

## عنوان مقاله:

Hematological and Biochemical Parameters Associated with Mortality in COVID-19 Infection and Their Correlation with Smoking

## محل انتشار:

مجله ایمنی و بهبود بیمار، دوره 9، شماره 1 (سال: 1400)

تعداد صفحات اصل مقاله: 6

## نویسندگان:

sahar sobhani - *Department of Nursing and Midwifery, Faculty of Nursing, Gonabad University of Medical Sciences, Gonabad, Iran*

Azar kazemi - *Department of Medical Informatics, School of Medicine, Mashhad University of Medical Sciences, Mashhad, Iran*

Forough kalantari - *Department of Nuclear Medicine, Rasoul Akram Hospital, Iran University of Medical Sciences, Tehran, Iran*

salman soltani - *Kidney Transplantation and Complications Research Center, Mashhad University of Medical Sciences, Mashhad, Iran*

saba vakili - *Medical Genetics Research Center, Medical School, Mashhad University of Medical Sciences, Mashhad, Iran*

Amir yarahmadi - *Department of Clinical Biochemistry, Faculty of Medicine, Mashhad University of Medical Sciences, Mashhad, Iran. and Transplant Research Center, Shiraz University of Medical Sciences, Shiraz, Iran*

Mahla Rahimi - *Department of Nursing and Midwifery, Faculty of Nursing, Islamic Azad University of Mashhad, Mashhad, Iran*

.Atena Aghaee - *Nuclear Medicine Research Center, Mashhad University of Medical Sciences, Mashhad, Iran*

## خلاصه مقاله:

Introduction: Coronavirus disease 2019 (COVID-19) initially appeared in China, in December 2019 and has already evolved into a pandemic spreading rapidly throughout the world. The present study aimed to determine the relationship between hematologic and biochemical parameters associated with the mortality rate in COVID-19 infection and their correlation with smoking. Materials and Methods: This study was performed on 388 patients affected by COVID-19 who were admitted to Imam Reza Hospital in Mashhad, Iran from February 20, 2020, to May 21, 2020. Results: The patients were within the age range of 18-94 years old, and 341 of them were nonsmokers, while 47 of them were smokers. Moreover, chronic obstructive pulmonary diseases were more frequent among smokers. The mean of initial (on admission) white blood cell (WBC) count in smokers was significantly higher than nonsmokers ( $P=0.015$ ). Males were more prone to death due to COVID-19 infection than females ( $P=0.035$ ). In total, 60 (15.46%) out of 388 patients died because of COVID-19, while 84.5% of them survived. Conclusion: The results

indicated a higher WBC count among smokers. Moreover, a higher WBC count on admission was associated with higher mortality. However, hospitalization duration was not different among smokers and nonsmokers groups. It was found that higher CRP levels and hospitalization periods were associated with an increased risk of death. The COVID-19 mortality rate was higher in men, compared to women. Eventually, no significant correlation was found between .smoking and the mortality of patients with COVID-19

### کلمات کلیدی:

Smoking, white blood cell, COVID-19, SARS-CoV-2

### لینک ثابت مقاله در پایگاه سیویلیکا:

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