

## DAFTAR ISI

|  |             |
|--|-------------|
| <b>HALAMAN PENGESAHAN.....</b>               | <b>ii</b>   |
| <b>DAFTAR ISI .....</b>                      | <b>viii</b> |
| <b>DAFTAR GAMBAR.....</b>                    | <b>x</b>    |
| <b>DAFTAR TABEL .....</b>                    | <b>xi</b>   |
| <b>DAFTAR SINGKATAN.....</b>                 | <b>xii</b>  |
| <b>DAFTAR LAMPIRAN.....</b>                  | <b>xiv</b>  |
| <b>BAB I.....</b>                            | <b>1</b>    |
| <b>PENDAHULUAN .....</b>                     | <b>1</b>    |
| A. Latar Belakang Masalah .....              | 1           |
| B. Perumusan Masalah .....                   | 4           |
| C. Pertanyaan Penelitian .....               | 4           |
| D. Tujuan Penelitian .....                   | 5           |
| E. Keaslian Penelitian .....                 | 5           |
| F. Manfaat Penelitian .....                  | 6           |
| <b>BAB II.....</b>                           | <b>8</b>    |
| <b>TINJAUAN PUSTAKA.....</b>                 | <b>8</b>    |
| A. Infeksi COVID-19 .....                    | 8           |
| B. Diagnosis dan Evaluasi COVID-19.....      | 18          |
| C. Pencitraan COVID-19 .....                 | 21          |
| D. Analisis Gas Darah .....                  | 24          |
| E. Kerangka Teori .....                      | 31          |
| F. Kerangka Konsep.....                      | 32          |
| G. Hipotesis.....                            | 33          |
| <b>BAB III.....</b>                          | <b>34</b>   |
| <b>METODE PENELITIAN.....</b>                | <b>34</b>   |
| A. Jenis Rancangan Penelitian .....          | 34          |
| B. Waktu dan Tempat Penelitian.....          | 34          |
| C. Populasi dan Subyek Penelitian.....       | 34          |
| D. Besar Sampel.....                         | 36          |
| E. Instrumen Penelitian .....                | 36          |
| F. Variabel Penelitian .....                 | 37          |
| G. Definisi Operasional .....                | 37          |
| H. Jalannya Penelitian .....                 | 38          |
| I. Alur Penelitian.....                      | 39          |
| J. Analisis Data.....                        | 39          |
| K. Pertimbangan Etik .....                   | 40          |
| L. Pendanaan.....                            | 40          |
| <b>BAB IV.....</b>                           | <b>41</b>   |
| <b>HASIL PENELITIAN DAN PEMBAHASAN .....</b> | <b>41</b>   |



|                                  |   |           |
|----------------------------------|---|-----------|
| <b>A.</b>                        | <b>Hasil Penelitian.....</b>                  | <b>41</b> |
| 1.                               | Uji Realibilitas.....                         | 41        |
| 2.                               | Hasil Pengukuran dan Analisis Statistik ..... | 42        |
| <b>B.</b>                        | <b>Pembahasan .....</b>                       | <b>45</b> |
| <b>BAB V .....</b>               | <b>51</b>                                     |           |
| <b>KESIMPULAN DAN SARAN.....</b> | <b>51</b>                                     |           |
| <b>A.</b>                        | <b>Kesimpulan .....</b>                       | <b>51</b> |
| <b>B.</b>                        | <b>Saran .....</b>                            | <b>51</b> |
| <b>DAFTAR PUSTAKA.....</b>       | <b>52</b>                                     |           |
| <b>LAMPIRAN .....</b>            | <b>59</b>                                     |           |

## DAFTAR GAMBAR

|   |    |
|---|----|
| Gambar 1. Struktur Coronavirus.....   | 8  |
| Gambar 2. Siklus Hidup Coronavirus.....   | 16 |
| Gambar 3. Pembagian 6 zona paru pada radiografi toraks frontal. <i>Line A</i> dibuat pada batas dinding inferior arkus aorta. <i>Line B</i> pada batas dinding inferior vena pulmonalis inferior dextra. A dan D sebagai zona atas, B dan E zona tengah, C dan F zona bawah. .... | 22 |
| Gambar 4. Contoh penilaian <i>Brixia score</i> pada CXR pneumonia COVID-19.....   | 23 |
| Gambar 5. Tes Allen yang dimodifikasi.....  | 27 |
| Gambar 6. Skema kerangka teori.....   | 31 |
| Gambar 7. Skema kerangka konsep.....  | 32 |
| Gambar 8. Skema alur penelitian.....  | 39 |
| Gambar 9. Contoh penilaian Brixia Score.....  | 42 |
| Gambar 10. Contoh penilaian Brixia Score.....   | 42 |



## DAFTAR TABEL

|   |    |
|---|----|
| Tabel 1. Daftar penelitian terdahulu .....                                  | 5  |
| Tabel 2. Spektrum klinis COVID-19 .....                                     | 17 |
| Tabel 3. Komplikasi Pasien COVID-19 .....                                   | 18 |
| Tabel 4. Karakteristik Data Dasar Penelitian .....                          | 43 |
| Tabel 5. Karakteristik Data Dasar Analisis gas Darah dan Brixia Score ..... | 44 |

## DAFTAR SINGKATAN

COVID-19: *coronavirus disease 2019*

ICTV: *International Committee on Taxonomy of Viruses*

SARS-CoV-2: *Severe Acute Respiratory Syndrome Coronavirus-2*

GGO: *opasitas ground glass*

RNA: *ribonucleic acid*

RT-PCR: *reverse transcriptase polymerase chain reaction*

CT: *Computed tomography*

ARDS: *acute respiratory distress syndrome*

MERS-CoV: *middle east respiratory syndrome-associated coronavirus*

ACE-2: *angiotensin-converting enzyme 2*

RBD: *reseptor-binding domain*

RBM: *receptor- binding motif*

ERGIC: *endoplasmic reticulum -golgi intermediet compartment*

APC: *antigen presenting cell*

MHC: *major histocompatibility complex*

HLA: *human leukocytes antigen*

CTLs: *sel limfosit T sitotoksik*

PAMPs: *pathogen-associated molecular pattern*

PRRs: *patern recognition receptor*

RT-LAMP: *Reverse transcription loop-mediated isothermal amplification-based assay*

NAAT: *nucleic acid amplification test*

POC: *point of care assay*

LDH: *lactate dehydrogenase*

CRP: *C-reactive Protein*

CK: *creatinine kinase*

PT: *prothrombin time*

INR: *international normalized ratio*

CXR: *chest X-ray*

P-SILI: *patient self-inflicted lung injury*



PACS: *Picture Archiving and Communication System*

DM: *diabetes mellitus*

HT: hipertensi

PaO<sub>2</sub>: *pressure of oxygen in arterial blood*

PaCO<sub>2</sub>: *pressure of carbon dioxide in arterial blood*

HCO<sub>3</sub>: *bicarbonate*

BE: *Base excess*

SaO<sub>2</sub>: *oxygen saturation*



## DAFTAR LAMPIRAN

|  |    |
|--|----|
| Lampiran 1. Surat Ijin penelitian dari Komisi Etik.....            | 58 |
| Lampiran 2. Surat Iin Penelitian dari Diklat RSUP dr Sardjito..... | 59 |
| Lampiran 3. TAbel analisis gas darah .....                         | 60 |
| Lampiran 4. Uji Reliabilitas Brixia score.....                     | 60 |
| Lampiran 5. Tabel karakteristik data dasar penelitian.....         | 61 |
| Lampiran 6. Uji korelasi AGD dengan Brixia score.....              | 61 |