J Clin Tuberc Other Mycobact Dis 20 (2020) 100167

Contents lists available at ScienceDirect

J Clin Tuberc Other Mycobact Dis

journal homepage: www.elsevier.com/locate/jctube

COVID-19 screening on a tuberculosis ward in Manila, the Philippines

ARTICLE INFO

Keywords:
TB
SARS-CoV-2
Coronavirus
Screening
Healthcare workers

Dear Editor,

People with co-morbidities such as tuberculosis (TB) or other chronic lung disease are at increased risk of severe COVID-19, including requirement for intensive care and mechanical ventilation.[1] The Philippines has a high burden of TB with around 1 million active cases.[2] However, little is known about the current situation regarding novel coronavirus (SARS–CoV-2) infection among TB patients in the Philippines. In this brief report, we share our experience of screening healthcare workers and patients on the TB ward at San Lazaro Hospital (SLH), the national referral hospital for infectious diseases located in Manila, the Philippines.

SLH is a public hospital serving a large urban poor population with a large TB ward and high admission rates of TB patients.[3] However, the number of inpatients reduced from 107 in January 15, 2020 to 35 in April 23, 2020 primarily due to 2 reasons – fear of contracting COVID-19 in SLH, and the inability to enter Manila for hospital consults due to the enhanced community quarantine, which began on March 17. The first confirmed cases of COVID-19 were managed at SLH in late January 2020.[4] A further 33 confirmed COVID-19 patients were managed from February to March 30. COVID-19 polymerase chain reaction (PCR) testing was established in the Philippines at the Research Institute of Tropical Medicine (the national reference laboratory) in February 2020.[5] Testing was initially limited to people with exposure history and symptoms. COVID-19 PCR testing was established at the SLH laboratory on March 22, in order to increase testing capacity at SLH and enable screening of healthcare workers.

From March 22 to April 23, 309 healthcare workers reporting either symptoms or exposure were referred from the infection control department and screened. Through this screening, we identified seven COVID-19 infections in healthcare workers, including two nurses working on the TB ward. On March 21, one of the doctors working on the TB ward tested positive for COVID-19. He had developed mild symptoms three days prior and had been in contact with patients and other healthcare workers. These three infections led to concern of a possible infection cluster on the TB ward and significant anxiety amongst fellow healthcare workers. We decided to screen healthcare workers who had been in contact with the doctor, as well as all of the staff and patients on the TB ward to look for any evidence of nosocomial transmission.

Nasopharyngeal and oropharyngeal swabs were taken from all of the 26 admitted TB patients and 40 healthcare workers of whom six had mild respiratory symptoms. The specimens all tested negative for SARS-2CoV by real-time reverse transcriptase polymerase chain reaction (qRT-PCR). Although it is possible that false negatives may have occurred as a result of timing and method of sample collection, overall the identification of no additional infections was reassuring for the healthcare workers and they felt more confident to continue their duties under challenging conditions, concerned about risk of both TB and COVID-19 infection.

At the present time, we foresee two challenges. First, how to reduce the risk of COVID-19 infection on the TB ward. In addition to standard infection control practices, we feel that enhanced screening of patients will enable prompt detection of a cluster to enable early isolation of cases. Screening of healthcare workers provides reassurance in the case of negative tests. The second challenge relates to maintaining high-quality uninterrupted TB care. Inpatient numbers have fallen and part of the reason may be that patients want to avoid hospitals where COVID-19 patients are treated. In this case, patients need to be adequately followed up and feel confident to be admitted to hospital if required.

In conclusion, it is reassuring that at this time, we found no evidence of a COVID-19 infection cluster on the TB ward at San Lazaro Hospital. However, as the number of cases continued to increase in the Philippines, continued vigilance is required.

CRediT authorship contribution statement

Ana Ria Sayo: Writing - original draft, Conceptualization. **Ellen Grace M. Balinas:** Data curation, Resources. **Jeffrey A. Verona:** Data curation, Resources. **Annavi Marie G. Villanueva:** Writing - review & editing, Investigation. **Su Myat Han:** Writing - review & editing, Investigation. **Shuichi Suzuki:** Project administration. **Koya Ariyoshi:** Conceptualization, Writing - review & editing. **Chris Smith:** Writing - review & editing, Conceptualization. **Rontgene M. Solante:** Supervision, Conceptualization.

https://doi.org/10.1016/j.jctube.2020.100167

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Acknowledgments

We are grateful to the healthcare workers on the San Lazaro Hospital TB ward and epidemiology team for providing additional data shown in this article under the challenging circumstances of COVID-19.

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