


Nursing and Health Policy Perspectives

COVID-19: Korean nurses' experiences and ongoing tasks for the pandemic's second wave

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Nurses are the largest group of healthcare workers in the world, and during the COVID-19 pandemic, nurses have been recognized worldwide as frontline warriors working hard to stem suffering, infection rates and deaths. Korean nurses experienced the effects of the pandemic earlier than in most other countries, and the work of our nurses has been recognized as a successful model in responding COVID-19. In this paper, we share the experiences of Korean nurses, including their experiences of workload, acute shortages of staff and equipment and work overload, and suggest ongoing tasks that need to be addressed to combat the pandemic's second wave and other possible waves. Specifically, the nursing issues relating to COVID-19 are critically reviewed and recommendations for each issue are suggested in terms of nursing staffing, practice and policy, as well as health policy.

Keywords: COVID-19, Health Policy, Infectious Diseases, Korea, Nurse Staffing, Nurses, Nursing Policy, Pandemic

Korea was the first country after China to engage in a massive response fighting COVID-19 and has had many successes thus far in controlling the disease. It is very pleasing to inform readers that many countries have benchmarked the Korean quarantine efforts, the so-called *K-Quarantine*, for this has become known as a global standard: 3T – Test (diagnosis/confirmation), Trace (epidemiological survey/trace) and Treat (isolation/treatment) (Shim, 2020; The Government of the Republic of Korea, 2020). For example, Tang et al. (2020) commented on 30th March 2020 that ‘...the extremely high detection rate is the key factor determining the success in controlling the COVID-19 epidemics in South Korea’. However, behind a glittering counterstrategy for COVID-19 control, there are many matters that need to be satisfied in any response to the pandemic’s second wave. Specifically, from a nursing perspectives, practical issues relating to COVID-19 should be critically reviewed and the appropriate solutions for each issue prepared.

As Korea is located relatively close to Hubei Province, China, the first confirmed COVID-19 case in the country was reported on 20 January 2020. In the period to 18 February, the infection rate of COVID-19 gradually increased to 30 cases. However, after case 31 was confirmed, COVID-19 community transmission was rapid in the limited areas of Daegu city and Gyeongsangbuk-do Province. At its peak, on 1 March, the daily new number of cases was 1062 (Central Disaster Management Headquarters & Central Disease Control Headquarters 2020). At this time point, Korea was the second most infected country next to China. The World Health Organization (WHO) announced the global pandemic of COVID-19 on 11 March 2020. With several fluctuation points in the infection rate, the number of confirmed cases in Korea was 27 553 as of 9 November (Central Disaster Management Headquarters & Central Disease Control Headquarters 2020).

During the sudden upward rise in COVID-19 infections in Korea after the 31st case, Daegu and Gyeongsangbuk-do Province struggled from serious shortages of healthcare workers, hospital beds, medical equipment (e.g. ventilators and extracorporeal membrane oxygenation [ECMO]) and personal protective equipment (PPE, including gloves, gowns, eye protection and face masks). Together with other healthcare workers, Korean nurses from across the country rushed to volunteer in Daegu and Gyeongsangbuk-do Province. On 1 March, the first day to apply to volunteer in these areas, more than 500 nurses applied. Subsequently, 3959 nurses applied to Korean Nurses Association (KNA) and the Ministry of Health and Welfare to volunteer in these areas (Korean Nurses Association 2020a). With the contributions of these volunteer nurses, the sudden outbreak of infected patients was

addressed including total care of those infected, proactive diagnostic testing, and triage of patients.

Volunteer nurses and local nurses have been frontline warriors in the COVID-19 battle. In the early stages of the pandemic, healthcare workers in Korea were in turmoil due to a poor and bumbling response within the government systems, local communities, and hospitals, as has also been described by nurses in France (Chamboredon et al. 2020). In acute care settings, Korean nurses were required to provide not only total care of those with COVID-19, but also attend to environmental hygiene and their usual patient load under substandard conditions that involved shortages of nurses, medical supplies, and PPE. Nurses taking care of infected patients were not allowed to return to their homes and did not do so because of fear of transmission to family members and others; this was despite needing opportunities to receive family support and advocacy (Paterson et al. 2020). Nurses suffered from symptoms of physical and psychological stress such as skin problems from long-term use of PPE, fatigue, loneliness and a sense of alienation. Nevertheless, Korean nurses silently provided care and undertook other service works from both their strong sense of mission and calling as nurse, as nurses around the world have played their roles diligently with working on the frontline, facing battles, being sacrificed, and being resilient (Turale et al. 2020). Many members of the Korean public were impressed with these nurses and nursing care situations since most knew that the infected patients during outbreaks of COVID-19 could not be cared for without the sacrifices of nurses and their sense of a caring mission. Public awareness of the value of nurses has been heightened in other countries (for example in China by Xiao & Jiang 2020), and in 2020, the International Year of the Nurse and Midwife, the profession has been placed in a powerful, meaningful, and alas unenviable, spotlight.

The efforts of the Korean Nurses Association

The KNA (2020b) globally shared the K-Nursing experience with COVID-19 in the Triad Meetings with the World Health Organization, International Council of Nurses and International Confederation of Midwives. The KNA also played a key role as an immediate communication channel between nursing practice fields involved with COVID-19 and the Korean government, and throughout the nationwide network of KNA’s branches, quick monitoring of nursing care situation under the COVID-19 pandemic was performed and appropriate treatments were applied (KNA 2020b).

In addition to the burdens of nurses who provided patients with COVID-19 direct nursing care, other nurses who did not provide such direct care also suffered from stressful

working conditions. From 27 April to 4 May 2020, the KNA conducted a survey among 2489 hospital nurses. The results indicated that the unfair treatment of nurses was a very significant issue in health care, including such actions as forcing nurses to work with insufficient notice, unpaid leave of absence, pressure to use annual leave, and conciliation to resign (Cho 2020). Due to the dramatic drop in numbers of non-COVID-19 patients, caused by the large influx of COVID-19 patients, hospital management teams forced nurses into such unfair conditions.

Preparing for the second wave: critical issues in nursing

It can be said that during the COVID-19 pandemic, the saying 'Never let a good crisis go to waste' applied well to the nursing field. For example, authors have described nursing issues, their implications and potential solutions for nursing and health policy during COVID-19 such as addressing universal palliative care (Rosa & Davidson 2020), health emergency nursing skills (Chamboredon et al. 2020), and the ethical nursing quandaries surrounding caring during the pandemic and the importance of policymaking through evidence-based research and empowerment strategies (Turale et al. 2020). There are a number of immediate actions that Korean nurses need to take in order to improve work environments and treatment, and to respond more appropriately to the second wave of the COVID-19 pandemic.

First, there is an urgent need around the world for nursing work environments to be improved to retain nurses in the profession. Shortages in the nursing workforce are the current most urgent issue in Korea. The number of active Korean nurses per 1000 capita is 3.6, which is way below the mean of 9 active nurses per 1000 capita in the Organisation for Economic Co-operation and Development (OECD) countries (OECD Statistics 2017). Currently, there are 414 983 registered nurses but only about 51.9% or 215 293 of these are employed as nurses (National Health Insurance Service & Health Insurance Review and Assessment Service, 2020). Although there are around 20 000 new Korean graduate nurses every year, a very alarming 45.5% of them leave their jobs within one year, and >50% of nurses in the hospital have <3–5 years' of work experience (Hospital Nurses Association 2020). Particularly, a high proportion of newly graduated nurses leave the profession within the first year, as they fail to adapt to their role due to reasons such as fear or tension to provide care to patients, pressure from senior nurses, work overload, or experiencing health issues due to working three rotating shifts (Hospital Nurses Association 2020). Thus, having an insufficient workforce has caused the nurses remaining

on the job to encounter a higher work intensity and unacceptable burdens to provide quality nursing. This poor work environment has undoubtedly forced some remaining nurses to consider leaving their job. From year 2009 to 2019, the entrance quota in nursing colleges was increased to >20 000 nursing places from about 12 000 in response to the nursing shortage (Ministry of Education 2019). However, this was not a sustainable solution to address the nursing shortage as shown in the high turnover rate of newly graduated nurses. With an increase in the numbers of students being educated, and the entrance quotas of nursing school, the quality of nursing education has been threatened due to the lack of clinical practicum sites and a shortage of well-prepared nursing faculty members. Therefore, more radical solutions are urgently required to retain nurses in practice and include addressing the core issues and challenges within the work environment that cause nurses to leave.

Secondly, nurse staffing ratios need to be urgently addressed. From our Korean experience with the COVID-19 pandemic, the issue about nurse–patient staffing ratios re-emerged, and especially regarding the higher demand for nurses working in intensive care. As in other countries, the nurse–patient ratio of intensive care unit (ICU) nurses in Korea differs, depending on hospital size and the type of care provided. In large tertiary hospitals, it is 1 ICU 1: 2.48 patients; in hospitals with >500 beds it is 1:3.23 patients, while in hospitals with 300 ~ 499 beds it is 1:4.20 patients (Ministry of Health & Welfare, 2017). The above nurse-to-patient ratios are based on usual times, not during COVID-19, and Korean ICU nurses have a much higher patient load than other developed countries. In England, the nurse–patient ratio is a minimum 1:1 at normal times (Dunhill, 2020). However, the staffing ratio during COVID dramatically increased with one critical care nurse to 6 patients, supported by two non-specialist nurses and two healthcare assistants (Dunhill, 2020). In United States, the ICU nurse-to-patient ratio is regulated as 1: 2 or less (Shin et al. 2018).

During the COVID-19 pandemic, with increased work intensity due to the use of various PPE in an isolation unit with negative pressure, about twice the number of nurses is needed compared to the usual ratio. In addition, nurses working under these conditions need to be experienced with complex medical machines (such as ECMO, continuous renal replacement therapy [CRRT], or ventilators.). Thus, to respond the next waves of COVID-19 pandemic, nursing education on critical care should be expanded, strengthened and supported. The demand for critical care nurses has increased across the world during the pandemic. For example, at the governmental level, Australia preemptively announced that

20 000 new online education places would be funded to train more nurses for critical care (Department of Health, 2020) and the Australian College of Critical Care Nurses has developed an online courses on 'Core Critical Care Nursing (The Australian College of Critical Care Nurses, 2020)'. This kind of proactive strategy should be taken in Korea as well.

Thirdly, nurses who have provided healthcare services to patients infected with COVID-19 under substandard care situations should be highly recognized and appropriately rewarded (Catton 2020). Otherwise, further nurses' feelings of 'making sacrifices' and their sense of mission could diminish in the pandemic's second wave. Further, there is a sense that more nurses and other healthcare professionals will become infected and suffer, or die as a result of their work if the health system becomes overwhelmed with patients. Therefore, the KNA has kept monitoring nursing practice fields as to whether both volunteer and employed local nurses get rewarded and supported by their institutions and government.

Lastly, to greatly assist the systematic and efficient achievement of the urgently needed tasks described above, the Nurses Act in Korea should be legislated. The KNA has been tireless in working to propose and pass the Nurses Act since 2003. It is really an indictment that no such legislation has been approved in Korea, although many regulations and rules related to nurses and nursing practice in hospitals and communities are considered under several high-ranking laws such as the Medical Law, Regional Public Health Act, Mental Health Law, and the Act on Long-Term Care Insurance for the Aged. Each current set of regulations or rules from each Law mentioned above prescribes nurses' roles and practices differently, resulting in lack of congruency and putting the profession in situations of conflict of interest with other healthcare workers. With authorization of the Nurses Act, most issues related to nurses' roles, staffing and work environments would be addressed. Therefore, now is the time for all Korean nurses and KNA to unite in support of appropriate legislation to protect the public, guide the profession and clarify the position of the Korean government regarding nursing's vital role into the future.

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