



The relationship of health knowledge, attitude and implementation of health protocol with incidence of suspected COVID-19 on pregnant mothers at Lendah II Public Health Center

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ABSTRAK

Latar Belakang: Kasus suspek covid-19 adalah orang yang memenuhi salah satu kriteria klinis demam akut dan batuk. Atau minimal tiga gejala demam, batuk, lemas, sakit kepala, nyeri otot, nyeri tenggorokan, pilek/hidung tersumbat, sesak napas, anoreksia, mual, diare, atau penurunan kesadaran atau pasien dengan ISPA (Infeksi Saluran Pernapasan Akut) berat dengan riwayat demam ($> 38^{\circ}\text{C}$) dan batuk yang terjadi dalam 10 hari terakhir, atau anosmia akut atau ageusia akut tanpa penyebab lain yang ada.

Tujuan: Diketahui hubungan tingkat pengetahuan, sikap dan pelaksanaan protokol kesehatan dengan kejadian suspek covid-19 pada ibu hamil di Puskesmas Lendah II.

Metode: Desain penelitian ini adalah Crosssectional, dilakukan pada tanggal 12 November 2021-31 Januari 2022. Jumlah sampel dalam penelitian ini adalah 80 responden yang diambil dengan teknik purposive sampling. Alat pengumpulan data menggunakan lembar kuesioner dan pemeriksaan suspek covid-19 dg metode skrining Ag-RDT. Penelitian ini menggunakan analisis data univariat dengan distribusi frekuensi, analisis bivariat dengan uji chi square dan analisis multivariate dengan regresi logistic.

Hasil: Penelitian menunjukkan mayoritas responden memiliki pengetahuan yang baik sebanyak 72 orang (90%), memiliki sikap positif yaitu 51 orang (63,8%) dan melaksanakan protokol kesehatan secara baik yaitu 42 orang (52,5%). Hasil pemeriksaan ibu hamil sehat yaitu 70 orang (87,5%). Hasil analisis bivariat, ada hubungan pengetahuan ibu dengan kejadian suspek covid-19 dengan p value 0,000, ada hubungan antara sikap ibu dengan kejadian suspek covid-19 dengan p value 0,031 dan ada hubungan antara pelaksanaan protokol kesehatan dengan kejadian suspek covid-19 dengan p value 0,005. Hasil analisis multivariate variabel independen berpengaruh secara bersama-sama terhadap kejadian suspek covid-19 dengan nilai signifikansi 0,000. Nilai OR untuk pengetahuan sebesar 0,006, sikap 0,196 dan pelaksanaan prokes 0,079

Kesimpulan: Ada hubungan antara pengetahuan, sikap dan pelaksanaan protokol kesehatan dengan kejadian suspek covid-19 pada Ibu hamil di Puskesmas Lendah II

KATA KUNCI: COVID-19; pengetahuan; sikap; pelaksanaan protokol kesehatan

ABSTRACT

Background: A individual who matches one of the clinical criteria for acute fever and cough is suspected of having COVID-19. Fever, cough, weakness, headache, muscle aches, sore throat, runny nose/stuffed nose, shortness of breath, anorexia, nausea, diarrhea, or loss of consciousness are all possible symptoms or patients with severe ARI (Acute Respiratory Infection) who have had a fever ($> 38^{\circ}\text{C}$) and cough in the last 10 days, or who have had acute anosmia, or who have had acute ageusia without other causes that have gone away.

Objectives: The goal of this study was to see if there was a link between the amount of knowledge, attitudes, and application of health protocols in pregnant women at the Lendah II Health Center and the incidence of suspected covid-19..

Methods: This cross-sectional survey took place from November 12, 2021, to January 31, 2022. The number of respondents in this study was 80, and the samples were gathered using a purposive sampling technique. The data collection tool employs a questionnaire sheet and the Ag-RDT screening method to examine covid-19 suspected. Univariate data analysis with frequency distribution, bivariate data analysis with chi square test, and multivariate data analysis with logistic regression were employed in this study

Results: According to the bivariate analysis, there was a 0.000 p value relationship between mothers and the results of the covid-19 screening, a 0.031 p value relationship between the mother's attitude and the results of the incidence of suspected covid-19 and a 0.005 p value relationship between the implementation of the health protocol and the results of the incidence of suspected covid-19. With a significance value of 0.000, the results of the multivariate analysis of the independent variables have a joint effect on the assessment of the incidence of suspected covid-19. Knowledge has a OR value of 0.006, attitude is 0.196, and health-care implementation has a OR value of 0.079.

Conclusions: There were correlation between of the incidence of suspected covid-19 in pregnant women at the Lendah II Health Center are linked to knowledge, attitude, and application of health protocols

KEYWORD: COVID-19; knowledge; attitude; implementation of health protocols

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INTRODUCTION

Coronavirus disease (Covid-19) was first discovered in Wuhan as novel coronavirus 2019 (2019-nCoV) caused by the Severe Acute Respiratory Syndrome Coronavirus-2 (SARS-CoV-2) (WHO, 2020). This disease is caused by a virus (SARS-CoV-2) that is part of a large family of viruses called coronaviruses. Decree of the President of the Republic of Indonesia Number 12 of 2020 concerning the Determination of Non-Natural Disasters for the Spread of Corona Virus Disease 2019 (Covid-19) as a National Disaster. This disaster has had an impact that not only caused death but also caused considerable economic losses, so it is necessary to take measures to overcome including prevention and control (1).

Pregnant women are people with a high risk of contracting COVID-19, this is because

pregnant women have a low immune system, making them more susceptible to contracting disease or infection. Corona virus in pregnant women will show the same symptoms as positive people with COVID-19 in general. With a low immune system, COVID-19 can infect at any time. Although the general symptoms experienced will be the same as for other sufferers, pregnant women who already have a congenital disease, such as lung, asthma or liver damage, will have severe symptoms. The physiological and immunological changes that occur as a normal component of pregnancy can have systemic effects that increase the risk of obstetric complications from respiratory infections in pregnant women. This puts the mother at risk of complications during pregnancy in the form of respiratory disorders such as decreased lung capacity and cardiovascular system such as tachycardia, and even nutritional

deficiencies (2).

Confirmed cases of COVID-19 are found in various ages and groups, including groups of pregnant women. Data in the Special Region of Yogyakarta as of July 17, 2021, there were 34 maternal deaths out of a total of 60 maternal deaths. The details are that in Kulon Progo Regency there were six maternal deaths, one of which died due to Covid-19, in Bantul Regency there were nine maternal deaths who died due to Covid-19 from a total of 16 maternal deaths, in Gunungkidul Regency there were three mothers who died from COVID-19. covid-19 from a total of eight deaths, in Sleman Regency there were 19 maternal deaths with 15 people due to covid-19, while in Yogyakarta city there were 11 maternal deaths, six of whom died from covid-19. Kulon Progo Regency contributed the least number of maternal deaths due to COVID-19, but when compared to the target of pregnant women who were the least compared to other regencies, the percentage of maternal deaths in Kulon Progo Regency was relatively high. The case of pregnant women with confirmed COVID-19 in Kulon Progo Regency is very high, with more than 250 cases recorded so far. Cases of pregnant women in Kulon Progo Regency exposed to COVID-19 have very diverse characteristics, some are comorbid, and some are pregnant women who initially appear physically healthy but are suddenly declared confirmed and have severe symptoms. In 2020, in Kulon Progo Regency, 17 pregnant women were found to be positive for COVID-19 and from 2021 to July 22, 2021, 173 pregnant women with confirmed COVID-19 were recorded, who gave birth in hospitals spread across the Special Region of Yogyakarta. Until July 17, 2021, there is one pregnant mother and one baby in Kulon Progo Regency who died due to COVID-19. The contributor to maternal mortality in Kulon Progo Regency due to covid 19 came from the working area of the Lendah II Health Center, out of a total

of 12 pregnant women who were confirmed to have COVID-19 (3).

Pregnant women are expected to understand and know about preventing Covid-19 by implementing health protocols, including the use of medical masks and the rules for their use, steps to prevent infection with the Covid-19 virus with 5 M, namely avoiding going to crowded places or public places such as markets, stations, and so on. Washing hands with soap and running water before and after leaving the house, limiting mobilization and interaction, consuming warm water and not eating outside the home, not touching objects/money that other people have touched. In a day, pregnant women must be exposed to the morning sun for at least 15 minutes. Pregnant women should clean their hands with hand sanitizer before and after touching objects that other people have touched. Maintain a distance when conducting routine checks, at least one meter from other people. Pregnant women are not in a crowd or in groups of more than 20 people. Pregnant women must consume healthy foods, multiply meat, vegetables and fruits. Pregnant women who have contact with someone infected with the Covid-19 virus must immediately be isolated in an appropriate place. Pregnant women do not have to check themselves regularly during the Covid-19 pandemic unless there are danger signs/risks. Pregnant women are still required to implement a Clean and Healthy Lifestyle (PHBS) during the Covid-19 pandemic. Pregnant women can monitor the welfare of the fetus during the Covid-19 pandemic by calculating fetal movements (4).

The purpose of this study was to determine the relationship between the level of knowledge, attitudes and implementation of health protocols with the incidence of suspected COVID-19 in pregnant women at the Lendah II Health Center, to know the knowledge of health protocols for pregnant women at the Lendah II Health Center,

to know the attitudes of pregnant women to health protocols for mothers. Pregnant women at the Lendah II Health Center, knowing the implementation of the health protocol for pregnant women at the Lendah II Health Center, knowing the suspected case of Covid-19 in pregnant women at the Lendah II Health Center and knowing the most dominant variable with the suspected Covid-19 incident in pregnant women at the Lendah Health Center II.

MATERIALS AND METHODS

This study uses an analytic observational research type, with a cross sectional research design. The sample consisted of 80 respondents using a purposive sampling technique with the inclusion criteria of pregnant women in the working area of the Lendah II Health Center, physically and mentally healthy, willing to become respondents and sign informed consent, will be screened for COVID-19 and can read and write. The data collection process was carried out from November 2021 to January 2022 using a questionnaire, which had previously been tested for validity and reliability on all questionnaires. the results of the knowledge validity test, 14 valid questions, 15 valid attitude questionnaires and 15 valid health protocol implementation questionnaires. in the reliability test all questionnaires were declared reliable. Then the data analysis was carried out using the Chi-Square test. This research has passed the ethical test from the Health Research Ethics Committee (KEPK) Poltekkes Ministry of Health Yogyakarta with an Ethical Eligibility Certificate Number e-KEPK/POLKESYO/0808/XI/2021.

RESULTS AND DISCUSSION

RESULTS

The results of the frequency distribution of respondents based on the characteristics of respondents can be seen in **Table 1**.

Table 1. Frequency distribution of respondents based on characteristics

Variable	Frequency	Percentage (%)
Age		
Healty reproductive age	68	85
Unhealthr reproductive age	12	15
Total	80	100
Education		
Higher education	62	77,5
Low education	18	22,5
Total	80	100
Profesion		
Work	39	48,75
Doesn't work	41	51,25
Total	100	80

Based on **Table 1**, it is known that the majority of respondents of healthy reproductive age, namely the age of 20-35 years, are 68 people (85%), the majority of respondents are highly educated, namely at least high school, 62 people (77.5%) and the majority of respondents are not working (housewives). as many as 41 people (51.25%). The results of the descriptive analysis of research variables can be seen in table 2.

Table 2. Frequency distribution of knowledge, attitudes, implementation of prokes and suspected events of COVID-19 in pregnant women at the Lendah Health Center II

Variable	Frequency	Percentage (%)
Knowledge		
Good	72	90
Enough	8	10
Total	80	100
Attitude		
Positive	51	63,8
Negative	29	36,3
Total	80	100
Implementation of health protocol		
Good	42	52,5
Enough	38	47,5
Total	80	100
Incidence of Suspected Covid-19		
Suspec	10	12,5
Healthy	70	87,5
Total	80	100

Based on **Table 2**, it can be seen that the respondents of pregnant women in the working area of the Lendah II Health Center were 80 people, the majority had good knowledge,

Table 3. Relationship of knowledge, attitude and implementation of health protocols with covid-19 suspected incidents in pregnant women at Lendah Health Center II

Variable	Incidence of Suspected Covid-19		Total	p-value	OR (95 % CI)
	Suspec	Healthy			
Knowledge				0,000	
Good	3 (4,2 %)	69 (95,8 %)	72 (100 %)		0,006
Enough	7 (87,5 %)	1 12,5 %)	8 (100 %)		(0,001-0,068)
Attitude				0,031	
Positive	3 (5,9 %)	48 (94,1 %)	51 (100 %)		0,196
Negative	7 (24,1 %)	22 (75,9 %)	29 (100 %)		(0,046-0,832)
Implementation of health protocol				0,005	
Good	1 (2,4 %)	41 (97,6 %)	42 (100 %)		0,079
Enough	9 (23,7 %)	29 (76,3 %)	38 (100 %)		(0,009-0,655)

Table 4. Multivariate initial modeling

Variable	P value	OR	CI 95%	
			Lower	Upper
Knowledge	0,001	0,012	0,001	0,161
Attitude	0,194	0,231	0,025	2,109
Implementation of Health protocol	0,082	0,077	0,004	1,386

Table 5. Confounding test model

Variable	P value	Old OR	New OR	Change in OR	
OR Modelling Without Attitude Variables					
Knowledge	0,000	0,012	0,008	0,33	<10 %
Attitude	-	0,231	-	-	-
Implementation of Health Protocol	0,120	0,077	0,117	0,89	<10%
OR Modelling Without Implementation of Health Protocol Variables					
Knowledge	0,000	0,012	0,008	0,33	<10 %
Attitude	0,386	0,231	0,404	0,74	<10 %
Implementation of Health Protocol	-	0,077	-	-	-
OR Modelling Withouth Knowledge Variables					
Knowledge	-	0,012	-	-	-
Attitude	0,009	0,231	0,117	0,49	<10 %
Implementation of Health Protocol	0,008	0,077	0,050	0,35	<10 %

namely 72 people (90%), the majority had a positive attitude, namely 51 people (63.8%), the majority of the implementation of the health program was good, namely 42 people (52.5%) and the majority of pregnant women are healthy, namely 70 people (87.5%).

While in **Table 3** it can be seen that there is a significant relationship between knowledge and the incidence of suspected covid-19 with a p-value <0.001, there is a significant relationship between attitudes and the incidence of suspected covid-19 with a p-value = 0.031, and there is a relationship There is a significant relationship

between the implementation of the health protocol and the incidence of suspected covid-19 with a p-value = 0.005

For the results of multivariate analysis with logistic regression as shown in **Table 4** and **Table 5** above, the knowledge p-value is 0.000 and the risk prevalence is 0.001, the attitude p-value is 0.194 and the risk prevalence is 0.231, while the implementation of the program has a p-value of 0.082 and a risk prevalence of 0.077. . If a person's knowledge is good, it will reduce the incidence of suspected covid-19 by 0.012, while the attitude variable if a person's attitude is

positive, it will reduce the incidence of suspected covid-19 by 0.231 and if the implementation of health protocols is good, it will reduce the incidence of suspected covid-19 by 0.077.

Table 6. Interaction test results between independent variables

Variable	P value
Knowledge*implemenngtation of health protocol	0,155
Knowledge*attitude	0,287
Implementation of health protocol*attitude	0,084

For the results of the interaction test between the variables in **Table 6**, these three variables have no significant interaction, as evidenced by the p value = value of all three of them more than 0.05, i.e. if knowledge is interacted with the implementation of the prokes, a p-value of 0.155 is obtained, if knowledge is interacted with attitude obtained a p-value of 0.287, and if the implementation of the health program is interacted with attitudes, a p-value of 0.084 is obtained.

The control variables, namely age and education in **Table 7**, have no significant relationship with the incidence of suspected COVID-19, as evidenced by the p-value of the age variable, which is 0.641 and the p-value of the education variable 0.686.

DISCUSSION

The results of the statistical test of knowledge obtained a sig value (p value) of 0.000 < 0.05, which means that there is a significant relationship/correlation between knowledge

and the incidence of suspected COVID-19. A similar study on the knowledge factor and the behavior of preventing Covid-19 transmission by Hardiati, if this research was tested on the knowledge variable and the implementation of health protocols with the chi square test, the p-value was 0.024, and the p-value was <0.05. It can be concluded that knowledge also has a significant relationship with the implementation of health protocols, which is in line with Hardiati's research that there is a relationship between the knowledge factor and the behavior of preventing Covid 19 transmission in the work area of the Pedamaran Health Center, Pekaitan District, Rokan Hilir Regency with a p value of 0.001.4 Knowledge according to Lawrence Green in Notoatmodjo (2011) is one of the factors that influence health behavior. Knowledge is included in the predisposing factors or causal factors. Knowledge itself is influenced by several factors, including age, level of education, mass media or sources of information, socio-cultural economy, environment and experience (5).

The behavior that a person displays based on the knowledge he has. The better the knowledge, the better the behavior, and vice versa the less knowledge, the behavior is also getting less. This can be proven in this study, where respondents whose behavior in preventing the transmission of COVID-19 is not good are respondents who have less knowledge, and vice versa, the majority of respondents whose behavior is good are respondents who have good knowledge.4 With good knowledge,

Table 7. The relationship between age and education with the incidence of suspected Covid-19 in pregnant women at the Lendah II Health Center

Variable	Incidence of Suspected Covid-19		Total	p-value	OR (95 % CI)
	Suspec	Health			
Age				0,641	0,667 (0,123-3,605)
Healthy reproductive	8 (11,8 %)	60 (88,2 %)	68 (100 %)		
Unhealthy reproductive	2 (16,7 %)	10 (83,3%)	12 (100 %)		
Education				0,686	0,636 (0,147-2,762)
Higher Education	7 (11,3 %)	55 (88,7 %)	62 (100 %)		
Low Education	3 (16,7 %)	15 (83,3 %)	18 (100 %)		

pregnant women The government will carry out prevention of Covid-19 transmission behavior by proving healthy mothers with negative Covid-19 screening results even though pregnant women or respondents show symptoms of suspected COVID-19. Likewise, the research conducted by Khoirunnisa also stated that there was a relationship between the level of knowledge and the behavior of preventing COVID-19 in the people of Paya Bujok Blang Pase Village, Langsa City with a p value of 0.000.6 According to Sarah's research, research with statistical tests with a 95% confidence level, obtained p-value = 0.000 which means it is smaller than -value ($P < 0.05$), which means that there is an influence of knowledge of pregnant women's adherence to the COVID-19 health protocol at the Bone-Bone Health Center in North Luwu Regency (7).

The results of the statistical test of the attitude variable obtained a sig value (p-value) of $0.031 < 0.005$, which means that there is a significant relationship/correlation between attitudes and the results of suspected cases of COVID-19. The results showed that the majority of respondents had a positive attitude in complying with health protocols. The positive attitude of the respondents was shown from the answers to the questionnaire on the statement that they always wash their hands after handling objects in public places, bathe and change clothes after traveling, wear masks, carry spare masks when traveling, keep a distance from other people, eat balanced nutrition, maintain body immunity with exercise as evidenced by the majority of respondents answered "strongly agree" and "agree". The positive attitude of pregnant women is caused because the attitude is a response or reaction of pregnant women to cases of covid-19 so that if they have good knowledge or behavior they can have a positive attitude in preventing covid-19. On the other hand, the negative attitude of pregnant women is caused by a lack of self-awareness in preventing COVID-19. This is in

line with the theory which states that attitude is a feeling of supporting or taking sides (favorable) or feeling unfavorable (unfavorable) on an object, but there are still some pregnant women who have a negative attitude, especially as can be seen from attitudes about how to overcome and prevent COVID-19. 19. Negative attitudes occur due to lack of support from the surrounding community and family, or lack of awareness of the individual himself (8).

The results of this study are in line with Simanjuktak's (2021) research which shows that most of the respondents have a positive attitude towards health protocols as many as 71 people (78.9%). Attitude is a person's closed response that can describe likes or dislikes towards something. A person's attitude towards something shows that person's knowledge of that thing. This can be seen from the majority of respondents having good knowledge of health protocols. The better the knowledge, the more positive the attitude formed (9).

The results of statistical tests on the variables of the implementation of health protocols, obtained the results of sig (p value) $0.005 < 0.05$, which means that there is a significant relationship/correlation between the implementation of health care programs and the incidence of suspected COVID-19. If the respondent in his daily life obeys the implementation of good health protocols, then the respondent will avoid the transmission of COVID-19.

The covid-19 examination carried out on 80 respondents showed significant results, that in addition to knowledge, attitudes and implementation of health protocols, other things that affect the results of the Covid-19 symptom examination with symptoms of mild illness are because based on MCH data from the Lendah II Health Center, all Respondents have participated in the Covid-19 vaccination program. Evidence-based policies regarding

COVID-19 in pregnant women, in point 3 it is stated that getting vaccinated during pregnancy will prevent pregnant women with severe symptoms when exposed to COVID-19 (10). WHO recommends the Sinovac vaccine for pregnant women over 13 weeks of gestation. The Sinovac vaccine or CoronaVac is made using an inactivated or attenuated corona virus method, so this vaccine does not contain live viruses and cannot replicate. The dead coronavirus is then mixed with aluminum-based compounds called adjuvants. These compounds function to stimulate the immune system and increase the response to vaccines. The efficacy of this vaccine is 65.3%. The way this vaccine works is that after being injected, the Sinovac vaccine which contains this inactive virus will trigger the immune system to produce antibodies that can specifically fight the corona virus. That way, if at any time the body is attacked by the corona virus, there are already antibodies that can fight it and prevent the occurrence of disease. The dominant side effects that occurred in the recipients of this vaccine were headaches, and pain in the hands where the injection was done (11).

According to WHO in the Journal of Interim Recommendations for the Use of an inactivated COVID-19 vaccine, coronavac, developed by sinovac in May 2021, that available data on the use of Sinovac-CoronaVac in pregnant women is insufficient to assess vaccine efficacy or vaccine-related pregnancy risks. However, there have been no developmental and reproductive toxicological studies in animals showing an adverse effect on pregnancy. In addition, this vaccine is an inactivated vaccine with an adjuvant that is routinely used in many other vaccines that have a good safety profile record, including in pregnant women. Based on the experience of using other inactivated vaccines during pregnancy, the effectiveness of Sinovac-CoronaVac in pregnant women is estimated to be equivalent to its effectiveness in women

of comparable age who are not pregnant. Studies evaluating safety and immunogenicity in pregnant women are needed. For now, WHO recommends the use of Sinovac-CoronaVac in pregnant women if the benefits of vaccination for pregnant women outweigh the possible risks. To help pregnant women carry out this assessment, information about the risks of COVID-19 during pregnancy, the possible benefits of vaccination in the context of local epidemiology, and the current limitations of safety data for pregnant women need to be shared with pregnant women. WHO does not recommend a pregnancy test before vaccination. WHO does not recommend postponing pregnancy or abortion due to vaccination (12).

Vaccines that enter the body will enter the cells and then be captured by APC/antigen presenting cells and broken down into small peptides bound by MHC, after which they will be presented to helper T cells/CD4. CD4 cells will stimulate B lymphocyte cells to secrete various cytokines which then develop into plasma cells which then develop into antibodies. The antibodies produced are IgM, IgG and neutralizing antibody (antibody neutralization). This process takes approximately 2 weeks if we have vaccinated against covid-19, so if there is a covid-19 infection, the body that already has memory B cells will recognize the antigen faster so that neutralizing antibodies will be formed in a short time (10)

This study found that knowledge, attitudes and implementation of health protocols had a significant relationship with the examination of COVID-19 symptoms. Pregnant women really need counseling either directly or indirectly or through social media. The counseling is packaged as attractively as possible, so that pregnant women in particular and the public in general are interested in listening to important information related to matters related to health protocols. In addition to increasing knowledge,

pregnant women are expected to change their attitude so that they have a positive attitude, obey health protocols and always remind their families and surrounding communities to be orderly in implementing health protocols. By reading, listening and being given counseling, pregnant women will increase their knowledge, attitude and implementation of health protocols. As health workers, especially midwives, to overcome the impact of the COVID-19 pandemic, several ways to prevent the spread of COVID-19 are by educating the implementation of the COVID-19 health protocol, wearing masks, maintaining distance, washing hands, avoiding crowds, and reducing mobility, providing motivation to implement the protocol. health. Thus, this research is expected to add insight to the reader regarding the relationship between knowledge of pregnant women about health protocols. People who obey health protocols, especially pregnant women, will avoid complications in pregnancy due to COVID-19. Along with the current pandemic, pregnant women are listed as one of the vulnerable groups at risk of being infected with COVID-19 because during pregnancy there are physiological changes that result in a partial decrease in immunity. Being a vulnerable group for contracting the Corona virus, pregnant women can take precautions by increasing their knowledge, attitudes and behavior according to health protocols (8).

CONCLUSION AND RECOMMENDATION

Based on the results of the study, it can be concluded that there is a significant relationship between the level of knowledge, attitudes and implementation of health protocols with the incidence of suspected covid-19 in pregnant women at the Lendah II Health Center, with p value for knowledge of $p < 0.001$, attitude value p value 0.031 and the implementation of health protocols p value 0.005, all three of which have a joint effect on the outcome of suspected cases

of covid-19 with p value < 0.001 . It is known that the attitude of pregnant women at the Lendah II Health Center towards the health protocol is mostly positive (63.8%) and the implementation of the health protocol for pregnant women at the Lendah II Health Center is mostly good (52.5%). The incidence of suspected Covid-19 from 80 pregnant women at the Lendah II Health Center was 87.5% healthy and 12.5% suspected of Covid-19. The most dominant variable with suspected cases of COVID-19 is the attitude variable, because it has the highest OR value compared to other variables, which is 0.231.

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