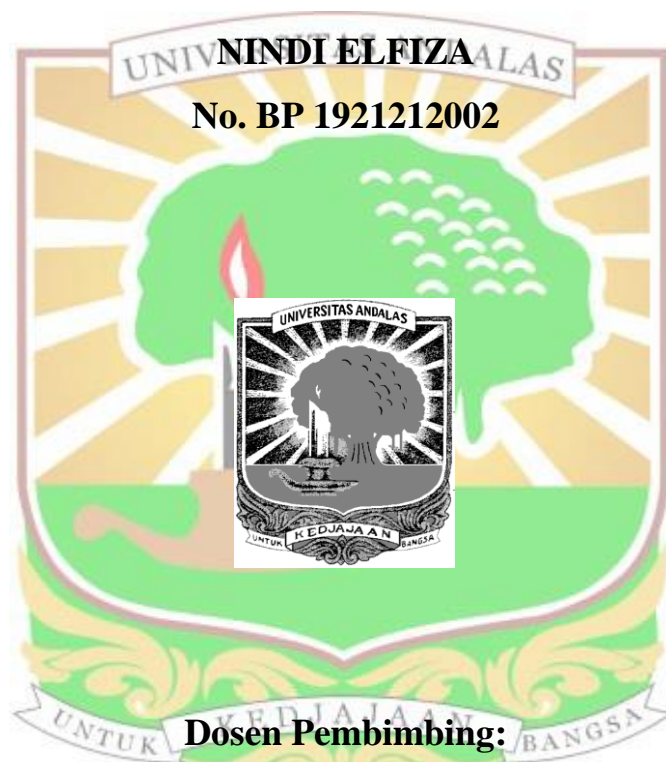


**ANALISIS KESINTASAN DAN MORTALITAS COVID-19  
DI PROVINSI SUMATERA BARAT TAHUN 2020-2021**

**TESIS**

**OLEH**



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# ANALISIS KESINTASAN DAN MORTALITAS COVID-19 DI PROVINSI SUMATERA BARAT TAHUN 2020-2021

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## Abstrak

Penularan COVID-19 yang begitu cepat dan tidak terkendali, menyebabkan tingginya angka kesakitan dan kematian COVID-19 di seluruh dunia termasuk Provinsi Sumatera Barat dengan CFR 2,27%, lebih tinggi dari CFR di dunia. Penelitian bertujuan untuk menganalisis kesintasan dan mortalitas COVID-19 di Provinsi Sumatera Barat dan faktor risiko yang mempengaruhinya. Desain penelitian yaitu *cohort retrospective* dengan menggunakan data sekunder kasus COVID-19 terkonfirmasi di Provinsi Sumatera Barat dari tanggal 26 Maret 2020-7 Juni 2021. Teknik pengambilan sampel yaitu *total sampling* dengan syarat memenuhi kriteria sampel, didapatkan sampel sebanyak 44.693 kasus. Kesintasan dianalisis menggunakan metode *Kaplan-Meier*, *cox regression* dan *cox proportional hazard* sedangkan kematian dianalisis menggunakan metode regresi logistik. Dari 44.693 kasus COVID-19 terkonfirmasi, 968 (2,17%) meninggal dan 43.725 (97,83%) sembuh, secara keseluruhan probabilitas kesintasan adalah 97,51% dari hari ke-34 infeksi. Terdapat hubungan dan perbedaan kesintasan pasien COVID-19 berdasarkan usia (HR 10,12), jenis kelamin (HR 1,56), diabetes (HR 10,73), hipertensi (HR 6,65), gangguan kardiovaskular (HR 10,39), PPOK (HR 11,46), asma (HR 1,89), dan gangguan ginjal (HR 24,07). Faktor yang berhubungan dengan mortalitas COVID-19 adalah usia (RR 9,79), jenis kelamin (RR 1,51), diabetes (RR 10,21), hipertensi (RR 6,49), gangguan kardiovaskular (RR 9,57), PPOK (RR 10,06), asma (RR 2,03), dan gangguan ginjal (RR 19,87). Gangguan ginjal merupakan faktor yang paling dominan mempengaruhi kesintasan (HR 9,37) dan mortalitas (RR 16,07) COVID-19 di Provinsi Sumatera Barat. Diharapkan agar Dinas Kesehatan dan tenaga kesehatan dapat mengencarkan promosi kesehatan kepada kelompok yang berisiko dan mengutamakan penanganan bagi pasien COVID-19 yang memiliki komorbid.

**Kata Kunci** : COVID-19, kesintasan, mortalitas, faktor risiko

# **SURVIVAL AND MORTALITY ANALYSIS OF COVID-19 IN WEST SUMATERA PROVINCE IN 2020-2021**

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## **Abstract**

*The rapid and uncontrolled transmission of COVID-19 has caused high rates of COVID-19 morbidity and mortality in worldwide, including the Province of West Sumatra with a CFR of 2.27%, higher than the CFR in the world. This study aims to analyze the survival and mortality of COVID-19 in West Sumatra Province and the risk factors that influence it. The research design was a retrospective cohort using secondary data of confirmed COVID-19 cases in West Sumatra Province from March 26, 2020 to June 7, 2021. The sampling technique was total sampling which fulfil the samples criteria that is 44,693 cases. Survival was analyzed using the Kaplan-Meier method, cox regression and cox proportional hazard, while mortality was analyzed using the logistic regression method. From the 44,693 confirmed cases of COVID-19, 968 (2,17%) died and 43.725 (97,83%) recovered, the overall survival probability was 97,51% from the 34th day of infection. There was a relationship and differences in the survival of COVID-19 patients based on age (HR 10,12), gender (HR 1,56), diabetes (HR 10,73), hypertension (HR 6,65), cardiovascular disease (HR 10,39), COPD (HR 11,46), asthma (HR 1,89), and kidney disease (HR 24,07). Factors associated with COVID-19 mortality were age (RR 9,79), gender (RR 1,51), diabetes (RR 10,21), hypertension (RR 6,49), cardiovascular disease (RR 9,57), COPD (RR 10,06), asthma (RR 2,03), and kidney disease (RR 19,87). Kidney disease was the most dominant factor influencing the survival (HR 9,37) and mortality (RR 16,07) of COVID-19 in West Sumatra Province. It is hoped that the Department of Health and health workers can intensify health promotion to at-risk population and prioritize the treatment for COVID-19 patients who have comorbidities.*

**Keywords** : COVID-19, survival, mortality, risk factors