

# 6. HIV Stigma Among Clinical Medical Students in East Java, Indonesia

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# HIV Stigma among Clinical Medical Students in East Java, Indonesia

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## Abstract

**Background:** HIV-related stigma is considered as major barrier for controlling the spread of HIV/AIDS. People living with HIV/AIDS (PLWHA) that experienced stigma were less likely to disclose their HIV status to their sexual partners and health care professionals. Medical students as the future physicians are expected to be at the forefront to prevent and treat HIV/AIDS. This study aims to explore the stigmatized attitude and practices towards HIV/AIDS patients among medical students in East Java, Indonesia.

**Material and Method:** Observational study was conducted at one of the faculty of medicine in public university in East Java, Indonesia. Respondents of this study was last year clinical medical students. Instrument used in this study was self-administered questionnaire that assess medical students attitudes and practices towards PLWHA.

**Results:** Most respondents empathize PLWHA patients equally with non-PLWHA. Forty percent of the respondents agreed that PLWHA needs to be separated from non-PLWHA in health care services. Around 39% of the respondents think that PLWHA should not become a healthcare worker and Eighty two percent of the respondents did inform their friends if there was a PLWHA patient to be cautious. More than half of the respondents used unnecessary protection when examining PLWHA patients.

**Conclusion:** HIV-related stigma among clinical medical students in East Java was still exist, in both attitudes and practices. Medical schools should consider developing a teaching method that improves their students attitudes and behaviors towards PLWHA patients.

**Keywords:** HIV, Stigma, Medical Students, Indonesia.

## Introduction

HIV/AIDS is still one of the most important global public health problem. Globally, 2.1 million people were estimated to have become newly infected with

HIV, representing a rate of 0.3 new infections per 1000 uninfected people in 2015. An estimated 36.7 million people were living with HIV at the end of 2015<sup>1</sup>. Data from USAID showed that around 620000 people living with HIV in Indonesia with 48000 new infection in 2016, and among them only 13% accessing antiretroviral therapy (ART)<sup>2</sup>.

HIV/AIDS related stigma is considered as major barrier for controlling the spread of HIV/AIDS. Stigma is not only devastating for social and economical aspect of the individual, but also a major barrier for accessing HIV/AIDS prevention and treatment services. Feeling afraid of being stigmatized is the main reason why people feel reluctant to see doctors for having HIV counseling and testing (HCT)<sup>3,4</sup>. HIV/AIDS related

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stigma also impact patient's adherence to highly active anti-retroviral therapy (HAART). People living with HIV/AIDS (PLWHA) who disclosed their status were likely to skip doses to avoid their families, friends, or doctors finding out their status<sup>5</sup>. Study conducted in 4 countries in Asia (Indonesia, India, Philippines, and Thailand) shows that 80% of HIV respondents reporting discriminatory experiences, including discrimination in the health sector (54%), community (31%), family (18%), and workplace (18%)<sup>6</sup>.

Good health care access is important for maintaining quality of life PLWHA. HIV/AIDS-related stigma from health care providers result in lack of access or delayed access which speeds up progression of the disease<sup>7</sup>. There are only 3 studies in Indonesia about the HIV/AIDS-related stigma in health worker until now, and all of the studies found that HIV/AIDS-related stigma among health care worker did exist, and it is unacceptably high<sup>8-10</sup>. Although only few studies conducted in Indonesia, stigmatizing attitudes toward PLWHA likely to occur in clinical settings throughout the country.

Medical students as the future physicians are expected to be at the forefront to prevent and treat HIV/AIDS. Thus, their professional behavior and attitudes against HIV/AIDS patients have profound impact on the course of the disease, treatment compliance, and prognosis. Until now, there are no study regarding the HIV/AIDS-related stigma among medical students. This study aims to explore the stigmatized attitude and practices towards HIV/AIDS patients among medical students in East Java, Indonesia.

## Material and Method

This study was a observational study conducted in March 2017 at one of the faculty of medicine in public university in East Java, Indonesia. This study follows the principles of the Declaration of Helsinki. All respondents gave their informed consent prior to their inclusion in the study. Information for informed consent was given before respondents signed the informed consent. Details that might disclose the identity of the respondents under study were omitted.

In general, medicine in Indonesia is taught in minimum of 11-semester and divided into two phases. The first phase is preclinical study, consisted of 7-semester study program. The second phase is clinical study, consisted of 4-semester study program. After the students finish the second phase, they are eligible

to take national examination, consist of theory and Objective Structure Clinical Examination (OSCE) test. After students pass the national examination, they are entitled for Medical Doctor degree. In this study, the respondents were medical students whose already finish their clinical study in the academic year of 2016/2017 but not yet took the national examination. We choose these students as respondents in our study because they had already interacted with patients and involved in the tending process during their clinical study.

Study instrument in this study was self-administered questionnaire, consisted of three sections as follows: 1) The characteristic of the medical students; 2) The medical students attitude towards PLWHA; and 3) The medical students practice towards PLWHA during their clinical years. The medical students attitude section contained 9 questions, and the medical students practice section contained 8 questions. There were only 2 possible responses to each statement in attitude and practice section, which were 'yes' or 'no'. The questionnaire was given to the respondents in Indonesian. We did not measure the score in each section of the questionnaire in this study. All the acquired data from the questionnaire was entered to SPSS (SPSS Inc., Chicago, IL, USA) for descriptive analysis.

## Results

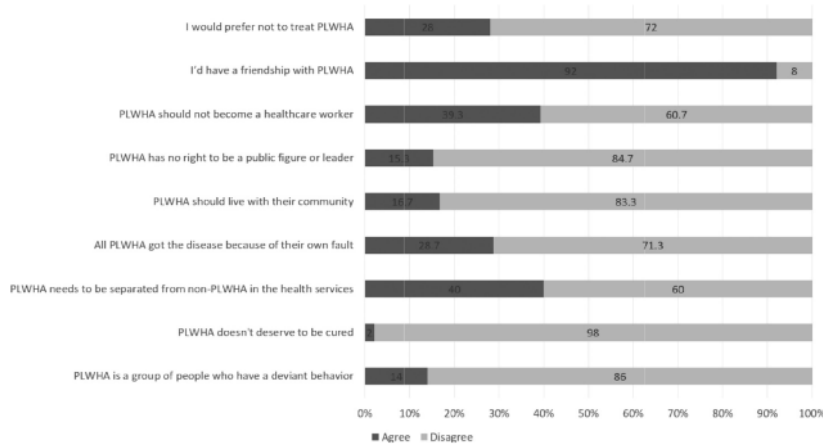
A total of 150 medical students were recruited as respondents, with the response rate of 100%. Mean age of the participants was  $23.23 \pm 0.734$  years old. There were more female respondents than male respondents in this study. Most of the participants had an average GPA of 3.0-3.5 out of 4.0 throughout their study as medical students. More than half of the respondents was raised in the healthcare worker (HCW) family (table 1).

In the medical students attitude towards PLWHA section, almost all of the respondents would have a friendship with PLWHA. Forty percent of the respondents agreed that PLWHA needs to be separated from non-PLWHA in the health service. There were 28% of respondents that would prefer to treat PLWHA. Few respondents agreed with the statement that PLWHA doesn't deserve to be cured, and 28.7% agreed that all PLWHA got the disease because of their own fault. Around 39% of the respondents agreed that PLWHA should not become a healthcare worker, and 15.3% agreed that PLWHA has no right to be a public figure or leader (Figure 1).

In the medical students practice towards PLWHA patients section, most of the respondents empathize PLWHA patients as much as they empathize other patients. Eighty two percent of the respondents did inform their friends if there was a PLWHA patient so that their friends will be more careful in tending that patient. There were 20% of the respondents who did not do complete physical examination on PLWHA patients as complete as on other patients, and 33.3% try to avoid physical contact with the PLWHA patients. More than half of the respondents used unnecessary protection when examining PLWHA patients. Around 20% of the respondents did HIV screening test in the patients that they suspect of having an HIV infection without making any proper counselling (Figure 2).

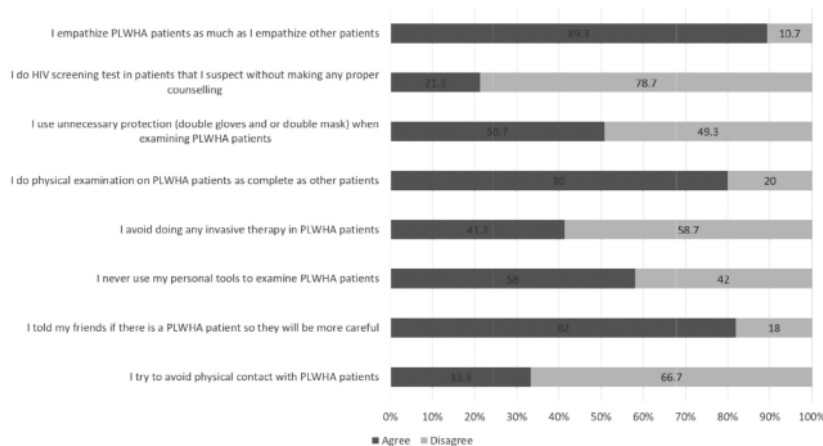
**Table 1. Characteristic of the respondents**

	N (%)
Age (Mean ± SD)	23.23 ± 0.734
<b>Gender</b>	
Male	64 (42.7)
Female	86 (57.3)
<b>GPA</b>	
2.5 – 3.0	5 (3.3)
3.0-3.5	122 (81.4)
>3.5	23 (15.3)
<b>Family Background</b>	
Health worker	50 (33.3)
Non-health worker	100 (66.7)



**Figure 1. Medical Students Attitude Towards PLWHA**

The percentage represents the number of respondents who agreed (dark grey) or disagreed (light grey) with the following statement out of 150 respondents in this study.



**Figure 2. Medical Students Practice Towards PLWHA Patients**



The percentage represents the number of respondents who agreed (dark grey) or disagreed (light grey) with the following statement out of 150 respondents in this study.

### Discussion

We found that there was still stigma towards PLWHA among medical students in Indonesia, which was observed in their attitudes and practices toward PLWHA. There were several previous studies that evaluate the attitude of medical students regarding HIV/AIDS that shows same result to stigmatizing attitude<sup>11-14</sup>.

Almost all respondents in our study had an average GPA of 3.0 to 3.5 out of 4.0 throughout their study in medical faculty. Several studies have been conducted to seek the correlation between knowledge and stigmatizing attitude towards HIV/AIDS among medical students. Previous study in China found that there was no association between knowledge of medical students in HIV/AIDS and stigmatizing attitude<sup>11</sup>. Other studies found that there are no positive changes in students' attitudes as students progressed through their studies although their knowledge showed a significant improvement<sup>12-14</sup>.

There are several studies that compare the knowledge and attitude between medical students and students from other faculties. Study by Turhan et al which compare the knowledge and attitude of students from faculty of medicine, faculty of dentistry, and medical technology vocational training school towards HIV/AIDS found that there was no significant difference between these students in terms of both knowledge and attitude<sup>14</sup>. In contrary, study done by Chauhan et al showed that HIV/AIDS knowledge in medical students was higher than allied health sciences students, and the attitude was also more positive<sup>15</sup>. Comparative study between final year of medical and pharmacy students conclude that overall medical students' knowledge appeared to be better than pharmacy students regarding HIV/AIDS, and there was significant difference between students group in attitudes and risk perceptions about HIV/AIDS<sup>16</sup>. Until now, there are no study that compare between medical students and society in general.

There were only 3 studies regarding HIV-related stigma in Indonesia among HCW to date, and only 1 study involved medical student intern. Study of HCW in Banda Aceh city found that the average of stigmatized attitudes among doctors and medical student interns was significantly lower from those of nurses<sup>8</sup>. Another

study in Aceh region conclude that although the HIV caseload is very low, the discriminatory attitude was high. Discriminatory attitudes were higher amongst HCW with low-level of formal education and low-level knowledge on transmission and prevention of HIV, non-doctor profession, Islam, have not experience direct contact with HIV-positive patients, rarely attend HIV/AIDS-related trainings, high value-driven stigma and overestimated risk to HIV transmission, and working in bad health facilities<sup>10</sup>. Study done by Walyuo et al. among 396 nurses at 4 different hospital in Jakarta, the capital city of Indonesia, found that stigmatizing attitudes towards HIV were significantly predicted by formal education, HIV training, perceived workplace stigma, religiosity, Islamic religious identification, and affiliation with the Islamic hospital, but not by HIV knowledge<sup>9</sup>.

In order to reduce HIV/AIDS stigma, knowledge alone is not adequate if not followed by proper clinical experience and clinical situational analogue training<sup>17</sup>. Moreover, in order for knowledge itself to change the medical students' attitude, more time is needed. Personal experience and convincing role model also plays role in building the knowledge to prevent HIV-related stigma.<sup>13</sup> To our knowledge, medical schools in Indonesia did not gave specific lecture and training to eliminate the stigma. This issue is similar to Israel, where HIV content taught in medical schools curricula focus mainly on matters such as the pathogenesis of HIV infection and the affects on its host, but there are no specific programs that purposely address the importance of preventing stigma and if it already occurred, dealing toward specific patient populations<sup>12</sup>. Previous studies found that the medical students' main source of HIV/AIDS information is not from the class lecture, but from the mass media instead<sup>12,15</sup>. Because most of the medical students receive information about HIV/AIDS from the same source as general population, one might argue that these might be the reason why the stigma against HIV is still exist in medical students.

It has been suggested that other than providing adequate knowledge to medicals students, it is important to also focusing on dealing with stigma, anxiety and misperceptions about HIV/AIDS and PLWHA, Medical schools should modify their curricula to include teaching method aimed at improving HIV-related attitudes and behavior, and adherence to medical professionalism. It could be done by providing the lecturer's comprehensive experience that address all the possible prejudice and

discriminatory health beliefs in the students, engaging PLWHAs to speak of their life experience and interact with the students, bed-side teaching with PLWHA supervised by an experienced physician who was a proven good role model in clinical practice and teaching, having a structured elective program for knowledge enhancement and cognitive exercise to improve their skills in handling PLWHA<sup>11-16</sup>.

### Conclusion

HIV-related stigma among clinical medical students in East Java was still exist, in both attitudes and practices. Having a knowledge of HIV/AIDS does not guarantee that there will be no stigmatizing attitudes towards PLWHA. Other than providing adequate knowledge by giving classical lecture, medical schools should also develop a teaching method that improves their students attitudes and behaviors towards PLWHA patients before they enter their clinical years study. Future study needs to be done to compare the attitude between medical students and society in order to evaluate the effectivity of the teaching method regarding the HIV-related stigma.

**Conflict of Interest:** The authors declare that there is no conflict of interest regarding the publication of this article.

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