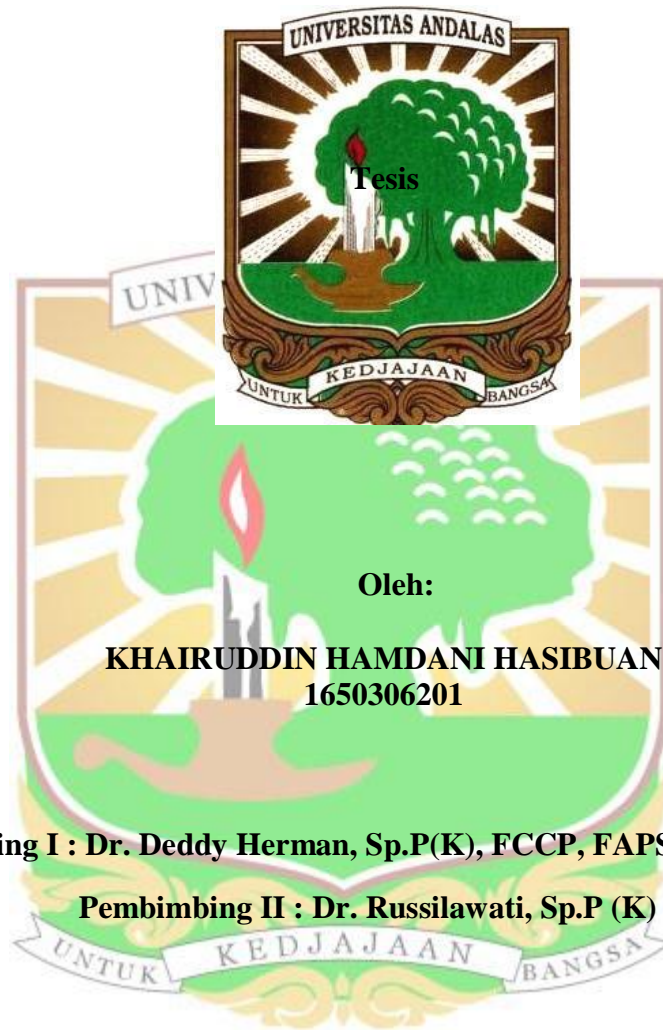


**HUBUNGAN DERAJAT KEPARAHAN KLINIS DENGAN
FUNGSI PARU PENYINTAS COVID-19**

TESIS



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ABSTRAK

Latar belakang: Kerusakan paru dan fibrosis menyebabkan beberapa gejala menetap pada penyintas COVID-19. Mayoritas pasien COVID-19 sembuh tetapi terdapat potensi *long COVID-19* berkepanjangan yang akan menjadi beban kesehatan masyarakat di masa mendatang. Gangguan fungsi paru adalah salah satu gejala *long COVID-19* yang perlu dievaluasi. Tujuan dari penelitian ini adalah untuk mengetahui hubungan derajat keparahan klinis COVID-19 dengan gangguan fungsi paru penyintas COVID-19.

Metode: Penelitian ini merupakan studi potong lintang pada penyintas COVID-19 di Puskesmas Lubuk Begalung. Keparahan klinis diklasifikasikan berdasarkan penggunaan terapi oksigen selama rawatan dan tes fungsi paru dilakukan dengan menggunakan spirometer. Subjek dipilih dengan *convenience sampling*. Analisis statistik antara dua variabel menggunakan uji *chi-square* dengan alternatif *Fisher Exact Test*. Nilai bermakna secara statistik jika $p\text{-value} < 0,05$.

Hasil: Kami menemukan total 72 survivor COVID-19, sebagian besar adalah perempuan dengan rentang usia 45-64 tahun. Sebagian besar bukan perokok. Semua penyintas COVID-19 dengan gejala ringan tidak mengalami gangguan fungsi paru. Delapan orang dengan gejala klinis sedang dan berat mengalami gangguan paru. Semuanya mengalami restriksi. Analisis statistik menemukan hubungan antara derajat keparahan klinis dengan fungsi paru.

Kesimpulan: Derajat Keparahan klinis berhubungan dengan fungsi paru penyintas COVID-19. Kita perlu melakukan semua upaya mencegah terjadinya COVID-19 klinis berat.

Kata kunci: COVID-19, fungsi paru, spirometri, *long covid*



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ABSTRACT

Background: Lung damage and fibrosis lead to some persistent symptoms on patients who are recovering from COVID-19. Most of COVID-19 patients would be survive and there are potency of long covid that could be public health burden in the future. Pulmonary impairment one of COVID-19 sequelae that need to be evaluated. The aim of this study is to find out the relationship between severity of COVID-19 clinical manifestation and occurrence of pulmonary impairment among COVID-19 survivors.

Methods: this was a cross-sectional study among COVID-19 survivors at Lubuk Begalung Public Health Center. Clinical severity was classified based on the oxygen therapy during COVID-19 illness and pulmonary function test were carried out using a spirometer. The subjects were selected by convenient random sampling. Statistic analysis between two variable using chi-square test with alternative Fisher Exact Test. We considered statistically significant If the p-value <0.05.

Results: We found total 72 survivors of COVID-19 who were mostly females with a range of age of 45-64 years old. Most of them were non-smokers. All COVID-19 survivors who were got mild symptom had no pulmonary impairment. Eight survivors with history of moderate and severe clinical presentation had been suffering of pulmonary impairment. All of them got restriction. Statistically analysis found significant relationship.

Conclusion: The severity of clinical presentation was related to lung function in COVID-19 survivors. We need to perform all the effort that could prevent occurrence of severe COVID-19

Key words: COVID-19, lung function, spirometry, long covid

