

Adolescents' Attitude toward HIV/AIDS Prevention in Yogyakarta

Sikap Remaja terhadap Pencegahan HIV/AIDS di Yogyakarta

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Abstract

Acquired immunodeficiency syndrome (AIDS) is the second leading cause of death in adolescent groups in the world. In Indonesia, the rate of human immunodeficiency virus (HIV)-infected adolescents increases annually. Yogyakarta, well-known as the education city, has the highest number of HIV/AIDS cases in the productive age group of 20–29 years old, which means that they have been already infected with HIV since teen age. This study aimed to determine influential factors that affect adolescents' attitude toward HIV/AIDS prevention. The study was an analytic survey research with a cross-sectional design. Stratified random sampling was applied to select a sample size of 128 respondents of class XI at Muhammadiyah 3 Yogyakarta Senior High School in 2017. Data were taken by using questionnaires that had been tested for validity and reliability. Data were analyzed by chi-square test and logistic regression. The results revealed that most of the respondents received information on HIV/AIDS from media (47.7%), have a good knowledge level (82%), and support the prevention of HIV/AIDS (96.9%). The source of information and knowledge level had a statistically significant relation with adolescents' attitude toward HIV/AIDS prevention. Knowledge level is the most influential factor to adolescents' attitude toward HIV/AIDS prevention (p value = 0.006, PR = 1.199; 95% confidence interval = 1.052–1.367).

Keywords: Adolescent, attitude, HIV/AIDS prevention, knowledge

Abstrak

AIDS merupakan penyebab kematian kedua pada kelompok remaja di dunia. Di Indonesia kelompok remaja yang terinfeksi HIV selalu meningkat setiap tahunnya. Di Yogyakarta, yang dikenal sebagai kota pendidikan, memiliki kasus HIV/AIDS terbanyak pada usia produktif yaitu kelompok usia 20-29 tahun, yang dapat diartikan bahwa saat usia belasan telah terinfeksi virus HIV. Penelitian ini bertujuan mengetahui faktor yang memengaruhi sikap remaja terhadap pencegahan HIV/AIDS. Penelitian ini merupakan penelitian survei analitik dengan desain potong lintang. Pengambilan sampel dengan *stratified random sampling* dan didapatkan 128 responden kelas XI SMA Muhammadiyah 3 Yogyakarta tahun 2017. Pengambilan data menggunakan kuesioner yang telah diuji validitas dan reliabilitas. Data dianalisis dengan uji kai kuadrat dan regresi logistik. Hasil menunjukkan sebagian besar responden menerima informasi mengenai HIV/AIDS dari media (47,7%) tingkat pengetahuan dalam kategori baik (82%) dan sikap responden yang mendukung pencegahan HIV/AIDS (96,9%). Sumber informasi dan tingkat pengetahuan memiliki hubungan yang signifikan secara statistik dengan sikap remaja terhadap pencegahan HIV/AIDS. Tingkat pengetahuan merupakan faktor yang paling berpengaruh terhadap sikap remaja terhadap pencegahan HIV/AIDS dengan nilai p = 0,006, PR = 1,199; CI 95%=1,052-1,367.

Kata kunci: Remaja, sikap, pencegahan HIV/AIDS, pengetahuan

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Introduction

The Joint United Nations Programme on Human Immunodeficiency Virus (HIV) and Acquired Immunodeficiency Syndrome (AIDS; UNAIDS) said that the world is committed to end AIDS epidemic by 2030. To achieve this target, the transmission prevention efforts should be strengthened. According to UNAIDS, an estimated 36.7 million people are living with HIV by the end of 2015.¹

According to the United Nations Children's Fund (UNICEF), adolescents are dying of AIDS at an alarming rate. Globally, AIDS is the second leading cause of death in adolescents aged 10–19 years. The rate of AIDS mortality in adolescents aged 15–19 years has more than doubled since 2000, with an average of 29 new infections every hour.²

The Directorate General of Disease Control and Environmental Health of the Ministry of Health stated that in Indonesia, there are 17,784 HIV and 3,267 AIDS cases reported by mid-2016. The age group of 25–49 years has been dominant, with 12,357 cases of HIV infection until June 2016. Also, the number of AIDS cases in school children or students is 61.³

According to the Quarter I report of the AIDS Commission of the Special Region of Yogyakarta in 2016, Yogyakarta ranks the first in the region with 759 cases of HIV/AIDS. Based on the report, the productive age group of 20–29 years has the highest percentage at 30.98%. On the other hand, new infections are found every year in the age group of 15–19 years from 2012 to March 2016.⁴

Adolescence is a period of instability. At this time, adolescents are looking for an identity and likely converging to a peer group or peers, so there is an enormous environmental influence to their attitudes and perspectives on something during this time.⁵

Yogyakarta City has the highest percentage of HIV/AIDS cases, among other cities and districts in the province, in the age group of 15–19 years at 0.15%. Muhammadiyah 3 Yogyakarta Senior High School is one of the high schools in the city that holds annual activities in cooperation with the Indonesian Planned Parenthood Association of the Special Region of Yogyakarta to implement reproductive health education including HIV/AIDS for the students.

Therefore, this study aimed to determine the influential factors to the attitude of adolescents toward HIV/AIDS prevention. The results of this study are expected to elevate the knowledge of the factors that influence adolescents' attitude toward HIV/AIDS prevention.

Method

This study used analytic survey research with a cross-sectional design. The independent variables were sex,

residence, subject major, the source of information, and knowledge level. The dependent variable was the attitude toward HIV/AIDS prevention. This study was conducted on April 2017 at Muhammadiyah 3 Yogyakarta Senior High School.

The study populations comprised 259 students of class XI at Muhammadiyah 3 Yogyakarta Senior High School consisting of four natural science classes and three social science classes. The minimum sample size required was 119 and was obtained using a stratified random sampling technique. In this study, 128 respondents came from two natural science classes and two social science classes.

Results

The study was conducted at Muhammadiyah 3 Yogyakarta Senior High School on April 2017 with a total sample of 128 respondents. Table 1 shows that most of the respondents are women (52.3%), living in an urban area (96.9%), majoring in natural science (53.1%), and receiving information on HIV/AIDS from non-media (52.3%). The knowledge level of most respondents is categorized as good at 82.1%, and 96.9% has shown to have a supportive attitude toward HIV/AIDS prevention.

In this study, there were many factors that theoretically formed attitudes, but not all of them shaped the attitudes of adolescents toward the prevention of HIV/AIDS. In Table 2, several variables are not related to the attitude of adolescents, including sex with more number of female respondents at 98.5%, and not statistically related with the attitude toward HIV/AIDS prevention (p value = 0.347). Majority of the respondents were living in an urban area (96.8%), which was not statistically associated with adolescents' attitude toward HIV/AIDS prevention (p value = 1.000). Another variable not statistically related was natural science major (p value = 1.000).

The results of the multivariate analysis in Table 3 indicated that knowledge level was the most influential

Table 1. Univariate Analysis

| Variable | Characteristic | Frequency | % |
|-----------------------|------------------|-----------|------|
| Sex | Male | 61 | 47.7 |
| | Female | 67 | 52.3 |
| Residence | Urban | 124 | 96.9 |
| | Rural | 4 | 3.1 |
| Major | Natural sciences | 68 | 53.1 |
| | Social sciences | 60 | 46.9 |
| Source of information | Media | 61 | 47.7 |
| | Non-media | 67 | 52.3 |
| Knowledge level | Good | 105 | 82.1 |
| | Adequate | 19 | 14.8 |
| | Poor | 4 | 3.1 |
| Attitude | Support | 124 | 96.9 |
| | Not support | 4 | 3.1 |

Table 2. Bivariate Analysis

| Variable | Category | Attitude | | | | | | p Value |
|-----------------------|------------------|----------|------|-------------|------|-------|-----|---------|
| | | Support | | Not support | | Total | | |
| | | F | % | F | % | F | % | |
| Sex | Male | 58 | 95.1 | 3 | 4.9 | 61 | 100 | 0.347 |
| | Female | 66 | 98.5 | 1 | 1.5 | 67 | 100 | |
| Residence | Urban | 120 | 96.8 | 4 | 3.2 | 124 | 100 | 1.000 |
| | Rural | 4 | 100 | 0 | 0 | 4 | 100 | |
| Major | Natural Sciences | 66 | 97.1 | 2 | 2.9 | 68 | 100 | 1.000 |
| | Social Sciences | 58 | 96.7 | 2 | 3.3 | 60 | 100 | |
| Source of information | Media | 57 | 93.4 | 4 | 6.6 | 61 | 100 | 0.049 |
| | Non-media | 67 | 100 | 0 | 0 | 67 | 100 | |
| Knowledge level | Good | 105 | 100 | 0 | 0 | 105 | 100 | 0.000 |
| | Adequate | 17 | 89.5 | 2 | 10.5 | 19 | 100 | |
| | Poor | 2 | 50 | 2 | 50 | 4 | 100 | |

Table 3. Multivariate Analysis

| Variable | B | SE | Wald | df | p Value | Exp (B) | 95% CI for Exp (B) | |
|-----------------|------|------|------|----|---------|---------|--------------------|-------|
| | | | | | | | Lower | Upper |
| Knowledge level | 0.18 | 0.07 | 7.42 | 1 | 0.006 | 1.20 | 1.05 | 1.37 |

Notes:

SE, Standard Error; df=degree of freedom; Sig=significance level; CI=confidence interval.

variable to the attitude toward HIV/AIDS prevention (p value = 0.006; PR = 1.199). This means that adolescents with knowledge in good and adequate levels or are reasonably likely to support attitudes toward HIV/AIDS prevention were 1.199 times higher than the adolescents with a poor knowledge level.

Discussion

This study focused on the influential factors to adolescents' attitude toward HIV/AIDS prevention. According to the Theory of Planned Behavior by Ajzen,⁶ there are several factors that could affect the confidence of how one behaves toward something. This study took demographic or social factors including sex, residence area, the education major, information sources, and knowledge level in consideration. The results showed that most respondents (96.9%) were supportive toward the prevention of HIV/AIDS.

A study by Sohn and Park,⁷ on high school students in Seoul, South Korea, revealed that more girls (53.3%) were using condoms as prevention of HIV/AIDS than boys (35.3%). Another study by Majelantle *et al*,⁸ found no significant relation of sex, age, and residence area with knowledge of HIV/AIDS prevention among adolescents in Botswana. A study by Rahnama,⁹ on public university students in Malaysia mentioned that there is no relation of age, sex, education level, maternal status, and residence place with the attitude toward HIV/AIDS.

This study is also in line with the study by Rahmawan,¹⁰ that stated that no statistically significant difference was found on the grade level between natural science and social science classes about their interest in health education (p value = 0.214). The characteristics of the natural science students differ with that of the social science students on their way of thinking. The natural science students have a scientific way of thinking, and they have reasoning patterns based on certain targets, which developed from a regular and careful habit of scientific thinking based on mathematical logic and statistics. On the other hand, the way of thinking of the social science class students is more natural, and their reasoning pattern is based on daily habits from the social influence of their surrounding.¹⁰ This is in line with the results of this study showing that the natural science student's attitude to support HIV/AIDS prevention has a greater percentage than the social science students.

This study is not in line with the study conducted by Rina *et al*,¹¹ that revealed that there is no relation between exposure to information on premarital sex and adolescents' attitude toward premarital sex (p value = 1.000).

Uddin *et al*,¹² mentioned that for adolescents in Bangladesh, media have an important role in spreading health information. Overall, the study indicated that half of the adolescents have a sufficient knowledge level and most of them have a neutral attitude toward HIV/AIDS.

The respondents were predominantly at a good and adequate level of knowledge with a supportive attitude toward HIV/AIDS prevention. This is consistent with the statement by Handayani,¹³ that knowledge will support good adolescents' attitude on HIV/AIDS. Rasumawati stated that knowledge and behavior on the prevention of HIV/AIDS have a positive relation.

A further study by Thanavah,¹⁴ found that high school students with sufficient and high knowledge of HIV/AIDS have a positive attitude to people living with HIV/AIDS (odds ratio = 4.3; 95% confidence interval [CI] = 2.1–9.0; p value < 0.001).¹⁴ The results of the multivariate analysis in this study indicated that knowledge level is the most influential variable to adolescents' attitude toward HIV/AIDS prevention (p value = 0.006; PR = 1.199; 95% CI = 1.052–1.367). This means that the adolescents with a high or adequate level of knowledge were likely to have a supportive attitude toward HIV/AIDS prevention by 1.199 times greater than the adolescents with a low level of knowledge.

According to the study by Nubed and Akoachere,¹⁵ in Cameroon, although it is not statistically significant, knowledge raises the willingness of respondents to behave in safe sex. In addition, respondents with adequate and high levels of knowledge would have more positive attitudes toward HIV/AIDS.

Christiane *et al*,¹⁶ in a study on adolescents in Libreville, stated that the right knowledge of HIV will support young people in making decisions for their behavior in preventing the transmission HIV. A study by Ghojavand *et al*,¹⁷ on adolescents in Isfahan City, Iran, stated that there is a direct relation between adolescents' knowledge of HIV/AIDS and supportive attitude toward HIV/AIDS prevention. Adolescents' knowledge is important, and the attention of the government and school programs are also necessary.

Verma *et al*,¹⁸ said that the source of knowledge of HIV/AIDS among adolescents was mostly from electronic media and then followed by printed media. Most of the adolescents also agreed to the introduction of HIV/AIDS as a topic in the curriculum. Education programs on HIV/AIDS should be held in the classrooms, and teachers should be trained to educate students about the infection and the ways to prevent HIV/AIDS effectively. A study by Etrawati *et al*,¹⁹ also stated that reproductive health education for high school students is needed to increase their knowledge of reproductive health and decrease risky sexual behaviors.

Conclusion

The level of students' knowledge of HIV/AIDS is mostly good, and the students' attitudes largely support the prevention of HIV/AIDS. There is no statistically significant relation of sex, residence area, and education ma-

jors with adolescents' attitude toward HIV/AIDS prevention. Sources of information and knowledge level are statistically related to adolescents' attitude toward HIV/AIDS prevention. The knowledge level is the most influential factor to the adolescents' attitude toward HIV/AIDS prevention.

Recommendation

Schools that already have health education programs are expected to maintain and improve existing activities, as well as form a discussion forum, so that information of HIV/AIDS will be more easily accepted by students. Furthermore, researchers should not only examine attitudes that cannot be observed directly, but also investigate one's own behavior in preventing HIV/AIDS. In addition, the media can be used as a study instrument.

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