

# EC PULMONOLOGY AND RESPIRATORY MEDICINE Literature Review

# Social and Psychological Effects of COVID-19 on Health Care Providers

Tamara Al-Khalifa<sup>1</sup>, Mohammad ALBashtawy<sup>2</sup>\*, Ma'en Aljezawi<sup>3</sup>, Sa'd ALBashtawy<sup>4</sup>, Bayan ALBashtawy<sup>5</sup>, Abdullah Alkhawaldeh<sup>6</sup>, Zaid ALBashtawy<sup>7</sup>, Ali Ibnian<sup>8</sup>, Hasan Alkhawaldeh<sup>9</sup> and Shada Khazaaleh<sup>10</sup>

- <sup>1</sup>Master Student, Community Health Nursing, Princess Salma Faculty of Nursing, AL al-Bayt University, Jordan
- <sup>2</sup>Professor, Princess Salma Faculty of Nursing, AL al-Bayt University, Jordan
- <sup>3</sup>Associate Professor, Princess Salma Faculty of Nursing, AL Al-Bayt University, Jordan
- <sup>4</sup>Faculty of Medicine, Hashemite University, Zarqa, Jordan, Jordan
- <sup>5</sup>Medical Intern, King Abdullah University Hospital, Jordan
- <sup>6</sup>Associate Professor, Princess Salma Faculty of Nursing, AL Al-Bayt University, Jordan
- <sup>7</sup>Faculty of Medicine, Yarmouk University, Irbid, Jordan
- 8MDs, Faculty of Medicine, Jordan University of Science and Technology, Irbid, Jordan
- <sup>9</sup>Teacher Assistant, Department of Physical Therapy, Jordan University of Science and Technology, Irbid, Jordan
- <sup>10</sup>MSc, Research Assistant, JUST, Faculty of Applied Medical Sciences, Department of Rehabilitation Sciences, Irbid, Jordan

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

Received: July 01, 2021; Published: July 28, 2021

#### **Abstract**

The health care providers are similarly susceptible to COVID-19 infections as the rest of the people, particularly, the frontline providers. The current paper aimed to examine the main literature on the subject of the psychological and social effects of COVID-19 on health care providers. The electronic examination was including EBSCO, CINHAL and PubMed databases. Symptoms of anxiety, fear, depression, insomnia were found within the health care providers. This review highlights the significance of considering the psychological and social effects of COVID-19 pandemic on Jordanian health care providers.

Keywords: COVID-19 Pandemic; Health Care Providers; Psychological Effects

# Introduction

Any country that has high population, medical professional's shortage, insufficient equipment and health care centers, scarcity of testing facilities and surveillance, and poor awareness of people will fail to control the COVID-19 as a pandemic and so, put more pressure on the health system [1].

The health care providers are not protected against the risk of infections. They are similarly susceptible to infections as the rest of the people, particularly the frontline providers. According to prior figures, health care providers create a significant percentage of the infected cases [2]. For example, in China the COVID-19 infection was reported among 3387 health care providers, and 22 health care providers (0.6%) died as a result of the disease [3]. In the same way, Spain (14%), Italy (20%), and France (above 50 deaths between health care providers) described high rates of health care providers' COVID-19 infection [4,5].

The health care providers working in close interaction with COVID-19 infected patients are susceptible to adverse psychological health consequences. Studies were carried out in past pandemics indicated that increasing workload, frustration, fear of infection, fatigue and insufficient personal equipment had a significant effect on the psychological health of health care providers [6].

Anxiety and high levels of stress may decrease morale of staff, increase absenteeism, decrease level of quality of care and work satisfaction [7]. The past studies focused mainly on the disease and how to treatment, and less attention was given to the psychological and social effect on health care providers [8-21]. Consequently, it is a priority to recognize the psychological and social needs of our health care providers so as to offer them with the suitable tools to alleviate the harmful effects of dealing with the COVID-19 pandemic.

## Aim of the Study

The current paper plans to examine the main literature on the subject of the psychological and social effects of COVID-19 on health care providers.

#### Method

#### Search methods

The electronic examination was including EBSCO, CINHAL and PubMed databases. The keywords were "Psychological impact", "CO-VID-19", "health care providers".

Studies published between 2008 and 2021 were found. Those studies published in the English language that discussed the psychological and social effects of COVID-19 on health care providers were included in the present review. Studies involving comments, editorials, letters, books, and thesis reports were omitted from the present study.

#### Search outcome

A literature search created 150 headings for review. The last consideration resulted in 10 articles, not including studies comprising merely the study abstract and unrelated studies.

#### **Results and Discussion**

There was a profound effect of the COVID-19 pandemic on the psychological and social health of the health care providers, and results from worldwide studies may help to prepare the Jordanian health care system for the possible effects. Several studies were described a range of psychological and social health in frontline health care providers throughout the COVID-19 pandemic.

A recent study on Indian health care providers stated significant psychological and social health problems because of the COVID-19 pandemic. It found that physicians had the highest anxiety level among the health care providers. Both nurses and physicians perceived a greater level of irritability than the other health care providers. Also, compared to physicians and nurses, other health care providers were more expected to have insomnia. The greater perception of anxiety was associated with younger age, female gender, higher education and urban habitat. While the significant predictors of irritability were older age, being quarantined, and single marital status [22]. A cross-sectional study was carried out among health care providers in three hospitals in Ghana. The study found that Above 40% of health care providers have fear, whereas 27.8%, 21.1%, and 8.2% have anxiety, depression, and stress, correspondingly [23]. A psychological study indicated that the rates of insomnia, anxiety, depression, and stress symptoms among health care providers involved in COVID-19 pandemic control and prevention were as high as 36.1%, 44.7%, 50.7%, and 73.4% correspondingly [24].

The current studies revealed that the scores of psychological stress for health care providers in isolation units were mostly higher [25], and in clinical work the nurses showed more psychological distress [26], comprising physical symptoms such as headache, dizziness, and difficulties in breathing [27]. In Italy, a study found that about 63.2% of health care providers described COVID-19 related traumatic experiences at work and 53.8% revealed signs of post-traumatic distress; also, 50.1% revealed signs of anxiety and about 26.6% indicators

of moderate depression. The multivariable logistic regressions indicated that nurses, women, healthcare providers directly involved with COVID-19 patients and those with pre-existing psychological problems were at greater risk of psycho-pathological effects of the COVID-19 pandemic [28].

In the United Kingdom, a study intended to evaluate the social effects of the COVID-19 pandemic, in the workplace, as perceived by health care providers working in mental health services. The findings indicated that about two thirds of health care providers sensed there was a change in how they felt about interacting with others, and many had lost confidence in their capability to communicate emotionally with others. A majority of health care providers believed that distancing social and face masks may have a negative consequence on communication and relationship within the workplace [29].

Finally, there are many reasons that may cause psychological and social problems among health care providers such as long working hours, dealing with patients directly and fear of acquiring infection and transmitting it to their families [30-39]. In addition to their absence from their families for a long time [40]. Nurses, who are more susceptible to mental problems, may have a higher workload and greater risk of direct exposure to patients with COVID-19 [41]. Research has shown that worrying about family members may be one of the main sources of stress in nurses and other health care provided, indicating the critical role of community support for a nurse's mental health [41-70].

#### Conclusion

The present review confirms that front-line health care providers are at risk of significant psychological and social distress as direct consequences of the COVID-19 pandemic. The published studies propose that symptoms of anxiety, fear, depression, insomnia were found within the health care providers. This review highlights the significance of considering the psychological and social effects of COVID-19 pandemic on Jordanian health care providers and proposes creating psychological and social support services for providing sufficient professional care. More research in social care and primary care settings is recommended.

### **Bibliography**

- 1. Kumar A., et al. "COVID-19: Challenges and its consequences for rural health care in India". Public Health in Practice 1 (2020): 100009.
- 2. Simonds AK., and Sokol DK. "Lives on the line? Ethics and practicalities of duty of care in pandemics and disasters". *European Respiratory Journal* 34.2 (2009): 303-309.
- 3. Lin M., et al. "What can early Canadian experience screening for COVID-19 teach us about how to prepare for a pandemic?" CMAJ 192.12 (2020): E314-E318.
- 4. Minder R and Elian P. "Virus knocks thousands of health workers out of action in Europe". The New York Times 24 (2020): 2021.
- 5. Lancet T. "COVID-19: protecting health-care workers". Lancet (London, England) 395.10228 (2020): 922.
- 6. De Pablo GS., et al. "Impact of coronavirus syndromes on physical and mental health of health care workers: Systematic review and meta-analysis". Journal of Affective Disorders 275 (2020): 48-57.
- 7. Brooks SK., et al. "A systematic, thematic review of social and occupational factors associated with psychological outcomes in health-care employees during an infectious disease outbreak". Journal of Occupational and Environmental Medicine 60.3 (2018): 248-257.
- 8. Wu Y-C., et al. "The outbreak of COVID-19: an overview". Journal of the Chinese Medical Association 83.3 (2020): 217.
- 9. 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.

- 10. Al Qadire M., et al. "Public Attitudes toward Cancer and Cancer Patients: A Jordanian National Online Survey". Middle East Journal of Cancer (2020).
- 11. Howeri NM., *et al.* "Nurses' Knowledge Regarding Care Provided to Patients with Angina". *EC Pulmonary and Respiratory Medicine* 10.1 (2021): 01-04.
- 12. AL-rawashdeh N., et al. "Nurses Roles in Providing Care for Patient with COVID-19". EC Emergency Medicine and Critical Care 5.1 (2020).
- 13. Shudaifat Y., et al. "Managing Pain in Acute Myocardial Infarction Patients". Journal of Pulmonary and Respiratory Medicine 10.4 (2021): 1-6.
- 14. Mohammad KI., *et al*. "Informative title: Effects of social support, parenting stress and self-efficacy on postpartum depression among adolescent mothers in Jordan". *Journal of Clinical Nursing* (2021).
- 15. Alessa R., et al. "Intensive Care Units Nurse's Knowledge and Practice Regarding the Endotracheal Tube Suctioning". EC Pulmonology and Respiratory Medicine 10.5 (2021): 29-35.
- 16. Mohammad KI., *et al.* "Informative title: Effects of social support, parenting stress and self-efficacy on postpartum depression among adolescent mothers in Jordan". *Journal of Clinical Nursing* (2021).
- 17. Al-Kazaleh A., et al. "Aortic Valve Stenosis: A Review of the Literature". Medico Legal Update 21.3 (2021): 144-146.
- 18. Alzyoud B., et al. "Nurses Knowledge Regarding Prevention Protocol of COVID-19 in Emergency Departments". Medico Legal Update 21.3 (2021): 168-170.
- 19. Khader WF, et al. "COVID-19 and Its Relation to Takotsubo Cardiomyopathy". Medico Legal Update 21.3 (2021): 263-266.
- 20. Olimat Y., et al. "Knowledge and Attitudes Regarding Pain Management among ICU Nurse's". Medico Legal Update 21.3 (2021): 267-269.
- 21. Shudaifat Y., *et al.* "The Role of Nursing Practice to Prevent Ventilator-associated Pneumonia in the Intensive Care Units". *Medico Legal Update* 21.3 (2021): 270-273.
- 22. Chatterjee SS., *et al.* "Stress, sleep and psychological impact in healthcare workers during the early phase of COVID-19 in India: a factor analysis". *Frontiers in Psychology* 12 (2021): 473.
- 23. Ofori AA., *et al.* "Psychological impact of COVID-19 on health workers in Ghana: A multicentre, cross-sectional study". *SAGE Open Medicine* 9 (2021): 20503121211000919.
- 24. Liu S., et al. "Online mental health services in China during the COVID-19 outbreak". The Lancet Psychiatry 7.4 (2020): e17-e18.
- 25. Deng R., *et al.* "Influencing factors for psychological stress of stress of health care workers in COVID-19 isolation wards". *Chinese Journal of Infection Control* 19.3 (2020): 1-6.
- 26. Li Z., *et al.* "Vicarious traumatization in the general public, members, and non-members of medical teams aiding in COVID-19 control". *Brain, Behavior, and Immunity* 88 (2020): 916-919.
- 27. Sui J. "Investigation and analysis of the psychological condition of nurses in the infection department". *Today Nurse* 12 (2017): 154-156.
- 28. Lasalvia A., et al. "Psychological impact of COVID-19 pandemic on healthcare workers in a highly burdened area of north-east Italy". Epidemiology and Psychiatric Sciences 30 (2021).

- 29. Eddy CM. "The social impact of COVID-19 as perceived by the employees of a UK mental health service". *International Journal of Mental Health Nursing* (2021).
- 30. Mansi K., *et al.* "Biochemical factors relevant to kidney functions among Jordanian children with beta-thalassemia major treated with deferoxamine". *International Journal of Medicine and Medical Sciences* 5.8 (2013): 374-379.
- 31. Batiha A-M., 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.
- 32. Al-ghzawi HM., et al. "The impact of wars and conflicts on mental health of Arab population". International Journal of Humanities and Social Science 4.6 (2014): 237-242.
- 33. Al-ghzawi H., et al. "Alcohol use among adolescents". International Journal of Humanities and Social Science 4.10 (2014): 167-175.
- 34. Tawalbeh LI., 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.
- 35. Khamaiseh A and ALBashtawy M. "Prevalence of obesity and physical inactivity behaviors among nursing students in Mutah University, Jordan". World Journal of Medical Sciences 12.2 (2015): 95-102.
- 36. ALBashtawy M., "Exploring the reasons why school students eat or skip breakfast". Nursing Children and Young People 27.6 (2015).
- 37. Batiha A-M., et al. "The relationship between hypertension and anthropometric indices in a Jordanian population". Advanced Studies in Biology 7.5 (2015): 233-243.
- 38. Batiha A-M, et al. "Quality of life and fatigue among Jordanian cancer patients". Iranian Journal of Public Health 44.12 (2015): 1704-1705.
- 39. Batiha A-M and ALBashtawy M. "Attitudes and practices of health science students regarding blood donation". *International Journal of Advanced Nursing Studies* 5.1 (2016): 81.
- 40. Saleem Z., et al. "COVID-19 pandemic fear and anxiety among healthcare professionals in Pakistan". (2020).
- 41. Que J., et al. "Psychological impact of the COVID-19 pandemic on healthcare workers: a cross-sectional study in China". General Psychiatry 33.3 (2020).
- 42. Hamadneh S., et al. "Sudden Infant Death Syndrome in the Middle East: An exploration of the literature on rates, risk factors, high risk groups and intervention programs". Research Journal of Medical Sciences 10.4 (2016): 199-204.
- 43. Alkhawaldeh A., et al. "Long-term conditions in older adults using primary care services". Primary Health Care 26.2 (2016).
- 44. Abd El-Razek A., *et al.* "The relationship between sleep disturbance in late pregnancy and labor outcomes" *International Journal of Health* 4.1 (2016): 12-16.
- 45. Albashtawy 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". *Iranian Journal of Public Health* 45.5 (2016): 708-709.
- 46. Alazzam M., *et al.* "Advantages and disadvantages of studying the family as a context approach when dealing with a school aged child diagnosed with attention deficit hyperactivity disorder". (2016): 1369-1370.
- 47. Suliman M., et al. "Exploring safety culture in Jordanian hospitals". Journal of Nursing Care Quality 32.3 (2017): E1-E7.

- 48. Alhalaiqa F., et al. "Adherence to Antipsychotic Drug Measured by an Arabic Version of Morisky Scale". Issues in Mental Health Nursing 37.12 (2016): 975-982.
- 49. AlAzzam M and AlBashtawy M. "Family approaches to dealing with a child's ADHD". The Journal of Family Health Care 26.5 (2016): 29-33.
- 50. Qaddumi J., et al. "Prevalence of hypertension and pre-hypertension among secondary school students". International Journal of Advanced Nursing Studies 5.2 (2016): 240.
- 51. Al Azzam M., et al. "Prevalence of attention deficit hyperactivity disorder among school-aged children in Jordan". Eastern Mediterranean Health Journal 23.7 (2017): 486-491.
- 52. Alkhawaldeh A., et al. "Assessment of Northern Jordanian adolescents' knowledge and attitudes towards asthma". Nursing Children and Young People 29.6 (2017).
- 53. Alazzam M., et al. "Pattern of interaction and relationships between family members". International Journal of Health 5.1 (2017): 45-47.
- 54. Freij M., et al. "Awareness and knowledge of ovarian cancer symptoms and risk factors: a survey of Jordanian women". Clinical Nursing Research 27.7 (2018): 826-840.
- 55. 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.
- 56. Suliman M., et al. "Knowledge and practices of isolation precautions among nurses in Jordan". American Journal of Infection Control 46.6 (2018): 680-684.
- 57. 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.
- 58. Aloush S., et al. "Effectiveness of Basic Life Support Training for Middle School Students". The Journal of School Nursing 35.4 (2019): 262-267.
- 59. Al Omari O., et al. "A Review of the Short Form Health Survey-Version 2". Journal of Nursing Measurement 27.1 (2019): 77-86.
- 60. 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.
- 61. 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.
- 62. 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.
- 63. Aloush SM., et al. "Cardiopulmonary resuscitation training for undergraduates from nonmedical majors: Effectiveness of the three tiers model". Nursing Forum 53.4 (2018).
- 64. Khraisat O., et al. "Shared governance: a children's hospital journey to clinical nursing excellence". Journal of Research in Nursing 25.4 (2020): 347-358.
- 65. Al Kazaleh A and AL Bashtawy M. "Therapeutic Communication Skills in Nursing Education and Practice". *EC Psychology and Psychiatry* 8.12 (2019): 01-04.

- 66. 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.
- 67. Haliq SAA., *et al.* "Automated External Defibrillator Issues and Challenges in Saudi Arabia: Knowledge Assessment among Laypersons; Public Safety Perspective". (2019).
- 68. Al Haliq SA., et al. "Assessment on CPR Knowledge and AED Availability in Saudi Malls by Security Personnel: Public Safety Perspective". Journal of Environmental and Public Health 2020 (2020).
- 69. Suliman M., et al. "Effect of nurse managers' leadership styles on predicted nurse turnover". Nursing Management 28.3 (2021).
- 70. Magabla A., et al. "Conflict in nursing: A Review Paper". EC Psychology and Psychiatry 9.9 (2020): 01-03.

Volume 10 Issue 8 August 2021 ©All rights reserved by Mohammed ALBashtawy., et al.