Home-based care for mild and moderate COVID-19 during and after pregnancy

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11 January 2022
Introduction

• Covid-19 pandemic has caused significant disruption of essential health services

• Urgent need for innovative strategies as disease evolves

• Most countries have crossed the initial 3 phases of transmission and are now heading towards community/local transmission

• Vaccine coverage

• New variants, more transmissible

• Search for strategies to minimize risk of transmission
Obstetric Telehealth

“Evidence suggests that telehealth provides comparable health outcomes when compared to traditional methods of health care delivery. Patient-physician relationship not compromised. Patient satisfaction enhanced. Patient engagement improved”
Covid Statistics – Gauteng, South Africa

COVID-19 metrics in Gauteng, as % of previous wave peak

Dr. Richwaan Suliman
twitter: @rid1tweets

Wave 2 (beta)
Wave 3 (delta)
Wave 4 (omicron)
Deaths
Cases
Hospital Admissions

% of delta wave peak


World Health Organization

HEALTH EMERGENCIES programme
Increased need for home-based care to minimize risk of transmission
Principles of management

• Clinical evaluation of the COVID-19 pregnant woman

• Evaluation of the home setting

• The ability to monitor the clinical evolution of a person with COVID-19 at home

• Waste management in home setting
Criteria for home-based care

- **Mild disease** – COVID-19 without evidence of viral pneumonia or hypoxia

- **Moderate illness** – some clinical signs of pneumonia (fever, cough, dyspnea) but SpO2 > 90% on room air; RR < 30

- Appropriate IPC measures at home

- Close monitoring of signs and symptoms of deterioration in health status by a trained HCW
Assessing severity of illness / signs that require urgent medical attention

- Difficulty in breathing / talking
- Coughing blood
- Chest pain or pleuritic chest pain
- Signs of dehydration / unable to tolerate oral fluids / medication
- Dizziness
- Confusion
- Warning signs: pain, bleeding, ROM, decreased FM
- Unremitting fever > 39°C despite use of paracetamol
Assessment of clinical and social risks

- Presence of co-morbidities
- Obstetric problems
- Inability to care for self or arrange follow-up

Clinical assessment
Respiratory function
Physical examination, CXR, pulse oximetry, ABGs
Evaluation of the home setting

- Ability to adhere to restrictions on movement around the house
- Presence of support network – caregiver
- Hand and respiratory hygiene supplies
- Environmental cleaning materials
Evaluation of the home setting

- Household members knowledge of preventing transmission in home
- Presence of other vulnerable members in household
- Psychosocial needs of pregnant woman and family
- When to call for medical assistance
Home monitoring

- Home-based care should be provided by HCWs
- Lines of communication between the caregiver and trained HCWs for the duration of home-care period
- Telemonitoring, SMS, WhatsApp, contact for clinic/hospital
- Covid Helpline (South Africa) – 0800 029 999
- Daily monitoring forms
# Home monitoring

<table>
<thead>
<tr>
<th>Surname</th>
<th>First Name</th>
<th>Date of Birth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contact Cell number</td>
<td>E-mail address</td>
<td>Category of Essential Worker (Select from addendum 1)</td>
</tr>
<tr>
<td>Alternative contact number</td>
<td>Job Title</td>
<td></td>
</tr>
<tr>
<td>Next of kin or Alternative Contact (Please provide name, relationship and contact details)</td>
<td>Work address &amp; details:</td>
<td></td>
</tr>
<tr>
<td>Home address:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Days post exposure</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Date: DD/MM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Document morning + evening</td>
<td>AM / PM</td>
<td>AM / PM</td>
</tr>
<tr>
<td>Temperature (no meds)</td>
<td>I</td>
<td>I</td>
</tr>
<tr>
<td>Respiratory rate</td>
<td>I</td>
<td>I</td>
</tr>
<tr>
<td>Pulse rate</td>
<td>I</td>
<td>I</td>
</tr>
<tr>
<td>Symptoms (Circle Y or N)</td>
<td>Daily</td>
<td>Daily</td>
</tr>
<tr>
<td>Fever/Chills</td>
<td>Y / N</td>
<td>Y / N</td>
</tr>
<tr>
<td>Cough</td>
<td>Y / N</td>
<td>Y / N</td>
</tr>
<tr>
<td>Sore throat</td>
<td>Y / N</td>
<td>Y / N</td>
</tr>
<tr>
<td>Shortness of breath</td>
<td>Y / N</td>
<td>Y / N</td>
</tr>
<tr>
<td>Body aches</td>
<td>Y / N</td>
<td>Y / N</td>
</tr>
<tr>
<td>Redness of the eyes</td>
<td>Y / N</td>
<td>Y / N</td>
</tr>
<tr>
<td>Loss of smell OR loss of taste</td>
<td>Y / N</td>
<td>Y / N</td>
</tr>
<tr>
<td>Nausea/vomiting/diarrhoea</td>
<td>Y / N</td>
<td>Y / N</td>
</tr>
<tr>
<td>Fatigue/ weakness</td>
<td>Y / N</td>
<td>Y / N</td>
</tr>
<tr>
<td>At Home or work?</td>
<td>H / W</td>
<td>H / W</td>
</tr>
<tr>
<td>Clinical and Progress Notes and Exposure History:</td>
<td></td>
<td></td>
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</tbody>
</table>
Primed for a pandemic: Implementation of telehealth outpatient monitoring for women with mild COVID-19

Nicole M. Krenitsky, Jessica Spiegelman, Desmond Sutton, Sbaa Syeda, and Leslie Moroz
IPC measures for HCWs providing care in a private home

- Carry out risk assessment and need for PPE – medical mask
- Patient in adequately ventilated room - natural ventilation
- Avoid use of fans for air circulation
- Limit presence of household members during visits
IPC measures for HCWs providing care in a private home

- Perform hand hygiene after contact with patient
- Use disposable paper towels to dry hands
- Clean and disinfect any reusable equipment before using on another patient
- Remove PPE before leaving home
- Dispose waste in strong bags / safety boxes
IPC measures for caregivers providing care at home

- Limit woman's movement around the house
- Household members should not enter room of patient
- Appropriate hand hygiene - before and after preparing food
- Pregnant woman and caregivers should wear medical mask
- Do not reuse medical masks
- Avoid contact with patients body fluids
- Linen and clothes should be washed with soap, hot water: 60-90°C
- Waste generated at home should be packed in strong bags
## Requirements for PPE

<table>
<thead>
<tr>
<th>Indication</th>
<th>Consists of</th>
<th>Required for</th>
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<tbody>
<tr>
<td>Standard PPE (staff)</td>
<td>Gloves, surgical mask, apron</td>
<td>Routine care of COVID-19 patients</td>
</tr>
<tr>
<td></td>
<td>May require eye covering if risk of a mucosal splash.</td>
<td></td>
</tr>
<tr>
<td>Full PPE (staff)</td>
<td>Gloves, gown, hair cover, N95 ventilator, goggles/visor</td>
<td>Aerosol generating procedures</td>
</tr>
<tr>
<td>PPE for mothers/ caregivers</td>
<td>Hand hygiene, face mask</td>
<td></td>
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</tbody>
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Medical Management

- Supportive treatment – antipyretics for pain, fever
- Adequate nutrition, rehydration
- Antibiotics – only if clinical suspicion of bacterial infection
- Anticoagulants not recommended for outpatient settings
- Psychosocial support
Educational tools
Respectful maternity care (RMC) and person-centred care (PCC)

- RMC – evidenced-based approach to care in all circumstances. It includes respect for dignity, privacy, confidentiality, informed choice and continuous support during childbirth and labour.

- PCC – emotional wellbeing and physical comfort. Woman are empowered and included in decisions about their care.
RMC and PCC within the reality of COVID-19

• Promote family support
• Keep mother and newborn together. Promote breastfeeding and skin-to-skin contact
• Ensure effective health education
• Promote positive practice environment
Other problems which woman may face

- Mental health problems
- Gender based-violence
- Poverty/ Food insecurity
- Adolescent/teen pregnancies – build a trusting, non-judgmental relationship.
  Ensure privacy/confidentiality
- Bereavement/loss
Vaccine hesitancy

- Share personal experiences
- Build trust
- Address misinformation
- Help woman to feel empowered
- Emphasize positive outcomes
Conclusion

Covid-19 has forced HCW to seek alternate forms of patient care

Need to balance restrictions but provide access to maternity care

Maintain patient-physician relationship

Less resourced persons may have less access to technology

HCWs should be aware of medical board laws