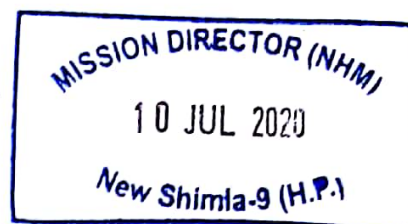




National Health Mission
SDA Complex, Kasumpti, Shimla-9
Himachal Pradesh
 Dated: Shimla-171009, the



CIRCULAR

Currently, the Department of Health and Family Welfare is running 15 dialysis units in PPP mode in the high load facilities i.e RH Bilaspur, ZH Dharamshala, RH Kullu, ZH Mandi, RH Solan, RH Una, ZH Shimla, RH Hamirpur, RH Chamba, CH Nurpur, CH Palampur, CH Paonta Sahib, RH Nahan, CH Sundernagar and SLBSGMC Ner Chowk Mandi in Himachal Pradesh. The dialysis services are being provided free for BPL patients and for beneficiaries under Ayushman Bharat PMJAY and HIMCARE.

MoHFW, Government of India has issued detailed instructions for dialysis of COVID-19 patients. Further the chances of morbidity and mortality due to COVID-19 in patients with Chronic Kidney Disease (CKD) is high and it is imperative to take extra care of CKD patients, especially those diagnosed to be COVID-19. Keeping in view the GOI instructions and notification of the DCCC, DCHC and DCH dated 4.5.2020, the following arrangements shall be done with immediate effect:

1. The CKD patients suffering with COVID-19 shall be given treatment at the Institutions mentioned below:


COVID-19 positive patient with CKD from	Treatment to be undertaken in
District Shimla , Solan, Sirmour and Kinnour	IGMC Shimla*
District Mandi, Bilaspur ,Kullu and Lahaul & Spiti	SLBSGMC Ner Chowk Mandi
District Kangra, Una , Hamirpur and Chamba	ZH Dharamshala**

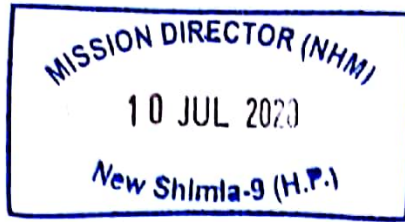
* Subject to the condition that the dialysis of COVID and Non COVID cases shall be carried out in separate blocks and with separate dialysis machines. In no case, shall there be intermingling of the patients.

This arrangement shall be in place till the dialysis facility at Dr. RPGMC Tanda is able to cater to the COVID-19 positive patients with CKD.

2. The clinical protocol to be followed for the COVID-19 positive patients shall be as per the attached Annexure.

3. All the other dialysis units shall function and provide uninterrupted dialysis services on 24x7 basis in consultation with the Physician of the concerned hospital as per the following guidelines:
- a. All the institutions except SLBSGMC Ner Chowk, Mandi will function in routine and shall continue to provide the dialysis services which were being provided through those institutions earlier to COVID-19 epidemic.
 - b. While providing all the services, the staff working in these units shall be provided all the necessary Personal Protective Equipment as per the guidelines already circulated.
 - c. All dialysis units shall ensure the social distancing measures in the institutions for both the patients as well as the health care staff. The facilities shall install IEC material in the prominent areas of the health facility including cough/sneezing etiquettes and frequent hand washing for benefit of people visiting the hospital/dialysis facility.
 - d. All units will take necessary steps for sanitization/disinfection as per guidelines.
 - e. All non COVID dialysis centers should have a staffing plan in place, including deployment on rotation basis to the extent possible, and a contingency plan to maintain continuity of operations.
 - f. Triage of the patients visiting the dialysis centre shall be done by the physician of the concerned Institution through existing institutional mechanisms already put in place.
 - g. The suspected cases of COVID-19 shall be sampled and tested before dialysis. However, in case of emergency, if the clinical condition of the patient does not permit time for sampling and waiting for subsequent result, the dialysis in emergency shall be undertaken by observing prescribed universal precautions. **In no case, shall the dialysis be deferred for want of test results.**
 - h. All the cases who have been detected COVID-19 positive and the dialysis is not required in emergency, shall be shifted to IGMC Shimla/SLBSMC Ner Chowk Mandi/ZH Dharamshala as per the above mentioned plan. However, if the dialysis is required in emergency and the patient's clinical condition does not permit time for transportation, the dialysis shall be carried out at the existing dialysis centre, with universal prescribed precautions.


Addl. Chief Secy. (Health)
to the Govt. of H.P., Shimla-2



Additional Chief Secretary (Health) to the
Government of Himachal Pradesh

Endst No.as above Dated:

Copy for information and necessary action is forwarded to:-

1. Additional Secretary and Mission Director National Health Mission MOHFW
Government of India, New Delhi
2. The Special Secretary (Health) to the Government of Himachal Pradesh
3. The Director of Health Services, HP, Shimla-9
4. The Director of Medical Education & Research HP, Shimla-9
5. All the Deputy Commissioners in Himachal Pradesh
6. All the Chief Medical Officers in Himachal Pradesh
7. All the Principals, Government Medical Colleges, in Himachal Pradesh
8. Vendors operationalizing Dialysis services in PPP mode in the State


Additional Chief Secretary (Health) to the
Government of Himachal Pradesh

Addl. Chief Secy. (Health)
to the Govt. of H.P., Shimla-2

Management Guidelines for COVID-19 patients with ESKD and AKI in the state of HP

Introduction:

COVID-19 is a global pandemic that has resulted in a rapid spread of infection with an increase in morbidity and mortality worldwide. Acute kidney injury (AKI) is a common complication with reported incidence in patients with COVID-19 is 3-15% and in patients with severe infection increased to 15-50%. AKI is an independent risk factor for mortality in COVID-19 patients. About 25-50% of COVID-19 patients admitted in ICU require RRT.

Chronic kidney disease (CKD) is a global public health problem. CKD patients are more vulnerable to COVID-19 because they are immune-compromised, have multiple co-morbidities and end stage renal disease (ESRD) patients are recurrently exposed to hospital environment due to maintenance dialysis treatment 2-3 times a week. About one third of patients who develop AKI have underlying CKD stage 3-5. COVID-19 infection has a variable disease severity in dialysis and transplant patients. There is a high risk (80%) for acute respiratory distress syndrome (ARDS) and death (30-40%) in the subgroup requiring hospital admission.

Management:

Currently, there is no evidenced based approved treatment of COVID-19 itself. It is primarily general and supportive management and kidney replacement therapy if patients has advanced CKD or severe AKI. There is no effective antiviral therapy available at present.

Supportive care includes:

1. Adequate rest
2. Nutritional food
3. Adequate fluid intake
4. Maintenance of blood pressure
5. Control of blood sugar
6. Oxygen support if required
7. Avoidance of nephrotoxic drugs -
8. Regular monitoring of renal function (serum creatinine, Na and K) -
9. Daily intake/output recording
10. Prevention of secondary infections

Initial fluid resuscitation

Preferably Isotonic crystalloids,
Volume as per individual need

Fluid restriction (If required)

500-750 ml/d (approximately 10 ml/kg per day) If there is no response to fluid loading and signs of volume overload appear

Metabolic acidosis

Tab Sodium bicarbonate 05-1 g TDS
(1g provides ~12 meq of HCO_3)

IV NaHCO_3 for severe metabolic acidosis pH <7.2

Hyperkalemia (K >5.5)	Potassium binding resins Sodium/Calcium polystyrene sulfonate
Fluid overload	Furosemide 100 mg IV BD/TDS ±Tab Metolazone 5 mg BD
Indication for dialysis	Volume overload, Hyperkalemia, Severe metabolic acidosis, Uremic encephalopathy, uremic pericarditis Not responding to medical management
Intermittent HD (Hemodynamically stable)	Standard bicarbonate dialysis Dialysis duration 3-4 hours 2-3 times/week
SLED (Hemodynamically unstable)	Dialysate flow rate (QD) 200-300 ml/min Blood flow rate (QB) 200 ml/min Treatment duration 6-8 hrs Treatment delivered on alternate days depending on patient need
CRRT (Hemodynamically unstable)	CVVHD/CVVH 25-30 ml/kg/hr Treatment for 18-24 hr
Anticoagulation	Standard heparin/tight heparin/no Anticoagulation
Drug therapy	
Azithromycin (When Used with Hydroxychloroquine)	500 mg PO once on Day 1, then 250 mg PO daily for 4 Days
Hydroxychloroquine	400 mg BD on day 1 followed by 400mg daily for next 4 days.
Lopinavir/Ritonavir	LPV/r 400 mg/100 mg PO twice daily for 10-14 days
Remdesivir	RDV 200 mg IV over 30-120 minutes for one dose, followed by RDV 100 mg IV on Day 2 through Day 5 (not administered if GFR <30 or dialysis)
Tocilizumab (Off Label)	8mg/kg (maximum 800 mg at one time) given slowly in 100 ml NS over 1 hour;

dose can be repeated once after 12 to 24 hours if needed for severe disease

Glucocorticoids

Dexamethasone 0.12 mg/kg/d can be used for 3 to 5 days in patients with COVID pneumonia

Heparin (UF & LMW)

Prophylactic anticoagulation in moderate & severe case

Convalescent plasma (Off Label)

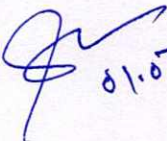
May be considered in patients with moderate disease who are not improving

Dose: Dose is variable ranging from 4 to 13 ml/kg (usually 200 ml single dose given slowly over not less than 2 hours)

Hydroxychloroquine chemoprophylaxis for COVID-19 infection:

GOI guidelines have recommended the prophylactic use of HCQS for Asymptomatic Health care workers and Asymptomatic household contacts of a laboratory confirmed cases.

Prophylactic use of HCQS has not been recommended for ESKD/dialysis patients



01.07.2020

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