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The Effects of Speech Training, Guidebook and Simultaneous Method, on the Knowledge and Attitude of Students about HIV/AIDS

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Abstract

Introduction

A great percentage of AIDS infections occur in adolescence and youth. Since that, studing and finding the most efficient teaching methods in order to improve their information (knowledge) and attitude also to create positive one and to create preventive measures in the young and adolescent, is of great significance and priority.

Materials and Methods

7 schools were picked randomly among different Mashhad educational districts. From these schools, 650 students were randomly selected and divided into 4 groups:1-Education with lecture, 2-Education with guidebook, 3-Education with lecture and guidebook, 4-Without any education. Firstly, basic knowledge and attitude of students on AIDS were evaluated. Then their educational needs and curriculum were designed. Then 2 weeks after conducting the education, student's knowledge (study groups) and attitude were evaluated.

Results

The results showed that there was no statistically significant difference between 4 groups' knowledge and attitude in the pre-test, also there was no significant difference between knowledge and attitude in the control group before and after the training program. But there was a significant difference between knowledge and attitude in the intervention group before and after implementing the training program (P=0.000). After the training, the mean scores of knowledge in the simultaneous method had statistically significant difference with the control group (P= 0.000), but that was not the case with guide book group. Although the mean score of the individuals in the guide book group was more than those of in the control group, the significance of this difference wasn't confirmed by ANOVA. Results also showed that the mean scores of attitude in speech training and guide book methods had statistically significant difference with the control group (P= 0.000).

Conclusion

To improve students' knowledge, education by both lecture and guidebook, and to improve their attitude or to create a positive one, lecture method are preferred.

Key words: Attitude, Effects, HIV/AIDS, Knowledge, Students.

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Introduction

AIDS is a disease that in terms of its social problems, incidence and prevalence in active ages of society, high fatality rate and the cost of intensive care is considered among the main problems of the health care system; and control, prevention and care of patients are among the main activities that the health care Institutions provide worldwide for this disease(١). AIDS is now one of the main causes of death among adolescents and young people aged 15 to 24 years old, and many of the people that are in this age group are students and university students. Reported cases of HIV infection among students has increased from 0.96% to 1.64% between 2006 and 2011(٢). Iran's geographical position is very dangerous and as of now, the highest rate of infections can be seen in Iran's northern neighbors, East of the Asia and the Eastern Mediterranean region (٣).

According to the statistics published in the first half of 2010 a total of 21,435 people with HIV/AIDS have been identified in our country, and 92.6% of them were men and the other 7.4% were women. Young people are the most at risk group in the world. Because of satisfying their curiosity, peer pressure and lack of knowledge and skills, they face unsafe sex and drug use risk. So in comparison with adults they are more at risk of developing HIV/AIDS (4). In the descriptive study that was conducted by Edin et al., entitled "Assessment of Knowledge and attitude of Bangladeshi adolescents in AIDS prevention", the average level of knowledge and the attitude level of neutral was obtained (5). Also in a study on Chinese students it was found that their knowledge about AIDS was average and boys compared with girls had more positive attitude towards people with HIV/AIDS (6). Also in a study on non-medical students in Uganda it was found that students had high knowledge about HIV/AIDS, but they didn't had suitable behavior to prevent infection. This study showed that the source of information for boys 92.5% of cases are friends and 90% of girls were getting their information from magazines and newspapers (7).

Since a large percentage of children are studying in school (8), training in schools is really important in HIV/AIDS prevention. These trainings should be a combination of information about HIV/AIDS, its transmission and prevention ways, and skills to prevent HIV/AIDS by implementing certain behaviors (8). One of the major factors affecting the quality of training, are educational methods. The most common method is speech training and in this method, all students despite individual differences are trained. In this method teachers are active and learners are passive and will listen to the teachers. But we must remember that learning is an individual act and would not take place without learner activity. Therefore the teacher should bring about changes in behavior by creating designed opportunities, and in this respect, it is necessary to pay attention to those teaching methods that make the learner more active and dynamic (8). For this reason in order to control the disease, educational planning at different levels and determining their level of their knowledge about the issue is really important. However, due to different methods of teaching we decided to compare the effect of speech training, training manual and simultaneous methods, on the knowledge and attitude of Mashhad high school students about HIV/AIDS.

Materials and Methods

This study is a quasi-experimental before and after intervention and has intervention and control groups; and is conducted to compare the effectiveness of speech training, guide book and simultaneous (speech + guide book) teaching methods on the knowledge and attitude of high school students in Mashhad about HIV/AIDS. The study populations were female high school students in Mashhad, Northeast Iran. Before visiting the school, coordination with the Education Department and high schools was done. ٧ schools were selected randomly from different parts of Education Department and

in any high school, 4 first year high school classes were selected randomly and divided into four groups (speech training, guide book, simultaneous method: speech training+ guide book and a control group without training).

In total 650 girl students were selected. The instrument used in this study consisted of a two part questionnaire (demographic information of research units and questions regarding students knowledge and attitude about HIV/AIDS) that was composed of 60 questions. For validity and reliability of questionnaire, content validity and Cronbach's alpha test methods were used respectively. To determine the validity, the questionnaire was sent to a number of health education specialists and based on their opinions the necessary changes in the questionnaire were applied. According to the results of the Cronbach's alpha, total reliability questionnaire was calculated $\alpha = 0.87$.

In the first phase (before training intervention) questionnaire was completed by four groups; and according to the educational needs of the individuals of the intervention group, educational content was provided. Educational content was the same in speech training, guide book and simultaneous groups but the control group didn't had any kind of training. To evaluate the effectiveness of training intervention in the second phase (after training) 2 weeks after the training programs, knowledge and attitude of research units were examined by the questions of the previous questionnaire. Then it was compared with the data obtained from the first phase questionnaires. Data obtained from sample volumes were input as raw data into SPSS software and were analyzed using descriptive statistics and inferential statistics tests including t-test, ANOVA, Tukey and Pearson correlation coefficient. P value less than 0.05 was considered statistically significant.

Results

The results showed that there is no statistically significant difference between knowledge and attitude scores of groups in the pre-test. Also there was no statistically significant difference, between the mean scores of knowledge and attitude of the control group before and after the training program. However, there was a significant difference (P=0.000) between the mean scores of knowledge and attitude in intervention groups before and after the training program. After training the mean scores of knowledge in the control group had a statistically significant difference with the simultaneous group (P=0.000), but that was not the case with training manual group.

Results showed although the mean scores of the guide book group was more than the control group, but the significance of these differences was not confirmed by ANOVA. Findings also showed that the mean scores of attitude in speech training group and guide book group had statistically significant difference with the control group (P = 0.000) (Tables 1, 2).

Table 1: Comparison the effect of before and after intervention training on the knowledge of students

Knowledge	Number	Average pre-intervention	Average after intervention	P- value
Controls group	167	26.63±8.13	26.90±4.95	P>۰,۰۵
Training manual group	157	26.25±7.51	28.19±6.26	P<۰,۰۰۱
Lecture group	163	23.97±8.21	28.33±5.6	P<۰,۰۰۱
Simultaneous group	163	26.71±6.95	29.77±4.49	P<۰,۰۰۱

Table 2: Comparison the effect of before and after intervention training on the attitude of students

Attitude	Number	Average pre-intervention	Average after intervention	P- value
Controls group	167	23.62+6.05	23.98±3.56	P>۰,۰۵
Training manual group	157	24.55+5.41	25.62±3.47	P<۰,۰۰۱
Lecture group	163	23.02+5.85	25.77±3.7	P<۰,۰۰۱
Simultaneous group	163	23.71+5.53	25.27±3.87	P<۰,۰۰۱

Discussion

The main aim of this study was to improve knowledge in order to change the attitude of the students by the first level prevention, i.e. training about HIV/AIDS disease and how to prevent it through the use of speech training, training manual and simultaneous methods by implementing an intervention training program. Since there is no effective vaccine for the treatment of HIV/AIDS, the only way to protect young people in the society is by training and prevention.

As many studies have shown, precise and enough knowledge about HIV can reduce high-risk behaviors in young people (9). The knowledge of young people about HIV transmission and prevention is very important, because knowledge influences attitude and attitude as a result will greatly affect the behavior (10). The results of the current study showed that after training intervention, a significant increase in the mean scores of knowledge and attitude of those who have been trained is identified. This reflects the positive effect of training intervention on the promotion of knowledge and attitude. This result corresponds to Jafari et al. study, titled "The impact of a training program to improve knowledge and attitude of dental students about caring for HIV/AIDS patients". Because in the intervention group after training, 96% of students reported that they fully comply with the principles of infection control. This shows that a training program would improve the knowledge and attitude of students about HIV/AIDS and will have a positive effect on future action (11). The results of Asghari and Karimi study showed that knowledge of young people about HIV/AIDS prevention especially in relation to prevention methods is very low, and training has a positive impact on improving their knowledge (12). The results of this study also showed that the mean scores of knowledge and attitude before and after the intervention are not different, and this corresponds with the result of Jafari et al. (11).

According to the statistical method of Tukey test, the average scores were not significantly different between the control group and training manual group. While there is a significant difference between the control group and the speech training group, also there is a significant difference between guide book group and speech training group. This means that training manuals had little impact on raising knowledge, which is incompatible with the results of Droodgar and Tashakor study. In a study entitled "The effect of training on knowledge of Kashan teachers' about Aleppo boil" that was conducted on 776 teachers, they determined the teachers Pre-training knowledge. Then they gave them training pamphlet, after one month, they evaluated their knowledge using the initial questionnaire again; and they concluded that training pamphlet is effective in promoting knowledge about aleppo boil disease (13). It may be argued that because in this study there was no obligation about studying the pamphlet, they may have not read the book. In this regard Mollayi et al., conducted a study entitled "Comparison of the effects of four methods of nutrition training in reducing Blood lipids in children and adolescents of Isfahan". According to results of this research, the most effective method was the use of training pamphlets, and this may be

because of the importance that individuals and families give to the written information, and another reason could be that they could be reviewed. In any case the role of training pamphlets is really important (8). Also it corresponds with Montazeri Far et al. study, entitled "Comparison of speech training and tutorials (training manuals) on the nutritional knowledge of high school girls". Their study results showed that the mean scores of the training groups knowledge after training about food groups increased significantly(١٤).

Conclusion

AIDS is one of the health‐related problems in the world. As there is no efficient treatment for the disease, the best way to halt its spread is prevention. The best way of prevention is to educate and promote the knowledge level among various social classes, especially students, who are ready for learning. According to the results, speech training and guide books when used simultaneously are one of the best methods to increase students knowledge about HIV/AIDS disease. Although, using speech training alone would also increase the knowledge. Therefore, it is suggested that in order to increase the level of students knowledge about HIV/AIDS, speech training and training manual simultaneously or at least speech training alone should be used.

Study limitations

The data analyses were done based on a cross-sectional data; therefore, causal interpretation of the results cannot be established. In addition, since all variables were measured by self-report instruments, which may have caused some bias considering the sensitive nature of the AIDS. It is important for future studies also to use other forms of data collection, such as interviews, and focus group discussions.

Conflict of interest: None.

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References

1. Moghaddam‹E S, Khosravi‹S, Abiz‹A, Marashi‹N, Karon‹M N, Sarhadi‹I. Knowledge, attitude and practice toward HIV/AIDS among students of Zahedan Islamic Azad University. The Scientific Journal of Iranian Blood Transfusion Organization 2010;7(4):206-13.
2. Li Y, Xu J, Reilly KH, Zhang J, Wei H, Jiang Y, et al. Prevalence of HIV and syphilis infection among high school and college student MSM in China: a systematic review and meta-analysis. PloS one 2013;8(7):e69137.
3. Rafsanjani‹SM Lp, Ravari‹A, Akbarinasab‹J. Knowledge, attitude and practice of non-medical students to the ways of transmission and prevention of AIDS in Rafsanjan city. Iranian Journal of Nursing Research 2011;6(22):31-9.
4. Ghaemi SZ, Rostambeigi P, Roshandel A. Assessment and comparison of the effects of lecture and pamphlet health education methods in the fields of AIDS on knowledge and attitude of university students. Int Res J Appl Basic Sci 2013;4:341-7.
5. Uddin A, Isaramalai S-a, Thassari J, Student RM. Knowledge and Attitude regarding HIV/AIDS Prevention among Adolescents in Bangladesh. Faculty of Liberal Arts, Prince of Songkla University; 2014: p. 1-16.
6. Buskin SE, Lin L, Houyuan Y, Tianji Y, McGough JP. HIV/AIDS knowledge and attitudes in Chinese medical professionals and students before and after an informational lecture on HIV/AIDS. Journal of Public Health Management and Practice 2002;8(6):38-43.
7. Sekirime WK, Tamale J, Lule JC, Wabwire-Mangen F. Knowledge, attitude and practice about sexually transmitted diseases among university students in Kampala. African health sciences 2001;1٢٢،-١٦:(١)

8. Abdollahi‹AA, Molaee‹EA, Roohi‹GH. Compare the effect of three educational methods on knowledge Girls Secondary school Gorgan about AIDS. PAYAVARD SALAMAT Journal 2008;2(3):75-80.
9. Savaser S. Knowledge and attitudes of high school students about AIDS: A Turkish perspective. Public health nursing 2003;20(1):71-9.
10. Mahmoudifar‹Y, Taha‹Z K. Effect of training in the field of AIDS on awareness rate and attitude of students. Iranian Bimonthly of Education Strategies In Medical Sciences 2009;2(3):109-115.
11. Jafari A, Yazdani R, Khami MR, Mohammadi M, Hajiabdolbaghi M. Effect of an Educational Course at an Iranian Dental School on Students' Knowledge of and Attitudes About HIV/AIDS. Journal of dental education 2012;76(6):792-9.
12. Nejat‹SN, Feyzzade‹A, Asghari‹Sh, Keshtkar‹AA, Heshmat‹R, Majdzade‹SR. Iran (HIV) analysis of risk factors for human immunodeficiency virus. Payesh 2006;6(1):45-54.
13. Doroudgar‹A, Tashakory‹Z. Effect of education on teachers' knowledge towards Leishmaniasis in Kashan. Feyz, Journal of Kashan University of Medical Sciences 2003;7(3):61-8.
14. Montazeryfar‹F, Bani‹M K, Rakhshani‹F. Effectiveness of two educational methods (Lecture and pamphelet) on nutritional knowledge of high school girls in Zahedan. Zahedan Journal of Research in Medical Sciences 2001;3(4):213-8.