

Pregnant Women Participation in HIV Test in Blang Mangat Primary Health Care, Lhokseumawe

Mardiana¹, Putri Chairani Eyanoer^{2*}

¹Blang Mangat Primary Health Care, Lhokseumawe

²Department of Preventive and Community Medicine, Faculty of Medicine, Universitas Sumatera Utara

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Abstract: The numbers of pregnant women performing HIV test in Blang Mangat Primary Health Care remain low at 25%. This situation is caused by several factors including lack of knowledge about HIV test, attitude towards HIV and lack of family support. A cross-sectional design with a total of 101 pregnant women with consecutive sampling technique was performed. The variable examined namely age, educational background, knowledge, attitude, husband's and health officer's support. Data were analyzed using the Chi-Square test and multiple logistic regression to identify the variable that has the greatest impact on the participation of the pregnant women for HIV test. We found that pregnant women were generally lacking of knowledge (57.4%) and with a positive attitude (60.4%). Women with support from the husband were found as many as 61 people (60.4%) and support from the health officer (58.4%). However, most pregnant women did not want to participate in HIV testing (51.5%). This study found that knowledge and husband's support are variable with the greatest impact on the participation of pregnant women for HIV testing.

1 INTRODUCTION

WHO studies in several Asia Pacific countries show that HIV screening of pregnant women conducted in antenatal care is really cost-effective to prevent mother-to-child HIV transmission (Kemenkes, 2015). In 2016, new cases of HIV infection in Indonesia were as many as 48,000 with the incidence of 0.19%. The total population living with HIV is 620,000, while the case of pregnant women in antiretroviral treatment is 14% (UNAIDS, 2017). More than 90% of the HIV infected child cases contracted the disease through mother-to-child infection (Kemenkes 2015).

The implementation of screening among pregnant women by using the voluntary and confidential test service (VCT) has risen in all over Indonesia. However, the knowledge of the existence of this service is still limited. This corresponds with a study that showed 16 out of 27 respondents (59.3%) with low knowledge did not perform VCT test. Statistically, there is a correlation between the level of knowledge with the participation of VCT test in pregnant women (Nurhayati, 2016).

People with a higher economy level found to have better information on VCT service, as well as

on HIV prevention programs (Unicef, 2012). In Blang Mangat Primary Health Care, only around 25% of pregnant women perform HIV test in the VCT service. The low utilization of VCT service is caused by many factors. One of which is the health officer's support. A study found that those who perform the VCT receive support from the health officer (70.8%) (Khoiriyah, 2016). Another study showed that husband's support is correlated significantly with VCT test in Public Health Care (Handayani, 2017). This study will look on to several factors that influenced the willingness of pregnant women to perform HIV test at the VCT service in Blang Mangat Primary Health Care.

2 METHODS

This research applied an analytic method with a cross-sectional design. The population in this study is all pregnant women in Blang Mangat Lhokseumawe area, Aceh Province, Indonesia. Based on sample size computation, a total of 101 pregnant women were then recruited based on their inclusion criteria

Structured interviews were done using a validated questionnaire to collect primary data from pregnant women. Meanwhile, secondary data was obtained from the Health Office of Lhokseumawe, village office, health, and other related institutions. The questionnaire is divided into 2 categories, namely category A and category B. Category A contains common information such as respondent's age, education and occupation. Category B contains specific data such as knowledge, attitude, husband's support, and health officer's support.

Univariate, bivariate, and multivariate analysis were done. The univariate analysis aims to describe the frequency distribution of pregnant women based on their characteristics such as age and education. Bivariate analysis in the form of a Chi-square test was done to see the correlation between independent variables with the dependent variable. The multivariate analysis aims to determine the most influential independent variables by using multiple logistic regression.

3 RESULTS

Factors correlated with the participation of pregnant women for HIV testing at the Blang Mangat Health Center of Lhoksumawe are listed in Table 1. It shows that the majority of respondents are between 20-35 years old ($n=53$, 52.5%), in which the one with the middle educational level was found in 43 people (42.6%) and mostly worked as a housewife in 68 people (67.3%).

Based on Table 1, it shows that respondents below 20 years who did not want to participate in the HIV test were as many as 8 people (7.9%), while those who took the HIV test were 9 (8.9%). Among the 20-35 years group, 27 people (26.7%) did not want to participate and those who participated in the HIV test were lower ($n=26$, 25.7%). There was no association between maternal age and their participation in HIV testing ($P=0.870$).

Of 101 pregnant women with elementary education, there were only 13 people (12.9%) who did not want to participate in HIV test and the one willing to participate in HIV test were as many as 9 people (8.9%). While pregnant women with higher education who did not participate in HIV test were only 16 people (15.8%), and those who took the HIV test were 20 people (19.8%) There was no association between education and pregnant women participation in HIV testing ($P=0.524$).

In terms of knowledge, women with higher awareness of HIV were more willing to undertake the test ($n=30$, 29.7%) compared to the number of the mother who had less information on HIV ($n=19$, 18.8%). There was a strong association between knowledge and the participation of pregnant women in HIV testing ($P<0.001$).

Table 1: The Association of Age, Knowledge, Attitude, Husband's Support, and Health Officer's Support with the Participation of Pregnant Women in HIV Test at BlangMangat Health Centre 2018.

Characteristic	HIV Test on VCT service				p
	Participate		Do not participate		
	n	%	n	%	
Age					0,870
< 20 years	8	7,9	9	8,9	
20-35 years	27	26,7	26	25,7	
> 35 years	17	16,8	14	13,9	
Educational Level					
Elementary School	13	12,9	9	8,9	0,524
High School	23	22,8	20	19,8	
College	16	15,8	20	19,8	
Knowledge					
Less	39	38,6	19	18,8	0,000
More	13	12,9	30	29,7	
Attitude					
Negative	25	24,8	23	12,9	0,025
Positive	27	26,7	36	35,6	
Husband's Support					
Less	29	28,7	11	10,9	0,001
Good	23	22,8	38	37,6	
Health Officer's Support					
Less	27	26,7	15	14,9	0,030
Good	25	24,8	34	33,7	

Pregnant women with a negative attitude but willing to participate in HIV test were as many as 23 people (12.9%), lower than those with a positive attitude and participated in HIV test ($n=36$, 35.6%). There was an association between knowledge and the participation of pregnant women in HIV testing ($P=0.025$).

Pregnant women with good husband support and participated in HIV testing were as many as 38 people (37.6%), more than those with less support from the husband but willing to participate in HIV testing ($n=11$, 10.9%). The statistic test result shows that there was an association between knowledge and the participation of pregnant women in HIV testing ($P=0.025$).

Pregnant women with good health care support and participated in the HIV test were as many as 34

people (33.7%), more than those with less knowledge and participated in the HIV test as many as 15 people (14.9%). There was an association between knowledge and the participation of pregnant women in HIV testing ($P=0.030$).

Table 2. Analysis in Knowledge, Attitude, Husband's Support, and Health Officer's Support, with The Participation of Pregnant Women in HIV Test at BlangMangat Health Centre 2018.

Variable	B	SE	Sig	OR
Step: 1				
Knowledge	1,55	0,43	0,000	4,730
Constant	-2,27	0,65		
2 log likelihood:126,0		Overall Percentage: 68,3		
Step: 2				
Knowledge	1,36	0,45	0,003	3,925
Husband's Support	1,26	0,46	0,007	3,532
Constant	-4,04			
2 log likelihood:118,3		Overall Percentage: 67,3		

Multivariate analysis shows that both knowledge and husband's support is the most influential variables in the participation of HIV test among pregnant women, with an odds ratio of 3.925 and 3.532, respectively. This finding suggests that pregnant women with less knowledge and or less husband's support will have the risk of not participating in HIV testing as much as 3.9 and or 3.5 times higher than pregnant women with good knowledge or good support. This model showed a contribution as high as 67.3% and it is statistically significant with $P<0.05$.

4 DISCUSSION

The results of this study showed that the majority of pregnant women were aged between 20 and 35 years old. This is in accordance with a study that found pregnant women who came to the VCT clinics were women of the same age (Anggraini, 2017; Ernawati et al, 2016; Nurmasari et al, 2015). Both studies found that there was no association between age and the willingness to participate in HIV test

Most pregnant women in this study were high school graduates. This result is in accordance with a study done previously where most pregnant women who were recruited were high school graduates (Olanrewaju et al, 2006; Anggarini, 2010). Statistically, there was also no association between level of education with the participation of pregnant women in HIV test. This result is in accordance with

several studies done prior to this one (Halim et al., 2016)

The analysis of the association between knowledge and participation, however, is significant. This result is supported by a similar study (Nurhayati, 2016). Theory by Notoadmojo mentioned that knowledge is a very important domain for creating an action (Sari, 2014). Once a pregnant woman understands the objectives and benefits of VCT and where the VCT services can be accessed, the willingness would then be higher compared to those who still have no such information. According to the behavioral theory of Lawrence W. Green, there are several factors that cause behavior in a person, such as predisposing factors including level of education and knowledge. The higher the education and the knowledge, therefore, the more she will behave positively (Notoatmodjo, 2012).

The statistical test result also shows that there was an association between attitude and the participation of pregnant women in HIV test. This is harmonious with a study stating that there is a correlation between attitude and behavior of HIV test (Halim et al, 2016). However, another study found no association between attitude and willingness (Mujiati et al., 2014). The positive attitude of the pregnant woman is affected by her good knowledge of HIV/AIDS and VCT program itself. Attitude is not yet action and/or activity, however, it is a predisposition for an action/practice. Attitude can be positive or negative (Nuraini, et al, 2011). If the attitude of pregnant women is positive towards the HIV test, then the situation will likely to improve and the easier the treatment process is to be given to prevent transmission from mother to baby.

The statistical test result of husband support variable shows that there is an association between husband's support with the participation of pregnant woman in HIV test. This is in accordance with a study that mentioned that there is a significant correlation between husband support and VCT examination (Handayani et al, 2017; Hikmah, 2015). According to Friedman (2010), family support consists of attitude, action, and acceptance of family members. Husband as a role model in the family has a responsibility to maintain and support and always ready to provide help and assistance if necessary from family members including providing support to the wife in checking their health.

The analysis of health officer support shows that there is an association between support of health officer with the participation of pregnant women in

HIV test. This is in accordance with a previous study by Halim and Kusumawati (2016). The role of health workers is very influential because health officers often interact with pregnant women so that pregnant women have a sense of trust and accept the presence of officers for themselves in utilizing the service of antenatal care (Kemenkes, 2012).

In this study, we found the most dominant factor related to pregnant women's participation in HIV Test at Puskesmas Blang Mangat Kota Lhokseumawe is the knowledge of pregnant women which has an OR equal to 3.9. This means that a pregnant mother with good knowledge has the probability to check their HIV status as much as 3.9 times when compared to pregnant women with less knowledge. Husband support had an OR equal to 3.5, means that pregnant women with good husband support have a probability to check HIV status 3.5 times when compared with pregnant women without husband support. This result is in accordance with a study by Nurhayati (2016) that showed a pregnant woman with good knowledge was 5.4 times more likely to check their HIV status. Meanwhile, pregnant women with husband support were 6.1 times more likely to check their HIV status. Knowledge factor is an influential factor in applying new behavior as well as in HIV testing, the higher a person's knowledge the easier it is to apply new behaviors.

5 CONCLUSIONS

We concluded that there was a significant association between knowledge, attitude, husband's support, and health officers' support with the participation of pregnant women in HIV testing ($P < 0.05$). While there was no significant correlation between age and education level with the participation of pregnant mother in HIV test at Blang Mangat Public Health Centre in Lhokseumawe ($P > 0.05$). The most dominant factors associated with the participation of pregnant women in HIV Test was knowledge with $P = 0.003$ and husband's support with $P = 0.007$.

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