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Nursing and the Novel Coronavirus: Risks and Responsibilities in a Global Outbreak

Short Title: Nursing and the Novel Coronavirus

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In December of 2019, reports emerged of pneumonia clusters of unknown cause at health facilities in Wuhan, China. These cases were linked to a wet animal wholesale market in the region and, after extensive epidemiologic investigation, led to identification of a novel coronavirus (COVID-19). COVID-19 is among a family of viruses—called coronaviruses—that can affect both humans and animals (Zhu et al., 2020). Coronavirus infections are respiratory in nature and can range from the common cold with mild symptoms to more severe infections, such as Severe Acute Respiratory Syndrome (SARS) and Middle East Respiratory Syndrome (MERS) (World Health Organization [WHO], 2020; Perlman, 2020). The newly identified COVID-19 infection typically presents as fever, tiredness, fatigue and a dry cough (Huang et al., 2020). However, more severe symptoms such as dyspnoea, diarrhea, pneumonia and others have been reported. As of March 9, 2020, cases of COVID-19 have been reported in countries across the world. The global number of reported cases has surpassed 100,000 with almost 4,000 deaths (WHO, 2020). China remains the highest risk area but, clearly, COVID-19 is a global health problem.

Nurses are central to COVID-19 prevention and response efforts. Nursing is the largest healthcare profession in the United States and the world, with approximately 3.8 million nurses in the US and over 20 million nurses worldwide. Nurses are providing front-line care in the most patient-facing role to complex COVID-19 cases that require hospitalization. Individuals who have preexisting health vulnerabilities are at greatest risk for COVID-19 complications or mortality and nursing resources are critical to managing this population. Public health experts predict that healthcare and hospital resources will become even more urgently needed as COVID-19 spreads in communities (Jiang et al., 2020; Pan et al., 2020). As one of the most trusted health professional groups, nurses also play a key role in providing public education on disease prevention and reducing the spread of misinformation around the outbreak. There has been widespread misinformation on how COVID-19 is transmitted, who is at risk of transmitting or receiving the virus and where outbreaks are occurring (Wen et al., 2020). For example, in some cases, Chinese and other Asian individuals have been assumed to be at higher risk for being infected with COVID-19 simply because of their nationality or race, resulting in stigma and xenophobia (Wen et al., 2020). There has also been misinformation about appropriate use of face masks. Some individuals have assumed that they are protected from COVID-19 by wearing a face mask—even though this is not supported by evidence from studies of

other viral infections—and may neglect more efficacious infection prevention measures (e.g., handwashing) while also limiting the availability of face masks for response professionals who need them (Cowling et al., 2010; WHO, 2020). Such misinformation may be spread via traditional media, social media, or within communities and can interfere with public health response efforts.

Because of the unique patient-facing nature of nursing work in community, outpatient and acute care settings, there are occupational risks to providing care during the COVID-19 outbreak. It is essential that nurses are supported to protect themselves during the management of COVID-19 in clinical care with clear infection control protocols (standard, contact, airborne) and adequate availability of personal protective equipment (PPE) at their place of work, including N-95 respirators, masks, gowns, eye protection, face shields and gloves (American Nurses Association [ANA], 2020). Healthcare facilities employing nurses must ensure consistent availability and use of hand hygiene supplies; provide updated information on screening, isolation, quarantine and triage procedures based on guidance from the Centers for Disease Control and Prevention or other appropriate public health agencies; and coordinate with local, state, or national outbreak management efforts (ANA, 2020). Healthcare leaders should closely monitor the well-being, occupational health and safety of their clinical nursing staff. Nurses have a responsibility to stay home if they have traveled to areas that have declared states of emergency or contract COVID-19 in their work. Healthcare leaders must support and provide resources for nurses who are exposed to COVID-19 or experience other outbreak-related harm as a result of their work, even if nursing resources become strained.

Despite these occupational risks and the immediate need for health system interventions to support nurses, nursing also has unique responsibilities in the COVID-19 outbreak. Nurses will continue to be at the front line of patient care in hospitals and closely involved with assessment and monitoring in outpatient and community settings. They must ensure that all patients receive individualized, high-quality care regardless of their infection status and participate in preparation for increased nursing and health system demand related to COVID-19. Nurses also must continue to provide education to patients and the public about the outbreak. This includes confronting misinformation, directing communities to reputable public health resources such as the World Health Organization and Centers for Disease Control and Prevention and promoting evidence-based infection prevention measures (Centers for Disease Control and Prevention, 2020; WHO, 2020). Leaders and

educators in nursing should provide education to clinical nurses and support staff about current COVID-19 issues and risks specific to their practice area (e.g., pediatrics, maternal-infant health, nursing homes, schools, places of worship). This education should extend to nursing students, who may have additional considerations related to being in a campus environment. Finally, nurses should advocate for local, state and national policy response to the COVID-19 outbreak and support local preparedness and prevention efforts (International Council of Nurses, 2020; National Nurses United, 2020). Particularly, there is a need for care coordination across public health departments, communities and healthcare systems that nurses are ideally suited to providing. A global outbreak requires the active participation of the nursing workforce in clinical care, education and information sharing, public health and policy. Nurses are already fully engaged in COVID-19 response and, with appropriate support, will be key players in ending the outbreak.

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