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Triaging in COVID-19 at Patan Hospital, Nepal

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Abstract

Amid this pandemic, which has been spreading like a wildfire globally, Nepal is not an exception to it. With this, we have been hearing the news of global shortage of personal protective equipment (PPE), with growing concern over the safety of medical community and possibility of cross-contamination. Triaging is less researched and reported in COVID-19. It is as important as PPE, a gateway of safety for health care worker. If we have to manage COVID-19, ensuring triage should be among the priority strategies. Patan hospital is among the few hospitals in Nepal where triaging is practiced.

Keywords: COVID-19, personal protective equipment PPE, triage

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There is a global shortage of personal protective equipment (PPE)[1] and Nepal is no exception. Due to shortage of PPE improvised surrogates are available in market, the safety of which has been a growing concern in Nepal.[2] There are concerns in medical community that doctors are sent to war without weapon. However, the right time to buy weapon is not after war starts. Therefore, the root to this problem is that we did not prepositioned adequate PPE. There were no PPE, neither did we have Triage in all hospitals. There are no studies to exactly state what percentage of hospitals were doing triage before outbreak of COVID-19. Nevertheless, lack of triage is less heard. Does this mean that we have suddenly started doing triage?

Triaging is important to manage COVID-19. It is as important as PPE. This is a gateway of safety for health care worker, Figure 1.

Figure. 1 COVID-19 Triage at Patan Hospital, Nepal

Patan Hospital is a multispecialty tertiary care teaching hospital of Patan Academy of Health Sciences, Nepal. Preparing a general hospital for a pandemic is a challenge as there is a constant threat of transmitting the infection to other patients, and more so in a resource constraint environment like Nepal, to build separate hospitals for managing such pandemics.

The first challenge for us was to build a system to try to separate, suspected Covid-19 patients from general patients who would come for their regular or emergency visits, and this is where the triage comes in. Ensuring triage is one among the Infection Prevention and Control (IPC) strategies mentioned in the interim guidance by World Health Organization (WHO).[3]

After the COVID-19 pandemic, Patan hospital has allocated a separate, dedicated building for influenza like illness (ILI) patients. So how are we separating COVID and non- COVID patients? The basic answer to this is by effective triaging. We have a 2-level triage system; primary and secondary triage that runs 24 hours a day. Primary triage station is set at the first entry to the regular emergency room where the triage officer geared up in full set PPE will ask if the patients fulfill any criteria to meet for COVID or not; clinical and travel history. If the patient meets the criteria then he/she will be directed towards the fever clinic around 10 minute away from the emergency, if not then towards the regular emergency. In fever clinic, a secondary triage officer with PPE will receive the patient and take vitals, then the on duty medical officers inside the fever clinic will manage accordingly. With this, we have been making rational use of PPE.

Triage is sorting out the patients by the type and urgency of the care they seek.[4] Triage during pandemics are different from regular emergency triaging. The crucial part during infectious disease outbreak is to separate infectious patients from others, to minimize cross contamination. The role of efficient triaging comes here. During such pandemics, two tier triaging, primary and secondary, is important. During the severe acute respiratory syndrome (SARS) outbreak in 2003, many countries had no triage, as a

result of which they became the source for many instances in the transmission of the disease.[5,6] Initial triage is based on the symptomatology without a definitive diagnosis and they highlight the importance of isolation and decontamination to prevent further spread or exposure to patients and responders. Using the triage protocols during the pandemics will also help us in utilizing the available resources to optimize the health care deivery.[6]

As the burden of COVID-19 cases has risen up and lockdown has been imposed, care of non COVID emergencies can be easily overlooked. In a study done in China on impact of COVID-19 outbreak on ST-Elevation Myocardial Infarction (STEMI) patient hospital visits, there was a longer median time difference from symptom onset to medical contact.[7] General patients should not be deprived of emergency services even during the time of disaster, as reported in various studies.[8,9] And this requires effective triaging to ensure the safety of patients and service provider.

We have been able to provide smooth emergency services during the period of crisis, including current COVID-19 outbreak. Effective triaging along with preparedness and coordinated health effort has ensured the safety of patients, health care staff and the community as a whole preventing us from turning into an epicenter itself. With the surge of cases, we will be lacking in resources including PPE soon, so the first place to invest PPE to make rational use is in Triage. A hospital which has PPE but no triage cannot sustain the disaster. And large influx of cases are yet to be seen!

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Conflict of Interest

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All authors contributed equally

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