

# **Korelasi Derajat Keparahan Covid-19 Dan Status Vaksinasi Covid-19 Di Rumah Sakit Umum Pusat DR Kariadi Semarang**

dr. Cahya Candra Pramudyono, dr. Aria Dian Primatika, Sp.An, Msi.Med. KIC,  
dr. Hari Hendriarto Satoto, Sp.An, KAKV

Departemen Anestesiologi dan Terapi Intensif Fakultas Kedokteran Universitas  
Diponegoro/Rumah Sakit Umum Pusat Dr Kariadi Semarang

## **Abstrak**

**Pendahuluan:** COVID-19 merupakan penyakit yang menginfeksi saluran respirasi dan menimbulkan gejala beragam serta dapat pula tidak menimbulkan gejala atau *asimptomatik*. Vaksinasi Covid-19 ditunjukkan untuk melakukan pencegahan terhadap penyebaran virus melalui droplet dan udara. Efektivitas berbagai jenis vaksin sudah terbukti dalam berbagai studi di dunia dan Indonesia. Studi ini bertujuan untuk melihat korelasi status vaksinasi terhadap derajat keparahan pasien COVID-19.

**Metode:** Studi ini merupakan studi retrospektif dalam kurun waktu 5 bulan ini dilakukan dengan desain *case-control*. Sebanyak 419 kasus COVID-19 yang memenuhi kriteria inklusi diikutsertakan dalam studi. Data demografik pasien, status vaksinasi, jenis vaksin, dan derajat keparahan infeksi didapatkan melalui rekam medik elektronik. Seluruh data kemudian dianalisis menggunakan uji korelasi *spearman* dan uji beda Kruskal-Wallis dengan bantuan *software SPSS for Windows*.

**Hasil:** Perbedaan signifikan ditemukan antara status vaksinasi pasien terhadap derajat keparahan COVID-19 ( $p < 0,001$ ) serta korelasi kuat ditemukan pada jumlah dosis vaksinasi terhadap derajat keparahan COVID-19 ( $p < 0,001$ ), dengan status vaksinasi lengkap berkorelasi dengan derajat keparahan COVID-19 yang rendah. Tidak terdapat perbedaan signifikan antara jenis vaksin yang digunakan dengan derajat keparahan Pasien COVID-19.

**Kesimpulan:** Terdapat korelasi status vaksinasi dengan derajat keparahan pasien COVID-19, yang menunjukkan hubungan dosis vaksinasi lengkap berkaitan dengan derajat keparahan pasien COVID-19 yang lebih rendah.

**Kata Kunci:** Covid-19; Dosis Vaksin; Imunitas; Vaksin;

## ***Correlation of Covid-19 Severity and Covid-19 Vaccination Status at***

### ***DR Kariadi General Hospital Semarang***

*dr. Cahya Candra Pramudyo, dr. Aria Dian Primatika, Sp.An, Msi.Med., KIC,*

*dr. Hari Hendriarto Satoto, Sp.An, KAKV*

*Department of Anesthesiology dan Intensive Therapy, Faculty of Medicine,*

*Diponegoro University/Dr Kariadi Hospital, Semarang*

#### **ABSTRACT**

***Introduction:*** COVID-19 is a disease that infects the respiratory tract and causes various symptoms and may also cause no symptoms or be asymptomatic. The Covid-19 vaccination is shown to prevent the spread of the virus through droplets and the air. The effectiveness of various types of vaccines has been proven in various studies in the world and Indonesia. This study aims to see the correlation of vaccination status to the severity of COVID-19 patients.

***Methods:*** This study is a retrospective study over a period of 5 months and was conducted with a case-control design. A total of 419 COVID-19 cases that met the inclusion criteria were included in the study. Patient demographic data, vaccination status, vaccine type, and severity of infection were obtained through electronic medical records. All data were then analyzed using the Spearman correlation test and the Kruskal-Wallis difference test with the help of SPSS for Windows software.

***Results:*** A significant difference was found between the patient's vaccination status and the severity of COVID-19 ( $p < 0.001$ ) and a strong correlation was found in the number of vaccination doses to the severity of COVID-19 ( $p < 0.001$ ), with complete vaccination status correlated with the severity of COVID-19 low 19. There is no significant difference between the type of vaccine used and the severity of COVID-19 patients.

***Conclusion:*** There is a correlation between vaccination status and severity of COVID-19 patients, which shows a complete relationship between dose of vaccination and lower severity of COVID-19 patients.

***Keywords:*** Covid-19; Vaccine Dosage; Immunity; Vaccine;