

# The Correlation Between Level of Knowledge, Socio-Economic Status, Health Care Support, and Family Support With the Frequency of Pregnancy Examination Visits in Nganjuk

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## ABSTRACT

Mabung village has the largest gap of frequency of pregnancy examination in Baron district, Nganjuk Regency in 2017, which is 38.6%. A large gap is caused by several factors in a pregnancy screening visit. The purpose of this research is to know the relationship between the level of knowledge, socioeconomic status, support of health officers and family support with the frequency of pregnancy examination visits in Mabung village, Baron district, Nganjuk regency. An observational analytic study with a cross-sectional design was used. Simple random sampling was used as sampling technique, in which all expectant mothers who make antenatal service visits in the Mabung village, Baron District, Nganjuk District participated. A validated questionnaire and observations were used to collect data. Data were collected on May to July 2019 and analyzed with Chi Square test. The results showed that there were a significant relationship between knowledge level ( $P = 0,029$ ), health care support ( $P = 0,036$ ), and family support ( $P = 0,048$ ) with frequency of the pregnancy examination visits, while socioeconomic status with frequency of the pregnancy examination visits had non-significant relationship ( $P = 0,380$ ). We conclude that there are relationships among the level of knowledge, socioeconomic status, health care support, and family support with frequency of pregnancy examination visits.

**Keywords:** Level of knowledge, Socio-economic status, Health care support, Family support, Frequency of pregnancy examination visits.

## 1. INTRODUCTION

Maternal Mortality Rate (MMR) is an important indicator of the degree of public health describing the number of women's deaths caused by pregnancy disorders or handling (excluding accidents or incidental causes) during pregnancy, childbirth and postpartum (42 days after childbirth) without take into account the length of pregnancy per 100,000 live births (Ministry of Women's Empowerment and Child Protection of the Republic of Indonesia, 2016). The high MMR shows low socio-economic conditions and the use of health care facilities including low prenatal and obstetric services [1].

Nganjuk Regency is an area experiencing an increase in maternal mortality rates. Based on data from

the Nganjuk District Health Office, in 2016 the number of maternal deaths was 70.35 per 100,000 KH [2]. Meanwhile, and in 2017 it was 84.10 per 100,000 KH [3].

To reduce maternal mortality one of the efforts made by the Government is to implement safe motherhood programme. One of the pillars of four safe motherhood pillars is antenatal care [4]. The purpose of antenatal care is: to maintain healthy mothers during pregnancy, childbirth and the puerperium; to strive for babies born healthy; to make a safe and satisfying pregnancy and childbirth process; to monitor the likelihood of pregnancy risks; to plan for optimal managements of high risk pregnancies; and to decrease

the mortality and morbidity of the mother and the perinatal fetus [5].

The frequency of pregnancy examination visits or antenatal care should be done at least four times [6]. An assessment of the implementation of the antenatal care programme can be done by looking at the coverage of K1 and K4 [7]. If the coverage of K1 to K4 has a gap, it indicates the dropout rate during K1-K4. The gap in coverage of K1-K4 in antenatal care is due to several factors. There are three factors that influence pregnancy check visits, namely: 1) predisposing factors (age, level of education, occupational status, parity of pregnant women, pregnancy gap, and knowledge and attitude of pregnant women), 2) enabling factors (distance of residence, socio economic status, and information or media), and 3) reinforcing factors (support of husband, family and health workers) [8].

This research aims to determine whether there is a relationship among level of knowledge, socioeconomic status, health care support, and family support with the frequency of pregnancy examinations visits in Mabung Village, Baron District, Nganjuk Regency.

## 2. METHOD

This research was observational analytic study with a cross-sectional design research implemented. This cross sectional design calculated independent and dependent variables at the same time [9]. The independent variables in this study were the level of knowledge, socioeconomic status, health care support, and family support of pregnant women. The dependent variable in this study was the frequency of pregnancy examination visits. The sample used in this study was total sampling, a sampling technique where all population were included [10]. Population and samples in this research were 35 pregnant women in Mabung Village, Baron District, Nganjuk. The instruments used were observations and questionnaires. The statistical test used was Chi Square statistical test.

## 3. RESULTS AND DISCUSSION

### 3.1. Respondents Characteristics

The results of this study were presented in the following table.

**Table 1. Characteristics of respondents by age, last education, employment (n=35)**

Characteristics of respondents		n	%
Age	≤ 20 years old	2	5,7
	21 – 25 years old	10	28,6
	26 – 30 years old	10	28,6
	31 – 35 years old	9	25,7
	≥ 36 years old	4	11,4
Last Education	Not finished	1	2,9
	Elementary School	5	14,3
	Middle School	13	37,1
	High School	14	40
	Bachelor Degree	2	5,7
Jobs	Housewife	26	74,3
	Teacher	1	2,9
	Farm Workers	1	2,9
	Private Employees	7	20

From table 1, we see that there were two groups with the same amount of respondents, namely group age of 21-25 years and 26-30 years, that consisted of 10 respondents (28.6%). From the last education level, mostly respondents were a high school graduated, that were 14 respondents (40%). While more respondents did the work of housewives by 26 respondents (74.3%).

### 3.2. Univariate Analysis

#### 3.2.1 Knowledge Level

**Table 2. Distribution of respondents by knowledge level**

No.	Knowledge Level	n	%
1.	Good	18	51,43
2.	Enough	13	37,14
3.	Poor	4	11,43
Total		35	100

Source: Primary Data, 2019

Table 2 indicated that the majority of respondents had a good level of knowledge (51.43%) in Mabung Village, Baron District, Nganjuk Regency

### 3.2.2 Socioeconomic Status

**Table 3. Distribution of respondents by socioeconomic status**

No.	Socioeconomic status	n	%
1.	Lower Class	18	51,43
2.	Middle Class	13	37,14
3.	Upper Class	4	11,43
Total		35	100

Source: Primary Data, 2019

Table 3 showed that the majority of respondents' socioeconomic status were in the lower class category (97.1%).

### 3.2.3 Healthcare Support

**Table 4. Distribution of respondents by health care support**

No.	Healthcare Support	n	%
1.	Good	32	91,4
2.	Not Good	3	8,6
Total		35	100

Source: Primary Data, 2019

Table 4 showed that the majority of respondents had good health care support (91.4%) in Mabung Village, Baron District, Nganjuk Regency.

### 3.2.4 Family Support

**Table 5. Distribution of respondents by family support**

No.	Family Support	n	%
1.	Good	27	77,1
2.	Not Good	8	22,9
Total		35	100

Source: Primary Data, 2019

Based on the results of the study, table 5 showed that most respondents received good support from their families, that were 27 people (77.1%).

### 3.2.5 Frequency of pregnancy examination visits

**Table 6. Distribution of respondents by frequency of pregnancy examination visits**

No.	Frequency of Pregnancy Examination Visits	n	%
1.	Good	15	42,9
2.	Not Good	5	57,1
Total		35	100

Source: Primary Data, 2019

Table 6 showed that the majority of respondents visited pregnancy examination that were suitable as many as 20 people (57.1%).

## 3.3. Interview Results

### 3.3.1. The Relationship between Level of Knowledge with Frequency of Pregnancy Examination Visits

**Table 7. Results of cross tabulation of level of knowledge with frequency of pregnancy examination visits**

Knowledge Level	Frequency of Pregnancy Examination Visits		Total
	Unsuitable	Suitable	
Deficient	4 (100%)	0 (0%)	4 (100%)
Enough	6 (46,2%)	7 (53,8%)	13 (100%)
Good	5 (27,8%)	13 (72,2%)	18 (100%)

Source: Primary Data, 2019

Based on the results of statistical tests using Chi Square test, we got  $p$ -value = 0.029, which means that there was a significant relationship between level of knowledge with frequency of pregnancy examination visits. This proves that the level of knowledge has an influence on the improvement of pregnancy examination visits. The level of knowledge has a higher chance of improving pregnancy examination visits. If the mother has a good level of knowledge, it will make the mother more often checked her pregnancy according to the age of her pregnancy compared to a mother with less knowledge. Mothers who have good knowledge will feel that the examination of pregnancy is very important for the mother or the fetus.

There were many possibilities that affected the pregnancy examination visit. Sometimes, even the maternal knowledge level is good, the pregnancy examination visit were still unsuitable. According to Fatimatasari, Sa'adi and Fatmaningrum (2017), some

possibilities that affected the pregnancy examination visit were: source of information about antenatal care, trusting more myths or the help of adequate people to provide IEC material by health care requesting supervision from the government related to the quality of ANC services provided by health care [11].

### 3.3.2. The Relationship between Socioeconomic Status with Frequency of Pregnancy Examination Visits

**Table 8. Results of cross tabulation of socioeconomic status with frequency of pregnancy examination visits**

Socioeconomic	Frequency of Pregnancy Examination Visits		Total
	Unsuitable	Suitable	
Lower Class	15 (44,1%)	19 (55,9%)	34 (100%)
Middle Class	0 (0%)	1 (100%)	1 (100%)
Upper Class	0 (0%)	0 (0%)	0 (0%)

Source: Primary Data, 2019

Based on the results of the statistical test using the Chi Square test obtained the value of  $p = 0.380$ , which means that there was a non-significant relationship between the socioeconomic status with the frequency of pregnancy examination visits. This results was different with those described by Dewi (2012), which concluded that the low socioeconomic status and unable to provide for her life will affect the obedience of someone in conducting the examination pregnancy [12].

### 3.3.3. The Relationship between Health Care Support with Frequency of Pregnancy Examination Visits

**Table 9. Results of cross tabulation of health care support with frequency of pregnancy examination visits**

Health Care Support	Frequency of Pregnancy Examination Visits		Total
	Unsuitable	Suitable	
Not-Good	3 (100%)	0 (0%)	3 (100%)
Good	12 (37,5%)	20 (62,5%)	32 (100%)

Source: Primary Data, 2019

Based on the results of the statistical test using the Chi Square test obtained the value of  $p = 0.036$ , it means there was a significant relationship between health care support with frequency of pregnancy examination visit. This means that good or bad health care support provides an opportunity to make more pregnancy examination visit. The results of this study proved that the support of good health care followed by good action as well.

The results of this study were unsuitable with the results of the research by Awaliyah (2018), that stating there is non-significant relationship between the support of the health care with pregnancy examination visits. Mothers who have adequate support from health care or less have much influence over the maternal pregnancy examination visits [13].

Some things that made mothers' examination of pregnancy visits is unsuitable were because the health care is not always present at the place, the service provided is not thoroughly but dependent on the needs of the patient, the information provided is not fully understood by mother, so that mother is more reliant on the experience of running her pregnancy [14].

### 3.3.4. The Relationship between Family Support with Frequency of Pregnancy Examination Visits

**Table 10. Results of cross tabulation of family support with frequency of pregnancy examination visits**

Family Support	Frequency of Pregnancy Examination Visits		Total
	Unsuitable	Suitable	
Not-Good	1 (12,5%)	7 (87,5%)	8 (100%)
Good	14 (51,9%)	13 (48,1%)	27 (100%)

Source: Primary Data, 2019

The value was  $p = 0.048$  from Chi Square test, it means there was a significant relationship between family support with the frequency of pregnancy examination visit. The results of the study was supported by Nurlaelah, Salmah, and Ikhsan (2014) in their research at the Dungkai District Health Center of Mamuju Regency which stated that there was a family support influence on ANC visit. Support is an efforts given to others, both morally and materially to motivate the person in carrying out activities [15].

Family support is a form of support from family attitudes, actions, and acceptance to their family members and prepares to be ready to provide help and assistance if needed. The form of support include informational support, such as: providing information and advice, support of awards such as giving support and attention, instrumental support such as financial needs, eating and drinking, and emotional support such as good trust and communication [16]. Such support is very important for pregnant women during their pregnancy.

However, not all pregnant women get good support from the family. According to the opinion of the researcher, this is likely due to the lack of another husband or other family in helping mothers to care for

her pregnancy, accompanying ANC, and ignoring maternal health conditions. It was supported by Armaya (2018) in his research stating that not all pregnant mothers get positive family support. The family feels the mother can keep her pregnancy because the pregnancy now is not the first pregnancy [14].

#### 4. CONCLUSION

Based on the results of research in the Mabung Village, Baron District, Nganjuk Regency, we can conclude that there are relationships among the level of knowledge, socioeconomic status, health care support, and family support with frequency of pregnancy examination visits.

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