**Changes in Pharmacological Approach to COVID-19 in A Referral Hospital in Tehran during Two years**

Seyed Mehran Marashian1, Payam Tabarsi2, Esmaeil Idani3, Majid Marjani2, Afshin Moniri2, Zahra Abtahian4, Atefeh Fakharian1, Majid Malek Mohammad5, Hamidreza Jamaati1,SomayehLookzadeh1, Jalal Heshmatnia1, Arda Kiani1, Sanaz Soleimani1, Azadeh Moradkhani1, Mohsen Sadeghi1, Fatemeh Ferdowsi1, Zeinab Chaghervand 1, Alireza Eslaminejad1\*

1. Chronic Respiratory Diseases Research Center, National Research Institute of Tuberculosis and Lung Diseases (NRITLD), Shahid Beheshti University of Medical Sciences, Tehran, Iran
2. Clinical Tuberculosis and Epidemiology Research Center, National Research Institute of Tuberculosis and Lung Diseases (NRITLD), Shahid Beheshti University of Medical Sciences, Tehran, Iran
3. Department of Internal Medicine, School of Medicine, Shahid Beheshti University of Medical Sciences, Tehran, Iran
4. Infectious Diseases and Tropical Medicine Research Center, Shahid Beheshti University of Medical Sciences, Tehran, Iran
5. Tracheal Diseases Research Center, National Research Institute of Tuberculosis and Lung Diseases (NRITLD), Shahid Beheshti University of Medical Sciences, Tehran, Iran

\* **Corresponding author:** Alireza Eslaminejad

Associate Professor, Chronic Respiratory Diseases Research Center, National Research Institute of Tuberculosis and Lung Diseases (NRITLD), Shahid Beheshti University of Medical Sciences, Tehran, Iran

**Phone:** +989121821395

**Email :** eslaminejadalireza@sbmu.ac.ir

**Abstract**

**Aim:** The current study attempts to look at the trend of medication prescription among inpatients with COVID-19 by comparing two groups of them who admitted in our hospital at separate times with around two years interval.

**Materials and Methods:** Through a retrospective cross-sectional design, the current study enrolled hospitalized cases from two separate time sections including winter 2019 and summer 2021 to compare some characteristics of COVID-19 in addition to sex and age distribution as well as the approach and management and their changes as the time passed.

**Results:** Remdesivir was raised to be the most common used medication for COVID-19 after one and a half year when approved by the FDA in this regard. Tocilizumab was prescribed for just less than 6% at earlier pandemic in winter 2019 while used in more than a half of hospitalizations in 2021. After two years, corticosteroids are used in 98.6% of the cases at least in our center.

**Conclusion:** Exact medication administration to target COVID-19 and accurate vaccination in addition to “Herd immunity” among the global population seem to be the chief secret of the current success at least for partial control of the disease now.

**Keywords: COVID-19, Remdesivir, Tocilizumab, Corticosteroids, Medications, Management**