

The Effects of HIV/AIDS Education on Knowledge, Attitude, and Satisfaction for AIDS Prevention Self Massage on College Students in Korea

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Abstract

Background/Objectives: It is important to provide education for university students about HIV/AIDS. This study was to evaluate the effects of HIV/AIDS education program in knowledge, attitudes of HIV/AIDS, and satisfaction of education.

Methods/Statistical analysis: The research design was a nonequivalent control group pretest-posttest design. The participants were comprised of 102 students (experimental group=50, control group=52) in Korea. A self-questionnaire knowledge and attitudes about HIV/AIDS were administered before, and after 180 minutes of HIV/AIDS education. The collected data was analysed descriptive statistics, Chi-square test, and t-test.

Findings: There were significant differences in the mean scores of knowledge, and attitude of HIV/AIDS and were significant differences satisfaction of education between two groups.

Improvements/Applications: HIV/AIDS education including multimedia was found to be an effective method for increasing knowledge, and attitudes of AIDS/HIV. The results suggest that customized educational programs with methods and contents should be developed to improve knowledge, exciting and participation of the learners.

Keywords: HIV/AIDS, Education, Knowledge, Attitudes, Satisfaction

Introduction

HIV/AIDS is one of the most destructive diseases and has become an even more significant international health issue^[1]. Since the first case were reported 1980s in the U. S, the disease has spread to virtually every country. In 2017, UNAIDS estimated that 33.7 million people were infected with HIV/AIDS^[2] and 29 million people died HIV globally^[1]. The total number of Koreans diagnosed with HIV have been increased since 2000 in Korea^[3]. As of 2016, there have been 15,208 cumulative reported cases of HIV/AIDS^[4]. Of those, approximately half all HIV-infected people are age 15-29 years^[5]. Therefore, it

is necessary to provide education about HIV/AIDS for young people.

However, Koreans hold strong stigmatizing attitudes about HIV/AIDS and people living with HIV/AIDS. Because of the social discrimination and stigma attached to homosexuality in Korea, it is culturally reluctant to discuss these sexually topics. Furthermore, people living with HIV/AIDS are mostly away from their work, family and intimated persons, and even religious groups^[6-7]. Discussion on the subjects of homosexuality and HIV/ AIDS is thought sensitive and uncomfortable with the Korean culture. People who are infected HIV/AIDS chance on taboo, bias, and discrimination. This fact can sometimes be the negative effect of living with HIV/AIDS. Fear of this happening can lead to people being sensitive about telling others that they have HIV/AIDS or avoiding contact altogether with other people.

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AIDS phobia, prejudice, and discrimination began with the introduction of HIV/AIDS to Korea because the mass media was reporting it as a contagious disease. Many people were under the wrong information that only contact with an HIV positive individual would cause HIV infection^[8]. Regrettably, information about HIV/AIDS in South Korea is not accurate even though many research have been studied and published within South Korea^[9]. People with HIV/AIDS may end up suffering in silence due to the social stigma put on by society and may not seek out for help or treatment that is needed. Therefore, it is important to ask a way for active treatment and live actively in society for people of infected with HIV/AIDS, they need to be supported physically and psychosocially as well as being accepted as a valuable member of the community. Previous studies have reported that knowledge of HIV/AIDS is important determinant for prevention of HIV and the pathways to changing attitudes of HIV. Furthermore, knowledge reduce the stigma against people with HIV/AIDS.

Newly, the results of many research found the results of effect of HIV/AIDS educational program on knowledge, attitudes, and stigma et al^[9-11]. However, many research were confined, their outlines were on easily providing or determining knowledge utilizing one way teaching method. Therefore, developing new tools to use students increase knowledge and attitudes have become an important part of education. The video learning methods is reported to improve learner attention, explanation, and memory^[12]. And the video learning method can add to images and sound stimuli more the using paper material or other method for education, multimedia allows students actively participate in their learning process, which resulted in higher knowledge gain, improve attitude, and decreased fear or phobias of persons with HIV/AIDS^[13]. Through this education method, students can be encouraged to practice infection prevention activities while actively engaging in social interactions with people with HIV/AIDS without prejudice towards those with it. The purpose of this study is to identify the effects of HIV/AIDS education on knowledge, attitude, and satisfaction for prevention in University students.

Method

This study was nonequivalent control group pretest-posttest design to evaluate the effects of HIV/AIDS education program on knowledge, attitude, and satisfaction for education in University students.

The participants for this study were senior university students who (a) volunteered to participate in the research and (b) were enrolled in the Health and Well-being course. Sample size was based on previous study examining the effect of educational interventions using multimedia^[14]. Using the statistical software G*Power V.3 at a statistical power of 0.80, effect size 0.27, and statistical significance 0.025, the estimated sample size required to perform 2 sample t tests was 92(46 students in the experimental group and 46 in the control group).

The study was conducted among university students at S university in Korea, who receive their health and well-being course. Participants were senior students who were enrolled in S University, in J city, South Korea, from September 1st to December 31st, 2016. Each participants signed a written consent from that specified the purpose of this study and the rights of the participants and voluntarily agreed to participate.

The instrument of this study were as follows. HIV-related knowledge was assessed using a 19-item questionnaire^[5-6]. The ranges of the scores are from score of zero (0) to score of 19 on the composite index, which means the higher the score, the higher knowledge level of HIV/AIDS. The Cronbach's α **α** was .78 in this study. To measure attitudes towards HIV/AIDS, 17 questions were taken from the tool developed by the Center for Disease Control and the department of academic research of the Korean Association for AIDS Prevention in 2013^[7]. Students' attitudes were measured using the 5-point Likert scale ranging from one (1): Strongly disagree to five (5): strongly agree. The Cronbach's α **α** of this tool was .81 in this study.

Satisfaction of the education was measured using the 5-point Likert scale ranging from 3 questions (1): strongly disagree to five (5): strongly agree. The results indicated that the higher the score, the higher the satisfaction with the education by the students.

The educational program was developed after reviewing literature, research articles, and video presentations. This program was reviewed by content experts in HIV/AIDS. This education program consisted of six sessions totaling 180 minutes that are required to run all six sessions. These educational sessions are (a) Understandings of AIDS, (b) Summary and understanding of AIDS, Definition of AIDS and natural death Characteristics of HIV infection, Diagnosis of

AIDS, Confirmation system of diagnostic examination, Sexually transmitted diseases, (c) Policy of AIDS and human rights, support services, AIDS-related laws and regulations, (d) Sexuality of human and sexual culture, Sexural counseling, Sexuality and understanding of sexual minority (e) Understanding of people living with HIV/AIDS, social understanding of people living with HIV/AIDS and disease, and follow up of people living with HIV/AIDS, and (f) Discussion on phobia toward AIDS and intent for AIDS prevention.

Statistical analyses were done utilizing SPSS, version 25.0 (IBM Corporation, USA). The homogeneity of subjects' characteristics and variables were used

to descriptive statistics, t-test, and chi-square. The differences in knowledge, attitudes, and satisfaction among two groups was used to t test.

Result and Discussion

1. General characteristics of the subjects

There were no significant difference between the two groups at baseline for general characteristics of the subjects [Table 1]. The mean age of 20.9 years was the experimental group and, and the mean age of 20.8 years was the control group. The majority of subjects were female (82.0% in the experimental group versus 86.5% in control group).

Table 1. Homogeneity of General Characteristics and Dependent Variables (N=102)

Characteristics	Exp. (n=50) n(%) or M±SD	Con. (n=52) n(%) or M±SD	t/χ ²	p
Age	20.9± 1.56	20.8±1.45	3.631	.481
Gender				
Male	9 (18.0)	7(13.5)	.397	.593
Female	41(82.0)	45(86.5)		
GPA	2.78±1.54	3.15±2.12	1.016	.312
AIDS Education experience				
Yes	12(24.0)	13(25.0)	.014	.907
No	38(76.0)	39(75.0)		
Knowledge	8.52±.87	8.72±.86	1.156	.251
Attitude	3.26±.53	3.35±.48	.890	.376

Exp: Experimental group

Con: Control group

GPA: Grade point average

There was demonstrated no statistically significant differences between the two groups on the total mean scores for knowledge ($p = .251$), and attitude ($p = .376$) at baseline. There was no statistically significant difference in demographic characteristics (gender, age, GPA, and education experience and independent variables (knowledge, and attitude of HIV/AIDS before education) between the experimental and control groups [Table 1].

2. Comparison knowledge, attitudes and education satisfaction between two groups after intervention

The mean score of knowledge before education (total score =19) in the experimental group was 8.52 ($\pm .87$), and this changed to 22.18 (± 0.76) after education.

In the control group, the mean baseline knowledge score was 8.72 ($\pm .86$), and this changed to 11.03 (± 1.21) after education. The mean score of attitudes before education in the experimental group was 3.26(.53), and this changed to 4.21 ($\pm .78$) after education. In the control group, the mean baseline attitudes score was 3.35 ($\pm .48$), and this changed to 3.87 ($\pm .90$) after education. There were found statistically significant better knowledge in the experimental groups after education ($p < .001$) and attitudes ($p < .05$). And there were statistically significant difference for knowledge ($p < .001$) and attitudes ($p < .001$) between the pretest and posttest in the two groups. There were statistically significant difference for satisfaction of education ($t=3.911, p < .001$) [Table 2].

Table 2. Knowledge, Attitudes and Education Satisfaction between two groups (N=102)

Variables	Group	Pre	Post	Difference	t
Knowledge	Exp. (n=50) M±SD	8.52± .87	13.73±1.12 11.03±1.21	5.22±.25 2.31±.35	48.151***
	Con. (n=52) M±SD	8.72±.86			
t		1.156	11.266***		
Attitudes	Exp. (n=50) M±SD	3.26± .53	4.21± .78 3.87± .90	0.95± .25 0.62± .42	4.798***
	Con. (n=52) M±SD	3.25± .48			
t		.890	2.036**		
Satisfaction	Exp. (n=50) M±SD		4.52± .60		3.911***
	Con. (n=52) M±SD		4.10± .48		

*: $p < 0.05$, **: $p < 0.01$, ***: $p < 0.001$

Exp: Experimental group

Con: Control group

Discussion

This study was conducted to evaluate the effects of HIV/AIDS education on knowledge, attitude, and satisfaction for education in university students. To establish the basis for applying education methods to improve the knowledge and attitudes to increase preventive behavior while reducing prejudice and fear towards individuals with HIV/AIDS. In this study, the educational program had a positive impact on increasing the knowledge level of university students and improving their attitudes toward HIV/AIDS. This findings were similar to studies of the previous research [1][13]. The results of these studies also stated that using discussion, audiovisual presentation, or quiz types of the educational methods allows students actively participate in their learning process, which resulted in higher knowledge gain, improve attitude, and decreased fear or phobias of persons with HIV/AIDS when compared to the traditional lecture. Like these studies, in this study, the educational programs provided with audiovisual aids had improved knowledge and attitudes more than other instructional methods, thereby enhancing preventive measures against the disease^[12] [15-16]. Literature supports that using the audiovisual improves students' concentration due to an audio/visual stimulus; the scenes are often self-explanatory, thus enhances longer retention of the knowledge^[17]. Therefore, HIV / AIDS education using audiovisual material is encouraged because it promotes a better understanding of health and motivates learners to participate in health promotion activities, which in the long run, results in better health outcomes. Previous studies suggested that combining PowerPoint slides, audiovisual materials, and question and answer sessions helped to change prejudice about HIV/AIDS and argued the need for ongoing small group discussion sessions to change the attitude toward people with HIV/AIDS. It is believed that the educational program used in this study allowed students the opportunity to freely express and share their thoughts and ideas with team members that positively influenced the attitude changes toward HIV/AIDS. Therefore, changing attitudes based on sociocultural values may require a special program as it is difficult by simple knowledge-based education^[18]. Including individual or small-group discussions in an educational program that allows students to share their ideas may be more effective in changing attitudes. The educational program used in this study included a lecture using audiovisual aids, and small group discussions provided in the experimental group while the control group received a traditional

lecture using only PowerPoint Slides. The results of compared to the control group, the experimental groups' learner satisfaction was significantly higher. Also, it is confirmed that students in the experimental group actively provided feedback on the educational program and made broad recommendations as well. It is believed that in addition to textbooks, a realistic educational program reflecting social and cultural realities heightened students awareness and lessened anxiety towards HIV/AIDS through discussions. The limitation of this study was that there was no group who received a single lecture as an educational program, and the long-term effects of the educational program used in this study were not confirmed.

Conclusion

The purpose of this study was to evaluate the effects of HIV/AIDS education on knowledge, attitude, and satisfaction for AIDS prevention in college students. In this study, a new multimodal HIV/AIDS education was provided to the college students to identify the effects of this educational program on the knowledge and attitude towards HIV/AIDS. The results of this study revealed that multimodal educational programs provided in this study were found to be helpful in improving college students knowledge and attitude toward HIV/AIDS. This study provided a foundation to develop effective HIV/AIDS educational programs. Based on the results of this study, it is necessary to develop a variety of customized educational programs with their methods and contents that are exciting and promotes the active participation of the learners. Further ongoing research is recommended to confirm the effects of the educational program used in this as well as its impact on students majoring in health sciences and non-health sciences in other universities in different geographical locations.

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Conflict of Interest: Nil

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