The Level of Community Compliance Towards Prevention Efforts of COVID-19 in West Tanjung Jabung Regency, Jambi

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Abstract

The COVID-19 cases in Tanjung Jabung Barat Regency, Jambi, have risen significantly daily. This significant increase in cases illustrates that the people are less than optimal in complying with the health protocols established by the government. This phenomenon concluded that public compliance in efforts to prevent COVID-19 has a vital role in preventing the spread. This study aims to describe the level of compliance towards prevention efforts of COVID-19 in the community. We use a descriptive survey method with probability sampling techniques to obtain the data. The subjects in this study were the community of Tanjung Jabung Barat, Jambi Regency, who were>17 years old with a sample size of 400 samples. Collecting data using a questionnaire in a validated form and distributed to the public via social media. The data analysis in this study is the frequency distribution analysis (univariate analysis). The results of this study shown were that 172 respondents (43.0%) had a good level of compliance, 146 respondents (36.5%) had a sufficient level of adherence, and as many as 82 respondents (20.5%) had a good level of compliance to prevent COVID-19 spreads.

Keywords: Compliance level; COVID-19 prevention efforts; the community of West Tanjung Jabung Regency

Background

From December 2019 to early January 2020, a new pneumonia outbreak characterized by dry cough, fever, fatigue, and sometimes gastrointestinal symptoms occurred at the Huanan Seafood Wholesale Market in Wuhan, Hubei, China. Thousands of people in China, including several provinces and cities, regarding the spread of this new outbreak. The pathogen of this outbreak was finally identified by WHO or named 2019 novel coronavirus (2019-nCov) (Wu et al., 2020). Coronavirus is one of a large family of viruses that can cause infection. This virus can cause respiratory infections in humans ranging from the common cold to the more severe ones, namely Severe Acute Respiratory Syndrome (SARS) or Middle East Respiratory Syndrome (MERS) (WHO, 2020a). COVID-19 is a new form of coronavirus that can infect person-to-person by contact and cause acute infection with several respiratory symptoms (WHO, 2020b).

WHO declared that the number of COVID-19 cases globally as of December 14, 2020, is 70,461,926 cases, with 1,599,704 deaths (WHO, 2020c). The highest risk which can be infected with COVID-19 cases were someone aged >70 years and someone who had underlying diseases such as respiratory disorders and cardiovascular disease (Jordan et al., 2020). A study revealed that out of 41 confirmed patients, 11 (31%) had underlying diseases such as cardiovascular disease, hypertension, diabetes, and diabetes. COPD. Moreover, from 138 cases of COVID-19, 64 cases (46.4%) of them had comorbidities (Yang et al., 2020). In February 2020, in Zhejiang province, China, there were 91 confirmed cases of COVID-19, with the
average age of patients being 50 years with a male ratio-men as many as 37 cases and women are 54 cases (Qian et al., 2020).

In Indonesia, COVID-19 cases are increasing day by day. Based on data from the Indonesian Ministry of Health on December 14, 2020, the number of COVID-19 cases in Indonesia was 623,309, with a death toll of 18,956 deaths (Kemenkes RI, 2020a). For Jambi Province, the number of confirmed COVID-19 was 968 as of December 14, 2020, with the number of deaths as many as 47. Tanjung Barat Regency is still one of the regencies in Jambi Province with the highest number of cases, with 294 confirmed cases and four deaths (Pemprov Jambi, 2020).

World Health Organizations established several health protocols to prevent the COVID-19 spread, such as washing hands regularly with soap and running for 40-45 hours, using alcohol-based antiseptic liquid (hand sanitizer), using a mask that covers the nose and mouth, doing the social distancing at least 1 meter from other people to avoid getting droplets from people who cough or sneeze (Kemenkes RI, 2020). According to the government spokesman-review of COVID-19, dr. Achmad Yuriano, COVID-19 case in Indonesia, is experiencing a significant increase every day. The increase in cases every day illustrates that the people are less than optimal in carrying out/obeying the established health protocols such as masks, social distancing, and handwashing (Kemenkes RI, 2020c).

Until now, no research has been conducted specifically to assess compliance to prevent and control COVID-19 plays an essential role in breaking the chain of the spread of this virus, and there is no specific research to assess the level of the compliance of the community of Tanjung Jabung Barat Regency to the efforts to prevent and control COVID-19. Therefore, researchers are interested in researching the Description of the Level of Compliance with COVID-19 prevention efforts of the community of Tanjung Jabung Barat Regency, Jambi.

Methods
The descriptive research with the survey method was used in this study. This study was conducted to describe the level of compliance with COVID-19 prevention efforts in the community of Tanjung Jabung Barat Regency, Jambi. This research was conducted in Tanjung Jabung Barat Regency, Jambi, from November 21, 2020, until November 28, 2020.

The population in this study were all people of Tanjung Jabung Barat Regency aged >17 years. The sample of this study was the people in Tanjung Jabung Barat Regency who met the inclusion and exclusion criteria. Sampling was carried out using the probability sampling technique, simple random sampling with a sample of 400 students. The data used in this study is primary data. The primary data were obtained directly from the respondents by filling out questionnaires on the form that had been distributed.

Data Analysis
Univariate analyses were used to see an overview of the level of compliance with COVID-19 prevention efforts in the community of Tanjung Jabung Barat Regency, Jambi.

Results
Demographic Characteristics of Research Subjects
Based on research that has been carried out in Tanjung Jabung Barat Regency, Jambi, 400 respondents met the inclusion and exclusion criteria with the several characteristics demographic of this research subjects (Table 1).
Table 1. The demographic characteristics of the study

| Characteristic    | Frequency (N=400) | Percentage (%) |
|-------------------|-------------------|----------------|
| Gender            |                   |                |
| Male              | 166               | 41.5           |
| Female            | 234               | 58.5           |
| Old               |                   |                |
| 17-25             | 264               | 66.0           |
| 26-35             | 58                | 14.5           |
| 36-45             | 58                | 14.5           |
| 46-55             | 16                | 4.0            |
| 56-65             | 3                 | 0.8            |
| >65               | 1                 | 0.3            |
| Profession        |                   |                |
| Housewife         | 58                | 14.5           |
| Student/student   | 175               | 43.8           |
| Government employees | 12             | 3.0            |
| Private employees | 26                | 6.5            |
| Entrepreneur      | 78                | 19.5           |
| Other             | 51                | 12.8           |
| Last education    |                   |                |
| Elementary school | 13                | 3.3            |
| Junior high school| 39                | 9.8            |
| Senior high school| 254               | 63.5           |
| College           | 94                | 23.5           |

Overview of The Compliance Level of COVID-19 Prevention Efforts in General

Based on the research, an overview of the compliance level with COVID-19 prevention efforts of the community in Tanjung Jabung Barat Regency, Jambi, in general is presented in Table 2 below.

Table 2. The distribution of the compliance level towards prevention efforts of COVID-19 based on respondents in general (N=400)

| Characteristic   | Frequency (N=400) | Percentage (%) |
|------------------|-------------------|----------------|
| Preventive       |                   |                |
| Not enough       | 82                | 20.5           |
| Enough           | 146               | 36.5           |
| Good             | 172               | 43.0           |

Based on the research, an overview of the adherence level to COVID-19 prevention efforts of the community in Tanjung Jabung Barat Regency, Jambi, based on gender is presented in Table 3 below.

Table 3. The distribution of the compliance level towards prevention efforts of COVID-19 based on respondent’s gender

| Characteristic  | Gender          |                 |                 |
|-----------------|-----------------|-----------------|-----------------|
|                 | Men  | Percentage (%) | Women | Percentage (%) |
| Not enough      | 56   | 33.7           | 26    | 11.1           |
| Enough          | 52   | 31.3           | 94    | 40.2           |
| Good            | 58   | 34.9           | 114   | 48.7           |
| Total           | 166  | 100.0          | 234   | 100.0          |

Based on this research, an overview of adherence to COVID-19 prevention-efforts of the community in Tanjung Jabung Barat Regency, Jambi, based on the age of the respondents presented in Table 4 below.
Table 4. The distribution of the compliance level towards prevention efforts of COVID-19 based on the respondent’s age

| Respondent’s age | Compliance level | Total |
|------------------|------------------|-------|
|                  | Not enough | Enough | Good |
| 17-25            | 65         | 108     | 91    |
| Percentage (%)   | 24.6      | 40.9    | 34.5  |
| 26-35            | 13         | 15      | 30    |
| Percentage (%)   | 22.4      | 25.9    | 51.7  |
| 36-45            | 3          | 20      | 35    |
| Percentage (%)   | 5.2       | 34.5    | 60.3  |
| 46-55            | 1          | 2       | 13    |
| Percentage (%)   | 6.3       | 12.5    | 81.3  |
| 56-65            | 0          | 1       | 2     |
| Percentage (%)   | 0         | 33.3    | 66.7  |
| >65              | 0          | 0       | 100.0 |
| Percentage (%)   | 0         | 0       | 100.0 |

Based on the research, an overview of the compliance level with COVID-19 prevention efforts in the people of Tanjung Barat Regency, Jambi, based on the respondents activity, is presented in Table 5 below.

Table 5. The distribution of the compliance level towards prevention efforts of COVID-19 based on the respondent’s activity

| Respondent’s activity | Compliance level | Total |
|-----------------------|------------------|-------|
|                       | Not enough | Enough | Good |
| Housewife             | 3         | 21     | 34    |
| Percentage (%)        | 5.2       | 36.2    | 58.6  |
| Student               | 46        | 72     | 57    |
| Percentage (%)        | 26.3      | 41.1    | 32.6  |
| Government employees  | 3         | 1      | 8     |
| Percentage (%)        | 25.0      | 8.3     | 66.7  |
| Private employees     | 7         | 10     | 9     |
| Percentage (%)        | 26.9      | 38.5    | 34.6  |
| Entrepreneur          | 15        | 22     | 41    |
| Percentage (%)        | 19.2      | 28.2    | 52.6  |
| Other                 | 8         | 20     | 23    |
| Percentage (%)        | 15.7      | 39.2    | 45.1  |

Based on the research, an overview of the compliance level with COVID-19 prevention efforts in the people of Tanjung Barat Regency, Jambi based on the respondents latest education is presented in Table 6 below.

Table 6. The distribution of the compliance level towards prevention efforts of COVID-19 based on the respondent’s education

| Respondent’s education | Compliance level | Total |
|------------------------|------------------|-------|
|                       | Not enough | Enough | Good |
| Elementary school     | 15.4      | 30.8    | 53.8  |
| Percentage (%)        | 6         | 13      | 20    |
| Junior high school    | 15.4      | 33.3    | 51.3  |
| Percentage (%)        | 56        | 91      | 107   |
| Senior high school    | 22        | 35.8    | 42.1  |
| Percentage (%)        | 18        | 38      | 38    |
| College               | 19.1      | 40.4    | 40.4  |
| Percentage (%)        | 15.4      | 30.8    | 53.8  |
Discussion

The Compliance Level of COVID-19 Prevention Efforts in General

In Table 2, we found that most of the people of Tanjung Jabung Barat Regency, Jambi, have good compliance with the COVID-19 prevention efforts set by the government, such as washing hands maintaining distance wearing masks, and others (Kemenkes RI, 2020). The results describe 172 respondents (43.0%) have an effort to prevent COVID-19 well, then 146 respondents (36.5%) have a sufficient level of compliance, and 82 respondents (20.5%) of respondents have a low level of compliance efforts to prevent COVID-19.

Previously, a survey was carried out by several agencies. One of the surveys was at the West Tanjung Jabung Police. According to the survey, many residents still did not apply the health protocols set by the government (Dinamika Jambi, 2020). However, we found that the level of community compliance towards prevention efforts of COVID-19 in West Tanjung Jabung Regency, Jambi was more than good enough. According to the researcher, this result can be influenced by various factors: the West Tanjung Jabung Regency Government, through a circular urging the community to comply with the established protocol (Tanjab Barat, 2020). Furthermore, in September 2020, the West Tanjung Jabung Regency Government and DPRD also ratified that anyone who violates the protocol Health regulations will be subject to regulations in the form of money in the amount of Rp. 500.000 (Kompas, 2020) So that from the appeals and regulations issued, it can make the community more comply with the protocols that have been set.

The level of community compliance with COVID-19 prevention efforts was assessed using a questionnaire distributed in the google form to the public through social media, and the questionnaire had been evaluated by experts and had been declared valid. Table 1 shows that most people always try to prevent COVID-19 in statements number 2 and number 1, namely regarding leaving the house, people avoid crowds and keep their distance from other people. Physical distance and prevention of mass spread are considered to be able to break the COVID-19 chain because one of the transmissions of this virus is through droplets of infected people so that when people keep their distance, they can minimize transmission from COVID-19 (Elang Medika Corpora, 2020). Currently, in Tanjung Jabung Regency West, Jambi, the number of COVID-19 confirmed cases reached 294.

The Compliance Level of COVID-19 Prevention Efforts Based on The Respondent Gender

This study had a sample size of 400 respondents, with the male respondents being 166 (41.5%) and the female respondents being 234 (58.5%). Therefore, researchers here cannot compare the level of compliance of which community groups are better due to the unbalanced number of each group. In Table 1, we inform the extent of the compliance level of each community group towards the COVID-19 prevention efforts.

Table 3 states that the majority of the male population has a good level of compliance with the established COVID-19 prevention efforts, namely 58 people (34.9%) of the total male respondents, 52 people (31.3 people) %), which is sufficient, and 56 (33.7%) have a low level of compliance with COVID-19 prevention efforts. The majority of the female population also have a good level of compliance with the COVID-19 prevention efforts, namely 114 people (48.7%) of the total female respondents, 94 people (40.2%) sufficient, and 26 people (11.1%) have a low level of compliance with COVID-19 prevention efforts.

From the results, we found no difference in the level of community compliance with efforts to prevent COVID-19, both men and women. These two community groups from the study results had the same level of adherence to COVID-19 prevention efforts. Although some studies say that women tend to be better at obeying a rule compared to men, this is due to the nature of women who are loving, responsible for those around them, and gentle, while men tend to be aggressive, like
The compliance level of COVID-19 prevention efforts based on the respondent ages

In Table 4, it has been stated that most people aged >25 years old have a good level of compliance with COVID-19 prevention efforts. In contrast, in the 17–25 year age group, most people have a sufficient level of compliance with COVID-19 prevention efforts, namely 108 people (40.9%) of all populations in the community group with that age range.

From the results, we found that only the group aged <25 years had more adequate levels of compliance than good, this was different from the age group >25 years where the majority of this group had a good level of compliance. The results of this study are in line with research that the Yogyakarta Health Office has carried out with the title "Community Response to COVID-19 in Yogyakarta", where it is stated that the higher the age group of the community, the higher the level of community compliance (Dinkes DIY, 2020).

The Compliance Level of COVID-19 Prevention Efforts Based on The Respondent Activity

In Table 5, it has been stated that most respondents or people who work as housewives, civil servants, entrepreneurs, and others have a good level of compliance with COVID-19 prevention efforts. However, the other two groups of people with the activity as students and as private employees, the majority have a sufficient level of compliance with COVID-19 prevention efforts, with the percentages 72 people (41.1%) who work as students and ten people (students) (38.5%) who work as private employees.

From the data, we found that one of the community groups who are respondents, the sufficient level of compliance are students as a majority, even though students are one of the community groups that have an essential role in helping the community and the government in dealing with the spread of COVID-19. According to the coordinating minister for Human Development and Culture (Menko PMK), students have an important role in this COVID-19 pandemic. Students can help the government in socializing the COVID-19 prevention protocols that have been set, by the government (Menko PMK, 2020). However, the researchers did not further examine the factors that affecting student compliance in carrying out this COVID-19 prevention effort.

The Compliance Level of COVID-19 Prevention Efforts Based on The Respondent's Education

In Table 6, it has been stated that most of the respondents in this study had a good level of compliance with the COVID-19 prevention efforts, with the status of elementary, junior high, high school, or college all having a good level of compliance.

In this study, we found the respondents were people with the last education of high school (SMA), and the least respondents were respondents with the last education level of elementary school (SD). However, from the results of this study, it was not found that there was a difference in the level of compliance between people with the latest education in elementary, junior high, high school, or college. The majority of groups from the community also had a good level of compliance. The results of this study are different from other studies, which state that the higher a person's education, the higher the level of compliance.

Conclusion

Based on the analysis data, we concluded that most of the Tanjung Jabung Barat Regency people have a good level of compliance with COVID-19 prevention efforts; b. The majority of respondents were aged <25 years, students and private employees had a sufficient level of compliance, while the majority of respondents aged >25 years, housewife, civil servant, entrepreneur had a good level of compliance; and c. There is no difference in compliance level of the COVID-19 prevention efforts between men,
women, and educational grade of the Tanjung Jabung Barat Regency community.

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**Conflict of interest**

All authors declare no conflict of interest.

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