



## The effectiveness of HIV elective class on attitudes nursing students toward gay & HIV clients in Indonesia<sup>☆</sup>



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### KEYWORDS

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### Abstract

**Objective:** This study aims to determine the differences in the level of attitudes toward gay and HIV/AIDS among nursing students did or did not choose to take HIV elective class.

**Method:** The research was conducted using comparative descriptive design. Research respondents consisted of nursing faculty students of Universitas Indonesia with a total sample of 266 students.

**Result:** The results showed that there were no differences in attitudes toward HIV clients ( $p$ -value = 0.298). Additionally, there were differences in attitudes toward gay ( $p$ -value = 0.001).

**Conclusion:** The results of this study suggest the need for an evaluation of educational curricula and teaching methods to improve effectiveness in learning. In addition, there needs to be a greater psychosocial discussion about reducing negative attitudes among nursing students toward clients who are gay and/or who have HIV/AIDS.

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## Introduction

Human immunodeficiency virus (HIV) is a virus that attacks the function of the immune system, causing immune deficiency.<sup>1</sup> HIV will continue to weaken the immune

system, causing a patient to become vulnerable to a number of opportunistic infectious diseases. When the immune system is sufficiently weakened, the patient is said to have developed AIDS.<sup>2</sup> The number of HIV cases continues to increase both globally and regionally. The United Nations Program on HIV/AIDS (UNAIDS) reported that 33.2 million people were living with HIV in 2010 and that the number of people living with AIDS increased to 36.7 million by 2016.<sup>3</sup> HIV continues to be a particular problem in various regions, including the Asia Pacific region where in 2016 there were 5.1 million people living with HIV.<sup>3</sup> The incidence of HIV in Indonesia continues to increase. In Indonesia, the number

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of people living with HIV increased from 21,591 in 2010 to 41,250 in 2016.<sup>4</sup>

Men who have sex with men (MSM) are at higher risk for developing HIV/AIDS.<sup>5</sup> Based on data from the Indonesian Ministry of Health 2017, MSM accounts for the second largest population of HIV patients in the country and consist of 13,063 people.<sup>6</sup> The latest Ministry of Health data taken from January to March 2017 shows that MSM continued to be at high risk for HIV/AIDS in Indonesia, and the number of MSM who are HIV positive continues to increase with the highest number of 2867 people.<sup>6</sup>

Nurses are at risk of being exposed to HIV infection in their practice because of the many opportunities to come in contact with their clients' fluids and blood.<sup>7</sup> The possibility of contracting an infection causes the nursing student to feel afraid faced with HIV-positive clients. Based on research conducted by Areti et al.<sup>7</sup> with 100 nursing students at the Department of Technological Education at the Institute of Crete in Greece, found that more than 50% of students were afraid of the risk of exposure when conducting health interventions with HIV-positive clients. In addition, qualitative research conducted in Vietnam involving professional health workers found that the health professionals fear contracting an infection when working with HIV-positive clients.<sup>8</sup>

Furthermore, clients who are gay and who are HIV-positive, generally are met with negative attitudes from the community, including from nursing staff. A study conducted by Shah et al.<sup>9</sup> showed that nursing students in India do not understand the transmission process of HIV, blame HIV clients when they contract an infection and discriminate against these clients during invasive interventions. Moreover, qualitative research conducted by Gaudine et al.<sup>8</sup> found that HIV-positive clients experience anger and rejection. The study also found that HIV-positive clients still face stigma and discrimination in health services. Research conducted by Ng, Yee, Subramaniam, Loh, and Moreira<sup>10</sup> shows that the majority of nursing students at one of the Malaysian Universities had negative attitudes toward gay clients, including believing stereotypes and having anxiety and misunderstandings about gay individuals.

This study is based on research found that negative attitudes and stigma toward a population can have a negative impact on a client's mental health.<sup>11</sup> Research conducted by Lyons, Pitts, and Grierson<sup>12</sup> shows that the extent of psychological pressure experienced by a group of HIV-positive participants was significantly greater (14%) than for a group of HIV-negative participants (8%). Qualitative research conducted by Pretorius et al.<sup>13</sup> involving HIV clients found that HIV clients experienced stressors and hurt due to a lack of acceptance by their families. In addition, research conducted by Quirk et al.<sup>14</sup> with gay clients with HIV/AIDS found that the stigma faced by this population can increase anxiety, loneliness, signs of depressive symptoms and a history of suicidal ideas.

Nursing staff in Indonesia are expected to provide health services that value dignity and uniqueness and should not be affected by any consideration of nationality, ethnicity, color, age, gender, political belief, religion, and/or social position of clients. Nursing staff members are responsible for improving health status, preventing disease, reducing and eliminating suffering, and restoring client health.<sup>15</sup>

To provide optimal nursing services, Faculty of Nursing Universitas Indonesia has added HIV/AIDS curriculum in the form of elective class. The HIV elective class are part of an additional lecture program organized by FIK UI to provide learning opportunities about HIV/AIDS. This course focuses on understanding of: the global and local HIV/AIDS epidemics; HIV pathophysiology, including transmission, diagnosis, and medical management; the role of nurses in ARV medical therapy; the prevention of HIV transmission in at-risk groups; the psychosocial aspects of the disease; and information about how to reduce the stigma and stereotypes associated with HIV/AIDS and the psychosocial and spiritual impacts the diagnosis can have on clients. The course involves both lecture and discussion.<sup>16</sup> Although the university has added these HIV elective class, there has been no prior research about the existing attitudes of nursing students in Universitas Indonesia toward gay clients and clients with HIV/AIDS. This study aims to gather information about the differences in the attitudes toward gay clients and clients with HIV/AIDS between students who participated in the class and those who did not participate the HIV elective class.

Furthermore, previous research has shown that knowledge and exposure can influence attitudes toward individuals who identify as gay and/or are HIV-positive.<sup>17-19</sup> However, this study's results indicate that students who join the elective class still have a negative attitude toward clients who are HIV-positive and feel less willing to help HIV-positive clients. Additionally, in this study, the students in the elective class joined the course had more positive attitudes toward gay people and are more accepting and supportive and less willing to discriminate against or stigmatize gay clients.

## Method

This study is descriptive and used a cross-sectional design. Research respondents consisted of FIK UI students from in their first to the fourth year of their program and clinical students in a fifth year. The sample included 266 students, consisting of 84 students who participated and 182 students who did not participate the HIV elective class. This study used a bivariate analysis with chi-square to see the differences in attitudes between students who participated and who did not participate in the HIV elective class (*p*-value).

This research was categorized based on a cut of point mean and median. The attitude was categorized into two groups: positive and negative. This study used the following surveys: Aids Attitude Scale (AAS) to determine attitudes toward HIV; and The Attitude Toward Homosexuals Questionnaire (AHQ) to see attitudes toward gay individuals.<sup>20,21</sup> The researchers tested the reliability of the questionnaires and the alpha Cronbach scores were: AAS (0.800) and AHQ (0.889).

## Result

The respondents consisted of teenagers (96 students) and young adults (170 students), with the 17 years as the youngest participant and 39 years as the oldest participant. The majority of respondents were women, consisting of 250

**Table 1** The differences in attitude toward clients with HIV ( $n = 266$ ).

Class	Category				Total		<i>p</i> value
	Positive		Negative		<i>N</i>	%	
	<i>N</i>	%	<i>N</i>	%			
Participate	42	50.0	42	50.0	84	31.6	0.298
Did not participate	77	42.3	105	57.7	182	68.4	
Total	119	44.7	147	55.3	266	100	

**Table 2** Sub questions about HIV attitudes.

Sub questions	Join HIV class		Did not join HIV class	
	Positive	Negative	Positive	Negative
Stigma	71.4%	28.6%	64.8%	35.2%
Discrimination	61.9%	38.1%	51.1%	48.9%
Alert for transmission	76.2%	23.8%	57.7%	42.3%
Receive	83.3%	16.7%	69.8%	30.2%
Willing to help	23.8%	76.2%	33.5%	66.5%

(94%) of the students. Respondents consisted of fourth-year students (58 students), third-year students (53 students), second-year students (51 students), first-year students (53 students), and clinical or fifth-year students (51 students).

Table 1 shows a *p*-value of 0.298 ( $p > 0.05$ ), indicating that there is no significant difference in the attitudes toward HIV between those who took the class and those who did not.

Furthermore, the results of the study measured the attitudes of students who participated in the elective HIV class but still had a negative attitude in the form of not willing to help HIV clients. However, most of them have no stigma, discrimination, remain alert to transmission and receive HIV clients (Table 2).

Table 3 shows the value of  $p < 0.001$  ( $p < 0.05$ ) or there are differences in attitudes toward gay between students who join and do not join HIV elective class. Based on the odds ratio results, it is known that students who join the elective class are 2.546 times more likely to have a more positive attitude toward gay clients.

Furthermore, the results of the study showed that students who join elective class had a more positive attitude toward gay in the form of appreciating, accepting, not discriminating, supporting and not stigmatizing gay clients (Table 4).

## Discussion

The results of this study indicate that there were no significant differences in the attitudes toward HIV between students who join and who do not join the elective class ( $p = 0.298$ ). The primary purpose of HIV elective class is to increase students' knowledge and the attitudes toward HIV/AIDS. This class discusses the global and local HIV/AIDS epidemics; pathophysiology, transmission, diagnosis, and medical management; the role of nurses in ARV medical therapy, the psychosocial aspects of the disease; and

information about how to reduce the stigma and stereotypes associated with HIV/AIDS and the psychosocial and spiritual impacts the diagnosis can have on clients. Students who joined the elective class may have better knowledge about HIV, but they still hold negative attitudes about the disease which is manifested in an unwillingness to help HIV-positive clients. These results can be contradicted with previous studies. Prior research conducted by Ugoji and Agoke<sup>18</sup> states that there is a positive relationship between improved knowledge and improved attitudes toward HIV.

In addition, the HIV class also discuss how individuals who identify as gay are a higher risk for contracting HIV. In this class, knowledge about gay does not discuss maximally. The result of this study also indicated that there were differences in attitudes toward gay individuals between the group of students who join and do not join the elective class ( $p = 0.001$ ). These results also contradict prior research. Previous studies conducted by Sanchez et al.<sup>17</sup> and Cornelius and Carrick<sup>19</sup> show that students who have good basic knowledge about individuals who identify as gay will have a more positive attitude toward them.

According to the results of this study, knowledge alone cannot fully influence student attitudes. Knowledge must be accompanied by a readiness to act.<sup>22</sup> A readiness to act or interact with clients can be developed through case studies, simulations and training so that students have the basic knowledge to deal with clients.<sup>23</sup> Based on this study, nursing students still have negative attitudes about HIV-positive patients are not willing to help HIV clients.

Based on research by Reis et al.,<sup>24</sup> inadequate training in the care of HIV-positive can cause health workers to refuse to treat HIV clients. In other study by Kulakac, O and Berkas, HA,<sup>25</sup> students who had previous experience in caring for an AIDS patient and had known someone with HIV/AIDS were willing to care for PLHIV. The elective HIV courses primarily consisted of lectures and discussions.<sup>16</sup> While methods such as case studies, problem-based learning, training and

**Table 3** The difference of attitude toward gay ( $n = 266$ ).

Class	Category				Total		p valve
	Positive		Negative		N	%	
	N	%	N	%			
Participate	58	69.0	26	31.0	84	31.6	0.001
Did not participate	85	46.7	97	53.3	182	68.4	
Total	143	53.8	123	46.2	266	100	

**Table 4** Sub questions of attitude toward gay.

Sub questions	Join HIV class		Do not join HIV class	
	Positive	Negative	Positive	Negative
Appreciate	65.5%	34.5%	48.4%	51.6%
Receive	65.5%	34.5%	45.1%	54.9%
Discrimination	64.3%	35.7%	49.5%	50.5%
Support	72.6%	27.4%	47.3%	52.7%
Stigma	77.4%	22.6%	61.5%	38.5%

simulations involving psychomotor were rarely applied in the course. In addition, the students who do not attend HIV elective class did not receive any coursework or training about HIV clients during that time. Therefore, the learning method used to teach the coursework can be one of the factors in why there are no significant differences between the two groups. In spite of method, the experience can be one of the factors that can influence attitude toward them.

Furthermore, negative attitudes about HIV that manifest in an unwillingness to help HIV-positive clients can be influenced by several factors. Previous research has shown that students have negative attitudes about HIV due to fears about HIV transmission and infection. Fear of infection can be a major factor that causes students to be unwilling to help HIV-positive clients. Reis et al.<sup>24</sup> shows that nurses refuse to treat HIV-positive clients because they want to protect themselves and their families from infection transmission. The students who join the elective class received more information about HIV.<sup>16</sup> According to the analysis, the willingness some nurses feel about helping HIV clients comes from a fear of transmission.

This study also suggests that students who join the elective class about HIV also learned that gay individuals are an at-risk group. Learning and discussing gay issues has been shown to reduce negative thinking and to influence more positive attitudes about gay individuals.<sup>25</sup> In addition, within the elective HIV courses, there are targets for discussing the psychosocial aspects in order to reduce the negative attitudes, such as stigma and stereotypes.<sup>16</sup> Therefore, attending elective class can be one factor that can influence students' positive attitudes toward gay clients.

Based on the results of this study, researchers recommend educational curricula and evaluation of the methods and delivery system to improve effectiveness in learning about HIV/AIDS and the gay experience. In addition, there need to be greater psychosocial discussions to reduce

negative attitudes toward gay individuals and HIV/AIDS among nursing students.

### Conflict of interests

The authors declare no conflict of interest.

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