

## **Characteristics of Inpatients Suspected Covid-19 Based On Swab Results RT-PCR in Dustira Army Hospital (Period on August, 15<sup>th</sup> – November, 15<sup>th</sup> 2020)**

**Sasongko S<sup>1</sup>, Nurrokhmawati Y<sup>2</sup>, Rahayu D.F<sup>3</sup>**

<sup>1</sup>Dept. ENT of RSPAD GatotSoebroto, Jakarta, Indonesia

<sup>2</sup>Dept. ENT of Medical Faculty of UNJANI, Cimahi, West Java, Indonesia

<sup>3</sup>Medical staff of Dustira Army Hospital, Cimahi, West Java, Indonesia

### **ABSTRACT**

Coronavirus Disease 2019 (Covid-19) is an infectious viral disease of a new type of betacoronavirus and is named 2019 novel Coronavirus (2019-nCoV). WHO recommends diagnostic tests for patients with suspected Covid-19, with molecular detection / NAAT (Nucleic Acid Amplification Test) such as RT-PCR using the naso-oro-pharyngeal swab method.

This research discuss about the characteristic of inpatients suspected Covid-19 based on the result of the RT-PCR swab at the Dustira Army Hospital so that is useful for epidemiological data. This research is a descriptive study with a cross sectional design. The study sample was a total sampling of inpatients with suspected Covid-19 who were tested by RT-PCR. The results of RT-PCR were positive if the CT value was <41. The results of the data were analyzed using statistical tests that were in accordance with the significance if  $p < 0.001$  with the odds ratio (OR) based on the Confidential interval (CI) 95%.

The results showed that the mean CT value of positive RT-PCR was 30,345 (20.17-40.52). The characteristics of the most inpatients suspected Covid-19 with positive RT-PCR were male (65.01%), aged 25-50 years (40.35%), TNI / Polri occupation (45.17%) with the rank of non-commissioned officers / group II (51.02%) and units outside Kodam III / Slw (86.22%). Male patients confirmed of Covid-19 with positive PCR results were significantly at risk 2.3 times greater, while those aged 25-50 years had a 1.39 times greater risk and occupation of the TNI / Polri had a 4.78 times greater risk. Inpatients suspected Covid-19 were significantly dominant at the age of 25-50 years. with the main symptoms of the airway system.

Inpatients suspected Covid-19 with positive RT-PCR results had an average CT value of 30,345, with the most significant characteristics being male, aged 25-50 years, occupation of the TNI / Polri, as well as the main symptoms of the respiratory system.

### **Keywords:**

Characteristics, Covid-19, RT-PCR.

### **Introduction**

Coronavirus Disease 2019 (COVID-19) is a viral disease that is transmitted from a new type of betacoronavirus and is named 2019 novel Coronavirus (2019-nCoV). The World Health Organization (WHO) on February 11, 2020 named the new virus Severe Acute Respiratory syndrome coronavirus-2 (SARS-CoV-2) and the name of the disease is known as Coronavirus disease 2019 (COVID-19). This virus is a single-stranded RNA virus, positive, encapsulated and unsegmented with a diameter of 50-200nm, and can be transmitted from human to human. On March 11, 2020, WHO declared that COVID-19 was a pandemic in the world.<sup>1,2</sup>

Epidemiological data until February 12, 2020, shows a worldwide mortality rate of 2.1%. The increase in the number of cases took place quite rapidly, and spread to various countries in a short time. As of 9 July 2020, WHO reported 11.84,226 confirmed cases with 545,481 deaths worldwide (Case Fatality Rate / CFR 4.6%). Indonesia reported its first case on March 2, 2020. The cases are increasing and spreading rapidly throughout Indonesia. As of September 1, 2020, the COVID-19 Handling Task Force reported 174,796 confirmed cases of COVID-19, the highest in Asia, with 7,417 deaths (CFR 4.24%) spread across 34 provinces. As many as 51.5% of cases

occurred in men. Most cases occurred in the age range 45 - 54 years and the least occurred at the age of 0-5 years. The highest mortality rate was found in patients aged 55-64 years.<sup>1,2,3</sup>

The Minister of Health of the Republic of Indonesia has issued Decree Number HK.01.07/MENKES/104/2020 concerning the Determination of Novel Coronavirus Infection (2019-nCoV Infection) as a Type of Disease that can Cause outbreaks and efforts to overcome it, while the Governor of West Java has issued Decree number 445/ Kep.186-Dinkes/2020 concerning destination of referral hospitals for management of certain emerging diseases (including 2019-nCoV Infection) in West Java and Dustira Army Hospital is one of them.<sup>4,5</sup>

Diagnosis of the Covid-19 virus disease is generally carried out by history taking, physical examination and supporting examinations, so that it can be classified into patients with Suspect (possible), Probable, Confirmed and Close Contact status. A patient with suspected covid19 is someone who has one of the following criteria:<sup>4</sup>

- a. People with Acute Respiratory Infections (ARI) and in the last 14 days before symptoms develop have a history of travel or live in countries / regions of Indonesia that report local transmission.
- b. People with any of the symptoms / signs of ARI and in the last 14 days before symptoms develop had a history of contact with a confirmed / probable COVID-19 case.
- c. People with severe ARI / severe pneumonia requiring hospitalization and no other cause based on a convincing clinical picture<sup>4</sup>

WHO currently recommends molecular testing for all patients with suspected Covid-19. The recommended method is the molecular detection method / NAAT (Nucleic Acid Amplification Test) such as the RT-PCR examination through the naso and oropharyngeal swab methods.<sup>1,2,3</sup>

Dustira Army Hospital as a Indonesian Army referral hospital in West Java and became referral of Covid-19 Hospital, conducts PCR swab examination activities for both military or police personnel, government employee and their families and the general public. Executing the task of naso-oropharyngeal swab examination are doctors and all ENT nurses assisted by laboratory staff and health workers who have been trained to do swabs at the ENT Department in Dustira Army Hospital.

From this description, Writers would like to discuss the description of the results of RT-PCR swabs in inpatients with suspected Covid-19 in the Dustira Army Hospital from August to November 2020, based on characteristics age, type gender, rank, symptom classification and examination results of inpatients with suspected covid-19 so it is useful to present epidemiological data about the results of the RT-PCR swab, especially in Dustira Army Hospital, Siliwangi Military Health District and generally for the Indonesian Army and the Task Force for the Acceleration of Handling Covid-19.

### **Methodology**

This research is a descriptive study analyzed with a cross sectional design. The research sample was a total sampling of inpatients with suspected Covid-19 (data taken from the medical committee of Dustira Army Hospital), which was carried out by swab at Dustira Army Hospital, and met the inclusion criteria. The RT-PCR swab testing / analysis was carried out in the PCR laboratory of the Dustira Army Hospital. Data were taken from 15<sup>th</sup> August to 15<sup>th</sup> November 2020. The inclusion criteria were all inpatients with suspected Covid-19 who had an RT-PCR swab, while the exclusion criteria were incomplete patient data and / or damaged / doubtful RT-PCR swab results. The results of the data will be analyzed using the same statistical test to determine its significance. Significance was obtained if  $p \leq 0.001$  with Odds ratio (OR) based on 95% Confidential Interval (CI).

## Result and Discussions

### Patient Characteristics of Suspected Covid-19

| No | Characteristics  | Total | Percentage (%) |
|----|--|-------|----------------|
| 1. | <b>Gender</b>  |       |                |
|    | - Male   | 249   | 65.01          |
|    | - Female   | 134   | 34.99          |
| 2. | <b>Age (years old)</b>   |       |                |
|    | - < 25   | 82    | 21.41          |
|    | - 25 – 50  | 189   | 49.35          |
|    | - > 50   | 112   | 29.24          |
| 3. | <b>Occupation</b>  |       |                |
|    | - Military / Police  | 173   | 45.17          |
|    | - Government eEmployee   | 23    | 6.01           |
|    | - Family   | 60    | 15.67          |
|    | - Others   | 127   | 33.16          |
| 4. | <b>Rank (especially military /police and government employee, n=196)</b> |       |                |
|    | - Officers/government employee of group III/IV                           | 59    | 30.10          |
|    | - Non commissioned officers (NCO)/ government employee of group II       | 100   | 51.02          |
|    | - Enlisted men/ government employee of group I                           | 37    | 18.88          |

|              |  |     |       |
|--------------|--|-----|-------|
| 5.           | -Unity (especially <b>military /police and government employee, n=196)</b> |     |       |
|              | - <b>Siliwangi military district</b>                                       | 27  | 13.78 |
|              | - <b>Outside of siliwangi military district</b>                            | 169 | 86.22 |
| <b>TOTAL</b> |  | 383 | 100   |

Based on Table 1, it can be seen that the subjects with the most gender characteristics who underwent PCR swabs at Dustira Hospital were male as many as 249 people (65.1%) and female as many as 134 people (34.9%). This shows that the activities / activities of workers in this study were dominated by men.

In the characteristics of the largest age group who carried out the swab examination were the age group 25-50 years as many as 189 people (49.5%), followed by the age group over 50 years as many as 112 people (29.24%) and those under 25 years old as many as 82 people (21.41%).

Research on Covid-19 patients at Kariadi Hospital Semarang found 67% more female patients than men.<sup>6</sup>

Male has previously been confirmed to suffer more from Covid-19, even in severe degrees. This is most likely due to gender-specific behavior, genetic and hormonal factors, and sex differences in the biological pathways associated with SARS-CoV-2 infection.

In Covid-19, descriptive biomarker levels are often reported by gender. However, research data relating to the effect of gender on the association between biomarkers and Covid-19 disease severity / outcome are underreported.<sup>7,8</sup>

Epidemiological data on deaths due to Covid-19 shows gender differences, where there is a greater difference in mortality rates for men compared to women. This may related with sex hormones such as testosterone and estrogen which emerge to be key in the adaptation of the body's immune response and the presence of other risk factors, such as diabetes, hypertension and cardiovascular disease, which affect more men than women.<sup>9</sup>

In the characteristics of the type of work / profession the subjects who underwent the most swab examinations were the Military / Police as many as 173 people (45.17%), 60 families of the Military (15.67%), 23 Government employee (6.01%) and others as many as 127 people (33.16%).

It can be seen that members of the Military / Police are indeed a high-risk profession and are included as the front guard in interacting with suspected of Covid-19 sufferers.

Members of the Military / Police and Government employee who carried out swab examinations with the rank of NCO / Government employee of group II were 100 people (51.02%) officers / Government employee of group III-IV were 59 people (30.1%) and enlisted / Government employee of group I were 37 people (18.8%). This shows members of the Military / Police / Government employee who are on duty in the field, especially with the rank of NCO / Government employee of group II, who is more at risk of Covid-19 transmission.

The original unit of Military members who underwent examination were 169 people (86.22%) from outside the Siliwangi Military District ranks and as many as 27 people (13.78%) from the Siliwangi Military District ranks. This shows that the distribution of suspected Covid-19 patients is quite extensive.

Table II. Characteristics of Suspect Patient Covid-19 Based on Swab RT-PCR Result.

| No | Characteristic   | Result swab RT-PCR |       |     |       | OR<br>(95% CI)        | p-value        |
|----|--|--------------------|-------|-----|-------|-----------------------|----------------|
|    |  | (+)                | %     | (-) | %     |                       |                |
| 1  | <b>Gender</b>  |                    |       |     |       |                       |                |
|    | ➤ Male   | 180                | 47.00 | 69  | 18.02 | 2.315                 | <b>0,0001</b>  |
|    | ➤ Female   | 71                 | 18.54 | 63  | 16.45 | (1.88 - 2.75)         |                |
| 2  | <b>Age (years old)</b>   |                    |       |     |       |                       |                |
|    | ➤ <25  | 31                 | 8.09  | 45  | 11.75 | 1.39                  | <b>0,00011</b> |
|    | ➤ 25 – 50  | 145                | 37.86 | 50  | 13.05 | (0.85 – 1.92)         |                |
|    | ➤ >50  | 75                 | 19.58 | 37  | 9.66  |                       |                |
| 3  | <b>Occupation</b>  |                    |       |     |       |                       |                |
|    | ➤ Military/Police  | 144                | 37.60 | 29  | 7.57  |                       | <b>0,00023</b> |
|    | ➤ Government employee  | 13                 | 3.39  | 10  | 2.61  | 4.785                 |                |
|    | ➤ Family   | 36                 | 9.40  | 24  | 6.27  | (4.30 - 5.27)         |                |
|    | ➤ Others   | 58                 | 15.14 | 69  | 18.02 |                       |                |
| 4  | <b>➤ Position (Military/Police and Government employee, n = 196)</b> |                    |       |     |       |                       |                |
|    | ➤ Officers / Government employee of Group III/IV                     |                    |       |     |       |                       |                |
|    | ➤ Non commissioned officers (NCO) / Government employee of Group II  | 52                 | 26.53 | 7   | 3.57  |                       |                |
|    | ➤ Enlisted men / Government employee of Group I                      | 79                 | 40.31 | 21  | 10.71 | 1.57<br>(0.69 - 2.45) | 0,0949         |

|              |  |            |            |            |            |                        |        |
|--------------|--|------------|------------|------------|------------|------------------------|--------|
|              |  | 26         | 13.27      | 11         | 5.61       |                        |        |
| 5            | <p>➤Unity (especially military and Government employee, n =196)</p> <p>➤Siliwangi Military District</p> <p>➤Outside of Siliwangi Military District</p> | 21         | 10.71      | 6          | 3.06       | 1.655<br>(0.67 - 2.64) | 0,7446 |
|              |  | 136        | 69.39      | 33         | 16.84      |                        |        |
| <b>TOTAL</b> |  | <b>251</b> | <b>100</b> | <b>132</b> | <b>100</b> |                        |        |

p counted based on testing  $\chi^2$ , and significant if  $p < 0,01$ .

The mean CT value for positive RT-PCR results was 30.345 with a CT value range between 20.17 - 40.52. The PCR swab examination at Dustira Hospital was positive if the CT value was  $<41$ . In West Java Labkesda the CT value was positive  $<31$ , this was different from Dustira Hospital because of the use of different reagents.

The results of PCR swab examination were positive for male gender as many as 180 people (47%) and negative for 69 people (18.02%). There were 71 (18.54%) positive women and 63 (16.45%) negative women. Statistical analysis showed  $p = 0.0001$  which means that between the sexes of men and the positive result of PCR swab is significant. Table 2 above also shows that subjects with suspected Covid-19 who are male have a 2.3 times greater risk of having a positive result on the PCR swab examination. This means that male gender tends to have more active physical activity/mobility so that they are more at risk of getting Covid-19.

Based on age, it was found that ages 25-50 years were positive as many as 145 people (37, 86%) and negative results as many as 50 people (13.05%). Age over 50 years of positive results as many as 75 people (19.58%) and negative results as many as 37 people (9.66%). In the age group under 25 years, positive results were obtained as many as 31 people (8.09%) and negative results for 45 people (11.75%). The results of statistical analysis showed a value of  $p = 0.00011$ , meaning that between age and positive results of PCR swabs were significant.

Based on the profession, it was found that in the Military/Police profession positive results were obtained for 144 people (37.6%) and negative results for 29 people (7.57%). For the Military/Police family, there were 36 positive results (9.4%) and 24 negative people (6.27%), 13 people in the Government employee profession were positive (3.39%) and 10 negative people (2.61%). Meanwhile, 58 other professions were positive (15.15%) and 69 people (18.02%) were negative. The results of statistical analysis showed a p value of 0.00023, which means that between the occupation/ profession of the Military/Police and the positive results of the PCR swab are significant.

The Military members who were examined, positive results were found at the rank of NCO/ Government employee of group II, positive results were found in 79 people (40.31%) and negative results in 21 people (10.71%). At the rank of officer / Government employee of group III / IV, positive results were found in 52 people (26.53%) and negative results in 7 people (3.57%). At the rank of Enlisted / Government employee of group 1, there were 26 positive results (13.27%) and negative 11 people (5.61%). The results of statistical analysis showed a p value of 0.0949, meaning that between the rank and the positive result of the PCR swab was not significant.

Military personnel who were subjected to swab examinations from outside Siliwangi Military District obtained positive results on 136 subjects (69.39%) and negative results in 33 subjects (16.84%). Military personnel from Siliwangi Military District obtained positive results on 21 subjects (10.71%) and negative results on 6 subjects (3.06%). The result of statistical analysis showed that the p value was 0.7446, meaning that there was no relationship between the origin of the unit and the positive result of the PCR swab.

Table III. Characteristic of suspect patient of Covid-19 based on clinical symptoms

| No | Characteristics        | Clinical symptoms |       |              |      |                   |       |              |      | p       |
|----|------------------------|-------------------|-------|--------------|------|-------------------|-------|--------------|------|---------|
|    |                        | Resp. tract (+)   | %     | GI tract (+) | %    | Combined symptoms | %     | Asymptomatic | %    |         |
| 1  | <b>Gender</b>          |                   |       |              |      |                   |       |              |      | 0.248   |
|    | ➤ Male                 | 172               | 44.91 | 0            | 0.00 | 74                | 19.32 | 3            | 0.78 |         |
|    | ➤ Female               | 98                | 25.59 | 0            | 0.00 | 32                | 8.36  | 4            | 1.04 |         |
| 2  | <b>Age (years old)</b> |                   |       |              |      |                   |       |              |      | 0.00046 |
|    | ➤ <25                  | 50                | 13.05 | 0            | 0.00 | 19                | 4.96  | 7            | 1.83 |         |
|    | ➤ 25 – 50              | 144               | 37.60 | 0            | 0.00 | 51                | 13.32 | 0            | 0.00 |         |
|    | ➤ >50                  |                   |       | 0            | 0.00 | 36                | 9.40  | 0            | 0.00 |         |
|    |                        | 76                | 19.84 |              |      |                   |       |              |      |         |

|              |  |     |       |   |      |     |       |   |      |        |
|--------------|--|-----|-------|---|------|-----|-------|---|------|--------|
| 3            | <b>Occupation</b>  |     |       |   |      |     |       |   |      |        |
|              | ➤Military/Police   | 121 | 31.59 | 0 | 0.00 | 52  | 13.58 | 0 | 0.00 | 0.0388 |
|              | ➤Government employee   | 17  | 4.44  | 0 | 0.00 | 6   | 1.57  | 0 | 0.00 |        |
|              | ➤ Family   | 44  | 11.49 | 0 | 0.00 | 12  | 3.13  | 4 | 1.04 |        |
|              | ➤ Others   | 88  | 22.98 | 0 | 0.00 | 36  | 9.40  | 3 | 0.78 |        |
| 4            | <b>Position (Military/Police and Government employee, n = 196)</b> |     |       |   |      |     |       |   |      |        |
|              | ➤Officers / Government employee of Group III/IV                    | 41  | 10.70 | 0 | 0.00 | 18  | 4.70  | 0 | 0.00 | 0.6402 |
|              | ➤Non-commissioned officers (NCO)/ Government employee of Group II  | 73  | 19.06 | 0 | 0.00 | 27  | 7.05  | 0 | 0.00 |        |
|              | ➤Enlisted men / Government employee of Group I                     | 24  | 6.27  | 0 | 0.00 | 13  | 3.39  | 0 | 0.00 |        |
| 5            | <b>Unity (military and Government employee, n =196)</b>            |     |       |   |      |     |       |   |      |        |
|              | ➤Siliwangi Military District                                       | 17  | 4.44  | 0 | 0.00 | 10  | 2.61  | 0 | 0.00 | 0.3614 |
|              | ➤Outside of Siliwangi Military District                            | 121 | 31.59 | 0 | 0.00 | 48  | 12.53 | 0 | 0.00 |        |
| <b>TOTAL</b> |  | 270 | 100   | - | -    | 106 | 100   | 7 | 100  |        |

p counted based on testing logistic regression, and significant if  $p < 0,01$ .



Patients who underwent a swab examination who had complaints in the respiratory tract in the form of shortness of breath, painful swallowing, colds and anosmia were 270 subjects, with 172 men (44.91%) and 98 women (25.59%). No subject has only gastrointestinal complaints. Subjects who had complaints of a combination of airway and gastrointestinal tract were 106 subjects, male gender 74 subjects (19.31%) and female 32 (8.36%). There were 7 asymptomatic subjects with male gender 3 subjects (0.78%) and 4 female subjects (1.04%). In statistical analysis, the p value was 0.248, meaning that there was no relationship between gender and the type of symptoms.

Based on the types of complaints in the age group, there were 144 subjects (37.6%) in the 25-50 years age group, 76 subjects (19.84%) in the age group over 50 years (19.84%), and in the age group less than 25 years as many as 50 subjects (13.05%). There were 51 subjects (13.32%) of the combined airway and gastrointestinal tract combined complaints (13.32%), 35 subjects (9.4%) over 50 years old and 19 subjects under 25 years old (4.96%). Asymptomatic patients were only found in the age group under 25 years as many as 7 subjects (1.83%). In statistical analysis, it was found that the p value was 0.00046, meaning that there was a relationship between age and clinical symptoms.

Based on the type of work, there were 121 subjects (31.59%) had respiratory complaints, other jobs were 88 subjects (22.98%), 44 subjects (11.49%) were Military families, and Government employee were 17 subjects (4.44%). Subjects who had a combination of respiratory and gastrointestinal symptoms from the Military/Police profession were 52 subjects (13.58%), other professions were 36 subjects (9.4%), Military families were 12 subjects (3.13%) and Government employee were 6 subjects (1.57%). In statistical analysis, the p value was 0.388, meaning that there was no relationship between work and the type of complaints that came out.

Military/Policepersonils who have the most respiratory symptoms rank NCO / ASN of group II as many as 73 subjects (19.06%), officers / ASN goals III-IV 41 subjects (10.7%) and enlisted / Government employee goal I as many as 24 subjects (6.24%). Combined symptoms found in 27 subjects of NCO/Government employee group II (7.05%), 18 subjects (4.7%) of officers / Government employee goals III-IV and 13 subject from enlisted / Government employee goals I (3.39%). In the statistical analysis, the p value was 0.6402, meaning that there was no relationship between rank and the type of complaint that came out.

Based on the origin of the unit, the respiratory tract symptoms were found in personnel from outside the Siliwangi Military District as many as 121 subjects (31.59%) and from Kodam III / Slw as many as 17 subjects (4.44%). Combined symptoms were found in personnel from outside Siliwangi Military District as many as 48 subjects (12.53%) and from Siliwangi Military District 10 subjects (2.61%). In the statistical analysis, it was found that the p value was 0.3614, meaning that there was no relationship between the origin of the unit and the type of complaint that came out.

Table IV. Clinical symptoms of Covid-19 suspect patient Based on Swab RT-PCR Result

| No. | Clinical Symptoms | Swab RT-PCR Result |       |     |       | P value        |
|-----|-------------------|--------------------|-------|-----|-------|----------------|
|     |                   | (+)                | %     | (-) | %     |                |
| 1   | Respiratory       | 270                | 72,50 | 88  | 66,66 | <b>0,00039</b> |
| 2   | Digestion         | 0                  | 0     | 0   | 0     |                |
| 3   | Combined          |                    |       |     |       |                |

|   |              |     |       |     |       |     |
|---|--------------|-----|-------|-----|-------|-----|
| 4 | symptoms     | 106 | 27,50 | 37  | 28,03 |     |
|   | No Symptoms  | 0   | 0     | 7   | 5,31  |     |
|   | <b>TOTAL</b> | 251 | 100   | 132 | 100   | 383 |

p counted based on logistic regression, and significant if  $p < 0,01$ .

Based on the statistical analysis of the relationship between symptoms and positive results of PCR swabs, the p value was 0.00039, meaning that there was a significant relationship ( $p = 0.00039$ ) between airway symptoms and positive results from PCR swabs. Patients with suspected Covid-19 with positive PCR swab results had 1.25 times more respiratory symptoms than those with combined symptoms with gastrointestinal tract and those without symptoms. This is in accordance with a meta-analysis review of the most common signs and symptoms, namely fever (83.0%,), cough (65.2%,), dyspnea (27.4%,), myalgia / fatigue (34.7%,), and sputum production (17.2%). Less common symptoms include hemoptysis (2.4%), diarrhea (5.7%), and nausea / vomiting (5.0%).<sup>10</sup>

The clinical spectrum of Covid-19 varies from asymptomatic or paucisymptomatic to clinical conditions characterized by respiratory failure requiring mechanical ventilation and support in the ICU, to multi-organ and systemic manifestations such as sepsis, septic shock, and multiorgan dysfunction syndrome (MODS). In one of the first reports of this disease, Huang et al. described that patient (n. 41) had fever, malaise, dry cough, and dyspnea. CT scan showed abnormal pneumonia in all cases. About a third of them (13, 32%) required ICU care, and 6 (15%) cases were fatal.<sup>11</sup>

The case study, published in the New England Journal of Medicine (NEJM) on January 29, 2020, summarizes the first 425 cases recorded in Wuhan. The data showed that the median age of the patients was 59 years, with an age range of 15 to 89 years. Thus, they reported no clinical cases in children under 15 years of age. There was no significant gender difference (56% male). In contrast, in other reports, there is a lower prevalence of female sex.<sup>12</sup>

Clinical and epidemiological data from the Chinese CDC and regarding 72,314 case records (confirmed, suspected, diagnosed, and asymptomatic cases, shared in the Journal of the American Medical Association (JAMA), provide the first important illustration of the Chinese epidemiological curve. There were 62% confirmed cases, including 1% asymptomatic but laboratory positive (viral nucleic acid test). In addition, the overall case fatality rate (in confirmed cases) was 2.3%. Of note, the fatal cases were mainly in elderly patients, especially those aged  $\geq 80$  years (approx. 15%), and 70 to 79 years (8.0%). Approximately half (49.0%) of patients critically ill and affected by preexisting comorbidities such as cardiovascular disease, diabetes, chronic respiratory disease, and oncology, died. While 1% of the patients were 9 years or younger, no fatal cases occurred in this group.<sup>12,13</sup>

### Conclusion

In Dustira Army hospital, the results of the RT-PCR examination were positive if the CT value was  $< 41$ . Inpatients suspected Covid-19 with a positive PCR had an average CT value of 30,345. The characteristics of most suspected Covid-19 inpatients were male, aged 25-50 years, Military/Police occupations with the rank of non-commissioned officers / Government employee group II and units outside Siliwangi Military District. Male inpatients suspected of Covid-19 with

positive PCR swab results have a significantly 2.3 times greater risk than women, with ages 25-50 years having a 1.39 times greater risk than other ages and work as Military/Police is at risk 4.78 times greater than other professions. Inpatients with suspected Covid-19 with positive PCR swab results were significantly dominant at the age of 25-50 years. with the main symptoms of the airway system.

## REFERENCES

- [1] Pneumonia Covid-19 Diagnosis & Penatalaksanaan di Indonesia Perhimpunan Dokter Paru Indonesia (PDPI) Tahun 2020
- [2] Pedoman Tatalaksana Covid-19, Perhimpunan Dokter Paru Indonesia (PDPI), perhimpunan Dokter Spesialis Kardiovaskular Indonesia (PERKI), Perhimpunan Dokter Spesialis Penyakit Dalam Indonesia (PAPDI), Perhimpunan Dokter Anestesiologi dan Terapi Intensif Indonesia (Perdatin) Ikatan Dokter Anak Indonesia (IDAI), tahun 2020.
- [3] Pedoman Perlindungan dokter di Era Covid 19 Tim Mitigasi Dokter dalam pandemi Covid-19 PB IDI
- [4] Keputusan Menteri Kesehatan Republik Indonesia nomor hk.01.07/menkes/413/2020 tentang pedoman pencegahan dan pengendalian coronavirus disease 2019 (covid-19)
- [5] Keputusan Gubernur Jawa Barat No 445 2020
- [6] Iriani, Desi. Olfactory and Gustatory dysfunction in CoVID-19 patients at Kariadi Hospital Semarang, presented at Indonesian Rhinology Conference /Indorhino December 2020
- [7] Moein ST, Hashemian SM, Mansourafshar B, Khorram-Tousi A, Tabarsi P, Doty RL. Smell Dysfunction: a Biomarker for COVID-19. International Forum of Allergy & Rhinology, 2020.
- [8] Tu Haitao, Vermunt JV, Abeykooe J, et al COVID-19 and Sex Differences: Mechanisms and Biomarkers. Mayo clinic proceedings Vol.95, Issue 10, October 2020 page 2189-2202
- [9] Goujon A, N F, Ghio D et al. Age, gender, and territory of COVID-19 infections and fatalities <https://ec.europa.eu/jrc/JRC120680>. EUR 30237 EN.
- [10] Agyeman AA, Smell and Taste Dysfunction in Patients With COVID-19: A Systematic Review and Meta-analysis. Mayo Clin Proc. 2020 Aug; 95(8): 1621–1631.
- [11] Huang C, Wang Y, Li X, Ren L, Zhao J, Hu Y, Zhang L, Fan G, Xu J, Gu X, Cheng Z, Yu T, Xia J, Wei Y, Wu W, Xie X, Yin W, Li H, Liu M, Xiao Y, Gao H, Guo L, Xie J, Wang G, Jiang R, Gao Z, Jin Q, Wang J, Cao B. Clinical features of patients infected with 2019 novel coronavirus in Wuhan, China. Lancet. 2020 Feb 15; 395(10223):497-506. [PMC free article] [PubMed]
- [12] Li Q, Guan X, Wu P, Wang X, Zhou L, Tong Y, , et al Early Transmission Dynamics in Wuhan, China, of Novel Coronavirus-Infected Pneumonia. N Engl J Med. 2020 Mar 26; 382(13):1199-1207. [PMC free article] [PubMed]