

The Factors Affecting to Antenatal Care Mother's Pregnant Visit in Public Health Centre District of Mimika

Sonya Helena Yewun¹, Arry Pongtiku², Sarce Makaba³, Anwar Mallongi⁴

¹Magister Program of Public Health, Faculty of Public Health, Cenderawasih University, Jayapura.

^{2,3}Lecturer of Master Program in Public Health Faculty of Public Health, Cenderawasih University, Jayapura

⁴Environmental Health Department, Faculty of Public Health, Hasanuddin University, Makassar

Corresponding Author: Sonya Helena Yewun

ABSTRACT

Background: Utilization of antenatal care by a pregnant woman can be seen from antenatal care coverage. Mimika's coverage of antenatal care target of ANC coverage in 2017 decreased K1 91% and K4 45% was not achieved as per 95% standard. The factors affecting by characteristic is age, studies, job, ethnic, parity, married state, husband support and health officer support.

The purpose of research: to determine the factors that influence K4 pregnancy visit at Puskesmas Mimika Regency Mimika Regency of Papua Province.

Method: Quantitative descriptive study with cross sectional study design. The research was conducted in May 2018 at Timika Jaya Health Center, Central Market, Bhintuka, Mapurujaya with population is third trimester pregnant mother counted 98 mothers by purposive sampling. Data were obtained using questionnaire and analyzed using chi square test and logistic binary regression.

Results: The factors associated with ANC visit at Puskesmas Kabupaten Mimika were age ($p = 0,000$, $RP = 3,091$ $CI95\%$, 1,974-4,842), education ($p = 0,000$, $RP = 2,758$ $CI95\%$ (1,451-5,243), parity ($p = 0,011$, $RP = 6,279$; $CI95\%$; 0,951-41,453), marital status ($p = 0,018$; $RP = 1,725$; $CI95\%$; 1,154- 2,579) and husbands support ($p = 0,009$; $RP = 1,875$; $CI95\%$; 1,184-2,969), while unrelated factors on ANC visit at Puskesmas Kabupaten Mimika were work ($p = 0,296$; $RP = 1,349$; $CI95\%$; 0,827-2,199) and support of health personnel ($p =$

0.051, $RP = 1.607$, $CI95\%$ 1.079-2.393) Age, tribe, husband support and marital status are the dominant factors of ANC visit at Puskesmas Timika Kabupaten Mimika.

Keywords: Quality Service, Satisfaction, Patient, Hospital

1. INTRODUCTION

The high maternal mortality rate can indicate the low quality of health services. Decrease in Maternal Mortality Rate (MMR) is also an indicator of the success of the health status of a region. The government is working together to make various strategies for acceleration to reduce MMR. The Mother and Child Health Program is one of the priorities of the Ministry of Health and the success of the Maternal and Child Health (MCH) program is one of the key indicators of the National Long-Term Development Plan 2005-2025. The high maternal mortality rate (MMR) placing efforts to decrease MMR as a priority program in health development (Ministry of Health RI, 2012).

World Health Organization (WHO) in 2013 states Maternal Mortality Rate (MMR) is still high. In 1990 the AKI was 576,000 live births and by 2015 at 359 per 100,000 live births or a 45% reduction in MMR from 1990 to 2015. The decline in maternal mortality target per 100,000 live births was too slow to reach the target of the Development Millennium Goals (MDGs) in order to reduce three-quarters the number of women who died during pregnancy and childbirth

by 2015 (WHO, 2014). The cause of the WHO's high mortality rate according to the WHO during the period 1990-2015 occurred in poor countries and developing countries with AKI decrease of 2.6% per year from the target of 5.5% annual MDGs decrease. East Asia whose decline has already reached the target of 4.2% per year as well as North Africa, Southeast Asia, Latin America and the Caribbean is much larger than Sub-Saharan Africa (WHO, 2016). Maternal Mortality Rate (MMR) in Indonesia is still high in Asia. The Health Ministry 2016 reported an MMR in Indonesia of 309 per 100,000 live births and in the province of Papua AKI of 505 per 100,000 live births. One important factor contributing to maternal mortality is the quality of maternal health services at various levels of health services (MoH RI, 2016).

Improving maternal health in Indonesia is *the* fifth Millennium Development Goals (MDGs) that have been slow in recent years, despite efforts to improve maternal health services. This is in contrast to poor and developing countries (Vietnam, Thailand, Philippines) around Indonesia which shows a greater increase in the fifth MDGs (Unicef, 2012). *Antenatal care* is healthcare by professionals who administer to the mother during pregnancy and in accordance with the standard of care. This examination aims to examine the state of the mother and fetus periodically followed by correction of the found irregularities, with the frequency of visits *antenatal* 4 times during pregnancy, i.e. 1 time in the first trimester, 1 time in the second trimester and 2 times in the third trimester. Medical examinations in *antenatal care* include anamnesis, physical examination, diagnosis, obstetric examination and diagnostic investigation (Yanuarita, 2013).

The number of first visit coverage (K1) up to November 2013 in Indonesia is 93.34% which has met the target of 89%. Likewise, most provinces have met the target, Province with highest achievement is Bangka Belitung Islands of 97.92%, while

the lowest is West Papua Province of 25.54%. The highest coverage of K4 is 85.06% in South Sumatera Province at 97.78% and North Maluku with 21%. Papua Province and has not reached the target according to 2013 strategic plan that is 93% (Dinkes Prov Papua, 2014).

Mulyanti's research results (2012) revealed that the factors that affect the visit *antenatal care* is the support of husbands given to pregnant women. This is reinforced by Haruimawati (2012) research, that the support of husbands given to pregnant women in the ANC visit (53.3%) and 46.7% did not support. This has an impact on low visits *antenatal care*. Husband's support is a manifestation of attentiveness and affection. Support can be provided both physically and psychically. Husband has a big share in determining maternal health status. Support a good husband can provide good motivation to the mother to check her pregnancy (Mulyanti, 2013). The result of Erlina's research (2013) revealed that the factors that influence the low order of pregnant women to visit the pregnancy are mother's attitude, while the result of Dewi & Musfiroh's research (2013) say that the factors influencing the low of pregnant woman's visit in *antenatal care* (ANC) are knowledge and the attitude of pregnant women who are less about the benefits of making ANC visits. In addition Vitriyani study (2013) revealed that age, education, employment, husband support and marital status greatly affect mothers during pregnancy visits.

Report of Dinas Kesehatan Provinsi Papua (2016), in 2014 coverage K1 58,1% and K4 33,6%, while in 2015 coverage K1 56% and K4 24%. While data of Mimika Regency Health Office 2015 coverage of K1 as much as 111% and K4 as much as 49,4%. In 2016 K1 coverage as much as 118.3% and K4 as much as 45.3% and in 2017 coverage of K1 as much 91% and K4 as much as 45%. This shows the target of ANC coverage in 2017 decreased K1 and K4 not achieved as per 95% standard (Mimika Regency Health Office, 2017).

Local Permanent Monitoring Data (PWS) at Timika Health Center in 2015 K1 coverage is 150.6% and K4 is 76.5%, in 2016 K1 coverage is 98.5% and K4 is 35.6%, in 2017 coverage of K1 is 112 % and K4 by 67%. Puskesmas Timika Jaya in 2015 K1 coverage is 138,7% and K4 is 73,3%, 2016 coverage of K1 is 220,8% and K4 is 127,8%, 2011 coverage of K1 is 113% and K4 is 57%. Central Health Centers in 2015, K1 coverage is 72.2% and K4 is 15.2%, by 2016 K1 coverage is 187.6% and K4 is 66.1%, by 2017 K1 coverage is 115% and K4 is 41%. Bhintuka Health Centers in 2016 K1 coverage as much as 202.2% and K4 of 94.1% in 2017 K1 coverage as much as 180% and K4 as much as 128%. Puskesmas Mapuru Jaya by 2015 K1 coverage is 135,7% and K4 33%, 2016 coverage of K1 is 139,3% and K4 is 35,4%, 2017 coverage of K1 is 106% and K4 is 22% (Dinas Kesehatan Regency of Mimika, 2017).

Based on the above problems, the researchers are interested in conducting research with the title "Factors - Factors related to visit *antenatal care* of pregnant women in Puskesmas Kabupaten Mimika"

2. MATERIALS AND METHODS

Descriptive quantitative with study design *cross sectional*. The research was conducted in May 2018 at Timika Jaya Health Center, Central Market, Bhintuka, Mapurujaya with population is third trimester pregnant mother counted 98 mothers by *purposive* sampling. Data were obtained using questionnaire and analyzed using chi square test and logistic binary regression.

3.2 Bivariate Analysis

Age Relation with ANC visit

Table 2. Age relationship with ANC visit at Puskesmas Kabupaten Mimika 2018

Age of	visit ANC				Total	p	RP	CI 95% (LU)
	Less		Good					
	n	%	n	%				
<26 years	30	81,			1 26.2 7 45 18.9 73.8 37 61			
≥ 26 years	16							
Total	46	46.9	52	53.1				

3. RESEARCH RESULTS

3.1 Univariate Analysis

Table 1. Age, Education, Employment, Parity, Tribe, Marital Status, Support Husband, Health Manpower Support and ANC Visit at Puskesmas Kabupaten Mimika

No	Variables	Total (n)	Percentage (%)
1	Age		
	<26 years old	37	37.8
	≥ 26 years	61	62.2
2	Education		
	Low	62	63.3
	High	36	36.7
3	Jobs		
	working	64	65.3
	Not working	34	34.7
4	Parity		
	High	28	28.6
	Low	70	71.4
5	tribes		
	Papuan	86	87.8
	Non Papua	12	12.2
6	Marital Status		
	Unauthorized	34	34.7
	Legal	64	65.3
7	Husband Support		
	Difficult	49	50
	Easy	49	50
8	Support Health Personnel		
	Less	28	28,6
	Enough	70	71,4
9	ANC Visit		
	Less	46	46,9
	Good	52	53,1
Total		98	100

Table 1, indicating that out of 98 respondents mostly in mother aged ≥ 26 years as many as 61 people (62.2%), low level of education of 62 people (63.3%), did not work as many as 34 people (34.7%) and low parity or have children > 4 children 70 people (71.4%). Most of the mothers came from the tribe of Papua as many as 86 people (87.8%) with legitimate marriage statuses as many as 64 people (65.3%). The proportion of husbands support is as much 49 people (50%) and dukunagan health workers are mostly in good category as many as 70 people (71.4%). The ANC visits conducted by pregnant women are mostly in good category as many as 52 people (53.1%).

Table 2 shows that of the 37 respondents were aged <26 years, 30 men (81.1%) were lacking in ANC visits and as many as 7 people (18.9%) both in the ANC visit. Mothers aged ≥ 26 years out of 61 persons were 16 (26.2%) less in ANC visits and 45 (73.8%) in both ANC visits. results test *Chi square* obtained $p = 0,000 \leq 0.005$

which means there is a relationship between maternal age with an ANC visit at Puskesmas Kabupaten Mimika. The results of the prevalence ratio (RP) test showed $RP = 3.091$ $CI_{95\%} (1,974-4,842)$, interpreted that the mother age <26 years tended to be a risk factor with an ANC visit less than 3.091 times higher than mothers aged ≥ 26 years.

Education relationship with ANC visit

Table 3. Educational relationship with ANC visits at the health center in 2018 Mimika

Education	ANC Visits				Total	p	RP	CI 95% (LU)
	Less		Good					
	n	n%	n	n%				
Low	38	61.3	24	2.758	1,451-5,243	0.000		38.7
High	8	22.2	28	77.8	36			
Total	46	46.9	52	53.1	100			

Table 3 shows that of the 62 respondents who educated poor education there are 38 people (61.3%) less than in the ANC visit and as much as 24 people (38.7%) both in the ANC visit. Highly educated mothers of 36 people were 8 (22.2%) less in ANC visits and 28 (77.8%) in both ANC visits. results test *Chi square* obtained $p = 0,000 \leq 0.005$ which means

that there is a relationship of maternal education with an ANC visit at Puskesmas Kabupaten Mimika. The results of the prevalence ratio (RP) test showed $RP = 2.758$ $CI_{95\%} (1,451-5,243)$, which interpreted that low maternal education tended to be a risk factor with an ANC visit less than 2.758 times higher than that of a highly educated mother.

Employment relations with ANC visit

Table 4. Employment relations with ANC visits in health centers by 2018Mimika

Job	ANC Visits				Total	p	RP	CI 95% (LU)
	Less		Good					
	n	n%	n	n%				
Working	33	51.6	31	48.4	64	0.296	1.349	21
Not working	13	38.2	0,827-2,199	61.8	34			
Total	46	46.9	52	53.1	100			

Table 4 shows that of the 64 respondents who worked there were 33 (51.6%) less than in the ANC visit and as many as 31 people (48.4%) both in the ANC visit. Mothers who did not work from 34 people were 13 (38.2%) less in ANC visits and 21 (61.8%) in ANC visits. results test *Chi square* obtained $p \text{ value} = 0.296 > 0.005$

which means that there is no working relationship with ANC visit at Puskesmas Kabupaten Mimika. The results of the prevalence ratio test (RP) showed $RP = 1.349$; $CI_{95\%} (0.827-2.199\text{worker})$ with a lower value less than 1, so there is a protective factor with an ANC visit.

Parity relationship with ANC visit

Table 5. Parity relationship with ANC visit at Puskesmas Kabupaten Mimika 2018

Parity	Visit ANC				Total	p	RP	CI 95% (LU)
	Less		Good					
	n	%	n	%				
High	8	28,6	20	0,282-0,982	20	0.038	0.526	71.4
Low	38	54,3	32	45.7	32			
Total	46	46.9	52	53.1	100			

Table 5 indicates that out of 20 respondents are of high parity 8 (28.6%) less than in the ANC visit and as many as 20 people (71.4%) in the ANC visit. Mothers with low parity of 32 people found 38 people (54.3%) less in ANC visits and 32 (45.7%) in both ANC visits. results test *Chi square* obtained p value = 0.038 <= 0.005

which means that there is a parity relationship with the visit of ANC at Puskesmas Kabupaten Mimika. The results of the prevalence ratio test (RP) showed RP = 0.526; CI95% (0.282-0.982) with a lower value less than 1, so parity is not a risk factor with ANC visits.

Tribal Relation with ANC visit

Table 6. Tribal Relation with ANC visit at Puskesmas Kabupaten Mimika 2018

Tribe of	Visit ANC				Total	p	RP	CI 95% (LU)
	Less		Good					
	n	%	n	%				
Papua	45	52,3	41	47,7	86	0.011	6.279	0.951-41,453
Non Papua	1	8,3	11	91,7	12			
Total	46	46.9	52	53.1	100			

Table 6 shows that of the 41 respondents from the tribe of Papua there were 45 people (52.3%) lacking in the ANC visits and as many as 41 people (47.7%) both in the ANC visit. Mothers from non-Papuan tribes of 12 people found 1 (8.3%) less in ANC visits and as many as 11 people (91.7%) in ANC visits. results test *Chi square* obtained p value = 0.011 <= 0.005

which means that there is a tribe relationship with the visit of ANC in Puskesmas Kabupaten Mimika. The result of prevalence ratio test (RP) shows RP = 6,279; CI95% (0.951-41,453) with a lower value less than 1, so the tribe is not a risk factor with ANC visits.

Marital status Relationship with ANC visit

Table 7. Marital status relationship with the ANC at the health center visits Mimika 2018

Marital Status	ANC Visits				Total	p	RP	CI 95% (LU)
	Less		Good					
	n	n%	n	n%				
Unauthorized	22	64.7				5 12 40 35.3 62.5 34 64 0.018		
Legal	24	37,						
Total	46	46.9	52	53.1	100			

Table 7 shows that of the 34 respondents with an invalid marriage status there were 22 people (64.7%) less than in visited ANC and 12 people (35,3%) in ANC visit. Mothers with valid marriage status of 64 people were 24 (37.5%) less in ANC visits and as many as 40 people (62.5%) in the ANC visit. results test *Chi square* obtained p value = 0.018 <= 0.005 which

means that there is a relationship of marital status with the visit of ANC in Puskesmas Kabupaten Mimika. The results of the prevalence ratio test (RP) show RP = 1, 725; CI95% (1,154-2,579) interpreted that unauthorized marital status of marriage was a risk factor with an ANC visit of less than 1.725 times higher than for mothers whose legal marital status.

Relationship Support ANC husband to visit

Table 8. Support husband's relationship with ANC visits at the health center in 2018 Mimika

husband support	the ANC Visits				Total	p	RP	CI 95% (LU)
	Less		Good					
	n	n%	n	n%				
Do not support	30	61.2				7 19 33 38.8 67.3 49 49 0.009		
Supports	16	32,						
Total	46	46.9	52	53.1	100			

Table 8 shows that of the 49 respondents who have received the support of a husband 30 men (61.2%) less than in doing ANC visits and as many as 19 people (38.8%) both in the ANC visit. Mothers who did not get husbands support from 49 people were 16 (32.7%) less in ANC visits and 33 (67.3%) in ANC visits. results test *Chi square* obtained p value = 0.009 <=

0.005 which means that there is a relationship of support of husbands with the visit of ANC in Puskesmas Kabupaten Mimika. The results of the prevalence ratio test (RP) show $RP = 1.875$; $CI_{95\%} (1,184-2,969)$ interpreted that lack of maternal husbands support was a risk factor with an ANC visit of less than 1.875 times higher than for husbands supported women.

Support Relationship with health workers ANC visit

Table 9. Correlation support health workers in health centers with ANC visit Mimika 2018

health workers support	the ANC Visits				Total n	p	RP	CI 95% (LU)
	Less		Good					
	n	n%	n	n%				
Do not support	18	64 ,			3 40 10 42 35.7 60 28 70			
Support	28							
Total	46	46.9	52	53.1	100			

Table 9 shows that of the 28 respondents who had the support of health workers, there are 18 people (64.3%) less than in doing ANC visits and as many as 10 people (35.7%) both in the ANC visit. Mothers who did not receive health support from 70 people were 28 (40%) lacking ANC visits and as many as 42 people (60%) in the ANC visit. results test *Chi square* obtained p value = 0.051 > 0.005 which means that there is no significant association of health personnel support with ANC visit at Puskesmas Kabupaten Mimika. The results of the prevalence ratio test (RP) showed $RP = 1.607$; $CI_{95\%} (1.079-2.393)$ interpreted

that the lack of maternal health care support was a risk factor with an ANC visit of less than 1.607 times higher than for women receiving support from health personnel.

Multivariate Analysis Multivariate

Analysis was used to find out which factors influenced ANC visit, bivariate analysis was needed and continued on multivariate test. Bivariate modeling using logistic regression test begins with bivariate modeling using where each independent variable is tested to dependent variable gradually with p value ≤ 0.25 which can be seen in Table 10.

Table 10. Bivariate Modeling

No	Variable	p-value	RP	95% CI for Exp (B)		Ket
				Lower	Upper	
1	Age	0.000				candidate
2	Education	0.000				Candida
3	Occupation	0.296				No candidate
4	Parity	0.038				candidate
5	Rate	0.011				candidate
6	Marital Status	0.018				candidate
7	Support Husband	0.009				candidate
8	Support Medicals	0.051				candidate

Table 10 above, the variable age, education, parity, tribe, marital status, husband support and support of health personnel are candidate variables to be tested together using logistic regression with method *backward LR* with the results that can be seen in Table 11.

Table 11. Analysis of Logistic Regression Variables multiple

No	Variables	B	p-value	RP	95% CI for Exp (B)	
					Lower	Upper
1	Age	3,499	0,000		002 0.026 0.000 33.089 44.622 4.556 12.075 7.228	
2	Tribe	3,798	0 ,			
3	Marital Status	1,517				
4	husband Support	2,491				
	Constant	16.091	0.000	0.000		

Table 11 above shows the age, ethnic, husband support and marriage are the dominant factors with ANC visits with $p < 0.005$.

4. DISCUSSION

4.1 Influence of Age with visit of ANC

The result of research found that there is relation of mother age with visit of ANC at Puskesmas Kabupaten Mimika. Mothers aged < 26 years were 81.1% less in ANC visits while in mothers aged ≥ 26 years 73.8% were good in making ANC visits.

The results of this study were conducted in advance by Cholifah (2015) that there is an age relationship with ANC visit ie increasing age increasingly increasing the ANC youth compared to mothers who are young or in the category of adolescents. According Rohmah (2010) is the readiness of pregnant women in following service *antenatal* meaningful with changes that occur due to the process of growth and development (increasing age) and interaction with background experience.

A certain age range is good for running a parenting role and following *antenatal care*, if too young or too old may not be able to perform the role optimally. In this case there is a suitability between the theory and the results of the analysis that is the number of age group of pregnant women between years old who utilize the visit *antenatal* 20-35 complete compared with the age group of pregnant women < 20 or > 35 years (Hukmiah, 2015).

Efforts to socialize by health workers about good age in pregnancy should be more aggressively conducted to the community, this can involve women cadres who are very helpful to improve health status in the community, so that the reduced number of marriages at a young age (less than 20 years) that can cause complications in pregnancy as well as pregnancies over 35 years.

Thus, age may be a predictor of maternal behavior in the examination of pregnancy, meaning either mother who is in

their teens or at risk of having a higher chance of not doing an incomplete ANC mismatch (not standardized). This is understandable because the knowledge of pregnant women about the danger of pregnancy is still low, in addition, geographically the work area of Limau Asri Health Center consists of urban areas and areas where transportation accessibility is still quite difficult to reach.

4.2 Effect of Education with ANC visit

Education means education given to someone else to understand something. It can not be denied that the higher the education of a person, the easier it will be to receive information and ultimately the knowledge it has will be more and more. Conversely, if someone has a low level of education, it will hamper the development of the person's attitude towards the acceptance of newly introduced information and values (Mubarak, 2011).

The results obtained that there is an educational relationship to the ANC visit in the Puskesmas Kabupaten Mimika. Mothers with low education were 61.3% less in ANC visits. When compared to well-educated mothers the proportion of ANC visits was 77.8% higher. The results of the prevalence ratio (RP) test showed $RP = 2.758$ CI95% (1,451-5,243), which interpreted that low maternal education tended to be a risk factor with an ANC visit less than 2.758 times higher than that of a highly educated mother.

It can be explained that the role of education with ANC visits is very large in terms of reproductive health, well-educated mothers tend to have a better thinking for health improvement whereas low-educated mothers have less knowledge about their health and are more resigned, giving in to circumstances without any incentive to improve his fate. In addition, a highly educated mother will always determine her decision more rationally in this case the behavior of her pregnancy examination.

The same result is explained by Langefielt in Walgito (2014), the higher the

level of education the person's perspective on everything in society will be wider. The more mature a person then his attitude towards something he considers useful will be more rational.

The result of Pangmenan (2013) study shows that there is a correlation between education and the utilization of K4 service ($p = 0,000$, $RP = 0,038$) where the higher the mother's education the more able to take the decision and keep the health and use the health facilities around them. Further confirmed by research Puspita (2014) found that education related to knowledge about *antenatal care* that the higher the education hence there is tendency more and more opportunity for ANC complete examination.

The importance of education for women, who later become mothers, may influence their attitudes and knowledge of health care, the need for prenatal and postnatal visits and awareness of the health of children and their families. Education is one of the indirect causes that affect the examination of pregnancy. Likewise in the literature (Azwar, 2010), that the goal of education is not only the transfer of knowledge and skills, but also the character development such as the development of thinking, sensitivity, awareness, ethical values and others. The higher a person's education will be more easily accept and develop knowledge and technology. Education is very influential on the way of thinking, acting and in making a person's decision in using health services.

Efforts in improving education can be in line with health promotions, especially those related to pregnant women who can be assisted by health workers assisted by cadres or local community leaders, to improve the knowledge of pregnant women in utilizing *antenatal care* by way of delivery of health workers who will conduct education of pregnant women should be adjusted to the level of education of pregnant women, in addition language used by health personnel should be simple and understandable by pregnant women, so

communication in providing education is *antenatal* not hampered.

4.3 Influence of Occupation with ANC visit

The research found that there is a relationship of mother education with ANC visit. Mother employed 51,6% less during ANC visit while 38.2% less working mother in ANC visit and from prevalence ratio (RP) test showed $RP = 1,349$; $CI95\%$ (0.827-2.199worker) with a lower value less than 1, so there is a protective factor with an ANC visit.

The results are consistent with the Cholifah study (2015), that the maternal employment status is not related to ANC visits. This is in contrast to Gabriellyn's theory, 2013 which suggests that the more busy a pregnant woman with the job the opportunity to get *antenatal care* is smaller so the chance to check her pregnancy will tend to decrease. Factors that may cause it are educational factors. Working mothers usually have better education and sufficient knowledge compared to mothers who are not working. Despite being occupied with work, the mother keeps regular visits *antenatal*.

According to Romauli (2011), one's work will describe the activity and level of economic prosperity gained. Working mothers have a better level of knowledge than mothers who do not work, because the working mothers will have more opportunities to interact with others, so it has more chances also to get information about the circumstances of pregnancy.

In this study, the low mothers who did not work for ANC visits were due to stronger evidence in ANC visits such as husband support. Good husbands support will help mothers in fulfilling the facilities including the costs that the mother needs. While the mother who worked but got husband support, so the mother is willing to visit the health center. This can be seen in the type of work of mothers who are mostly farmers, where the working time is arranged by the mother himself. lack of support from

husbands so that the motivation of pregnant women to be low in ANC visits and differ with difficult geographical conditions for mothers who live far away in accessing services.

Socialization efforts on pregnant women in groups that are not working can be done more diligently, not only in the group of mothers who do not work alone promoted health but also to groups of pregnant women who work to conduct a visits *antenatal* complete and regular, in order to monitor the possibility- chances are that will happen in pregnancy.

4.4 Parity relationship with ANC visit

The results obtained that there is a parity relationship with ANC visit at Puskesmas Kabupaten Mimika. Mothers with high parity or having children of more than 4 children were 28.6% less in ANC visits. While mothers who are low parity or children less than 4 children as much as 54.3% less in the ANC visit. From result of test of prevalence ratio (RP) show $RP = 0,526$; $CI95\% (0.282-0.982)$ with a lower value less than 1, so parity is not a risk factor with ANC visits.

Parity is the state of a woman related to having a number of children. Called nulipara, if the mother has never had a baby or has never had a child, has one child is called primipara, has 2 - 4 children called multipara and mmeiliki child more than 5 children called grandemultipara (Tiran, 2009). According Surniati (2013), pregnant women with low parity (have children <4 children) the percentage of more pregnancy visits.

The absence of correlation was due to 45 respondents studied, 43 respondents or 95.6% were low parity, making it difficult to obtain parity relationship with regularity of pregnancy checking due to not found high irregularity parity doing a non significant 0 in one examination table cell.

4.5 Relation of pregnant mother tribe with visit of ANC

The result of research obtained that there is relation of tribe with visit of ANC at Puskesmas Kabupaten Mimika. Mothers from the Papuan tribe were 52.3% less in ANC visits. Mothers from non-Papuan tribes were 8.3% less in ANC visits. This suggests a higher proportion of irregular visits to ANCs in mothers of Papuan origin.

Different ethnic groups may differ in habits, lifestyles, and so on which can lead to differences in morbidity or mortality (Notoatmodjo, 2011). However, from the results of test the prevalence ratio (RP) shows $RP = 6.279$; $CI95\% (0.951-41,453)$ with a lower value less than 1, so the tribe is not a risk factor with ANC visits.

The absence of meaningful life hollows given the cultural diversity of tribes in Papua and non-Papuans has blended and resembled the same culture. In addition, there is a support factor of husbands and support of health workers who can change the behavior of mothers in making ANC visits.

4.6 Relationship of Marriage Status with Visit of ANC

The result of research shows that there is relationship of marital status to ANC cohunagn at Timika Health Center in Mimika Regency. Mothers with unauthorized marriage status 64.7% less in ANC visits. When compared to mothers who legal marriage status fewer in doing ANC less as much as 37.5%. The results of the prevalence ratio test (RP) show $RP = 1,725$; $CI95\% (1,154-2,579)$ interpreted that unauthorized marital status of marriage was a risk factor with an ANC visit of less than 1.725 times higher than for mothers whose legal marital status.

The results of this study differ from the research of Erlina (2013), revealing that the factors that affect the low order of pregnant women to visit the pregnancy include the marital status, where the mother with unauthorized marriage status tends not paid attention to husband and financial condition.

Many married couples are illegitimate by the mother of hail due to the fact that there is a dowry culture that is expensive or unacceptable to the men, so that marriage can not take place in the church because it has not performed the traditional ceremony to the female family as a legitimate proof of marriage which subsequently marriages take place in the church. This causes many losses in women due to the absence of bonds or legal terms when the husband leaves the pregnant woman.

The existence of marital status relationship caused by married husband who is legitimate marriage, has a sense of responsibility to his wife and prospective children who make the husband meet the needs of his wife, including taking his wife in a visit to the health center.

4.7 Relationship of Husband Support with ANC visit

The result of the research shows that there is a relationship of husband support with ANC visit at Puskesmas Kabupaten Mimika. Mothers who had the support of husbands were 61.2% less in ANC visits, while mothers had less husband support less in doing ANC. The results of the prevalence ratio test (RP) show $RP = 1.875$; $CI95\% (1,184-2,969)$ interpreted that lack of maternal husbands support was a risk factor with an ANC visit of less than 1.875 times higher than for husbands supported women.

The results of this study are in line with Vitriyani (2013), that pregnant women with poor husbands support, lower pregnancy checks than pregnant women with good husband support. Husband's support is encouragement / motivation given by the husband to his pregnant wife in this case the support can be in the form of verbal and non verbal, suggestions, real help in the form of behavior or presence that can provide emotional benefits and affect the behavior of his wife who in this support to visit ANC (Mulyanti, 2012).

Husband is the very closest to pregnant women, then the support of the

husband is needed in determining the various policies in the family. Support is one of the reinforcing factors (*reinforcing factor*) that can affect a person in behaving (Mulyanti, 2012). The form of support the husband provides is social support. Social support is a beneficial condition for individuals acquired from others who can be trusted so that one will know that there are others who pay attention, respect and love it (Prasetyawati, 2011).

Less husbands support (40%) given to the lowest respondents is to provide information about pregnancy and complaints faced by the mother and recommend regularly to visit ANC Husband regardless of the complaints that mothers feel during pregnancy. Although husbands 'support is lacking, it is the mother's own wish that realizes the importance of pregnancy checks, so husbands' support is not related to the regularity of pregnancy checkups.

4.8 Relationship of Health Personnel Support with ANC visit

The result of the research shows that there is a relationship of health personnel support with ANC visit. Mothers who did not receive healthcare support were 64.3% less in ANC visits than those who received more than 40% less health care support for ANC visits. The results of the prevalence ratio test (RP) showed $RP = 1.607$; $CI95\% (1.079-2.393)$ interpreted that the lack of maternal health care support was a risk factor with an ANC visit of less than 1.607 times higher than for women receiving support from health personnel.

The results of research are in line with previous research conducted Vitriyani (2013), that pregnant women with the support of husbands is not good, do lower pregnancy examination than pregnant women with the support of good husband. The coverage of *antenatal care* is the percentage of pregnant women who have received prenatal care by health personnel in a work area. Coverage K1 is coverage of pregnant women who first receive *antenatal*

care by health workers in a work area for a certain period of time. K4 coverage is the coverage of pregnant women who have received *antenatal care* in accordance with the standards, at least four times in a work area for a certain period of time (MOH RI, 2009).

The role of health workers is an activity that is expected of a health worker who provides health services to the public to improve the health status of the community. As in pregnant women need the role of health care workers about pregnancy. Support is one of the reinforcing factors (*reinforcing factor*) that can affect a person in behaving (Mulyanti, 2012). The form of support provided is social support. Social support is a beneficial condition for individuals acquired from others who can be trusted so that one will know that there are others who pay attention, respect and love it (Prasetyawati, 2011).

Mothers who receive support from health workers include advice or counseling given to pregnant women about regular visits can improve maternal motivation in repeat visits due to the attention given by the officers. From the results of the prevalence ratio test obtained from the results of the prevalence ratio test (RP) showed RP = 1.607; CI95% (1.079-2.393) interpreted that the lack of maternal health care support was a risk factor with an ANC visit of less than 1.607 times higher than for women receiving support from health personnel.

4.9 Dominant influence with ANC visit

The logistic binary regression test results obtained that age, tribe, husband support and marital status were the dominant factor with ANC visit with p value <0.005. Young motherhood has constraints to mother's mental readiness in getting pregnant. The tribal factors of pregnant women in poverty - the same as those of unlawful marriage status because of cultural similarity in Mimika Regency such as legitimate marriage after going through traditional ceremonies and marriages will be

legally passed through the marriage bond in the church. This causes the husband's low responsibility to meet the wife's needs and at any time can leave his wife without legal marriage.

5. CONCLUSION

From the results of the analysis of research data conducted, finally drawn the conclusion as follows:

- a. There is a relationship between maternal age with an ANC visit at Puskesmas Kabupaten Mimika ($p = 0,000$; RP = 3.091 CI95%; 1,974-4,842).
- b. There was an association of maternal education with ANC visit at Puskesmas Kabupaten Mimika ($p = 0,000$, RP = 2,758 CI95% (1,451-5,243)
- c. No work relationship with ANC visit at Puskesmas Kabupaten Mimika ($p = 0,296$; RP = 1,349; CI95%; 0.827 to 2.199).
- d. There is a relationship of parity with the ANC at the health center visits Mimika ($p = 0.038$; RP = 0,526; CI95%; 0.282 to 0.982).
- e. There is a relationship with the tribe of ANC visits in health centers Mimika Regency ($p = 0.011$; RP = 6.279; CI95%; 0.951 to 41.453).
- f. There is a relationship marital status with ANC visits at the health center Mimika Regency ($p = 0.018$; RP = 1,725; CI95%; 1.154 to 2.579).
- g. There is a relationship with the husband's support of the ANC at the health center visits Mimika ($p = 0,009$; RP = 1,875; CI95%; 1,184-2,969)
- h. There is no significant association of health personnel support with ANC visit at Puskesmas Kabupaten Mimika ($p = 0,051$, RP = 1,607 CI95% 1,079-2,393)
- i. Age, husband support and marital status are the dominant factor with ANC visit at Puskesmas Timika Kab upaten Mimika.

REFERENCES

- A Mallongi, R La Ane, AB Birawida, 2017. Spatial Lead Pollution in Aquatic Habitats

- and the Potential Risks in Makassar Coastal Area of South Sulawesi, Indonesia, *Jurnal Kesehatan Lingkungan Indonesia*
- Aryani, (2010). *Kesehatan Remaja, Problem dan Soulsinya*. Salemba Medika, Jakarta.
 - Agustini NM (2013). *Hubungan Antara Tingkat Pengetahuan Ibu Dan Dukungan Keluarga Dengan Cakupan Pelayanan Antenatal Di Wilayah Kerja Puskesmas Buleleng I*. *Jurnal Magister Kedokteran Keluarga Vol 1, No 1, 2013* (hal 67-79) <http://jurnal.pasca.uns.ac.id>
 - Arwiani T, (2013). *Faktor-Faktor Yang Memengaruhi Pemanfaatan Pelayanan Antenatal Di Puskesmas Kota Bandung Tahun 2013*. <http://www.unpad.co.id>. diakses 20 Maret 2018.
 - Dinkes Kota Jayapura, (2014). *Profil Kesehatan Kota Jayapura*.
 - Fitriyeni (2015). *Penyebab Rendahnya Kelengkapan Kunjungan Antenatal care Ibu Hamil Di Wilayah Kerja Puskesmas Pegambiran*. *Jurnal Kesehatan Masyarakat Andalas | Oktober 2015 - Maret 2016 | Vol. 10, No. 1, Hal. 101- 107 h. p://jurnal.2m.unand.ac.id/index.php/jkma/*
 - Fithriani N, (2011). *Hubungan Antara Dukungan Keluarga Dengan Kepatuhan Ibu Dalam Pemeriksaan Kehamilan Trimester III di Klinik Bersalin Sri Wahyuni Medan*. www.usu.co.id. diakses 20 Maret 2018.
 - Gabriellyn. 2013. *Faktor yang Berhubungan dengan Keteraturan Kunjungan Antenatal di Wilayah Kerja Puskesmas Kapala Pitu - Toraja Utara*. Makassar: Fakultas Kesehatan Masyarakat Universitas Hasanuddin.
 - Harumawati D., (2012). *Gambaran Dukungan Suami dalam Antenatal care Ibu Hamil di Wilayah Kerja Puskesmas Babadan Ponorogo*. www.unprog.co.id. diakses 20 Maret 2018.
 - Imogiri W., Dewi PP., Musfiroh M, (2013). *Hubungan pengetahuan ibu hamil tentang antenatal care dengan frekuensi kunjungan antenatal care di rumah Bersalin Bantul Jawa Tengah*. <http://www.uns.co.id>. diakses 10 Maret 2018.
 - Ivanna. (2011). *Hubungan Dukungan Suami dengan Keteraturan Antenatal care di Wilayah Kerja Puskesmas Pucangsawit Surakarta*. Karya Tulis Ilmiah: Universitas Negeri Sebelas Maret
 - Jannah N, (2013). *Buku Ajar Asuhan Kebidanan: Kehamilan*. Nuha Medika, Jakarta.
 - Janiwarty dan Piter, (2012). *Pendidikan Psikologi untuk Bidan, Suatu Teori dan Terapannya*. Rapha Publishing, Yogyakarta.
 - Kemenkes RI, (2012). *Pengumpulan dan Kajadian Kulit Pelayanan Kesehatan ibu Pada Tingkat Pelayanan Kesehatan Dasar dan Rujukan di Indonesia Tahun 2012*.
 - Lockhart & Saputra, (2014). *Kehamilan Fisiologis & Psikologis*. Binarupa Aksara Publisher, Tangerang.
 - Manuaba, IBG., (2013). *Ilmu Kebidanan, Penyakit Kandungan dan Pendidikan Keluarga Berencana Untuk Pendidikan Bidan*, EGC, Jakarta.
 - Mardiyah UL (2013). *Faktor yang Berhubungan dengan Pemanfaatan Pelayanan Antenatal oleh Ibu Hamil di Wilayah Kerja Puskesmas Tempurejo Kabupaten Jember Tahun 2013*. e-Jurnal Pustaka Kesehatan, vol. 2 (no. 1) Januari 2014.
 - Mulyanti, (2012). *Hubungan Dukungan Suami Pada Ibu Hamil Dengan Kunjungan ANC di Rumah Bersalin Bhakti IBI Jl. Sendangguwo Baru V No 44 Kota Semarang*. Program Studi DIV Kebidanan Sekolah Tinggi Ilmu Kesehatan Karya Husada Semarang.
 - Ningrum EW (2013). *Gambaran Faktor-Faktor Yang Mempengaruhi Rendahnya Cakupan Kunjungan Empat Kali (K4) Pada Ibu Hamil Di Wilayah Puskesmas Kalimanah*.
 - Nadhira F. W, (2011). *Hubungan Antara Dukungan Keluarga Dengan Kepatuhan Ibu Dalam Pemeriksaan Kehamilan Trimester III di Klinik Bersalin Sri Medan tahun 2011*. www.usu.co.id. diakses 10 Maret 2018.
 - Notoatmodjo S, (2010). *Promosi Kesehatan Masyarakat*. Rineka Cipta, Jakarta., (2011). *Kesehatan Masyarakat, Ilmu dan Seni*. Rineka Cipta, Jakarta.
 - , (2012). *Metode Penelitian Kesehatan*. Rineka Cipta, Jakarta.
 - Nurlaelah, (2012). *Faktor Yang berhubungan dengan kunjungan antenatal care Di Wilayah Kerja Puskesmas Dungkai Kabupaten Mamuju*. <http://www.unhas.co.id>. diakses 10 Maret 2018.

- Rismawati, (2012). *Hubungan Dukungan Suami Dengan Motivasi Ibu Hamil Terhadap pemeriksaan Antenatal care (ANC) Di Rskdia Siti Fatimah Makassar Tahun 2012*. <http://ww.unhas.co.id>. diakses 10 Maret 2018.
- Romauli, 2011. *Buku Ajar Asuhan Kebidanan I. Konsep Dasar Asuhan Kehamilan*. Nuha Medika, Jakarta.
- Sugiyono, (2009). *Metode Penelitian Administrasi*, Alfabeta, Jakarta.
- Sumiati, (2012). *Faktor-Faktor Yang Berhubungan Dengan Kunjungan Pemeriksaan Kehamilan K4 Di Puskesmas Dengan Tempat Perawatan Sindangratu Kabupaten Garut Tahun 2012*. <http://ww.ui.co.id>. diakses 10 Maret 2018.
- U Salmah, A Mallongi, A Wahyu, 2013. *Potential Risks Of Manganese Through Shallow Well Water Consumption Due To The Landfill Leachate Among Community In Tamangapa Disposal Site, Makassar*, *International Journal of Engineering* 2 (8)
- Yanuaria, (2013). *Penyusunan Upaya Peningkatan Pelayanan Antenatak Care Berdasarkan Voice Of The Customer*. (online) (<http://www.yahomail.com>. diakses 4 Maret 2018).

How to cite this article: Yewun SH, Pongtiku A, Makaba S et al. The factors affecting to antenatal care mother's pregnant visit in public health centre district of Mimika. *International Journal of Science & Healthcare Research*. 2018; 3(3): 55-67.
