

**KARAKTERISTIK PASIEN COVID-19 YANG MEMBUTUHKAN  
VENTILATOR DI *INTENSIVE CARE UNIT* (ICU) RSUP Dr. M. DJAMIL  
PADANG TAHUN 2021**



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## **ABSTRACT**

### **CHARACTERISTICS OF COVID-19 PATIENTS WHO REQUIRED MECHANICAL VENTILATORS IN THE INTENSIVE CARE UNIT (ICU) RSUP Dr. M. DJAMIL PADANG IN 2021**

**By**

**Anindia Salwa Salsabila**

*Covid-19 patients could fall into severe and critically ill conditions that require supportive and aggressive care in the ICU with mechanical ventilators. The purpose of this study was to investigate the characteristics of Covid-19 patients who required mechanical ventilators in the ICU of RSUP Dr. M. Djamil Padang.*

*This is descriptive observational study with a retrospective approach. The data were collected from medical records with convenience sampling technique. Patients who were treated from January to August 2021 that had complete medical records were the sample in this study.*

*This study analyzed 155 patients, most of them were in the 50-69 years age group (60%), males (51.6%) and had comorbidities type 2 DM (69%) and hypertension (52.9%). The most common clinical symptoms were shortness of breath (98.7%), fever (86.4%) and phlegm cough (65.8%). Laboratory examinations revealed patients with increased leukocyte values (87.7%), neutrophils (98.7%), D-dimer (100%), SGOT (75.5%), SGPT (58.7%), and decreased lymphocytes (97.4%). All patients had ARDS. Examination of inflammatory markers showed an increasing of ferritin (92.3%), procalcitonin (100%), and IL-6 (98.1%) levels. The outcomes of the patients showed a high mortality rate in patients when discharged from the ICU which reached 89.7% with 66.5% were on a mechanical ventilator for less than 10 days.*

*This study found that most of the Covid-19 patients who required mechanical ventilators were elderly, male, had comorbidities type 2 DM and hypertension, and showed an increasing of D-dimer levels and inflammatory markers, so it is necessary to give an intense attention and observation to this patient.*

**Keywords:** *characteristics, critically ill, Covid-19, ICU, mechanical ventilators*

## ABSTRAK

### KARAKTERISTIK PASIEN COVID-19 YANG MEMBUTUHKAN VENTILATOR DI *INTENSIVE CARE UNIT* (ICU) RSUP Dr. M. DJAMIL PADANG TAHUN 2021

Oleh  
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Pasien Covid-19 dapat jatuh ke kondisi berat dan kritis yang membutuhkan perawatan suportif dan agresif di ICU dengan alat bantu pernapasan ventilator. Tujuan penelitian ini adalah mengetahui karakteristik pasien Covid-19 yang membutuhkan ventilator di ICU RSUP Dr. M. Djamil Padang.

Jenis penelitian ini adalah deskriptif observasional dengan pendekatan retrospektif. Penelitian ini menggunakan rekam medis dengan teknik pengambilan sampel *convenience sampling*. Pasien yang dirawat dari Januari hingga Agustus 2021 yang memiliki rekam medis lengkap menjadi sampel pada penelitian ini.

Penelitian ini menganalisis sebanyak 155 pasien, dimana sebagian besar merupakan kelompok usia 50-69 tahun (60%), laki-laki (51.6%) dan memiliki komorbid DM tipe 2 (69%) dan hipertensi (52.9%). Gejala klinis terbanyak ditemukan pada pasien adalah sesak napas (98.7%), demam (86.4%) dan batuk berdahak (65.8%). Pemeriksaan laboratorium didapatkan pasien dengan peningkatan nilai leukosit (87.7%), neutrofil (98.7%), D-dimer (100%), SGOT (75.5%), SGPT (58.7%), dan penurunan limfosit (97.4%). Seluruh pasien mengalami ARDS. Pemeriksaan *marker* inflamasi didapatkan peningkatan nilai ferritin (92.3%), prokalsitonin (100%), dan IL-6 (98.1%). Kondisi saat keluar ICU didapatkan 89.7% pasien meninggal dengan 66.5% memakai ventilator kurang dari 10 hari.

Penelitian ini menemukan sebagian besar pasien Covid-19 yang membutuhkan ventilator merupakan kelompok usia tua, laki-laki, memiliki komorbid DM tipe 2 dan hipertensi, serta mengalami peningkatan nilai D-dimer dan *marker* inflamasi, sehingga perlu memberikan perhatian dan observasi khusus pada kelompok pasien ini.

**Kata kunci:** karakteristik, kondisi kritis, Covid-19, ICU, ventilator