

## OUTCOME OF SEVERE/CRITICAL COVID-19 INFECTION IN PATIENTS WITH AND WITHOUT DIABETES MELLITUS

## Bilal Saeed<sup>™</sup>, Abdul Rehman Arshad<sup>™</sup>

 Department of Medicine, Combined Military Hospital, Peshawar, Pakistan Contact #: +92-302-5829329
Email<sup>I</sup><sup>I</sup>: ayubian2019@gmail.com

## ABSTRACT

OBJECTIVE: To compare outcomes of COVID-19 infection in patients with and without diabetes mellitus (DM).

**METHODS:** This retrospective chart review study was conducted on patients with COVID-19 infection admitted in Department of Medicine, Combined Military Hospital, Peshawar, Pakistan from Jan 2020 to August 2021. Diagnosis of COVID-19 infection was based on a positive PCR for SARS-CoV-2. Using consecutive sampling technique, medical records of all patients with severe/ critical disease were scrutinized. Patients with incomplete data and those with a negative PCR despite suggestive radiological findings were excluded. Duration of hospital stay and in-hospital mortality were compared amongst patients with and without DM.

**RESULTS:** There were a total of 279 patients including 216 (77.42%) males. Of these, 92 (32.97%) had DM. Their mean age was  $52.53 \pm 11.31$  years. Duration of hospital stay was  $10.18 \pm 3.13$  days in the overall cohort. There was a trend towards longer stay ( $10.70 \pm 3.51$  days) in patients with DM as compared to  $9.92 \pm 2.91$  days in patients without DM (p= 0.052). Inhospital mortality was 46.74% (n=43/92) in patients with DM as compared to 28.34% (n=53/187) patients without DM (p=0.002). Hazard ratio for death in patients with DM was 1.673 (95% Cl 1.207, 2.319).

**CONCLUSION:** Pre-existing diabetes is associated with higher mortality rates in COVID-19 infection.

**KEYWORDS:** Length of Stay (MeSH); Mortality (MeSH); Pandemics (MeSH); Pneumonia (MeSH); COVID-19 (MeSH); Diabetes Mellitus (MeSH).

**THIS ABSTRACT MAY BE CITED AS:** Saeed B, Arshad AR. Outcome of severe/critical Covid-19 infection in patients with and without diabetes mellitus. Khyber Med Univ J 2021;13(Suppl 1, 19<sup>th</sup> Annual PES Conference Abstracts):S9. https://doi.org/10.35845/kmuj.2021.22228.

## CONFLICT OF INTEREST Authors declared no conflict of interest GRANT SUPPORT AND FINANCIAL DISCLOSURE

Authors have declared no specific grant for this research from any funding agency in the public, commercial or not-for-profit sectors



This is an Open Access article distributed under the terms of the Creative Commons Attribution-Non Commercial 2.0 Generic License.

KMUJ web address: www.kmuj.kmu.edu.pk Email address: kmuj@kmu.edu.pk