

## THE CORRELATION BETWEEN COVID-19 SCREENING RESULTS WITH ANXIETY LEVEL OF PREGNANT MOTHERS IN TAMBAKBOYO HEALTH CENTER

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### ABSTRACT

*The anxiety of pregnant women has increased during the pandemic, especially when participating in the Covid-19 Screening in the third trimester as a condition for childbirth. So this study aims to determine the relationship between the results of Covid-19 screening in pregnant women and the level of anxiety of pregnant women at the Tambakboyo Health Center in 2021. The type of research used was analytic with a cross-sectional design. The population was all pregnant women in the third trimester as many as 85 people. The sample size was 70 people using the Simple Random Sampling technique. The independent variable was the results of the Covid-19 Screening in pregnant women and the dependent variable is the level of anxiety of pregnant women. This study used secondary data, namely the results of the Rapid test and primary data using an interview guide. The results of the study showed that the majority (62.9%) of Covid-19 screening results were non-reactive pregnant women. Almost all (77.1%) pregnant women experienced moderate levels of anxiety and almost all (79.5%) pregnant women with moderate levels of anxiety obtained the results of the rapid test, which was non-reactive. The results of the Chi-Square test obtained a p-value = 0.533, so there was no significant relationship between the results of the Covid-19 Screening in pregnant women and the level of anxiety of pregnant women. It is hoped that further researchers will research other factors that affect the level of anxiety of pregnant women during the pandemic.*

**Keywords:** Covid-19 Screening Results, Anxiety Level



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### INTRODUCTION

COVID-19 (Coronavirus disease 2019) has been designated by the Government as a non-natural national disaster. COVID-19 in Indonesia has caused many casualties, large material

losses and has an impact on all aspects of people's lives, including social, economic, and community welfare aspects.<sup>1</sup>

COVID-19 can cause various manifestations, especially in at-risk groups, including pregnant women.

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Pregnancy during a pandemic like this may be a risk factor for anxiety disorders in pregnant women. The COVID-19 pandemic has caused many restrictions on almost all routine services, both in terms of access and quality, including restrictions on maternal and neonatal health services, such as a reduction in the frequency of antenatal care and postponement of classes for pregnant women.<sup>2</sup> In Indonesia, there are 373,000,000 pregnant women, There are 107,000,000 people who experience anxiety (28.7%), the Anxiety Level of Pregnant Women during the Corona Virus Pandemic (Covid-19) in East Java shows that 31.4% experience very severe anxiety, 12.9% experience severe anxiety, and the rest the mother does not experience anxiety or is in a normal state.<sup>3-4</sup>

The Tambakboyo Health Center consists of 18 villages with a target of 172 pregnant women until February 2021, and of 172 pregnant women who have been tested for Covid-19, 11 pregnant women are positive for Covid-19. In conducting interviews with 3 pregnant women in the working area of the Tambakboyo Health Center in March 2021, it was found that the three pregnant women interviewed by the researcher said that they were very anxious and afraid because during this

pandemic all pregnant women had to screen for Covid-19 as a condition for childbirth process. They feel that the results of the screening are very worrying for pregnant women because if the results of the rapid test screening are positive, pregnant women must undergo further screening and must comply with all established procedures until the delivery process, postpartum, and procedures for the baby as well.<sup>5-7</sup>

The data above shows that a person's level of anxiety is influenced by several factors including intrinsic factors (age, experience, self-concept, and roles), and extrinsic factors (medical conditions/disease diagnosis, education level, access to information, adaptation process, socioeconomic level, types of anesthetic action and therapeutic communication).

The results of the Covid-19 screening in pregnant women are medical conditions/diagnoses of diseases experienced by pregnant women which are included in one of the extrinsic factors that affect anxiety levels. From the results of the Covid-19 screening on pregnant women, both positive and negative, it can have an impact on the level of anxiety of pregnant women, namely the anxiety experienced by pregnant women related to restrictions on maternal and neonatal

health services, further examinations, self-isolation, the delivery process, the referral process. KB services and comply with the health protocols that have been set by the government. This will affect the health of the mother and fetus which can result in higher morbidity and mortality.

The long-term impact on these conditions that are not treated will affect the health conditions of pregnant women and fetuses such as preeclampsia, prolonged labor, abortion, low birth weight, premature, IUGR, postpartum depression to maternal death and fetal death. preventive measures by a midwife or other health workers by conducting health promotion through IEC as a preventive measure and as early as possible, then monitoring and assisting pregnant women at risk by midwives and health cadres online and conducting classes for pregnant women while adhering to health protocols as a precautionary measure. one of the efforts to prevent the occurrence of anxiety and depression by pregnant women.

## MATERIAL AND METHOD

The research design used is analytic with a cross-sectional time approach. The population in this study were all pregnant women in the third

trimester at the Tambakboyo Health Center in May 2021, as many as 85 people. The sample in this study was some of the third-trimester pregnant women at the Tambakboyo Health Center in May 2021, namely 70 people using Simple Random Sampling and by the inclusion and exclusion criteria set by the researcher.

The research variable consists of the independent variable, namely the Covid-19 Screening Results in Pregnant Women and the dependent variable is the Anxiety Level of Pregnant Women. The data analysis used was the Chi-Square statistical test with a significant value of 0.05 through the SPSS Version 21 application to see if there was a relationship between the results of the Covid-19 screening in pregnant women and the level of anxiety of pregnant women.

The instrument in this study was to use secondary data, namely the Rapid test result sheet to see the results of the Covid-19 screening and primary data, namely using an interview guide to see the level of anxiety of pregnant women. This interview guide uses the HARS (Hamilton Anxiety Rating Scale) questionnaire which consists of 14 questions with a scoring system, namely Score <14: no anxiety, Score 14-20: mild

anxiety, Score 21-27: moderate anxiety, and score 28-41: severe anxiety. Before the questionnaires were distributed to respondents, the researcher first explained the aims and objectives of the study, and the consent form became the respondent

first. Data analysis was carried out to see whether there was a relationship between the results of the COVID-19 screening in pregnant women and the anxiety level of pregnant women at the Tambakboyo Health Center in Tuban 2021.

## RESULT

**Table 1. Covid-19 Screening Results for Pregnant Women at the Tambakboyo Health Center in May 2021**

No	Covid-19 Screening Results	n	Percentage
1.	Non Reactive	44	62,9
2.	Reactive	26	37,1
<b>Total</b>		70	100

Table 1 shows that of the 70 pregnant women, most of the results of the Covid-19 screening were non-reactive, as many as 44 pregnant women or 62.9%.

**Table 2. Anxiety levels of pregnant women at the Tambakboyo Health Center in May 2021**

No.	Anxiety Level of Pregnant Women	n	Percentage
1.	No Anxiety	0	0
2.	Mild Anxiety	16	22,9
3.	Moderate Anxiety	54	77,1
4.	Severe Anxiety	0	0
<b>Total</b>		70	100

Table 2 shows that almost all of 70 pregnant women experienced moderate levels of anxiety, namely 54 pregnant women or 77.1%.

**Table 3. The correlation between the results of the Covid-19 screening for pregnant women and the level of anxiety for pregnant women at the Tambakboyo Health Center in May 2021**

No	Covid-19 Screening Result	Anxiety level								Total	
		No Anxious		Mild Anxious		Moderate Anxious		Severe Anxious		n	%
		n	%	n	%	n	%	n	%		
1	Non Reactive	0	0	9	20,5	35	79,5	0	0	44	100
2	Reactive	0	0	7	26,9	19	73,1	0	0	26	100
<b>Total</b>		0	0	16	22,9	54	77,1	0	0	70	100

p=0,533

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Table 3 shows that almost all pregnant women with moderate levels of anxiety obtained Covid-19 Screening results, namely non-reactive as many as 35 pregnant women (79.5%), while a small number of pregnant women with mild anxiety levels obtained Covid-19 Screening results, which were non-reactive. as many as 9 pregnant women (20.5%). Statistical results using the Chi Square test on the SPSS 21 application with a significance level of 0.05 obtained p value = 0.533 so that  $p > 0.05$  then  $H_0$  is accepted, meaning that there was no significant correlation between the Covid-19 Screening Results in Pregnant Women and Mother's Anxiety Levels Pregnant .

## DISCUSSION

Currently, the world is facing a COVID-19 pandemic situation, where a pandemic requires us to take precautions against transmission or transmission of COVID-19. According to the appeal issued by both the WHO and the government, the community needs to take preventive measures that can prevent the spread of COVID-19 transmission, especially to people who are more susceptible to the virus, namely people with comorbid or congenital diseases and pregnant women. Pregnant women are

one of the special groups that are vulnerable to the COVID-19 virus. During pregnancy there is a partial decrease in immunity, resulting in pregnant women being more susceptible to viral infections. 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. tachycardia,<sup>7</sup> even nutritional deficiencies.<sup>8</sup> Therefore, it is very important to pay attention to behaviors that can prevent transmission of the virus to pregnant women. This behavior can be carried out in several aspects, namely, pregnant women must take precautions to avoid being infected with COVID-19 must wash hands with soap for at least 20 seconds, use hand sanitizer with alcohol, keep a distance of at least 1 meter from others, avoid touching the face, mouth, eyes, and nose, avoid shaking hands and must consume nutritious food.

From the research, it was also found that respondents with sufficient behavior were mostly from the group with 1 child, which was 42.6%, while the behavior in the less category was almost half of the respondent group with 3 pregnancies or more, 47.8%. During the

current pandemic, pregnant women in their first pregnancy will be more careful and take precautions to prevent the transmission of COVID-19.

Based on the characteristics of the number of children with good behavior, almost half (28.2%) in the respondent group with 2 children. Meanwhile, half or (50%) of the respondents with sufficient behavior category are the respondent group who does not have children. From the table, it can also be concluded that almost half of the respondents with less behavior category are groups that have 3 or more children, namely 40%. Based on the number of children, most of the cases of COVID-19 occurred in respondents with 3 or more children, which was 66.6% while respondents who did not have children got the overall results from 28 respondents or 100% showed positive or negative results for COVID-19. The existence of this number of children is associated with the psychological condition of the mother in taking preventive measures, which is assumed if the more family members that must be considered, the mother will be more negligent with herself so that the preventive measures taken by herself become less good or less than optimal. A mother, especially a housewife, who has a

greater number of children or family members, will influence in carrying out and implementing clean and healthy living behaviors.<sup>12</sup>

After an analysis was conducted to determine the relationship between the behavior of pregnant women and the incidence of COVID-19, from the results of the answers to the questionnaire to test behavior was related to the reactivity of the COVID-19 test results with the antigen swab method and RT-PCR. From the results of the antigen swab and RT PCR, the results obtained from a total of 160 respondents there were 42 positive COVID-19 people and 118 healthy or negative COVID-19 people. When linked to the results of the questionnaire on the behavior of pregnant women, it was found that 50 people or 89.2% of the examination results were healthy or negative for COVID-19 having good behavior, while respondents with unhealthy or positive test results for COVID-19 were found to be mostly in respondents with behavior in the less category as many as 26 people or 68.42%. Furthermore, from these results, an analysis was carried out using chi-square which in the test results obtained a significance value of  $p = 0.00$  which means that there is a relationship or

relationship between the behavior of pregnant women and the incidence of COVID-19 in respondents, namely pregnant women in the Tambakboyo Health Center area.

From the results of the research that has been obtained, it can be seen that there is a relationship between the respondent's behavior and the incidence of COVID-19. Analysis of social behavior with test results and stating that overall preventive behavior carried out by a person can have an effect With the results of the COVID-19 test. Health behavior is a person's response to stimuli related to illness and disease, health care systems, food, and the environment and what to do to maintain and maintain health so as not to get sick. When linked to preventing the spread of COVID-19, these behaviors can be carried out with several actions, namely: washing hands with soap or antiseptic liquid, wearing masks, maintaining distance, avoiding crowds, applying correct coughing, and sneezing etiquette, increasing body resistance by consuming food. nutrition, supplements as well as by implementing a clean and healthy lifestyle, wherein this study the results of the behavioral questionnaire were measured in the behavioral category

The correlation between health worker support and COVID-19 prevention behavior is very large, especially by carrying out various activities, one of which is providing counseling to be able to provide scientific data and information to all levels of society about the Coronavirus in Indonesia. The provision of information can be provided through online media methods that can be reached by all levels of society, which has an impact on increasing correct knowledge regarding behavior to prevent the spread of COVID-19. The knowledge provided continuously greatly influences behavior change in the community as the most effective effort and an important key in preventing the spread of COVID-19

## CONCLUSION

Most of the pregnant women in the Tambakboyo Community Health Center have a moderate category of behavior. Most of the pregnant women in the Tambakboyo Health Center area are in good health or negative for COVID-19. There was a correlation between the behavior of pregnant women and the incidence of COVID-19 in pregnant women in the Tambakboyo Health Center

area, this is known after statistical test analysis, using chi-square and the results obtained a significance value of  $p = 0.000$ , meaning that there was a correlation between behavior and the incidence of COVID-19 in pregnant women in the Tambakboyo Health Center area, wherefrom the results of the study it is known that preventive behavior is the most effective effort and is the main key in efforts to prevent the transmission and spread of COVID-19. So that pregnant women are expected to carry out behavior according to the provisions to prevent the transmission of COVID-19.

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