

IMPACTS OF COVID-19: A NURSING PERSPECTIVE

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COVID-19 as a Global Catastrophe

The epidemic of the coronavirus disease (COVID-19) was first stated in Wuhan, China, in December 2019. Then after the lethal spread of coronavirus accelerated rapidly throughout China, Asia, the Middle East, Europe, North America, and other parts of the world. There have been 9,472,473 confirmed cases of COVID-19, including 484,236 deaths globally.

COVID-19 was declared a public health emergency of international concern on January 30, 2020 (World Health Organization. (2020) and it became a pandemic now.

COVID-19 – Disease Overview

Coronavirus disease is a contagious disease spread by a newly discovered coronavirus. The most common symptoms in patients infected with COVID-19 are fever and cough. Gradually leads to shortness of breath, fatigue, arthralgia, dyspnea, headache, hemoptysis, and diarrhea. Advance fatal complications, including sepsis, septic shock, pulmonary edema, severe pneumonia, and acute respiratory distress syndrome. The incubation period of this disease is 14 days with median 5-6 days. However, some infected patients reported to be asymptomatic. The asymptomatic ratio of COVID-19 is estimated at around 30.8%. The carriers of disease lead undetected transmission and massive spreading of this disease.

COVID-19 is spread mostly via respiratory droplets. Unhygienic conditions, places with heavy densities, and closed spaces with heavy foot congestion (e.g., malls, airports, and public transportation) are some of the propounding factors of community-based transmission and rapidly spreading this disease. Furthermore, group of nosocomial infections have occurred in hospitals.

The Consequences of COVID-19 Pandemic

The swift and unrecognized spread of COVID-19 and the relatively fatal outcome of COVID-19 associated pneumonia created synergy to create the current pandemic crisis, which is affecting greatly on health, economics, and social life on a universal level. Huge medical manpower and resources have been spent in the prevention and treatment of severe pneumonia, increasing the burdens & threatening the exhaustion of, healthcare systems around the world. Delimiting normal life, trade activities, and travel as well as lockdowns of cities and countries to prevent the spread of COVID-19 resulted in economic devastation, threatening an economic depression. In addition to financial distresses, psychological reactions such as fear of infection, ambiguity, worry, anxiety, and panic have been reported globally.

As far as the first outbreak of the disease in Wuhan, China, the travel restrictions on China have poised certain stigmas caused the negative framing of and social bias toward countries and ethnicities. Inter and intra travel restrictions and lockdowns have minimized communications between people and among countries, leading to social distancing and isolation on an international scale as well as to large-scale disruptions in international travel and commerce. The enormous costs of the destruction wrought by the COVID-19 pandemic both to human health and to the economy are remarkable.

Nurses' role in Anti-COVID-19

Nurses are the frontline healthcare professionals who are giving care across hospitals, long-term care agencies, nursing homes, schools, community, and government healthcare agencies. Several roles and functions played by nurses are particularly important during this COVID-19 pandemic. These important roles and functions cover five aspects.

The first aspect is concerned with information dissemination. Providing health education, screening information, and support for the general public and in high-risk categories. Health education should include strategies for infection prevention (e.g., washing hands regularly; avoiding touching the eyes, nose, and mouth; avoiding gathering activities and shared dining) and early detection of infections signs. Furthermore providing psychological support to those isolated because of COVID-19. The second aspect is prevention & control of nosocomial infection. Nurses can detect suspected cases by recording case histories of contact travel; follow standard guidelines of infection control (hand hygiene, respiratory hygiene, personal protective equipment, injection safety, medication storage and handling, and disinfection); and educate patients, families, and healthcare staff (CDC, 2016) to prevent hospital acquired infections. Add into this, nurses implement isolation care and monitor (using the mobile location finder system), conduct symptoms assessments.

The third aspect is concerned with to providing safe and protective care and environment at health care settings. Care guidelines for patients in these institutions should include strategies for rapidly identifying and managing deteriorating effects, developing safe visiting policies that minimize the number of visitors, maintaining a protective environment, spreading

awareness by intensified training session, and formulating proper sick-leave policies for healthcare staffs (CDC, 2020).

The fourth aspect is the protection immune compromised patients. These patients are threatening from a COVID-19 infection than the general population. Educating Patients with immunological deficiencies about self-protection is a crucial function of nurses. (American Society of Clinical Society, 2020; CDC, 2020).

The fifth aspect focuses on providing direct care to patients with COVID-19. It is vital to provide urgent, intensive care to patients who are infected and symptomatic, particularly who are in threatening condition. Ensuring that healthcare providers are fully protected by adequate personal protection equipment is also important. Ensure adequate man power as well as equipment stock in In intensive care areas, nurses should provide psychological support to panic patients

Key Challenges Faced by Nursing Professionals during COVID-19

Nursing professionals deals with huge challenges. The major challenges to nursing professionals during the COVID-19 pandemic are outlined here:

Bridging Gaps in empirical Knowledge

As COVID-19 is a newly discovered disease, effective vaccines and treatments are still need to be invented. Thus, in tackling this newly identified infectious disease, nurses face a potential risk to counteract infection as well as anxiety and mental health problems. It is important to apply the latest knowledge to protect healthcare professionals and nursing staff who are involving in caring for patients with COVID-19.

Averting Insufficiencies in the Healthcare System

The global spread of COVID-19 has produced challenges worldwide, especially to ensure sufficient personal protective equipment to the healthcare system. Insufficient personal protective equipment has been associated with occupational illness. Few studies have reported on inadequate personal protective equipment and medical supplies in hospitals and healthcare agencies during past events. Improving production and procurement is critical to ensuring security and safety in the workplace.

Addressing Staffing Shortages

Epidemics of contagious illnesses COVID-19 highlight the risk of safety problems for healthcare providers and nurses. Manpower shortages during infectious disease outbreaks may be caused by dangerous infectious sources and actual cases of infection among healthcare workers Nurse Manager can play important roles in emerging and encouraging effective anti-infection protective environments and strategies. Policies on employment benefits and incentives will be helpful for retaining staff during outbreaks

Research in the area of COVID-19 Prevention and Management

It is crucial to conducting studies on disease-spread prevention and the experience of supporting patients physically and psychologically. Evaluation of effects of administrative strategies on disease-spread prevention in both healthcare and community settings will be valuable. Discovering the impact of cultural variances on the sensitivity and prevention of COVID-19 will be one of the most noteworthy issues related to the spread and management of COVID-19 globally.

Conclusions

Global pandemic of COVID-19 has affected public health, global communications, and economic systems adversely. Nurses are vital members of healthcare teams assigned to control and prevent the spread of infectious diseases. In fact Nurses work on the front line, providing acute and direct care to individuals with COVID-19. Further determination is necessary to develop strategic recommendations and to integrate new knowledge into education. The strategies to control and prevent COVID-19 and to care for those who are infected remain continuing.

References:

1. Aldohyan M., Al-Rawashdeh N., Sakr F. M., Rahman S., Alfarhan A. I., & Salam M. (2019). The perceived effectiveness of MERS-CoV educational programs and knowledge transfer among primary healthcare workers: A cross-sectional survey. *BMC Infectious Diseases*, 19(1), 273.
2. Andrasik M., Broder G., Oseso L., Wallace S., Rentas F., & Corey L. (2020). Stigma, implicit bias, and long-lasting prevention interventions to end the domestic HIV/AIDS epidemic. *American Journal of Public Health*, 110(1), 67–68.
3. Anzai A., Kobayashi T., Linton N. M., Kinoshita R., Hayashi K., Suzuki A., ...Nishiura H. (2020). Assessing the impact of reduced travel on exportation dynamics of novel coronavirus infection (COVID-19). *Journal of Clinical Medicine*, 9(2), 601.
4. Centers for Disease Control and Prevention. (2020). Coronavirus disease 2019 (COVID-19).
5. Chen H., Guo J., Wang C., Luo F., Yu X., Zhang W., ... Zhang Y. (2020). Clinical characteristics and intrauterine vertical transmission potential of COVID-19 infection in nine pregnant women: A retrospective review of medical records. *The Lancet*, 395(10226), 809–815.
6. Chen N., Zhou M., Dong X., Qu J., Gong F., Han Y.,Zhang L. (2020). Epidemiological and clinical characteristics of 99 cases of 2019 novel coronavirus pneumonia in Wuhan, China: A descriptive study. *The Lancet*, 395(10223), 507–513.
7. Chew C., &Eysenbach G. (2010). Pandemics in the age of twitter: Content analysis of tweets during the 2009 H1N1 outbreak. *PLOS ONE*, 5(11), e14118.
8. Guan W. J., Ni Z. Y., Hu Y., Liang W. H., Ou C. Q., He J. X.Zhong N. S. (2020). Clinical characteristics of coronavirus disease 2019 in China. *The New England Journal of Medicine*. Advance online publication.

9. Huang C., Wang Y., Li X., Ren L., Zhao J., Hu Y. Cao B. (2020). Clinical features of patients infected with 2019 novel coronavirus in Wuhan, China. *The Lancet*, 395(10223), 497–506.
10. Jernigan D. B., CDC COVID-19 Response Team. (2020). Update: Public health response to the coronavirus disease 2019 outbreak—United States, February 24, 2020. *Morbidity and Mortality Weekly Report*, 69(8), 216–219.
11. Jin Y. H., Cai L., Cheng Z. S., Cheng H., Deng T., Fan T. P., A rapid advice guideline for the diagnosis and treatment of 2019 novel coronavirus (2019-nCoV) infected pneumonia (standard version). *Military Medical Research*, 7(1), 4.
12. Khalid I., Khalid T. J., Qabajah M. R., Barnard A. G., &Qushmaq I. A. (2016). Healthcare workers emotions, perceived stressors and coping strategies during a MERS-CoV outbreak. *Clinical Medicine and Research*, 14(1), 7–14.
13. Musau J., Baumann A., Kolotylo C., O'Shea T., &Bialachowski A. (2015). Infectious disease outbreaks and increased complexity of care. *International Nursing Review*, 62(3), 404–411.
14. National Institute for Health and Care Excellence. (2017). Healthcare-associated infectious: Prevention and control in primary and community care.
15. Nishiura H., Kobayashi T., Suzuki A., Jung S. M., Hayashi K., Kinoshita R.,Miyama T. (2020). Estimation of the asymptomatic ratio of novel coronavirus infections (COVID-19). *International Journal of Infectious Diseases*. Advance online publication.
16. Pan X., Ojcius D. M., Gao T., Li Z., Pan C., & Pan C. (2020). Lessons learned from the 2019-nCoV epidemic on prevention of future infectious diseases. *Microbes and Infection*, 22(2), 86–91.
17. Signorini A., Segre A. M., &Polgreen P. M. (2011). The use of Twitter to track levels of disease activity and public concern in the U.S. during the influenza a H1N1 pandemic. *PLOS ONE*, 6(5), e19467.
18. Wang D. H. B., Hu C., Zhu F., Liu X., Zhang J., Wang B.,Peng Z. (2020). Clinical characteristics of 138 hospitalized patients with 2019 novel coronavirus-infected pneumonia in Wuhan, China. *JAMA*, 323(11), 1061–1069.
19. Wang Y., Wang Y., Chen Y., & Qin Q. (2020). Unique epidemiological and clinical features of the emerging 2019 novel coronavirus pneumonia (COVID-19) implicate special control measures. *Journal of Medical Virology*. Advance online publication.
20. World Health Organization. (2020). Coronavirus disease (COVID-2019): Situation reports.