

The need for personal protective equipment to prevent the spread of COVID-19 in health care workers

Letter to Editor

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Sir,
In December 2019, a severe pneumonia-like illness, initially known as the 'Novel Coronavirus 2019-nCoV' and later named as severe acute respiratory syndrome-2 (SARS-CoV-2), emerged in the city of Wuhan, China. The outbreak soon spread to different regions of China and then globally, causing a pandemic in March 2020.[1] At the time of writing of this article, over 4.7 million people are reported to be infected across the world, and over 300,000 deaths have been documented with the highest number of cases reported in the United States of America.[2] Due to its rapid spread, the World Health Organization (WHO) has advised taking measures to control the spread of this infection as the primary method.[1,3] Although much emphasis has been given on social distancing and avoiding infected people, the importance of providing appropriate protective facilities to health care workers (HCWs) to control the disease is being overlooked.

There are many global incidents where HCWs are not receiving enough protection to fight against coronavirus disease-19 (COVID-19). In a developing country like Pakistan, there is a severe shortage of personal protective equipment (PPE).[4] By 2nd June 2020, approximately 2,201 HCWs-1240 doctors, 33 nurses, and 628 paramedics- have been declared positive for COVID-19 in Pakistan. Of whom, 24 healthcare providers have lost their lives battling the virus.[5] Recently, in Pakistan, one medical student died after contracting the illness as well.[6] A similar situation has been noted in Italy where according to Federazione Nazionale degli Ordini dei Medici Chirurghi e degli Odontoiatri (FNOMCeO) health association, over 100 doctors have died because of COVID-19. In the United Kingdom, doctors are forced to perform invasive procedures on infected patients without having the appropriate size of N-95 masks and moving on with the usage of surgical masks that do not provide the ultimate protection.[7,8]

The transmission of the virus is mainly achieved by

respiratory droplets; however, indirect contact, fomite transmission, and transmission while performing aerosol-generating procedures can also occur.[8,9] In Taiwan, China, it was found that nosocomial Severe Acute Respiratory Syndrome Coronavirus (SARS-CoV) outbreaks occurred when patients were admitted in hospitals because of transmission via fomites, SARS-CoV was able to survive in the environment for almost three days and HCWs unwittingly continued infecting other patients and fellow HCWs. If physicians and HCWs do not use appropriate equipment while caring for affected patients, there will be an increase in nosocomial infections, which would further aid the spread and may lead to serious complications.[9]

Owing to the contagious nature of the COVID-19, WHO advises that all HCWs should be provided with proper training on infection with 75% alcohol, and before prevention and control (IPC) and the use of PPE.

At each step, HCWs must sanitize themselves entering the contamination zone, the HCWs must be fully protected with PPE, which includes the use of gowns, gloves, N-95 respirators, and eye protection.[4,9] These should be provided to them to ensure that health workers follow safety protocols and must not expose others to health and safety risks.

To tackle the situation, the government must provide proper protection to the HCWs as these people are the ones on the frontline fighting the disease, therefore guarding, and encouraging them to work. HCWs are



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vulnerable to psychological distress, overburden, physical and psychological violence. According to WHO, HCWs should also be provided with required mental health facilities, breaks between shifts, right to remove themselves from work where there is a threat to health and provision of compensation and rehabilitation and curative services if they contract the disease in the process. This psychological distress can be seen when a nurse working in a hospital in Italy committed suicide after having contracted the virus to prevent the spread, as she had already suffered considerable stress trying to save lives infected by COVID-19.[9] Furthermore, traffic control bundling can be established, which requires the triage of patients to be held in an environment outside of the hospitals as was used in Taiwan to tackle the shortage of HCWs during the SARS outbreak in 2003. With the cases increasing every day, we need to gain the trust of HCWs as their fear and anxiety are natural, and additionally, we must realize that HCWs protection is of utmost importance if such a contagious outbreak needs to be controlled and effectively treated.

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CONFLICT OF INTEREST

The author declared no conflict of interest

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