NESOG Clinical Practice guidance

for management of

Reproductive Health during COVID-19 pandemic

Version 1.0

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Preface

It is our pleasure to share with you this document **"NESOG clinical practice guidance for management of reproductive health during Covid-19 pandemic"** prepared by NESOG.

This guidance aims for the management of reproductive health of women in this challenging situation of Covid-19 pandemic. It focuses mainly on necessary arrangements and adaptations in existing healthcare facilities for all maternity care including routine antenatal care, intrapartum care, postnatal care, postpartum and neonatal care, discharge, and advice for COVID-19 suspected/infected women. Besides, it will also give a brief guidance for provision of contraceptives and family planning, safe abortion services, gynecologic oncology care, subfertility treatment as well as infection prevention and control guideline for gender-based violence in this period of crisis.

All women, with suspected, probable, or confirmed COVID-19, including women in isolation or quarantine, should have access to woman-centred, respectful skilled care, including obstetric, and neonatal care, as well as all aspects of gynecological care. Reproductive health care providers also have the right to full access for all personal protective equipment (PPE), sanitation and a safe and respectful working environment.

The purpose of developing this comprehensive document is to help reproductive health care providers with proper evidence-based guidelines to keep our clients and service providers safe while providing quality care.

The recommendations included in the current document should be viewed as suggestions and may need to be adjusted within each health facility based on the local national guidance, needs, resources, and limitations. It should therefore be considered in conjunction with other relevant national guideline like " Interim Guidance for RMNCH services in COVID 19 Pandemic" issued by Family Welfare Division, Department of Health Services, Ministry of Health and Population and also the international guidelines like WHO, FIGO, RCOG, AOFOG, SAFOG and so on.

This is the first version and it will be updated periodically to incorporate latest evidence and recommendations. Every constructive comment and feedback on this document is most welcome.

On behalf of NESOG I would like to acknowledge all contributors who worked very hard to bring up this comprehensive document. The contributors are:

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Content

Abbreviations

AFI: Amniotic Fluid Index
ANC: Antenatal Care
ANM: Auxiliary Nurse Midwife
ART: Assisted Reproductive Therapy
BD: Twice a day
B HCG: Beta Human Chorionic Gonadotropin
BTL: Bilateral Tubal Ligation
CCRT: Concurrent Chemoradiotherapy
CIN Cancer in-situ
COVID-19: Corona Virus Disease 2019
CBC: Complete Blood Count
CT: Computed Tomography
CVS: Cardiovascular System
DM: Diabetes Mellitus
DNR/DNI: Do Not Resuscitate/Do Not Intubate
EBRT: External Beam Radiation Therapy
EIN: Endometrial Intraepithelial Neoplasia
EMACO: Etoposide, MTX, ACT-D, Cyclophosphamide, and Vincristine
EMA/EP: Etoposide/ methotrexate/actinomycin D/etoposide/cisplatin
ECOG: Eastern Cooperative Oncology Group
FP: Family Planning
FCHV: Female Community Health Volunteer
GBV: Gender Based Violence
G-CSF: Granulocyte Colony-Stimulating Factor
GCT: Glucose Challenge Test
GTD: Gestational Trophoblastic Disease
GTN: Gestational Trophoblastic Neoplasia
HBV: Hepatitis B virus
HCW: Health Care Worker
HIV: Human Immunodeficiency Virus
HSIL: High-grade cervical disease
IgG: Immunoglobulin G
IgM: Immunoglobulin M
IM: intra-muscular
IP: Infection Protocol
IPAC: Infection Prevention and Control
IUCD: Intrauterine Contraceptive Device
IUI: intrauterine Insemination
IVF: In Vitro Fertilisation
LEEP: Loop Electrosurgical Excision Procedure
LR: Labour Room
LSIL: Low-grade cervical disease

MoHP: Ministry of Health and Population
NESOG: Nepal Society of Obstetrics and Gynecology
MA: Medical Abortion
MIS: Minimal Invasive Surgery
MVA: Manual Vaccuum Aspiration
NGO: Non Governmental Organization
OCMC: One-stop Crisis Management Centre
OCP: Oral Contraceptive Pill
OT: Operating Theatre
PAC: Post abortion Care
PCR: Polymerase Chain Reaction
PEP: Post exposure Prophylaxis
PO: Per Oral
PPE: Personal Protective Equipment
PPH: Postpartum Hemorrhage
PPT:
PSTT: Placental site trophoblastic tumor
RDT: Rapid Diagnostic Test
RT: Radiotherapy
RT-PCR: Reverse Transcriptase Polymerase Chain Reaction
SAS: Safe Abortion Services
SARS-COV-2: Severe Acute Respiratory Syndrome- Corona Virus 2
SLN: Sentinel Lymph Node
STI: Sexually Transmitted Infection
TT: Tetanus Toxoid
UPT: Urine Pregnancy Test
USG: Ultrasonography
VDRL: Venereal Disease Research Laboratory test
WHO: World Health Organization
WOG: Weeks of Gestation

1 Objectives of this guidance

i. To provide evidence-based guidance in the management of all aspects of reproductive health of women during COVID-19 pandemic
ii. To standardize the management protocol in COVID -19 infection during pregnancy
iii. To maintain the safety of clients, patients, and all service providers by following the safety rule and precautions

Users of this Guidance

i. Specialist, doctors, nurses and other healthcare providers working in Obstetrics and Gynecology who are directly involved in providing RH service of women with COVID-19
ii. Program personnel who are involved in the prevention of COVID-19 in pregnancy
iii. Health care managers and policymakers for the planning and implementation of plans, operations, program activities
iv. Postgraduate Residents, Medical and nursing students for uniformity in the working knowledge and practice

2 Introduction

Novel coronavirus (SARS-COV-2) is a new strain of coronavirus causing COVID-19, first identified in Wuhan City, China. Most cases of COVID-19 globally have evidence of human to human transmission. There are two routes by which COVID-19 can spread. The first is directly through close contact with an infected person (within 2 metres) where respiratory secretions can enter the eyes, mouth, nose, or airways. This risk increases the longer someone has close contact with an infected person who has symptoms. The second route is indirectly via touching a surface, object, or the hand of an infected person contaminated with respiratory secretions and subsequently touching one's mouth, nose, or eyes. The limited data available do not indicate that pregnant women are more likely to contract the infection than the general population. Pregnant women with co-morbidities, like the general population with similar comorbidities are at increased risk for severe illness. Pregnancy itself alters the body's immune system and response to viral infections in general, which can occasionally cause more severe symptoms. This is also applicable for COVID-19.

With respect to vertical transmission (transmission from a woman to her baby antenatally or intrapartum),emerging evidence now suggests that vertical transmission is probable. However, the proportion of pregnancies affected and the significance to the neonate has yet to be determined. Two reports have published evidence of IgM for SARS-COV-2 in neonatal serum at birth. Since IgM does not cross the placenta, this is likely to represent a neonatal immune response to in utero infection or possible early infant infection attributable to postnatal contact with infected parents or caregivers. Previous case reports from China suggested lack of definitive evidence regarding in utero infection.SARS-CoV-2 testing on amniotic fluid, cord blood, neonatal throat swabs, placenta swabs, genital fluid and breastmilk samples from COVID-19 infected mothers mostly tested negative for the virus. One documented case, however, reported findings supporting the evidence of congenital infection. The neonate was not in contact with vaginal secretions, membrane was intact before birth, and there was

absence of skin-to-skin contact with the mother before nasopharyngeal swab collection. Laboratory findings of the neonate revealed positive SARS-CoV-2 testing on nasopharyngeal swab, neonatal plasma, neonatal stool, and placental swab. SARS-CoV-2 genes were not detected in umbilical tissue. Further investigation is still required as the proportion of pregnancies affected and the significance to the neonate has yet to be determined.

Current data and case reports do not demonstrate a convincing relationship between infection and increased risk of miscarriage or second-trimester loss in relation to SARS-CoV-2.There is no evidence currently suggesting teratogenesis of the virus or increased severe maternal morbidity or mortality. There are case reports of preterm birth in women with COVID-19, but it is unclear whether this was iatrogenic in every case, or whether some were spontaneous.

This NESOG guidance is developed based on various research studies and relevant published guidelines.

3 Diagnosis of infection and clinical classification

3.1 Testing for COVID-19 in Pregnancy

The criteria for testing non-pregnant persons are applicable to pregnant women. In addition, there are some special criteria for testing with regard to pregnancy.

- Individuals with signs or symptoms consistent with COVID-19 should be tested
- Asymptomatic individuals with history of recent travel, contact, exposure, high-risk profession (e.g. healthcare workers, first responders) should be tested.
- Asymptomatic individuals should be tested between 5 to 14 days of exposure to a known contact. Symptomatic individuals with influenza-like illness from hotspots should be tested by RT-PCR (within 7 days) or serology (after 7 days).
- Pregnant women residing in cluster/containment areas or large migration gatherings/evacuees centre from hotspot districts presenting in labour or likely to deliver in the next 5 days should be tested even if asymptomatic.
- There is no recommendation for testing every pregnant woman
- Test methods and facilities – presently the RT-PCR test from the nasopharyngeal swab is used for diagnosis.
- Other investigations– supportive investigations include blood studies for infection and systemic assessment and imaging by X-ray or CT scan chest with abdominal shielding.
- Quarantine for pregnant women – should be followed as per the general population depending on contact tracing or diagnosis.

3.2 Clinical classification

The definition of case, contact and suspect according to WHO is presented below. The same has been integrated into the guidelines given by the Ministry of health and population, Nepal with few minor additions.

Suspect case

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 location

reporting community transmission of COVID-19 disease during the 14 days prior to symptom onset
OR
A patient with an 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
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
OR
A healthcare worker who provides direct care to patients and has developed fever OR cough OR shortness of breath
OR
A patient with fever or signs/symptoms of respiratory distress (cough or shortness of breath) without an alternative explanation/diagnosis to the person's symptoms/signs (such as congestive heart failure exacerbation, scrub typhus, malaria, urinary tract infection, etc)

Probable case
A suspect case for whom testing for the COVID-19 virus is inconclusive
OR
A suspect case for whom testing could not be performed for any reason

Confirmed case
A person with laboratory confirmation of COVID-19 infection by reverse transcriptase polymerase chain reaction (RT-PCR), irrespective of clinical signs and symptoms.

Contact
Contact is a person who experienced any one of the following exposures during 2 days before and 14 days after the onset of symptoms of a probable or confirmed case:

i. Face-to-face contact with a probable or confirmed case within 1 meter and for more than 15 minutes
ii. Direct physical contact with a probable or confirmed case
iii. Direct care for a patient with probable or confirmed COVID-19 disease without using proper personal protective equipment
iv. Other situations as indicated by local risk assessments

4 Arrangements in existing Healthcare Facilities for all maternal care

The impact of the COVID-19 pandemic on acute care services in settings with under-resourced health systems is likely to be substantial. Maternity services should continue to be prioritized as an essential core health service. Prevention of disease transmission is the number one policy and the following recommendations can be implemented during routine care at the time of COVID-19 pandemic. The purpose of the recommendations is to help limit the unnecessary exposure of pregnant women to the healthcare system and general population as well as to

minimize the exposure and risk to the health care workers. All these should however ensure that services are provided in a respectful and safe manner, maintaining confidentiality and privacy of patients.

COVID and non-COVID facilities need to be distinguished from each other. Comprehensive maternity services should be available at COVID hospitals. COVID positive mothers should be delivered in a separate and dedicated Labour Room (LR) and Operation Theatre (OT). In the case of an emergency, where these facilities are not available, the LR and OT should be properly fumigated. Non-COVID hospitals need to make changes such as triage, checklist, and referral pathways to minimize accidental infection transmission risk.

- Maternity care providers (including midwives and all other health care workers providing maternal and newborn care), whether based in health facilities or within the community, are essential healthcare workers. They must be protected and prioritized.
    - Maternity care providers have the right to full access to all personal protective equipment (PPE), sanitation, and a safe and respectful working environment. Maintaining a healthy workforce will ensure ongoing quality care for women and their newborns; without healthy midwives and other maternity care providers there will be limited care for women and newborns.
- Triage and screening of all women for symptoms of COVID-19 before entering the facility. Anyone with history and/or symptoms suggestive of COVID-19 should be treated as positive unless proven otherwise by a laboratory test. (refer Triage section)
- Any patient who has mild symptoms should be discouraged to visit hospitals for at least 2 weeks since symptom onset if she has sought an appointment via telephone.
- During in-person visits, social distancing of 1 metre should be practiced at the waiting area.
- Attendance of support person such as partners/friends/children should not be allowed unless necessary (e.g. they are an important part of decision making).
- Triage and screening of the attending support person for symptoms of COVID-19 should be done.If the visitor has symptoms of COVID-19, she/he should not be allowed in the patient care area.
- Touching eyes, nose, and mouth should be discouraged to patients as well as providers.
- All components of routine care should be provided with the concept of ‘one-stop’ contact by combining services such as ultrasonography, blood and other tests, medication and vaccination administration at the same as other face-to-face maternity appointments to prevent women from returning frequently. Enough supplies of folic acid, iron, and calcium supplements should be ensured to prevent return for refills.
- The involvement of as few health care workers as necessary is to be encouraged. Unnecessary involvement of students (medical/nursing) and trainees is to be discouraged to avoid overcrowding. Duty allocation and duration of the shift should be regulated.
- To reduce transmission through fomites by disinfecting them, all non-essential items should be removed from the consultation rooms.
- Surfaces used by patients/staff should be sprayed with a cleaning product (0.5% sodium hypochlorite) and wiped with a clean cloth in between patients (areas designated for COVID

suspected cases) or at least twice a day, followed by hand washing or more frequently if obvious contamination is seen.

- Donning and doffing of the PPE should be done using a standard protocol.
- Obstetric Ultrasound
    - Due to prolonged examination time, small room size and proximity, transmission risk is high with obstetric ultrasound. To reduce the risk, minimum number of probes should be used and thereafter be washed, dried, and disinfected, and ultrasound machines and fomites should be disinfected as well. At the end of the day, the room should be disinfected or fumigated. In a hospitalized woman, bedside ultrasound is preferable.
- Staffing numbers
    - Where there are acute staff shortages, existing systems for recruiting additional staff should be used. Maternity support workers, midwifery students, independent midwives, and obstetric team members can be used to support core service delivery.
- The results of investigation reports can be provided by telephone without the patients attending the hospital. To do so, a number from hospital administration needs to be provided to the patient. The report can be forwarded to on-duty faculty afterwards.

4.1 Role of healthcare workers during COVID-19

- All clinicians should utilize Personal protective equipment (PPE)according to the clinical situation with adequate coverage of hands and face to minimize the risk of contracting the virus. Proper technique to wear and remove PPE is essential.
- All clinicians should wash their hands or use alcohol-based sanitizer (60-70% alcohol concentration).Practice the 5 moments of hand hygiene.
    - before physically examining a patient,
    - before clean/aseptic procedures,
    - after body fluid exposure/risk,
    - after physically examining a patient, and.
    - after touching patient surroundings.
- While taking a history, counseling and enquiring, patient should be at least 1 metre away from the provider. Both pregnant women and provider should be wearing a mask.
- The area designated to physical assessments should be separated from the area designated to discussion/enquiry/counseling.
- An examination should be quick to limit the time during which patient and provider are within 1 metre of distance.
- Clinical examination should be the same as in normal routine care, but extra attention should be given to infection prevention and control measures.
- Unnecessary exposure during physical examination like checking for pallor in the tongue may be omitted by looking at palmar creases or nail bed instead. Similar modification in physical examination may be done at one's discretion e. g. chest/CVS auscultation may be avoided unless the patient has suggestive symptoms or can be referred to a physician.
- Regardless of the type of contact, ALL women need to have:
    - Assessment for, and information on, possible COVID-19 symptoms
    - If women report symptoms or contact with suspected/confirmed COVID-19 positive individuals, provide country-specific information on mandatory self-isolation, and advise

phone contact or rescheduling where possible (if urgent need, follow Facility/Country recommendations for seeking care)
    - Information on Danger Signs in pregnancy and Birth Preparedness discussion
        - Danger Signs include excessive vomiting, severe abdominal pain, fainting attack, vaginal bleeding, watery discharge before onset of labor, absent fetal movement, severe headache, dizziness, epigastric pain, blurring of vision, convulsions or any other emergencies.
    - Ongoing pregnancy risk assessment – including emotional wellbeing and personal safety
    - If the risk assessment identifies potential or actual complications, more frequent contacts need to occur, and these may need to be face-to-face
    - Adequate documentation of care provision to ensure appropriate care planning
- Assessment of Pregnant women (not in labour)
    - Recognizing the critically ill woman – Most women will not need hospitalization or critical care. Tachypnoea (>30/min), hypoxia (SpO2 < or = 93%) and imaging showing > 50% lung involvement indicates a need for critical care.
    - Medical management and drugs used in the treatment of COVID-19 infection in pregnancy

4.2 Triage

Triage is the assignment of degrees of urgency to decide the order of treatment of patients along with proper place of treatment. This guideline is to triage pregnant women in the context of COVID-19 pandemic.

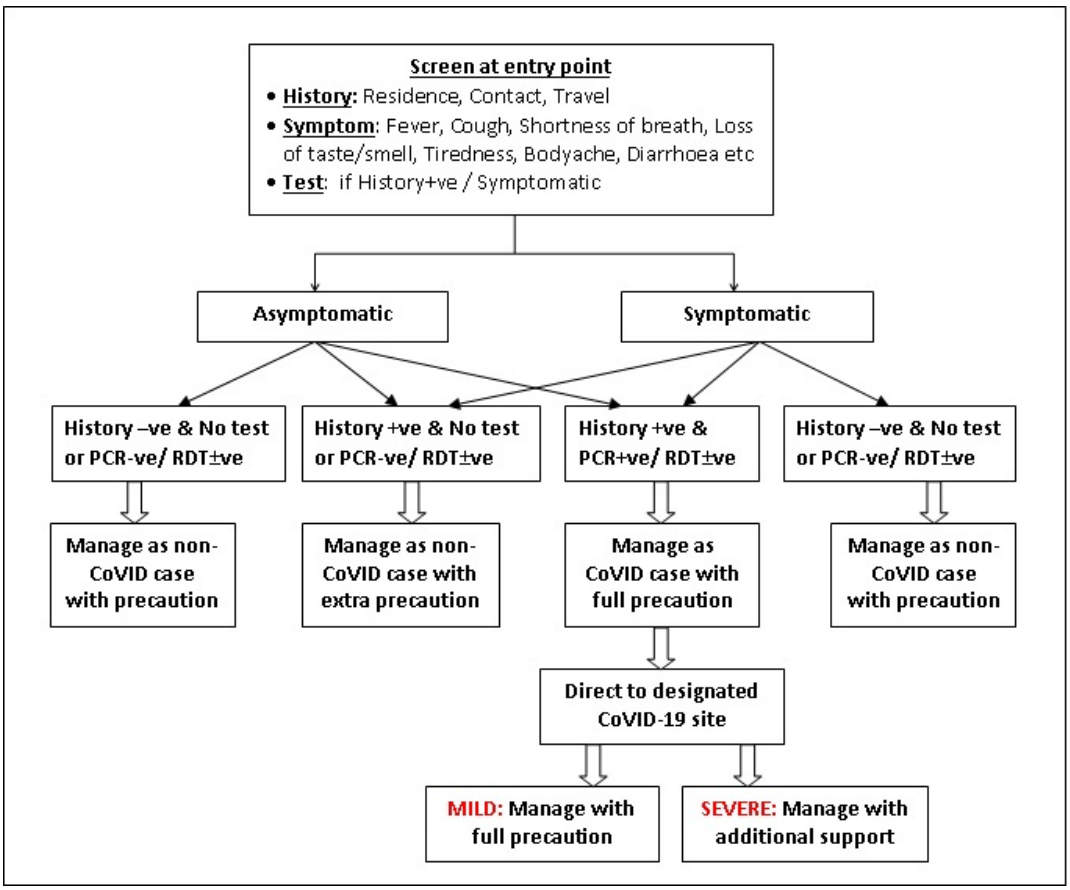
- Hospitals should have a checklist in the triage section so that suspected and confirmed cases can be managed separately or referred to a COVID-designated hospital.
    - COVID-19 Screening Checklist Tool in Triage Section
        i. Do you have a fever or had a fever past one week? (Check the temperature with a thermal gun)
        ii. Do you have features of respiratory disease (runny nose, altered smell sensation, blocked nose, cough, sore throat, difficulty in breathing, or feeling breathless)?
        iii. Have you travelled interstate or internationally in the last 14 days?
        iv. Do you reside in hotspot/containment area/cluster/with migrants/with evacuees from such areas?
        v. Have you been in contact with a person who is confirmed or is suspected to have to have COVID-19 infection?
        vi. Have you been hospitalized in the last 14 days?
        vii. Do you have any referral documents with you?
        viii. Do you have any medical disorder?
        ix. Are you a healthcare provider who has been to work in the last 14 days?

- To minimize contact between infected and non-infected women, after triage, women should be allotted into one of the three zones depending on the presentation determined by the checklist.

Zone	Criteria	Action
Clean	No signs/symptoms of COVID-19 No contact/exposure to infected persons No residence in hotspot or travel history	Send patient to emergency ward
Suspicious	Signs/Symptoms of COVID-19 Contact/ exposure to infected persons Residence in hotspot/ Travel abroad in last 14 days	Send patient to pre-designated isolated area or separate ward or hospital depending on hospital protocol Manage patient with PPE equipped HCW
Confirmed	Positive for COVID-19 as validated by tests	Send patient to pre-designated isolated area or COVID dedicated hospital Manage patient with PPE equipped HCW

- What patients do on arrival?
  - Inform/call healthcare providers about location, history of contact/travel, or symptoms.
  - Wear a facemask
  - Notify at the triage registration desk
  - Wash hands at the entrance with soap and water or alcohol-based hand rub
  - Carry paper or fabric tissues to cover mouth or nose
  - Dispose of paper tissues after coughing or sneezing in trash immediately
  - Maintain a social distance of at least 1 meter
- What healthcare facilities can do?
  - Establish a hotline call/chat/Telemedicine/Mass awareness program
  - Clear signs at entrance directing to the Registration desk and screening/treatment area
  - Registration desk with glass/plastic screen: thermal gun, hand hygiene station, waste bin
  - Post visual alerts at entrance/waiting and treatment area
  - Designate administrative and clinical staffs with appropriate PPE
  - Use case defining questionnaire/algorithm to identify suspected patients
  - Designate treatment area for suspected/positive patients, preferably negative pressure area
  - Disinfect triage area twice a day with 0.1% chlorine (0.5% for body fluid spill) or 70% alcohol
  - Test: Antigen test (PCR) for suspected and if feasible Antigen or Antibody test for non-suspected patients

- Treatment strategy
  - Minimize antenatal care (ANC) visit: 12w, 20w, 30w, 36w: then 41w or labor or complications
  - Combine ANC visit with essential tests
  - Cancel or postpone non-urgent visits
  - Handle all obstetric and gynecological emergencies and complications
  - Balance care scientifically and logistically
- Treating team
  - A team consists of doctors, nurses, and attendants
  - At least 3 teams with a minimum number of service providers at a time
  - One team for one week, then 2 weeks rest/quarantine at low obstetric load institution
  - One team for once or twice a week, then 2 weeks rest/quarantine at high obstetric load institution
- Companion: No companion at high obstetric load center or one companion with a negative report
- Training/instruction
  - To follow standard IPAC precaution (Universal precaution)
  - To follow PPE donning and doffing steps
  - To test/report appropriately
  - To ensure environmental cleaning



Algorithm to triage OB-GYN service delivery

KEY POINTS

- Triage and screen all women for symptoms of COVID-19 before entering the facility
- Limit the number of women attending clinics each day through telephonic patient interaction prior to in-person appointments
- Ensure all women have masks and avoid shared waiting areas
- Limit attendance of support person such as partners/children (at AN contacts)
- Keep patients at a minimum of 1-meter distance while taking history and during other communications
- Keep consultation time as short as possible without compromising the quality
- Wash hands before and after examining each patient
- Provide a 'one-stop' contact by combining in-person appointments such as ultrasound scans, medication administration, blood and other tests at the same time as other face-to-face maternity appointments to prevent women from returning frequently
- Disinfect clinic fomites and disinfect/fumigate room at the end of the day
- Use telemedicine where appropriate

5 Guidance for Routine Antenatal Care

Limited data are available on the impact of COVID-19 in pregnancy, but the studies published to date do not show an increased risk of miscarriage, severe maternal morbidity or mortality, or substantial risk to the newborn. Congenital infection is possible but there has been no definitive evidence, and the virus has not been detected in expelled products of conception. Given the information aforementioned, planning or termination of pregnancy should not be primarily based on these concerns.

Maternity care is vital, with studies reporting increased risk of stillbirth, maternal death and perinatal outcomes associated with lack of antenatal care services. Aim of this guideance is to ensure maternity care providers can deliver respectful and individualized antenatal care services that promote the safety of women, families, and health professionals during the COVID-19 pandemic.

- Adjustments to the standard antenatal care schedule may occur so that some antenatal appointments are conducted using telehealth, which is virtually by phone or video chat (remote contact), to ensure that there is no disrupted service in women's maternity care. Midwives and other key providers of antenatal care will need to use clinical judgement in deciding which women may be suitable for an alternate schedule of face-to-face care (contacts) that includes remote AN contact.
- Antenatal visits should be kept to a minimum i.e.
  - 1st booking visit in first-trimester routine antenatal investigations should be sent and a dating scan should be done for fetal viability and wellbeing.
  - 2nd visit around 20-22 weeks for an anomaly scan; GCT can be done at the same time; deworming and the first dose of TT given.

- 3rd visit at 37 weeks to assess the fetal condition, growth, presentation, AFI, etc; second dose of TT given.
- 4th visit at 40 weeks for examination and fetal heart rate monitoring.
- 5th visit at 41 weeks if she does not go into labor. Induction of labor will be decided after assessment.

- The number of women attending clinics each day should be limited. Groups of more than 20 patients coming for antenatal care should be discouraged. This can be done by the following ways.
  - Setting appointment for antenatal visits on the basis of patient interaction over the telephone.
  - Limiting the number of antenatal visits from 8 visits (as advised by WHO) to 4 - 5 visits in case of a low risk pregnancy.
  - Postponing any elective or non-urgent visits.
  - Increasing the number of remote antenatal visits by telehealth for minor pregnancy ailments.
  - Moving antenatal clinics from hospital environments to the community and/or where possible, recommending a route to the antenatal clinic that bypasses emergency or designated Fever Clinics.
  - Encouraging delivery of healthcare through telehealth that involves the use of telecommunications and virtual technology. In-person visits should be planned only when a physical examination is necessary or if a pregnant woman develops danger symptoms.

Use of personal protective equipment (PPE) in Antenatal clinic for coronavirus disease (COVID-19)

Screening	Targeted personnel	Activity	Type of PPE
Screening/triage Health care	Health care worker	Preliminary screening not involving direct contact	Maintain a physical distance of at least 1 metre. Ideally, build a glass/plastic screen to create a barrier between health care workers and patients No PPE required When the physical distance is not feasible and yet no patient contact, use a mask and eye protection. Perform hand hygiene
Consultation room	Health care worker	Physical examination of patients without symptoms suggestive of COVID-19	PPE according to standard precautions and risk assessment. Perform hand hygiene Surgical mask Gown Gloves
	Health care worker	Physical examination of patients with symptoms suggestive of COVID-19	Medical mask Waterproof Gown Gloves Eye protection Perform hand hygiene
	Cleaners	After and between consultations with patients with respiratory symptoms.	Medical mask Gown Heavy-duty gloves Eye protection (if the risk of splash from organic material or chemicals). Closed work shoes Perform hand hygiene

6 Guidance for Routine Intrapartum Care

Standard intrapartum care is the right of every pregnant woman for a comfortable and safe birthing experience. All women should be treated with compassion, dignity, and respect. Decisions regarding the mode of delivery, pain relief, mobility during labour, and thechoice of birth position should be discussed. Routine infection control precautions as mentioned in the arrangements in healthcare facilities for all maternal care need to be instituted during labour and birth.

- Selective screening with RT-PCR test should be considered for patients with respiratory symptoms but universal screening should be considered in high prevalence areas to all women in labour or those undergoing cesarean section for obstetric indications.
- Labour room preparedness should be present with easy access to sufficient PPE supplies (masks, gloves, goggles, gowns, hand sanitizer, soap and water, cleaning supplies).
- Continuous support by a known asymptomatic birth companion should be allowed during labour and deliver for its known beneficial outcomes. The birth companion should also be wearing a face mask.

6.1 First stage of labour

- Oral administration of water and clear fluid should be encouraged as tolerated. When intravenous fluid is given, conscious use is advised at not more than 125ml/hour of 5% dextrose. Upright posture is advised for the first stage in the absence ofregional analgesia.
- Oxytocin augmentation is recommended to shorten labour delivery interval in the first stage of labour.
- Mobility during labour should be considered whenever possible if social distancing could be maintained.
- The use of high flow oxygen with nasal prongs or face masks during labour for fetal indication should be suspended. However, it may be considered for maternal indication.
- Labour analgesia should be instituted; type determined according to feasibility and availability. Nitrous oxide for labour analgesia should not be used as it is a potentially aerosol-generating procedure.
- Epidural analgesia is preferred as it mitigates the risk of general anesthesia involving intubation in the event of urgent cesarean section.

6.2 Second stage of labour

- Pushing should not be delayed.
- Birth position of choice should also be considered.
- Water birth should be discouraged.
- Delayed cord clamping should be advocated due to lack of evidence of vertical transmission to newborns.
- Neonatal resuscitation corners should be kept 2 meters away from the delivery table. Standards and precautions for infection prevention in this area should be the same as for an adult.
- Patients will be exerting extreme effort during the second stage of labour – breathing forcefully, shouting, coughing, or vomiting, putting the healthcare team at risk. Asymptomatic patients in labour and delivery can infect frontline workers. If possible, universal screening of all women in labour should be instituted. When not possible full PPE

(gown, gloves, surgical mask/face shield, N-95 mask) should be used for all patients in the second stage of labour.

- Cesarean section and PPH management are taken as potentially aerosol-generating events. Therefore, full PPE should be used for the same in all cases until universal screening is available.
- Fever developing during the intrapartum period should be vigilantly taken. Development of COVID-19 symptoms after admission should be considered, however, other obstetric causes of fever should also not be overlooked.

Recommendations for cleaning and disinfection

Item	Solution and Procedure	Frequency
Floor	0.5% chlorine solution (e.g. sodium hypochlorite or equivalent disinfectant)	Every 6-8 hours in non-critical areas Every 3-4 hours in critical areas
All high touch surfaces in areas with COVID-19 patients (e.g. door handles, light switches, bed & handrails, toilet bowls, tap knobs, etc)	0.5% chlorine solution (e.g. sodium hypochlorite or equivalent disinfectant)	Every 3 to 4 hours
Spillage of blood or bodily fluids	Confine the spill and wipe it up immediately with absorbent (paper) towels, cloths, or absorbent granules (if available) that are spread over the spill to solidify the blood or body fluid (all should then be disposed of as infectious waste). Clean and disinfect the area with 1% sodium hypochlorite	As soon as spillage occurs
Reusables: utility gloves, heavy-duty gloves, plastic aprons, goggles/visors, boots	Drop in a bucket with soap and water then Decontaminate with 0.5% chlorine solution after each use.	After each use, ideally, all items should be designated and labeled with the user's name
Soiled linen/laundry	Soak laundry, linen in hot water and soap in a large bucket/drum, use a stick to stir, avoid splashing Empty the bucket of water, then soak linens in 0.05% chlorine for 30 minutes Rinse and dry in sunlight	When linens soiled, after each patient use

6.3 Management of laboring women with suspected/confirmed COVID infection

- Hospitals should have separate delivery rooms and operation theatre where intrapartum care can be provided in an isolated safe environment with minimum staff.
- Sufficient supply of the instruments, resources and PPE must be present in the labour room.
- Visitors should not be allowed into the delivery room.
- Airconditioning in labour room and operation room has to be switched off to prevent the spread of the virus into the atmosphere.
- The rooms should have negative air pressure, if possible, to limit the spread of infection.
- Neonatal resuscitation table must be at least 2 metres away from delivery or OT table.
- All the multidisciplinary teams involved must be pre-informed about the patient.
- Use Category II PPE as per to MoHP PPE guidelines.
- PPE must be changed with every patient.
- Proper donning and doffing must be practiced with all the staff who come in contact with the laboring woman.
- Provide mask to the laboring women and educate on infection prevention practices like hand and respiratory hygiene.
- Limit patient interaction with non-essential staff and visitors.
- All surfaces should be cleaned/disinfected thoroughly after any contact by the patient or staff.
- Women with severe respiratory symptoms requiring respiratory support should be stabilized and transferred to designated COVID hospitals.
- Women with moderate-severe symptoms of COVID-19 should be monitored using hourly fluid input-output charts, and efforts targeted towards achieving neutral fluid balance in labor, to avoid the risk of fluid overload.
- For a woman in preterm labor or where preterm birth is anticipated, antenatal corticosteroids should be used as routine.
- Routine tocolytics should be avoided in cases of preterm labor.
- The presence of infection is not an indication of delivery.
- The pregnant woman with COVID-19 infection can be allowed to labor and indications for interventions should follow the standard obstetric practice.
- Cut short the second stage of labor if possible.
- Caesarean section to be conducted only if there is any indication.
- Caesarean section should be done under regional anesthesia as far as possible.

7 Guidance for postnatal period

The precautions that the puerpera and the newborn should take at the time of this outbreak are the same as that of the general population. However, considering that they are at increased risk of acquiring infection and keeping the cultural and social traditions in mind the following recommendations are given below. Routine infection control precautions as mentioned in the arrangements in healthcare facilities for all maternal care need to be instituted.

- Discharge patients early from the hospital – 6 hours after an uncomplicated vaginal delivery and 2 days after an uneventful cesarean section.
- Limitation of visitors and support persons for care. It may be suggested to have the same support person throughout if possible.
- To limit the exposure to health care workers – reorganizing ward rounds with minimum health care workers.
- Inquiry for danger symptoms, newborn danger signs, and COVID-19 symptoms at the time of assessment should be done in the ward.
- If the woman has symptoms suggestive of COVID-19, temporary isolation of the newborn should be done.
- If the newborn is in the same room as the mother in such cases, the curtain should be placed between mother and baby or baby may be kept about 2 meters away from the mother.
- Respiratory hygiene and hand hygiene should be maintained at all times.
- Women may choose to nurse her baby, but respiratory and hand hygiene should be incorporated.
- Breastfeeding may be continued – direct or expressed but with full precaution.
- Mental health of the woman should also be considered during inquiry for other symptoms.
- Examination of the patient should be quick and targeted to find out if any complications have developed.
- Follow up visits on day 3 and after 6 weeks postpartum should be advised to be done remotely with telehealth if no danger signs are seen. However, they may be advised to do postnatal visits at 2 weeks in a person taking all general precautions.
- Contraceptive advice should be given and long-acting reversible contraceptive or Depo-Provera should be considered if the patient wished before discharging her to eliminate in-person postnatal visits.

8 Postpartum and neonatal care

Postnatal care is based on years of evidence to keep women and babies safe in pregnancy and birth. Postnatal care should be regarded as essential care and women should be encouraged to attend despite being advised to otherwise engage with social distancing measures. However, with respect to the current situation, postnatal care should be individualized according to a woman and newborn care. Routine infection control precautions as mentioned in the arrangements in healthcare facilities for all maternal care need to be instituted.

- Limit the risk of inadvertent exposure and infection by expediting discharge when both mother and infant are healthy (e.g. discharge on day 1 for women with uncomplicated vaginal birth and day 2 after caesarean births depending on their status after discussion with the pediatric care team).
- Restrict number of visitors as per the hospital policy to ensure the social distancing measures are implemented. Prevent swapping of the postnatal visitors to reduce the risk of transmission to women, their babies, and visitor themselves.

- Reduce in-person visits, particularly for healthy term multiparous women and their babies. Coordinate postnatal care with local health visitors to ensure a smooth transfer of care instead.
- Conduct majority of postpartum visits remotely unless the patients have specific concerns that require in-person examination. Only mothers and newborns with complications should be seen in the postpartum clinic such as:
  - Known psycho-social vulnerabilities
  - Operative birth
  - Premature/low birthweight baby
  - Other medical or neonatal complexities
- Certain concerns like breast, abdominal scars may be assessed over photos or video (where applicable)

8.1 Postpartum care in suspected or confirmed COVID 19 infection:

- Health care professional should follow their healthcare facility's policies and their local state health department policies.
- To reduce the risk of transmission, the patients should be cared for in a separate room.
- The umbilical cord should be clamped promptly, and the neonate should be transferred to the resuscitation area for assessment by the attending paediatric team. However, the guidance recognizes that there is insufficient evidence on whether delayed clamping increases the risk of infection to the newborn.
- Contact precautions and use of PPE should be maintained during the postpartum period until the mother tests negative for COVID-19
- For women who are self-isolating because someone in their household has possible symptoms of COVID-19, appointments should be deferred for 14 days.
- For women who have had symptoms, appointments can be deferred until 7 days after the start of symptoms, unless symptoms (aside from persistent cough) persevere.

8.2 Neonatal care in suspected or confirmed COVID 19 infection:

There is limited evidence to guide the postnatal care of babies of the patient who tested positive for COVID. The women and healthy babies, not otherwise requiring neonatal care, are kept together in the immediate postpartum period.

- Risk-and-benefit discussion should be done with the neonatologist and families to individualize care in the babies who may be more susceptible.
- Infant feeding:
  - There have been reported 13 cases in a systematic review that breast milk tested negative for COVID – 19. However, given the limited cases, this should be interpreted with caution.
  - The main risk of breastfeeding is the close contact between the baby and woman, who is likely to share infective droplets.
  - However, the benefits of breastfeeding outweigh any potential risk of transmission of virus which is also the UNICEF Baby friendly Initiative.
  - The risk and benefits of the feeding choices along with the risk of hold the baby in close proximity should be discussed with the parents
  - Precautions to be taken to limit the viral spread to the baby:

- Considering asking someone who is well to feed the baby.
- Wash hands before touching the baby, breast pump, or bottles.
- Avoid coughing or sneezing on the baby while feeding.
- Consider wearing a fluid-resistant surgical face mask, if available, while feeding or caring for the baby.
- For women bottle-feeding with formula or expressed milk, strict adherence to the sterilisation guidelines is recommended.

9 Discharge and advice for COVID suspected/infected women

- Women or babies requiring a readmission for postnatal obstetric or neonatal care during a period of self-isolation for suspected or confirmed COVID-19 are advised to telephone their local unit ahead of arrival and follow the attendance protocol.
- At the time of discharge from the hospital following a period of care for confirmed COVID-19, which includes the birth of their baby, all women should be prescribed at least 10 days of prophylactic LMWH owing to the increased risk of venous thromboembolism. This should be offered regardless of the mode of birth.
- Families should be provided with guidance about how to identify signs of illness in their newborn or worsening of the woman's symptoms and provided with appropriate contact details if they have concerns or questions about their baby's wellbeing.
- Routine advice about safe sleeping and a smoke-free environment should be emphasised, along with careful hand hygiene and infection control measures when caring for and feeding the baby.
- All families self-isolate at home for 14 days after the birth of a baby to a woman with active COVID-19 infection.
- Follow up of COVID-19 Clients
  - A specialized doctor should be arranged for each discharged patient follow up.
  - First, follow up call should be made within 48hrs of discharge, then 1week, 2 weeks, and 1month after discharge. Follow up calls via phone calls should be made 3mth and 6months after discharge
  - Examinations including liver and kidney function tests, CBC, pulmonary function test or lung CT scan should be reviewed according to the patient's condition.

10 Guidance for Contraceptives and Family planning

Access to effective contraception is one of the most cost-effective interventions to reduce maternal mortality by preventing unplanned pregnancy, thereby protecting an individual's physical and mental health. Ensuring that women have access to contraceptive services also reduces avoidable pressures on the health system to manage the consequences of unintended pregnancy.

- Increase the use of telephone, digital technologies for counseling, and sharing of messages related to safe and effective use of contraception and for selection and initiation of contraceptives.

- Increase family planning counseling during antenatal and postpartum care to reduce the need for return visits to health centers by linking family planning to the ongoing promotion of safe delivery.
- Enable health care workers to provide contraceptive information and services as per national guidelines to the full extent possible.
- Expand availability of contraceptive services (including both information and methods) through places other than healthcare facilities, such as pharmacies, drug shops, online platforms, and other outlets.
- Ensure access to emergency post-coital contraception
- Increase availability and access to the contraceptives which can be used by the client without service provider support.
- Enable access to contraception for women and girls in the immediate post-partum and post-abortion periods when they may access health services.
- Ensure adequate inventory to avoid potential stock-outs at all levels of the health system.
- Prepare advisories for users on how they can access contraceptive information, services, and supplies.
- Monitor contraceptive consumption in your area to identify any potential pitfall and shortage.

Interim Guidance for RMNCH[3]

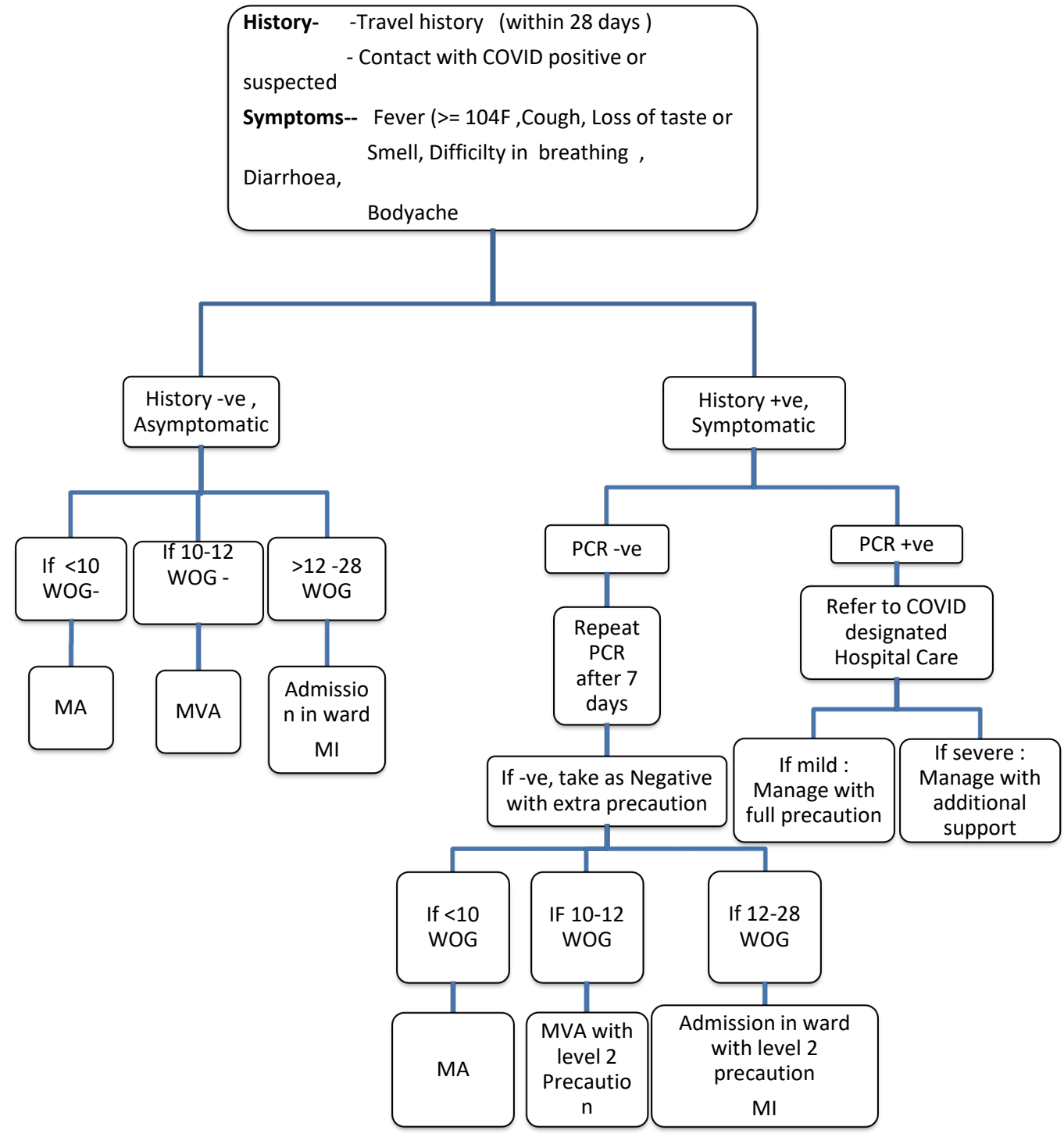
Family planning Method	Regular user	New User
Condom	Continue and provide for 3 months	Counseling over the telephone, provide for 3 months
OCP	Continue and provide for 3 months	After counseling and examination provide for 3 months
Depo Provera	Can continue, decrease contact time, with appropriate infection prevention and PPE	Consult over the phone, decrease contact time, appropriate infection prevention and PPE can be given
IUD/Implant	Can continue, follow up on the telephone, no need for removal after the recommended time, use an alternative method of contraception	Can provide IUCD/Implant with appropriate PPE, follow up over the telephone
Permanent method	Don't do semen analysis post sterilization of male, use alternatives like a condom, OCP for initial 3 months	No vasectomy and minilap during the pandemic. Can do BTL, PPT during C-section

11 Guidance for Safe Abortion Services (1st Trimester and 2nd Trimester)

Abortion is an essential component of comprehensive health care. It is a time-sensitive service as a consequence of which delay of merely days, not only several weeks may increase the risks or potentially make it completely inaccessible. Routine infection control precautions as mentioned in the arrangements in healthcare facilities for all maternal care need to be instituted.

- Abortion services must be maintained in all location, even in circumstances where non-urgent or elective services are suspended.
- Medical consultation with health care professionals can be done via the telephone and measure of telehealth can be utilized where applicable.
- The national abortion protocol in conjunction with policies for infection prevention and control (IPC) and PPE will be strictly followed for all procedures as per the flowchart. This includes the medical abortion (MA), Manual vacuum aspiration (MVA) under local anaesthetic, second-trimester abortion and post abortion care services including post-abortion follow up
- FCHVs will be mobilized to provide information and referral services for SAS including MA.
- Home service / out-of-facility provision of Medical Abortion Services by trained providers from the public OR private sector (including MA trained volunteers from I/NGOs) with the following provisions:
    - Trained provider from public OR private sectors (ANM/Staff Nurse or MA trained volunteers from I/NGOs) would visit the woman at her home on demand and assess gestational age and eligibility, offer complete counseling, obtain consent, assess her ability to understand instructions and record/document the service.
    - He/she will then provide the woman with an MA combi-pack and ask her to take the first dose in his/her presence.
    - The provider will maintain regular contact with the woman throughout the process, provide required guidance on the 2nd dose, and advise her to visit a health facility when required.
    - Mobilize FCHVs as a mediator between the trained service providers and the women seeking MA services as this would minimize the need for women seeking an abortion to visit already overburdened health facilities. In this way, women & girls can be protected from unnecessarily risking themselves to COVID-19 exposure and infection.
- Distance Health Education through digital and call channel – on Safe Abortion Services to clients seeking information, service availabilities, options, drug regimen, and symptoms of complication.
- The service provider/counsellor will provide information ensuring the availability of services in different settings as per the Safe Abortion legal framework of the country and encourage clients to visit public/private service centers.

FLOWCHART


History- -Travel history (within 28 days)
- Contact with COVID positive or suspected
Symptoms-- Fever (>= 104F ,Cough, Loss of taste or Smell, Difficilty in breathing , Diarrhoea,
Bodyache
History -ve , Asymptomatic
History +ve, Symptomatic
If <10 WOG-
If 10-12 WOG -
>12 -28 WOG
MA
MVA
Admissio n in ward
MI
PCR -ve
PCR +ve
Repeat PCR after 7 days
Refer to COVID designated Hospital Care
If -ve, take as Negative with extra precaution
If mild : Manage with full precaution
If severe : Manage with additional support
If <10 WOG
IF 10-12 WOG
If 12-28 WOG
MA
MVA with level 2 Precautio n
Admission in ward with level 2 precaution
MI

12 Guidance for Gynecologic Oncology patients

The COVID-19 pandemic has rapidly and drastically changed the approach and management of various diseases including gynecologic cancers. Nepal Society of Obstreticians and Gynaecologist (NESOG) has developed COVID-19 specific cancer treatment guidelines for doctors and health institutions.

Cancer patients in general are more susceptible to COVID-19 infection not only while in hospital during treatment but also in the community. COVID positive cancer patients were shown to be at a higher risk of severe complications and higher mortality compared with non-cancer patients. Therefore, during the process of providing appropriate cancer treatment, it is crucial to balance the benefit of therapy with the risk of COVID-19 infection and its possible adverse sequelae. Decisions regarding cancer care delivery should be individualized based on locoregional factors for optimal patient outcomes

It is highly recommended to:

- Diagnose cancer in an early stage and prioritize first-line treatment with curative intent.
- For patients provided with non-curative management options, offer palliative therapy at home to reduce risks of hospitalization.
- Home-based maintenance treatment for survival benefit should be considered and weighed against the risks of COVID-19.
- Aim at lowering the risk of infection such as temperature screening of patients, limiting the frequency of infusions and in-person visits.
- Oral therapies, rather than infusion-based treatments, should be considered when possible, and patients should be screened for COVID-19 (based on available testing capacity) before beginning any cancer treatments.

12.1 Frontline considerations in COVID-19 burdened regions

Ovarian cancer:

- Neoadjuvant chemotherapy for ovarian cancer compared with primary surgical debulking can reduce morbidity and reduce the risk of hospitalization over primary surgical debulking especially in high COVID-19 burden areas.
- Delaying interval debulking surgery beyond 3–4 cycles of neoadjuvant chemotherapy can reduce morbidity and hospitalization for patients with ovarian cancer.
- Choose regimens that necessitate the fewest infusion visits (e.g. 3 weekly paclitaxel/carboplatin)
- Consider avoiding/limiting the prescription of dose-dense, intraperitoneal, and HIPEC regimens.

Endometrial cancer:

- For early endometrial cancer: progesterone therapy: oral or progesterone IUD may decrease bleeding and may offer disease control if surgery is delayed for lower grade cancers
- For ER/PR positive advanced/recurrent endometrial cancer: consider the use of megestrol acetate, or megestrol acetate alternating with tamoxifen. Oral letrozole may have a better

response rate compared to hormonal therapy alone but the impact of the increased toxicity and possible immunosuppression should be considered

- Avoid radiation if possible unless for curative intent (i.e., locally advanced cervical cancer)
- Consider paclitaxel/carboplatin over paclitaxel/cisplatin-based regimen due to shorter total time in the infusion center and less toxicity.
- For Stage IV primary high grade endometrial and cervical cancers: consider delaying/deferring non-curative treatment, especially if patients are older or possess significant co-morbidities unless to control symptoms that may necessitate/lead to hospitalization.

12.2 General considerations for cancer-directed therapy.

Prior to the start of therapy:

- Consider goals of therapy: Curative intent, maintenance therapy, or palliative treatment.
- Patients are advised to attend health care centers unaccompanied, even at admission, except when this is completely unavoidable.
- Social distancing should be facilitated.
- Patients should take their temperature or report any symptom that is suggestive of infection by COVID-19 before reaching the center, irrespective of whether they are attending for surgery or an outpatient visit.
- Channels of communication (telephone, e-mail) should be facilitated to ensure continuous electronic/online contact with the patient.
- Patients should be informed of the situation and the change in diagnostic and treatment strategies. This should be set out in the informed consent.
- For chemotherapy, transfer patients to cancer center/daycare avoiding hospital area
- where patients with COVID-19 are being evaluated and treated.
- Consider local administration of chemotherapy if a patient lives far from the current infusion site or it requires traveling to a COVID-19 “hotspot”.
- Test for COVID-19 prior to cancer-directed therapy: medical or surgery if testing capabilities allow
- Try to limit the frequency of infusions; avoid weekly infusions
- Consider single-agent therapy or holding cancer-directed therapy for patients N65 years old, patients at any age with significant co-morbidity (DM, chronic lung disease, and cardiovascular disease) or ECOG status ≥2.
- Consider oral therapies over infusion-based treatments when appropriate.
- With select exceptions (i.e. high-risk GTD), avoid inpatient administration of chemotherapy, when possible.
- Screen all patients for symptoms of COVID-19 and ensure temperature be 99.5 prior to treatment and consider testing if possible, prior to chemotherapy.

During therapy:

- Utilize telemedicine to reduce the frequency of in-person evaluation and allow for patients to proceed directly to the infusion center for treatment.
- Use local labs for tests whenever possible.
- Consider the liberal use of granulocyte colony-stimulating factor (G-CSF). Prioritize home administration or use of pegfilgrastim on day 2.

- Consider outpatient management of neutropenic fever when clinically stable with moxifloxacin 400 mg PO daily or ciprofloxacin PO 500–750 mg BID and Augmentin 875 mg BID PO. Maintain a close follow-up with daily phone contact for at least 3 days to ensure no clinical deterioration.

Post-therapy:

- Delay imaging during or after completion of treatment to a post-COVID surge timeframe unless critical to patients' immediate care.
- Ensure that goals of care discussions with patients (including DNR/DNI status) are prioritized prior to or shortly after admission, even if via telephone or telemedicine.

The management recommendation into three categories (modified clinical guidelines from Ontario Health) depending on the severity of the patient's condition with gynecologic cancers.

Priority A: The patient's condition is life-threatening or needs emergency care.
Priority B: The patient's condition is non-life threatening and could be deferred 6-8 weeks during the COVID-19 pandemic.
Priority C: The patient's condition is stable even in the discontinuation of treatment during the current COVID19 crisis.

Cervix Cancer

Patient's status	Management	Priority
Stage IA1, IA2	LEEP, Conization	B
Stage IB1, IB2, IIA1	Neoadjuvant Chemotherapy followed by Radical Hysterectomy Or, Definitive CCRT	B
Stage IB3, and IIA2	Definitive CCRT	B
Stage IIB- IVA	CCRT is recommended on schedule and could consider hypofractionation to reduce the number of visits to the clinic. Brachytherapy should be done on time unless there is COVID-19 symptom.	B
Recurrent Cervix Cancer – Central or localized pelvic	Surgery Or RT if it has been not been done earlier	B
Recurrent Cervix Cancer – Central or localized pelvic	Palliative Chemotherapy	B
Massive and/or persistent bleeding from the cervix	Assessment should be performed as soon as possible based on the level of institution resources or regional circumstances of COVID-19	A
Follow up	Can be deferred	C

Ovarian Cancer

Patient's status	Management	Priority
Suspected ovarian cancer with symptoms indicating bowel obstruction/perforation, massive ascites, or peritonitis	Assessment should be performed as soon as possible.	A
Inadequately staged (suboptimal debulking) ovarian cancer.	Chemotherapy with regimens having fewest infusion visits. Consider lower dosing intensity and less myelosuppressive regimens to reduce neutropenia. Avoid the prescription of dose-dense (Weekly) Completion surgery better avoided in advanced stage in favour of chemotherapy; for early stage in a later date	B
Early Stage Ovarian Cancer	Surgery: minimize surgery and surgical time. Open surgery preferred to laparoscopy Avoid intraoperative histology (frozen section) Apply radiology for staging deferring surgical staging and rather adjuvant treatment.	A
Stage IIB- IV - Advanced Stage Ovarian Cancer	Neoadjuvant chemotherapy: 3-4 cycles; Depending upon response and COVID situation it can be given for full six cycles Delaying interval debulking surgery until the reassuring situation	B
High-grade serous/endometrioid	Adjuvant chemotherapy as early as possible	A
Non-High-grade serous/endometrioid Clear cell or mucinous tumour	Adjuvant chemotherapy can be an option but should be considered less essential and discussed with the patient about minimizing the infusion visits.	B
Suspected postoperative complications (e.g. anastomotic leak)	Assessment and exploration should be performed as soon as possible.	A
Follow up	Routine surveillance of asymptomatic patients should be postponed as possible. Limit radiology evaluation Utilize telemedicine and reduce the frequency of in-person evaluation.	C

Endometrial Cancer

Patient's status	Management	Priority
EIN	Progesterone: Oral or IUCD if fertility required Simple Hysterectomy – can be done in ~ 8 weeks	B
Early-stage with active bleeding	Staging operation with hysterectomy should be performed as soon as possible in MIS with sentinel LN (SLN) mapping	A
Early-stage without active bleeding	Conservative treatment such as oral progestin and Progesterone – Oral/IUD can be used until the pandemic is over.	B
Stage III, IV – Advanced stage Endometrial Cancer	Chemotherapy is recommended, regimens that will avoid frequent patient visits and admission (e.g. paclitaxel + carboplatin) Hormonal therapy	B
Adjuvant treatment Stage I, II with low risk factor	Adjuvant therapy might be discontinued during the crisis of COVID-19 Adjuvant treatment can be deferred up to 9 weeks after surgery.	B
Adjuvant treatment Stage I, II with low risk factor	Brachytherapy is preferred considering fewer visits and less complication risk	B
Adjuvant treatment Stage III, IV	Depending on the discretion of the physician, adjuvant chemotherapy or radiotherapy is considered. Use chemotherapy regimens that will avoid frequent patient visits (e.g. paclitaxel + carboplatin). In the case of pelvic RT, consider hypofractionation to reduce the number of visits to the clinic.	B
Follow up	Can be deferred A routine imaging study to be avoided until the pandemic is over	C
Recurrent Endometrial Cancer	Brachytherapy: for isolated vaginal vault recurrence EBRT: for pelvic recurrence Chemotherapy and hormonal therapy: Distant recurrence	B & C

Vulva Cancer

Patient's status	Management	Priority
Stage I	Radical excision under local/locoregional anesthesia.	B

(tumors <2 cm)	Radical procedures and lymphadenectomy that increase morbidity and hospital stay should be avoided.	
Stage II – IV (Advanced Stage)	Neoadjuvant Chemotherapy Or Neoadjuvant Radiation Therapy	B
Follow up	Can be deferred	C

Gestational Trophoblastic Neoplasia (GTN)

Patient's status	Management	Priority
Molar Pregnancy	MVA. Second gentle MVA can be repeated after 1 week to help more rapid fall in serum BhCG Hysterectomy can be considered if fertility is not desired to reduce the need for chemotherapy and early remission.	A
Persistent GTN (WHO Low Risk)	Oral Methotrexate Methotrexate 50mg IM for low risk (weekly regimen acceptable for score 0-1) Dactinomycin 1.25 mg/m2 is another alternative	A
Persistent GTN (WHO High Risk) Choriocarcinoma PSTT	EMA-CO Regimen for patients with a WHO score ≥ 6 even though this regimen requires hospitalization Curative intent EMA-EP for placental site trophoblastic tumor (PSTT)	A
Follow up	Less frequently visits – once in every two weeks	B

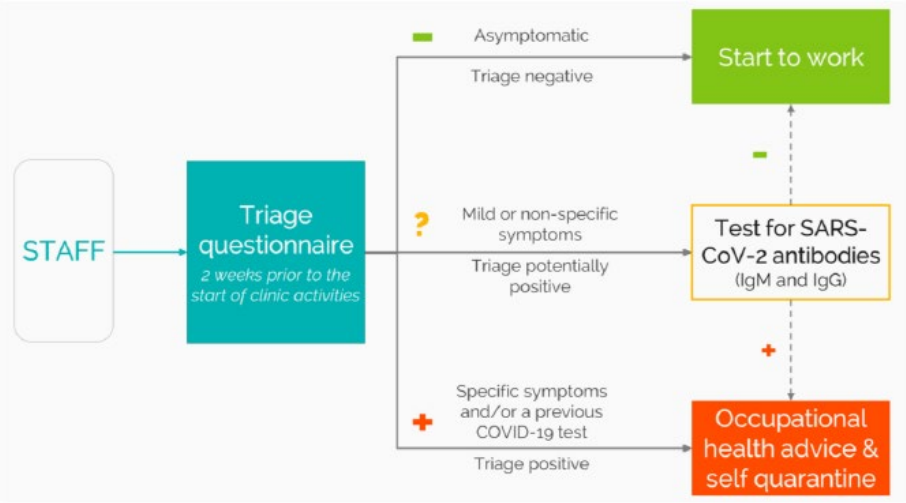
Cervical cancer screening:
Screening in community to be avoided until the COVID-19 pandemic is well controlled
Low-grade cervical disease (LSIL/CIN I): Follow up only. Re-assessment in 6-12 months
High-grade cervical disease (HSIL/CIN II & III): Re-assessment in 3 months or LEEP

13 Guidance for subfertility treatment

This guidance provides practices with recommendations that guard the health and safety of our patients and staff in response to the coronavirus (COVID-19) global pandemic.

- Suspend initiation of new treatment cycles, including ovulation induction, intrauterine inseminations (IUIs), in vitro fertilization (IVF) including retrievals and frozen embryo transfers, as well as non-urgent gamete cryopreservation.
- Continue care for patients who have already initiated oral medications, such as clomiphene citrate or letrozole, or injectable gonadotropin therapy either for IUI, IVF or oocyte cryopreservation.
    - Treatment should be limited to a single cycle and further treatment postponed after cycle completion.
    - Patients who were planning to proceed with oocyte retrieval should be counseled to proceed with cryopreservation of embryos with plans for deferred transfer.
- Continue care for patients who are currently “in-cycle” or who require urgent stimulation and cryopreservation. For the purposes of this document, “urgent” refers to all time-sensitive treatment, such as impending gonadotoxic therapy or extirpative reproductive surgery. While age and diminished ovarian reserve are time-sensitive, at present these should not be included in the definition of urgent care.
- Strongly consider cancellation of all embryo transfers whether fresh or frozen.
- Directed oocyte donation cycles, where the donor has begun ovarian stimulation, may be continued and embryos should be cryopreserved for future use.
- Suspend elective surgeries and non-urgent diagnostic procedures such as hysterosalpingograms.
- Minimize in-person interactions by increasing utilization of telehealth.
- Restart all Assisted Reproductive Therapy (ART) treatments once COVID-19 infection risk decreases. However, to minimize the risks related to COVID-19-positive patients or staff during treatment, utmost care is mandatory for safe practice.
- The key principle in restarting activity in an ART centre is that patients, staff, and anyone attending the centre are triage negative. Each centre should adapt its triage questionnaire.
- The working group identified six pillars of good medical practice proposed for the restart of activity in an ART clinic and laboratory.
    - Discussion, agreement, and consent to the start of treatment
    - Staff and patient triage
    - Access to advice and treatment
    - Adaptation of ART services
    - Treatment cycle planning
    - Code of Conduct for staff and patients

Summary Figure staff triage



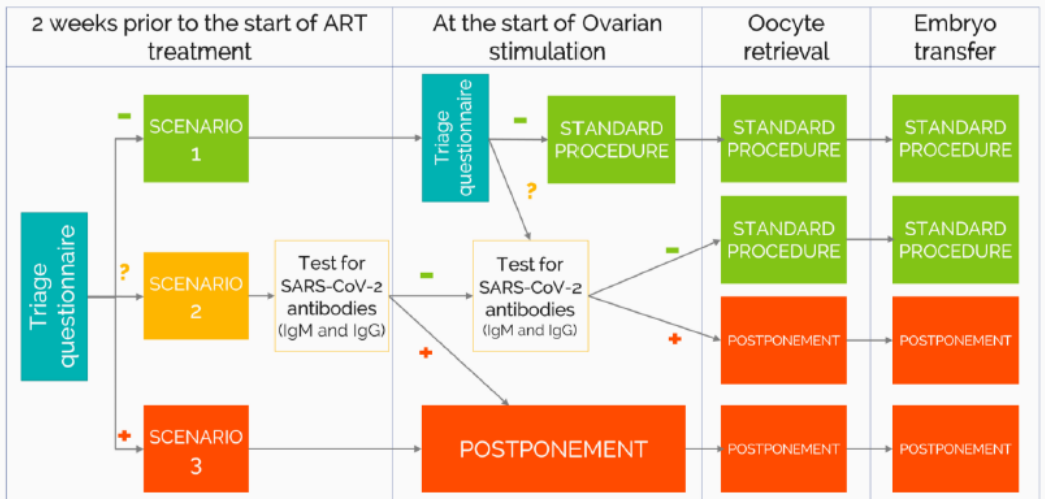
13.1 Procedure for patients

- A preliminary triage, with questionnaire (paper, email, or phone), of the patient and support person should be performed two weeks before starting the ART treatment.
- A further triage of both partners should be performed during ovarian stimulation.
- Triage should be performed according to the same procedures used for staff members.
- Patients suspected of infection after triage should get regular testing in line with national recommendations and/or availability of tests.
- All patients with a previously confirmed COVID-19 infection should present a medical specialist report of clearance to be eligible for treatment.

13.2 Treatment cycle

- Ovarian stimulation monitoring, during which, the following specific precautions should be taken:
  - Minimal exposure for both staff and patients
  - Isolation of staff showing symptoms of infection
  - Use of personal protective equipment (PPE) by staff
  - Minimal number of visits and an optimized number of blood tests
  - Vaginal probe and tissue hygiene
  - Re-triage and action depending on pre-triage results or new non-specific symptoms.

Summary Figure treatment cycle



Scenario 1

Both patients are triaged as low risk (negative clinical history, lifestyle compatible with low/minimal risk of contact with potentially infected individuals).

Both patients are asymptomatic.

Scenario 2

Patients who have recovered from a previous COVID-19 infection, proven by the certified medical evidence of clearance, should have SARS-CoV-2 IgM/IgG testing prior to starting treatment.

2a. Presence of non-specific symptoms in one of the partners before starting ovarian stimulation:

If negative	Continue the treatment
If symptoms persist	Perform SARS-CoV-2 IgM/IgG testing to decide
If IgM/IgG negative:	Continue the treatment
If IgM/IgG positive:	Postpone the treatment and refer for further testing.

Repeat the triage at the beginning of ovarian stimulation

2b. Non-specific symptoms arising during ovarian stimulation

Perform SARS-CoV-2 IgM/IgG testing

If IgM/IgG negative:	Continue the treatment
If IgM/IgG positive:	Postpone the treatment and refer for further testing.

Scenario 3 [exclude]

If patients and/or partners are symptomatic or COVID-19 positive, postpone the treatment and refer for further testing and follow-up.

14 Infection prevention and control guideline for Gender Based Violence case management

Gender based violence (GBV) is a grave social and human rights concern affecting all societies. The U.N. Convention for the Elimination of All Forms of Discrimination against Women (1992) defined it as "violence that is directed against a woman because she is a woman or violence that affects women disproportionately. It includes acts that inflict physical, mental or sexual harm or suffering, threats of such acts, coercion and other deprivation of liberty"(General Recommendation No. 10). However, there is increasing recognition that men and gender minorities can also experience violence based on gender, for example when they do not conform to the traditional norms of masculinity-existing protection issues in Nepal include violence against women and girls, violence against children including child marriage, child labour, high rates of institutionalization and family separation, harmful traditional practices and human trafficking and family separation.

There is an unsettling amount of GBV occurring against the backdrop of the COVID-19 outbreak. It is also becoming increasingly clear that many of the measures deemed necessary to control the spread of the disease (e.g. restriction of movement, reduction in community interaction, closure of businesses and services, etc.) are increasing GBV related risks and violence against women and girls. Furthermore, it is limiting survivors' ability to distance themselves from their abusers as well as reducing their ability to access external support. In addition, health systems have become overloaded, facilities have closed, or have provided a limited set of services to women, and many important medical checkups have been skipped due to fear of contracting the virus. All in all, the impact of the COVID-19 pandemic on care for women has been substantial.

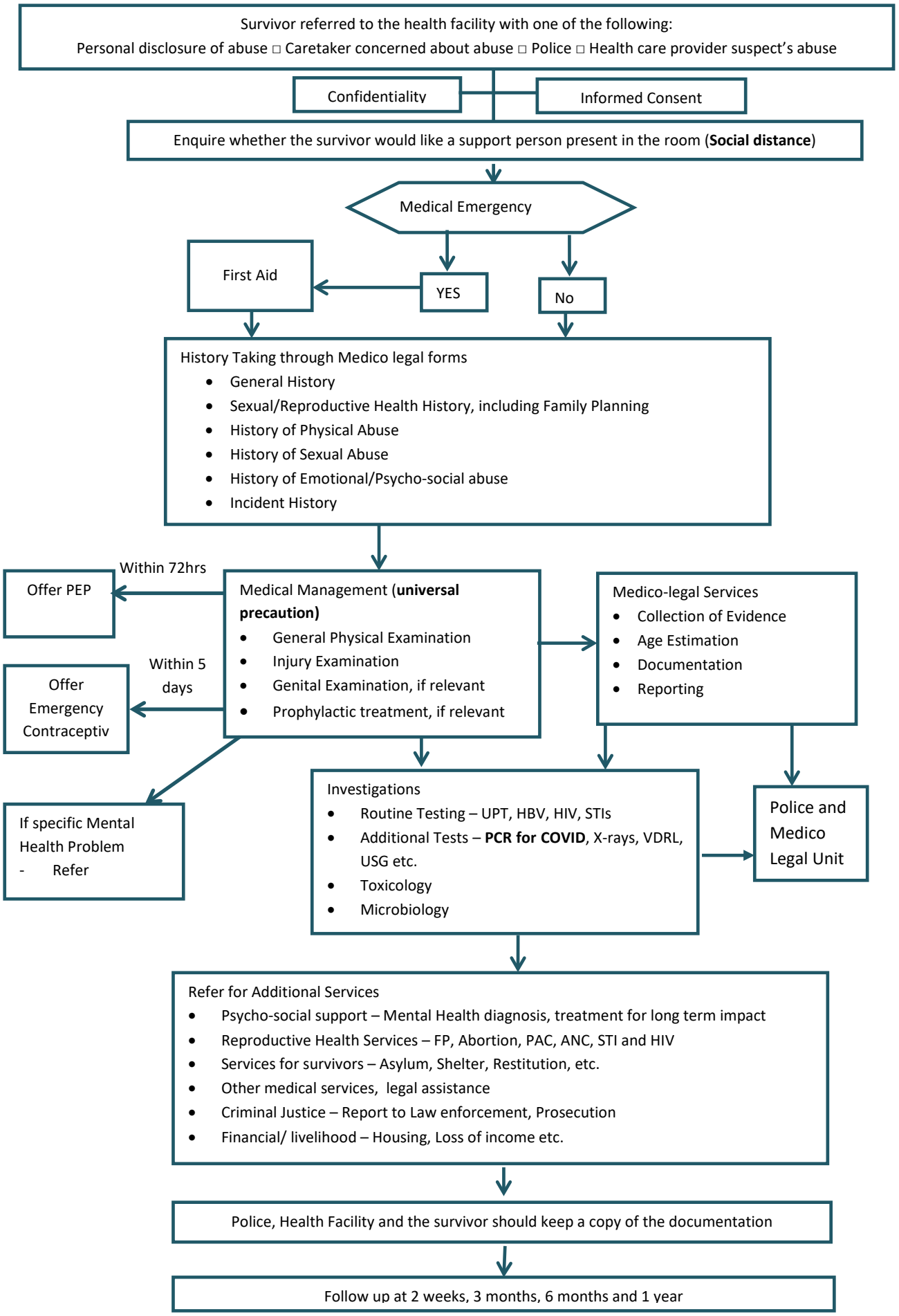
- Frontline health workers (Doctors, Nurses, Health Assistants) working in One-Stop Crisis Management Centre (OCMC), who will mostly encounter GBV survivors, must be kind, respectful, and responsible towards the survivor. Give her every care while maintaining all steps of prevention.
- All GBV survivors who come to the health post/hospital must be first screened for Coronavirus infection before being sent to the OCMC. (PCR test. Until result comes survivor should be kept in isolation)
- At the entrance of the OCMC, the GBV survivor and any person accompanying them must wash their hands with sanitizer or soap and water for 20 seconds. (Put a flex with all steps of handwashing if available)
- Except for health workers who are directly treating the survivor, all other staff including all staff of OCMC must maintain a distance of at least 1 meter from the survivor and any accompanying person. Everyone must maintain a physical distance of at least 1 meter from each other. Avoid touching and hugging and find other ways to comfort survivors (example- Verbal comfort: -"I am listening", "I am with you", Physical gesture: - Nodding head, quick eye contact).

- All rooms of the OCMC should contain sanitizer or facility to wash hands with soap and water, including at the entrance of the OCMC (if sinks are not available, provide bucket with water and soap).
- All staff and service seekers should wash their hands after each step. All staff should either use paper towels to dry their hands and then dispose of the paper towel in a closed bin OR use their towels/cloth for drying their hands and this towel/cloth must be sterilized/washed with water and detergent regularly.
- All service seekers and any accompanying person, such as the staff of NGO, shelter home, police, should also frequently wash their hands. They should be provided with paper towels to dry their hands or air-dry their hands. The used paper towel must be thrown in a closed bin.
- All bathrooms should contain large bottles of hand soap. Staff Nurse in-charge of the OCMC should be responsible for making sure that the bathrooms always have hand soap in them
- Clean and disinfect frequently touched surfaces daily. This includes tables, doorknobs, light switches, countertops, handles, desks, phones, keyboards, toilets, faucets, and sinks.
- All surfaces of shared toilets must be cleaned and disinfected by each user after using toilets and bathrooms. Provide disinfectant for toilet seats, sink, tap, buckets, mugs, doorknobs.
- All staff of the OCMC must wear a medical mask and protective gloves and if required to interact with any GBV survivor in quarantine, must be fully dressed in Personal Protective Equipment (PPE)
- Other than survivors and their caregivers or other GBV service providers such as the police, staff of NGO, or shelter, no visitors should be allowed in the OCMC until the lockdown is over. Legal aid service providers need not visit the OCMC and should continue to provide their services over the phone.
- During the lockdown period, all staff should follow guidelines of the health post/hospital on whether they should temporarily live at the health post/hospital or commute daily from their home to the OCMC. Follow all guidelines issued by MoHP for your protection from Coronavirus while you temporarily live at the health post/hospital OR Follow all guidelines issued by MoHP for your and your family's protection from Coronavirus while you continue to go to the health post/hospital from home.
- Prepare for extension of lockdown period, stock up on food and essential supplies, dignity kits, soap, sanitizers, face masks (medical and simple cloth, medical only for those with symptoms).
- Inform all staff about an extension of lockdown period if and when that happens and about all the arrangements that have been made for them at the health post/ hospital/OCMC, including for their travel to and from their homes.
- If your hospital is not authorized for COVID-19 related testing and treatment, find out which is the nearest health post/hospital authorized for COVID-19. Contact them to get all information and make arrangements for any transport from your OCMC/health post to the authorized hospital. See the attached list of hospitals that are authorized for COVID-19.

Self-care for health workers and staff of OCMC

- As a health worker/OCMC staff, it is natural to experience increased stress, as you attend to the needs of patients and survivors during the COVID-19 outbreak
- You can adopt some simple techniques to manage your stress levels by developing a daily routine and focusing on basic needs: take adequate rest, eat nutritious meals on a regular schedule, exercise regularly, practice deep breathing, and remain connected with family and well-wishers
- If any of your family members have tested positive for COVID-19, practice all measures described above and in the guidelines. If you need to take leave to attend to your family members' wellbeing, speak with your supervisor, and plan a replacement.
- If you or any of your family members need to speak with a counselor, contact the counselor of the OCMC or any other on your list of referrals or from the service directory provided by National Women's Commission.

Triage of survivor to be done as soon as survivor comes to the hospital. PCR to be taken of all survivor and until results come survivor should be kept is isolation ward. IP to be maintained by service providers for themselves and the survivor against COVID-19. Maintaining IP (as per situation Level 1/2/3 PPE to be used) below flowchart to be followed.


Survivor referred to the health facility with one of the following:
Personal disclosure of abuse □ Caretaker concerned about abuse □ Police □ Health care provider suspect's abuse
Confidentiality
Informed Consent
Enquire whether the survivor would like a support person present in the room (Social distance)
Medical Emergency
First Aid
YES
No
History Taking through Medico legal forms
General History
Sexual/Reproductive Health History, including Family Planning
History of Physical Abuse
History of Sexual Abuse
History of Emotional/Psycho-social abuse
Incident History
Within 72hrs
Offer PEP
Medical Management (universal precaution)
General Physical Examination
Injury Examination
Genital Examination, if relevant
Prophylactic treatment, if relevant
Medico-legal Services
Collection of Evidence
Age Estimation
Documentation
Reporting
Within 5 days
Offer Emergency Contraceptiv
If specific Mental Health Problem
- Refer
Investigations
Routine Testing – UPT, HBV, HIV, STIs
Additional Tests – PCR for COVID, X-rays, VDRL, USG etc.
Toxicology
Microbiology
Police and Medico Legal Unit
Refer for Additional Services
Psycho-social support – Mental Health diagnosis, treatment for long term impact
Reproductive Health Services – FP, Abortion, PAC, ANC, STI and HIV
Services for survivors – Asylum, Shelter, Restitution, etc.
Other medical services, legal assistance
Criminal Justice – Report to Law enforcement, Prosecution
Financial/ livelihood – Housing, Loss of income etc.
Police, Health Facility and the survivor should keep a copy of the documentation
Follow up at 2 weeks, 3 months, 6 months and 1 year

Job Aid 1: Identification of Gender-Based Violence Survivors
Suspect that a woman has been subjected to violence if she has any of the following symptoms:

Symptoms	√ / X
Symptoms of depression, anxiety, post-traumatic stress disorder, or sleep disorders	
Suicidal tendency or ideation or self-harm	
Alcohol or other substance use	
Unexplained chronic gastrointestinal symptoms	
Unexplained reproductive symptoms, including pelvic pain and sexual dysfunction	
Adverse reproductive outcomes, including multiple unintended pregnancies or terminations, or both, delayed pregnancy care, or adverse birth outcomes	
Unexplained genitourinary symptoms, including frequent bladder or kidney infections or other	
Repeated vaginal bleeding and sexually transmitted infections	
Chronic pain (that is unexplained)	
Traumatic injury, particularly if repeated and with vague or implausible explanations	
Problems with the central nervous system—headaches, cognitive problems, or hearing loss	
Repeated health consultations with no clear diagnosis	
Intrusive partner or husband in consultations	

Notes: antenatal care (ANC), hepatitis B virus (HBV), family planning (FP), post-abortion care (PAC), post-exposure prophylaxis (PEP), sexually transmitted infection (STI), urine pregnancy test (UPT), ultrasonography (USG), and Venereal Disease Research Laboratory (VDRL) test,

KEY POINTS

- 2 modes of transmission: direct contact with respiratory secretion- within 2 metres or indirect contact with contaminated surface
- Pregnancy changes body's immune system and could potentially demonstrate more severe symptoms. Limited data regarding susceptibility of pregnant women compared to the general population.
- Vertical transmission is probable although not definite. Two studies reported IgM for SARS-COV-2 in neonatal serum
- No proven correlation between COVID-19 and increased maternal mortality or morbidity
- COVID and non-COVID facilities need to be distinguished
- COVID hospitals must be adequately equipped with isolation rooms in terms of infrastructure, well trained health care staff members and appropriate PPE.
- Non-COVID hospitals need to make changes such as triage, checklist, and referral pathways to minimize accidental infection transmission risk.
- Reduce in person visits, especially of symptomatic patients or asymptomatic exposed patients till 2 weeks of exposure or complete symptom resolution
    - Introduce the idea of one-stop contact by combining radiology services, routine investigations, medication and vaccination administration to reduce number of visits
    - Introduce phone consults or telehealth consults for follow up appointments
- Attendance of support person must be restricted unless necessary
- Social distancing of 6 feet must be practiced by healthcare workers and patients
- Maintain good hand hygiene, disinfect and clean the surrounding environment between patients and remove non-essential items
- All clinicians must utilize the correct procedure of donning and doffing PPE and follow the 5 moments of hand hygiene
- Social distance must always be maintained at 6 feet away
- A focused examination must be performed in a designated area, with apt infection control measures
- For all women, COVID-19 must be adequately ruled out with history and investigations. Risk assessment must be performed for physical, emotional and psychological wellbeing and problems or complications must be appropriately managed.
- In pregnant COVID positive women, in addition to supportive therapy and medical management in high risk group
- Triage is the assignment of degrees of urgency to decide the order of treatment of patients along with proper place of treatment
- An apt triage checklist must be utilized to divide patients into 3 primary zones:
    - clean patients go to the ward,
    - suspicious patients with symptoms, exposure or recent travel go to pre-designated isolated area or separate ward to be managed by HCW in PPE
    - confirmed patients with positive test go to isolated area or COVID hospitals

References

1. Government of Nepal Ministry of Health and Population. Interim Pocket Book of Clinical management of COVID 19 in Healthcare Setting. Public Health Update. Published April 24, 2020. Accessed June 25, 2020.
2. Yan J, Guo J, Fan C, et al. Coronavirus disease 2019 in pregnant women: a report based on 116 cases. *Am J Obstet Gynecol*. 2020 Apr 23;223(1):111.e1-111.e14. doi: 10.1016/j.ajog.2020.04.014.
3. Qiu L, Liu X, Xiao M, et al. SARS-CoV-2 is not detectable in the vaginal fluid of women with severe COVID-19 infection. *Clin Infect Dis*. 2020 Apr 2;ciaa375.doi: 10.1093/cid/ciaa375
4. Chen H, Guo J, Wang C, et al. Clinical characteristics and intrauterine vertical transmission potential of COVID-19 infection in nine pregnant women: a retrospective review of medical records. *Lancet*. 2020; 395:809.DOI:https://doi.org/10.1016/S0140-6736(20)30360-3
5. Kirtsman M, Diambomba Y, Poutanen SM, et al. Probable congenital SARS-CoV-2 infection in a neonate born to a woman with active SARS-CoV-2 infection. *CMAJ.* 2020;192:E647.doi: 10.1503/cmaj.200821.
6. Wang W, Xu Y, Gao R, et al. Detection of SARS-CoV-2 in Different Types of Clinical Specimens. *JAMA.* 2020;323(18):1843-1844. doi:10.1001/jama.2020.3786
7. Baud D, Greub G, Favre G, et al. Second-Trimester Miscarriage in a Pregnant Woman With SARS-CoV-2 Infection. *JAMA*. 2020;323(21):2198-2200. doi:10.1001/jama.2020.7233
8. Penfield CA, Brubaker SG, Limaye MA, et al. Detection of SARS-COV-2 in Placental and Fetal Membrane Samples. *Am J ObstetGynecol MFM.* 2020; 100133.doi: 10.1016/j.ajogmf.2020.100133.
9. Patanè L, Morotti D, Giunta MR, et al. Vertical transmission of COVID-19: SARS-CoV-2 RNA on the fetal side of the placenta in pregnancies with COVID-19 positive mothers and neonates at birth. *Am J ObstetGynecol MFM.* 2020; 100145.doi: 10.1016/j.ajogmf.2020.100145
10. World Health Organization. Global surveillance for COVID-19 caused by human infection with COVID-19 virus: Interim Guidance. World Health Organization website. https://apps.who.int/iris/bitstream/handle/10665/331506/WHO-2019-nCoV-SurveillanceGuidance-2020.6-eng.pdf. Published March 20, 2020. Accessed June 25, 2020.
11. World Health Organization. Rational use of personal protective equipment for coronavirus disease (COVID-19) and considerations during severe shortages, Interim Guidance. World Health Organization website. https://www.who.int/publications/i/item/rational-use-of-personal-protective-

equipment-for-coronavirus-disease-(covid-19)-and-considerations-during-severe-shortages. Published April 6 2020. Accessed June 06, 2020.
12. Royal College of Obstetricians and Gynecologists. Coronavirus (COVID-19) Infection in Pregnancy. Royal College of Obstetricians and Gynaecologists website. https://www.rcog.org.uk/coronavirus-pregnancy. Published June 19, 2020. Accessed June 25, 2020.
13. Ministry of Health and Population. Interim Guidance for RMNCH services in COVID 19 Pandemic. Asian Disaster Preparedness Center. https://app.adpc.net/sites/default/files/public/publications/attachments/Guidance_for_RMNCH_services_08-02-2077.pdf. Published May 21, 2020. Accessed June 25, 2020.
14. Federation of Obstetric and Gynaecological Societies of India. Good Clinical Practice Recommendation on Pregnancy with COVID 19 Infection. Federation of Obstetric and Gynaecological Societies of India website. https://www.fogsi.org/wp-content/uploads/covid19/fogsi_gcpr_on_pregnancy_with_COVID_19_version_1.pdf. Published March 28, 2020. Accessed June 25, 2020.
15. The United Nations Fund for Population Activities. COVID-19 Technical Brief for Antenatal Care Services. The United Nations Fund for Population Activities website. https://asiapacific.unfpa.org/en/publications/covid-19-technical-brief-antenatal-care-services. Published April 2020. Accessed June 25, 2020.
16. The United Nations Fund for Population Activities. COVID-19 Technical Brief Package for Maternity Services. The United Nations Fund for Population Activities website. https://www.unfpa.org/sites/default/files/resource-pdf/COVID-19_Maternity_Services_TB_Package_04052020_FINAL.pdf. Published April 2020. Accessed June 25, 2020.
17. The American College of Obstetricians and Gynecologists. Novel Coronavirus 2019 (COVID-19). The American College of Obstetricians and Gynecologists website. https://www.acog.org/clinical/clinical-guidance/practice-advisory/articles/2020/03/novel-coronavirus-2019. Published April 2020. Updated June 15, 2020. Accessed June 25, 2020
18. ObG Project. COVID-19, PPE and Second Stage of Labor: Current US Guidance. ObG Project website. https://www.obgproject.com/2020/03/31/covid-19-ppe-and-second-stage-of-labor-current-us-guidance/. Published 2020. Accessed June 25, 2020
19. Palatnik A, McIntosh JJ. Protecting labor and delivery personnel from COVID-19 during the second stage of labor. *Am J Perinatol.* 2020; 37(08): 854-856. DOI: 10.1055/s-0040-1709689
20. Boelig RC, Manuck T, Oliver EA, et. Al. Labor and Delivery Guidance for COVID-19. *Am J ObstetGynecol MFM.* 2020 Mar 25:100110. DOI: 10.1016/j.ajogmf.2020.100110
21. Society for Maternal-Fetal Medicine and Society for Obstetric and Anesthesia and Perinatology. Labor and Delivery COVID-19 Considerations. Society for Maternal-Fetal Medicine website. https://s3.amazonaws.com/cdn.smfm.org/media/2319/SMFM-SOAP_COVID_LD_Considerations_-_revision_4-14-20_PDF_(003).pdf. Published April 14. Accessed June 25, 2020
22. Boelig RC, Saccone G, Bellussi F, Berghella V. MFM guidance for COVID-19. *Am J ObstetGynecol MFM*. 2020 May; 2(2): 100106. doi: 10.1016/j.ajogmf.2020.100106.

23. Royal College of Obstetrics and Gynecologists. Corona Virus (COVID– 19) Infection in Pregnancy. Royal College of Obstetrics and Gynecologists. https://www.rcog.org.uk/globalassets/documents/guidelines/2020-05-13-coronavirus-covid-19-infection-in-pregnancy.pdf. Published May 13 2020. Accessed June 25, 2020
24. Obstetrical and Gynecological Society of Bangladesh. COVID– 19 and Women's Health: OGSB Guidelines. The Asia & Oceania Federation of Obstetrics &Gynaecology website. http://www.aofog.net/pdf/OGSB_COVID19_health.pdf. Published April 2020. Accessed June 25, 2020
25. World Health Organization. Q&A: Contraception/Family planning and COVID-19. World Health Organization website. https://www.who.int/emergencies/diseases/novel-coronavirus-2019/question-and-answers-hub/q-a-detail/contraception-family-planning-and-covid-19. Published April 6 2020. Accessed June 25, 2020.
26. United States Agency for International Development. Guidance on Social and Behavior change for family planning during COVID-19. United States Agency for International Development website. https://www.thecompassforsbc.org/sites/default/files/strengthening_tools/Guidance%20on%20SBC%20for%20FP%20During%20COVID-19%20EN_v1.1.pdf. Published April 14, 2020. Accessed June 25, 2020.
27. The American College of Obstetricians and Gynecologists. Joint Statement on Abortion Access during COVID-19 Outbreak. The American College of Obstetricians and Gynecologists website. https://www.acog.org/news/news-releases/2020/03/joint-statement-on-abortion-access-during-the-covid-19-outbreak. Published March 18 2020. Accessed June 25, 2020.
28. Royal College of Obstetricians and Gynaecologists.Coronavirus (COVID-19) infection and abortion care. Royal College of Obstetricians and Gynaecologists website.https://www.rcog.org.uk/en/guidelines-research-services/guidelines/coronavirus-abortion/. Published June 3, 2020. Accessed June 25, 2020.
29. Pothuri B, Secord AA, Armstrong DK, et. Al. Anti-cancer therapy and clinical trial considerations for gynecologic oncology patients during the COVID-19 pandemic crisis.*Gynecol Oncol.* 2020 Jul; 158(1): 16–24. doi: 10.1016/j.ygyno.2020.04.694.
30. Lee SJ, Kim T, Kim M et. Al. Recommendations for gynecologic cancer care during the COVID-19 pandemic. *J Gynecol Oncol*. 2020 Jul;31(4):e69. https://doi.org/10.3802/jgo.2020.31.e69.
31. Cancer Care Ontario Pandemic Plan Review Group. Pandemic Planning Clinical Guideline for Patients with Cancer. Cancer Care Ontario website. https://www.accc-cancer.org/docs/documents/cancer-program-fundamentals/oh-cco-pandemic-planning-clinical-guideline_final_2020-03-10.pdf. Published March 2020. Accessed June 25,2020.
32. Spanish Society of Gynecology and Obstetrics. Recommendations of the Gynecological Oncology and Breast Disease Section of SEGO on management of gynecological tumors during the COVID-19 pandemic. Spanish Society of Gynecology and Obstetrics website. https://www.esgo.org/media/2020/03/Recommendations-of-the-Gynecological-Oncology-and-Breast-Disease-Section-of-SEGO-on-management-of-gynecological-

tumors-during-the-COVID-19-pandemic.pdf. Published March 2020. Accessed June 25,2020.
33. National Comprehensive Cancer Network. Coronavirus Disease 2019 Resources for the Cancer Care Community. National Comprehensive Cancer Network website. www.nccn.org/covid-19. Published 2020. Accessed June 25, 2020
34. Society of Gynecologic Oncology. COVID-19 resources for Health Care Practitioners. Society of Gynecologic Oncology website. https://www.sgo.org/clinical-practice/management/covid-19-resources-for-health-care-practitioners. Updated June, 2020. Accessed June 25, 2020.
35. American Society for Reproductive Management. Patient Management and Clinical Recommendations during the Coronavirus (COVID-19) Pandemic. American Society for Reproductive Management website. https://www.asrm.org/news-and-publications/covid-19/statements/patient-management-and-clinical-recommendations-during-the-coronavirus-covid-19-pandemic. Published May 11, 2020. Accessed June 25, 2020.
36. European Society of Human Reproduction and Embryology. ESHRE guidance on recommencing ART treatments. European Society of Human Reproduction and Embryology website. Published April 23, 2020. Updated May 5, 2020. Accessed June 25, 2020.
37. United Nations Human Rights. Declaration on the Elimination of Violence against Women. United Nations human Rights website. Published December 20, 1993. Accessed June 25, 2020.
38. Graham-Harrison E, Giuffrida A, Smith H, Ford L. Lockdowns around the world bring rise in domestic violence. The Guardian website. https://www.theguardian.com/society/2020/mar/28/lockdowns-world-rise-domestic-violence. Published March 28, 2020. Accessed June 25, 2020
39. Gupta AH, Stahl A. For Absued Women, a Pandemic Lockdown Holds Dangers of its Own. The New York Times website. https://www.nytimes.com/2020/03/24/us/coronavirus-lockdown-domestic-violence.html.. Published March 24, 2020. Updated June 18, 2020. Accessed June 25, 2020
40. Haneef C, Kalyanpur A. Global Rapid Gender Analysis for COVID-19. Cooperative for Assistance and Relief Everywhere (CARE) International. website. https://www.carefrance.org/ressources/themas/1/93a8e81-8640-Global-RGA_COVID_RDM_3.31.2.pdf. Published March 16, 2020. Accessed June 25, 2020.
41. Government of Nepal, Ministry of Health, Population Division, Jhpiego, UNFPA. Clinical Protocol on Gender Based Violence. Jhpiego website. Published November 2015. Accessed June 25, 2020.