

# EC EMERGENCY MEDICINE AND CRITICAL CARE

**Mini Review** 

# **Nurses Roles in Providing Care for Patient with COVID-19**

Nour AL-rawashdeh<sup>1</sup>, Mohammed Al Bashtawy<sup>2</sup>\*, Nawal Ozaybi<sup>3</sup>, Abdullah Alkhawaldeh<sup>4</sup>, Bayan Albashtawy<sup>5</sup>, Sa'd Albashtawy<sup>6</sup>, Moawiah Khatatbeh<sup>7</sup>, Omar Khraisat<sup>8</sup>, Zaid AlBashtawy<sup>9</sup> and Mohammad Suliman<sup>10</sup>

<sup>1</sup>Registered Nurse (RN), Alharamain Hospital, Jordan

<sup>2</sup>Professor, Princess Salma Faculty of Nursing, AL Al-Bayt University, Jordan

<sup>3</sup>PhD Candidate, School of Health Sciences, University of Nottingham, United Kingdom

<sup>4</sup>Associate Professor, Princess Salma Faculty of Nursing, AL Al-Bayt University, Jordan

<sup>5</sup>Medical Intern, King Abdullah University Hospital, Jordan, Jordan

<sup>6</sup>Faculty of Medicine, Hashemite University, Zarga, Jordan

<sup>7</sup>Associate Professor, Faculty of Medicine, Yarmouk University, Jordan

<sup>8</sup>Assistant Professor, Faculty of Nursing, Al-Ahliyya Amman University, Amman, Jordan

<sup>9</sup>Faculty of Medicine, Yarmouk University, Irbid, Jordan

<sup>10</sup>Associate Professor, Princess Salma Faculty of Nursing, AL Al-Bayt University, Jordan

\*Corresponding Author: Mohammed AL Bashtawy, Professor, Princess Salma Faculty of Nursing, AL Al-Bayt University, Jordan.

Received: November 24, 2020; Published: December 31, 2020

#### **Abstract**

Nurses are at the frontline of the health care system response to both epidemics and pandemics of COVID-19. This paper intends to review the literature regarding roles and risks of nurses in the caring of patient with COVID-19. The search was performed in a number of electronic databases: Google Scholar, Pub Med and MEDLINE. Nurses have vital roles during the COVID-19 pandemic, and they provide different nursing care consistent with patients' degree of infection. Though, nurses are at high risk for developing the disease, and have concerns about their job and its impact on them and their family. Governments, policy makers and nursing groups need to support nurses, during and following the COVID-19 epidemic or pandemic.

Keywords: COVID-19; Corona Virus; Nurses Roles; Risks

# Introduction

The Corona virus belongs to the large family of virus that causes disease in human and animals. The most newly discovered corona virus is Corona Virus Disease 2019 (COVID-19) [1]. The discovery of COVID-19 was in Wuhan, China in December 2019 [2].

COVID-19 symptoms may be mild and appear in as few as two days or as long as two weeks following exposure [3]. These symptoms may include fever, nasal congestion, dry cough, breathing difficulties and shortness of breath, body aches, and sore throat or diarrhea [4]. COVID-19 can spread through tiny droplets from mouth or nose when someone with the disease exhales or coughs [2,4]. About 80% of people will fully recover with no need for special treatment, while one out of six people may become very ill [1,2,4]. Older persons and those with medical health problems such as cardiac diseases, lung diseases or diabetes, are at a high risk of developing serious illness.

Nurses are among the first people present to provide care in times of crisis [5,14], and they are at the frontline of the health care system response to both epidemics and pandemics [6-23]. They provide health care directly to patients in close physical proximity and consequently, are frequently directly exposed to viruses and are at high risk of developing disease [24].

## Aim of the study

This paper intends to review the most important literature regarding roles and risks of nurses in the caring of patient with COVID-19.

#### Method

#### Search methods

The search was performed in a number of electronic databases: Google Scholar, PubMed and MEDLINE. The keywords included "Corona virus", "covid 19", "nurses role". Papers published in 2019 and 2020. The studies included in the review were: (a) published in the English language (b) identified guideline about role of nurses in the care of patient with covid 19 (b) discuss how to prevent and control spread of covid 19 (c) talk about the precautions should nurses take to protect themselves. Studies involving other health professionals were excluded. In addition, comments, editorials, letters, were excluded.

#### Search outcome

A literature search yielded 50 titles for review. While, the final examination resulted in 10 articles for review.

#### **Results and Discussion**

Nurses have vital roles and tasks during the COVID-19 pandemic. They will continue to be at the front line of patient health care in hospitals and actively engaged in monitoring and evaluation in community, and they will as well involve in planning for anticipated CO-VID-19-associated outbreaks [25].

Nurses provide different nursing health care consistent with patients' degree of infection. For example, for infected patient with mild to moderate symptoms, nurses roles include: symptom management, monitoring of disease progression, exercise and nutrition counsel, health education and psychological support [25,26]. For infected patient with severe symptoms the nurses collaborate with physicians to provide life support treatments (such as: artificial airway management, prone position ventilation care and continuous renal replacement therapy (CRRT) [27]. Also, nurses lead training of infection control and ensure firmly adherence to infection control policies, in order to protect all members of the health team. Furthermore, nurses developed definite rules to avoid spread of the infection by health care team to the public [28]. Still nurses have a fundamental function, in increasing community awareness about disease prevention and in reducing the distribution of myths on the subject of the epidemic. This includes guiding public to accessible health care services, confront myths and support evidence-based patient management and initiatives aims to reduce infection [27-29].

Nurses are essential to the health care response to infectious disease epidemics and pandemics [28-30]. As nurses are at the front line of the COVID-19 epidemic response and are exposed to danger that place them at risk of infection, it is necessary that they are supported to protect themselves with infection prevention procedures and sufficient protective equipments at their work, include masks, gloves, robes, eye cover, face shields and ventilators [28-31]. Also, nurses in need to repayment, psychological counseling, and therapeutic care if they are infected with COVID-19 during work [32].

According to past studies, many nurses have concerns regarding their job and its impact on them and their family. Specifically, the possibility of being infected, spread to family members, the vulnerabilities of their work [7,29-33]. Governments, policy makers and nursing groups need to support nurses, through and following the epidemic or pandemic. Without support, nurses are probable to experience significant psychological issues that may produce burnout and loss from the nurses workers [29-30].

71

#### Conclusion

Nurses have fundamental roles and tasks during the COVID-19 pandemic. They provide different nursing health care consistent with patients' degree of infection. And, they lead training of infection control and ensure adherence to infection control policies by health care teams. Also, they increase community awareness about disease prevention and reduce the distribution of myths regarding the epidemic. On the other hand, many nurses have concerns regarding their job and its impact on them and their family. Subsequently, governments, policy makers and nursing groups need to support nurses, through and following the epidemic or pandemic.

## **Bibliography**

- 1. WHO. "Corona virus disease (COVID-19)". (2019).
- 2. Huang L and rong Liu H. "Emotional responses and coping strategies of nurses and nursing college students during COVID-19 outbreak". *Med Rxiv* (2020).
- 3. Centers for Disease Control and Prevention. "2019 Novel Coronavirus, Wuhan, China" (2020).
- 4. WHO. "Summary of probable SARS cases with onset of illness from 1 November 2002 to 31 July 2003". (2003).
- 5. Buchan J., et al. "A Critical Moment: NHS staffing trends, retention and attrition 2019". The Health Foundation (2019).
- 6. WHO. "State of the World's Nursing 2020: Investing in education, jobs and leadership" (2020).
- 7. Abdul-Monim B., et al. "Exploring the Competency of the Jordanian Intensive Care Nurses towards Endotracheal Tube and Oral Care Practices for Mechanically Ventilated Patients: An Observational Study". Global Journal of Health Science 5.1 (2013): 203-213.
- 8. Abu obead k., et al. "Impact of radiotherapy treatment on Jordanian cancer patients' quality of life and fatigue". *International Journal of Advanced Nursing Studies* 3.1 (2013): 6-12.
- 9. Tawalbeh L., *et al.* "The Relationship between Social Support and Adherence to Healthy Lifestyle among Patients with Coronary Artery Disease in the North of Jordan". *Clinical Nursing Research* 24.2 (2015): 121-138.
- 10. Batiha A., et al. "Quality Of Life and Fatigue among Jordanian Cancer Patients". Iranian Journal of Public Health 44.12 (2015): 1704-1705.
- 11. Alkhawaldeh A., *et al.* "Long-term conditions associated with primary health care service use among older adults". *Primary Health Care* 26.2 (2016): 31-35.
- 12. AL Bashtawy M., *et al.* "The Health Belief Model's Impacts on the Use of Complementary and Alternative Medicine by Parents or Guardians of Children with Cancer". *Iran J Public Health* 45.5 (2016): 708-709.
- 13. Sulaiman M., et al. "Exploring Safety Culture in Jordanian Hospitals: A Baseline Study". *Journal of Nursing Care Quality* 32.3 (2017): E1-E7.
- 14. Aloush SM., *et al.* "Compliance of nurses and hospitals with ventilator-associated pneumonia prevention guidelines: a Middle Eastern survey". *Journal of Nursing Care Quality* 33.3 (2018): E8-E14.
- 15. Suliman M., et al. "Knowledge and practices of isolation precautions among nurses in Jordan". American Journal of Infection Control 46.6 (2018): 680-684.
- 16. Al saraireh FA., *et al.* "The effectiveness of cognitive behavioral therapy versus psychoeducation in the management of depression among patients undergoing haemodialysis". *Issues in Mental Health Nursing* 3.39 (2018): 514-518.

- 17. Gharaibeh H., et al. "Clinical burdens of β-thalassemia major in affected children". Journal of Pediatric Hematology/Oncology 40.3 (2018): 182-187.
- 18. Omari A., et al. "A Review of the Short Form Health Survey Version 2". Journal of Nursing Measurement 27.1 (2019): 76-85.
- 19. Aloush SM., et al. "Compliance of Middle Eastern hospitals with the central line associated bloodstream infection prevention guide-lines". Applied Nursing Research 43 (2018): 56-60.
- 20. Tawalbeh LI., *et al.* "The Most and the Least Performed Self-Care Behaviors Among Patients With Heart Failure in Jordan". *Clinical Nursing Research* 29.2 (2020): 108-116.
- 21. Al saraireh FA., *et al.* "The Effectiveness of Cognitive Behavioral Therapy versus Psychoeducation in the Management of Depression among Patients Undergoing Haemodialysis". *Issues in Mental Health Nursing* 39.6 (2018): 514-518.
- 22. Suliman M., et al. "The incidence of peripheral intravenous catheter phlebitis and risk factors among pediatric patients". *Journal of Pediatric Nursing* 50 (2020): 89-93.
- 23. Al Kazaleh A., *et al.* "Effects of Deep Breathing Exercise on Patient with Chronic Obstructive Pulmonary Disease". *EC Pulmonology and Respiratory Medicine* 9.11 (2020): 114-117.
- 24. Seale H., et al. "Will they just pack up and leave?" attitudes and intended behaviour of hospital health care workers during an influenza pandemic". BMC Health Services Research 9.1 (2009): 30.
- 25. Jackson D., et al. "Life in the pandemic: some reflections on nursing in the context of COVID-19". Journal of Clinical Nursing 29 (2020): 2041-2043.
- 26. Chen S., et al. "COVID-19 control in China during mass population movements at New Year". Lancet 395.10226 (2020): 764-766.
- 27. The State Council Information Office of the People's Republic of China. "SCIO briefing on the science-based treatment of severe CO-VID-19 cases (2020).
- 28. National Health Commission of the People's Republic of China. "Joint Prevention and Control Mechanism Press Conference on Introducing the Care of Healthcare Personnel at Frontline of the Epidemic by State Council (2020).
- 29. WHO "Novel Coronavirus (COVID-19). Geneva, Switzerland: World Health Organization". (2020).
- 30. Fernandez R., *et al.* "Implications for COVID-19: A systematic review of nurses' experiences of working in acute care hospital settings during a respiratory Pandemic". *International Journal of Nursing Studies* (2020).
- 31. Adams J and Walls R. "Supporting the health care workforce during the COVID-19 global epidemic". *The Journal of the American Medical Association* 323 (2020): 1439.
- 32. Chen X., et al. "Initiation of a new infection control system for the COVID-19 outbreak". The Lancet Infectious Diseases 20 (2020): 397-398.
- 33. Koh Y., et al. "Nurses' perceptions of risk from emerging respiratory infectious diseases: a Singapore study". *International Journal of Nursing Practice* 18.2 (2012): 195-204.

Volume 5 Issue 1 January 2021 ©All rights reserved by Mohammed AL Bashtawy., *et al.*