



The Correlation Between Pregnant Women Knowledge About Covid-19 and Its Transmission Prevention Behavior During Pregnancy

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ABSTRACT

Background: Coronavirus Disease (COVID-19) is an infectious disease that can be transmitted from human to human through coughing/sneezing droplets (droplets). Pregnant women are a group that is vulnerable to the risk of being infected with COVID-19, furthermore it is necessary to take some preventive actions toward COVID-19. According to the literature review and previous research, knowledge is one of the factors that influence health behavior.

Objective: This study aims to determine the correlation between knowledge of pregnant women about COVID-19 and the behavior to prevent transmission.

Methods: The type of research method is cross-sectional. The samples in this study were all populations that met the inclusion and exclusion criteria with consecutive sampling techniques. The independent variable of this study is the knowledge of pregnant women about COVID-19 and the dependent variable is prevention behavior

Results: Based on the results of this study, showed that the majority of respondents have good knowledge, 33 people (73.3%) and have good behavior in preventing COVID-19, 34 people (74.6%). The results of the bivariate analysis showed that there was a correlation between the knowledge of pregnant women about COVID-19 and its prevention behavior during pregnancy.

Conclusion: The majority of respondents have good knowledge and have the behavior of preventing the transmission of COVID 19 in the good category. Besides, there is a significant correlation between the knowledge and behavior to prevent transmission of COVID 19 with p value of 0.001 (p value <0.05).

Keywords: COVID-19, Knowledge, Prevention Behavior

INTRODUCTION

Coronavirus Disease (COVID-19) is an infectious disease caused by the Severe Acute Respiratory Syndrome Coronavirus-2 (SARS-CoV-2). This virus can be transmitted from human to human through coughing/sneezing (droplets) and has spread widely in China and more than 190 other countries¹. On March 12, 2020, WHO declared COVID-19 a pandemic and the mortality rate of COVID-19 in Indonesia is the highest in Southeast Asia².

According to the data from the Indonesian Obstetrics and Gynecology Association³, 13.7% of pregnant women are more easily to be infected with Covid-19 than those who are not pregnant. This is because pregnant women experience a condition where there is a physiological change which makes the partial immunity decrease, furthermore they are vulnerable for suffering diseases or viruses that can have a serious impact on pregnant women such as abortion, premature delivery and other pregnancy complications⁴. Meanwhile, since April 2020-April 2021, it has been recorded that 536 pregnant women have been exposed to Covid-19. Then, 51.9 percent from that number are asymptomatic or OTG⁵.

In addition, the situation of the COVID-19 pandemic makes pregnant women afraid of being infected and anxious, such as wondering whether the mother and fetus will be healthy and free from COVID-19 infection, or wondering about the safety for pregnancy check-ups during the pandemic. This condition encourages pregnant women to seek information about COVID-19 and its prevention efforts, which is followed by the rise of false information (hoax) through information technology. According to Lawrence Green in Notoatmodjo (2011) knowledge is one of the factors that influence health behavior and is included in the predisposing or causing factor. A behavior that is shown by a person is based on the knowledge he

or she has. Knowledge can be obtained by someone from various sources of information. Knowledge of pregnant women about COVID-19 obtained from various sources of information affects the behavior of mothers and can be very dangerous if incorrect information is practiced by pregnant women⁶. If that condition is allowed to continue, it will have a bad impact, furthermore the researchers are interested in conducting a research about a correlation between knowledge of pregnant women about COVID-19 and the behavior to prevent transmission during pregnancy.

The hypothesis of this study is that there is a correlation between the knowledge of pregnant women about COVID-19 and its prevention behavior during pregnancy. The purpose of this study was to determine the correlation between knowledge of pregnant women about COVID-19 and behavior to prevent transmission during pregnancy.

METHOD

This study used a quantitative research method with a cross sectional approach. The population of this study is pregnant women who perform antenatal care or ANC (Ante Natal Care) from July to August 2021 in Mojo Health Center Surabaya.

The sampling technique used was non-probability sampling with a consecutive technique, namely a sampling technique in which all subjects who came and met the selection criteria were included in the study until the required number of subjects was fulfilled. The variables in this study consisted of the independent variable, namely knowledge about COVID-19 and the dependent variable was the prevention of transmission.

Collecting data using a questionnaire sheet that has been tested for validity and reliability to 45 respondents who have the same criteria as the respondents in the study.

Data analysis used in this research is univariate analysis using frequency distribution and bivariate analysis using chi square test.

RESULT

Respondents Characteristics

Table 1. Frequency Distribution of Respondents Based on Age, Education, Occupation, at the Mojo Public Health Center Surabaya

Characteristics	Frequency	Percentage (%)
Age		
20-29 years old	22	48,9
30-39 years old	22	48,9
> 39 years old	1	2,2
Profession		
Civil Servant	5	11,1
Private	18	40,0
Entrepreneur	3	6,7
Housewife	19	42,2
Education		
Elementary School	0	0
Junior high school	1	2,2
Senior High School	22	48,9
Diploma	19	42,2
3/Diploma		
4/Bachelor Degree	3	6,7
Master Degree		
Total	45	100

Based on table 1, it shows that from 45 respondents the majority are 20-39 years old, with each 22 respondents (48.9%), for the senior high school education category there are 19 respondents (48.9%), with the status of housewives there are 19 respondents (42.2%)

Univariate Analysis

Table 2. Frequency Distribution of Respondents Based on Knowledge of Pregnant Women About Covid-19 and Prevention Behavior of Transmission During Pregnancy at Mojo Health Center Surabaya.

Variable	Frequency	Percentage (%)
Knowledge		
Good	33	73,3
Enough	7	15,6
Less	5	11,1
Total	45	100
Behavior		
Good	34	75,6
Less	11	24,4
Total	45	100

According to table 2, it can be concluded that most of the respondents, namely 33 (63.1%) respondents have knowledge in the good category and 34 (75.6%) respondents have the behavior to prevent transmission of COVID 19 in the good category.

Bivariate Analysis

Table 3. The correlation between knowledge of pregnant women about Covid-19 and the transmission prevention behavior during pregnancy at the Mojo Public Health Center in Surabaya.

Knowledge	Preventive Behavior				Total		P value
	Good		Less		n	%	
Good	17	85,0	3	15,0	20	100,0	0,008
Enough	12	70,6	5	29,4	17	100,0	
Less	2	25,0	6	75,0	8	100,0	
Total	31	68,9	14	31,1	45	100,0	

Based on table 3 it showed that from 20 respondents who have good knowledge, there are 3 respondents (15.0%) whose behavior is not good in preventing the transmission of COVID 19, then respondents who have sufficient knowledge with good prevention behavior there are 12 respondents (70.6 %) and less prevention behavior there are 5 respondents (29.4%), while respondents who less knowledge with good behavior in preventing the transmission of COVID 19 are 2 respondents (25%). The results of the statistical test using the Chi square test

obtained a P value of 0.008 (p value <0.05) which means that there is a correlation between the knowledge factor and the transmission prevention behavior of COVID 19 at the Mojo Health Center Surabaya.

DISCUSSION

The characteristics of respondents in this research sample are age, occupation, and education of pregnant women. In this study, most of the age characteristics were 20-39 years old. In addition, at that age there will be an enhancement in someone's physical performance and skills⁷. According to Lawrence Green, age is a factor that can encourage the creation of a behavior⁸.

Based on the education level, most of the respondents are senior high school (SMA) education. The level of education is basically one of the factors that influence someone's knowledge and actions because knowledge will directly affect behavior⁹. In this study, the majority of respondents have jobs. The work environment can provide knowledge or experience to someone either directly or indirectly which will also affect the process of someone receiving knowledge¹⁰.

According to Notoadmodjo (2011) Knowledge is the result of someone's understanding of sensing objects. The existence of information sources can increase the knowledge of someone. Meanwhile, easy access to information related to COVID-19 can make it easier also for people to get information and increase knowledge. Television and print media are easy to access for the public regarding cases and prevention of Covid-19, including information from social media. This is in line with this study, which found that the level of knowledge of pregnant women was mostly good and the majority of prevention behaviors were good. Based on what the researchers personally think, pregnant women who have good knowledge because they get a lot of information from both social media and print media.

The researchers concluded that knowledge is one of the factors that influence behavior. Therefore, less knowledge of pregnant women can have an impact on their prevention behavior. Hence, it is very important for pregnant women to seek information and increase knowledge related to COVID-19, furthermore that pregnant women can take good precautions. Pregnant women during the COVID-19 pandemic are required to comply with health protocols such as wearing masks when doing activities on the outside, washing hands using soap and running water as often as possible, maintaining a minimum distance of 1-2 people from other people, avoiding crowds, consuming nutritious food to increase body immunity, and pregnant women are required not to carry out monthly health checks such as when it is not a pandemic, unless pregnant women having complaints that there are danger signs.

In this study, the results of statistical tests showed that there was a correlation between the knowledge of pregnant women about Covid-19 and the transmission prevention behavior at Mojo Health Center Surabaya with a p value of 0.008 (p value <0.05). This study also showed that most of the respondents who had sufficient and good knowledge also carried out good behavior related to the prevention of Covid-19. This can be seen from the answers of respondents who have sufficient and good knowledge and have implemented health protocols during the Covid-19 pandemic.

This is in line with research conducted by Rachmani et al (2020), namely there is a significant correlation between knowledge about Covid-19 and Covid-19 prevention practices on the society in Depok City, because the majority of people who have good knowledge carry out preventive behavior well compared to the society who are less knowledge¹¹. This case is supported by the theory of adaptation namely the level of a person good knowledge will encourage that person to take good actions

also¹². A research conducted by Santoso et al (2020) in the City of Kediri also stated that there was a correlation between the level of knowledge and Covid-19 prevention measures. The results of Santoso's research showed that respondents who have good knowledge also take good preventive actions¹³.

According to the theory, knowledge is an important thing that can influence the formation of individual behavior. Knowledge is the basis of a person in making a decision and determining an action in dealing with a problem¹⁴. In addition, Lawrence Green in Notoatmodjo (2012) stated that knowledge is one of the factors which influence health behavior and it is also included in predisposing factors or causal factors. Someone will show his or her behavior based on knowledge he or she has. Thus, if someone has more knowledge, he or she will also have good behavior. So the better the knowledge, the better the behavior, and it will be the opposite, namely if someone has less knowledge, furthermore he or she will also have less behavior. This case can be proved in this study, where respondents whose behavior is not good in preventing the transmission of COVID are respondents who have less knowledge, and the opposite also namely respondents whose behavior is good the majority are respondents who have good knowledge⁸.

CONCLUSION

The majority of respondents at the Mojo Health Center Surabaya have good knowledge and have the behavior to prevent the transmission of COVID 19 in the good category.

There is a significant correlation between knowledge and behavior to prevent a transmission of COVID 19 at Mojo Health Center Surabaya with p value 0,008 (p value < 0,05).

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