LETTER FROM HONG KONG

An outbreak of SARS among healthcare workers

The recent outbreak of atypical pneumonia, better known as severe acute respiratory syndrome (SARS) underscores the importance of occupational health risk to healthcare workers. Within one week, about 50 healthcare workers have contracted the disease, all traced to one index patient. Nurses, doctors, ward assistants, and medical students alike were infected. Despite the general belief of a person-to-person mode of transmission by droplets, the shape of the epidemic curve in the early phase resembled that of a common source outbreak. From preliminary epidemiological evidence, a suspected source of the infection was the nebuliser used on the patient, the culprit believed to have aerosolised infectious droplets and thus facilitated the spread of the disease. After the patient was isolated and the use of the nebuliser stopped, the rate of infection among healthcare workers has declined considerably. By now, the disease has spread to the community, affecting over 400 victims and showing no signs of abatement. Wherever the disease first originated, it is now clear SARS has become a serious and challenging public health problem of global dimensions. Our virology colleagues have been very efficient in identifying a metapneumovirus (of the paramyxoviridae family) from the nasopharyngeal aspirate shortly after the start of the outbreak, and great efforts are being made to elucidate the aetiology of the disease. A new coronavirus has been identified by scientists in Hong Kong, the US CDC, and other laboratories as the causative agent for SARS.

What lessons have we learnt? The safety of certain clinical procedures has to be re-evaluated. An apparently “routine” treatment for a patient with respiratory illness might turn out to be a major health threat not only to healthcare workers, but to other patients and the hospital work environment as well. Infection control practices should be reinforced for all respiratory infections, among primary healthcare providers, hospital workers, and hospital visitors alike. This outbreak also illustrates how easily it is, at a time when air travel is a norm, for a respiratory disease to spread to other cities and develop into a global health threat.

Our war is far from over. All healthcare workers in Hong Kong are working hard to track down the disease contacts. Quarantine measures, not enforced for nearly 40 years, are being implemented. Primary and secondary schools and the universities are closed. Health education is stepped up, and the community has responded by positive actions such as holding community health forums, raising awareness of personal hygiene, and practising personal protective measures, including wearing masks in public places. For all its damages, the outbreak is a sobering reminder to healthcare workers of the importance of infectious diseases and occupational health, and to the general public of the equally important, but sometimes unrecognised role of preventive medicine.

Photographs are of the Prince of Wales Hospital where the outbreak first occurred.

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