

# Differences in Stigma Against People with HIV AIDS (PLWHA) between Adolescents in Urban and Rural Areas

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## ABSTRACT

**Background:** AIDS-related stigma leads to allegations, negative attitudes, and rejection aimed at people with HIV AIDS (PLWHA), groups, or communities associated with PLWHA. Many factors influence the stigma that occurs in the teenage environment. The residential environment affects teenagers in behaving.

**Aim:** The purpose of this study was to determine the closeness of a residence relationship with a stigma attitude towards people with HIV / AIDS.

**Method:** This study uses data from the Indonesian Demographic and Health Survey (IDHS) in 2012 using a cross-sectional analytical survey. The study sample was 10,437 adolescents in Indonesia, and the model was excluded from data missing/censor data. The research instrument in the form of an available questionnaire was recorded by the IDHS in 2012. Data analysis used univariate analysis and bivariate with the chi-square test.

**Results:** The results obtained  $\chi^2$  value (51.098), the value of significance ( $p = <0.001$ ) and (OR: 6.68; 95% CI: 5.98-7.47). There is a difference in stigma against PLWHA between cities and villages.

**Conclusion:** Health Technology Assessment (HTA) Assessment, a video-based intervention to reduce stigma against PLWHA, these interventions are effective in overcoming the obstacles posed by distance and transportation.

**Keywords:** Stigma, HIV/AIDS, PLWHA, Rural, Urban

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## INTRODUCTION

Since the beginning of the AIDS epidemic, more than 78 million people have been infected with HIV. According to a 2017 report, around 36.9 million people living with HIV / AIDS worldwide [1]. In Asia, a survey found that 80 percent of respondents experienced resistance and discrimination, including the health sector (54%), community (31%), family (18%), and workplace (18%). Whereas in Indonesia, data on HIV / AIDS per January-March 2017 in 10,376 people [2]. Research conducted by Wanda Arista Dana Paramitha on 62 people living with HIV / AIDS shows that if stigma is associated with family, there is a decrease in family function when people live with HIV / AIDS ( $\beta = -0.36$ ,  $p < 0.05$ ). This shows if the value of stigma increases, the family function's value will decrease [3].

HIV is a disease that is not yet available for vaccines and drugs for curative efforts. Therefore, WHO provides four strategies: revolutionizing HIV prevention, eliminating new HIV infections in children, catalyzing the next phase of HIV diagnosis, treatment, care, and support, and providing integrated services for key populations [4]. Based on data on the high level of PLWHA in Indonesia, the Ministry of Health of the Republic of Indonesia (Ministry of Health RI) is looking for HIV problems in Indonesia. HIV in Indonesia struggles with the lack of early knowledge about the early conditions infected and the reluctance to test because of fear of being seen as unfavorable by others [5].

The Indonesian government's efforts in the Sustainable Development Goals (SDG's) are an ongoing program of the Millennium Development Goals (MDG's). At the same time, the things that are still a concern of sustainable development goals are HIV / AIDS, Tuberculosis, malaria found in the third objective, namely guaranteeing a healthy life and encouraging the welfare of all people of all ages. One that must be continued is

combating HIV / AIDS, including efforts to reduce the stigma and discrimination found in the second prong [6].

Globally, the HIV / AIDS epidemic has been accompanied by an outbreak of stigmatization of people living with HIV / AIDS (PLWHA). The stigma carried out by adolescents refers to prejudice, discriminating against people who are considered to have HIV / AIDS, both individuals, groups, and communities in people with HIV / AIDS [4]. Stigma against people with HIV / AIDS makes PLWHA avoid testing for HIV, and PLWHA loses the confidence to try to get proper care and tend to hide their status [7]. Also, stigma affects the disobedience of PLWHA in taking medicine. Non-adherence to taking drugs can impact treatment failure, and PLWHA is resistant to the medications given [8]. This study was conducted to compare the results of stigma in people with different sociodemographic characteristics. This study aims to determine the differences in stigma against PLWHA in adolescents living in the City and Village.

## METHOD

This research is quantitative research with an analytical survey design. This study uses a cross-sectional approach to take the research data at present [9]. The population in this study were teenagers in Indonesia who had heard about HIV / AIDS. Data collection was carried out using questionnaires provided by the 2012 IDHS. Data were collected from the data obtained from the DHS Program. Sampling conducted by the 2012 IDHS uses a three-stage sampling method. The first stage was to select several Primary Sampling Units (PSUs) from the PSU framework formed for various survey purposes using the Probability Proportional to Size (PPS) household approach. PSU is a group of adjacent census blocks that are the task areas for the Population Census (SP) team coordinator [10]. In the second stage, selecting a census block (PPS) in each PSU

was chosen in the first stage. The third stage, setting 25 households in the census block, was systematically selected from household updates in the selected census block in the second stage.

The 2012 IDHS study population included all adolescents and young adults aged 15-24 in Indonesia, with 10,890 men and women 8902. Researchers used the inclusion criteria, namely adolescents who had heard of HIV / AIDS, and exclusion criteria, namely respondents who said they were ignorant and missing data. So the sample in this study amounted to 10,437 teenagers.

Univariate analysis was carried out to determine the frequency distribution of respondent characteristics and each variable's percentage distribution. A bivariate analysis was performed to assess the interaction of two variables by chi-square statistical test with p-value <0.05. Also, to find out the magnitude of the risk in this study is done by calculating the odds ratio (OR).

## RESULTS

Table 1: Variable Frequency Distribution and Characteristics

Variable	Category	n	%
Age	Teenagers (15-19 Years)	6.248	61.6

	Young adults (20-24 Years)	4.009	38.4
Gender	Man	6.004	57.5
	Woman	4.433	42.5
Education	Elementary school	410	3.9
	Middle school	1.852	17.7
	High school	5.786	55.4
	Diploma	574	5.5
	Bachelor	1.815	17.4
Residence	Village	3.766	36.1
	City	6.671	63.9

Table 1 Univariate analysis shows that most teenagers aged 15-19 years are 6,248 (61.6%) and 4,009 (38.4%) for young adults, 20-24 years old. The number of teenagers is more than the number of young adults. At the age of adolescence is 15-19 years, where a person has an unstable emotion. The sex distribution of male adolescents was more than female adolescents, namely 6,004 (57.5%) male adolescents and 4,433 (42.5%) female adolescents. From the data obtained, adolescent education is dominated by high school education as many as 5,786 (55.4%) teenagers with high school education. It can be seen from the data on the place of residence; more adolescents are living in the city than adolescents who live in the village that is 6,671 (63.9%).

Table 2. Results Relationship between adolescent residences and stigma against PLWHA

Variable	Category	Stigma Towards PLWHA						x2 (95% CI)	P-value	OR
		Stigma		No Stigma		Total				
		N	%	N	%	N	%			
Residence	Village	518	5	3248	31.1	3766	36.1	51.098	0.000	6.68
	City	1285	12.3	5386	51.6	6671	63.9			

Table 2 bivariate analysis with chi-square test results obtained by calculating x2 value of (51.098) with a value of significance ( $p = <0.001$ ) with a 95% confidence level and an Odds Ratio of 6.68 times risk. The data above shows that adolescent residence is associated with the stigma against PLWHA. 1,285 (12.3%) adolescents who live in the city and stigmatize are more significant than the teenagers who live in the village and stigma 518 (5%).

Although the number of teenagers doing stigma living in the city is more if revisited, the number of teenagers who live in the city tends not to stigmatize as many as 5,386 (51.6%). This happened because of the more significant number of adolescents living in the towns than teenagers living in villages. Teenagers who live in cities are more often exposed to information about HIV / AIDS. So that teenagers in cities are more likely not to stigmatize PLWHA.

## DISCUSSION

Adolescence is a period that is vulnerable to deviating sexual behavior. It is best during adolescence to present accurate, quality, and continuous information about HIV AIDS, both in prevention and transmission. With this hope, adolescents can be positive and responsible for making decisions. A negative attitude or rejection is a form of stigma. AIDS-related stigma itself leads to all contradictions, negative attitudes, and rejection aimed at

PLWHA and individuals, groups, or communities related to PLWHA [11].

In this study, adolescents who had a high school education down were more prominent, so teenagers' knowledge about HIV / AIDS was not perfect. Misconceptions about the mode of transmission of HIV / AIDS also affect the stigma of PLWHA. Teenage age is dominated by early adolescents, namely 15-19 years. In adolescence, where adolescents are still easily influenced by friends, there are other opportunities for adolescents to stigmatize PLWHA. This means that young people have more discriminatory attitudes towards PLWHA.

A stigma occurs in adolescents living in villages because rural areas still have limited access to health education and health facilities [12]. Stigma can be done because of their own will and from other factors; the influence of peers also influences adolescents' stigma; besides, the stigma of adolescents is also influenced by where teenagers live [13].

In this study, the proportion that carried out the most stigma was 12.3% of the stigma carried out by adolescents in the city and 5% stigma carried out by adolescents living in the village. The analysis results show that adolescents who live in the city do more stigma than adolescents who live in the town. But if we look at the data above, the number of teenagers living in the city and not stigmatizing has the largest number, namely 5,386 (51.6%). Thus most teenagers, both men, and women do not stigmatize.

With the high stigma carried out by adolescents living in the village, it can be understood that adolescents in the city have been exposed to information about how to transmit HIV / AIDS. Teenagers who know how to communicate HIV / AIDS choose to keep their distance. Between adolescents in cities and villages, individuals who are aware of AIDS become more infectious diseases [12]. To resist stigma against PLWHA. The stigma that is formed from adolescents in the city tends to be encouraged because of the fear of being infected.

PLWHA living in rural and low prevalence areas experience transportation and issues of confidentiality, high discrimination, and adverse attitudes, and experience a decrease in access to health services and social support [14], [15], [16]. Age is one of the things that affect results, where older adults accept other people's circumstances, in research conducted in the Northeastern United States. Finding that women living with HIV in rural communities experience more significant concerns about HIV disclosure than women in urban areas [15]. Conversely, it also applies to HIV-positive men, with those living in cities experiencing more significant HIV disclosure problems than men in rural communities [17].

## CONCLUSION

This study explains the differences in stigma committed by adolescents in the village and the stigma carried out by teenagers in the town. The findings show that more significant stigma is carried out by adolescents living in the city. This is because teenagers in the city who have received information about transmitting HIV choose to protect themselves and be aware of PLWHA. However, data from this study are mostly teenagers who do not stigmatize living in the city.

The stigma carried out by adolescents who live in villages is caused by the shame and anxiety experienced by PLWHA. PLWHA have a perception that if they come to health services, they will be treated differently.

**Suggestion:** One intervention approach that contributes positively to overcoming stigma has been tested in the southern United States. Testing video effects that describe women living with HIV / AIDS managing the stigma they have experienced. In the short duration of the video, but the video is made by giving deep meaning. This video will be sent via handphone. The test results showed a reduction in stigma in the case group compared to the control group's condition, who did not receive stigma reduction intervention. This finding is interesting because of the low cost of the intervention and the potential for broad access to reach people living in villages with good connections.

However, implementing interventions in urban and rural communities will face challenges related to reaching, registering, and maintaining these populations in need of intervention. People outside big cities will have less exposure to information from posters and other forms of advertising intervention. As mentioned above, video-based interventions are expected to be sent to cellphones and effectively overcome the obstacles posed by distance and transportation. More intense interventions, such as interactive groups and counseling, can also be delivered

using remote communication technologies such as telephones and telephone videos. In this case, a group can be formed in the WhatsApp application. With new technology, it can improve our ability to reach people who are outside the city. Cellphone technology-based interventions are designed to get individuals in geographical or rural areas so that the information obtained can be well received.

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