

# HUBUNGAN KARAKTERISTIK USIA, JENIS KELAMIN, DAN STADIUM *ACUTE KIDNEY INJURY* TERHADAP MORTALITAS PASIEN COVID – 19 DI RSPAD GATOT SOEBROTO PADA TAHUN 2020 – 2021

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## Abstrak

Perkembangan kasus COVID-19 secara global terus berkembang dengan kondisi pasien yang beragam. Virus SARS-CoV-2 dapat menempati reseptor ACE2 diberbagai organ yang dapat memicu timbulnya cedera pada organ tersebut. *Acute kidney injury* merupakan komplikasi yang timbul akibat *cytokine storm* dan cedera pada renal oleh COVID-19. Penelitian ini bertujuan mengetahui hubungan karakteristik usia, jenis kelamin, dan stadium *acute kidney injury* terhadap mortalitas pasien COVID – 19 di RSPAD Gatot Soebroto. Penelitian ini menggunakan desain analitik observasional dengan metode *cross sectional*. Teknik pengambilan sampel dengan *total sampling*, sebanyak 66 sampel pasien COVID -19 dengan AKI. Hasil uji bivariat dengan uji Fisher bahwa usia ( $p=0,161$ ) dan jenis kelamin ( $p=0,483$ ) tidak berhubungan terhadap mortalitas pasien COVID-19 dengan AKI. Hasil uji bivariat Fisher stadium AKI ( $p=0,004$ ) berhubungan dengan mortalitas pasien COVID-19. Pasien dengan stadium AKI yang tinggi memiliki risiko 15 kali lebih besar meningkatkan kejadian mortalitas pasien COVID-19.

**Kata Kunci** : Usia, Jenis Kelamin, Stadium Acute Kidney Injury, Mortalitas, COVID-19

# **RELATIONSHIP OF CHARACTERISTICS OF AGE, GENDER, AND ACUTE KIDNEY INJURY STAGE ON MORTALITY OF COVID-19 PATIENTS IN INDONESIA ARMY CENTRAL HOSPITAL GATOT SOEBROTO 2020-2021**

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## **Abstract**

The development of COVID-19 cases globally continues to grow with various patient conditions. The SARS-CoV-2 virus can occupy ACE2 receptors in various organs which can trigger injury to the organs. Acute kidney injury is one of the complications arising from cytokine storm and injury to the kidneys by COVID-19. The purpose of this study was to determine the relationship between the characteristics of age, gender, and acute kidney injury stage on mortality of COVID-19 patients at Gatot Soebroto Army Hospital. This study used an observational analytic design with a cross-sectional method. Sampling technique with total sampling, as many as 66 samples of COVID-19 patients with AKI. The results of the bivariate test using Fisher's exact test showed that age ( $p=0.161$ ) and gender ( $p=0.483$ ) were not associated with mortality in COVID-19 patients with AKI. Fisher's bivariate test results for AKI stage ( $p=0.004$ ) were associated with mortality in COVID-19 patients. Patients with a high stage of AKI have a 15 times greater risk of increasing the incidence of mortality in COVID-19 patients.

**Keywords :** Age, Gender, Acute Kidney Injury Stage, Mortality, COVID-19