

# Predictor Analysis of Antenatal Care Behavior in the Pandemic Era in the Work Area of the Banyuwangi Kabat Health Center

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## ABSTRACT

The spread of COVID-19 caused by the SARS-CoV-2 virus has spread worldwide . On January 30, 2020, WHO declared it a public health emergency (Suryani & Purwodiharjo, 2021). Indonesia is currently expanding across regions, followed by an increase in the number of cases and the number of deaths (Purba, 2021). Overview of the Death Rate from Positive COVID-19 Cases Per 100,000 Population Based on Regency/City, Banyuwangi is ranked 8th at the national level at 396 with the highest number of deaths. ANC is a visit by pregnant women with health workers aimed at monitoring the progress of pregnancy to ensure the health of the mother and baby's growth and development, to recognize any abnormalities or complications that may occur during pregnancy, prepare for childbirth, prepare for the postpartum period and provide exclusive breastfeeding. (Fatkhayah , d kk, 2020). This type of research is quantitative using observational analytical methods using a *cross sectional approach*. The variables in this study consisted of independent variables and dependent variables. The independent variable is behavioral factors (age, occupation, knowledge, and attitude). The dependent variable is ANC (*antenatal care*) behavior . The number of samples in this study were 30, using *total sampling technique*. Data collection techniques were carried out by distributing questionnaires. The analysis in this study used Multiple Linear Regression Test consisting of t test and F test.

**Keywords:** Covid 19, ANC, Behavior

Received : March 7<sup>nd</sup> 2022

Accepted : April 11<sup>rd</sup> 2022

Published : May 27<sup>th</sup> 2022

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## INTRODUCTION

The spread of COVID-19 caused by the SARS-CoV-2 ( *Severe Acute Respiratory Syndrome Coronavirus-2* ) virus is very high in almost all countries around the world. On January 30, 2020, WHO declared it a public health emergency (Suryani & Purwodiharjo, 2021) . Indonesia is currently expanding across regions accompanied by an increase in the number of cases and/or the number of deaths (Purba, 2021) .

Changes in the pandemic can be seen based on indicators of the comparison of the number of positive cases with the number of tests (positivity rate) and death rates. If the number of tests (positivity rate) and death rates increase, it indicates that the pandemic is out of control (Ariansyah & Kusmira, 2021) . Based on the official report from the Covid-19 Handling Task Force in early 2021 which can be accessed from the official website *covid19.go.id* , Indonesia's *positivity rate* occurred on January 31, 2021 which reached 36.18% or more than 7 times the safe limit set. set by WHO (5%). The number of daily deaths occurred on January 28, 2021, which reached 476 people. In fact,

Indonesia's case fatality rate (CFR) is high, at 2.8%, above the global CFR (2.3%). Active cases as of February 3, 2021 reached 175,236 cases or 15.8% of positive confirmed cases. East Java became the province with the highest increase in mortality, within 1 week it rose 14.2% (373 vs 426). Overview of the Death Rate from Positive COVID-19 Cases Per 100,000 Population Based on Regency/City, Banyuwangi is ranked 8th at the national level at 396 with the highest number of deaths.

This situation is increasingly having an impact on aspects of health, politics, economy, social, culture, defense and security, as well as community welfare. Health services are no exception, one of which is maternal and neonatal health services, both in terms of access and quality (Triguno & Ayu, 2020). Based on the data obtained, the coverage of repeat visits (K4) decreased significantly from before the pandemic and during the pandemic. Health workers reported cessation of services at the community level and posyandu, 46 percent of antenatal care services stopped during the pandemic (Covid-19 Handling Task Force, 2021). In this pandemic situation, many pregnant women are reluctant to check their pregnancy at the puskesmas or other health services such as at the Independent Midwife Practice (PMB) for fear of contracting the Corona virus, as well as the recommendation to postpone pregnancy checks and classes for pregnant women, even though pregnancy checks still need to be carried out routinely. (Triguno & Ayu, 2020).

Research conducted (Wiratmo, et al, 2020) shows that the factors that influence the health behavior of pregnant women in conducting ANC visits are divided into predisposing factors consisting of age, education level, occupation, parity, knowledge, and attitudes of pregnant women. Enabling factors include the distance of residence, family income, as well as existing information media facilities. Meanwhile, the reinforcing factors include husband's support, family support, and attitudes and support from health workers.

Pregnancy is a physiological condition, but normal pregnancy can also turn into a pathological pregnancy, with a high risk of serious illness, morbidity and mortality. (Purwoastuti & Walyani, 2016). Coupled with the pandemic condition, it is feared that it will increase maternal mortality and neonatal mortality. Risks that may occur to pregnant women and babies can be detected early if pregnant women do a pregnancy check (Ariestanti, et al, 2020).

ANC is a visit by pregnant women with health workers aimed at monitoring the progress of pregnancy to ensure the health of the mother and baby's growth and development, to recognize any abnormalities or complications that may occur during pregnancy, prepare for childbirth, prepare for the postpartum period and provide exclusive breastfeeding. Through ANC, pregnant women get various information and education related to pregnancy and preparation for childbirth can be given to the mother as early as possible (Fatkhayah, et al, 2020). Hormonal changes during pregnancy result in low immunity of pregnant women, so that pregnant women are classified as vulnerable to being infected with the Covid-19 virus. This has the risk of increasing morbidity and mortality which is higher than women of childbearing age who are not pregnant (Mugiati & Rahmayati, 2021).

COVID-19 is currently having an impact on all age groups, including pregnant women who have a higher risk. Possible risks can be prevented by performing ANC in accordance with the provisions. The description above is the background for the author to identify and analyze *predisposing factors* that can affect the visit of pregnant women in the pandemic era.

## METHODS

This type of research is quantitative using observational analytical methods using a *cross sectional approach*. The variables in this study consisted of independent variables and dependent variables. The independent variables are behavioral factors (age, occupation, knowledge, and attitude). The dependent variable is ANC (*antenatal care*) behavior. The number of samples in this study were 30, using *total sampling technique*. Data collection techniques were carried out by distributing questionnaires to respondents, then the data obtained were processed and analyzed using the Multiple Linear Regression test consisting of t test and F test.

**RESULTS**

Frequency Distribution of Respondents

**Table 4.1** Frequency of Respondents by Age, Occupation, Knowledge, and Attitude

Variable	Category	N	%
Age (X1)	at risk	13	43.3
	No Risk	17	56.7
	Total	30	100
Job (X2)	Working	25	83.3
	Doesn't work	5	16.7
	Total	30	100
Knowledge (X3)	Well	10	33.3
	Not good	20	66.7
	Total	30	100
Attitude	Positive	6	20
	negative	24	80
	Total	30	100

T test

The t-test is intended to partially test the effect of the independent variables on the dependent variable with the assumption that other variables are considered constant with a 95% confidence level ( $\alpha = 0.05$ ). Where if the value of  $Sig > 0.05 = H_a$  is rejected and the value of  $Sig < 0.05 = H_a$  is accepted.

**Table 4.2** t test results

Variable	Sig.	Information
Age (X1)	0.078	$H_a$ rejected
Job (X2)	0.049	$H_a$ accepted
Knowledge (X3)	0.019	$H_a$ accepted
Attitude (X4)	0.013	$H_a$ accepted

Sumber : Lampiran

Based on table 4.13, it is known that two  $H_a$  were rejected and the other six were accepted, with the following description:

- a. Age (X1) with  $Sig\ 0.078 > 0.05$  then there is no partial effect on ANC Behavior (Y)
- b. Work (X2) with  $Sig\ 0.049 < 0.05$  then there is a partial effect on ANC Behavior (Y)
- c. Knowledge (X3) with  $Sig\ 0.019 < 0.05$  then there is a partial effect on ANC Behavior (Y)
- d. Attitude (X4) with  $Sig\ 0.013 < 0.05$  then there is a partial influence on ANC Behavior (Y)

F Uji test

The F test is intended to test the simultaneous effect of the independent variables on the dependent variable with a 95% confidence level ( $\alpha = 0.05$ ), where the results show that the Sig value  $> 0.05 = H_a$  is rejected, while the Sig value  $< 0.05 = H_a$  is accepted.

**Table 4. 3 F Test Results**

Variable	Sig.	Information
X1, X2, X3 , X4	0.0 00	H <sub>a</sub> accepted

Source: Appendix

Based on table 4. 14 it is known that H<sub>a</sub> is accepted, thus it can be concluded that the variables Age (X1), Occupation (X2), Knowledge (X3), and Attitude (X4) simultaneously affects the ANC behavior (Y).

**Coefficient of Determination Test**

The coefficient of determination test aims to see how much influence the independent variables have on the dependent variable.

**Table 4.4 Coefficient of Determination**

R Square	R Adjust Square
0, 784	0.554

Source: Appendix

Based on table 4.9, it is known that the R Square value is 0.784 this means that the influence of the variables X1, X2, X3, and X4 simultaneous effect on variable Y is 78.4 % and the remaining 21.6 % is influenced by other variables not examined.

**DISCUSSION**

**Age Relationship to ANC's Behavior**

Based on the frequency distribution table of respondents, the age category of respondents is divided into 13 pregnant women (43.3%) including those at risk and 17 pregnant women in the non-risk age category (56.7%). The risk age category is pregnant women aged < 20 years and > 35 years, while the non-risk category is mothers or women aged between 20 years and 35 years. Possible complications during pregnancy, delivery or postpartum. This condition is at risk of increasing mortality and morbidity 2-4 times higher than the age with no risk. At each phase of pregnancy, pregnant women need to carry out pregnancy checks as a form of monitoring the growth and development of the fetus in preparing for the birth process (Sinuhaji, 2021).

The results of the t-test for Age (X1) with Sig 0.078 > 0.05 then there is no partial effect on ANC behavior (Y). These results contradict the results of other studies, where ANC behavior is influenced by the age of pregnant women. The more mature the individual, the level of maturity and strength of a person, the more mature they will think and work, so they will be motivated to check their pregnancy and know the importance of antenatal care (ANC). (Santi Deliani Rahmawati, 2020). The possibility that age does not affect pregnancy visits is that the mother feels experienced so that according to her there is no need to routinely carry out pregnancy checks, based on past experience it is used as a guide to overcome the complaints felt during pregnancy.

**Employment Relationship to ANC Behavior**

The results of the study based on the frequency distribution of work, as many as 25 working mothers and 5 pregnant women not working. The results of the t-test calculation obtained the results that work (X2) with Sig 0.049 < 0.05 then there was a partial effect on ANC behavior (Y). The intended work of the mother is when the mother is active outside the home or inside the house except for routine household work. Pregnant women who work with high and dense activities prefer to prioritize their careers than their own health, so it is difficult to comply with ANC visits compared to housewives who have more free time to be able to organize and schedule ANC visits optimally. (Wisdom, et al, 2020).

### Relationship of Knowledge to ANC's Behavior

Based on table 4.3, the respondents' answers with good knowledge categories were 10 people (33.3%) and 20 people were less good (66.7%). Based on the t-test, it was found that knowledge (X4) with Sig 0.019 <0.05 then there was a partial effect on ANC behavior (Y). According to Bloom (Sumarni, 2014) knowledge is a very important domain for the formation of one's actions, in this case a pregnant woman will carry out antenatal care regularly if the mother knows the benefits of antenatal care for her pregnancy.

The knowledge that the mother has makes her want to know more about the state of her pregnancy, so she makes more frequent ANC visits. In line with research (Sari Priyanti, et al, 2020) Good knowledge of pregnant women about antenatal care, antenatal care visits with the number of visits 6 times. The higher the mother's understanding of the importance of prenatal care for the health of the mother and baby, the better the behavior to get health services for pregnancy. The health of the mother and fetus will be guaranteed, if pregnant women have good knowledge about Covid-19 so that pregnant women can prevent transmission and motivate pregnant women to be positive or good about Covid-19 (Siska et al., 2020) .

### Relationship of Attitudes to ANC Behavior

Based on table 4.4, the data obtained from respondents' answers on the attitude variable in the positive category as many as 6 people (20%) and in the negative category as many as 24 people (80%). Attitude is a readiness or willingness to act, and is not the implementation of a particular motive. Attitude is not yet an action (open reaction) or activity but is a behavioral predisposition (action) based on closed reactions (Sumarni, 2014) .

Attitude (X5) with Sig 0.013 <0.05 then there is a partial influence on ANC behavior (Y). a person in making decisions and actions, it is strongly influenced by the attitude held by each individual. A positive attitude or a good response reflects his concern for the health of himself and his fetus so that it can increase the number of visits. Meanwhile, a negative attitude makes pregnant women lose their motivation to visit (Rahmawati, 2020) .

In line with the research conducted (Ariestanti et al., 2020) get the results that attitudes affect antenatal care visits. With the formation of a positive attitude towards the importance of ANC, pregnant women can carry out pregnancy checks on health workers so that they can monitor the condition of the mother and fetus, so that the coverage of K1 and K4 is achieved according to the target.

### Relationship of Age, Occupation, Knowledge and Attitude to ANC Behavior

Based on the data obtained by the researcher and presented in table 4.14, the data obtained are  $X_1, X_2, X_3, X_4$  with a sig value of 0.000 <0.05, thus it can be interpreted that the variables  $X_1, X_2, X_3, X_4$  have an effect simultaneously on ANC behavior. This is also shown by the value of the coefficient of determination where the value of R square is 0.784 or 78.4%, this shows that the variables  $X_1, X_2, X_3, X_4$  have an influence level of 78.4% on the Y variable.

## CONCLUSION

In accordance with the research objective, namely to determine the factors that influence ANC behavior in pregnant women, researchers can conclude as follows:

1. Variables Age (X1), Occupation (X2), Knowledge (X3) , and Attitude (X4) Simultaneously Affect ANC Behavior (Y)
2. Age (X1) Has no partial effect on ANC Behavior (Y)
3. Work (X2) has a partial effect on ANC Behavior (Y)
4. Knowledge (X3) has a partial effect on ANC Behavior (Y)
5. Attitude (X4) has a partial effect on ANC Behavior (Y)

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