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**EPIDEMIOLOGY OF COVID -19 IN ANDIJAN, UZBEKISTAN, RISK
FAKTORS AND OUTCOMES.**

Annotation. The outbreak of coronavirus disease 2019 (COVID-19) dates back to December 2019 in China. Uzbekistan has been among the most prone countries to the virus. The aim of this study was to report demographics, clinical data, and their association with death. This observational cohort study was performed from 20th March 2020 to 18th March 2021 in hospital. All patients were admitted based on the WHO and Uzbekistan's National Guidelines. Their information was recorded in their medical files. Multivariable analysis was performed to assess demographics, clinical profile, outcomes of disease, and finding the predictors of death due to COVID-19.

Keywords: COVID-19, clinical profile, predictors, cohort study.

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**ЭПИДЕМИОЛОГИЯ COVID-19 В АНДИЖАНЕ, УЗБЕКИСТАНЕ,
ФАКТОРЫ РИСКА И ИСХОДЫ.**

Аннотация. Вспышка коронавирусной болезни 2019 года (COVID-19) датируется декабрем 2019 года в Китае. Узбекистан оказался в числе стран, наиболее подверженных заражению вирусом. Целью этого исследования было сообщить демографические, клинические данные и их связь со смертью. Это наблюдательное когортное исследование проводилось с 20 марта 2020 г. по 18 марта 2021 г. в больнице. Все пациенты были госпитализированы в соответствии с ВОЗ и Национальными рекомендациями Узбекистана. Их информация была записана в их медицинских картах. Многопараметрический анализ был проведен для оценки демографических

данных, клинического профиля, исходов заболевания и выявления предикторов смерти от COVID-19.

Ключевые слова: COVID-19, клинический профиль, предикторы, когортное исследование.

Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) was officially announced as a pandemic and public health emergence following the first case detected in China in December 2019 and spread rapidly around the world [1]. At the outset, fever and respiratory symptoms were considered as the major symptoms of this novel virus [2]. Over time, the virus caused several clinical manifestations varying from asymptomatic or mild constitutional symptoms to life-threatening conditions leading to hospitalization and even death [3]. The purpose of this retrospective study was to investigate the epidemiology, clinical outcomes, therapeutic protocols, and the potential risk factors of in-hospital mortality of the COVID-19 cases from academic and referral health care centers in Tehran, the most populous city in Iran, since the outbreak of COVID-19 pandemic. Besides, this study is aimed at calculating CFR to hopefully provide successful guidelines to block transmission of SARS-CoV-2, early detection of severe cases, and perform effective therapeutic guidelines.

A medical team collected demographic data (age, sex, body mass index), presenting symptoms, symptom onset to admission interval (days), comorbidities, habitual history (smoking, alcohol, opium, hookah), and triage vital signs (pulse rate, respiratory rate, blood pressure, oxygen saturation without supplementary oxygen, oxygen saturation with supplementary oxygen, body temperature measure by infrared thermometer) from electronic medical records. Inpatient medication and treatment protocol were retrieved from the nursing notes. Outcomes were determined as death versus survived, ICU admission versus ward admission, invasive mechanical ventilation, and length of admission. Deceased cases had higher range of blood pressure, pulse rate, respiratory rate, and lower oxygen saturation compared to survivors. The data showed that abnormal vital signs could

be predictors of severity. In contrary to Russian study [36], we had a weak relationship between age and length of hospital stay since elderly tend to stay more time in the hospital, and on the other hand, younger patients had a higher chance to recover from COVID-19 than older cases.

Conclusion.

Since SARS-CoV-2 is a novel virus and the pandemic is still alive, we provide a large cohort study to evaluate demographics and clinical profile and their association with mortality. Older patients and cases with comorbidities are at a higher risk for developing complications from COVID-19 infection and even death. Guide healthcare providers in decision-making and get the most out of their skills and facilities to immediately detect at-risk cases and evaluate the course of infection, to improve therapeutic protocols and reduce virus transmission and mortality rates.

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