GUIDELINE FOR MANAGING OBSTETRIC PATIENTS DURING THE CORONAVIRUS PANDEMIC

This document was combined on the 23rd June 2020 and is a combination of the previous documents

1. **Guideline for managing an obstetric patient with suspected/confirmed covid-19 V1.6**
2. **Guideline for obstetric management for the non covid-19 patients in the pandemic coronavirus V4**

Fifth Update 11 12 2020

- **Checked for relevance**

Contents

Definitions

TERM, ACRONYM OR ABBREVIATION	DEFINITION
Antenatal Patient	A pregnant woman that has not reached 37 weeks gestation and may have complications of pregnancy requiring admission for maternal and fetal monitoring
COVID-19	The disease caused by Coronavirus in 2019 SARS-CoV-2
EBM	Expressed breast milk
Foetal Distress	Will include but not limited to foetal tachycardia, foetal bradycardia, meconium stained liquor or any additional factor where the foetus cannot be adequately monitored
HCW	Health Care Worker
High risk 'unknown test status'	Obstetric patient who has not undergone a COVID PCR test prior to admission and who has symptoms or risk factors on admission
IPC	Infection Prevention and Control
Low risk 'unknown test status'	Obstetric patient who has not undergone a COVID PCR test prior to admission and who has no symptoms or risk factors on admission
Neonatal Unit	Unit where sick and premature newborns are nursed regardless of level of care
Obstetric Units	This includes all areas in a Mediclinic hospital where a pregnant woman is cared for during the antenatal, labour and postnatal periods of pregnancy. The layout is dependent on the individual hospital.
PPE	Personal Protective Equipment
PUI	Person under investigation
RCOG	Royal College of Obstetricians and Gynaecologists (UK)

Purpose

This clinical guideline will focus on the journey of obstetric patients, through the hospital during the coronavirus pandemic. This will include antenatal, intrapartum and post-natal care.

Pregnant women with suspected, probable, or confirmed COVID-19, including women who may need to spend time in isolation, should have access to woman-centered, respectful skilled care, including obstetric, fetal medicine and neonatal care, as well as mental health and psychosocial support, with readiness to care for maternal and neonatal complications (WHO 2020). Woman who do not have COVID-19 should be reassured and managed with the same level of obstetric care.

As the COVID-19 pandemic evolves in South Africa each hospital is facing different stages of the pandemic. The universal testing of all obstetric patients either prior to admission or on admission is to determine the risk of doing an elective procedure whilst the patient is positive, or potentially postponing if the condition of the patient allows, and also allows managing the risk of possible transmission. No obstetric patient should be denied access if care is required at any stage.

The obstetric patients are unique, in that they are healthy but still required to come into hospital to have antenatal problems addressed or deliver their babies. Whilst some of these women will have the coronavirus or have been exposed, the majority of the woman will not, and will be requiring normal obstetric care. What is usually a very exciting and anticipated day, may now be terrifying for many women coming into what they perceive is a relatively hostile environment.

The Covid-19 pandemic is now added to an already threatened obstetric environment, with high insurance premiums for Obstetricians, fear of litigation and an already risk averse environment. Another unique challenge is the 75% caesarean section rate, with approximately 70% of those being elective cases if reviewing previous trends.

In this already challenging environment, there is a reputational risk of a mother or her newborn contracting coronavirus while in a Mediclinic facility.

This document contains general guidelines to be used when making decisions within the different hospitals, considering the available space. It is a series of factors to be considered when setting up each hospital's response to the coronavirus pandemic. It is assumed that all necessary precautions are already in place within each hospital regarding IPC, physical distancing etc. It does not replace personalized evaluation and management decisions based on individual patient factors.

Responsibilities

PERSON	RESPONSIBILITIES
Unit Manager	Ensures the staff are updated with current COVID-19 information Ensures the staff are aware of IPC principles and adhere to them Ensures that all patients in the ward are cared for and additional staff is arranged to care for potential COVID-19 cases
Obstetrician	Informs unit of potential case or confirmed case of COVID-19 for admission Follows all IPC principles
Infection Prevention and Control Manager	Monitors compliance to IPC principles Addresses areas of non-compliance

What is the coronavirus?

Coronavirus disease 2019 (COVID-19) is a respiratory tract infection caused by a newly emergent coronavirus, that was first recognized in Wuhan, China, in December 2019.

To date there remains little evidence that pregnant women present with different signs or symptoms, or are at higher risk of severe illness. There have only been minimal reports of vertical transmission to date and in the recent RCOG guidelines the guideline were changed to say only probable vertical transmission. So while it is possible it remains extremely rare. Similarly, evidence of increased severe maternal or neonatal outcomes is uncertain, and limited to infection in the third trimester, with some cases of premature rupture of membranes, fetal distress, and preterm birth reported.

Current information shows that most people with COVID-19 develop only mild or uncomplicated illness, approximately 14% develop severe disease that requires hospitalization and oxygen support, and 5% require admission to an intensive care unit. Relatively few cases have been reported of infants confirmed with COVID-19; with the majority experiencing mild illness. Pregnant and recently pregnant women with suspected or confirmed COVID-19 should be treated with supportive and management therapies before, during and after pregnancy.

Early recognition of suspected patients and managing of patients with COVID-19 allows for effective infection prevention and control principles to prevent spread and ensure staff safety.

A woman with suspected or confirmed COVID-19 should only be admitted to the obstetric unit if she is carrying a viable pregnancy i.e. > 24 weeks gestation. Prior to this monitoring of the foetus is not as critical and therefore the patient can be managed in the medical COVID dedicated ward.

Flow through the hospital and communal areas in the obstetric unit

During the height of the pandemic there were many processes in place to stop the potential spread of the virus within the hospital. Apart from normal IPC principles, there were a decrease in movement through the hospital by restricting visitors and non-essential staff. Strict access control was implemented, with the aim to filter out potentially sick people from well people. Due to Mediclinic facilities all being general facilities, and not dedicated obstetric hospitals, there will be the added challenge of managing a COVID+ obstetric patient in the obstetric ward with non COVID+ obstetric patients. Whilst many of these restrictions are now being adjusted and lifted it is important to remember that COVID remains a threat and all instituted practices of IPC must be adhered too with additional people now being allowed in the units.

High quality basic obstetric care for ALL mothers must remain unchanged. If possible and time allows, the patient should be phoned a couple of days before the elective procedure, and informed what she and her partner should expect, with regards access control and what the partner will require.

Hospitals must consider the obstetric patient flow from entrance to the obstetric ward. This will include whether there is adequate physical distancing in all areas, how long she sits at reception and, in possible proximity to any potential COVID patients or is she a risk to any other patients.

As the pandemic continues and hospitals become full of predominantly COVID+ patients, it will become more important to protect the mother and her partner as she comes in. The situation is fluid and changes may be required at any stage.

It is important that each hospital do all they can to protect women from contracting COVID-19 during their stay in Maternity. On admission they should be spread as far apart in the unit, and care must be taken not to fill a room, if possible. They must be educated not to walk around the ward, and move as little as possible within the greater unit.

Once delivered, the baby should remain with the mother, and the nurseries should only be used if absolutely necessary. The baby should not move around the unit.

If the nursery is used, strict physical distancing must be enforced, and admission to the nursery managed so as not to have mothers congregate in the area.

Babies may not be brought into the nursery to be examined in batches, with everyone congregating in the small area. If babies are cared for in the nursery following delivery e.g. being observed in an incubator, only one person (partner) to be allowed in the nursery at a time.

Appropriate IPC measures

In a maternity ward the normal infection prevention and control activities, including standard precautions and meticulous environmental cleaning should continue as before with special attention given to physical distancing.

All IPC principles must be followed according to the Mediclinic Corporate Policies:

- Hand Hygiene
- Notifiable Medical Condition Reporting
- Surveillance
- Isolation: Standard and Transmission Based Precautions
- Cleaning and Disinfection: Bed and Patient Environment
- Disinfection Guidelines

As the pandemic continues and numbers increase, the staff must take all precautions necessary to protect themselves at all times. All obstetric elective admissions will have had a COVID-19 PCR prior to admission and the remainder will be tested on admission.

In each obstetric unit there will now be 3 different types of patient

- Woman with a confirmed negative PCR COVID test
- Woman with a confirmed positive PCR COVID test (Symptomatic or Asymptomatic)
- Woman who are awaiting COVID-19 PCR test results and will be symptomatic or asymptomatic

This is important to take into context when placing woman in the ward, and to justify different staffing scenarios. COVID positive women can be cohorted, but ideally suspected cases should not be. However this situation will need to be managed at the time depending on staffing. For example: If the ward is full and there are minimal isolation facilities, and there are two woman being admitted neither with a COVID test result but one is symptomatic – then it is advisable for that patient to be isolated and the asymptomatic one can be 'distanced' from other patients.
Hospital to communicate to Obstetricians to inform the ward of any suspected or proven COVID-19 pregnant woman that may require admission.
From 1 May 2020 it became compulsory for all South Africans to wear a cloth mask in public, therefore all obstetric patients should arrive with one, and if not are to be issued with a cloth mask to wear. The partner must be asked to bring a cloth mask with them. Masks must be worn at all times in communal areas.

While care must be taken to protect the obstetric unit and keep it a 'pure obstetric' area, additional non-obstetric patients that have tested negative and having elective surgery should be placed in the unit only if no other area available, and keeping safe staffing at all times. Care must be taken to try and not admit higher risk patients e.g. elderly in obstetrics. No emergency admissions or medical patients should be admitted in obstetrics for the duration of the pandemic.

Partners of the obstetric patient

All woman should be allowed a birth partner, as this has well known psychological benefit and improves obstetric outcomes. Mediclinic does not require the partners to be tested prior to entry BUT they must be screened on entrance and may only be allowed access if they are well with no symptoms of COVID-19. All partners are to wear cloth masks at all times and must stay by the bedside. If they refuse to wear a mask they should be denied entry.

For a woman with a negative test and well partner

- Normal care should continue.
- The partner may stay with her in a private room for the duration of her stay and must have the daily symptom check done
- The partner may visit daily for unlimited times passing through screening each time
- Please see visitation updates for remaining visitation allowances

For a woman with suspected or confirmed COVID-19 or a high risk unknown test status

- A well partner may accompany them for the labour and delivery only, and may not stay or visit in the postnatal period. Or an alternative healthy person can be nominated for the delivery only.
- The partner of the positive mother must be screened properly at the admission and have no symptoms – especially respiratory symptoms.
- They may support the woman through the labour and delivery, regardless of type of delivery.
- The partner going into theater will be wearing appropriate theatre attire
- For a caesarean section under general anesthetic of a confirmed positive or symptomatic suspected case the partner should either come in just before the delivery of the baby or watch from the door – this will depend on theatre setup, or alternatively be allowed to see the baby just after birth
- Please remember the woman and partner live together, and if asymptomatic and wearing a mask are very low risk. Again it must be stressed that they are told to wear masks all the time and stay by the bedside, or they may be asked to leave
- He may not visit again except to fetch his partner

Management of COVID-19 Positive mothers

An area within the obstetric unit must be identified where a woman with potential or confirmed COVID-19 can be isolated and managed antenatally, pre and post-delivery. This room must ideally have its own bathroom.

Dedicated equipment should be used within this isolation area and not moved for use in any other part of the unit. No unnecessary items or equipment should be taken into the room. Any equipment on standby for this room should be readily available outside the room and identified by the 'Cleaned after last use' sticker being affixed.

- A dedicated CTG machine
- A delivery trolley that is set up for a COVID-19 patient that has all additional PPE
- Baby crib and any additional baby equipment required
- If a breast pump is required this should be provided for by the patient

Nursing staff should be dedicated for the isolation area and follow all appropriate IPC guidelines as per the isolation policy.

- The patient should be looked after by a dedicated staff member if she is an antenatal patient or for delivery and for 12-24 hours post-delivery until she is mobile again
- Whilst the mother is in labour or an antenatal patient they may require the nurse to be in the room more often and for longer periods and with appropriate PPE
- If there is more than one COVID-19 patient then the patients can be cohorted
- Suspected patients should not be cohorted in one room

Normal Delivery Patient with COVID-19

If the delivery room is suitable (has its own bathroom) the patient should be admitted directly into the room and remain there for the duration of their stay.

Entonox gas no longer is seen as a risk and can still be used with meticulous cleaning and use of filter between patients.

Only essential staff to be allowed in the room during the delivery and appropriate PPE to be worn. A standby team for an emergency should be outside the room and available to assist if necessary.

IPC for Normal delivery patient with COVID-19

COVID-19 Maternal and newborn care guidelines SA: (30th April 2020)

For staff attending to pregnant women with COVID-19 or PUIs, the same PPE requirements apply as when attending non-pregnant adults with COVID-19. As with all pregnancies, irrespective of COVID-19 status, particularly during labour, there are risks of staff exposure to blood, urine, faeces and amniotic fluid. Routine IPC measures as required for managing all pregnancies and deliveries must therefore be strictly adhered to.

National SA COVID-19 IPC Guidelines

The currently available evidence does not include the second stage of labour and delivery as an aerosol-generating event (REFS). In light of this, the recommended PPE for obstetric staff performing deliveries is as follows:

Labour and deliveries of well women: PPE as indicated to reduce exposure risk to blood and bodily fluids i.e. gloves, apron/gown and goggles/visor.

Labour for women with suspected (PUI) or confirmed COVID-19: PPE as indicated for the direct care of persons with COVID-19 i.e. a medical mask, gloves, apron and goggles/visor.

Caesarean Section with COVID-19

The patient should be admitted into the identified isolation area in obstetrics and the same principles apply as per normal delivery. Theatre should be informed of a PUI or a positive COVID-19 patient who requires a caesarean section, with isolation precautions being maintained at all times. An N95 respirator should be worn by members of the surgical team for an emergency Caesar and due to the potential risk of invasive procedures causing aerolisation (e.g. emergency intubation). However only the intubation is an AGP and therefore for an elective spinal Caesar only a surgical mask is required. The patient should wear a surgical mask throughout the caesarean section and during transport to and from the theatre.

Only essential staff to be allowed in the theatre during the delivery and appropriate PPE to be worn. The principle again is that as few people as possible remain in theatre, and a standby team for an emergency should be outside the room and available to assist if necessary. The baby should be managed in the theatre and the crib should be placed at least 2m from the theatre table if possible and space allows. A well partner may be present and will wear appropriate theatre clothes and PPE.

Some scenarios to consider:

Scenario 1: Emergency Caesar or mother very ill – pediatrician should be in theatre and manage the baby.

Scenario 2: Mom asymptomatic or mildly ill – elective Caesar – midwife in theatre can manage the baby and pediatrician be nearby and enter if needed

Scenario 3: Baby can be brought out the theatre for evaluation/resuscitation – however if not a GA Caesar then there is no AGP and risks must be weighed up according to size of theatre and if space allows etc.

Care of the newborn

The baby from a confirmed positive or symptomatic mother must be treated as a suspected case. The risks of vertical transmission between mother and foetus recently changed to probable, due to recent case study reports, but remains rare. The majority of newborns seems to have only mild or no disease. A discussion about the risks and benefits of separation after birth should take place between the family and doctor, preferably prior to delivery. In most international guidelines the benefits of bonding and breastfeeding outweigh the risk of transmission, and the baby should not be separated from the mother unless mother is very ill, or baby requires admission to a neonatal unit.

- Baby separated from mother must still be nursed as a PUI and all IPC principles remain. The baby can be isolated in an incubator in the corner of the nursery. A healthy family member may be considered to stay with the baby but they will be required to wear appropriate PPE when handling the baby. If the mother is not well enough to go home, the baby can be discharged as soon as possible if a feasible option, and the baby is well.
- If the baby is to stay with the mother then the cot should be placed at least 2 meters away from the mother's bed. The mother must be coached and apply IPC principles - including performing hand hygiene pre- and post- handling and wearing a face mask when handling the baby. All surface areas that the mother comes into contact with must be routinely cleaned and disinfected.
- WHO recommends breastfeeding as protecting against morbidity and death in the post-neonatal period and throughout infancy and childhood. The protective effect is particularly strong against infectious diseases that are prevented through both direct transfer of antibodies and other anti-infective factors and long-lasting transfer of immunological competence and memory. Infants born to mothers with suspected, probable, or confirmed COVID-19 should be breastfed, and within the first hour for maximum benefit, while applying necessary precautions for IPC. This includes hand hygiene pre and post handling and wearing a facemask if symptomatic when feeding.

- If bottle feeding is the mothers preferred choice of feed try and use ready to feed in hospital. Or the baby can be fed and bottle wiped down and taken out the room and managed as per normal.
- The baby although a low risk remains a PUI – if the mother is nursed in a 'newly' created maternity area, again be aware of the baby and maternal needs. Avoid as much as possible putting them in a larger COVID ward as the baby is very low risk and may be at higher risk there, and also a newborn that is crying a lot may upset sick adults.

When the separation option is chosen OR the mother with COVID-19 is severely ill, mothers should be encouraged and supported to express their milk, and this should be administered to the baby via cup or bottle. The patient will need to provide her own breast milk pump and it should be kept in the room all the time. Hand hygiene must be performed prior to expressing and again on completion. The parts of the pump that came into contact with the breast milk must be thoroughly rinsed and the pump cleaned after every use.

In the event that the mother is too unwell to breastfeed or express breastmilk explore the viability of donor human milk or appropriate breastmilk substitutes, informed by cultural context, acceptability to the mother, and service availability.

If the mother is well enough for discharge or a PUI, she should be discharged home with clear instructions on how to manage her baby at home.

The Placenta

There are currently no documented additional recommendations on managing the placenta. Therefore this should be managed as per the normal process.

- The placenta can be passed out the delivery area into a second red bag and sealed (label as COVID)
- There has been minimal documented transmission of the virus in the placenta and as it is spread by droplets the placenta remains low risk
- The placenta should be kept as per usual for the required time in the fridge (SASOG requirement) before moving to the freezer

Additional Considerations

The following may now be considered entry as long as all IPC principles can be maintained and they wear masks for the duration of their visit.

- Birth photographers
- Breast feeding consultants
- Doulas may only attend the delivery and be considered if the partner is ill and unable to attend, and the entire management team, CPC and lead obstetrician is in agreement.
- Hearing tests – should again continue, and especially if there is concern that the baby will not be brought back for follow-up. All necessary precautions must be taken between patients and hearing equipment meticulously cleaned.

Staffing challenges

The obstetric staff should be kept for the obstetric unit only where possible. There must always be a midwife available for an obstetric patient. Avoid moving staff from designated COVID areas into the maternity ward during a shift. Once the obstetric staff are on duty, they may not visit other wards or move around the hospital, even during breaks. Physical distancing should apply in rest areas and at nursing stations.

Whilst there may be a period where there may be excess staff in the hospitals, obstetric staff must not be replaced by staff who are unfamiliar with the ward and obstetrics. This is not the time to teach new documentation and obstetric skills. Even though a caesarean section is a surgical procedure, staff not familiar with obstetrics, may not recognize obstetric complications.

As mentioned in the previous point, should partners not be allowed in, or are unable to stay, additional staff may be needed to assist the mother with the baby, particularly after caesarean section, until the woman is able to get up and help herself and her baby.

Documentation and staffing challenges

Due to staff being off in quarantine or self-isolation, sick or the hospital reaching capacity unit managers must consider the following

- What is the absolute minimum of staff is needed to continue and maintain safe obstetric care
- This should be discussed with the management team and lead obstetrician – i.e. when patients would need to be transferred out
- Documentation should be decreased and non-essential parts omitted – this would include care plans, basic needs. Documentation can be minimal as long as the correct times of abnormal readings and medications are documented, and the 'story' is correct. Summarize the normal and document the abnormal
- Documentation must be accurate – if late entry then to state late entry, or if written as a summary then to state summary and reason for this.
- IntelliSpace should be used as much as possible and notes made directly on to the paper copy if required

All serious adverse events must continue to be reported as usual and to the legal department.

Healthcare Worker (HCW) fears

All staff on the frontline of the pandemic are open to similar fears and information overload. They will be nervous and easily misinformed. At the different stages of the pandemic whilst their particular discipline may not be severely affected, many things within the hospital will be. They may be feeling cut off from friends in other units, and fearful of what is going to happen. When staff are out of normal routines it is common that there are increased mistakes made.

It is important to have regular huddles (remembering physical distancing) with the staff, listen to their fears and address what can be addressed in a safe environment, keep them informed and remind them frequently of IPC principles. Remind them too of the need to always to ensure they are safe in the community as well, cloth masks to be warn, not attending big events etc.

Often when there is fear and anxiety the staff can behave out of character and this exacerbates an already high risk situation. Practice different scenarios and responses, ensure that all staff are on the same page and that their responses to queries and requests are uniform, e.g.

- A woman who becomes ill with COVID-19 symptoms while admitted

- A woman who refuses a staff member to do what they need to because of fear
- A woman and her partner who are afraid and want to be reassured that their baby will be 'safe'
- A woman that asks for additional visitors
- Health education re COVID-19 must be the same from all staff members
- IPC advice must be the same
- How do you help a woman whose partner may not come as there may be other children at home – how will you manage this and assist them with communicating with their family

Maternal health

Not only will staff be anxious but pregnant women will have a heightened anxiety about their unborn or newborn babies. They may overreact to small issues, and it is important to be visible and understand this, or exacerbations of emotions may lead to a poor patient journey.

The attached document from the South African Society of Psychiatry, deals with all aspects of pregnancy, and many external factors. It is an excellent document for understanding some of the fears of both patients and staff, and allowing for situations to be managed early.

Please see attached: Coping with Anxiety and Psychological Distress related to COVID – 19 during Pregnancy and Postpartum

00149511.pdf

References

1. Coronavirus in Pregnancy. RCOG guideline Version 9. Published 18th June 2020. https://www.rcog.org.uk/globalassets/documents/guidelines/2020-06-18-coronavirus-covid-19-infection-in-pregnancy.pdf

2. Coronavirus Disease 2019 (COVID-19) Update—Information for Clinicians Caring for Children and Pregnant Women https://www.cdc.gov/coronavirus/2019-ncov/hcp/inpatient-obstetric-healthcare-guidance.html#anchor_1582067966715

3. The Royal Australian and New Zealand College of Obstetricians and Gynaecologists COVID Information HUB https://ranzcog.edu.au/statements-guidelines/covid-19-statement

4. South African National department of Health: COVID – 19 Maternal and Newborn care guidelines. (see Mediclinic COVID Library on the Intranet to access)

HISTORY AND VERSION CONTROL

CONTRIBUTORS	NAME	DESIGNATION
Author	Aliné Hall	Clinical Quality Specialist: Mother + Child
IPC Coordinator: Operational	Christine Smedley	IPC Coordinator: Operational
Version	V3	
Effective date	2020-09-29	
VERSIONS 1	Guidelines combined Well partner of covid positive mom may attend labour and delivery only	
2	Projected admissions updated Spelling errors corrected Clarity on partner in theatre of positive mother	
3	Addendum A - Prospective admission section removed	
4	Additional visitors and access added	