

## ***Frequency of Antenatal Care: Does It Affect Pregnant Women's Anxiety in the Third Trimester? A Cross-Sectional Study***

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### **ABSTRACT**

*Antenatal Care (ANC) is a visit carried out by pregnant women to check the health status of their pregnancy. In Indonesia, 11 provinces have still not achieved the ANC visit target based on the Ministry of Health's 2017 Strategic Plan. The impact for pregnant women who do not make ANC visits is increased mortality and morbidity rates, undetected abnormalities, lack of information, and even anxiety. This study aims to determine the relationship between the frequency of ANC visits and the anxiety level of pregnant women in the third trimester. This research uses a cross-sectional method. Spearman rank analysis was used to analyze data on 42 respondents at the Jatiasih District Health Center, Bekasi. This study shows that there is a relationship between the frequency of ANC visits and anxiety of pregnant women in the third trimester with a p-value of 0.002 and  $r = 0.474$ . Pregnant women need to make ANC visits according to the regulations recommended by the government to protect their babies and their health status*

**Keywords:** Antenatal Care; Anxiety; Pregnant Women

### **INTRODUCTION**

Pregnancy and childbirth are processes that can cause changes in a woman's body (physiological and psychological), requiring adjustments to these changes (Nirwana, 2011). In pregnancy or childbirth, there are still many problems and complications caused by many factors.

One of the problems that is often encountered is that many pregnant women do not regularly make ANC visits to health services. Antenatal care is an assessment procedure before delivery, especially

regarding the growth and development of the fetus in the womb. The K4 coverage target (last ANC visit during pregnancy) must reach 76% based on the Ministry of Health's 2017 Strategic Plan target. 11 provinces have not reached the K4 coverage target from this target (Kementrian Kesehatan, 2017).

Data on pregnant women who made K1 visits (first ANC visit) in DKI Jakarta Province were 222,290 pregnant women and K4 visits were only 218,201 pregnant women (Dinas Kesehatan Provinsi DKI Jakarta, 2017). Meanwhile, in West Java in 2016,

1,028,526 pregnant women made K1 visits, but only 961,017 pregnant women made K4 visits. This shows that 6.92% of pregnant women do not make K4 visits (Dinas Kesehatan Provinsi Jawa Barat, 2016). K1 coverage in Bekasi City in 2014 was 92.8 percent. Meanwhile, in Q4 there was a decline of 85.5 percent. At the Jatiasih Community Health Center, in 2018 K1 coverage reached 276 pregnant women while K4 coverage was 275 pregnant women (Dinas Kesehatan Kota Bekasi, 2014).

The impact of pregnant women who do not attend ANC visits is an increase in maternal mortality and morbidity rates, undetected pregnancies, and physical abnormalities that occur during childbirth. Apart from that, pregnant women will receive insufficient information regarding preparation for childbirth, so when they face childbirth, their anxiety will increase. Worry and anxiety in pregnant women if not handled seriously will have an impact and influence on physical and psychological aspects. Physical and psychological aspects are two things that are interconnected and influence each other. If your physical condition is not good, your thought process, mood, and actions in daily life will be negatively impacted (Hasim, 2018). Based on this, researchers think it is necessary to research anxiety in the third-trimester pregnant women

## OBJECTIVE

This study aims to assess the relationship between the frequency of ANC visits and anxiety among third-trimester pregnant women.

## METHOD

This research used a cross-sectional method on 42 third-trimester pregnant women at the Jatiasih District Health Center, Bekasi City. The criteria for respondents in this study were pregnant women in the third trimester, pregnant women without comorbidities, and willing to be respondents. Anxiety of pregnant women was assessed using the Zung Self-Rating Anxiety Scale

(Zung-SAS) instrument. The score range if an individual gets a score of 20-44 then falls into the normal category, 45-59 mild to moderate anxiety, 60-74 severe anxiety, and  $\geq 75$  extreme anxiety. ANC visits are seen based on the Maternal and Child Health book. Pregnant women who have visited  $\geq 4$  times are considered complete in their ANC visits. The relationship between ANC visits and anxiety in third-trimester pregnant women was assessed using the Spearman-rank correlation test.

This research was examined and obtained a permit from the Bekasi City Health Office with number 070/1331/Dinkes.SDK.

## RESULT

Table 1 shows that the frequency of complete ANC visits was 32 respondents (76.2%) and the frequency of incomplete ANC visits was 10 respondents (23.8%). Of the 32 respondents with a complete frequency of ANC visits, there were no respondents who experienced severe anxiety, there were 12 respondents (28.6%) who experienced mild to moderate anxiety, and 20 respondents (47.6%) were normal or did not experience anxiety. In addition, of the 10 respondents with incomplete frequency of ANC visits, there was 1 respondent (2.4%) with severe anxiety, 8 respondents (19.0%) with mild-moderate anxiety, and there was 1 respondent (2.4%) with normal condition or without anxiety.

The analysis results obtained a p-value of 0.002, indicating a significant relationship between the frequency of ANC visits and the anxiety of pregnant women in the third trimester at the Jatiasih Community Health Center, Bekasi City. The results of Spearman's rho analysis also show a correlation score of 0.474, which means there is a moderate or quite high correlation between the variable frequency of ANC visits and the variable anxiety of pregnant women in the third trimester.



This study shows that antenatal care visits have a significant relationship with the incidence of anxiety in third-trimester pregnant women. Anxiety is one of the responses that pregnant women have in dealing with pregnancy situations that are considered to have risk and are followed by symptoms that may be physiological, emotional, psychological, or cognitive (Araji et al., 2020; Che Hassan & Abdulwahid Aljaberi, 2023).

Pregnant women are psychologically and emotionally vulnerable, and research shows that pregnant women have a higher prevalence of anxiety and depression symptoms (Dunkel Schetter & Tanner, 2012; Răchită et al., 2023).

This study shows relevant results with Ainun et al., (2022) where ANC compliance has a significant relationship with the incidence of anxiety. Anxiety experienced by pregnant women can occur because of the information they receive.

One of the activities carried out during antenatal assessment is counseling. The purpose of doing this is to obtain information related to the health of the mother and fetus, as well as the steps that must be taken to ensure a healthy and smooth pregnancy (Health Ministry of Indonesia, 2018).

The complete information obtained by pregnant women includes further conditions regarding their pregnancy. Kemenkes RI (2020) stated that the information obtained by pregnant women during ANC visits is the result of examinations, care according to gestational age and maternal age, nutrition of pregnant women, mental readiness, recognizing danger signs of pregnancy, childbirth and postpartum, preparation for childbirth, postpartum contraception, care newborn babies, early initiation of breastfeeding, and exclusive breastfeeding. This makes the mother more prepared for all the possibilities that will occur during childbirth and the mother is not burdened with feelings of fear and anxiety. Information is obtained from health workers during visits

and becomes a reference for the quality of ANC services (Missa, 2017).

The information obtained by pregnant women will increase their knowledge about pregnancy and childbirth. Increasing the knowledge of pregnant women will increase the use of ANC, and vice versa (Marniyati L, 2016). Antenatal visits are planned to follow the growth and development of the fetus and identify abnormalities that could interfere with the normal birth process. Apart from that, examinations or ANC visits do not only include physical things such as checking fundal height in pregnant women, checking fetal heart rate, and others. Health workers also provide spiritual services or care, such as the mental readiness of a pregnant woman to face childbirth.

Anxiety in pregnant women at a certain level is normal because anxiety is part of a normal response in dealing with everyday problems. However, if the anxiety that occurs is excessive and not commensurate with the situation at hand then the anxiety can be considered abnormal. Health workers must provide counseling to clients and families. The counseling provided consists of planning a pregnancy at a risk-free age, explaining the importance of having ANC regularly, and providing ongoing psychological support to pregnant women (Sembiring, 2016).

Based on the discussion above, the researchers concluded that one form of mental unpreparedness that appears when mothers face childbirth is anxiety. Lack of information or counseling received by pregnant women can be a factor in pregnant women experiencing this. Therefore, a health worker or practitioner has an important role in providing services that include bio-psycho-social and spiritual.

This research was conducted using a small number of respondents. Further research with a larger number of respondents can be carried out with a larger number of respondents.

## CONCLUSION

This research shows that there is a significant relationship between the

frequency of ANC visits and the anxiety of pregnant women in the third trimester. Antenatal care services are comprehensive, so nurses such as nursing care providers and educators are very important in providing counseling and other services for pregnant women during ANC.

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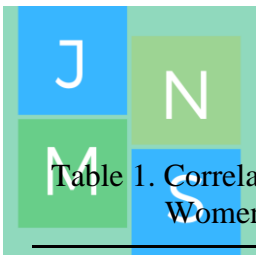


Table 1. Correlation between Frequency of ANC Visits and Anxiety Among 3<sup>rd</sup> Trimester Women

Frequency of ANC Visits	Anxiety of 3 <sup>rd</sup> Trimester Pregnant Women						Total		p-value	Correlation
	Severe		Mild-Moderate		Normal					
	N	%	N	%	N	%	N	%		
Incomplete	1	2,4	8	19,0	1	2,4	10	23,8	0,002*	0,474
Complete	0	0	12	28,6	20	47,6	32	76,2		
Total	1	2,4	20	47,6	21	50,0	42	100		