The compliance of Pasar Raya Padang merchants in implementing health protocol

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ABSTRACT

Introduction: COVID-19 cases in Indonesia continue to grow, including in Padang, 48% of the largest contributors to cases in West Sumatra. The distribution cluster occurs in the economic center of Pasar Raya market Padang. Traders are very at risk of contracting COVID-19 because of the dense market activity and interaction between sellers and buyers. The first survey by the COVID-19 Task Force showed that 40% were reprimanded for not implementing health protocols. This study aims to determine the factors related to the compliance of Pasar Raya Padang traders in implementing health protocols.

Methods: The type of research conducted is analytical with a quantitative approach to prove the existence of a statistical correlation between the variables studied. The total sample in this study amounted to 103 respondents. The sampling techniques used in this study are a proportional random sampling.

Results: 103 respondents showed that most respondents were female 52.4%. Respondents were dominated by the elderly age group aged 45 years 39.8%, 26-45 years were 31.1% and the young group 29.1%. Variable dependent obedience 53.4% or 55 people. Independent variables, knowledge, attitude, and environment. Respondents have high knowledge 60.2%, positive attitude 51.8% and a supportive social environment 53.4%. Bivariate analysis showed a significant relationship between knowledge, attitude, and environment with compliance with health protocols. Based on qualitative results, the inconvenience of wearing a mask is the main priority of the obstacles found.

Conclusion: There is a significant relationship between knowledge, attitude, and environment with compliance with health protocols. Education about implementing health protocols and the vulnerability of traders to COVID-19 infection, as well as strict monitoring of effectiveness to improve merchant compliance with health protocols.

Keywords: COVID-19, health protocol, market, supervision, strict.


INTRODUCTION

The globe was stunned by the arrival of the Coronavirus Disease 2019 (COVID-19) in 2020. This virus first appeared in Wuhan, China, in December 2019 and has since spread to most countries worldwide. The World Health Organization (WHO) Emergency Committee, on January 30, 2020, declared a global health emergency or Public Health Emergency of International Concern (PHEIC) based on the increasing notification rate of cases in China and international locations. WHO officially declared the Coronavirus outbreak a pandemic on March 11, 2020.1 Globally, COVID-19 has infected 224 countries worldwide, and the total number of confirmed cases as of June 15, 2021, is 175,847,347 cases with a death toll of 3,807,276 cases.2,3

The virus that causes COVID-19 is called SARS-CoV-2. Transmission of this virus is through droplets that come from the mouth and nose of the patient when coughing or sneezing. Common symptoms of COVID-19 infection are fever above 38°C, dry cough, shortness of breath, and several other symptoms that can appear less frequently, such as diarrhea, skin rash, headache, conjunctivitis, and loss of ability to taste or smell.4-6 In severe cases, COVID-19 can cause pneumonia, acute respiratory syndrome, kidney failure, and even death. Symptoms can appear 2-14 days after being exposed to the virus.7-8 The implementation of the health protocol, namely wearing a mask, maintaining distance, washing hands with soap and running water, and avoiding crowds. Various policies have been implemented, starting with Large-Scale Social Restrictions, namely the Enforcement of Restrictions on Community Activities, either full or limited, has been implemented. In mid-July, there was an increase in cases throughout Indonesia, especially in West Sumatra, in the fifth highest group.

Padang, the capital of West Sumatra Province, is in the spotlight. All Channel Senarai Hospitals Mid-July 2021, Director of M. Jamil Padang Central Hospital conveyed a 300% increase in mortality, limited facilities and infrastructure, and a heavy burden. It was feared that the hospital had started queuing up, and the people were told to implement the health protocol, but they did not want to. There is a question of when it will be resolved. ICU with 14 places in the hospital. M. Jamil currently has about 145 beds. Affected are people who have comorbid disease. A person who is positive without symptoms returns home and transmits to his family who has relative comorbidities such as hypertension and diabetes. There are also deadly variants and even different ways this virus can transmit, which kills
more and leads to congenital disease. In cities, coverage is fast, and areas that are the center of crowds are lively places. The market where suppliers of goods gather, who sell merchandise and who buy because they need it is the biggest contributor to the increase in positive COVID-19. No wonder the target to overcome is the market.

The market is included in the category of locations vulnerable to COVID-19 transmission. The condition of the market as a public facility is where daily needs are bought and sold, and the density of human activities at that location comes from various regions. The market has the potential to be a very crowded place, so it is easier to have close contact between asymptomatic COVID-19 sufferers and those around them.9 The Central Statistics Agency (CSA) survey found that 17.32% of traditional markets/street vendors did not implement health protocols.16 The cumulative number of people reprimanded by 3M in the market reached 4,364,384. Even though traders carry out activities that are at risk of contracting COVID-19. Every day buyers come and go to buy necessities. Merchants make close contact with buyers, hold money to return and receive money from buyers, and deliver goods and pick up goods.11

As much as 48% of COVID-19 cases in West Sumatra came from the city of Padang. The total confirmed cases in Padang City as of June 15, 2021, are 21,337 cases with 843 active cases, 374 deaths, and 20,295 recoveries.17 The largest cluster of COVID-19 transmission in Padang City is at Pasar Raya Padang. Pasar Raya Padang is the largest and central market for other markets in Padang City. The Trade Office closed the Pasar Raya Market for five days starting from April 20–24, 2020, for disinfection.13 From the Pasar Raya Padang cluster, 248 positive cases of COVID-19 were found, with details of 89 traders, 16 Trade Service officers and 143 other people from the results.12

The researchers’ initial observations show that market traders have different ages and educational backgrounds. Researchers observed 100 traders, while only 10 out of 100 people wore masks. Some traders used masks but did not comply with the procedures for using masks. Some only covered their mouths, under their chins, and even hung them around their necks. It is easy to find traders who sell in crowds without keeping their distance. The hand washing facilities at Pasar Raya Padang City are also not functioning optimally. The researcher also interviewed 10 traders, where 7 out of 10 respondents stated that wearing masks when trading made them uncomfortable. Besides that, they also said they had never done disinfection around the trading area. The statement that people who have been vaccinated are 100% immune from COVID-19 is also approved by 8 out of 10 traders. The problems above are risk factors for the transmission of COVID-19.14,15

The aim of this research is to determine the factors related to the compliance of Pasar Raya Merchants in implementing health protocols. Specifically, the research aims to 1) knowing the frequency distribution of the compliance of Pasar Raya Padang traders in implementing health protocols, 2) knowing the relationship between knowledge factors about COVID-19 and the compliance of Pasar Raya traders in implementing health protocols, 3) knowing the relationship between attitude factors about COVID-19 on the compliance of Pasar Raya traders in implementing health protocols, and 4) knowing the relationship of social, environmental factors to the compliance of Pasar Raya Padang traders in implementing health protocols.

METHOD

Study Design

The type of research conducted is analytical with a quantitative approach to prove the existence of a statistical correlation between the variables studied. In practice, it is used to test hypotheses, data collection, data analysis, and report the results. This research was conducted using cross sectional study design. Researchers use this design because it is economical in terms of time, and the results can be obtained quickly. The design of this study fits the purpose of this study because it can be used to measure and observe independent variables (knowledge, attitudes, and social environment) and dependent variables (compliance of Padang Market traders) at the same time (point time approach) to be explore and study the correlation of the two variables. A qualitative approach to some respondents who do not comply with implementing the health protocol.

Sample of the Study

Based on the calculation of the Lemeshow formula, the result \( n = 93.306 \) is rounded to 93. It means that the number of samples needed for this study was 94 respondents. To anticipate the dropout, a backup sample of 10% of the total sample is required, which is 10 people. So, the total sample in this study amounted to 103 respondents. The sampling techniques used in this study are a proportional random sampling.

Instrument and Procedures

The instruments used in this study were questionnaires. The questionnaire is the number of written questions used to obtain information from respondents or things known by respondents questionnaire in this study is divided into 5 parts, namely: 1) The respondent’s characteristic sheet includes name, age, gender, address, education, trade type, length of trading history, type of business facilities, frequency of trade, history of COVID-19, vaccination history, and exposure to COVID-19 information. 2) Part A is a questionnaire that measures respondents’ basic knowledge of the etiology, risk groups, transmission, and prevention of COVID-19. 3) Part B is a questionnaire to measure respondents’ attitudes toward the COVID-19 pandemic, which includes barriers to compliance and self-motivation. 4) Part C contains statement items to measure social environment variables. 5) Part D of the section is a compliance variable questionnaire used to evaluate respondents’ practices in suppressing the spread of COVID-19.

Data Analysis

Data analysis is conducted univariate and bivariate. Univariate analysis is performed to obtain frequency distribution results in a unit of variables studied. Bivariate analysis is performed to see the relationship between independent and dependent variables. This analysis was conducted using a Chi-square test that aims to determine if there is a relationship between independent variables and...
dependent variables using computerized processes. Qualitative data was collected by interviewing several patients in the health protocol.

**RESULTS**

Univariate analysis of the distribution of sex, age, and education can be seen in the following table.

The study of 103 respondents showed that the majority of respondents were female, as many as 54 people (52.4%) and 49 people (47.6%). Respondents were dominated by the elderly age group aged 45 years and over, as many as 41 people (39.8%). Respondents in the 26-45 years age group were 32 people (31.1%), and from the young group, as many as 30 people (29.1%). Respondents in the higher education category were 59 (57.3%) and 44 (42.7%).

The results of 103 respondents on health protocols showed that the compliance rate of respondents was mostly compliant (53.4%), the knowledge level of respondents was high (60.2%), the attitude of respondents was mostly positive (51.5%), and the social environment most respondents supported (53.4%).

Some respondents who did not comply were interviewed about why they did not wear masks, and most stated that they were uncomfortable, and others thought that the disease came from God and there was no need to worry. To wash their hands most of the respondents only wash their hands in the bathrooms in the market without soap. A few brought soap from home. In order to keep their distance, interviewed respondents said that the existing location conditions made them unable to keep their distance due to the need for activities. Buyers are not always 1 meter apart when paying, nor do they approach buyers to explain their merchandise. If there is a sudden inspection in health protocols, such as Public Order Enforcers Police, they immediately use it.

**DISCUSSION**

Results of the study of 103 respondents showed that the majority of respondents were female 52.4%. Respondents were dominated by the elderly age group aged 45 years 39.8%, 26-45 year were 31.1% and the young group 29.1%. The aim of Riyadi and Larasaty’s study is to determine how to assess community adherence to health protocol implementation in daily life and to identify demographic and social characteristics that influence adherence.
to protocol implementation in Indonesian society. The empirical findings indicate that, on average, respondents adhered to the implementation health regimen, with a 7.74 adherence index. When compared to female respondents, male respondents have a somewhat lower compliance level score (7.47 vs. 8.01), which is surprising given their gender. This demonstrates that more female respondents follow through on putting health precautions in place in an effort to safeguard themselves from contracting the COVID-19 virus and stop its spread. In addition, there is a tendency for young individuals to be less interested in application health protocol, depending on their age group. In comparison to older respondents, young respondents have a significantly low average compliance index. When it comes to following health standards, respondents over 50 had an average compliance level that was higher than 8, or 8. Residents above the age of 50 are known to fall under the category of vulnerable populations. Older respondents will be more compliant in putting the plan into practice since they are more susceptible to infection and exposure from the COVID-19 virus.

Bivariate analysis showed a significant relationship between knowledge, attitude, and environment with compliance with health protocols. Mardiati and Ghozali's study aims to determine the relationship between knowledge and compliance to COVID-19 prevention health protocols in adolescents at Tenggarong 2 State Vocational School. The results of the research show that there is a significant relationship between knowledge and compliance to COVID-19 prevention health protocols in adolescents at Tenggarong 2 State Vocational School.

The purpose of Ikhsan's study is to determine the relationship knowledge and attitudes towards community compliance in implementing health protocols in the new normal era in the City Bengkulu. Data analysis through chi-square test, with p value = 0.000 <0.05 which means there is a relationship between knowledge and 3M compliance. Odds ratio with a value of 5.220 which means less knowledge will be at risk 5.220 times for disobedience using masks and good knowledge of will at risk of 5.220 times adherence to wearing a mask. The data obtained through the chi-square test, with p value = 0.000 <0.05 which means there is a relationship between attitude and compliance using a mask.

Rachmani, et al showed that there is relationship between attitudes and community compliance related to COVID19 prevention. Based on the research results of Phitri and Widiyaningsih shows that respondents who have a bad attitude tend to have low compliance while the respondents who have a good attitude mostly have obedience tall one. This shows that people's attitudes about using masks, maintaining distance and washing hands will affect the implementation behavior compliance with health protocols. The relationship between attitudes about health protocols and implementation of health protocol compliance has an important role in anticipating recurring incident.

CONCLUSION

There is a significant relationship between knowledge, attitude and environment with compliance with health protocols. Based on qualitative result, the inconvenience of wearing a mask is the main priority of the obstacles found. Merchants comply with health protocols if there are officers who carry out supervision. Education about implementing health protocols and the vulnerability of traders to COVID-19 infection, as well as strict monitoring of effectiveness to improve merchant compliance with health protocols. Further research is needed to find out more about the factors that influence the compliance of Pasar Raya Padang merchants in implementing health protocols.

Table 1. Frequency Distribution by Compliance, Knowledge, Attitude, and Social Environment.

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Frequency(f)</th>
<th>Percentage(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compliance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Obedient</td>
<td>55</td>
<td>53.4</td>
</tr>
<tr>
<td>Disobeying</td>
<td>48</td>
<td>46.6</td>
</tr>
<tr>
<td>Knowledge</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>62</td>
<td>60.2</td>
</tr>
<tr>
<td>Low</td>
<td>41</td>
<td>39.8</td>
</tr>
<tr>
<td>Attitude</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Positive</td>
<td>53</td>
<td>51.5</td>
</tr>
<tr>
<td>Negative</td>
<td>50</td>
<td>48.5</td>
</tr>
<tr>
<td>Social Environment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Support</td>
<td>55</td>
<td>53.4</td>
</tr>
<tr>
<td>Not Supported</td>
<td>48</td>
<td>46.6</td>
</tr>
</tbody>
</table>

Table 2. Chi-Square Test Results.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Compliance</th>
<th>p-value</th>
<th>OR (95%CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge</td>
<td>f %</td>
<td>f %</td>
<td>10.222</td>
</tr>
<tr>
<td>High</td>
<td>46 74.2</td>
<td>16 25.8</td>
<td>(4021-25.986)</td>
</tr>
<tr>
<td>Low</td>
<td>9 22.0</td>
<td>32 78</td>
<td>22.500</td>
</tr>
<tr>
<td>Attitude</td>
<td>f %</td>
<td></td>
<td>(8.092-62.560)</td>
</tr>
<tr>
<td>Positive</td>
<td>45 84.9</td>
<td>8 15.1</td>
<td>0.000</td>
</tr>
<tr>
<td>Negative</td>
<td>10 20.0</td>
<td>40 46.6</td>
<td>(6.436-45.431)</td>
</tr>
<tr>
<td>Social Environment</td>
<td>f %</td>
<td></td>
<td>17.100</td>
</tr>
<tr>
<td>Support</td>
<td>45 81.8</td>
<td>10 18.2</td>
<td>(6.436-45.431)</td>
</tr>
<tr>
<td>Not Supported</td>
<td>10 20.8</td>
<td>38 79.2</td>
<td></td>
</tr>
</tbody>
</table>
DISCLOSURES

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Conflict of Interest
No potential conflict of interest relevant to this article was reported.

Author Contribution
All authors similarly contribute to the think about from the investigate concepts, information acquisitions, investigation, factual investigations, changing the paper, until detailing the consider comes about through publication.

Ethical Consideration
Ethical approval was obtained from The Health Research Ethics Committee of Universitas Andalas (No.115/EC-KEP-UNANDVII/2021).

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