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Behavior Analysis of Covid-19 Prevention in Community of Productive Age in the City of Palembang

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Abstract

Reported cases of Covid-19 were found in 203 countries around the world in early April 2020, Indonesia showed a large number of confirmed cases and deaths in the Covid-19 outbreak. The first known case of Covid-19 in Palembang occurred in March 2020. Covid-19 continues to spread to all areas in South Sumatra, including the city of Palembang. In the grouping of the population based on age and ability, there are two groupings, namely, the non-productive population group and the productive age group. The productive age group is the population aged between 19-60 years. The productive age group is the largest population who plays an important role. Therefore, people at productive age do the most activities so that good behavior is needed to comply with the implementation of health protocols. This research was conducted to find out how the description of knowledge, attitudes and behavior of the people of Palembang City in preventing Covid-19. This research is important to do to find out the next strategic steps that can be done through community empowerment. The method used in this study uses quantitative methods. Respondents in this study amounted to 119 people of productive age in the city of Palembang. Based on the results of the research conducted, the results obtained in the form of characteristics of people of productive age based on age, gender, last education, occupation and length of working hours, knowledge of productive age people's behavior and attitudes towards productive age people's behavior. The results obtained from this study show that there is a relationship between knowledge of the behavior of people of productive age regarding Covid-19 who get a p-value of 0.003, there is a relationship between attitudes towards the behavior of people of productive age regarding Covid-19 with a p-value of 0.000 and the presence of the relationship between behavior towards Covid-19 preventive behavior with a p-value of 0.000. The conclusion in this study is that there is no relationship between the characteristics of respondents of productive age that affect the behavior of preventing Covid-19 in Palembang City, but knowledge of Covid-19 prevention, Covid-19 prevention attitudes and community prevention behavior in suppressing the number of Covid-19 in the city of Palembang very influential.

Keywords
COVID-19; Productive age; COVID-19 preventive behavior; Health Protocol

I. Introduction

The Covid-19 pandemic arises when the virus is known to spread from person to person in a short time and with symptoms such as high fever, cough, shortness of breath, no appetite and weakness. Covid-19 was first reported in Wuhan, Hubei, China in December 2019, and on March 11, 2020 the World Health Organization (WHO) declared that Covid-19 had become a worldwide pandemic disease (Andrews, Foulkes & Blakemore, 2020).

The Covid-19 outbreak was declared a global pandemic with a 13-fold increase in the number of cases reported outside China, over a few weeks, affecting more than 2.3 million people in 185 countries worldwide. Of the total global burden, 120,000 confirmed cases and 5784 deaths were reported by EMRO as of April 18, 2020. (Mansuri, Zalat, Khan, Alsaedi & Ibrahim, 2020). The outbreak of this virus has an impact of a nation and Globally (Ningrum et al, 2020). The presence of Covid-19 as a pandemic certainly has an economic, social and psychological impact on society (Saleh and Mujahiddin, 2020). Covid 19 pandemic caused all efforts not to be as maximal as expected (Sihombing and Nasib, 2020).

Reported cases of Covid-19 were found in 203 countries around the world in early April 2020, Indonesia showed a large number of confirmed cases and deaths in the Covid-19 outbreak, and prevention strategies were needed for the more severe spread of the disease (Yanti et al., 2020).

Based on data from the Covid-19 Task Force, confirmed cases of Covid-19 in Indonesia as of February 22, 2021 were 1,288,833 with 34,691 deaths occurring (Covid-19 Task Force, 2021). Palembang City is the city with the highest number of Covid-19 cases in South Sumatra Province. Confirmation cases of Covid-19 in Palembang City as of February 22, 2021 were 7,641 with 331 deaths occurring (Palembang City Health Office, 2021).

The number of positive cases in Indonesia is dominated by the age of 19-45 years by 55%, this age is the productive age. This has the potential to make them carriers who can transmit Covid-19 to their families, relatives, or people of vulnerable age living with them (Adisasmito, 2020).

The health protocol actions set by WHO and the Indonesian Ministry of Health will not run until the community is equipped with good knowledge, attitudes and skills in its implementation. Socialization and intensive health promotion efforts are needed so that there are changes in the community's cognitive, affective and psychomotor in preventing Covid-19 (Saqlain et al., 2020).

In handling Covid-19, the government stated that a number of regions must innovate, one of which is monitoring the movement of community mobility as the key to controlling the outbreak. Prevention and control of the transmission of Covid-19 infection must be carried out by various parties. Not only the government, world organizations, health facilities, medical personnel but the community also have an important role in breaking the chain of transmission of Covid-19 so as not to lead to new sources of transmission. Discipline and concrete actions from the government and the community regarding Covid-19 will always reduce the number of cases of Covid-19 infection, so that the Covid-19 pandemic period can end.

Based on these factors, research is needed on the behavior of preventing Covid-19 in people of productive age in the city of Palembang. This research was conducted to find out how the description of knowledge, attitudes and behavior of the people of Palembang City in preventing Covid-19. This research is important to do to find out the next strategic steps that can be done through community empowerment

II. Research Method

This research is an observational quantitative type of research with a cross sectional study design regarding Covid-19 prevention behavior in people of productive age. This research was conducted with a cross-sectional approach.

The minimum sample in this study was 119 respondents using program calculationssample size 2.0.The sampling technique for the respondent sub-districts in this study was purposive sampling, namely the sub-districts were selected by determining certain criteria, namely the selected sub-district because it was confirmed that the highest Covid-19 area was confirmed. District in Palembang City. Data analysis in this study used univariate, bivariate, multivariate analysis using SPSS version 22.

III. Results and Discussion

Table 1. Distribution of Respondents Based on Characteristics

Variable	Frequency (n)	Percentage (%)	Min	max	Average
Age Group (Years)					
19-29	59	49.6			
30-45	54	45.4	19	57	31
46-60	6	5			
Gender					
Man	59	49.6			
Woman	60	50.4			
Last education					
<high school	24	20.2			
Senior High School	40	33.6			
D3	20	16.8			
S1	31	26.1			
>S1	4	3.4			
Work					
civil servant	18	15.1			
Private	67	56.3			
Other	34	28.6			
Working Time					
>8	16	13.4			
8	61	51.3			
<8	42	35.3			

Table 2. Frequency Distribution of Knowledge of the productive age community regarding Covid-19

Knowledge	Frequency	Percentage (%)
Not good	104	87.4
Enough	15	12.6
Amount	119	100

Table 3. Frequency Distribution of People's Attitudes of Productive Age Regarding Covid-19

Attitude	Frequency	Percentage (%)
Agree	72	60.5
Strongly agree	47	39.5
Amount	119	100

Table 4. Frequency distribution of productive age community behavior regarding Covid-19

Behavior	Frequency	Percentage (%)
Well	33	27.7
Enough	55	46.2
Not good	31	26.1
Amount	119	100

The results from table 1 above show that the average age of the respondents is 31 years with the lowest age being 19 years and the highest age being 57 years. Characteristics of respondents based on gender showed that the majority of respondents in this study were 59 men (49.6%), while 60 female respondents (50.4%). Characteristics of respondents based on their latest education showed that the majority of respondents in this study had high school education, namely 40 people (33.6%), S1 as many as 31 people (26.1%), D3 as many as 20 people (16.8%), the last education was less from high school as many as 24 people (20.2%) and education more than S1 as many as 4 people (3.4%).

The results from table 2 above show that the majority of respondents have poor knowledge, namely 104 respondents (87.4&). 15 respondents have sufficient knowledge (12, 6%).

The results of table 3 above show that the majority of respondents in this study were 72 respondents (60.5%), while 47 respondents (39.5%).

Table 4 above shows that from 119 respondents in this study, 33 good behavior (27%), 55 moderate behavior (46.2%) and 31 bad behavior (26.1%).

Table 5. The Relationship of Knowledge with COVID-19 Prevention Behavior in People of Productive Age

Knowledge	COVID-19 Prevention Behavior						Amount		p-value	OR (95%CI)
	Not good		Enough		Well					
	n	%	n	%	n	%	n	%		
Enough	4	26.7	10	66.7	1	6.7	15	100	0.033	3,135 (16,697-22,968)
Well	29	27.9	45	43.3	30	28.8	104	100		

Table 6. The Relationship between Attitudes and COVID-19 Prevention Behaviors in People of Productive Age

Attitude	COVID-19 Prevention Behavior						Amount		p-value	OR(95%CI)
	Not good		Enough		Well					
	n	%	n	%	n	%	n	%		
Strongly Disagree	24	51.1	18	38.3	5	10.6	47	100	0.000	2,111 (17,721-21,945)
Don't agree	9	12.5	37	51.4	26	36.1	72	100		

Table 7. Behavior Relationship with COVID-19 Prevention Behavior in People of Productive Age

Behavior	COVID-19 Precautionary Behavioral Measures						Amount		p-value	OR (95% CI)
	Not good		Enough		Well					
	n	%	n	%	n	%	n	%		
Not good	33	100	0	0	0	0	33	100	0.000	2,392 (37.274 – 42.059)
Enough	0	0	55	100	0	0	55	100		
Well	0	0	0	0	31	100	31	100		

The results of the bivariate analysis from table 5. can be seen that the knowledge of respondents who have sufficient value is 66.7% in COVID-19 prevention behavior and the knowledge of respondents who have good value with COVID-19 prevention behavior is 43.3%. The results of the statistical test obtained a p-value of 0.033 which is smaller than alpha ($\alpha = 0.05$), which means that at 95% there is a relationship between knowledge and COVID-19 prevention behavior.

The results of the bivariate analysis from table 6. can be seen that the attitude of respondents strongly disagree with the behavior of preventing COVID-19 which is not good as much as 51.1% and the attitude of disapproving of the attitude of respondents with the behavior of preventing COVID-19 is sufficient as much as 51.4%. Statistical test results obtained p-value of 0.000 smaller than alpha (= 0.05) which means that at a degree of 95% there is a relationship between attitudes and behavior to prevent COVID-19 in people of productive age.

The results of the bivariate analysis from table 7. can be seen that the respondents who have bad behavior are 33 respondents, 55 respondents have sufficient behavior and 31 respondents have good behavior. The statistical test results obtained a p-value of 0.000 which is smaller than alpha (= 0.05) which means that at the 95% degree there is a relationship between behavior and COVID-19 preventive behavior.

Table 8. Logistics Multivariate Analysis Results

Variable	B	SE	P-Value	OR	95% CI	
					Lower	*Upper*
Knowledge of the productive age community about COVID-19	0.397	0.386	0.034	1,487	0.698	3,169
The attitude of the productive age community regarding COVID-19	1.375	0.318	0	3,957	2,122	7,379
The behavior of the productive age community regarding COVID-19	1.087	0.329	0	3,966	1,152	8,366

Based on the multivariate analysis above, it is known that there is a significant relationship between the variables of knowledge of the productive age community about COVID-19, the attitude of the productive age community regarding COVID-19 to the behavior of the productive age community regarding COVID-19 (p-value <0.05). The OR value states that respondents in the productive age community's knowledge about COVID-19 will increase the behavior of the productive age community 1.487 times greater than respondents who do not have knowledge, the productive age community's attitude about COVID-19 will increase the preventive behavior of the productive age community regarding COVID-19 as much as 3.

Discussion

Respondents in this study were found that at most 19-29 years old, then 30-45 years old, respondents at that age were of productive age who were vulnerable to COVID-19 transmission, which mostly carried out activities outside the home, interacted with other people and had high mobility that allows transmission to other people and the surrounding environment. That there is no relationship between age and COVID-19 prevention behavior with Covid-19 prevention behavior. The age range of 35-45 is a mature age with the consideration that someone at that age will have a good grasping pattern and thinking power so that their behavior will also get better.

So that the discussion about the characteristics of respondents in productive age communities does not have a relationship with COVID-19 prevention. The results of this study are in line with those of Prihati, et al (2020) with statistical test results obtained p-value = 0.14 which means > , it can be concluded that the characteristics of respondents do not have a significant relationship with behavior in preventing COVID-19

Knowledge about COVID-19 is said to be in the bad category if the respondent's knowledge score is <60, it is said to be sufficient if the respondent's knowledge score is 60-75 and it is said to be good if the respondent's knowledge score is 76-100. Based on bivariate analysis, it is said that knowledge of preventive behavior in people of productive age has sufficient knowledge of 12.6% compared to respondents who have poor knowledge of 87.4%. The results of the Chi-Square test at the 95% confidence level. The p-value = 0.033, so that information can be obtained that there is a relationship between knowledge and prevention behavior of people of productive age in the city of Palembang.

Attitudes are said to be in the category of strongly agree, namely 4, agree 3, disagree 2 and strongly disagree 1. Based on bivariate analysis, it shows that respondents agree as much as 60.5% and respondents agree as much as 35.5%. The results of the Chi-Square test at the 95% confidence level. The p-value = 0.000, so that information can be obtained that there is a relationship between attitudes and preventive behavior in people of productive age in the city of Palembang.

Behavior about COVID-19 is said to be in the bad category if the respondent's behavior score is <60, it is said to be sufficient if the respondent's behavior score is 60-75 and it is said to be good if the respondent's behavior score is 76-100. Based on the bivariate analysis, it is said that the behavior towards preventive behavior in the productive age community has good behavior as much as 27.7%, 46.2% is sufficient compared to respondents who have bad behavior, namely 26.1%. The results of the Chi-Square test at the 95% confidence level. The p-value = 0.000, so that information can be obtained that there is a relationship between behavior and preventive behavior in people of productive age in the city of Palembang.

IV. Conclusion

The conclusions of this study are:

1. The characteristics of the respondents of productive age are the majority aged 19-29 years (49.2%), with female sex 60 people (50.4%), having high school education last 40 people (33.6%), having private jobs 67 people (56.3%) and 8 hours of working time (51.3%). So that the characteristics of respondents of productive age regarding COVID-19 prevention behavior are not related because the results of the statistical tests that have been carried out in this study show that all p-value characteristics have more than 0.05.
2. The frequency of knowledge of the productive age community regarding COVID-19 is at a poor level of 87.4% and has sufficient knowledge of 12.6%. The frequency of the

attitude of the productive age community regarding COVID-19 is 60.5% agree and 39.5% strongly agree. The frequency of COVID-19 prevention behavior for people of productive age is at 27.7% good behavior, 46.2% is sufficient and 26.1% is not good.

3. Knowledge with COVID-19 prevention behavior in people of productive age has a relationship with a p-value of 0.033.
4. Attitudes with COVID-19 prevention behavior in people of productive age have a relationship with a p-value of 0.000.
5. Behavior with COVID-19 preventive behavior in productive age communities has a relationship with a p-value of 0.000.

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