Annex 35

GUIDELINES OF INFECTION CONTROL AND CLINICAL MANAGEMENT OF SEVERE ACUTE RESPIRATORY INFECTIONS (SARI) / PNEUMONIA TRO COVID-19

Case Definition of SARI

An acute respiratory infection with:

I. History of fever or measured fever of ≥ 38C°;

II. and cough;

III. with onset within the last 10 days;

IV. and requires hospitalization.

Consider COVID-19 as a possible aetiology of patients with SARI under certain conditions (history of travelling, mass gatherings, religious gatherings etc.)

Infection prevention & control measures at point of entry

1. Initiate Infection Prevention and Control (IPC) at the point of entry of the patient to hospital.

2. Screening questions should be done at first point of contact at the emergency department or outpatient department/clinics.

3. Suspected SARI TRO COVID-19 patients should be given a surgical mask and directed to dedicated waiting area.

4. Keep at least 1m distance between suspected patients.

5. Standard precautions should always be adhered by all healthcare workers (HCWs) and applied in all areas of the health care facilities.

6. Standard precautions include hand hygiene and the use of personal protective equipment (PPE) during direct and indirect contact with patients' blood, body fluids, droplets secretions (including respiratory secretions) and non-intact skin.

Infection prevention & control measures in the ward

1. Designated ward for SARI/Pneumonia cases:
    a. preferably single room with en-suite bathroom.
    b. If not available, cubicle or room with 1m distance between patients.

2. All patients should be asked to wear surgical mask as long as possible.

3. HCWs managing patients in SARI cubicles (with a distance of >1m) should use minimum PPE of surgical mask and frequent hand hygiene practice throughout their shift.

4. HCWs coming into patient areas (with a distance of < 1m) should use PPE as below:
    a. Surgical mask, long sleeved plastic apron, non-sterile gloves, face shield (if exposure to patient's secretions is anticipated).
    b. Strict doffing procedure must be practiced

5. HCW performing sampling of Oropharyngeal/Nasopharyngeal swab should use PPE as below:
    a. N95 mask, face shield, long sleeved apron, non-sterile glove.
    b. Strict doffing procedure must be practiced

6. HCWs must comply **with PPE usage and hand hygiene practices at all time.**

7. If performing aerosol generating procedures (AGP), HCWs must use appropriate PPE in accordance to airborne and droplets precautions.

8. Frequently clean and disinfect surfaces of high touch areas in the ward such as bed railings, over bed table etc.

9. All equipment and material used in the ward should be disinfected.

Housekeeping rules for patients

1. To remain within the confines of the bedroom and to call should they require any assistance.

2. Visitors strictly not allowed.

3. Basic necessities (clothing, food etc) will be provided.

4. Prohibited from taking photos / disseminating news on admission to social media.

5. Ensure surrounding areas clean and dispose tissues/wet towels in provided bins.

6. To inform the staff if patient have any drug or food allergy.

7. Always wear the face mask especially when the staff comes into the room and follow the cough etiquette.

8. Keep yourself hydrated.

9. Limit yourself to others to at least 1 m

Please inform the HCWs immediately if experiencing any of the following symptoms:

I. Difficulty in breathing (gasping of breath or rapid breathing)

II. Coughing up blood.

III. Chest pain which do not abate/resolve.

IV. Persistent diarrhoea/ vomiting

COVID-19 screening test

1. Inform laboratory prior to screening of COVID-19.
2. Get the sample box from microbiology laboratory.
3. Label the sample container and Viral transport medium (VTM) tube with the patient's name and details.
4. Laboratory request form must be filled by Medical Officer and signed by specialist as SARI TRO COVID-19.
5. All laboratory request form should be labelled as "**SARI TRO COVID-19"**
6. Triple packaging for Nasopharyngeal/ Oropharyngeal samples.

If the result is **POSITIVE**:

1. Call the COVID TEAM to transfer to confirmed COVID-19 ward.
2. Notification for "Notifikasi Penyakit Berjangkit Perlu Dilaporkan" must be done immediately (not needed if result is negative)

If result is **NEGATIVE**:

1. If result is negative and patient improved with current empirical management, transfer out to respiratory ward or to other general wards where beds are available.

Clinical Management of SARI/ Pneumonia TRO COVID-19

1. **All patients with suspected pneumonia should be managed in PUI/SARI wards with adequate PPE** (Eye cover, surgical mask, long sleeved plastic gown/isolation gown and gloves).
2. All cases must be **screened for COVID-19**.
3. All cases must be fully investigated for the aetiology.

4. All SARI/Pneumonia with features suggestive of **viral in origin (**CXR changes, normal or low WBC count or low absolute lymphocyte count) may be started on antiviral empirically. If COVID-19 is suspected, treatment can be started early with Hydroxychloroquine or other drugs as recommended.

5. Treatment with Hydroxychloroquine for SARI may be stopped if aetiology has been identified and COVID-19 result is negative.

Adult Dosage of Hydroxychloroquine

May start hydroxychloroquine if there is no contraindication:

- 400 mg at diagnosis; 400 mg 12 h later; followed by 200 mg BD up to Day 5

If no hydroxychloroquine available,

- Use chloroquine base 600 mg (10mg/kg) at diagnosis and 300mg (5mg/kg) 12 h later, followed by 300mg (5mg/kg) BD up to Day 5

Clinical Management of SARI/ Pneumonia TRO COVID-19 in paediatrics

1. All children with pneumonia should be managed in PUI/SARI wards with appropriate PPE.

2. Pneumonia is a very common cause for admission to paediatric wards. Common pathogens include respiratory viruses (RSV, influenza, parainfluenza etc) and bacteria. During this Covid-19 period, **screening for Covid-19 is recommended in those children admitted to wards with very severe pneumonia and those with features of viral pneumonia.**

3. The role of antiviral treatment in children with Covid-19 is unclear. Children with Covid-19 usually have less severe illness compared to adults. There is very little data on efficacy and safety of hydroxychloroquine in treatment of Covid-19 in children.

4. **The decision to start on antiviral drugs should pay close attention to patients' clinical condition, co-morbidities and interacting medications. Consult Paediatric ID specialist before starting antiviral drugs.**

Paediatrics Dosage of Hydroxychloroquine

The dose of Hydroxychloroquine in children, (based on Univ. of Michigan protocol):

- 10mg/kg PO BD x 2 days, then 3 mg/kg PO TDS (total duration: 5 days)

Clinical Management of SARI/ Pneumonia TRO COVID-19 in Obstetric

1. **To be prescribed to O&G patients when the advantage is more then the risk.**

2. Chloroquine has not been formally assigned to a pregnancy category by the FDA. There are no controlled data in human pregnancies.

3. Congenital anomalies were reported in the offspring of one woman being treated with chloroquine 250 to 500 mg daily during pregnancy for SLE; however, chloroquine has been used in the prophylaxis and treatment of malaria during pregnancy without evidence of fetal harm. (Chloroquine is the drug of choice for the prophylaxis and treatment of sensitive malaria species during pregnancy).

4. Chloroquine should only be given during pregnancy when need has been clearly established.

Obstetric Dosage of hydroxychloroquine

Options of Hydroxychloroquine dosage for Obstetric Patients:

I. 400mg BD on day one then OD for 5 days; OR

II. 400mg BD on day one, then 200mg BD for 4 days; OR

III. 600mg BD on day one, then 400mg OD on day 2-5

Contraindication of Hydroxychloroquine

Contraindication in Hydroxychloroquine:

1. Known allergy to the drug

Precautions when using hydroxychloroquine:

1. QTc > 500 msec.
2. Myasthenia gravis.
3. Porphyria.
4. Retinal pathology (baseline eye examination not required).
5. Epilepsy
6. Drug interaction (refer to http://www.covid19-druginteractions.org (Liverpool)