DETERMINANTS OF COVID-19 PREVENTION BEHAVIOR IN WOMEN OF REPRODUCTIVE AGE IN SOUTH TANGERANG CITY YEAR 2020

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ABSTRACT

Coronaviruses, which are responsible for diseases in humans and animals, including Middle East Respiratory Syndrome (MERS), Severe Acute Respiratory Syndrome (SARS), and COVID-19, are a group of viruses known to cause respiratory infections in humans. Monitoring data for COVID-19 in South Tangerang City until February 2 2023 states that South Tangerang City is in the first level with the highest cases in Banten Province with 117,671 positive confirmed cases. This study aims to determine the determinants associated with COVID-19 prevention behavior in Women of Reproductive Age. This research was conducted in January 2023 using a cross-sectional design. The research sample was taken using the One-Stage Cluster and found as many as 190 women aged between 15-49 years. The results showed that most of the behaviors for preventing COVID-19 were good, most were aged <25 years (63.7%), had secondary education (58.9%), working status (60%), good knowledge (95, 3%) and good attitude (52.1%). In the variables of age, education, work, and knowledge, the results obtained were p value > 0.05. Meanwhile, the attitude variable obtained a p-value < 0.05. Age, education, occupation, and knowledge are not related to COVID-19 prevention and only attitude factors are related to COVID-19 prevention behavior. It is recommended for the community to improve good attitudes to produce good COVID-19 prevention behavior.

Keywords: COVID-19, Behavior, Women of Reproductive Age

INTRODUCTION

Coronaviruses, which are responsible for diseases in humans and animals, including Middle East Respiratory Syndrome (MERS), Severe Acute Respiratory Syndrome (SARS), and COVID-19, are a group of viruses known to cause respiratory infections in humans.¹ This disease and the disease it causes had never been detected in humans before the outbreak in Wuhan, China in December 2019 and
spreading to many other countries. Severe Acute Respiratory Syndrome with the severity of the virus that causes Coronavirus Disease-2019 (COVID-19), also known as SARS according to some studies, known as Coronavirus 2 (SARS-COV2) (transmitted between animals and humans) from camels to humans via civet cats (civet cats). Since mid-December 2019 the coronavirus disease known as COVID-19 has spread to almost all over the world and has become a global pandemic.

Based on world data, as of February 1, 2023, the United States is the country with the highest positive cases in the world, with a total of 102,179 million positive cases. Globally, COVID-19 infection has reached 670,901,884 million positive cases and 6,835,274 million deaths. According to statistical data, it is stated that in Indonesia positive cases were confirmed from December 2019 to February 1, 2023, and a total of 6,730,289 positive cases were found. million cases and a total of 160,817 thousand cases of death. Banten Province is in fifth place with 363,348 thousand total positive cases, 358,533 thousand recovered, and 2,982 total deaths.

According to Global Health data, the number of positive cases of COVID-19 whose sex is known as of November 2021 shows positive cases of COVID-19 in women totaling 90,192,768 positive cases. Positive cases of COVID-19 in Indonesia as of 14 January 2023 by gender show the number of positives in women is greater than that of men, namely 50.4%. According to statistical data on women until Friday 28 May 2021, 51.3% of women in Indonesia are receiving treatment due to contracting the COVID-19 coronavirus. This number exceeds the proportion of men, namely 48.7%. However, the percentage of men who died from corona was higher than women. Men account for up to 56.3% of all deaths caused by coronavirus, compared to women's percentage of 43.7%. The results of previous studies showed that the Long-COVID symptom cluster of 1.2 million people who had symptoms of SARS-CoV-2 infection was more common in women aged 20 years or older (10.6%) with 3 months after symptomatic infection with SARS-CoV-2. 2 compared to men aged 20 years or more (5.4%).

Every resident must be able to maintain health by complying with health protocols to help break the chain of disease transmission in people of all ages and walks of life, including Women of Reproductive Age, who play an important role in the family and can meet the needs of all family members. Women of Reproductive Age are women aged 15 to 49 years with unmarried, married, or widowed status who are included in the reproductive age category. Low knowledge about risks and how to stop transmission of the virus is a factor that can affect Women of Reproductive Age's awareness of preventing COVID-19. Similar to research conducted in North Kuta District, Badung Regency, it was revealed that most of the respondents or 71.3% were in the good knowledge category and most, or 80.6% obtained information about COVID-19 through social media and WUS behavior in preventing the spread of COVID-19 has shown adherence to health protocols, namely 92.6% by washing hands properly followed by 91.8% using masks properly.
Factors that influence COVID-19 prevention behavior in WUS are sociodemographic factors consisting of a person's age, education, and occupation. The results of research on the people of Paya Bujok Blang Pase Village, Langsa City showed that there was a relationship between age, education, and knowledge with the behavior of preventing COVID-19 (p-value 0.000)\(^{13}\) and there was a relationship between people's age (0.018), education (0.046) and work (0.010) with COVID-19 prevention behavior in RT 002/007 Simpangan Village.\(^{14}\) However, based on the results of research conducted in the Democratic Republic of the Congo, there was no statistically significant difference in the effect of education level on women's knowledge, attitudes, and practices for controlling transmission of COVID-19 in Democratic Congo, women with higher levels of education were not found to always show increased knowledge, attitudes, or practice of appropriate strategies for prevention and control of COVID-19 in Democratic Congo. The results also show that education can have both positive and negative effects in alleviating the burden of COVID-19.\(^{15}\)

The results of COVID-19 monitoring data in South Tangerang City until February 2 2023 state that South Tangerang City is in the first level with the highest cases in Banten Province since the first appearance of COVID-19 with 117,671 positive confirmed cases with details of 116,860 being declared cured and 786 cases dying.\(^{16}\) Based on the background that has been described, the authors are interested in research to find out the Determinants of COVID-19 Prevention Behavior in Women of Reproductive Age in South Tangerang City using secondary data from the 2020 South Tangerang IAKMI Survey Data.

**METHOD**

This study used a Quantitative Analytical method with a Cross-Sectional study design. While taking samples using the One Stage Cluster technique and obtained as many as 190 women aged between 15 and 49 years. This study follows the research design used by the IAKMI South Tangerang Online Survey 2020 which stipulates that data collection is only carried out once for each respondent whose measurement is carried out through an individual questionnaire. Secondary data from the results of the 2020 IAKMI South Tangerang Online Survey was used in this study. The variables measured in this study were prevention behavior, age, education, occupation, knowledge, and attitudes. Variable measurement using scoring on each statement.

**RESULTS AND DISCUSSION**

Based on Table 1, it can be seen that the description of the research subjects based on COVID-19 prevention behavior is that 114 people have good COVID-19 prevention behavior with a percentage of 60%, based on the age of the respondents, 121 people are less than 25 years old with a percentage of 63.7%. Description of the research subjects based on education level, 112 people had a higher level of education with a percentage of 58.9%, and based on employment status, 114 people had jobs with a percentage of 60%. Description of research subjects based on level of knowledge, 181 people had good
knowledge with a percentage of 95.3%, and based on attitude, 99 people had good attitudes with a percentage of 52.1%.

**Table 1. Characteristics of Respondents**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Covid-19 Prevention Behavior</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Good</td>
<td>114</td>
<td>60</td>
</tr>
<tr>
<td>Bad</td>
<td>76</td>
<td>40</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>≤ 25 years</td>
<td>121</td>
<td>63.7</td>
</tr>
<tr>
<td>&gt; 25 years</td>
<td>69</td>
<td>36.3</td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Higher education</td>
<td>112</td>
<td>58.9</td>
</tr>
<tr>
<td>Middle education</td>
<td>78</td>
<td>41.1</td>
</tr>
<tr>
<td><strong>Occupation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work</td>
<td>114</td>
<td>60</td>
</tr>
<tr>
<td>Doesn’t work</td>
<td>76</td>
<td>40</td>
</tr>
<tr>
<td><strong>Knowledge</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Good</td>
<td>181</td>
<td>95.3</td>
</tr>
<tr>
<td>Enough</td>
<td>9</td>
<td>4.7</td>
</tr>
<tr>
<td><strong>Attitude</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Good</td>
<td>99</td>
<td>52.1</td>
</tr>
<tr>
<td>Not enough</td>
<td>91</td>
<td>47.9</td>
</tr>
</tbody>
</table>

Based on Table 2 it is known that there is no relationship between the age variable and COVID-19 prevention behavior with a p-value of 0.157. It is known that there is no relationship between educational variables and COVID-19 prevention behavior with a p-value of 0.718. In the work variable, there is no relationship with COVID-19 prevention behavior with a p-value of 0.629 and odds of 1.157 and there is no relationship between the knowledge variable and COVID-19 prevention behavior with a p-value of 0.265. Based on the table above, it is known that only the attitude variable has a relationship with COVID-19 prevention behavior with a p.Value of 0.000 and an Odds Ratio of 3.774, which means that respondents with a good attitude are 3.530 times more likely to behave in a good way to prevent COVID-19 than respondents who have a poor attitude.

**Table 2. Determinants of COVID-19 Prevention Behavior in Women of Reproductive Age in South Tangerang City 2020**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Good</th>
<th>Not enough</th>
<th>OR</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 25 years</td>
<td>68</td>
<td>56.2</td>
<td>53</td>
<td>43.8</td>
</tr>
<tr>
<td>≥ 25 years</td>
<td>46</td>
<td>66.7</td>
<td>23</td>
<td>33.3</td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Middle Education</td>
<td>66</td>
<td>58.9</td>
<td>46</td>
<td>41.1</td>
</tr>
<tr>
<td>Higher education</td>
<td>48</td>
<td>61.5</td>
<td>30</td>
<td>38.5</td>
</tr>
</tbody>
</table>

305
RESULTS AND DISCUSSION

Age is the number of respondents’ life span from birth to the time of filling out the questionnaire with an age range between 15 to 49 years. Age that is still in numerical form is categorized into two categories, namely the age category <25 years and the age category ≥ 25 years. From the results of the study, it was found that most of the respondents were aged <25 years and the results of the study showed that there was no relationship between the age variable and the behavior of preventing COVID-19 with odds of 1.559. In this study, there was no relationship between age and COVID-19 prevention behavior because respondents aged <25 years and respondents aged ≥ 25 years showed the same results, namely good COVID-19 prevention behavior. The results of this study are in line with research conducted by Sari, Ayu Riana. et al. (2020) which showed that there was no significant relationship between age and COVID-19 prevention behavior. 0.000)13 and a study in the Kapasa Makassar Village showed the same results, that is, age has a significant relationship with COVID-19 prevention behavior, meaning that adults have good COVID-19 prevention behavior.18

From the results of the study, it was found that most of the respondents’ education was secondary education and there was no relationship between the education variable and the behavior of preventing COVID-19 and the odds were 1.115. Education affects both individuals and their social environment, to improve health behavior and improve health and quality of life. The results of this study show that education level is not related to COVID-19 prevention behavior because respondents with secondary education show good prevention behavior and respondents with higher education also show good behavior. These results are in line with research conducted by Fakhira, et al. (2022) which showed that there was no relationship between education level and COVID-19 prevention behavior (p-value 0.130).19 p-value of 0.02616 and the research in the Kapasa Makassar Village showed the same results, namely the level of education has a significant relationship with COVID-19 prevention behavior, meaning that a high level of education has good COVID-19 prevention behavior.20

The results showed that some of the respondents worked. The results of the bivariate analysis showed that there was no relationship between work variables and COVID-19 prevention behavior with odds of 1.157. Employment status in this study was not related to COVID-19 prevention behavior.
because respondents who did not work demonstrated good COVID-19 prevention behavior and working respondents also demonstrated good COVID-19 prevention behavior. The results of the same study showed that there was no relationship between work and COVID-19 prevention behavior ($p$-value 0.230) in the Paya Bujok Blang Pase Village community, Langsa City$^{13}$ and there was no significant relationship between employment status and COVID-19 prevention behavior.$^{13}$ In the results of other studies showed different results carried out at the Pemurus Inner Health Center in the City of Banjarmasin which showed a relationship between work and the incidence of COVID-19 which had a $p$ value of 0.035$^{20}$.

Knowledge is all information that is known by someone, in this study knowledge is measured through 11 statements that must be answered with the choice of true, false, or don't know. The statement contains the COVID-19 virus, its signs and symptoms, and how it is transmitted. The results showed that most of the respondents had good knowledge and the results showed that there was no relationship between knowledge and behavior to prevent COVID-19 with odds of 0.413. In this study, knowledge was not related to COVID-19 prevention because respondents with sufficient knowledge performed good preventive behavior, and respondents with good knowledge also demonstrated good preventive behavior.

The same results were found in research in the To’bulung sub-district, Bara District, Palopo City, which showed that there was no relationship between knowledge and COVID-19 prevention behavior with $p$=0.463$>0.005$. In contrast to the results of research conducted in South Korea, the results of knowledge were direct. influencing both attitudes and practices as factors that influence COVID-19 prevention behavior. In this study, belief in efficacy is a variable that mediates the relationship between knowledge and the three behaviors to prevent COVID-19, namely wearing a face mask, practicing hand hygiene, and avoiding crowded places.$^{22}$

Attitude is said to be a response that only arises when the individual is exposed to a stimulus. In this study, attitudes were measured using 15 statements with the choices of strongly agree, agree, disagree, and strongly disagree. Based on these results the attitude is categorized as a less attitude and a good attitude. An unfavorable attitude is an attitude that does not accept or does not tolerate the prevention of transmission of COVID-19, while a good attitude is an attitude that tolerates the prevention of transmission of COVID-19.$^{23}$ The results showed that most respondents had a good attitude. The results of this study indicate that attitude is related to COVID-19 prevention behavior following Lawrence Green's Theory which explains that attitude is a predisposing factor that contributes to a person's health behavior. A person's attitude determines how they will react to contextual cues, which may initiate or direct their actions. A person's attitude towards an object is determined by whether they feel happy or supportive of it (favorable), or whether they feel unhappy or indifferent to it.
(unfavorable). For this reason, a positive attitude is needed to prevent the transmission of COVID-19 to break the chain of disease transmission.

This is in line with research that shows that most participants have a positive attitude toward tackling COVID-19.\(^{25}\) Research conducted in China also shows a more positive attitude among inpatients associated with good prevention and control behavior. For inpatients, hospitals should focus on teaching hand hygiene, conditions when masks must be worn and how to wear them correctly, and maintaining proper social distancing.\(^{26}\) The results of a study conducted among adolescents in Palangka Raya City showed a value of \(p = 0.004\), namely that there is a relationship between attitudes and behavior of respondents.\(^{27}\) In research conducted in Banten Province, it was shown that there was a significant relationship between attitudes and behavior in preventing COVID-19 where the \(p\)-value <0.0522 and there was a relationship between attitude (\(p\)-value = 0.000) to precautionary measures for COVID-19.\(^{28}\)

**CONCLUSION AND SUGGESTIONS**

Based on the results of the study it can be concluded that most of the behavior in preventing COVID-19 among WUS in South Tangerang City in 2020 showed good results, aged <25 years, had secondary education, working status, and had good knowledge and attitudes. In this study, there was no relationship between age, education, occupation, knowledge, and behavior to prevent COVID-19. However, there is a relationship between attitudes and behavior to prevent COVID-19 among WUS in South Tangerang City in 2020.

The suggestions in the research are: it is hoped that the community will continue to implement the behavior to prevent the transmission of COVID-19 and a positive attitude is needed in preventing the transmission of COVID-19 to break the chain of disease transmission, as for the Health Service, it is hoped that this research can become a reference and consideration in deciding to improve a good attitude towards the community in efforts to prevent the transmission of COVID-19, as for IAKMI Tangerang Selatan as the owner of the data, it is hoped that this research will become a source of information for the community to improve good attitudes in implementing good COVID-19 prevention behaviors, and for future researchers, it is hoped that the results of this study can be used as a basis for developing research on similar topics.

**ACKNOWLEDGMENT**

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309


