LETTER TO THE EDITOR

Keeping Patients and Hospital Health Care Workers Safe During the COVID-19 Pandemic: Pneumonia Epidemic Prevention Ward

To the Editor:

Taiwan was thought to be at very high risk of being affected by the coronavirus disease 2019 (COVID-19) pandemic because of its location near China. However, the Taiwanese government has taken more aggressive action including case identification, containment, and border control. Compared with other countries, far fewer patients have been diagnosed with COVID-19 in Taiwan, with a total of 443 confirmed cases and 7 deaths as of June 2020. E-Da Hospital established a pneumonia epidemic prevention ward in March 2020. E-Da Hospital is one of the most advanced emergency responsibility hospitals in Taiwan. Patients are eligible for admission if airway symptoms or fever develop and pneumonia is diagnosed. If the patients are suspected of having COVID-19, they will be transferred to an isolation room.

The National Health Service in England developed “the framework for measuring and monitoring safety.” The framework contains 5 aspects, which can provide a rounded, accurate, and “real-time” view of safety.

1. Integration and learning: are we responding and improving?

One patient in Taiwan was admitted to a hospital because of hypoglycemia with airway symptoms and was finally confirmed to have COVID-19. The Infection Control Department of our hospital have also drawn up plans for COVID-19 management, including the establishment of a pneumonia epidemic prevention ward.

To improve safety and decrease risk of cross-infection, the staff in the pneumonia epidemic prevention ward will not care for patients outside their specific area. In addition, a fixed team is assigned to care for patients suspected of having or confirmed to have COVID-19.

2. Past harm: has patient care been safe in the past?

Many doctors and nurses were infected and died because of severe acute respiratory syndrome in 2003. Because of this painful experience, the first priority is to ensure that there is sufficient personal protective equipment available to protect frontline health care workers. In the pneumonia epidemic prevention ward, every health care member of staff will wear a surgical mask and isolation gown before caring for patients. In addition, they will wear N95 and facial masks if the patient cannot wear a mask or is preparing for an invasive procedure. Every member of staff should take a shower before leaving the hospital. We also provide a free hospital dormitory for staff.

3. Reliability: are our clinical systems and processes reliable?

Some of the clinical policies and procedures need to be modified during the COVID-19 pandemic. For patient management, every patient and caregiver during admission are required to wear a surgical mask. Only one caregiver is allowed to accompany a patient. All visitors are prohibited. The body temperature and airway symptoms of the caregiver are checked and recorded every day. The nurses also help deliver meals to the bedside for both patients and caregivers.

For patient transfer, nonurgent examinations will not be arranged. If the exam is crucial and requires transport, the exam department is contacted first, and a specific elevator is designated for transport.

Nebulizing oxygen therapy and inhalation medications are restricted because of concerns over pathogen spread. Metered dose inhaler bronchodilators are allowed for patients with dyspnea and wheezing.

4. Sensitivity to operations: is care safe today?

Only 2 patients are admitted to the 3-bed room. The equipment will be changed before entering a different room. The nurse-to-patient ratio is 1:7, which is lower than average in Taiwan. Every health care member of staff receives an allowance. The purpose of advance deployment is to eliminate the risk of medical collapse. Safety is the highest consideration.

5. Anticipation and preparedness: will care be safe in the future?

The pneumonia epidemic prevention ward was established on March 6, 2020. Some problems associated with patient care or health care worker connection were discovered, and we have modified the workflow whenever necessary. Through the comprehensive protocols for epidemic prevention and standard operating procedures, the patients and health care workers are safe now and will also be safe in the future.

CONCLUSIONS

The purposes of the management protocols detailed previously are to decrease the risk of COVID-19 cross-infection and to protect the frontline health care staff. Some measures such as prohibiting visitors were carried out before the announcement of the Central Epidemic Command Center in Taiwan. No cases of in-hospital COVID-19 infection occurred in E-Da Hospital. Because of the low nurse-to-patient ratio and centralized management system, only 1 case of unplanned cardiopulmonary resuscitation occurred in a 3-month period. We continue to build a safe environment to face the long-term challenge of COVID-19.

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