

## ORIGINAL ARTICLE

# FACTORS AFFECTING HOUSEWIVES' ATTITUDES TO HIV AND AIDS TEST IN YOGYAKARTA, INDONESIA

Nanik Setiyawati and Niken Meilani.

*Poltekkes Kemenkes Yogyakarta, Indonesia.*

Corresponding author: Nanik Setiyawati

Email: [nanikyogya@gmail.com](mailto:nanikyogya@gmail.com)

### ABSTRACT

*HIV testing becomes one of the standard components of mother and child health and family planning services at every level of health care. Increase case oh HIV among Housewives. There are 67% of pregnant women supported HIV test, but only 24% who tested HIV. This study aims to know the factors that influence the housewife attitude toward HIV testing in Yogyakarta which includes knowledge, mother's belief in HIV testing, belief the attitude of her husband, friend and community leaders. This research is correlational analytic with cross sectional design. The sample are 350 housewives in Yoga City and Sleman district that already implemented Prevention Mother to Child Transmission for HIV program. Analysis data use chi square and logistic regression. The result is majority of respondents: mothers aged >35 years, secundipara, education level is middle, husband's work as an employee and family income above the regional minimum income standard. Majority respondents have a good knowledge of HIV/AIDS and HIV testing, supportive attitudes toward HIV testing and have high belief in HIV testing from husband's attitudes and community leader's attitude. Respondents' belief that the attitude of friends did not support HIV testing for them. The majority have a supportive attitude to HIV testing are have a good knowledge of HIV/AIDS, have high belief in HIV testing, have high belief in the attitudes of husbands, friends and community leaders. The most factors influence on mother's attitude toward HIV testing is mother belief in her husband's attitude.*

**Keywords:** housewives, knowledge, attitude, belief HIV test.

### INTRODUCTION

The number of women living with HIV and AIDS in Asia varies greatly between different countries. It has been estimated that 90 percent of women living with HIV in Asia are infected by their husband or long-term partner. Since the start of the global HIV epidemic, in many regions, women have remained at a much higher risk of HIV infection than men. Moreover, HIV remains the leading cause of death of women of reproductive age, yet access to HIV testing and treatment remains low.<sup>1</sup>

New HIV cases in Indonesia based on data from the Ministry of Health of the Republic of Indonesia in 2013 were 29 037 cases, in 2014 as many as 32 711 cases and 2015 is as much as 30 935 cases. As for new cases of AIDS in 2013 is as many as 11,282 cases, in 2014 as many as 7,864 cases and in 2015 was 6,373 cases. Based on data on new cases of HIV and AIDS is still very high. Women who affected by AIDS in Indonesia has increased the case that in 2013 as much as 32%, while in 2014 has risen as much as 36% of AIDS cases in Indonesia and in 2015 they were 36% of cases.<sup>2</sup>

Yogyakarta one of the provinces in Indonesia which is famous as a cultural city and student

city, currently ranked 8th for prevalence of HIV & AIDS case that is equal to 26,49 per 100.000 population.<sup>3</sup> Peoples with HIV/AIDS majority live in Yoga city (726 people) and Sleman Regency (737people). Yoga city and Sleman have implemented HIV prevention program from mother to child trough the Primary Health Centre. Housewives in the Province of Yogyakarta reportedly affected by HIV & AIDS based on data from the HIV & AIDS Commission (KPA) DIY2015for 401 HIV cases. This figure is in the second rank of the number of HIV & AIDS cases by type of work. This figure is far above Commercial Sex Workers affected by HIV, reported as many as 119 cases.<sup>2</sup>

There are 4 actions recommended by WHO to prevent the occurrence of mother-to-child HIV transmission: (1) Strengthening of primary HIV prevention measures to ensure that women of reproductive age and their partners are protected from HIV infection; (2) providing contraception and counseling in order to achieve the target/coverage of family planning among women living with HIV; (3) provide HIV testing, counseling and antiretroviral drugs in a timely manner to HIV pregnant women to prevent transmission to their

children and (4) ensure that care, treatment and support for women with HIV, children and their families has been properly provided and on time.<sup>4</sup> HIV counseling and testing is conducted through the Counseling and Test approach of healthcare provider initiation (PITC) and voluntary counseling and testing (VCT), which is an important component in the prevention of mother-to-child transmission of HIV. The way to find out a person's HIV status is through a blood test.<sup>5</sup> According to Social Cognitive theory, attitudes included in *personal factors* along with aspects of knowledge and *biological events*, influenced by behavior and *environmental factors*.

Previous research carried out data mining through qualitative research with a focus group discussion method, obtained results that the majority of respondents supported the implementation of HIV testing, but there are still those who think housewives do not need to be tested for HIV and they afraid to test HIV. The person who has the most influence on a mother's attitude to take an HIV test is her husband.<sup>6</sup> Then continued research about Determinants of Conduct Voluntary Counseling and Testing (VCT) in Pregnancy in Yogyakarta in 2014, showed that the attitude of pregnant women in Yogyakarta to VCT shows the results of 67% of respondents supported VCT, but only 24% of pregnant women who tested HIV.<sup>7</sup> Based on these data the researchers continued research to explore what factors influenced the mother's attitude to HIV testing which included the level of knowledge about HIV, the mother's belief

in HIV testing, belief the attitudes of her husband, friends and community leaders. The aim of this study is to know the factors affecting of housewife's attitudes toward HIV testing in Yogyakarta, Indonesia.

**METHODS**

This research is quantitative research. This type of research is correlational analytic research using survey method. The approach used is *cross sectional* study. The population in this study are all housewives who are members of PKK (Pemberdayaan Kesejahteraan Keluarga/ Family Empowerment) group in Yogya City and Sleman Regency as much 8642. The simple size use Isaac and Michael theory and obtained 350 respondents.

The sampling technique is using cluster sampling by taking 5 groups in of Yogyakarta and 13 groups in Sleman Regency. The location was chosen because that area has implemented the prevention and control of HIV in primary health centers

**RESULTS**

Characteristics of respondents studied include age, number of children (parity), education, husband work and family income. The majority of respondents are women aged more than 35 years, secundipara, level of education is middle education and less standard income.

**Table 1: Characteristic of Respondent**

Characteristic	Frequency (n)	Percentage (%)
<b>Age</b>		
< 35 years old	82	23.4
> 35 years old	268	76.6
<b>Parity</b>		
Nulipara	6	1.7
Primipara	83	23.7
Sekundipara	164	46.9
Multipara	97	27.7
<b>Education</b>		
Elementary	91	26.0
Midle	191	54.6
High	68	19.4
<b>Husband's work</b>		
Private	111	31.7
Civil servants	52	14.9
Military	9	2.6
Others	178	50,9
<b>Family Income</b>		
Less standard	189	54
Upper standard	161	46
<b>Total</b>	<b>350</b>	<b>100</b>

**Table 2: Distribution of variable**

Variable	n	%
<b>Level of knowledge</b>		
Good	282	80,6
Moderate	40	11,4
Low	28	8
<b>Mother beliefs about HIV &amp; AIDS</b>		
High	208	59,4
Low	142	40,6
<b>Mother beliefs about the husband's attitude about HIV &amp; AIDS</b>		
High	148	42,3
Low	202	57,7
<b>Mother beliefs about friends' attitudes about HIV &amp; AIDS</b>		
High	178	50,9
Low	172	49,1
<b>Mother's belief in community leader's attitude about HIV &amp; AIDS</b>		
High	193	55,1
Low	157	44,9

The majority of respondents have a good level of knowledge that is equal to 80.6%. Mother beliefs about HIV tests majority have high belief as well as about the beliefs of mothers about the attitudes of friends and community leader on HIV testing. Majority of mother have low belief to husband's attitude towards HIV & AIDS.

Mothers with good knowledge of the majority have a supportive attitude to HIV testing, whereas mothers with a fairly large knowledge of HIV have a non-supportive attitude toward HIV testing of 70%. The *p* value indicates a significant relationship between the HIV/AIDS knowledge level and the HIV test with the mother's attitude to the HIV test.

Mothers with high belief about HIV testing the majority have supporting attitude towards HIV testing otherwise mothers with low belief about HIV does not support attitude towards HIV testing. The *p*-value indicates a significant relationship between mother beliefs about HIV testing and mother's attitude to HIV testing.

Mothers with high belief in their husbands' attitudes toward HIV testing, majority have an supporting attitude towards HIV testing. The value of *p* suggests a significant relationship between mother beliefs about the attitudes of husbands towards HIV testing and mother's attitude to HIV testing.

Mothers who have high confidence about the attitudes of friends to the majority of HIV tests have the attitude of supporting HIV testing and vice versa. The *p*-value indicates a significant relationship between mother beliefs about the attitudes of friends to HIV testing and the mother's attitude to HIV testing. Mothers with high belief about the attitudes of community leaders toward HIV testing have supporting attitude towards HIV testing. The value of *p* suggests a significant relationship between mother beliefs about the attitudes of husbands to HIV testing and mother's attitude to HIV testing.

Based on the *p*-value of variable above, then five variables by multivariate analysis are education, husband's job, family income, knowledge level, mother's belief, mother's belief to attitude of husband, friend and community leader. The five variables were subjected to a multivariate analysis and there are two variable that influenced the mother's attitude towards HIV testing, there can be seen in the following table.

Variables that affect mother attitudes toward HIV testing are mother's beliefs about HIV testing and mother's beliefs about her husband's attitude to HIV testing. The greatest strength of the relationship is the mother's belief in her husband's attitude about HIV testing (OR = 3.497).

**Table 3: Bivariate Analysis Mother's Knowledge Level on HIV & AIDS with mother's attitude to HIV testing**

Variables	Support		Attitude Does not support		amount		p-value
	f	%	f	%	f	%	
	<b>Knowledge level about HIV &amp; AIDS</b>						
Good	152	54	130	46	282	100	0.016
Moderate	12	30	28	70	40	100	
Low	13	46.4	15	53.6	28	100	
Total	177	50.6	173	49.4	350	100	

**Table 4: Bivariate Analysis Mother's belief about HIV & AIDS testing with mother's attitude to HIV testing**

Variables	Attitude				amount		p-value
	Support		Does not support		f	%	
	f	%	f	%	f	%	
<b>Mother beliefs about HIV &amp; AIDS</b>							
High	131	63	77	37	208	100	0.00
Low	46	32.4	96	67.6	142	100	
<b>Mother beliefs about the husband's attitude about HIV &amp; AIDS</b>							
High	105	71	43	29	148	100	0.000
Low	72	35.6	130	64.4	202	100	
<b>Mother beliefs about friends' attitudes about HIV &amp; AIDS</b>							
High	109	61.2	69	38.8	178	100	0.000
Low	68	39.5	104	60.5	172	100	
<b>Mother's belief in community leader's attitude about HIV &amp; AIDS</b>							
High	115	59.6	78	40.4	193	100	0.000
Low	62	39.5	95	60.5	157	100	
Total	177	50.6	173	49.4	350	100	

**Table 5: Association factors of mother attitudes towards HIV testing by Logistic Regressions model**

Variables	Regression		OR (95.0% CI)
	Coefficient (b)	P	
Mother belief about HIV & AIDS	0.968	.000	2,633 (1,635-4,239)
Mother's belief about her husband's attitude to Constant HIV tests	1.252	.000	3,497 (2,174-5,624)
	-1.074	.000	0.342

**DISCUSSION**

Cognitive Social Theory states attitudes are influenced by environmental factors risk and social factor. Social links that affect mothers' attitudes are husband support, friend support, and community leader support.<sup>8</sup> In this study tested the influence of social support on mothers' attitudes towards HIV testing was examined supporting from husband, friend, community leader and knowledge. Respondents in this study, have a supportive and non-supportive attitude towards HIV testing are almost the same, that are respondents who have supportive attitude as much as 50.6% while those who do not support the HIV

test as much as 49.4%. The large number of respondents who support the HIV test because the place of study is the work area of the Local Government Clinic that already have prevention and control programs HIV & AIDS so that the possibility of the respondent has been exposed to information about HIV & AIDS. This is also indicated by the high level of knowledge of respondents about HIV & AIDS and HIV test that is 80.6%. Study in Karnataka, 87% housewives had positive attitude towards people suffering from HIV/AIDS.<sup>8</sup> As is the case with Sarkar's research which states that the greater knowledge among women in Pondicherry may be due to the higher prevalence of HIV in this Union teritoy.<sup>9</sup> Same with

study before Setiyawati, majority of housewife in Sleman have support attitudes to HIV testing for women.<sup>10</sup>

Housewife have high belief about HIV & AIDS. Similarly, the mother's belief in the attitudes of husbands and community leader towards HIV testing. They belief majority her friend has been low attitudes of HIV testing. According to Ajzen in *Reason action* theory attitude is influenced by belief, the higher one's confidence hence the more positive attitude it possesses.<sup>11</sup> HIV testing of healthy reproductive age mothers is strongly recommended because at this age it is still possible to conceive so as to prevent transmission to the fetus it contains. Based on the target of the PMTCT program, Prong 1 states preventing the occurrence of HIV transmission in women of reproductive age, this is a focus on low prevalence of HIV & AIDS. It is therefore appropriate that women in healthy reproductive groups have been informed and programmed to prevent HIV & AIDS transmission.<sup>5</sup>

Respondents who do not support to HIV testing in women are multipara. Whereas based education, on low educated respondents has an attitude of not supporting HIV testing. Based on the work of husbands, husbands who work as drivers and conductors of the majority have an unfavorable attitude, even though this group is a high-risk group contracting HIV. Research by Atilola GO, the mobile nature of this high-risk group has made getting HIV/AIDS awareness messages across to them a difficult task. However, we found that supporters of wife inheritance were more likely to accept their HIV status being disclosed ( $P = 0.002$ ), truckers who have had sexual possibilities ( $P = 0.020$ ) and those who confirmed that they had extramarital sex were less likely to have sex while on trip ( $P = 0.000$ ). Also, it is possible to use condom during sexual act ( $P = 0.040$ ) and those who use to have extramarital affairs were less likely to use condom during sexual act ( $P = 0.000$ ).<sup>12</sup>

Knowledge related to prevention of HIV<sup>16</sup>. Woman with moderate knowledge had a good attitude.<sup>17</sup> Based on the level of knowledge, respondents who have a good level of knowledge are supportive of HIV testing whereas respondents who do not support HIV testing are the majority in the knowledge level group. For mother's belief in HIV testing, on the attitudes of husbands, friends and leaders, the majority of those who favor supporting HIV testing are mothers with high confidence.

Variables affecting attitudes are mother's belief in HIV testing and mother's belief in her husband's attitude. Research conducted Asmaruddin et al

(2016)<sup>14</sup> stated there was a significant difference between IRTs that tested HIV and not on husband's support ( $p=0.0001$ ) and peer support ( $p=0.0001$ ). There were no significant differences in age, education, knowledge, opinions, attitudes, access to services, access to information and support of staff on HIV testing. Although the research by Manjrekar states that family members, friends and healthcare providers as per 35,11% of our study participants, similar to that seen in the study done Vadodara by Kotecha PV.<sup>15,16</sup> It is concluded that husbands and close friends who often communicate with respondents have an influence to perform HIV testing.

While in this study the factors of self and husband who have a significant relationship to the attitude of housewife on HIV testing. According to housewife, the attitude of the husband has an influence in the IRT to test HIV. From the newsletter of the AIDS & an Anthropology research group, while many married women do not readily discuss their husband as a source of infection, probing, relieved and HIV risk.<sup>17</sup> The most influential person in the mother's attitude towards the HIV test was the husband.<sup>18</sup>

## CONCLUSION

Majority of the respondent are have a good knowledge about HIV, have high belief about HIV, have low belief about husband's attitude, have high belief about friend's attitude, have high belief about community leader's attitude to HIV testing. There is relationship between knowledge, mother belief about HIV, husband's attitude, friend's attitude and community leader's attitude with housewife's attitude towards attitude to HIV testing. The most factors influence on the mother's attitude toward HIV testing is mother's belief in husband's attitude to HIV test.

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## REFERENCES

1. Sidibe M. Women and Girls, HIV and AIDS. Global Information and Education on HIV and AIDS. 2019. Available from <http://www.avert.org/women-and-hiv-aids.htm>
2. Ministry of Health Department of Indonesia. Cases of HIV AIDS 2015. Available from <https://www.spiritia.or.id> . Accessed 2016

3. KPA DIY Data reported until September 2015 Available from <http://aidsyogya.or.id/2016/data-hiv-aids/data-kasus-hiv-aids-sd-sept-2015/> .
4. Ministry of Health RI, National Action Plan for Prevention of HIV Transmission from Mother to Child (PPIA) Indonesia 2013-2017. Ministry of Health, 2013
5. Ministry of Health RI. National Guidelines for Prevention of HIV Transmission from Mother to Child (PPAI). 2012
6. Setiyawati N, Meilani M. Determinant of HIV testing behavior among pregnant women. *Kesmas National Public Health Journal*. 2015; 9 ( 3 ): 201-206 Available from <http://journal.fkm.ui.ac.id/kesmas/article/view/565>
7. Suresh p, Asha B. The Knowledge and Attitude of Married Women against HIV / AIDS in an urban community of BelgaumnCity, Karnataka-A cross sectionel study. *Internationla Journal of Interdisciplinary and Multidisciplinary Studies (IJIMS)*. 2014; 1 ( 5 ): 337-343 . Available from <http://www.ijims.com>
8. Bandura, A., *Social foundations of thought and action: a social cognitive theory*. Englewood Cliffs, N.J.: Prentice-Hall. 1986
9. Sarkar R, M Danabalan, GA Kumar. Knowledge and attitude on HIV / AIDS among married women of reproduction age attending a teaching hospital. *Indian Journal of Community Medicine*. 2007 : 32 (1 ): 82-83 . Available from <http://www.ijcm.org.in/text.asp?2007/32/1/82/53416>
10. Setiyawati N, Shaluhiah Z, Cahyo K. Sikap Ibu Rumah Tangga terhadap tes HIV/AIDS di Sleman Yogyakarta. *Jurnal Promosi Kesehatan Indonesia* Vol 9 No 1 Januari 2014. Available from: <https://ejournal.undip.ac.id/index.php/jpki/article/view/12692>
11. Colman, Andrew "Theory of Reasoned Action". *A Dictionary of Psychology*. 2015
12. Atilola GO, Akpa OM. A cross-sectional survey on the knowledge, attitude, risk behavior and beliefs of truckers. *Journal of infection and public health*. 2010; 3 ( 4 ): 166-178. Available from <http://www.sciencedirect.com/science/article/pii/S1876034110000730>
13. Octavianty L, Rahayu A, Rosadi D, Rahman F. Pengetahuan, Sikap dan Pencegahan HIV/AIDS pada Ibu Rumah Tangga. *Jurnal Kesehatan Masyarakat KESMA*. Vol 11 No 1 2019. Available from: <https://journal.unnes.ac.id/nju/index.php/kemas/article/view/3464>
14. Asmaruddin, Misyati, Nugraheni, Sri Achadi, Siti Fatimah. Factors Affecting Mother Household's Readiness to Implement HIV Testing (Study in Working Area of Singojuruh Public Health Center of Banyuwangi Regency , UNDIP 2016. Downloaded from <http://eprints.undip.ac.id/47378/>
15. Manjrekar S, Sherkane M, Chowti J. Perceptions and Outlook towards HIV / AIDS among the reproductive age group of urban slum population. *International Juonal of Medical Science and Public Health*. 2014; 3 ( 7 ) . Available from <http://www.ijmsph.com/>
16. Kotecha PV, Patel S. Measuring knowledge about HIV among youth: Baseline survey for urban slums of Vadodara. *Indian J Sex Transm Dis* 2008; 29 (2): 68-72
17. *AIDS and Anthropology Bulletin* Vol 12 Issue 1. February 2000. [http://aarg.medanthro.net/newsletters/2000/aarg\\_vol\\_12\\_no\\_1.pdf](http://aarg.medanthro.net/newsletters/2000/aarg_vol_12_no_1.pdf)
18. Haghdoost, Navazendeh S. Assessment of knowledge, attitude and practice of pregnant women in respect of prevention of Mother To Child Transmission (PMTCT) of HIV/AIDS at a selected antenatal clinic in Durban, South Africa. *University of Kwazulu-Natal Research Space*. 2015. Available form: <http://ukzn-dspace.ukzn.ac.za/handle/10413/14613>