

Original Article

The understanding level regarding to STI, HIV and free sex on medical and non-medical students

Dina Arwina Dalimunthe, Alicia*, Rezky Darmawan Hatta

Department of Dermatology and Venereology, Universitas Sumatera Utara, Medan, Indonesia.

* Student of the Faculty of Medicine, Universitas Sumatera Utara, Medan, Indonesia.

Abstract

Background Students are regarded to be the final stage of adolescence. Their surroundings, as well as their education, have a good amount of influence on their attitudes and sexual behaviors. Furthermore, they are highly vulnerable to sexual misconduct and sexually transmitted diseases. Free sex has a number of adverse consequences, including STIs, HIV/AIDS, and other sexually transmitted diseases. STI prevalence has increased significantly worldwide.

Objective To examine the discrepancies between medical and non-medical students' awareness regarding STIs, HIV, and free sex.

Methods Analytical research design was employed in this study. A validated questionnaire was used to assess the variables associated with STI, HIV, and the understanding of free sex. Furthermore, this study was done using a cross-sectional approach and simple random sampling. Exactly 100 samples were required in each population.

Results It suggests that teenagers have an adequate amount of understanding about STIs and HIV. There were found 236 people (73.8%) for the first group and 173 people (54.1%) for the other group. Furthermore, 297 people (92.8%) were characterized as having an unusually high level of knowledge regarding free sex. The amount of knowledge about STIs, HIV, and free sex between medical and non-medical students varies significantly.

Conclusion The understanding level of teenagers towards STI and HIV are considered as moderate. Therefore, it is required to make an improvement by providing education on STI and HIV.

Key words

Understanding level of STI; HIV; Free sex; Sexually Transmitted Infection; College students.

Introduction

Teenagers are defined as the period of transition from childhood to adulthood.¹ Students are regarded to be the final stage of adolescence who are believed to have unhealthy sexual attitudes and behavior due to the lack of parental

supervision and supportive environment. Teenagers tend to be out of control due to poor parental supervision which raise the possibility of them involving in free sexual behavior.² The impact of free sex behavior is the spread of sexually transmitted infections (STIs) and HIV/AIDS.³

Address for correspondence

Dr Dina Arwina Dalimunthe
Department of Dermatology and Venereology,
Faculty of Medicine, Universitas Sumatera
Utara, Universitas Sumatera Utara Hospital,
Medan, Indonesia.
Phone : +6282163732580
Email: dina.arwina@usu.ac.id

Sexually transmitted diseases (STIs) are conditions that are transmitted via sexual contact, such as vaginal, anal, and sexual activity through oral contact, however may also be transmitted through non-sexual interaction, such as through the transmission of blood and its

components. Based on data compiled by the World Health Organization (WHO), there are more than 30 different bacteria, viruses and parasites that cause more than 1 million STIs every day. There are around 357 million new infections every year, including 131 million cases of chlamydia, 78 million cases of gonorrhea, 5.6 million cases of syphilis, and 143 million cases of trichomoniasis.⁴ At the end of 2017, there were an estimation of 36.7 million people suffering from HIV with 1.8 million newly infected cases.⁵

In Indonesia, the reported cases do not represent the actual numbers as there are no regulations that require reporting any new cases of STIs found except HIV infection.⁶ The region with the highest number of HIV infection cases reported from 1987 to September 2014 was the Capital of Indonesia, DKI Jakarta Province (32,782 cases). In this case, the top ten cases of HIV besides DKI Jakarta were East Java (19,249 cases), Papua (16,051 cases), West Papua (13,507 cases), Bali (9,637 cases), North Sumatra (9,219 cases), Central Java, West Kalimantan, Riau Islands, and South Sulawesi.⁷

The reports from the Provincial Health Office of North Sumatra in 2015, depicts that the number of STIs cases found in STIs health care were as many as 13,127 cases (3,265 males and 9,862 females). On the other hand, for HIV/ AIDS cases there were 10,844 cases 5,184 HIV and 5,660 AIDS cases).⁸

Based on Indonesia's demographic and health survey, the understanding of adolescents about STIs is relatively low. For gonorrhea and genital herpes, it is around 35%. Additionally, the understanding of condyloma, chancroid, chlamydia, candida, and other types of STIs is also fairly low which is below 1%.⁹

Through this research, the author intends to

comprehend the manner in which medical and non-medical students at Universitas Sumatera Utara differs in their understanding of STIs, HIV and free sex.

Methods

This study is an analytic descriptive study with cross sectional approach. The population in this study are medical and non-medical students which are enrolled to Universitas Sumatera Utara. The total number of study samples are 160 medical students and 160 non-medical students.

The samples used are the subjects from the chosen population that had fulfilled the inclusion and exclusion criteria. Sample selection was done by simple random sampling. A validated questionnaire was used to assess the variables associated with STI, HIV, and the understanding of free sex.

The collected data was then processed with a statistical computer program. In this study, the data hypothesis was analyzed with statistical test Mann-Whitney.

Inclusion criteria

1. The university students' class of 2015 who actively attend the class in Universitas Sumatera Utara
2. Minimal age of 20 years in 2018
3. Willing to fill the questionnaire and participate.

Exclusion criteria

1. Married students

Results

There are 320 subjects consisting of 160 medical students and 160 non-medical students.

As seen on **Table 1**, there were 59 respondents (18.4%) who had a high understanding level of STI, 236 respondents (73.8%) were moderate and 25 respondents (7.8%) were low. As seen in **Table 2**, 95 respondents (29.7%) had high understanding level of HIV, 173 respondents (54.1%) had moderate and 52 respondents had low. Moreover, based on **Table 3**, 297 respondents had high level understanding regarding free sex, 12 respondents had moderate, and 11 respondents had low.

Based on the result (**Table 4-6**) by using statistical Mann-Whitney test, it can be observed that the mean ranks of understanding about STI, HIV and free sex are higher in medical students than in non-medical students and is a statistically significant distinction in their understanding of STIs, HIV, and free sex ($p < 0.05$).

Table 1 Proportion of understanding level about STI.

Characteristic	Frequency	Percentage (%)
Medical Students		
High	51	15.9
Moderate	100	31.3
Low	9	2.8
Non-medical students		
High	8	2.5
Moderate	136	42.5
Low	16	5

Table 2 Proportion of understanding level of HIV.

Characteristic	Frequency	Percentage (%)
Medical Students		
High	74	23.1
Moderate	71	22.2
Low	15	4.7
Non-medical students		
High	21	6.6
Moderate	102	31.9
Low	37	11.6

Table 3 Proportion of understanding level of free sex.

Characteristic	Frequency	Percentage (%)
Medical Students		
High	151	47.2
Moderate	6	1.9
Low	3	0.9
Non-medical students		
High	146	45.6
Moderate	6	1.9
Low	8	2.5

Table 4 Difference in level of understanding about STI.

Characteristic	Total	Mean rank of STIs	p value
Medical students	160	193.1	*0.0001
Non-medical students	160	127.9	

Table 5 Difference in level of understanding about HIV.

Characteristic	Total	Mean rank of HIV	p value
Medical students	160	195.9	*0.0001
Non-medical students	160	125.1	

Table 6 Difference in level of understanding about free sex.

Characteristic	Total	Mean rank of free sex	p value
Medical students	160	175.4	*0.001
Non-medical students	160	145.6	

Discussion

This study is a cross sectional study to see the differences of the understanding level regarding STI, HIV and free sex between medical and non-medical students. Among medical and non-medical students in this study, there is a statistically significant distinction in their understanding of STIs, HIV, and free sex ($p < 0.05$).

The results of this study are consistent with the study of Bhramitasari (2011) which concluded that there was a significant difference between the level of understanding of sexually transmitted diseases (STDs) in medical school students with the social and political sciences students where level of understanding of medical students was higher than the social and political sciences students, in Universitas Diponegoro ($p = 0.0001$).¹⁰

The results of this research can be explained by the absence of a reproductive health curriculum in the social and political sciences (non-medical

students). Therefore, the students assume that the education at high school and seminars to be a good source of information, while medical students get courses on reproductive health during college.¹⁰ The extent of one's information about STI, HIV and free sex knowledge obtained from formal education, mass media, parents, seminars, and social/peer environment has important influence on their conduct.

Conclusion

There is a statistically significant distinction in the understanding of STIs, HIV, and free sex ($p < 0.05$) between medical and non-medical students.

References

1. Adjie, J.M.S. 2013, 'Kesehatan Reproduksi Remaja dalam Aspek Sosial', accessed: 18 March 2018, Available at: <http://www.idai.or.id/artikel/seputar-kesehatan-anak/kesehatan-reproduksi-remaja-dalam-aspek-sosial>.
2. Kustanti, E.R. 2013, 'Intensi Melakukan Seks Pranikah pada Mahasiswa Ditinjau dari Efektivitas Komunikasi Interpersonal Orangtua-Anak', Publikasi Ilmiah UMS, accessed 18 March 2018, Available at: <https://publikasiilmiah.ums.ac.id/bitstream/handle/11617/3965/B1.pdf;sequence=1>.
3. Amin, Z.A. 2015, 'Upaya Meningkatkan Pemahaman Bahaya Seks Bebas Melalui Layanan Informasi Berbantuan Audio Visual pada Siswa Kelas X PD 1 SMK Raden Umar Said Kudus', Eprints UMK, p.10-19.
4. World Health Organization. 2016, 'Sexually Transmitted Infections (STIs)', accessed 18 March 2018, Available at: <http://www.who.int/mediacentre/factsheets/fs110/en/>.
5. World Health Organization. 2018, 'HIV/AIDS', accessed 18 March 2018, Available at: <http://www.who.int/mediacentre/factsheets/fs360/en/>.
6. Menaldi, S. L. S. W., Bramono, K. & Indriatmi, W. (eds) 2017, Ilmu Penyakit Kulit dan Kelamin, Edisi Ketujuh, Badan Penerbit Fakultas Kedokteran Universitas Indonesia, Jakarta.
7. Kementerian Kesehatan RI Pusat Data dan Informasi Kesehatan. 2014, 'InfoDATIN Situasi dan Analisis HIV AIDS', pp. 2-3.
8. Dinas Kesehatan Provinsi Sumatera Utara. 2015, 'Laporan Program HIV/AIDS dan IMS Provinsi Sumatera Utara Tahun 2015', accessed 19 March 2018, Available at: <http://dinkes.sumutprov.go.id/artikel-104-laporan-program-hivaid-and-ims-provinsi-sumatera-utara-tahun-2015.html#>.
9. Kementerian Kesehatan RI Survei Demografi dan Kesehatan Indonesia. 2012, 'Kesehatan Reproduksi Remaja', pp.74.
10. Bhramitasari, W. 2011, 'Perbedaan Tingkat Pengetahuan Kesehatan Reproduksi pada Remaja Mahasiswa Fakultas Kedokteran dan Fakultas Ilmu Sosial dan Ilmu Politik Universitas Diponegoro', Fakultas Kedokteran Universitas Diponegoro.