Relationship of Anxiety Level of Pregnant Womens in the Covid-19 Pandemic with the Attitude to Preventing Covid-19 Transmission

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Abstract. Coronavirus disease (Covid-19) is an infectious disease caused by the Severe Acute Respiratory Syndrome Coronavirus-2 (SARS-CoV2). Coronavirus-19 (Covid-19) has been declared a world pandemic by WHO. Coronavirus has created stress and anxiety for pregnant women. Pregnant women should take the same precautions to avoid infection with Covid-19. This study aims to determine the relationship between the level of anxiety of pregnant women in the Covid-19 pandemic with the attitude of preventing the transmission of Covid-19. This study is a quantitative study with cross sectional approach in pregnant women with accidental sampling technique. The data was collected using HARS anxiety questionnaire sheets and the Likert Scale wich were analyzed by chi-square statistical test.The results of this study indicate that the anxiety level of pregnant women in the Covid-19 pandemic is at a moderate level of anxiety (37.5%) and a supportive attitude (68.8%) of preventing the transmission of Covid-19 from 32 respondents. The bivariate analysis, there was a significant relationship between the level of anxiety of pregnant women and the attitude of preventing the transmission of Covid-19 with a ρ_value 0,04 (<0,05). There is a relationship between the anxiety level of pregnant women and the attitude of preventing the transmission of Covid-19. It is recommennded that pregnant women need to increase self awareness in their effortsto prevent the transmission of Covid-19 and to follow helath protocols.

Keywords: anxiety levels · attitudes · pregnant women · Covid-19

1 Introduction

Coronavirus disease (Covid-19) is an infectious disease caused by the Severe Acute Respiratory Syndrome Coronavirus-2 (SARS-CoV 2) and the emergence of cases of Covid-19 and its consequences have caused fear, worry and anxiety among individuals worldwide [1]. Coronavirus-19 (Covid-19) has been declared a world pandemic by WHO [2]. The Covid-19 mortality rate in Indonesia is 8.9%, this figure is the highest in Southeast Asia [3].

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The Covid-19 pandemic risks increasing maternal morbidity and mortality during and after the pandemic. Meanwhile, vertical transmission from mother to fetus related to Covid-19 is not known certain [4]. In addition, the consequences of Covid-19 infection in pregnant women are not known with certainty until now and there is not enough evidence, but this possibility must still be considered. On the other hand, the Coronavirus epidemic has created stress and anxiety for pregnant women in different parts of the world [5]. Anxiety in pregnancy is an emotional reaction that occurs in pregnant women related to the mother's concern with the welfare of herself and her fetus, the continuity of pregnancy, childbirth, the period after childbirth and when she has played a role as a mother [6]. Anxiety that occurs continuously can cause the sympathetic nerves to stimulate the respiratory work of the lungs in order to deliver oxygen to the heart so that the heart strongly pumps blood to flow throughout the body, including that which flows into the fetus through the placenta in the mother's womb [7].

Until now, knowledge about Covid-19 infection in relation to pregnancy and the fetus is still limited and there are no specific recommendations for the treatment of pregnant women with Covid-19 [8]. The Indonesian government has made efforts to prevent and control Covid-19 infection and the main concern is the vulnerable groups with greater potential risk, one of whom is the group of pregnant women [9]. An increase in anxiety for pregnant women in the era of the Covid-19 pandemic is due to the lack of knowledge of pregnant women about Covid-19 and how to prevent it. This excessive anxiety factor will affect a person's attitude in dealing with the Covid-19 pandemic [10]. The purpose of the study was to determine the relationship between the level of anxiety of pregnant women in the Covid-19 pandemic with the attitude of preventing the transmission of Covid-19 in the Jalan Kembang Health Center area, Cirebon City.

2 Reseach Methods

The design of this study was a *cross sectional study*. The research method uses an analytical survey. The survey method is a research method that uses a questionnaire as the main instrument to collect data [11]. The research location is at Jalan Kembang Health Center, Jalan Sukapura I No. 24, Sukapura Village, District Attorney's Office, Cirebon City. The time of the research was carried out from September to November 2020. The population was all pregnant women in the Sukapura Village area as many as 86 pregnant women. Meanwhile, the sample was pregnant women who visited Jalan Kembang Health Center in the period from September to November 2020. The sampling technique was *accidental sampling* by considering the inclusion criteria and exclusion criteria. Inclusion criteria included pregnant women willing to be respondents, able to read and write, recorded in the maternal cohort register. Meanwhile, the exclusion criteria were when pregnant women could not participate in the study until it was completed.

The measurement in this study used a questionnaire instrument to assess anxiety and attitudes. Measurement of anxiety level using the *Hamilton Anxiety Rating Scale* (HARS) which consists of 14 symptoms and 67 questions consisting of 14 symptoms and 67 questions with given sign. Determination of the degree of anxiety by adding up the *item* (1–14) with the results: Score <14 no anxiety, 14–20 mild anxiety, 21–27 moderate anxiety and 28–41 severe anxiety. The Likert scale is used to measure attitudes,

opinions, and perceptions of a person or group of people about social phenomena, where scoring or the answer value is used [11]. The measurement of the attitude of preventing the transmission of Covid-19 is in the form of a questionnaire containing a statement, then respondents determine their level of agreement by choosing one answer from the available options. The questionnaire used was made by the researcher with the results of the validity test being 0.786, and the reliability test being 0.878. Data analysis was univariate and bivariate with *chi square.*

3 Results and Discussion

This research was conducted during September-November 2020 with the following research results:

Based on Table 1, the majority of pregnant women experience moderate levels of anxiety by 12 respondents (37.5%).

Table 1. Frequency Distribution of Anxiety Levels of Pregnant Women in the Covid-19 Pandemic Period in the Jalan Kembang Health Center Area in 2020

No	Anxiety Levels of Pregnant	Number	
		Frequency (n)	Percentage (%)
1	No anxiety	6	18,18
2	Mild Anxiety	6	18,18
3	Moderate Anxiety	12	37,5
4	Severe Anxiety	8	25
	Total	32	100

Source: Primary Data in 2020

Based on Table 2, it can be seen that pregnant women respondents who have a supportive attitude in preventing the transmission of Covid-19 are 22 respondents (68.8%), and 10 respondents are not supportive (31.3%).

Table 2. Frequency Distribution of Pregnant Women's Attitudes in Preventing Covid-19 Transmission in the Jalan Kembang Health Center Area in 2020

No	Attitudes for Prevention of Covid19	Number	
		Frequency (n)	Percentage (%)
1	Support	22	68,8
2	Not Support	10	31,3
	Total	32	100

Based on Table 3, the results of Chi Square with a P value of 0.04, so it can be concluded that there is a relationship between the level of anxiety of pregnant women and efforts to prevent transmission of Covid 19.

Table 3. Relationship of Anxiety Levels of Pregnant Women in the Covid-19 Pandemic with Attitudes to Prevent Covid-19 Transmission in the Jalan Kembang Health Center Area in 2020.

No	Anxiety Levels	Attitudes for Prevention of Covid19					Total		ρ Value
		Support		Not Support					
		n	%	n	%		n	%	
1	No anxiety	5	83,3	1	16,7		6	100	0,04
2	Mild Anxiety	3	50	3	50		6	100	
3	Moderate Anxiety	2	16,7	10	83,3		12	100	
4	Severe Anxiety	0	0	8	100		8	100	
	Total	10	31,3	22	68,8		32	100	

Table 1 shows that the majority of pregnant women experience moderate levels of anxiety by 12 respondents (37.5%). Another study found that there were pregnant women who experienced moderate anxiety based on an examination using Generalized Anxiety Disorder-7 of 11.1% [12]. Anxiety is a subjective experience of the individual and cannot be observed directly and is an emotional state without a specific object. Individuals who have high basic anxiety tend to more often respond to various stressful situations as dangerous situations with a higher increase compared to individuals who have low basic anxiety in reacting to situations that are considered threatening. Pregnantwomen are vulnerable to changes in mental conditions during a pandemic and are entitled to special care to cope with the high levels of anxiety and depression caused by times of uncertainty and stress [13]. This is compounded by the lack of timely and reliable information about the impact of Covid-19 on pregnancy and its outcomes leading to increased levels of depression, anxiety and stress [14].

Turning to the attitude of preventing the transmission of Covid-19, based on Table 2, the majority of respondents were included in the supportive category, namely 22 respondents (68.8%) and those who did not support were as many as 10 respondents (31.3%). The meaning of support here is to implement some of the precautions that have been recommended by the government including washing hands with soap, wearing masks, covering mouth and nose when coughing/sneezing, reading MCH books, avoiding going to areas infected with Covid-19, avoiding contact with animals [1]. During the Covid-19 pandemic, pregnant women always practice social distancing (56.7%), stay at home to keep their distance (55.3%), and always clean their hands using hand sanitizer (55.6%) [15]. In line with Mappa (2020) that pregnant women are willing to follow government guidelines on quarantine and social distancing in 93% of Covid-19 cases. Management of stress, anxiety, and depression at the prevention and therapy stage requires a holistic

approach method, which includes physical, psychological, psychosocial, and psycho-religious [16]. Physical activity/gymnastics during pregnancy can indirectly be part of psychological and psychosocial therapy, this process also helps reduce anxiety and is part of efforts to prevent the transmission of Covid-19 to pregnant women.

Table 3 of the results of the Chi-square obtained a value of 0.04 (< 0.05) which indicates that there is a significant relationship between the anxiety level of pregnant women in the Covid-19 pandemic and the attitude of preventing Covid-19 transmission. The attitude of pregnant women in preventing the transmission of Covid-19 is also very important. With the formation of a supportive attitude, it is hoped that the prevention of Covid-19 transmission can be overcome. If the attitude of pregnant women is not supportive, it will affect efforts to prevent the transmission of Covid-19, resulting in an increase in cases of Covid-19 transmission. The condition of the Covid-19 pandemic is something new for pregnant women, the absence of any personal experience at all with a psychological object tends to form a negative attitude towards that objec [17]. During the pandemic, the anxiety of pregnant women who will give birth affects the mother's readiness to make antenatal care and prepare for childbirth [18]. line with other studies which show that the level of anxiety is associated with antenatal care visits during the Covid-19 pandemic with a p-value of 0.001 and an OR of 3,75 [19]. There is a positive relationship about the level of anxiety that occurs in pregnant women, including the experience of the mother in a previous pregnancy, the participation of the mother in a class to prepare for childbirth and the support of her husband and family [20].

Researchers argue that with anxiety in pregnant women as a stimulus to an object or feeling in the Covid-19 pandemic condition, the pregnant woman will try to respond to it by obeying the recommendations of the government, namely by making efforts to prevent the transmission of Covid-19 to themselves. Pregnant women themselves. Pregnant women who experience moderate to severe levels of anxiety will be more concerned about their health by checking themselves into health services during pregnancy and childbirth (32.3%) [21]. One of the efforts to prevent the transmission of Covid-19 has been demonstrated by pregnant women by wearing masks, washing hands, consulting health workers if there are danger signs by checking their pregnancy at health facilities, regularly taking blood and vitamin supplements, maintaining balanced nutrition, maintain physical fitness by staying active at home such as doing pregnancy exercises, yoga, etc., not traveling to areas affected by COVID-19.

According to the researcher's assumptions from the results of the study which showed that the level of anxiety of pregnant women was directly proportional to the attitude of preventing the transmission of Covid-19, illustrating that pregnant women who did not have a level of anxiety tended to ignore or have a negative/unsupportive attitude towards efforts to prevent transmission of Covid-19. Meanwhile, pregnant women with moderate or severe levels of anxiety are actually positive or supportive of efforts to prevent the transmission of Covid-19.

4 Conclusion

The majority of the anxiety levels of pregnant women in the Covid-19 pandemic are at a moderate level of anxiety, while the attitude of pregnant women in preventing the

transmission of Covid-19 is supportive. There is a relationship between the level of anxiety of pregnant women in the Covid-19 pandemic with the attitude of preventing the transmission of Covid-19.

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