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Severe acute respiratory syndrome (SARS): infection control

Sir—Severe acute respiratory syndrome (SARS) is a newly discovered infectious disease with high potential for transmission to close contacts, including health-care workers.¹ The disease is transmitted by droplet and direct contact.^{2,3} Since early March, 2003, 30 of 163 patients admitted to the general medical ward of the Prince of Wales Hospital, Hong Kong, have been sent to the intensive care unit (ICU) because of respiratory failure. The issue of infection control in ICUs has not been specifically addressed by the guidelines from WHO and the Centers for Disease Control and Prevention (CDC). A special infection-control policy has been implemented at our ICU to avoid transmission.

To group our critically ill patients with SARS in our ICU, all pre-existing patients were transferred to other uncontaminated centres. During the outbreak, the unit is only open to patients with SARS to avoid infection of other patients. All staff and visitors are instructed to put on gowns, gloves, caps, and masks in a designated area before they enter the unit, which are discarded at the end of the visit. Designated “police nurses” are present at the entrance of the unit to ensure compliance. Regular spot checks are done to ensure the correct fitting of masks. Goggles and visors are worn during direct patient care, especially for aerosol generating procedures such as suction or intubation.⁴ Handwashing is important after contact with patients or their body fluids. Inanimate objects, such as pens, are kept within the unit. Every doctor’s pager is protected with a plastic cover, discarded when leaving the ICU environment. Measures are enforced by unannounced twice-daily infection-control rounds to inspect staff compliance.

Patients who are spontaneously breathing receive oxygen via nasal catheters or in combination with oxygen masks. A surgical mask is applied if the patient is using nasal catheters alone. Use of high-flow Venturi-type masks is avoided because the high flow might encourage dissemination of droplets if a patient coughs. Nebulisation and non-invasive positive pressure ventilation is avoided

for the same reason. For intubated patients, a high efficiency bacterial/viral filter is incorporated into the breathing circuit. A closed-suction system is important to avoid generation of aerosol.

Because of the risk of transmission, all staff have been instructed to avoid sharing food and utensils. A special room distant from the unit is reserved for meals and rest.

Even with these stringent measures in place, three of 160 ICU staff have contracted SARS since the outbreak. These breakthrough cases arose early in the course of the outbreak, however, before the culture of rigid application to infection-control measures developed. We are hopeful that further cases among our staff will be prevented.

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- 1 Benitez MA. Hong Kong bears brunt of latest outbreak. *Lancet* 2003; **361**: 1018.
- 2 WHO. Hospital infection control guidance for severe acute respiratory syndrome, March 16, 2003. <http://www.who.int/csr/sars/infectioncontrol/en/> (accessed March 28, 2003).
- 3 Centers for Disease Control and Prevention. Updated interim domestic infection control guidance in the health care and community setting for patients with suspected SARS, March 18, 2003. <http://www.cdc.gov/ncidod/sars/infectioncontrol.htm> (accessed March 28, 2003).
- 4 Centers for Disease Control and Prevention. Infection control precautions for aerosol-generating procedures on patients who have suspected severe acute respiratory syndrome (SARS), March 20, 2003. <http://www.cdc.gov/ncidod/sars/aerosolinfectioncontrol.htm> (accessed March 28, 2003).

Sir—As the world becomes smaller because of globalisation, global interdependence becomes more and more evident. Health concerns, which were previously thought to belong to another society or another part of the world, are fast becoming universal. The outbreak of a mystery killer bug, causing severe acute respiratory syndrome (SARS), which has swept through Hong Kong, Vietnam, and China, and is now affecting the UK, emphasises the need

for global networking and cooperation.

In January, 2001, the executive board of WHO noted that the globalisation of infectious diseases is such that an outbreak in one country is potentially a threat to the whole world.¹ Taiwan’s exclusion from WHO is, therefore, a dangerous omission for global health, since the country is a major transport, tourism, and migrant hub linking northeast and southeast Asia. Taiwan was swift to report its cases of SARS, and is ready and eager to participate in world health issues.

There is an urgent need for unity in global-health issues, especially in the case of HIV/AIDS. Figures show that the disease is the most threatening epidemic of present times, with 5 million individuals infected with HIV-1 worldwide in 2002. In Taiwan, measures have been implemented to control the spread of HIV/AIDS. The measures include free medical care for patients with confirmed HIV-1, a comprehensive blood-screening system, and better training of doctors, nurses, and health administrators. Furthermore, action is not just restricted to the domestic front; Taiwan is also involved in Care France’s AIDS prevention programme in Chad, and helps to promote antiAIDS campaigns in Burkina Faso and Swaziland. In 2002, Taiwan also donated US\$1 million to the Global Fund to fight AIDS, tuberculosis, and malaria.

Despite such positive action, Taiwan is refused access to the vast resources and latest information on AIDS prevention that WHO can provide. Although having both the right and the necessary requirements for joining, the country is excluded from the organisation because of China’s opposition. Yet, since when has health been a political issue? WHO’s constitution states that their objective is “to provide health for all peoples”; Taiwan’s exclusion is therefore a form of health apartheid.

On Mar 13, 2003, the US House of Representatives gave unanimous approval to legislation that would pressure the US State Department to find a way to secure Taiwan’s participation in this spring’s annual WHO meeting.²