

World Congress on **CARDIOLOGY & HEART CONGRESS AND SURGERY**

May 28, 2021 | Webinar

Predictors and mortality of patients with delayed pulmonary embolism (PE) diagnosis: A cohort study**Amirali Karimi***Tehran University of Medical Sciences, Iran*

Introduction: In the current COVID-19 pandemic, disease diagnosis is essential for optimal management and timely isolation of infected cases in order to prevent further spread. The aim of this study was to systematically review the assessment of risk and model the predictors of mortality in COVID-19 patients.

Methods: A systematic search was conducted of PubMed, Scopus, Embase, Google Scholar, and Web of Science databases. Variables associated with hospital mortality using bivariate analysis were included as potential independent predictors associated with mortality at the $p < 0.05$ levels.

Results: We included 114 studies accounting for 310,494 patients from various parts of the world. For the purpose of this analysis, we set a cutoff point of 10% for the mortality percentages. High mortality rates were defined as higher than 10% of confirmed positive cases and were given a score of two, while low mortality ($<10\%$) was assigned the score of one. We then analyzed the associations between 72 variables and the observed mortality rates. These variables included a large range of related variables such as demographics, signs and symptoms and related morbidities, vital signs, laboratory findings, imaging studies, underlying diseases, and the status of countries' income, based on the United Nation's classifications.

Conclusion: Findings suggest that older age, hypertension, and diabetes mellitus conferred a significant increased risk of mortality among patients with COVID-19. In the multivariate analysis, only diabetes mellitus demonstrated an independent relationship with increased mortality. Further studies are needed to ascertain the relationship between possible risk factors with COVID-19 mortality.

karimi.amirali.1999@gmail.com