Protecting healthcare workers

On the front line of patient care, they are vulnerable to catching the coronavirus they are fighting. What are the physical and mental healthcare steps to keep them safe?

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For The Straits Times

Enforced use of masks among healthcare workers, in combination with other resources, is key to preventing the spread and formation of clusters of cases among healthcare workers. (PHOTO: ASK CHEE SIONG)

Physical Health and Safety

By the tens of thousands, about 25 per cent of over 8,400 cases of infection worldwide occurred among healthcare workers. The incidence of occupational infection was unusually high in Singapore, with intra-hospital transmission identified as a key factor among the number of cases.

Based on occupational health principles, every case can potentially be prevented. Experts agree that the main mode of transmission of the coronavirus through respiratory droplets, which have generated when coughing, sneezing or talking. Inhaled infectious aerosols can transmit to another individual only if the two are in close proximity (within one metre) and in close contact (coughing or nasal for the infected person).

The similarity in the mechanism of transmission to SARS allows key lessons learnt in disease containment strategies to be applied to this public health crisis.

First, there should be a rigorous system to contain the disease within hospitals. Patients with the coronavirus are treated in negative-pressure isolation rooms. These special rooms maintain a negative pressure gradient, which contains the exhalation of infected pathogens within the room and confines effective protection to other healthcare workers in the same ward environment.

Second, conditions should be made uncomfortable and almost impossible for diseases to be transmitted and to propagate within the healthcare environment.

Respiratory protection is key to break the chain of transmission. Enforced use of masks among healthcare workers, in combination with other personal protective equipment (PPE) and infection control measures, is key to preventing the spread and formation of clusters of cases among healthcare workers.

Both N95 masks and surgical masks from part of Singapore’s pandemic preparedness stockpile. Since the start of the coronavirus outbreak, these are among the PPE stockpile that have been progressively released for use by healthcare workers by the Ministry of Health and Public Health Preparedness Division.

N95 masks need to be fit-tested for optimal effectiveness. These are used by healthcare workers exposed to very small droplets (aerosols) generated from medical procedures such as intubation and vomiting.

Some members of the public have been fearing N95 masks. This is generally not recommended. The heavier “workload” of breathing may also lead to mask fatigue, discomfort and misfit issues — and, ironically, reduce the level of protection compared with wearing a normal mask.

Good hand hygiene complements the use of PPE as an effective infection-control measure. Whether applied using alcohol-based hand rub, or hand washing, it takes all of 30 seconds to cut the spread of the coronavirus, which has been shown to survive on surfaces for up to three days.

Over the period, healthcare institution have stepped up and to ensure rigorous compliance by different line workers. Third, there should be a system of surveillance and early identification of healthcare workers who develop symptoms.

Psychological Well-Being

Healthcare workers are harder and longer in a public health crisis. As an infection control measure, healthcare teams are segregated to back off from infected patients or non-infected patients. This reduces occupational efficiency in manpower resource allocation, fatigue buildup and reduces individual capacity to cope.

Over the longer term, there have been reports of healthcare workers being overwhelmed in contact with severe illness or death in cases. This compounds the psychological stress on frontline workers. In a study of health workers during SARS, 75 per cent described a great personal risk of falling ill with the disease. What is discouraging is that about half the healthcare workers experienced some degree of psychological stress, and almost one in three reported attack by family members.

Another study in Canada, conducted one to two years after SARS, showed that compared with healthcare workers who did not treat SARS patients, those who had had significantly higher levels of stress and burnout, psychological stress and post-traumatic stress.

Another stress reaction during a crisis can result in one or two outcomes. The stress may be well managed, leading to satisfying forms and motivations to address the challenge at hand.

However, if the stress levels exceed the ability of the individual to cope in a healthy way, distress takes, affecting emotional functioning at a time when it is most needed.

Organisational, strong leadership support, clear directions and collaborative team spirit are all important to reduce and diffuse tensions. Facilitating access to resources — including manpower and PPE — boosts confidence and resilience.

As the personal level, frontline workers are provided channels to provide feedback, ask questions and share their concerns. Many hospital-based institutional based social media platforms, such as Workplace from Facebook, are reaching out. Ranging from human resource policies to provision of therapeutic units, front-line workers, questions are posted and answered promptly and squarely, providing assurance.

Peer support programmes provide these experiences to the best potential outcomes for their reactions to be acknowledged, normalised and managed. Often, the failure more senior healthcare workers reaching out to provide encouragement, self-care tips and psychological first aid for those in need.

WHAT’S NEXT?

While organisational measures and systems are in place to safeguard frontline healthcare workers, it is also incumbent upon each and every member on the ground to look after themselves and fellow co-workers.

They need to keep channels of communication open and high to allow communication.

Follow standard operating procedures in infection control measures and to wear personal protective equipment. To do this, first, one needs to be mentally prepared and to keep oneself on a constant state of readiness, then one can face a crisis head-on.

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