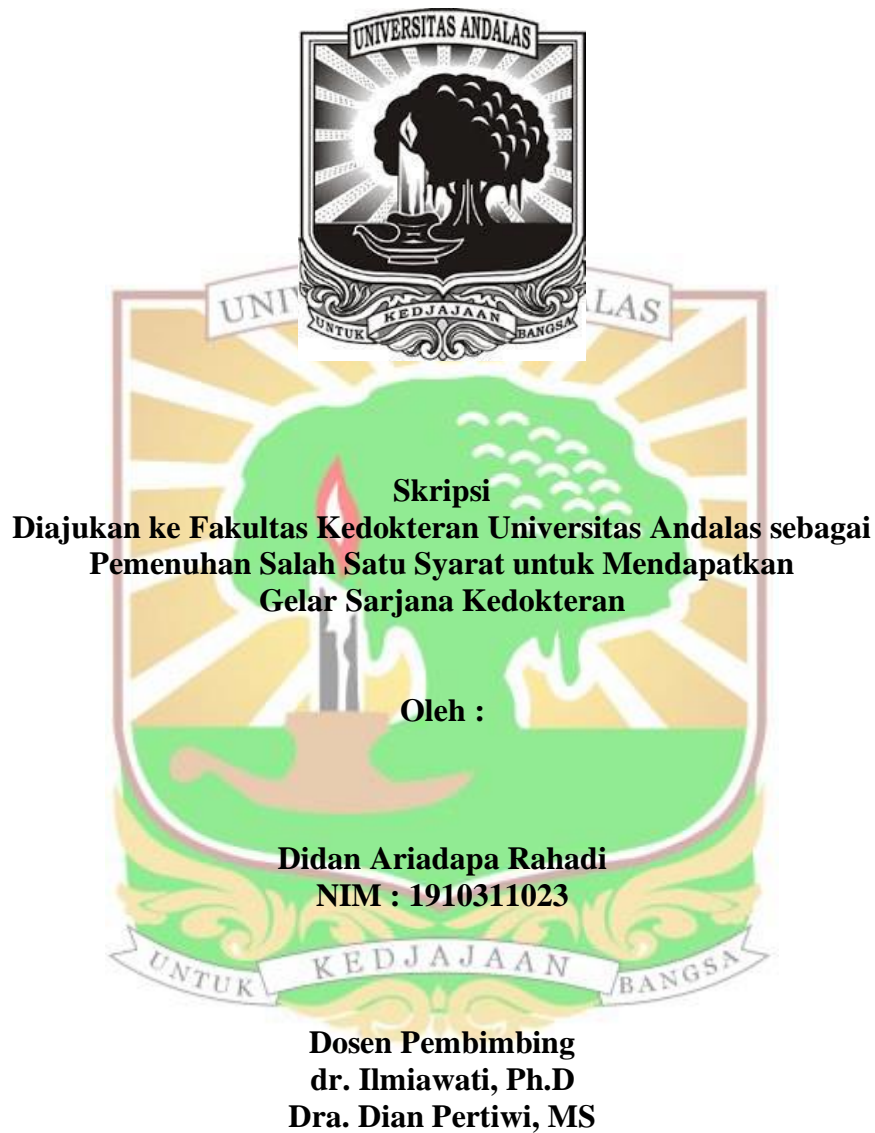


**HUBUNGAN STATUS VAKSINASI COVID-19 DENGAN LUARAN KLINIS
PADA PASIEN TERKONFIRMASI COVID-19 DI RUMAH SAKIT
UNIVERSITAS ANDALAS PERIODE JUNI-AGUSTUS 2021**



**FAKULTAS KEDOKTERAN
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ABSTRACT

ASSOCIATION BETWEEN VACCINATION STATUS AND CLINICAL OUTCOME IN PATIENT COVID-19 AT ANDALAS UNIVERSITY HOSPITAL IN JUNE-AUGUST 2021

By

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Morbidity and mortality in COVID-19 patients are diverse each patient. Through the immunological response formed by the vaccine, vaccination efforts are one of the factors that reduce the risk of morbidity and mortality. This study aimed to determine the relationship between COVID-19 vaccination status and severity, the incidence of hospitalization, ICU care, and death.

This research was an analytic observational study with a cross-sectional approach. This research was conducted at Andalas University Teaching Hospital. The study population was confirmed as COVID-19 patients admitted to the Emergency Room Covid-19 Andalas University Teaching Hospital in the period June-August 2021 with 713 samples as research subjects. The vaccination status with severity was analyzed using the Kruskal-Wallis test and then continued with the Bonferroni post-hoc test. The vaccination status with the incidence of hospitalization, ICU, and death was analyzed using the Chi-Square test followed by combining data from the partial and full-dose vaccine groups into the vaccinated group.

The univariate statistical results show that most patients with confirmed COVID-19 had not received the vaccine (59.3%) with the highest proportion in the elderly group, partial dose (8.1%) and full dose (32.5%). Of the 713 patients, 9.7% patient with severe infection, 35.6% were hospitalized, 6.7% were admitted to the ICU and 31 4.3% patients died. The bivariate statistical results show that the unvaccinated group significantly develop a severe-critical infection, was hospitalized (46.1 vs 20.5%, OR 3.28; CI 95% 2.33-4.62), admission the ICU (11.1 vs 0.1%, OR 36.13; CI 95% 4.96-263.39), and had more mortality (7 vs 0.4%, OR 22.07; CI 95% 2.99-162.71) than the vaccinated group ($p < 0.001$, respectively)

Vaccination of COVID-19 in patients with confirmed COVID-19 is associated with a reduced incidence of severe illness, hospitalization, ICU admission, and death. Therefore it is necessary to increase the coverage of COVID-19 vaccination in the community, especially in the elderly group.

Keywords : *vaccination status, severity, hospitalized, ICU, mortality*

ABSTRAK

HUBUNGAN STATUS VAKSINASI COVID-19 DENGAN LUARAN KLINIS PADA PASIEN TERKONFIRMASI DI RUMAH SAKIT UNIVERSITAS ANDALAS PERIODE JUNI-AGUSTUS 2021

Oleh

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Morbiditas dan mortalitas pasien terkonfirmasi COVID-19 beragam setiap individu. Melalui respon imunologi yang dibentuk oleh vaksin, vaksinasi diharapkan menjadi faktor yang menurunkan risiko morbiditas dan mortalitas. Penelitian ini bertujuan untuk mengetahui hubungan status vaksinasi COVID-19 dengan severitas, kejadian rawat inap, rawat ICU dan kematian.

Penelitian ini merupakan penelitian analitik observasional dengan pendekatan *cross-sectional* yang dilakukan di Rumah Sakit Universitas Andalas. Populasi penelitian adalah pasien terkonfirmasi COVID-19 yang masuk di IGD RS UNAND pada periode bulan Juni-Agustus 2021 dengan 713 sampel sebagai subjek penelitian. Hubungan status vaksinasi dengan severitas dianalisis menggunakan uji *Kruskall-Wallis* kemudian dilanjutkan dengan uji *post-hoc Bonferreni*. Hubungan status vaksinasi dengan kejadian rawat inap, ICU dan kematian dianalisis menggunakan uji *Chi-Square* dilanjutkan dengan penggabungan data kelompok vaksin dosis parsial dan dosis lengkap menjadi kelompok sudah vaksin.

Pada hasil penelitian didapatkan 59,3% pasien belum menerima vaksin dengan kelompok lansia yang memiliki cakupan vaksinasi terendah. Dari 713 pasien didapatkan 9,7% pasien dengan severitas berat, 35,6% pasien rawat inap, 6,7% rawat ICU dan 4,3% pasien meninggal. Hasil analisis menunjukkan bahwa kelompok yang tidak divaksinasi secara signifikan memiliki kejadian severitas infeksi berat-kritis, kejadian rawat (46,1 vs 20,5%, *OR* 3,28; *CI* 95% 2,33-4,62), kejadian masuk ICU (11,1 vs 0,1%, *OR* 36,13; *CI* 95% 4,96-263,39) dan kematian (7,0 vs 0,4%, *OR* 22,07; *CI* 95% 2,99-162,71) yang lebih tinggi dibandingkan kelompok pasien yang sudah vaksin ($p < 0,001$ masing-masing)

Vaksinasi COVID-19 pada pasien terkonfirmasi COVID-19 berhubungan dengan menurunnya insiden severitas berat, rawat inap, rawat ICU dan kematian. Oleh karena itu perlu ditingkatkan cakupan vaksinasi COVID-19 pada masyarakat, terutama pada kelompok lanjut usia.

Kata kunci : status vaksinasi, severitas, rawat inap, ICU, kematian.