Prioritizing Health Care Workers Safety: The International Year of Health and Care Workers 2021

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Healthcare workers pose a substantial risk of acquiring COVID-19 infection during their daily works. We have seen various conditions during the pandemic, such as limited adequate personal protective equipment (PPE), accurate diagnostic tests, lack of information regarding disease management, unsupportive work environment, and excessive workload, increased the number of HCWs-infected COVID-19. Compared to the general population, the risk of COVID-19 infection was several-fold higher in HCWs. HCWs with adequate PPE treating COVID-19 patients had a hazard ratio of 4.8 and those treating suspected COVID-19 had a hazard ratio of 2.4 compared to other HCWs that did not involve in COVID-19 management.[1] The non-prioritization of healthcare workers has led to detrimental effects. We have seen the lack of training and personal protective equipment (PPE) has led to a high number of physicians, nurses, and other health care workers' infection and mortality. The hesitation of authorities in early pandemics to heed the call of Indonesian medical professors for stricter rules and quarantine and prioritizing the economy might also play a role.

Up to September 2021, 730 Indonesian physicians, 670 Indonesian nurses, 398 Indonesian midwives died of COVID-19 infection. There were no available data of how many health care workers had been infected in Indonesia, but a total of 2066 HCWs were reported death of COVID-19.[2] The stressful working conditions of front-line health care workers and the dangers of becoming personally infected or infecting health care workers' families gave a substantial physical and emotional distress. Fear, anxiety, depression, posttraumatic stress disorder, leading to burnout for many health care workers. These conditions could eventually cause discontinuity of healthcare workloads to ensure the high-quality standard of care to the patients, or even fail to keep the health care system running.[3,4]

The condition was changed in January 2021 when the Indonesian government started the COVID-19 vaccination program with Sinovac. In its initial stage, the vaccination program is addressed only for a specific priority group, such as healthcare workers, including healthcare assistants and support workers who work at the healthcare facilities.[4] This was in line with the World Health Organization (WHO) call to ensure the world's health and care workers are prioritized for the COVID-19 vaccine in the first 100 days of 2021. World Health Organization (WHO) has even designated 2021 as the International Year of Health and Care Workers (YHCW).[5]

Santi, et al.[6] evaluated anti-SARS-CoV-2 antibodies after two doses of Sinovac vaccine in health care workers in the early COVID-19 vaccination period. The antibody titer did not decrease significantly after 3 months period. The observation period in this study might be too short because Chinese researchers later showed that Antibodies triggered by the

Sinovac COVID-19 vaccine declined below a key threshold from around six months after a second dose for most recipients.[7] Nevertheless, the coming of delta variant causing second wave increase in July made Indonesian government started to give all health care workers a third booster jab using Moderna vaccine.[8]

COVID-19 pandemic has raised the issue of health care workers' safety. Health care personnel or workers are defined as all paid and unpaid persons working in healthcare settings who have the potential for exposure to patients and/or to infectious materials, not only contaminated air but also body substances, contaminated medical supplies and equipment, and contaminated environmental surfaces.[9] Are health care workers only endangered by COVID-19? Certainly, many bloodborne or airborne infections could be transmitted to and from health care workers and patients. Globally, about one-third of health care workers are at risk of injury annually. More than 20 types of bloodborne pathogens can be transmitted following injury, including HIV, hepatitis B, and hepatitis C. The estimated transmission rates for HIV, hepatitis B, and hepatitis C after percutaneous injury are 0.2%, 1.8%, and 30%, but only HBV can be prevented by vaccination and post-exposure prophylaxis only available for HIV dan hepatitis B.[10] Our previous study reported the incidence of needle stick and sharp injury reported in a teaching hospital was 13.3 injuries per 1000 HCWs-years, though many were still underreported. More than 60% of the injuries reported involving sources with unknown HIV, hepatitis B, or hepatitis C status.[11]

Employers and health care workers both should share the responsibility to prevent occupationally acquired infections and avoid causing harm to patients by taking reasonable precautions to prevent vaccine-preventable disease transmission. Hepatitis B and influenza were the two most important vaccination for health care workers. Although many health care workers have taken hepatitis B vaccination, the question of how many health care workers have enough protection from hepatitis B infection remains. Annual influenza vaccination is recommended for three main reasons: reducing the risk of patients catching influenza from health care workers, protecting health care workers and their families against influenza, and reducing health care workers' absenteeism and presenteeism. Vaccine for mumps measles rubella (MMR), pertussis, and varicella were also highly recommended to be given for health care workers, while other vaccines might be indicated in certain circumstances.[9] However, there are no clear standard for vaccine requirement and who will cover vaccination and post-exposure prophylaxis.

This year, WHO has launched a year-long campaign under the theme -protect, invest, together'. It highlights the urgent need to invest in health care workers, not only during COVID-19. We need to ensure that all health care workers are supported, protected, motivated, and equipped to deliver safe health care at all times, to provide a high-quality standard of care to the patients.[5]

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