

GENERAL POPULATION DISCRIMINATORY ATTITUDE TOWARDS ADULTS AND CHILDREN WITH HIV/AIDS IN INDONESIA

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ABSTRACT

Introduction: HIV continues to be a major global public health issue. While the treatment of people with HIV is still being a challenge, social issues towards people with HIV/AIDS gradually growing. HIV stigma is prevalent worldwide being the barrier to HIV prevention and treatment including in Indonesia. The purpose of this research is to explore the association of social demographic and level knowledge about HIV/AIDS with the discriminatory attitudes towards adults and children with HIV/AIDS in the general population in Indonesia. **Methods:** The type of research is non-reactive research based on secondary data. Chi-square analysis and logistic regression statistics were performed to test the association. **Result:** The result reported that socio-demographic statistically had a significant association with the discriminatory attitude. Males (OR 0.993 [95% CI 0.990 – 0.995]) tend to have an inclusive attitude towards adults with HIV/AIDS but children with HIV/AIDS (OR 4.235 [95% 4.003 – 4.480]). People with no education (OR 1.625 [95% CI 1.143 – 2.310]), people with primary education (OR 1.465 [95% CI 1.363 - 1.575]), poorest people (OR 1.471 [95% CI 1.361 – 1.590]), and people with low incomplete knowledge about HIV prevention and transmission (OR 4.083 [95% CI 3.752 – 4.444]) significantly had a non-inclusive attitude towards adults with HIV/AIDS. **Conclusion:** The result of this research suggested that increasing general public knowledge about HIV prevention and transmission is one of the significant methods in reducing discriminatory attitudes towards adults and children with HIV/AIDS.

Keywords: attitude, discriminatory, general, population, stigma

INTRODUCTION

The human immunodeficiency virus (HIV) continues to become a world health concern, while the treatment of people with HIV/AIDS (PHAs) is still being a challenge, social issues related to them gradually growing. HIV stigma and discrimination are prevailing worldwide due to the irrational fears of HIV infection, dismissive attitudes, and negative judgment towards PHAs. The condition persists even after a long period of HIV/AIDS awareness campaigns and raising efforts to the general population. People with a higher risk of HIV infection encounter a high degree of stigma and discrimination because of their gender identity, sexual preference, personal identity, drug user, and commercial sex employee. Stigma towards them drives acts of discrimination from altogether sectors of society, public officers, cops, schools, the

general population, even from health workers (UNAIDS, 2017).

At the beginning of the HIV/AIDS disease epidemic, the transmission of HIV has worsened by stigma and discrimination, resulting in a terrible effect on the epidemic. The stigma is had a significant effect on PHAs or people who are anticipated to be infected with HIV, including children and adolescents (Boyes, Mason, and Cluver, 2013). The impact of stigma has proven to have a significant harmful effect on the physical and mental well-being of PHAs. Stigma is additionally connected to fear and avoidance of HIV testing program resulting in insufficient adherence to HIV treatment and outcomes (Chidrawi, Greeff, and Temane, 2014).

According to the obtainable information of nineteen countries, stigma and discrimination caused one in five PHAs

to avoid clinics and hospitals because of fear about their status revelation. PHAs tend to hide their status by avoiding taking antiretroviral treatment (ART), they were afraid that they will be disowned by family and discriminated against by the community. UNAIDS reported that one in every four PHAs have experienced discrimination in the health care settings and one in every three female PHAs have experienced at least one type of discrimination in health care setting associated with their sexual and reproductive health (UNAIDS, 2017). Stigma and discrimination reported to be commonly experienced by pregnant females, it was reported as one crucial factor preventing them to accept HIV testing in antenatal care (Turan et al., 2011). Therefore, confronting a stigma is significant to improving the PHAs' quality of life and as an integral effort to confronting HIV (National AIDS Trust, 2016).

The 2016 UN Political Declaration on Ending AIDs recognized the HIV epidemic as human rights challenge. Restrictive legal and policy frameworks continue to be discouraging and preventing an individual from accessing HIV/AIDs services because stigma and discrimination are a deep concern (UNITED NATION, 2016). In these efforts, some countries have initiated and adopted regulations and educational programs to transfer comprehensive knowledge about HIV/AIDs. Consequently, the stigma and discrimination among PHAs that existed in society can be reduced. A research in Nigeria reported that health education of comprehensive knowledge on HIV/AIDs is one of the control measures in reducing HIV/AIDs stigma and discrimination in society (Dahlui et al., 2015).

Dissemination of HIV/AIDs knowledge is one of the main key factors to reduce HIV stigma and discrimination. Interventions to enhance HIV/AIDs knowledge do not seem to be solely vital for people's health. However, it is crucial to the

success in achieving the goals of ending HIV/AIDs. Information related to HIV/AIDs is connected to extend information around risk perception and behavior modification. Besides, former studies had been suggested that increasing knowledge that concerning HIV/AIDs prevention and transmission is beneficial to reduce stigma and discrimination (Platten et al., 2014; Farotimi, Nwozichi, and Ojediran, 2015; Khan, Bilal, and Siddiqui, 2017).

In 2016, UNAIDS reported that more than six hundred twenty thousand PHAs were living in Indonesia with forty-eight thousand people was a new infection and there were thirty-eight thousand deaths. Among them, only 13% have access to antiretroviral treatment (ART) and only 14% of pregnant females with HIV had access to prophylaxis to prevent HIV transmission from mother to fetus. In addition, data showed that more than three thousand children have been infected with HIV from their mothers (UNAIDS, 2019). Several studies concerning the discriminatory attitude towards HIV/AIDs high-risk groups had been done in Indonesia. However, only a little evidence is available related to the general population's attitude toward PHAs in Indonesia. Prior available studies only cover specific populations that cannot be used to generalize the entire population. The main purpose of this research was to explore the association of the social-demographic background of the general population and level of knowledge about HIV prevention and transmission with the discriminatory attitudes towards people with HIV/AIDs based on the 2017 Indonesia Demographic and Health Survey.

METHOD

This research is non-reactive research or commonly called unobtrusive research. Unobtrusive analysis method represent non-reactive cognitive observation, investigation of existing files such as statistic result and records (Auriacombe, 2016). Data collection was

done by requesting data from USAID's *Demographic and Health Survey* (DHS) program, which was formerly collected for the Indonesia Demographic and Health Survey (IDHS) in 2017. The sampling design of the IDHS 2017 was designed to be able to present estimates of national and provincial levels. The sample covers 1,970 census blocks covering 34 provinces of urban and rural areas. The 2017 IDHS sample frame used the Indonesia Master Census Block Sample from the 2010 Census Population.

The social-demographic variable that was collected in this research including gender, residence status, education level, wealth quintile, and age. The wealth quintile was measured following the IDHS questionnaire. Household were given score based on the goods owned, housing characteristics, and facilities. National wealth quintiles are compiled by assigning the score to the family member then dividing the distribution into five categories (National Population and Family Planning Board (BKKBN), Statistics Indonesia (BPS) and (Kemenkes), 2018).

The level of knowledge was categorized as complete knowledge, incomplete middle knowledge, and incomplete low knowledge. The respondent's knowledge level of HIV/AIDS prevention and transmission was measured by nine statements. The level of knowledge categorized as Complete Knowledge (answer all of the question right, score 9), Incomplete Middle Knowledge (answer more than half question right, score 5-8), and Incomplete Low Knowledge (answer most of the question wrong, score 0-4).

Discriminatory attitude towards PHAs in IDHS of 2017 was assessed by two statements related to the situation of the respondents about an adult with HIV/AIDS and children with HIV/AIDS. The statement "*Would buy vegetables from a vendor with HIV*" aimed to assess the discriminatory attitudes of the respondent towards adults with HIV/AIDS and the statement "*Children with HIV should be allowed to attend school with children without HIV*" aimed to assess discriminatory attitudes towards children with HIV/AIDS. The response of the statement was categorized as inclusive and non-inclusive attitude. The total sample that was used in this research was 47,490 respondents with 39,393 females and 8,097 males. Chi-square analysis and logistic regression statistics were presented to explore the association of general population social-demographic background and knowledge of HIV/AIDS prevention and transmission with discriminatory attitudes toward PHAs. The 2017 Indonesia Demographic and Health Survey (IDHS) comply the Standard DHS survey protocol under The Demographic and Health Surveys (DHS) Program (DHS-7) number ICF IRB FWA00000845 that was approved by The Institutional Review Board (IRB) of ICF International. The IRB in Indonesia is housed within the Ministry of Health, and it was determined that the surveys did not require IRB review. Before conducting the research, the author had obtained approval IRB exemption number Y-2019-0158 from e-IRB of Severance Hospital (Yonsei University Health System) in South Korea to conduct this research

RESULT

Table 1. Respondent social-demographic and knowledge level

Variable	n	%
Age of Respondents		
Male (Mean)	39,03	
Female (Mean)	30,80	

Variable	n	%
Gender of Respondents		
Male	8,097	17.0
Female	39,393	83.0
Residence of the Respondents		
Urban	27,878	58.7
Rural	19,612	41.3
Complete Education of the Respondents		
No Education	210	0.4
Primary	8,317	17.5
Secondary	28,611	60.3
Higher	10,352	21.8
Wealth quintile		
Poorest	7,469	15.7
Poor	8,715	18.4
Middle	9,575	20.2
Rich	10,498	22.1
Richest	11,266	23.6
Knowledge Level		
Incomplete low knowledge	6,238	13.2
Incomplete middle knowledge	34,585	72.8
Complete knowledge	6,667	14.0

Table 1 showed data related to the social demographic data of the respondent in this research. In general, most respondents were females by 83%. The average age for the females involved in the survey was less than the average age of males. The female average age was 30.80 years old, while for males 39.03 years old. As for the distribution of respondent's residence, more respondents were observed living in the urban area by 58.6% and the rest were living in the rural or countryside area. Most highest education completed by

respondents were in secondary school by 60.3%, followed by higher education with 21.8%, primary education with 17.5%, and 0.4% of respondents without educational background. Wealth was categorized into five classes, the distribution of each class was almost the same, the lowest number of the respondent was in the poorest class with 15.7% while the highest was in the richest class with 23.7%. The majority knowledge level of the general population in Indonesia was incomplete middle knowledge (72.8%).

Table 2. Association of socio-demographic & knowledge with discriminatory attitudes towards adult with HIV/AIDS

Variable	Would buy vegetables from the vendor with			χ^2	<i>p-value</i>
	Yes (%)	No (%)	Don't Know (%)		
Gender					
Female	11,48 (29.2)	25,929 (65.8)	1,976 (5.0)	312.748	<0.001

Variable	Would buy vegetables from the vendor with			χ^2	<i>p</i> -value
	Yes (%)	No (%)	Don't Know (%)		
Male	2,86 (35.3)	4,560 (56.3)	676 (8.4)		
Residence					
Urban	9,074 (32.5)	17,321 (62.2)	1,483 (5.3)		
Rural	5,275 (26.9)	13,168 (67.1)	1,169 (6.0)	175.231	<0.001
Education					
Higher	3,881 (37.5)	5,951 (57.5)	520 (5.0)		
Secondary	8,448 (29.5)	18,640 (65.1)	1,523 (5.3)		
Primary	1,979 (23.8)	5,764 (69.3)	574 (6.9)	449.043	<0.001
No Education	41 (19.5)	134 (63.8)	35 (16.7)		
Wealth Quintile					
Poorest	1,602 (21.5)	5,358 (72.1)	476 (6.4)		
Poor	2,324 (26.7)	5,876 (67.4)	515 (5.9)		
Middle	2,848 (26.7)	6,204 (64.8)	523 (5.5)	566.248	<0.001
Rich	3,472 (33.1)	6,479 (58.3)	591 (5.2)		
Richest	4,103 (36.4)	6,572 (58.3)	591 (5.2)		
Knowledge					
Complete	3,325 (49.9)	3,084 (46.2)	258 (3.9)		
Incomplete	9,974 (28.8)	23,025 (66.6)	1,586 (5.9)	2,347.269	<0.001
Incomplete Low	1,050 (16.8)	4,380 (70.2)	808 (13.0)		

Table 3. Association of socio-demographic & knowledge with discriminatory attitudes towards children with HIV/AIDS

Variable	Children with HIV should be allowed to attend school with children without HIV			χ^2	<i>p</i> -value
	Yes (%)	No (%)	Don't Know (%)		
Gender					
Female	33,278 (84.5)	4,591 (12.6)	1,148 (8.4)		
Male	4,591 (56.7)	2,584 (31.9)	922 (11.4)	3,330.423	<0.001
Residence					
Urban	22,204 (79.6)	4,626 (16.6)	1,048 (3.8)		
Rural	15,665 (79.9)	2,925 (14.9)	1,022 (5.2)	76.171	<0.001
Education					
Higher	8,015 (77.4)	2,059 (19.9)	278 (2.7)		
Secondary	23,251 (81.3)	4,201 (14.7)	1,159 (4.1)		
Primary	6,464 (77.7)	1,253 (15.1)	600 (7.2)	449.382	<0.001
No Education	139 (62.2)	38 (18.1)	33 (15.7)		
Wealth Quintile					
Poorest	5,818 (78.2)	1,133 (15.2)	485 (6.5)	186.500	<0.001

Variable	Children with HIV should be allowed to attend school with children without HIV			χ^2	p-value
	Yes (%)	No (%)	Don't Know (%)		
Poor	6,984 (80.1)	1,306 (15.0)	425 (4.9)		
Middle	7,742 (80.9)	1,415 (14.8)	418 (4.4)		
Rich	8,414 (80.1)	1,680 (16.0)	404 (3.8)		
Richest	8,911 (79.1)	2,017 (17.9)	338 (3.0)		
Knowledge					
Complete	4,795 (71.9)	1,725 (25.9)	147 (2.2)		
Incomplete Middle	28,408 (82.1)	5,068 (14.7)	1,109 (3.2)	1,857.075	<0.001
Incomplete Low	4,666 (74.8)	758 (12.2)	814 (13.0)		

Discriminatory attitude towards adults and children with HIV in IDHS of 2017 assessed by statements “*Would buy vegetables from the vendor with HIV*” and “*Children with HIV should be allowed to attend school with children without HIV*”. Respondents were provided three choices which are “YES” indicating that they have an inclusive attitude towards people with HIV, answer “NO” indicating that

respondents tend to have a non-inclusive attitude so as “DON’T KNOW” response.

Table 2 and Table 3 showed the result of Chi-square Pearson's independent variables: gender, residence, education, wealth quintile, and knowledge have an association with the attitude towards both adults and children with HIV/AIDS indicated by a *p-value* less than 0.05.

Table 4. Logistic regression of discriminatory attitudes towards people with HIV/AIDS

Variable	Adults with HIV/AIDS		Children with HIV/AIDS	
	OR (CI 95%)	p-value	OR (CI 95%)	p-value
Age	0.752 (0.712 – 0.794)	<0.001	1.002 (0.999 – 1.005)	0.127
Gender				
Female	RG		RG	
Male	0.993 (0.990 – 0.995)	<0.001	4.235 (4.003 – 4.480)	<0.001
Residence				
Urban	RG		RG	
Rural	1.039 (0.992 – 1.087)	0.104	0.930 (0.882 – 0.981)	0.007
Education				
Higher	RG		RG	
Secondary	1.200 (1.141 – 1.262)	<0.001	0.752 (0.708 – 0.798)	<0.001
Primary	1.465 (1.363 – 1.575)	<0.001	0.819 (0.755 – 0.889)	<0.001
No Education	1.625 (1.143 – 2.310)	0.007	1.379 (1.012 – 1.879)	0.042

Variable	Adults with HIV/AIDS		Children with HIV/AIDS	
	OR (CI 95%)	p-value	OR (CI 95%)	p-value
Wealth Quintile				
Richest	RG		RG	
Rich	1.009 (0.951 – 1.070)	0.772	1.019 (0.950 – 1.094)	0.598
Middle	1.086 (1.019 – 1.156)	<0.001	0.982 (0.910 – 1.059)	0.632
Poor	1.192 (1.114 – 1.276)	<0.001	1.039 (0.959 – 1.125)	0.348
Poorest	1.471 (1.361 – 1.590)	<0.001	1.174 (1.076 – 1.281)	<0.001
Knowledge				
Complete	RG		RG	
Incomplete Middle	2.287 (2.166 – 2.415)	<0.001	0.849 (0.779 – 0.925)	<0.001
Incomplete Low	4.083 (3.752 – 4.444)	<0.001	0.535 (0.502 – 0.570)	<0.001

note: RG acronym of Reference Group

Table 4 showed the result of Logistic regression to analyse the tendency of people to have a non-inclusive attitude toward adults with HIV/AIDS based on several independent variables. Result showed that as the age increase, the respondent potentially to have an inclusive attitude towards adults with HIV/AIDS. Comparing to the female, males have fewer tendencies to have a non-inclusive attitude towards adults with HIV/AIDS but four times higher to have a non-inclusive attitude towards children with HIV/AIDS. The odds of people having a non-inclusive attitude towards people with HIV/AIDS gradually grow as education levels decrease. Regression results of wealth quintile showed that as economic class decreases, the odds of people having a non-inclusive attitude toward people with HIV/AIDS gradually grow. The odds of people with incomplete middle knowledge having a non-inclusive attitude towards adults with HIV/AIDS was 2.287 higher than people with complete knowledge, while the odds for people with incomplete low knowledge to have a non-inclusive attitude towards adults with HIV/AIDS was 4,083 times

comparing to people with complete knowledge while other variables are on hold. However, the result was totally in contrast towards children with HIV/AIDS, as the knowledge level decrease the respondent tended to have an inclusive attitude while other variables were on hold.

DISCUSSION

Dismissive perceptions towards PHAs are general sign of HIV/AIDS stigma which precede to the discriminatory and pre-judgement attitudes (Beaulieu et al., 2014). This research only accommodates two statements from 2017 IDHS in measuring discriminatory attitude, towards adults with HIV assessed by statements "Would buy vegetables from a vendor with HIV" while towards children with HIV assessed by the statement "Children with HIV should be allowed to attend school with children without HIV". Respondents are provided three choices which are "YES" indicating that they have an inclusive attitude towards people with HIV, answer "NO" indicating that respondents tend to have a discriminatory attitude towards

adults with HIV, and "DON'T KNOW" indicating that they are not sure about how to respond with the situation. The author then categorized the "YES" response to inclusive attitude and "NO" and "DON'T KNOW" answer to non-inclusive attitude.

According to the finding of social-demographic factors that were tested, age, gender, residence, education level, and wealth index were significantly associated with the discriminatory attitude towards PHAs in Indonesia. The result suggested that as the age increase, the odds to have a non-inclusive attitude towards adults with HIV/AIDS was decreasing, it is homogeneous with the previous finding (Okonkwo et al., 2017). Okonkwo, et al (2017) reported that among Nigerian people, age above 57 was less likely to show stigmatism attitude toward PHAs compare to people age 18 to 27 years old. However, some studies report the inverse result (Li, et al., 2017). According to Li, et al (2017) people in China between the age of 21 to 50 years old are associated with the decrease of stigma attitude towards PHAs by 26%. The difference in the finding might be because of the cultural difference from country to country. In Indonesia, older people are arguably to have better knowledge about HIV/AIDS prevention and transmission because of being exposed several times to the HIV/AIDS awareness campaign that has been done by the government. Therefore, older people are likely to have a less non-inclusive attitude towards PHAs than young people because they are conceivably to have higher awareness than the younger.

Gender was one of the predictors of discriminatory attitudes toward PHAs. It is interesting to note that from the finding, a male is likely to have an inclusive attitude towards adults with HIV/AIDS than a female but towards children with HIV/AIDS. Some studies have shown that females are arguably to have a proponent of reducing discriminatory attitudes towards PHAs than males (Ouzouni, 2012; Li, et al., 2017). However, other studies also report contrast results, they showed that females

had more dismissive and discriminatory attitudes toward PHAs when they are compared with male (Tofighi Niaki, 2012; Masoudnia, 2015). The possible explanation of females is arguably to have an inclusive attitude towards children with HIV/AIDS is because of female natural and social position as a mother in the community. Thus, females are arguably to feel more sympathy towards children with HIV/AIDS.

People who live in rural areas are arguably to hold non-inclusive towards adults with HIV/AIDS but towards children with HIV/AIDS. The finding is similar to several former types of research, people who live in a countryside is likely to have a discriminating attitude towards PHAs than people who live in an urban area (Amuri et al., 2011; Terán Calderón et al., 2015; Iqbal et al., 2019). Amuri (2011) reported that people who live in a rural area presumably to have a discriminatory attitude because people not familiar with the HIV/AIDS as the prevalence of HIV/AIDS in a rural area or countryside was less than in an urban area. Additionally, living in countryside are also arguably to have less access to information especially in Indonesia where the internet is still difficult to be accessed. The main source of information for them was television or radio. The limit of source information also being a barrier to the HIV/AIDS awareness campaign.

The finding indicates that one of the main predictors of discriminatory attitudes towards PHAs was the education level of the respondent. The results of this research are consistent with the findings of former researches in which shown the positive impact of education on the attitudes of the general population toward PHAs (Terán Calderón et al., 2015; Li et al., 2017; Khan, Bilal, and Siddiqui, 2017; Iqbal et al., 2019). Other studies confirmed the same result amid the health practitioners (Amuri et al., 2011; Memish et al., 2015; Farotimi, Nwozichi and Ojediran, 2015). Higher education less likely to have a non-inclusive attitude towards PHAs is because the

respondents have a longer period attending school. On account of this, higher education is arguably to have high awareness and better information about HIV/AIDS prevention and transmission compared to the people with lower education levels. However, there was a research that reports contrast result with the finding, Masoudnia (2015) reported that higher levels of education, especially academic education has higher discriminatory attitudes toward PHAs compared with those with lower levels of education. The phenomenon was due to the irrational fears of the people (Masoudnia, 2015). Some people who attended the special or specific school that was never exposed to the HIV/AIDS campaigns and awareness programs such as religious-based schools are arguably to have less knowledge of HIV/AIDS. As the result, even if people have certain degree of education, they might hold a non-inclusive attitude towards PHAs.

The wealth quintile was one of the predictors for discrimination toward PHAs. According to the result of the research, people who have better wealth are arguably to have an inclusive attitude toward PHAs. The finding indicates that people with a poor status are arguably to have a non-inclusive attitude toward PHAs, it is similar to the prior studies (Amuri et al., 2011; Terán Calderón et al., 2015; Iqbal et al., 2019). Calderon, et al (2015) reported that among Bolivian family who has income less than 1000 USD arguably to have a double discriminatory attitude toward PHAs than a family who has income greater than 1000 USD. Iqbal, et al (2019) reported that female who has less education and poor wealth index is arguably to show a less positive attitude toward PHAs. This finding is important to be considered when designing a program to reduce the discriminatory attitudes towards PHAs.

People with incomplete low knowledge about HIV/AIDS transmission and prevention tend to have four times higher odd of non-inclusive attitude toward adults living with HIV/AIDS and

incomplete middle knowledge tend to have two times higher odd than people who have complete knowledge. The finding is homogeneous to several former studies (Ekstrand et al., 2012; Memish et al., 2015; Masoudnia, 2015; Yang et al., 2015; Bhagavathula et al., 2015; Vorasane et al., 2017; Okpala et al., 2017; Khan, Bilal and Siddiqui, 2017). Masoudnia (2015) did research in Iran, he found that respondent awareness about HIV/AIDS and discriminatory attitude toward PHAs was statistically significant, the more knowledge of respondents about HIV/AIDS, the lower discriminatory attitudes they showed. Ekstrand, et al (2012) reported a research in India that discriminatory attitude toward PHAs was reduced with more accurate knowledge about transmission of HIV. Stigma attitude and discrimination toward PHAs are driven primarily by HIV/AIDS transmission misconception, blame, and negative feeling towards PHAs. The same result was also reported by Bhagavatula et al (2015), insufficient knowledge correlates with a dismissive attitude towards PHAs. Okpala, et al (2017) reported the same result that nurses with a high level of knowledge related to HIV/AIDS are arguably to have a positive attitude toward PHAs. A research in Saudi Arabia done by Memish, et al (2015) reported that the medical practitioners who have inadequate knowledge of HIV/AIDS had significantly higher mean stigma scores than medical practitioners who have better knowledge about HIV/AIDS. Inadequate knowledge of physician related to HIV/AIDS may lead to being an impediment to the control measures of HIV/AIDS because it can affect doctor attitudes towards PHAs thereby discouraging patients with HIV/AIDS to access HIV/AIDS prevention, care, and treatment service. The same result reported by Vorasane (2017), physicians and nurses in Lao PDR who have a higher level of HIV/AIDS knowledge were less likely to show stigmatizing attitudes towards PHAs.

Even insufficient knowledge was found statistically significant with discriminatory attitude toward PHAs, there was research reported contrast results (Li et al., 2017). Li, et al (2017) reported that escalated stigma is associated with better knowledge of HIV/AIDS transmission. The possible explanation related to the result is due to overestimating the risk of HIV/AIDS contagion in China, therefore the respondent is arguably to avoid contact with PHAs as far as possible when they have better knowledge about it. The finding related to knowledge with discriminatory attitude indicates that improving knowledge of people is one of the effective reduction strategies related to discriminatory attitude towards PHAs. The stakeholder should provide more awareness campaigns to improve community knowledge related to HIV/AIDS prevention and transmission to support discriminatory attitude reduction strategy towards PHAs. Since it already noted that discriminatory attitude that received by PHAs can prevent them from accessing health service and treatment that can lead to the fails of HIV/AIDS prevention and control program.

This research presented an adequate amount of the sample that is representative enough to cover provincial and national generalization levels. The research also covers topics about the discrimination attitudes towards children with HIV which is still being a sensitive topic and there is only limited amount of research which addresses the same issues.

The major strength of this research is that the research compares between people with complete level knowledge that showed the better impact of people having complete knowledge related to the HIV/AIDS prevention and transmission affecting the discriminatory attitude towards PHAs. The outcomes of the studies also showed consistency with the prior studies even from different countries, indicates that the outcome of the research represents the association of social-demographic and knowledge related to the HIV/AIDS

prevention and transmission with the discriminatory attitude towards PHAs.

Limitations

The research was limited by the bounded location and time of Indonesian citizens who were resided in Indonesia at the time of data collection. Data analysis was undertaken based on the questionnaire's secondary data collected for 2017 IDHS, which cannot provide deeper information. The research was undertaken by interview, limiting the author to collect additional information to support the explanation of research findings. Most of the results showed significant results determining the association between the independent and dependent variables, but that should be noted if using Chi-square analysis to analyse the association which chi-square analysis is highly sensitive with the sample size. The research's design was cross-sectional analysis in which the independent and dependent variables were measured simultaneously. Therefore, the research result cannot perfectly determine the direction of the relationship among variables. The direction of the association was conducted based on the theoretical framework.

CONCLUSION

The result of association analysis in this research indicated that the social demographic of the respondent, such as age, gender, residence, and wealth quintile, have a statistically significant association with discriminatory attitudes toward PHAs. The incomplete knowledge about HIV/AIDS prevention and transmission escalated the odds of people holding a biased attitude towards PHAs twice higher than people with a complete understanding of HIV/AIDS prevention and transmission.

The finding indicated that high education and complete knowledge related to HIV/AIDS prevention and transmission are the key factors that can be modified to reduce the odds of people holding a

discriminatory attitude towards PHAs in Indonesia. Future studies should be conducted to explore better information and deeper analysis in understanding the biased attitude mechanism towards PHAs.

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