isolation according to the standards for COVID-19 patients.
- Continuing to provide antiviral treatment which has been proved to be effective during prior hospitalization.
- Discharge only when improvement is observed on lung imaging and the sputum and stool are tested negative for 3 consecutive times (with an interval of 24 hours).
- Home isolation and follow-up visits after discharge in accordance with the requirements mentioned above.

15.MENTAL HEALTH / PSYCHOLOGICAL INTERVENTION

- ☐ Pregnant women are at an increased risk for anxiety and depression; once they have been defined with suspected/probable/confirmed COVID-19 infection they may exhibit varying degrees of psychiatric symptoms that are detrimental to maternal and fetal health.
- ☐ Mother/baby separation may impede early bonding as well as establishment of lactation. These factors will inevitably cause additional stress for mothers in the postpartum period.
- ☐ Healthcare providers should pay attention to a patient's mental health, including promptly assessing her sleep patterns and sources of anxiety, depression, and even suicidal ideation. A perinatal psychiatrist should be consulted when necessary.

16. GENERAL PRECAUTIONS

Currently, there are no effective drugs or vaccines to prevent COVID-19. Therefore, personal protection should be considered to minimize the risk of contracting the virus.

Patients and healthcare providers

- ☐ Maintain good personal hygiene: consciously avoid close contact with others during the COVID-19 pandemic period; reduce participation in any gathering in which a distance of at least 2 meters or 6 feet between individuals cannot be maintained; pay attention to hand washing and use hand sanitizer (60%–95% alcohol concentration) frequently.
- ☐ Wearing a three-ply surgical mask when visiting a hospital or other high-risk area is recommended.
- ☐ Seek medical assistance promptly for timely diagnosis and treatment when experiencing symptoms such as fever and cough.

Healthcare providers

- ☐ Consider providing educational information (brochures, posters) in waiting areas.
- ☐ Set up triage plans for screening. In units in which triage areas have been set up, staff should have appropriate PPE and ensure strict compliance with hand hygiene.
- ☐ All pregnant patients who present to the hospital and for outpatient visits should be assessed and screened for symptoms and exposure relevant to COVID-19.
- ☐ Pregnant patients with known exposure relevant to COVID-19 and those with mild or asymptomatic COVID-19 infection should delay an antenatal visit by 14 days.
- ☐ Reduce the number of visitors to the department.
- ☐ On presentation to triage areas, pregnant patients who are symptomatic and/or with known exposure relevant to COVID-19 should be placed in an isolation room for further assessment.

- Medical staff who are caring for patients with suspected/probable/confirmed COVID-19 should be monitored closely for fever or other signs of infection and should not be working if they have any COVID-19 symptoms. Common symptoms at onset of illness include fever, dry cough, myalgia, fatigue, and dyspnea. Medical staff assigned to care for patients with suspected/probable/confirmed COVID-19 should ideally minimize contact with other patients and colleagues, with the aim of reducing the risk of exposure and potential transmission.
- Medical staff who have been exposed unexpectedly without appropriate PPE to a COVID-19-infected pregnant patient should be quarantined or self-isolate for 14 days.
- Pregnant healthcare professionals should follow risk-assessment and infection-control guidelines following exposure to patients with suspected/probable/confirmed COVID-19.

17.MANAGEMENT OF BIOHAZARDOUS MATERIAL

Preventive measures associated with biohazardous exposures include:

- Use of single patient disposal supplies and equipment.
- Needleless systems.
- Proper hand hygiene.
- Standard and special transmission precautions.
- Red biohazardous waste containers and bags.
- Appropriate use of PPE.
- Use of a neutral zone in surgical areas and other areas where invasive procedures are performed.
- Safe disposal of sharps not only in healthcare facilities but also in a woman's home and their community .
- Protocols that address non-sharp biohazardous material management with waste segregation and storage in clearly labeled, leak proof, puncture-resistant secondary containers, followed by collection that provides sterilization by autoclaving, incineration, interment, disinfection/encapsulation methods, energy-based technologies, or collection by an emergency environmental and biosafety service.

18. Contraception During COVID-19

Telehealth Contraception during the Time of COVID-19

As organizations move to telehealth visits, the following guidelines and resources can help you continue to provide high quality counseling and contraceptive methods.

Contraception Counseling:

- Provide telehealth patient-centered counseling on range of methods & patient priorities.

Contraception Initiation:

- Avoid delays by sending prescriptions to pharmacy, mailing, or pre-packing for pick up.
- Assess risk of pregnancy
- Need in-person visit for IUD, implant, sterilization, +/- DMPA
- Delay visit if COVID-19 symptoms, PUI, pending test results, or asymptomatic contact.
- Initiate a bridging method as needed

Contraception Continuation:

- Use evidence-based extended use for all methods
- Advise condoms, initiate bridging methods
- IUD and Implants using extended durations
- Review risks & benefits of ongoing effectiveness of IUD beyond evidence

Contraceptive Change or Discontinuation:

- IUD and implant removal is an essential reproductive health service. Assure removal on request will be facilitated.

Recommendations for Contraceptive Use during COVID 19 Pandemic

These recommendations were formulated recently by GOB, DGFP, DGHS, OGSB, UNFPA, IPAS, SMC and other stakeholders nationally

- Contraception and family planning information and services are life-saving and important at all times. Sexual activity does not cease with the COVID-19 pandemic. By preventing unintended pregnancies, contraception helps to protect girls and women from the negative health consequences of unintended pregnancies, which can save their lives. Contraception reduces the need for abortion, meaning that women and girls are less at risk of unsafe abortion, which again can be lifesaving.
- All modern methods of contraception are safe to use, including during the COVID-19 pandemic. If you have had a baby in the last six months or have a health condition, such as diabetes, high blood pressure, or breast cancer – or if you smoke – seek advice from a health care professional to ensure you are using a method of contraception which is suitable and safe for you.

- If you do not want to become pregnant, you should start or continue to use your contraceptive method of choice. You may be able to access information and contraceptive services from a healthcare provider by phone or online or Hotline number (16767).
- If you cannot access these services you may opt for a method that is available without a prescription (such as condoms, pills, or emergency contraceptive pills) from a nearby pharmacy or drug shop.
- If you cannot access your contraceptive method of choice – perhaps because it requires a prescription, or because it can only be given to you by a health worker – consider using condoms, fertility awareness-based methods, lactational amenorrhea (if you are exclusively breastfeeding), or other contraceptive methods that are recommended for self-care. Depending on the situation methods recommended for self-care could include the pill or mini-pill, emergency contraception pills, and DMPA-SC (Sayana Press®).
- Condoms, when they are used consistently and correctly, are the only method of contraception that help to prevent unintended pregnancy and protect against sexually transmitted infections, including HIV. They can be used together with other methods of contraception to protect against both unintended pregnancy and sexually transmitted infections.
- Emergency contraceptive pills can prevent up to 95% of pregnancies when taken within 5 days after intercourse, and they can be taken by anyone with or without a health condition. Remember emergency contraceptive pills should not be used regularly and not more than once in a month.
- If you are using an IUD or Implant that still has expiry dates, we recommend you continue to use that as these are completely safe and provides long term protection against unwanted pregnancies. Removal of long acting methods such as implants or IUDs, after the recommended period of use Seek advice from your health provider. If, due to restrictions on movement due to the COVID-19 pandemic you cannot have your long acting method removed straight away, it is important to use another method of contraception to avoid pregnancy at this time. There are no medical problems caused by delaying removal of long acting methods such as implants or IUDs. Do not try to remove the contraception method yourself; wait until you are able to access health care from a trained provider.
- Ob-Gyns and other FP providers should increase use of mobile phones and digital technologies to increase telephonic counseling and sharing of messages related to safe and effective use of contraceptives. When possible, with proper counseling and consent, ensure immediate post-partum contraceptive services (PPIUD, PP Implant) to avoid any unwanted pregnancy.

- IUD and implant insertion or removal are low risk, non-aerosol generating procedures. To minimizing exposure risk during procedures, routine surgical masks and gloves for patient interactions may reduce asymptomatic transmission. Prepare all equipment trays and materials ahead of time to reduce time in the room.
- Governments may also consider relaxing restrictions on the quantity (cycles) of short acting contraceptives dispensed to users so as to avoid frequent repeat visits.
- Develop and disseminate messages with simple language through different communication channels including TVC, TV scrolling, social media, radio, community radio, TV talk show etc.
 - During COVID-19 Pandemic it is safer not to be pregnant
 - Use family planning methods
 - Family planning service available

19. MR, MRM, PAC during COVID19

Menstrual Regulation, Menstrual Regulation with Medication and Post Abortion care

These services should be provided to the all clients who needs it:

- Emergency services to be provided to all clients (Non COVID or suspected and confirmed cases) in all service centres and hospitals after proper triage and following proper infection prevention guidelines
- For routine services Menstrual Regulation with Medication will be preferred over instrumental Menstrual Regulation procedure as applicable
- instrumental Menstrual Regulation procedures are to be provided in designated centers after proper triage and following proper infection prevention guidelines
- Thorough counseling is important
- Tell the client hat to expect, danger signs and where to go in Emergency
- Services to COVID 19 confirmed cases to be given in designated hospital with proper assessment, investigation, counseling and precaution and protection of client and service providers

Menstrual Regulation with Medication

Recommended regimen for up to 9 weeks of gestation: Mifepristone and misoprostol

Day 1: Mifepristone 200mg orally

Day 2: Misoprostol 800mcg buccally,

If the woman is stable and it is convenient for her to do so, providers should allow her at least four hours after fetal expulsion to expel the placenta.

Post abortion Care (PAC)

Misoprostol Regimen for Incomplete and Missed abortion upto 12 weeks uterine size

Table 1 Regimens of Misoprostol in Incomplete and Missed Abortion*			
Regimens of Misoprostol in Incomplete Abortion			
Gestation	Dose	Route	Timing
Less than 12 weeks uterine size	600 mcg	Oral	Three 200 mcg tablets taken at once One 600 mcg tablets taken at once
	400 mcg	Sublingual	Two 200 mcg tablet under the tongue for 30 minutes, then swallow the remaining pill.
Regimens of Misoprostol in Missed Abortion and Abembryonic Gestation (Blighted Ovum)			
Less than 12 weeks uterine size	800 mcg	Vaginal	Four 200 mcg tablets placed vaginally in the posterior fornix,
	600 mcg	Sublingual	Three 200 mcg tablet under the tongue for 30 minutes, then swallow the remaining pill; may be repeated every 3 hours for a maximum of 3 doses, if required. Single dose is also effective, if left for 1-2 weeks.
Ipas, VSI. Misoprostol use in Post Abortion Care: A Service Delivery Toolkit. Chapel Hill, Ipas, 2011; 47 -48			

Pl see leaflets on Misoprostol in Post abortion Care in appendix 8 and 9

20. Care of subfertility in COVID-19

In considering when and how to provide reproductive care, the risk of viral transmission to patients, physicians, and staff, and the utilization of critically needed healthcare resources must be weighed against the time sensitive nature of infertility. This calculation includes understanding the worsening prognosis of treatments with the passage of time, and the threat of decreased access to care that occurs with further delays(ASRM).

ESHRE Guidelines:

Concept

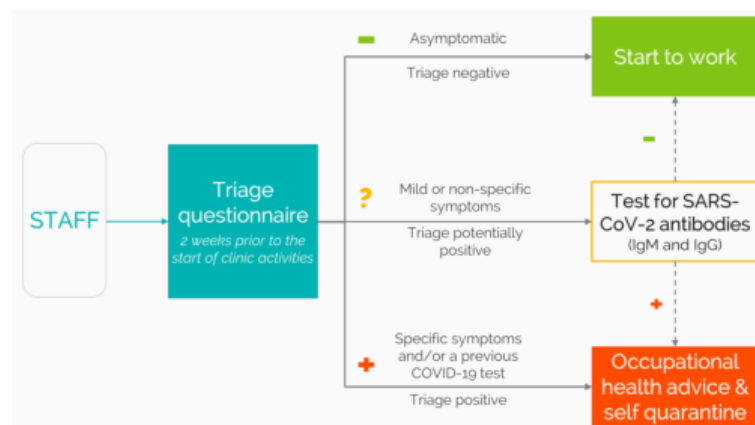
The working group identified six pillars of good medical practice proposed for the restart of activity in the ART clinic and laboratory.

1. Discussion, agreement and consent to the start of treatment
2. Staff and patient triage
3. Access to advice and treatment
4. Adaptation of ART services
5. Treatment cycle planning
6. Code of Conduct for staff and patients

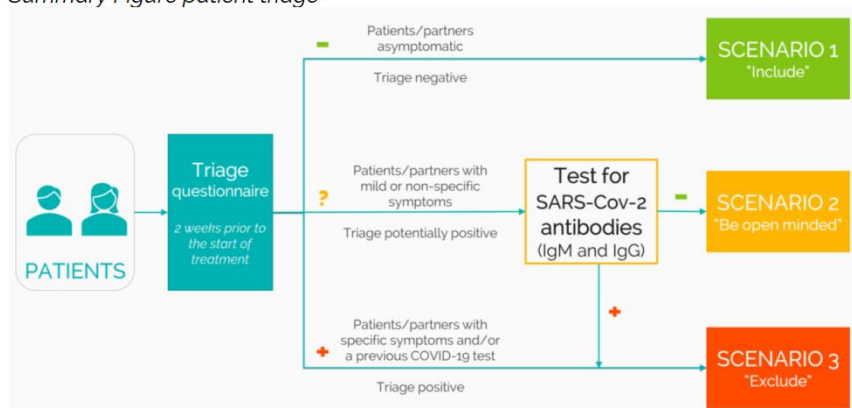
Discussion, agreement and consent to start treatment

- a. High-risk patients (e.g. diabetes, hypertension, using immunosuppressant therapy, past transplant patients, lung, liver or renal disease) should not start ART treatment until it is deemed safe to do so by relevant healthcare professionals and/or local health authorities.
- b. All patients should be offered a choice to proceed with or postpone their ART treatment. In both cases patient preference should be clearly documented.
- c. Patients must be comprehensively informed, clearly understand the risks related to COVID-19 disease and acknowledge the increased risks in case of infection during pregnancy. Patients must also be informed on how to reduce the risk of infection in general.
- d. Patients must sign and adhere to the Code of Conduct

Summary Figure staff triage



Summary Figure patient triage



Access to advice and treatment

Patient education on COVID-19 risk and prevention is an essential step prior to acceptance for treatment. Patient education should include:

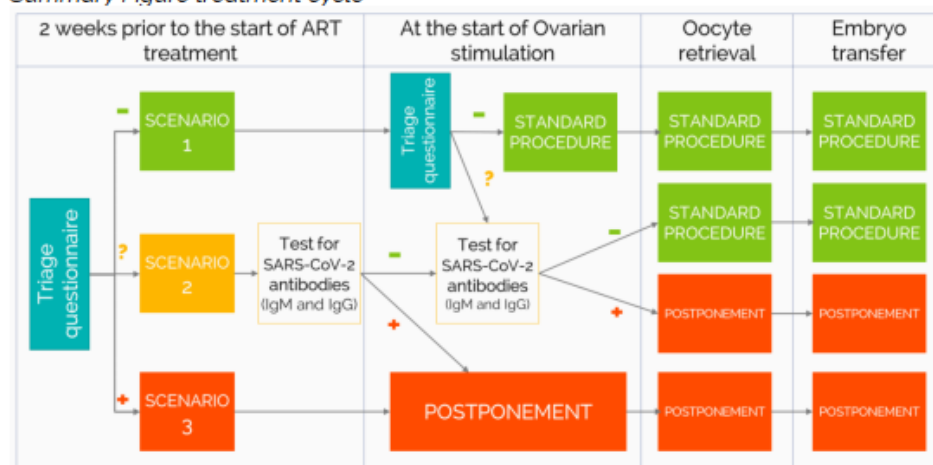
- Tutorials on the use of personal protective equipment (PPE), if required.
- Advice on continuation of social distancing and avoidance of unnecessary human physical contact.
- Information about symptoms of SARS-CoV-2/COVID-19 infection or exposure occurrence
- Agreement that treatment can be discontinued if the patient encounters a high-risk situation

Adaptation of ART services

The treatment of each patient should be completely re-thought and individualised.

In order to reduce unnecessary visits and staff-patient contact, telemedicine should be used for all treatment steps that do not require the physical presence of patients at the centre.

Summary Figure treatment cycle



Code of Conduct for staff and patients

All staff members and patients will be instructed to avoid unnecessary exposure (both at work and in private).

- Each service will prepare compulsory instructions for staff • Attendance at work will be tied to respecting the signed Code of Conduct
- Activities that are not allowed will be clearly detailed ("Expose yourself less" principle)
- Restricted social life and interactions
- Patients should sign regularly that they are well and have respected the Code.
- Staff members should sign regularly that they are well and have respected the Code or inform the centre's Person Responsible of any infringements of the Code of Conduct previously signed.

21. Gynecological Cancer

Outpatient Clinic Visits

- a. Restriction of visits only to new patients or consults that are absolutely necessary to address an acute oncologic issues and to those patients in active treatment for their disease.
- b. Limiting number of physicians and healthcare providers (advanced nurse practitioners or nurses) involved in providing ambulatory care to minimize exposure to all involved.
- c. Consideration of restricting personnel to those that are absolutely essential for the care of the patient. Thus, consideration of dismissing residents and medical students of their responsibilities in the ambulatory care setting.
- d. Limiting accompanying family members to only one person, when such person is considered absolutely necessary, as in situations when the patient has physical or psychological limitations. In addition, it is also confirmed that such person does not have suspicion of coronavirus infection or has been in contact with anyone suspected of such exposure.
- e. Postponing all routine follow-up/surveillance visits, or transition to telemedicine/web-based consultation, if resources allow, until crisis has stabilized and it is considered safe to return to normal operating procedures. Patients to notify healthcare team of any new or concerning issues by telephone or electronic correspondence.
- f. Consideration of web-based consultation for issues of concern to allow for proper, safer, and faster triaging.
- g. Consideration of postponing any type of intervention that is not absolutely necessary, such as routine imaging studies or serum markers, in patients who are asymptomatic and have no evidence of disease based on most recent evaluation.

Cervical Cancer

- a. Pre-invasive disease: According to American Society for Colposcopy and Cervical Pathology (ASCCP) recommendations, individuals with low grade cervical cancer screening tests may have postponement of diagnostic evaluations for 6–12 months. Individuals with high-grade cervical screening tests should have diagnostic evaluation scheduled within 3 months.
- b. Early-stage cervical cancer: In a setting where oncologic surgery is still allowed, proceeding with standard of care is recommended. However, when access to surgery is limited, these steps may be considered. Assuring that disease is localized by imaging studies, such as CT scans or PET/CT imaging (if available), and if so, consideration of postponing procedures that may be considered high-risk of prolonged operative time, or potential intraoperative and/or postoperative complications, such as radical trachelectomy or radical hysterectomy, for a period of 6–8 weeks, or until crisis resolves. In the setting of microscopic disease or low-risk disease (<2 cm, low-risk histology), consideration for conization or simple trachelectomy ± sentinel lymph nodes, if available and feasible. In the setting of gross visible tumor, consideration of neoadjuvant chemotherapy.

c. Locally-advanced disease: Consider hypofractionation (increase dose per day and reduce the number of fractions) to reduce the number of times the patient has to come in for hospital visits and treatments. According to the American Brachytherapy Society, brachytherapy procedures for cervical cancer patients should not be delayed in patients without COVID-19 symptoms. For radiation therapy patients that are visiting on a daily basis, consider changing face to face weekly visits to telemedicine, unless examination is required.

Endometrial Cancer

a. Low-risk patients: Patients with grade 1 disease can be considered for conservative management with non-surgical options, including systemic hormonal therapy or intrauterine devices.

b. High-risk patients: Patients with higher-risk disease (grade 2 or 3 or high-risk histology) should be considered for simple hysterectomy and bilateral salpingo-oophorectomy alone \pm sentinel lymph nodes, if available and feasible, and/or postoperative management based on uterine risk factors. Risk of laparoscopic surgery concerning pneumoperitoneum in the setting of COVID-19 must be weighed against risk of laparotomy.

c. Advanced disease: Patients with advanced disease should be considered for tissue biopsy to confirm diagnosis and proceeding with systemic therapy.

Ovarian Cancer

a. In suspected early disease, consideration of multiple factors, such as age and family history of breast/ovarian cancer, physical examination, and thorough radiologic evaluation with pelvic ultrasound with color Doppler, MRI, and/or serum markers, such as CA125 and HE4, to assess risk of malignancy in adnexal mass.

b. In patients with advanced stage disease, consideration of tissue biopsy to confirm diagnosis of disease and proceeding with neoadjuvant chemotherapy until crisis is resolved and consideration of surgery at a later time.

c. In patients who have already started neoadjuvant chemotherapy, consideration of extending the treatment plan to six cycles, rather than three, before consideration of interval cytoreductive surgery. However, decision in this setting is highly dependent on resource availability and access to the operating room for the respective institution, recognizing that additional cycles of chemotherapy may deplete bone marrow reserve and lead to higher susceptibility to infection.

d. In patients who have completed up-front adjuvant platinum based chemotherapy, consideration of no further treatment. Maintenance therapy may require repeat visits for toxicity evaluation which may place added burden on patient, families, and healthcare teams with the risk of added exposure to infection.

e. For patients traveling long distances for treatment, consideration of arranging with local oncologists to administer therapy, in order to avoid traveling, particularly by air, and further increasing risk of exposure and infection. Offer distant evaluation for toxicity through telecommunication.

f. For patients who have progressed on current treatment for recurrent disease, decisions regarding initiation of additional chemotherapy should be based on clinical judgment and potential for benefit based on expected response of subsequent available agents.

Treatment Planning

a. Local patients: Consideration of undergoing imaging studies and indicated laboratory tests and agreeing to having the physician contact them by telephone to discuss management beyond the point of evaluation.

b. Distant patients: Consideration of undergoing imaging studies and indicated laboratory tests locally in their home towns and sending discs with imaging either electronically or by mail to then have the physician discuss the management plan.

c. International patients: Consideration for postponing visits from international patients until further notice.

Palliative and Supportive Care Management

a. It is imperative that during this time of crisis, women diagnosed with gynecologic cancers understand that needs related to quality of life, patient end-of-life goals, advance care planning, pain and symptom management, and support of caregivers remain a priority of the healthcare team.

b. Multidisciplinary collaboration should be implemented to provide 'rapid response' to assure that supportive care and hospice care is established as quickly as possible, either in a facility or at home, in order to provide the patient the most comprehensive care and at the same time alleviate hospital volume so that beds may be allocated to patients needing acute medical attention, either related or unrelated to the coronavirus disease.

c. Consideration for video consultations for all outpatient visits and most inpatient visits in order to minimize bidirectional exposure to coronavirus infection of both the patient and the healthcare team.

d. Family engagement is of the utmost importance for patients requiring supportive care and hospice care. To this end, centers are encouraged to implement strategies to educate family members on how to provide most or all services pertaining to symptom control and management of physical needs for the patient while at home with certification from global health authorities.

22. Violence against women and Domestic Violence

Violence against women remains a major threat to global public health and women's health during emergencies

- Violence against women is highly prevalent. Intimate partner violence is the most common form of violence. Globally, 1 in 3 women worldwide have experienced physical and/or sexual violence by an intimate partner or sexual violence by any perpetrator in their lifetime. Most of this is intimate partner violence.
- Violence against women tends to increase during every type of emergency, including epidemics. Older women and women with disabilities are likely to have additional risks and needs. Women who are displaced, refugees, and living in conflict-affected areas are particularly vulnerable.
- Although data are scarce, reports from China, the United Kingdom, the United States, and other countries suggest an increase in domestic violence cases since the COVID-19 outbreak began. The number of domestic violence cases reported to a police station in Jingzhou, a city in Hubei Province, tripled in February 2020, compared with the same period the previous year.
- The health impacts of violence, particularly intimate partner/domestic violence, on women and their children, are significant. Violence against women can result in injuries and serious physical, mental, sexual and reproductive health problems, including sexually transmitted infections, HIV, and unplanned pregnancies.

How COVID-19 can exacerbate risks of violence for women

- Stress, the disruption of social and protective networks, and decreased access to services can all exacerbate the risk of violence for women.
- As distancing measures are put in place and people are encouraged to stay at home, the risk of intimate partner violence is likely to increase. For example:
 - o The likelihood that women in an abusive relationship and their children will be exposed to violence is dramatically increased, as family members spend more time in close contact and families cope with additional stress and potential economic or job losses.
 - o Women may have less contact with family and friends who may provide support and protection from violence.
 - o Women bear the brunt of increased care work during this pandemic. School closures further exacerbate this burden and place more stress on them.
 - o The disruption of livelihoods and ability to earn a living, including for women (many of whom are informal wage workers), will decrease access to basic needs and services, increasing stress on families, with the potential to exacerbate conflicts and violence. As resources become scarcer, women may be at greater risk for experiencing economic abuse.⁴
 - o Perpetrators of abuse may use restrictions due to COVID-19 to exercise power and control over their partners to further reduce access to services, help, and psychosocial support from both formal and informal networks.
 - o Perpetrators may also restrict access to necessary items such as soap and hand sanitizer.
 - o Perpetrators may exert control by spreading misinformation about the disease and stigmatize partners.⁵
- Access to vital sexual and reproductive health services, including for women subjected to violence, will likely become more limited.
- Other services, such as hotlines, crisis centers, shelters, legal aid, and protection services may also be scaled back, further reducing access to the few sources of help that women in abusive relationships might have.

What can be done to address violence against women during the COVID-19 response

Although the COVID-19 pandemic has placed an immense burden on health systems, including frontline health workers, there are things that can help mitigate the effects of violence on women and children.



Governments and policy makers must include essential services to address violence against women in preparedness and response plans for COVID-19, fund them, and identify ways to make them accessible in the context of physical distancing measures.



Health facilities should identify and provide information about services available locally (e.g. hotlines, shelters, rape crisis centers, counselling) for survivors, including opening hours, contact details, and whether services can be offered remotely, and establish referral linkages.



Health providers need to be aware of the risks and health consequences of violence against women. They can help women who disclose by offering first-line support and medical treatment. First-line support includes: listening empathetically and without judgment, inquiring about needs and concerns, validating survivors' experiences and feelings, enhancing safety, and connecting survivors to support services. The use of mHealth and telemedicine in safely addressing violence against women must urgently be explored.



Humanitarian response organizations need to include services for women subjected to violence and their children in their COVID-19 response plans and gather data on reported cases of violence against women.



Community members should be made aware of the increased risk of violence against women during this pandemic and the need to keep in touch and support women subjected to violence, and to have information about where help for survivors is available. It is important to ensure that it is safe to connect with women when the abuser is present in the home.



Women who are experiencing violence may find it helpful to reach out to supportive family and friends, seek support from a hotline, or seek out local services for survivors. They may also find it useful to have a safety plan in case the violence escalates. This includes having a neighbor, friend, relative, or shelter identified to go to should they need to leave the house immediately for safety.

23. Academic Activities

- a. In an effort to continue best standard of care for our patients, we should strive to maintain active and transparent communication as it pertains to patient management and outcomes. We should consider implementation of academic activities, such as tumor board or multidisciplinary conference, through web based systems.
- b. Teleconferencing to learn and explore options for improving the approach to care should be sought and flow of communication with other institutions is to be encouraged

24. Telehealth reproductive health

Telehealth reproductive health visits are important to improve social distancing and help reduce COVID-19 exposures.

Having staff available via telehealth helps:

- Empower patients regarding social distancing.
- Provide person-centered contraceptive counseling, method initiation and continuation, and method switching.
- Avoid unnecessary exposure to illness.
- Preserve staff availability and PPE to see high priority patients.

It can be organized / implemented by telephone, text message, email, facebook, video, skype, whats app, viber, imo, Zoom and goggle , etc

25. Record keeping, publication and research

We need to learn from our experience and generate evidences for prevention better management of COVID-19 and viral diseases. Proper record keeping, writing articles and research protocols are important and are encouraged

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Appendix

Appendix 1: Case Definition COVID-19

Suspect case

- a. A patient with acute respiratory illness (fever and at least one sign/symptom of respiratory disease, e.g., cough, shortness of breath), AND a history of travel to or residence in a Country/location reporting community transmission of COVID-19 disease during the 14 days prior to symptom onset.
OR
 - b. A patient/ health care worker with any acute respiratory illness AND having been in contact with a confirmed or probable COVID-19 case (see definition of contact) in the last 14 days prior to symptom onset
OR
 - c. A patient with severe acute respiratory illness (fever and at least one sign/symptom of respiratory disease, e.g., cough, shortness of breath; AND requiring hospitalization) AND in the absence of an alternative diagnosis that fully explains the clinical presentation.
-

Probable case:

- a. A suspect case for whom testing for the COVID-19 virus is inconclusive. Inconclusive being the result of the test reported by the laboratory.
OR
 - b. A suspect case for whom testing could not be performed for any reason.
-

Confirmed case:

A person with laboratory confirmation of COVID-19 infection, irrespective of clinical signs and symptoms.

Definition of contact:

- a. A contact is a person not having symptoms at present but who has been exposed to probable case or confirmed case.
 - b. Contact timing: 2 days before and the 14 days after the onset of symptoms of a probable or confirmed cases
 - c. Contact pattern
 - Face-to-face contact with a probable or confirmed case within 1 meter and for more than 15 minutes.
 - Direct physical contact with a probable or confirmed case
 - Direct care for a patient with probable or confirmed COVID-19 disease without using proper personal protective equipment¹, OR
 - Other situations as indicated by local risk assessments.
-

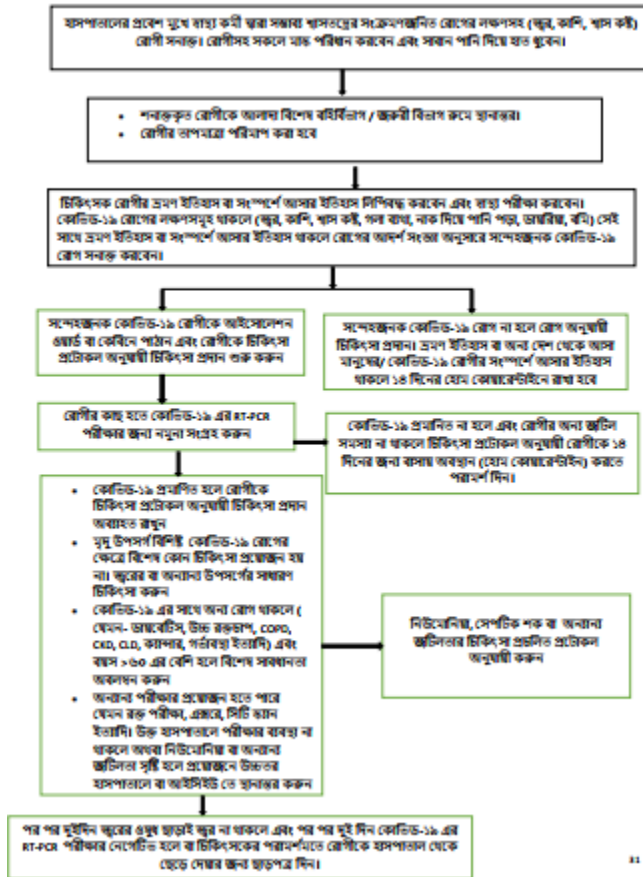
Note: for confirmed asymptomatic cases, the period of contact is measured as the 2 days before through the 14 days after the date on which the sample was taken which led to confirmation.¹¹

1. World Health Organization. Infection prevention and control during health care when COVID-19 is suspected [https://www.who.int/publications-detail/infection-prevention-and-control-during-health-care-when-novel-coronavirus-\(ncov\)-infection-is-suspected-20200125](https://www.who.int/publications-detail/infection-prevention-and-control-during-health-care-when-novel-coronavirus-(ncov)-infection-is-suspected-20200125)

COVID-19 is a notifiable disease. Please report all cases (confirmed or suspected) to health authority (civil surgeon, DGHS).

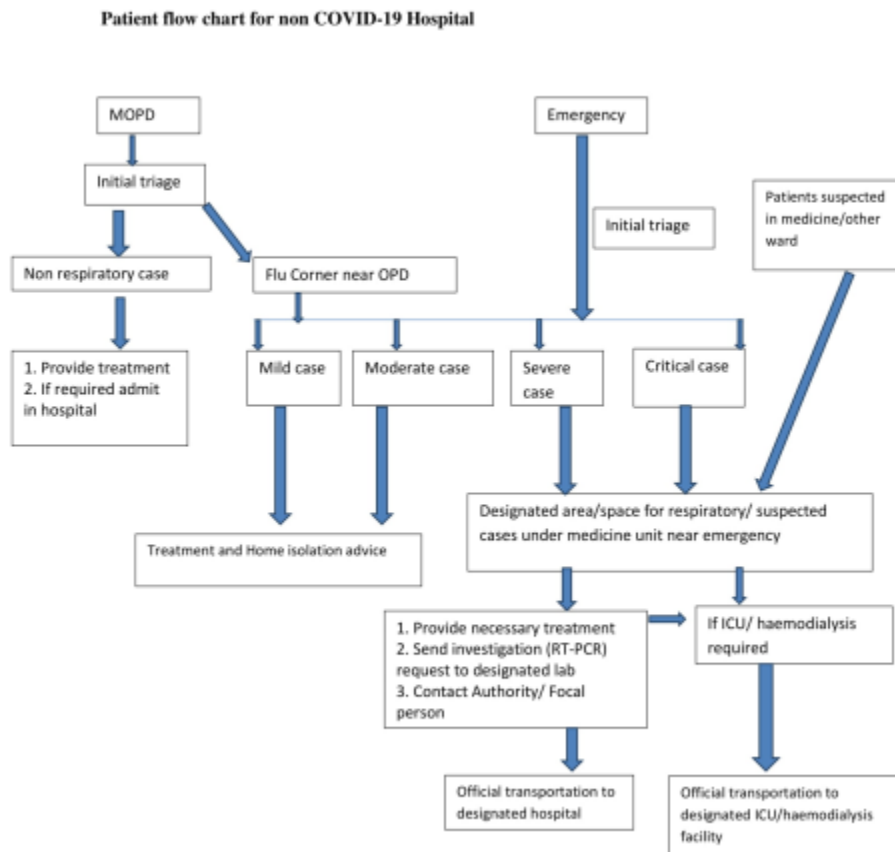
Appendix 2: Triage and management of COVID 19 Disease

Annex 1: হাসপাতালে কোভিড-১৯ রোগের ব্যবস্থাপনা

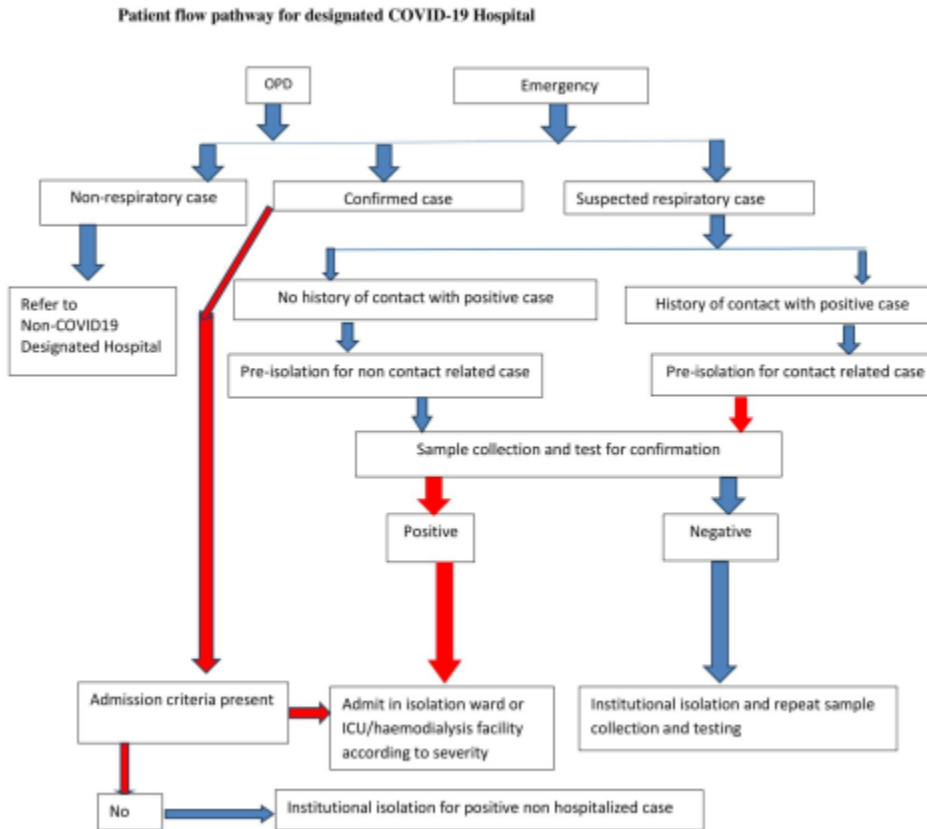


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Appendix 3: Patient flow pathway for non COVID-19 hospital



Appendix 4: Patient flow pathway for designated COVID-19 hospital




Appendix 5: OGSB: What should Pregnant Mothers and Family DO to Prevent COVID19



1 of 1

বিশ্বজুড়ে COVID-19 প্রতিরোধে

গর্ভবতী মা ও পরিবারের করণীয়



বিশ্বজুড়ে COVID-19 ভাইরাস সংক্রমণ বৈশ্বিক মহামারী আকার ধারণ করেছে। এই রোগের সংক্রমণ ও বিস্তার রোধে গর্ভবতী মা ও নবজাতকের স্বাস্থ্য সুরক্ষায় নিম্নলিখিত পদক্ষেপগুলো মেনে চলার জন্য অনুরোধ করা যাচ্ছে।

১. গর্ভবতী মা খুব প্রয়োজন না হলে ঘরেই থাকুন।
২. গর্ভবতীসহ বাড়ির সবাইকে বাইরে থেকে এসে বার বার সাবান দিয়ে ভাল করে হাত ধুতে হবে, কমপক্ষে ২০ সেকেন্ড।
৩. হাঁচি-কাশি শিষ্টাচার মেনে চলবেন। টিস্যু, রুমাল অথবা কনুয়ের ভেঁজে হাঁচি-কাশি নেকেন এবং ঢাকনা দেওয়া ডাঙিধিনে টিস্যু পেপার ফেলবেন। রুমাল বা কাপড় সাবান দিয়ে ধুয়ে ফেলুন।
৪. জ্বর হাঁচি কাশিতে আক্রান্ত প্রোগ্রাম সংস্পর্শ এড়িয়ে চলুন।
৫. করমর্দন কোমলকুলি করবেন না। পরস্পরের মধ্যে ও ফুটি দূরত্ব বজায় রাখুন।
৬. গর্ভবতী মা লোক সমাগম বা সমাবেশে যাবেন না, তাই মার্কেট, বাজার বা বাড়ির বাইরে না যাওয়াই ভাল। প্রতিদিন পরিমিত কাপড় ধুয়ে ফেলুন।
৭. খাবার সুস্বাদু করে খেতে হবে। বিশেষ করে মাছ, মাংস, কঁচা ও পোঁচ ভিন্ন, কঁচা দুধ খাওয়া যাবেনা।
৮. ফল বা সালাদ খুব ভালো করে বারো বার ধুয়ে খাবেন।
৯. পরিবারের কেউ যদি জ্বর আক্রান্ত হলে তাকে মাছ ও গ্রাভস পরা বা নিজেকে কারও সংস্পর্শে আসতে দেয়া যাবে না।
১০. বিদেশ ফেরত কেউ আসলে ১৪ দিন পর্যন্ত নিজগৃহে কোয়ারেন্টাইন অবস্থায় থাকতে হবে এবং পরিবারের সদস্যদের সংস্পর্শে আসা যাবে না। তার থাকা খাওয়া ও ব্যবহার্য বাসন কোসন আলাদা করতে হবে। ওয়ান টাইম থালা বাসন ব্যবহার করতে পারলে ভাল।
১১. গর্ভবতী মহিলারা তার চিকিৎসকের কাছে অনলাইন বা টেলিফোনে বাসা থেকে চিকিৎসা নিতে পারেন। জরুরী অবস্থা হলে হাসপাতালে আসবেন অথবা আপনার চিকিৎসকের পরামর্শে নির্ধারিত হাসপাতালে আসবেন।
১২. শুকনো কাশি, হাঁচি ও সংগ্রহ জ্বর থাকলে মাছ ও গ্রাভস ব্যবহার করুন এবং আলাদা থাকুন।
১৩. গর্ভবতী মা জ্বরের জন্য paracetamol সেকন করতে পারবেন। হাঁচি-কাশির জন্য antihistamin দেওয়া যেতে পারে। প্রচুর পানি ও তরল খাবার খাবেন।
১৪. মানসিক ও সামাজিক সহায়তা সহ গর্ভবতী মায়ের যত্ন নিতে হবে।
১৫. যদি কোন গর্ভবতী মা COVID-19 আক্রান্ত হয়ে থাকেন তবে তাকে চিকিত্সা হাসপাতালে* যেতে হবে এবং acute phase-এ যেকোন অপারেশন না করাই ভাল। যতটা দেরী করা যায় ততটা উত্তম।
১৬. গর্ভাবসিক প্রসবের সময় সেবা দানকারীর সাহায্য দিন ও নির্দিষ্ট হাসপাতালে ভর্তি হবেন। CS-এর প্রয়োজন হলে regional anesthesia দেয়া উচিত।
১৭. আক্রান্ত কোন গর্ভবতীর তীব্র মাথা ব্যথা, চোখে কাপসা দেখা, যেনীপাখে রক্তপাত, পেটে ব্যথা, উচ্চ জ্বর, শ্বাসকষ্ট, বাচ্চা নাড়জাড় কমে গেলে "Call Care" Centre-এ যোগাযোগ করবেন।
১৮. স্বাস্থ্য সেবাদানকারী ও গর্ভবতী মা উভয়ই মাছ ও গ্রাভস ব্যবহার করবেন। ভেলিডারীর পূর্বই গর্ভবতী মা সুস্থ হয়ে উঠলে মাতৃত্বকালীন সেবা নিকটস্থ স্বাস্থ্য কেন্দ্রে গিয়ে নিবেন।
১৯. বাচ্চাকে হাত না ধুয়ে কেউ কোলে নেবেন না। বাচ্চাকে চুমু দেওয়া যাবেনা। নবজাতককে শুধু মা একা অথবা পরিবারের নির্দিষ্ট এক জন যত্ন করলে ভাল হয়।
২০. মা যদি COVID-19 আক্রান্ত হয়ে থাকেন তবে মায়ের দুধ বের করে বাটি চামচ দিয়ে খাওয়াতে হবে।

প্রয়োজনে যোগাযোগ করুন (কল সেন্টার): ১৬২৬৩ এবং ৩৩৩

IEDCR Hotline: ০১৯৩৭০০০১১, ০১৯৩৭১১০০১১, ০১৯২৭৭১১৭৮৪, ০১৯২৭৭১১৭৮৫

করোনা ভাইরাস ট্রিগেট সেন্টার-

* মুগদা জেনারেল হাসপাতাল * কুয়েত মৈত্রী হাসপাতাল * মহানগর হাসপাতাল * কুর্মিটোলা জেনারেল হাসপাতাল।



Appendix 7. Aerosol Generating Procedures (AGP)

The following procedures are considered likely to generate aerosols capable of transmitting respiratory pathogens when undertaken on patients with an RTI:

- ☐ intubation, extubation and related procedures; for example, manual ventilation and open suctioning
- ☐ cardiopulmonary resuscitation
- ☐ bronchoscopy (unless carried out through a closed circuit ventilation system)
- ☐ surgery and post-mortem procedures in which high-speed devices are used
- ☐ dental procedures
- ☐ non-invasive ventilation (NIV) e.g. bi level positive airway pressure ventilation (BiPAP)
- ☐ continuous positive airway pressure ventilation (CPAP)
- ☐ high frequency oscillatory ventilation (HFOV)
- ☐ induction of sputum

Certain other procedures/equipment may generate an aerosol from material other than patients' secretions but are NOT considered to represent a significant infectious risk. Procedures in this category include:

- ☐ obtaining diagnostic nose and throat swabs
- ☐ administration of pressurised humidified oxygen
- ☐ administration of medication via nebulisation

During nebulisation, the aerosol derives from a non-patient source (the fluid in the nebuliser chamber) and does not carry patient-derived viral particles. If a particle in the aerosol coalesces with a contaminated mucous membrane, it will cease to be airborne and therefore will not be part of an aerosol. Staff should use appropriate hand hygiene when helping patients to remove nebulisers and/or oxygen masks.

NHS, appendix 67,








<https://www.rdash.nhs.uk/wp-content/uploads/2017/08/Appendix-46-Aerosol-Generating-Procedures.pdf>

Appendix 8. Misoprostol in Post abortion Care (Front)

গর্ভপাত পরবর্তী সেবা

গর্ভপাতের পরে মিসোপ্রোস্টল বড়ি খাবার নির্দেশাবলী
(অবায়ুর আগের শর্তের ১২ নম্বর শর্ত)

গর্ভপাতের পরে জরায়ুতে ক্রনের অংশ বা মৃত অবস্থায় ক্রন থেকে গেলে মিসোপ্রোস্টল বড়ি খেয়ে কার্যকরভাবে চিকিৎসা করা সম্ভব

<p>মিসোপ্রোস্টল বড়ি খাবার নিয়ম</p> <p>মিসোপ্রোস্টল ২০০০ মাইক্রোগ্রামের ০৪টি বড়ি বা ১০০০ মাইক্রোগ্রামের ১টি বড়ি ১ গ্লাস পানি নিয়ে বিশেষ খেয়ে দিন</p>  <p>বড়ি খাবার তারিখ: / /</p>	<p>পার্শ্ব প্রতিক্রিয়া</p> <p>• অনেক মহিলাদের কোন পার্শ্বপ্রতিক্রিয়া হয়না। তবে কাঁচো কপোৎসর্গ, শীত শীত ভাব, বমির ভাব, বমি বা লাতলা পায়খানা হতে পারে।</p>
<p>ফলোআপ</p> <p>ডাক্তার চিকিৎসা সফল হয়েছে কিনা সে সম্বন্ধে চিকিৎসা পরের ৭ দিন পরে অবশ্যই আপনার হাসপাতালে ফিরে আসবেন।</p> <p>ফলোআপের তারিখ: / /</p>	<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">  <p>বমির ভাব</p> </div> <div style="text-align: center;">  <p>ছুট/শীত শীত ভাব</p> </div> </div>
<p>বড়ি খাবার পরে কি খটবে</p> <p>স্বাভাবিক লক্ষণ</p> <p>মিসোপ্রোস্টল ডাক্তারের সার্বক্ষণিক নজর।</p> <p>বড়ি গ্রহণ করার পরে:</p> <ul style="list-style-type: none"> • মলিক্রমে মতো বাল্যায় হতে পারে • যেটি যেটি প্রকৃত লক্ষণ (শরীর এর স্বাভাবিক) • যা লক্ষণ অংশ যাওয়া স্বাভাবিক • ৪ ঘণ্টার বাল্যায় ২ থেকে ১০ দিন পর্যন্ত হতে পারে • মলিক্রমে লক্ষণীয় সময়ের মধ্যে কমেতে <p>মোটকভাবে ৭২ ঘণ্টা পর্যন্ত।</p>	<p>মেশীকরণ পার্শ্বপ্রতিক্রিয়া খটবে কয়েকদিন</p> <p>মতো ক্রমশে আপনাকে ভাল হয়ে যাবে</p> <p>• কমেতে কাঁচা, ছুর বা শীত মতো ২০০ ১টি পার্সোনাল বডি হলে গ্রহণ পরিমাণ পানি পান করুন এবং বিশ্রাম নিয়ে ভালো হতে আসবেন।</p>
<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">  <p>রক্তস্রাব</p> </div> <div style="text-align: center;">  <p>ডাকশেটে বাঁধা</p> </div> </div>	<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">  <p>নিশ্রাম</p> </div> <div style="text-align: center;">  <p>গরুর পরিমাণ পানি পান</p> </div> </div>




Appendix 9. Misoprostol in Post abortion Care (Back)

গর্ভপাত পরবর্তী সেবা


বিপদ জনক লক্ষণ

কীভাবে লক্ষণ হলি দেখা দিলে সাথে সাথে হাসপাতালে চলে আসবেন

- অতিরিক্ত রক্তস্রাব (যদি ঘণ্টায় ২ বাসের বেশী ব্যাপক রক্তস্রাব থাকে অথবা ১৫-২০ গারবর্ট ২ ঘণ্টা পর্যন্ত স্থায়ী হয়।)
- দুগ্ধের পরে কপি কপি করে পথে যদি ১ দিনের বেশী ব্যথা থাকে বা পরবর্তীতে জ্বর হয়।
- তলপেটে প্রচণ্ড ব্যথা (যদি পারাসিটামল খেয়ে বিশ্রাম নিয়ে বা গরম সেক দিয়ে বাধা না পড়ে)
- অস্বস্তি অনুভব হোক করলে




	অতিরিক্ত রক্তস্রাব	১
	দুগ্ধ	২
	তলপেটে প্রচণ্ড ব্যথা	৩





সকলই জরুরি যোগাযোগ ও হাসপাতালের ঠিকানা



সঠিক অনুশাসিত পদ্ধতি

- গর্ভপাতের পর পুনরায় গর্ভধারণ হতে পারে।
- তাই সঙ্গে সঙ্গেই অনুশাসিত পদ্ধতি গ্রহণ করতে হবে।
- মিসোপ্রোস্টল বডি ছাড়ার সময়ে একই সাথে অনুশাসিত পদ্ধতি গ্রহণের চরম পর্যায়ে পড়বে।

মনে রাখুন

মিসোপ্রোস্টল বডি ছাড়ার ও গর্ভপাতের সময়সীমা

আপন ৮টি সময়কাল মনে রাখুন।

১. আপনি আপনি গর্ভপাত পরবর্তী অনুশাসিত পদ্ধতি গ্রহণের সময় বাওয়া এই অনুশাসিত পদ্ধতি। মিসোপ্রোস্টল বডি খেয়ে ৩০-৪০ মিনিট পরে পড়া যাবে।
২. মিসোপ্রোস্টলের (২০০ মাইক্রোগ্রাম ৩টি বডি ১ গ্রাম পানি দিয়ে গিলে খেয়ে নিল।
৩. এই বডিগুলি খেয়ে ২-৪ ঘণ্টার মধ্যে পড়া হবে।
৪. মিসোপ্রোস্টল খেয়ে ১২-২৪ ঘণ্টার মধ্যে পড়া হবে।
৫. পানি বা দুগ্ধ উপরন্তু পানি পারসিটামল ১ টি বডি খেতে পারবেন।
৬. মিসোপ্রোস্টল খেয়ে ২৪ ঘণ্টার মধ্যে পড়া হবে।

- ১. মিসোপ্রোস্টল খেয়ে
- ২. বডি খেয়ে ২৪ ঘণ্টার মধ্যে পড়া হবে।
- ৩. মিসোপ্রোস্টল খেয়ে ২৪ ঘণ্টার মধ্যে পড়া হবে।

৭. আপনি গর্ভপাত করলে বা গর্ভপাত অনুশাসিত পদ্ধতি গ্রহণ করলে।
৮. মিসোপ্রোস্টল খেয়ে ২৪ ঘণ্টার মধ্যে পড়া হবে।