

Editorial

Are we following Uniform Protocol in the Management of COVID-19 Patients?

Deadliest pandemic of the recent history of mankind named COVID-19 caused by single stranded RNA virus SARS-CoV-2 started from Wuhan province of China since late December 2019 has now reported from more than 188 countries and territories across the globe. There are more than 1 core 44 lacks reported cases with more than 6 lacks mortality. Bangladesh is one of the heavily affected countries with 202,066 reported cases and 2581 reported deaths as yet.¹

Since the beginning of the pandemic different medical professional societies has published different management guidelines with minor dissimilarities. As per government current policy, along with COVID dedicated hospitals all other government hospitals and many private and corporate hospitals are now treating confirmed and suspected COVID patients. Lack of supervised training, inadequacy of logistics and incoordination leads to some non-uniformity and deviation from the standard in the management of COVID-19 patients.

Properly differentiated three zone (green, yellow, red) indoor system and checklist oriented stronger triage system is necessary to minimize mixing of COVID patient with others. Our poor infrastructural settings and poor triage system leads to mixing among them and also sometimes leads to unnecessary delay in treatment initiation.

Mild cases without risk factors should be treated at home with simple antipyretic and other supportive measures only. All hypoxic patients, moderate cases with CURB 65 score 1 or more, severe to critical cases and also mild cases with risk factors need to admit in hospital.²

Antivirals are currently not recommended in mild cases but overenthusiastic and injudicious uses of them going on across the country by the physicians. While Favipiravir and Remdesivir is indicated in moderate and severe to critical cases respectively, giving them in early viremic stages are of proven benefit found in small studies and anecdotal reports. However, in some severe cases viremic phases may be prolonged enough and overlap with immune reaction phases.

Until contraindicated all hospitalized COVID patients need anticoagulation. But sometimes the protocol of use and dosage of anticoagulant are neglected.

After the recent published pre-printed copy of RECOVERY trial, dexamethasone is now being used in our COVID centers. Dexamethasone 6 mg daily for 10 days showed benefit in patients with requiring supplemental oxygen and on mechanical ventilation but not in patients without any oxygen support. Use of steroids in mild cases, in patients with early viremic stages and for prolong period after discharge are observed which are actually harmful to the patients.

Use of immunomodulatory therapies are of matter of expertise. Before prescribing convalescent plasma some clinical indications and conditions like age > 18 years, critically ill, hypoxic patients with rapidly deteriorating clinical condition and increasing oxygen requirement etc. should be present.² Consultant or patient party wish and availability should not produce non indicated use of convalescent plasma. Tocilizumab is another immunomodulatory agent may be effective to combat cytokine releasing syndrome and may

reduce the rate of entry of severe cases in to critical phase.

Respiratory support of COVID patients is the cornerstone of management. For proper ventilation of lung awake proning and breathing exercise are effective methods supported by few small study reports. Our healthcare workers have to put more efforts to educate the patients and ensure the implementation of these supportive measures by them. To combat hypoxemia progressive use of nasal cannula, simple mask and partial non rebreather mask sometimes needed to be augmented by high flow nasal cannula (HFNC) and other noninvasive methods. HFNC with little risk of aerosol generation found to reduce the need of invasive ventilation in some study. Invasive Ventilation should be tried as last resort.³

Our current oxygen delivery system of the hospitals doesn't support high flow oxygen delivery to many patients at a time. The gross modification of oxygen delivery system of the hospitals from manifold or liquid oxygen plant to oxygen generating system is a crying need. Role of antibiotic is minimum in the overall management as the pneumonitis occurs here is viral. Most of the guidelines don't support empiric use of broad spectrum antibiotic other than in patients who is ventilated or in septic shock. Compatible clinical features, unilateral radiological shadow in chest x-ray, raised procalcitonin may point to concomitant bacterial infection. Ongoing Indiscriminate and injudicious uses of antibiotics in COVID treatment may lead to *Clostridioides difficile* infection and drug resistant bacterial emergence in the community.⁴

Use of drug in the management of COVID-19 patients should be rational and polypharmacy should be avoided. No doubt our health care stuffs including doctors are doing tremendous job to overcome this natural calamity but there are few areas of shortcoming. Our donning and doffing should be supervised, waste disposal and cleaning of hospital premises should be

optimum and our counseling to both patients and party should be more empathetic.

Last but not the least our isolation zone has to be well ventilated and standardized with effective infection control and prevention measures.⁵ Hope that through our sincere endeavor we will be able to implement a uniform protocol for the management of COVID-19 patients overcoming all these and other imperfections.

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References

1. Wikipedia contributors. COVID-19 pandemic. Wikipedia, The Free Encyclopedia. 2020. Available at: https://en.wikipedia.org/w/index.php?title=COVID-19_pandemic&oldid=968350112. Accessed July 19, 2020.
2. Bangladesh Society of Medicine. Clinical Guidelines for the Management of Moderate to Severe COVID-19 Disease –Bangladesh Model Version 2;2020.
3. Li J, Fink JB, Ehrmann S. High-flow nasal cannula for COVID-19 patients: low risk of bio-aerosol dispersion. *Eur Respir J*. 2020;55(5):2000892. doi:10.1183/13993003.00892-2020
4. National Institute for Health and Care Excellence. COVID-19 rapid guideline: antibiotics for pneumonia in adults in hospital (London): NICE;2020. Available from: www.nice.org.uk/guidance/ng173
5. World Health Organization. Infection prevention and control during health care when coronavirus disease (COVID-19) is suspected or confirmed Interim Guidance: WHO. 2020. Available at: <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance-publications>