

## THE CORRELATION BETWEEN PREGNANT WOMEN BEHAVIOR WITH COVID-19 IN PREGNANT WOMEN IN TAMBAKBOYO PUBLIC HEALTH CENTER AREA

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### ABSTRACT

*The COVID-19 pandemic has caused disruptions to health, economy, politics, and social order worldwide. Pregnant women experience physiological and immunological changes and are one of the vulnerable groups with high comorbidity rates. This study was conducted to determine the relationship between the behavior of pregnant women and the incidence of COVID-19 in the Tambakboyo Health Center area. This was an analytic observational with a quantitative approach research. With data taken through questionnaires and the results of RT-PCR and antigen swab analysis used a cross-sectional time approach with the population being pregnant women who were screened in the Tambakboyo Health Center area in June 2020 - May 2021 with a sample of 160 respondents determined by the Probability Sampling technique. sample used simple random sampling. The independent variable in this study was the behavior of pregnant women, while the dependent variable was the incidence of COVID-19 in pregnant women in the Tambakboyo Health Center area. The analysis carried out using the Chi-square test with the significance level of the test results obtained a significance value of  $p = 0.000$  which means that it showed that there was a correlation between the behavior of pregnant women and the incidence of COVID-19.*

**Keywords :** Behavior, pregnant women, COVID-19

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### INTRODUCTION

Behavior is all human activities or activities, whether directly observed or not observed by outsiders. The behavior of midwives in providing services to clients is health maintenance behavior,

namely behavior or efforts to maintain or maintain health so as not to get sick and efforts to heal when sick.<sup>1</sup>

The behavior of midwives in providing midwifery services in accordance with their autonomy is an integral part of health services as an effort

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to realize quality family health. Quality midwifery services are an effort to reduce the maternal mortality rate (MMR) in Indonesia to reach 305 per 100,000 live births. This result is still far from the goal of achieving the 2015 MDGs, namely the MMR of 102 per 100,000 kh. In the 2014-2019 RPJMN, the government targets a reduction in the MMR from 205/100,000 births to 276/100,000 live births. The target for reducing MMR globally by 2030 based on the Sustainable Development Goals (SDGs) is 70 deaths per 100,000 live births. The maternal mortality rate in Indonesia is still quite high and increasing.<sup>2</sup>

This effort is carried out by providing maternal and neonatal services for the community which is focused on the 3 key messages of Making Pregnancy Safer, namely that every delivery is assisted by trained health personnel, every obstetric and neonatal complication receives adequate services and every woman of childbearing age has access to effective pregnancy prevention. unwanted and treatment of complications of miscarriage. Obstetric complications that occur in pregnant women can be prevented by routine examinations during pregnancy. Obstetric complications in Indonesia are still high, namely 34% of

the number of pregnancies. The high number of pregnancy complications shows the low number of antenatal care (ANC) visits by pregnant women. Low ANC visits as an indication of low ANC services caused by various factors, including: pregnant women are not satisfied with the behavior of midwives in providing services, culture, attitudes of pregnant women and low knowledge of pregnant women.<sup>3</sup>

National ANC visit data in 2012 reached 65.91% for K1 and 62.12% for K4. In East Java province the coverage of K1 only reached 77%, while for K4 it was 78%. Kediri Regency K1 reached 84% and K4 reached 87%. From the results of achieving ANC nationally to the district area, it is still far from the target of 95%. In the Tiron Health Center area, the achievement of K1 only reached 85% and K4 reached 73%. The ANC achievement in the Tiron Health Center work area cannot be separated from the ANC achievement at the Tiron Community Health Center Polindes, of the 9 Polindes in Tiron Health Center the lowest ANC achievement is at Tiron Village Polindes for K1 68% and K4 reaching 67%.<sup>4</sup>

An initial study of 10 clients who visited the Tiron Village Polindes using open interviews about services, using

simple questions, namely how the behavior of the midwife in providing services and whether they were satisfied with the services provided by the midwife, got the results that 3 clients (30%) felt the behavior of the midwife in providing patient services and mothers are satisfied with the services provided, while 7 clients (70%) assess the behavior of midwives in providing services is not in accordance with the mother's expectations, because midwives are always in a hurry in providing services so that pregnant women who carry out examinations at the Village Polindes Tiron is not satisfied.

The satisfaction of pregnant women in carrying out ANC examinations is strongly influenced by the quality and behavior of midwives in providing services. The quality of midwifery services is generally determined in 5 dimensions of service quality, namely direct evidence (tangible) is physical evidence, equipment, personnel and communication materials, reliability is the ability to carry out the promised services reliably and accurately, responsiveness, namely willingness to help patients or clients and provide services quickly, assurance, namely the knowledge and courtesy of service providers and their

ability to generate trust and confidence and empathy, availability to care, give personal attention to patients.<sup>5,6</sup> Of the five dimensions The lowest public perception is from the dimension of assurance and certainty (Assurance). This is because the community is often disappointed with the estimates of childbirth that are often explained by the midwife whose results do not match reality.

The behavior of the midwife in practice will have an impact on the number of client visits. In addition to the client's distrust of the midwife, it also results in a change of choice in checking or seeking delivery assistance at a traditional birth attendant, if this happens, the wider impact is an increase in maternal and child mortality because delivery assistance is not carried out by midwives but by traditional birth attendants.<sup>7,8</sup>

## MATERIAL AND METHOD

This type of research was an analytical observational with a quantitative approach. Based on the time of cross-sectional data collection, the population in this study were all pregnant women who were screened for COVID-19

at the Tambakboyo Health Center until February 2021, as many as 279 pregnant women. The sample used in this research is using the probability sampling technique with simple random sampling totaling 160 respondents. The preparation of the instrument was based on the COVID-19 prevention and control manual issued by the Ministry of Health of the Republic of Indonesia No. 413 5th revision on July 13, 2020. This questionnaire is to identify the behavior of pregnant women during the pandemic. Questions on the instrument are behaviors

carried out by pregnant women following the provisions for preventing COVID-19 including handwashing habits, wearing masks, coughing and sneezing etiquette, psychological distance/social distance, intake of nutrition and vitamins/supplements, as well as independent exercise/physical activity. Before being used to collect data on the behavior of respondents, namely pregnant women who were screened at the Tambakboyo Health Center, the instrument had been tested for validity and reliability.

## RESULT

Table 1. Distribution of Behavioral Frequency of Pregnant Women in the Tambakboyo Health Center May 2021

Behavior	Frequency	Percentage (%)
Good	56	35
Enough	66	41,25
Less	38	23,75
Total	160	100

From table 1, it can be seen that almost half of the respondents have enough behavior in the category of 66 people (41.25%) and a small proportion of respondents with less behavior category are 38 people (23.75%).

Table 2. Distribution of the Frequency of COVID-19 Events in Pregnant Women in the Tambakboyo Health Center Area in May 2021

Pergnant Women	Incidence COVID-19	
	Frequency	Percentage (%)
Healthy	118	73,8
COVID-19	42	26,3
Total	160	100

From table 2, it can be seen that most of the pregnant women in the Tambakboyo Health Center area are in good health or negative for COVID-19, namely 118 people or 73.8%. While almost half of pregnant women in the Tambakboyo Health Center area were positive for COVID-19, namely 42 people (26.3%)

Table 3. The Correlation of Pregnant Women's Behavior with the Incidence of COVID-19 in Pregnant Women in the Tambakboyo Community Health Center May 2021

Behavior	Incidence of Covid-19				Total	
	COVID-19		Healthy		f	%
	f	%	f	%		
Good	6	10,7	50	89,2	56	100
Enough	10	15,1	56	84,8	66	100
Less	26	68,42	12	31,5	38	100
Total	42	26,25	118	73,75	160	100

p= 0,000

From table 3 it can be concluded that almost all respondents with good behavior, namely 50 people (89.2%) obtained a healthy or negative COVID-19 examination result, while respondents with an unhealthy or positive COVID-19 examination result were found to be mostly in respondents with behavior in the less category, as many as 26 people (68.42%) Based on statistical calculations from table 5.8, the data met the requirements for analysis using the Chisquare statistical test and the results obtained a significance value of  $p = 0.00$  meaning that there was a relationship between the behavior of pregnant women and the incidence of COVID -19 For pregnant women in the Tambakboyo Health Center area.

## 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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