The Impact of Group Discussion and Film on Promoting Knowledge and Attitudes about HIV/AIDS in Medical University Students: A Comparing Study

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Abstract: AIDS as an important health problem has been received more attention by social, political and health managers in the world. According to WHO education is the only way of fighting AIDS. Almost all educational interventions, lead to significant changes on Knowledge and attitudes toward AIDS by the subjects. Different methods have of course different influences. The present study is going to determine the rate of influencing two techniques, group discussion and film, on promoting Knowledge and attitudes toward AIDS, by the students of a medical university affiliated to the Ministry of Health and Medical Education. The present study is a randomized semi-experimental survey conducted among students attending in faculties of health, nursing and medicine in a medical university affiliated to the Ministry of Health and Medical Education. Based on the formula of sample size, 80 volunteer students have been randomly selected. By doing pre-test and giving the results of primary exam, the study population was divided into two sections including 40 subjects with almost same levels of Knowledge and attitudes. Educational intervention was done in two groups. To avoid of bias, immediately following the interventions, a post-test was conducted. Questionnaire was the only tool used to collect the data that its content validity and reliability were approved through test- retest and internal consistency [Alfa Cronbach] techniques. SPSS 12.0 was used to analyze the data. In group educated by film, the score mean of Knowledge increased from 31.03 (5.35) before intervention to 32.92 (4.38) after intervention. The changes was statistically significant (p<0.08). In attitude domain, however, the obtained difference was not statistically significant. In second group, educated by group discussion, the score mean of Knowledge was recorded 31.79 (4.36) and 33.97(3.34) before and after the intervention respectively. The score mean of attitude increased significantly from 37.73 (3.50) to 40.88 (2.19) following the intervention (p < 0.001). According to independent T- test, in secondary exam the score mean of Knowledge in the group intervened by group discussion was more than the other group. This change was statistically significant (p < 0.002). These difference in the domain of altitude was not statistically significant (p < 0.02). According to the results, obtained from the present study, due to more participation of the subjects, group discussion Technique had more influence in promotion of knowledge by the subjects. In the domain of attitude, however, there was not significant difference between the two techniques. That is, both methods had almost same influences on the subjects, attitudes. It is recommended, therefore, a combined technique may have more educational influence that could be tested by other studies.

Key words: HIV/AIDS-Health education methods • Group discussion • Film showing • Knowledge • Altitudes

INTRODUCTION

Prior to the year 1980, it was thought that infectious diseases are totally identified and preventable. Appearance of a new disease in the USA in1981,

however,destroyed that opinion. The new disease was named AIDS [Acquired Immune Deficiency Syndrome]. Reporting new models of the disease in Africa indicated that the problem is worldwide which is not limited to a specific place [1].

The first outbreak of AIDS in North America and west Europe, the second wave in Africa and South America, the third one in far Mediterranean and East Europe and finally the forth epidemic in Mediterranean and Asia in 1993, were reported. Nowadays more than 95% of new cases are reported from the third world [2,3].

According to the world statistics, Dec. 2007, about 33.2 million individuals are living with HIV/ AIDS throughout the world [2]. In Iran (I.R), the first case of AIDS was seen in a-six- year old homophiles child who received a contaminated imported factor [1]. According to the available statistics, the numbers of contaminated cases had an increase of 15587 for HIV and 1069 for AIDS from 1365 to 1386 [4]. Due to transferring the virus by avoidable and changeable behaviors, education is the most effective and strategic way to prevent new cases.

Education as an important activity in controlling infectious diseases including AIDS, sometimes has been neglected by society and individuals. If individuals knew that some of their behaviors have significant negative consequences, they would release those behaviors. Evaluation of health education programs in around the world, indicate that they are also effective in controlling this disease and reducing the numbers of sick people [5].

New researches conducted in the world, proved that majority of the youth 15-24 years of old, have Does not have adequate information about AIDS and its prevention. It is shown that, giving correct information regarding sex skills and human communication to the youth would solve their health problems and creating positive and responsible attitudes towards the issue In this regard, the United Nation in its 21st meeting, held in June 1999, mentioned that the governments throughout the world, should be sours that at least 90% of the teenage of is year old by the year 2005 and 95% by the year 2010 have necessary and effective information of AIDS to protect them selves. In order to diffusion of health information among people, one may use different educational methods and media that may change their behaviors. The recent studies indicate that giving correct information through Effective educational techniques increases the knowledge and positive attitudes towards AIDS by the youth [6]. But, correct information is not/never leading to solving all health problems of youth.

According to these studies, due to different influences of different methods, it seems that to obtain a better result, best methods should be applied.

Does not have adequate information Effective Educational techniques should correctly apply in achieving the objectives of any program. Methods, by themselves, don't have any superiority to each others. Therefore, to control a specific disease or health problem, one should employs the best and precise method [7].

Based on a general classification, educational techniques are divided into two direct and indirect groups. In direct group such as lecture and group discussion, there is a – two –way-communication. In the other group such as educational film,T.V and poster, however communication is one- away and education carried out indirectly through a few equipments and facilities. The present study is going to determine and compare the influences of two educational methods, group discussion and film showing, on promoting knowledge and attitude of HIV/AIDS, by the students of Medical University affiliated to the Ministry of Health and Medical Education.

The results, hopefully, world show practical guidelines to health authority in dealing with the underlined issue.

MATERIALS AND METHOD

This is a semi- experimental study done through a randomized clinical trial (RCT) type. Students from faculties of health, nursing and medicine studying in different courses in Medical University affiliated to the Ministry of Health and Medical Education were the study population. Procedures were included, first, literature review on different sources about HIV/AIDS. Second, adjusting questionnaire with the subjects Characteristics.

Third, selecting the sample based on the introduced formula.

$$n = \frac{\frac{tpq}{d}}{1 + \frac{1}{N} \frac{(tpq - 1)}{d}}$$

According to the Formula below and considering P=0.5, d=0.1, eighty students selected randomly.

Validity of questionnaire was tested by reviewing the questionnaire through eight experts for its Validity. Testretest and internal consistency [Alfa Cronbach] techniques were carried out for reliability of questionnaire.

Following a pre-test to complete the questionnaire, study sample was divided into two sections each consists of 40 persons. Subjects level of knowledge and attitudes were same at the beginning of the study.

Next step, educational intervention using methods introduced in the proposal (group discussion and film) has been administrated.

To prevent bias, directly following the intervention, a post-test was conducted by the researchers and the questionnaires were refilled by the two groups.

The results obtained following the intervention, were compared to those gathered prior the intervention. SPSS 12.0, T independent and T paired were used to analyze to the data. Subjects were quite formed and their participation was voluntary. The subjects were told that their information was considered secret and no one could access the data without permission.

RESULTS

Demographic information indicates that more than 46% of the population as at age group 25-29 year. 72% was male and 28% was female no married, 66.7% was married and 33.3 was no married. 29.3% of the students were from school of medicine. From educational level view point, 2.7% was had Master of Science (M.Sc). 20% was bachelor science (B.Sc) and 48% was undo graduate student. Distribution of the subjects in faculties was 44, 38.7 and 17.3 stands for nursing, medicine and health respectively. According to studied course, the subjects consist of nutrition (14.7%), medical emergency (41.3%), drug equipment (6.7%) and lab. Science (2.7%), medicine (29.3%), military nursing (2.7%) and environmental health (2.7%).

Results related to effectiveness of the intervention show that in the film group prior to the intervention, 7.9, 10.5 and 81.6 percent of the student had low, moderate and high levels of Knowledge about HIV/AIDS respectively. Following the educational intervention, however, the percentage of low level decreased to 2.6 and high level increased to 86.6. That is, the intervention conducted by film had on level of Knowledge. The subjectõs attitudes toward HIV/AIDS dramatically changed due to the educational intervention in group who received film. That is, low and moderate levels reduced from 23.7 and 47.4 to 10.5 and 36.8 respectively. The percentage of the subjects with good level of attitudes also increased from 28.9 to 52.7.

Table 1: Comparison of score means of the subjects knowledge and attitudes before and after the intervention in group educated by film

	Situation		
	Before	After	
Variable	Index		
	mean(SD)	Mean(SD)	P value
Knowledge	31.03(5.35)	32.92(4.38)	0.003
Attitudes	37.21(3.26)	38.74(4.75)	0.084

Table 2: Comparison of score means of the subjects knowledge and attitudes before and after the intervention in group educated by group discussion

	Situation		
Variable	Before	After	
	Index		
	mean(SD)	Mean(SD)	P value
Knowledge	31.79(4.36)	35.97(3.34)	0.000
Attitudes	37.73(3.5)	40.88(2.19)	0.000

In the other group, the one who intervened by group discussion, following the education nobody was found in low level. Those with moderate level of knowledge decreased from 18.9 to 5.4 percent. Finally, 75.7% of students with high level of knowledge increased to 83.8%. With regards to attitude about same results have been reported following the intervention. In this regards, 5.4% of subjects in low level decreased to 0.0%. Forty point six percent with moderate level decreased to 16.2 and finally, the percentage with good and positive attitudes toward HIV/AIDS increased from 32.4 to 73%. The scores (mean and standard deviation) reflecting the effectiveness of two interventions is presented in Tables 1 and 2. As shown in Table 1, according to T paired test, a significant difference has been reported between knowledge scores before and after the intervening in group educated by film (p<0.03). The difference for attitudes scores, however, is not significant (p<0.08). In Table two, where the group intervened by group discussion, according to the same test, the differences between before and after intervention for both knowledge and attitudes were statistically significant (p<0.00).

DISCUSSION AND CONCLUSIONS

In this study, subjects had a range 19 to 40 years of age. This wide range gives us enough power to have a better analysis in the study population that may not find in other similar studies. According to the objectives of the study, we should have had a comparison of core variables in two studied groups. As general assumption, it was appeared that the two groups were matched. Following the primary test using the independent T, subjects were divided into two matched groups. With regards to level of knowledge and attitudes, according to the results, presented in Tables one and two, it was indicated that score means of knowledge significantly increased in both groups. With regards to attitudes, however, the results showed that only the group who intervened by group discussion had a significant difference in level of attitudes towards the issue before and after the educational intervention and the difference in film group was not statistically significant. Having a look of other studies indicates about the same results. That is, Masoudi and Suki (2002), for example, in their study showed that videos education made a difference on knowledge level towards AIDS in students [6]. In another study done by Motahari et al. (2005), regarding compare of two educational methods on knowledge and attitudes towards AIDS, by the students of Islamic Azad university, it was showed that both film and leaflet had positive influence on knowledge and attitudes of the issue[8]. Kembo et al. (1994) got same results in their study of impact evaluation of film and slide on students' knowledge about AIDS [9]. That is, any educational intervention has positive influence on level of knowledge. In attitudes domain, however, it is not usually true. Some studies {Martiniok et al. [10], Mbizvo et al. [11], Keerbi et al. [12]} proved same results as the present study and a few such as Khomami [13] and Vakily [14] didn't. We may conclude that any educational intervention not necessary will change attitudes as well as knowledge. Researcher should look for other techniques to improve attitudes. In the present study, however, it was showed that group discussion could be one of those techniques. As reported score mean of attitudes in group intervened by group discussion increased from 37.73(3.5) to 40.88(2.1) following the education.

Comparing the effects of Group Discussion and Film on knowledge and attitudes of AIDS in students, considering the similarity of the two groups prior to the education, the findings following the educational intervention showed that knowledge scores have significant difference. That is, mean and S.D. of knowledge scores in Discussion Group were 36.9 (3.34) verses 32.9 (4.38) in the Film group, indicating a statistically power of group educated through discussion group. In general term, according to different studies such as Taslimi *et al.* [15], Hassanpour *et al.* [16] and Alizadeh *et al.* [17] group discussion, due to more participation of members of group, is more effective than other educational techniques.

Comparison of two effective methods on health education (direct andindirect) is of strength of the present study. Working with students as an important group in society was another point of the study. Time organizing to participate students in the study plan, being separate from one another by the end of the interventions were more important limitations of the study.

As conclusion, using group discussion in compare to showing film is more effective although, both methods were succeed to increase the levels of knowledge.

REFERENCES

- Islamic Republic of Iran's, Ministry of Health & Medical Education, 2002. A summary about AIDS. Published by Ministry of Health & Medical Education of Iran.
- Yeganeh, B., 2000. Epidemiology of AIDS. Published by Ministry of Health & Medical Education of Islamic Republic of Iran.
- 3. Muma, R., 1997. HIV Manual for Health Care Professionals. Published by Appleton & Lange.
- Islamic Republic of Iran's Ministry of Health & Medical Education, 2007. The last statistics of HIV/AIDS in Islamic Republic of Iran. Published by Ministry of Health & Medical Education of Iran.
- Avert organization, 2007. HIV/AIDS education: Why&How. Available from: http://www.avert.org/aidseducation.htm/.
- Masoodi, M. and M. Saki, 2002. Influencing of video education on knowledge of preventive of AIDS in students of Lorestan Shahid Beheshty university. Abstract book of national congress of public health and preventive medicine, pp: 153.
- 7. Egger, G., R. Spark and R. Donovan, 2004. Health Promotion Strategies and Methods. Australia: McGraw-Hill Book Company, 2nd edition.
- 8. Motahari, M. *et al.*, 2005. Comparison of influencing of two educational methods on AIDS for knowledge and attitudes by students of Islamic Azad university unit lahijan in 2003. Developing steps in medical education, 2(1): 49-55.

- Kembou, E., U. Tamoufe, L. Kaptue, A. Djiena and B. Kamouke, 1994. The impact of images in the education of high school students regarding STDs and AIDS. International Conference AIDS., 10: 383 (Abstract No. PD0712).
- Martiniuk, A.L.C., K.S. O'Connor and W.D. King, 2003. A cluster randomized trial of a sex education program in Belize: Central America. International Journal of Epidemiology, 32: 131-136.
- Mbizvo, M.T., J. Kasule, V. Gupta, S. Rusakaniko et al., 1997. Effects of a randomized health education intervention on aspects of reproductive health knowledge and reported behavior among adolescents in Zimbabwe. Social Science & Medicine, 44(5): 573-577.
- 12. Kirby, D., M. Korpi, C. Adivi and J. Weissman, 1997. An impact evaluation of project SNAPP: an AIDS and pregnancy prevention middle school program. AIDS Education Preview; 9(1 Suppl): 44-61.
- 13. Mosaffaye khomami. H., 1998. Survey knowledge and attitudes students of rasht teacher training centers toward by preventive methods of AIDS for presentation suitable health education plan. MSc Thesis, Tarbiat Modares University, Faculty of Medical Science.

- 14. Vakily, M., 1994. Comparison of influencing of direct and indirect health education methods on knowledge and attitudes toward AIDS by students of Sagez Payame noor university. MSc Thesis, Tarbiat Modares University, Faculty of Medical Science.
- 15. Taslimi, M., A. Jazayeri, A. Keshavars, H. Sadrzadeh and A. Rahimi, 2004. Comparing the effects of two educational methods, Booklet & group discussion, on nutritional KAP by high school students of Tehran. Journal of School of Public Health and Institute of Public Health Research, 2(4): 69-78.
- 16. Hassanpour, M., A. Farhadi, Z. Abdeyazdan, M. Tootoonchian and H. Hasanzadeh, 1999. Comparing the effects of Group Discussion & Lecture on knowledge relevant cares among parents with children affected with fever convulsion, referring to Imam Khomeini (RA) Hospital in city of shirvan 1997-1998, Abstract Book, The congress of nursing cares, Iran University Medicine Science.
- 17. Alizadeh, M., S. Zarrintan and R. Vahidi, 2007. The Effect of participatory education on attitude of school personnel towards HIV/AIDS. Research Journal of Biological Sciences, 2(7): 790-793.