

RISK Factors Identification of COVID-19 Patients with Chronic Obstructive Pulmonary Disease: A Retrospective Study in Punjab-Pakistan

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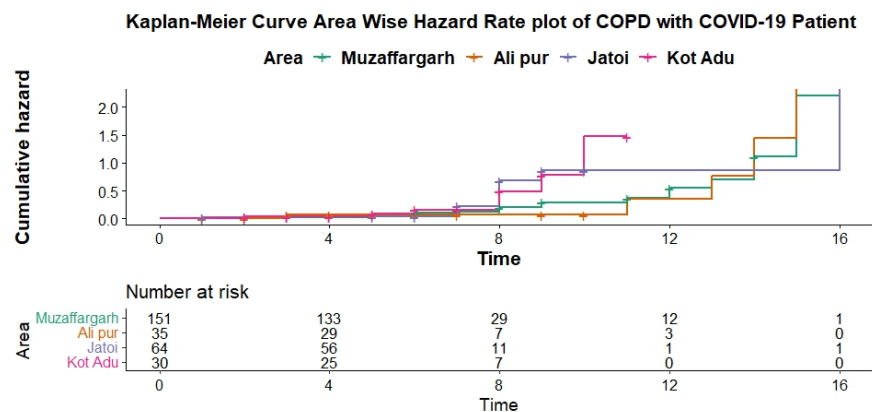
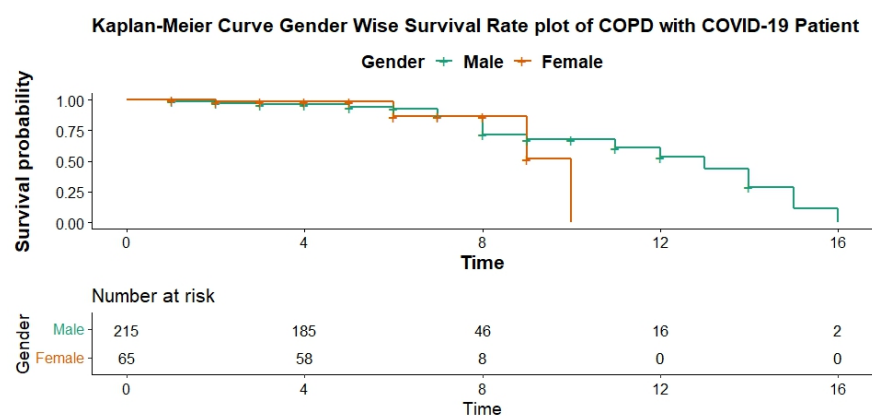
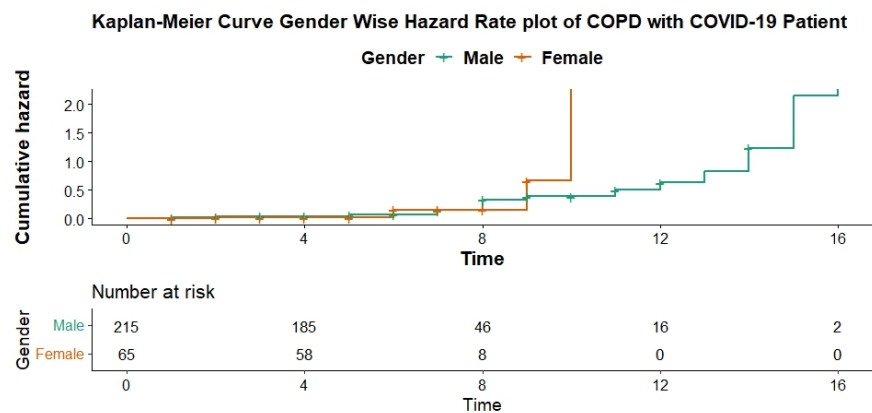
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Abstract

Objectives: Chronic obstructive pulmonary disease (COPD) affects a large part of the population around the world between the ages forty-one to seventy-one years. However, by combining the effects of the COVID-19 pandemic and the SARS-Cov-2 virus on COPD patients, we may be able to overcome factors that have a significant impact on our success. Moreover, we have to investigate the relationship between the diagnosis and its influencing factors to possibly overcome the emerging causes of this disease. **Methods:** A retrospective study of 280 patients was conducted at DHQ Hospital Muzaffargarh in Punjab, Pakistan. Negative binomial regression describes the risk of fixed successive variables. Cox proportional hazard model, and the model co-efficient is observed using log-likelihood. Kaplan-Meier curves showed how long COPD patients survived or died. **Results:** The increased risk of death in COPD patients was due to the effects of variables such as cough, lower respiratory tract infection, tuberculosis, and body aches being 1.369, 0.693, 0.170, and 0.217 times higher, while it decreased by 0.396 in normal conditions. **Conclusion:** We found that the symptoms of COPD (cough, lower respiratory tract infection, tuberculosis, and body aches) are statistically significant in patients who were most infected by COVID-19 and SARS-Cov-2.

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Kaplan-Meier Curve Area Wise Survival Rate plot of COPD with COVID-19 Patient

