



Chronic Diseases and COVID-19 Pandemic

Mohammad Esmailpour-Bandboni ^{1,*} and Amene Beig Mohammadi²

¹Department of Nursing, School of Nursing and Midwifery, Guilan University of Medical Sciences, Rasht, Iran

²Guilan University of Medical Sciences, Rasht, Iran

*Corresponding author: Department of Nursing, School of Nursing and Midwifery, Guilan University of Medical Sciences, Rasht, Iran. Email: m_esmaeilpour@gums.ac.ir

Received 2020 April 06; Revised 2020 April 11; Accepted 2020 April 12.

Keywords: Chronic Disease, COVID-19, Pandemic, Nursing Care, Iran

Dear Editor,

On 31 December 2019, the government of the Republic of China notified the World Health Organization (WHO) regarding a novel coronavirus, which caused the death of many people in Wuhan, China. After spreading worldwide, on 11 March 2020, WHO defined the disease caused by this virus as coronavirus disease 2019 (COVID-19). Since the pandemic began, the infection with this virus rapidly increased all over the world.

In Iran, on 19 February 2020, two patients in Qom City were diagnosed with COVID-19. The disease spread very rapidly at first in adjacent provinces near Qom, and after a short time, it spread all over the country. As of 11 April 2020, the total number of COVID-19-infected people and deaths have reached to 70,029 and 4,375, respectively. Thus so far, studies show that the mortality rate is about 2.9% in cases with COVID-19 (1). Today, despite various antiviral drugs are used, there is no complete cure for this new viral infection. We do not have sufficient information regarding the risk factors of COVID-19. However, it is observed that people suffering from chronic diseases such as hypertension, cardiovascular disease, chronic lung disease, serious heart conditions, diabetes, chronic kidney diseases, and liver disease are highly at risk of COVID-19 (2).

A study from China found that among all deaths caused by COVID-19, 48% of the deaths were older adults and had a chronic disease with hypertension as the most common (30%), followed by diabetes (19%) and coronary heart disease (8%) (3). Information from a European study showed that 95% of COVID-19 deaths were seen among older adults aged 60 and above, and hypertension was the first common chronic disease found in 75% and diabetes in 35% of the deaths, respectively (2).

Chronic diseases seem to have a detrimental effect on

the immune system in various ways and predispose a person to COVID-19. To combat COVID-19 during the pandemic, people with chronic diseases should be exactly monitored. Patients with diabetes, hypertension, and other chronic diseases should continue taking their care and medications according to their therapeutic regime. It is important that nurses have to educate the patients with chronic diseases during COVID-19 pandemic to stay at home longer, maintain social distancing, and be aware of any changes in the clinical symptoms of their chronic diseases.

Owing to the high mortality rate in COVID-19 among patients with chronic diseases, studies need to be conducted to follow up the patients with chronic diseases who have recovered from COVID-19 to monitor their disease trajectory.

Footnotes

Conflict of Interests: The authors declare no conflict of interest.

Funding/Support: None declared by the authors.

References

1. Abdi M. Coronavirus disease 2019 (COVID-19) outbreak in Iran: Actions and problems. *Infect Control Hosp Epidemiol.* 2020;1-2. doi: 10.1017/ice.2020.86. [PubMed: 32192541]. [PubMed Central: PMC7137533].
2. *Chronic illness raises risk from COVID-19: Expert.* 2020. Available from: <https://b2n.ir/091122>.
3. Zhou F, Yu T, Du R, Fan G, Liu Y, Liu Z, et al. Clinical course and risk factors for mortality of adult inpatients with COVID-19 in Wuhan, China: A retrospective cohort study. *Lancet.* 2020;395(10229):1054-62. doi: 10.1016/S0140-6736(20)30566-3. [PubMed: 32171076].