Analysis of implementation prevention protocols and community compliance with covid-19 event numbers

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ABSTRACT

Background: The Covid-19 pandemic has shaken the world community and disturbed all aspects of human life, for this reason our efforts need to be carried out as an effort to prevent and overcome this pandemic so that it will pass quickly. Therefore, it is necessary to implement health and compliance protocols in the community.

Objectives: The aim of this research is to determine the implementation of COVID 19 prevention protocols and community compliance with covid-19 events in Public Health Center

Methods: This research was conducted using regression analysis, correlation and factor analysis. The subjects in this research activity are people who need services at the Puskesmas according to the inclusion and exclusion criteria. The object under study is the community’s compliance with the Covid-19 prevention protocol implemented in Tangerang City. A sample of 150 people from 6 Puskesmas in the Tangerang City area in October.
November 2020. The main instrument is a questionnaire which is carried out through a blended system approach where research is carried out directly and indirectly in the field, raw data is processed with the help of SPSS and AMOS.

**Results:** it can be seen that the implementation of the health protocol in the Public Health Center in the Tangerang city area has been running quite well about 58.7%, but the level of compliance of the people of the city of Tangerang is still relatively low about 59.3%, however the incidence rate of Covid-19 in Public Health Center in the city of Tangerang is relatively low namely 70.7%.

**Conclusions:** With the knowledge of the above, it is hoped that the local government and other stakeholders can find out and make the basis of facts in making decisions for further handling in order to accelerate the completion of the Covid-19 pandemic.

**KEYWORD:** protocols; healths; compliance; event number; covid 19

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**INTRODUCTION**

In early 2020, the world was caught off guard by the outbreak of unknown pneumonia that began in Wuhan, Hubei Province. It spread rapidly throughout more than 190 countries and territories. This outbreak is named coronavirus disease 2019 (COVID-19), caused by severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2) (1).

The increase in the number of COVID-19 cases is fast spreading to other countries. The global population now stands at 7.7 billion, and we live very close to one another. Faster human mobility - with around 4.5 billion people traveling by plane per year - as well as a diet based on the consumption of animals, including wild animals - are factors that contribute to the spread of the virus (2).

On December 31, 2019, the world health organization based in China reported an incidence or case of pneumonia of unknown etiology, which occurred in Wuhan City, Hubei Province, China. And on January 7, 2020, China identified cases of pneumonia of unknown etiology as a new type of coronavirus (novel coronavirus). So far the coronavirus is believed to have first appeared in China in November 2019 (3).

With the Covid-19 incident there has been no good treatment to treat the disease. So a protocol for preventing the spread of Covid-19 has been created aimed at reducing the number and spread of the disease. The addition of cases per day illustrates that compliance with health protocols has not been optimally implemented by the community. It is time for us to remind each other in a good way to comply with health protocols, namely by means of 3M (Washing hands, Wearing masks and keeping distance (4).

The Banten Provincial Health Office released an additional 221 positive cases of Covid-19 on Wednesday, October 21, 2020. Positive confirmed cases were recorded at 8,092 people. Consisting of 1,399 people still being treated, 6,431 recovered, and 262 people died. To suppress additional cases (5). So that Banten remains outside the top 10 most cases in Indonesia.

As a result of this Covid-19, the Provincial Government has simultaneously implemented large-scale social restrictions (PSBB) for the prevention and handling of Covid-19. “Even so, the rate of spread of Covid-19 in the Banten Province has not significantly decreased, it is even more widespread. Allegedly, this is due to several
factors. Starting from the ineffective enforcement of health protocols to not optimal implementation of tightening health protocols in offices, the business world (industry), and tourism (6).

With an illustration of the high incidence rate in the city of Tangerang, it is hoped that the community will be able to implement the Covid-19 prevention protocol, obedience to take care of themselves and maintain their health so that they can reduce the burden on the state. Researchers are interested in taking the title “Analysis of the implementation of the covid 19 prevention protocol and community compliance with the incidence of covid-19 in the public health center in the city of Tangerang”

MATERIALS AND METHODS

This study uses a questionnaire with a quantitative approach. Research with primary data, directly distributing questionnaires to the people who carry out examinations at the Public Health Center. This research conducted in 6 Public Health Centers in Tangerang City, namely Neglasari Public Health Center, Sukasari Health Center, Periuk Health Center, Pasar Baru Community Health Center, Pondok Bahar Health Center, Peninggilan Community Health Center. The research time is October-November 2020.

The subjects in this research activity are people who need services at the Puskesmas in accordance with the inclusion and exclusion criteria. The object studied was community compliance with the Covid-19 prevention protocol which was implemented in Tangerang City. The research was carried out by distributing a questionnaire containing several question items related to knowledge and society about the prevention of Covid-19. The questionnaire used previously has tested its validity and reliability. The questionnaire contains 29 items using a Likert scale using a scoring 1-4.

The population in this research activity is the community at the health center in the city of tangerang. Data from the health office of the city of tangerang shows that there are 36 health centers in the city of tangerang. Then, cluster sampling was carried out so that the implementation of this research was carried out in 6 health centers. Sampling at the 6 health centers was carried out using purposive sampling technique, namely 150 community respondents.

Analysis of quantitative data with univariate analysis and multivariate analysis. Univariate analysis of the variables studied were Prevention Protocol, Community Compliance, Incidence Rate. And the multivariate variables studied were the Protocol for Prevention and Community Compliance with the incidence of covid. The statistical test used in this study is multiple correlation logistic regression, which is a statistical test to determine the relationship between several independent variables and one dependent variable by developing a parsimony model with SEM (Structure Equational Modal) analysis.

RESULTS AND DISCUSSION

Implementation of the Covid - 19 prevention protocol at the Public Health Center in the Tangerang City area

Based on the results of research and data processing carried out and summarized in Table 1, it was found that the implementation of the Covid-19 Prevention Protocol in the Public Health Center in the Tangerang City Region was in the moderate category with a total of 58.7%.

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>24-32 Low</td>
<td>38</td>
<td>25.3</td>
</tr>
<tr>
<td>33-41 Medium</td>
<td>88</td>
<td>58.7</td>
</tr>
<tr>
<td>42-49 High</td>
<td>24</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>150</td>
<td></td>
</tr>
</tbody>
</table>

Table 1. Implementation of the Covid 19 prevention protocol in the Public Health Center in the Tangerang City Region

Sumber: Olah data Primer, 2020
The level of compliance of the people of Tangerang city with the Covid-19 prevention protocol that has been made and is in effect

Based on the results of research and data processing carried out and summarized in Table 2, it was found that the Tangerang City Community Compliance with the Covid-19 prevention protocol was in the low category with a total of 59.3%.

Table 2. Tangerang city community compliance with covid 19 prevention protocol

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>28-40 Low</td>
<td>89</td>
<td>59.3</td>
</tr>
<tr>
<td>41-53 High</td>
<td>61</td>
<td>40.7</td>
</tr>
<tr>
<td>Total</td>
<td>150</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Sumber: Olah data Primer, 2020

The incidence rate of Covid-19 in Public Health Center in the city of Tangerang

Based on the results of research and data processing carried out and summarized in Table 3, it was found that the incidence rate of Covid-19 in Public Health Center in the city of Tangerang was in the low category with a total of 70.7%.

Table 3. Incidence rate of Covid 19 in Public Health Center Tangerang City Region

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>4-8 Low</td>
<td>106</td>
<td>70.7</td>
</tr>
<tr>
<td>9-13 High</td>
<td>44</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>150</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Sumber: Olah data Primer, 2020

Analysis prevention protocol implementation Covid-19 and compliance with the public on the incidence of Covid-19 at the health center city area Tangerang

Based on the results of the research and data processing carried out and summarized in Figure 1, the results showed that the implementation of health protocols was closely related to the level of community compliance, the results obtained were 0.778 or 78%.

The total effect, both direct and indirect, obtained results of 0.326 and 0.325, in this case it can be interpreted that if the community compliance variable increases by 1 unit, the Covid incidence variable in Public Health Center will decrease by 0.326, likewise if the implementation...
of the protocol increases by 1 unit, the Covid-19 incident variable 19 in Public Health Center will experience a decrease of 0.325. This means that the level of compliance with health protocols affects the incidence rate of Covid-19 in Public Health Center in the city of Tangerang.

The dominant factor affecting the level of community compliance with the Covid-19 Pandemic Health Protocol at the public health center in the city of Tangerang.

The dominant factors affecting the level of compliance of the Tangerang city community in implementing the Covid-19 prevention protocol that has been established by the Tangerang City Government

Based on the results of the research and data processing carried out, it turns out that there are three main factors that influence the compliance of the Tangerang community to the Covid-19 health protocol in Tangerang City: Socio-Culture, Value and Legal Norms of 0.760, Demographics of Seeking Eyes of 0.741, Perception of Pandemic Risk of 0.698.

**DISCUSSION**

The results showed that the implementation of the Covid-19 countermeasures health protocol at the Public Health Center in the city of Tangerang showed that the implementation of the Covid-19 Prevention Protocol at the Public Health Center Tangerang City Region 58.7% was relatively running in the moderate category in terms of implementing the Covid-19 protocol in general. has been implemented in the Public Health Center in the Tangerang City area but has not been optimally implemented yet.

The common coronavirus mainly infects adults or older children, causing the common cold. These viruses are mostly transmitted through droplets, and can also spread through the fecal-oral route of transmission, Covid 19 is a contagious disease (7).

There are three approaches to prevent and control infectious diseases, namely: Elimination of the reservoir (source of the disease) by isolating the patient, quarantine; breaking the chain of transmission by improving environmental sanitation and hygiene; Protecting vulnerable people or groups (8). Prevention also applies to covid 19, where the most important thing in health protocols during the covid 19 period is to maintain physical distance from other people is the key to preventing transmission of COVID-19 and adopting a clean and healthy lifestyle such as washing hands effectively. Make sure we are able to maintain a distance in all activities outside the home, including wearing masks (9).

Public Health Center is also a place and public facility is an area where people carry out social life activities and activities to fulfill their daily needs. The risk of movement of people and the gathering of people in public places and facilities, has the potential for transmission of COVID-19 which is quite large. In order for the economy to

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**Table 4. Dominant factors that affect the level of community compliance with the Covid 19 protocol in the Public Health Center Kota Tangerang Region**

<table>
<thead>
<tr>
<th>Item</th>
<th>Scale Mean if Item Deleted</th>
<th>Scale Variance if Item Deleted</th>
<th>Corrected Item-total Correlation</th>
<th>Cronbach’s Alpha if Item Deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perception of Pandemic Risk</td>
<td>9.85</td>
<td>4,453</td>
<td>.504</td>
<td>.698</td>
</tr>
<tr>
<td>Practical reasons everyday</td>
<td>10.14</td>
<td>3,826</td>
<td>.672</td>
<td>.630</td>
</tr>
<tr>
<td>Perception Comply with quarantine and social restrictions</td>
<td>10.36</td>
<td>3,682</td>
<td>.660</td>
<td>.631</td>
</tr>
<tr>
<td>Socio-Cultural Values and legal norms</td>
<td>10.13</td>
<td>4,340</td>
<td>.358</td>
<td>.760</td>
</tr>
<tr>
<td>Livelihood demographics</td>
<td>9.66</td>
<td>4,857</td>
<td>.370</td>
<td>.741</td>
</tr>
</tbody>
</table>

Sumber: Olah data Primer, 2020
continue running, it is necessary to mitigate the impact of the COVID-19 pandemic, especially in public places and facilities. The community must make changes to their lifestyle with a new order and adaptation of habits (new normal) so that they can live productively and avoid the transmission of COVID-19. Discipline in applying the principles of a cleaner and healthier lifestyle is the key in suppressing the transmission of COVID-19 to the community, so it is hoped that the COVID-19 outbreak can end soon (9).

In addition, the Public Health Center which has a function as a community empowerment center, the Public Health Center always strives for the community to have awareness, willingness and ability to serve themselves and the community to live a healthy life and play an active role in fighting for the interests of health (10). Therefore, it is very appropriate for the health center to implement health protocols because it provides a good example to the community. The thing that makes health protocols not optimal in health centers is because the community has not played an active role in fighting for health itself as is the result of community compliance (11).

The results of the research on the level of compliance of the people of the city of Tangerang on the Covid-19 prevention protocol, obtained data that relatively 59.3% of the compliance of the people of the city of Tangerang on the Covid-19 prevention protocol is still relatively low. Compliance is a change in behavior from behavior that does not obey the rules to behavior that obeys the rules (12). Meanwhile, compliance is divided into two, namely full compliance (total compliance) where in this condition serious adherence to health protocols, and patients who are not compliant (non-compliance) where in this situation the patient does not do so (13).

The results of the research on community compliance are still low, this is in accordance with the theory of (14). people still do not realize the importance of health in their lives. Health is still viewed as a low priority in their daily lives even though health is a human right and an investment that needs to be maintained. In fact, to be healthy is actually relatively easy, especially by getting used to living with a clean and healthy lifestyle (PHBS) and protecting the environment.

The results showed that the Covid-19 incidence rate in the Public Health Center in the Tangerang city area showed that the Covid-19 incidence rate in the Public Health Center in the Tangerang city area was still relatively low, this shows that the level of implementation of the protocol at the Public Health Center was going well. However, it can be seen that if the community comes to the Public Health Center there are officers who check the patients who come and if they do not wear masks, they will not be served by paramedics at the Public Health Center in Tangerang City.

Covid 19 is currently classified as a pandemic because of a condition in which a health problem (generally a disease) has a frequency in a short time to increase in height and its spread has covered a large area (15). The incidence rate will rise and fall in line with the implementation of health protocols by individuals themselves. In order for the incidence rate to decrease, which is done by preventing the transmission of infectious diseases, it must be carried out by the community, including those with infectious diseases through clean and healthy living habits (16).

In this study it was also found that there was a significant relationship between the health protocol implementation towards the community, this shows that if the health protocol is implemented comprehensively, the community level will increase, so if the community increases, the level of implementation of the Covid-19 health protocol will be better. thus it is clear that there needs to be a strong synergy between regulations, officials and the community to shoulder to implement these health protocols (17).
The implementation of health protocols and forums has also significantly affected the Covid-19 incidence in the Public Health Center in the city of Tangerang, in this application it is clear that the application of health protocols has an effect on the incidence of Covid-19 in Public Health Center, both the implementation of the health protocol then the incident Covid-19 at Public Health Center will continue to decline, as well as the more people obey the existing health protocols, the incidence of Covid-19 at Public Health Center will decrease.

These results are in line with research conducted by Balitbangkes Kemenkes RI (2020) on community studies of the Appeal to Stay Distance and Clean and Healthy Living Behaviors during the Covid 19 Pandemic, namely how to prevent transmission of the corona virus by implementing a clean and healthy life, maintaining cleanliness and social distancing. The survey was conducted online through social media, so that it can only reach people who use social media and the internet, not using enumerators so it is a perception study. Almost all respondents stated that the warning was important to support the spread of the virus, but there were still positive respondents, Patient Under Supervision (PUS) and People Under Monitoring (PUM) stated that they were ineffective. In addition, the most important respondent in the hand test has a higher SOP, especially after activities outside the home, but there are still many respondents who have not shown their hands before their faces.

There were found three (3) dominant factors that significantly influenced the success of implementing health protocols and community compliance, namely socio-cultural norms, values and laws, demographics and livelihoods and perceptions of pandemic risk. Socio-cultural norms, values and laws very clearly influence each other, and will affect the level of compliance and implementation of existing health protocols, as well as demographics and livelihoods greatly affect the level of community compliance and implementation of health protocols, the community is not unwilling obedient but it is the conditions that force them to continue to work in accordance with their livelihoods, and what is certain is that the perception of the risk of a pandemic from the people of Tangerang City is still low, meaning that the city community is likely to have started to get bored with the current conditions and think that this pandemic is just a lie only and there is no risk to him.

This is in line with the recommendations of Balitbangkes Kemenkes RI (2020) where counseling involves all parties to be able to carry out social activities, especially at the community level. As well as being able to carry out surveillance, including early detection and reporting to the nearest covid center.

In the 1950s, several social psychologists in the United States (US) began to develop the Health Belief Model (HBM) which is still widely used in health behavior research today. HBM can be seen as a combination of philosophical, medical and psychological approaches to explain the adherence or non-compliance of society in carrying out health efforts. This model was developed to explore various long-term and short-term health behaviors. The Health Belief Model (HBM) consists of six components: Perceived susceptibility, perceived severity, perceived benefits, perceived barriers, cues to action, self-efficacy. These six components explain the reasons for the community not to comply with the COVID-19 pandemic health protocol and can also be used for the prevention and transmission of covid 19 (12).

CONCLUSION AND RECOMMENDATION
This research can be useful to provide information about the description of the implementation of the Covid-19 prevention protocol at the Public Health Center in the city of Tangerang with relatively moderate results, 58.7%. Overview The level of compliance of the
people of Tangerang city in implementing health protocols with the results is still relatively low, 59.3%. The description of the Covid-19 incidence rate in the Public Health Center in the Tangerang city area is relatively low, 70.7%. The results of testing between variables showed that there was a significant relationship of 0.78 or 78% between the implementation of health protocols on community compliance. There are relatively similar direct and indirect effects between the implementation of the Covid-19 protocol and community compliance with the Covid-19 incidence rate in the Public Health Center in the Tangerang city area of 0.325 and 0.326. With the knowledge of the above, it is hoped that the local government and other stakeholders can find out and make the basis of facts in making decisions for further handling in order to accelerate the completion of the Covid-19 pandemic, especially in the Tangerang City area. This Covid-19 pandemic must be resolved immediately because its multiplier effects affect all aspects of life in society, so a multidisciplinary approach is needed so that this pandemic can be resolved quickly and accurately.

REFERENCES