

ORIGINAL ARTICLE

The impact of HIV/AIDS information disseminated on the status of behavioral change brought among Jimma University students. (a case of education faculty and medical school)

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ABSTRACT

Background: HIV/AIDS is spreading in heightened rate. Extensive dissemination of information, education and communication pertaining to the epidemic is the most cost effective means to bring about desirable behavioral change. The aim of this study is to assess the impact of HIV/AIDS information materials on the status of behavioral change brought.

Method. A total of 152 samples were drawn using simple random stratified sampling technique. A questionnaire was used to collect data.

Results: Radio, newspapers and magazine, television were indicated as information materials. A significant number of respondents evaluated information materials negatively. The Participants had good knowledge. 89.5%, 91.4%, and 76.3%, of the cases mentioned homosexual practice, infected blood transfusion, and common use of sharp materials as major modes of transmission. Majority (74.3%) did not have perception of susceptibility.

Conclusion: Preparation of materials did not consider characteristics /qualities which are peculiar to students. Most participants had good knowledge. However, knowledge could not guarantee a change in behavior for participants of this study involved in different riskier activities. In almost all the cases, field of study and year level of participants have an influence on the magnitude of behavioral change brought.

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INTRODUCTION

Years have passed since HIV/AIDS has become one of the most serious health, social, economic and political problems and created such a wide spread fear and concern of governments of all countries in the world. Most authorities agree that the problem is so severe and complicated in developing countries with limited resources health facilities.

Ethiopia is no exception. HIV/AIDS has started to spread in the 1980s. Available documents on the epidemic indicate that HIV infection was found in 1984 and the first AIDS case was reported in 1986. The prevalence of the disease was low in 1980s, but it escalated quickly through the 1990s. As a result, it rose from an estimated 3.2% of the adult population in 1993 to 7.3 % by the end of 1999 (MOH, 2000).

Though the problem is so complicated, it is not all gloomy that human beings cannot have a command over their lives and get on with their activities with availability of the right set of information.

Evidences from Uganda and other countries suggest that the spread of

information through out the population about the epidemic: its extent, the nature of the disease, how it is transmitted, the fatal consequences and how individuals can protect themselves and their loved ones is key to achieve wide spread changes in high risk behaviors (CAHB, 1999).

Studies indicate the importance of HIV/AIDS information, which equips individuals with appropriate information about the modes of transmission, and prevention strategies thereby help to reduce risk behaviors.

College/University students are at risk of the epidemic. In spite of this, students of higher education in Ethiopia have not been provided with the required information regarding the dangers of HIV/AIDS and STDS on campuses (ISAPSO, 2000). This study attempts to identify available information materials/sources which are accessible to students.

In addition, little or no research has been done concerning the designing and dissemination of HIV/AIDS materials based on base line data from target groups.

Merely looking at their educational level and relatively better access to organizations in order to get HIV/AIDS information, one may wrongly conclude that these students are generally aware of the existence of HIV/AIDS and know basic facts about its transmission and prevention. However, some students do not regard themselves as being at risk of HIV infection.

A study conducted on 490 Jimma university students revealed that participants had very high level of knowledge 485(97%) on HIV/AIDS and voluntary counseling and testing.74.4% prefer being abstinent from sex and being faithful to one's partner rather than using condom to prevent HIV.86% of the participants had favorable attitude towards preventive measures. (Tefera, 2004).

There is a prevailing misconception that a mere process of informing people about the transmission and prevention of the deadly disease is sufficient to change behavior of the target group. Unfortunately, prevention of this sort, produce little or no significant behavioral change. This research is further aimed to bridge this gap.

Concerning the susceptibility of Jimma university students, HIV seropositivity was found to be 12.2% with the highest prevalence in the public health faculty (17.3%) and the lowest in the college of agriculture 6.5%. Higher among married students 4(33.3%) followed by those who have boy or girl friend. Regarding the trend of seropositivity by the year of training, the highest prevalence 15(19.5%) was found in year three students followed by fifth and second year students that had a prevalence rate of 1(14.3%) and 25(12.3%) respectively.(Tefera, 2004).In a similar study which is carried out from May1-15,2000 among Jimma university students it was found out that over 15%believe that HIV/AIDS is not a big problem as media suggests. And 56.3% of the students who were involved in unprotected sex with casual partners do not recognize that they are at risk of HIV infection. This might be due to lack of condom as 58.2% of the respondents in this research did not know that persistent use of condom prevents HIV infection.(Tefera,,2004).

Different studies come up with mixed findings regarding the knowledge and perception towards HIV/AIDS across field of study and year level

For instance, a comparative study carried out in 1990 and 1992 among students at Gonder college of medical science disclosed that “despite their knowledge about AIDS and its modes of prevention, a large number of the students (about 22%) had sexual contact with high risk individual. To make the matter even worse, it was only 33% of them that practiced safer sex” (Tilahun 1997).

A research conducted on 1214 college students in Addis Ababa found out no statistical difference in Knowledge about preventive measures was observed for the background characteristics of sex, religion and the college and the year in the college the student belonged to. Only 217(17.9%) of the sexually active respondents reported that they always used condoms, whereas the highest proportion 802(66%) reported that they did not use condoms at all.(Beyene et al, 1997). A more recent study involving the general student population of Gonder college of Medical sciences reported about 23% sexual contact with prostitutes and about 48% condom use (Tilahun as cited in Beyene).

Similarly, students of Jimma University cannot be exceptions. A study conducted

on 572 Jimma university students suggested that students at the final year and older ones (22-24) years respectively had an increased likelihood of being sexually experienced than their first year and younger (17-19 years old) peers. This study also showed that most of those students who practiced unprotected sexual activity had a better knowledge on sexuality related issues than their peers who had no any sexual experiences (Zerai, 2005).

METHODOLOGY

Participants

This research was conducted on a total of 152 regular undergraduate students in the Faculty of Education and Medical school, Jimma University. Out of the total population 1208 were males and 316 of them were females.

Samples and sampling procedure

A complete list of students in the faculty of Education and Medical school was considered. Then, students' in the aforementioned faculty and school were stratified in more homogenous groups in order to select proportional number of representatives from each stratum. The stratifying factors used were, year level, sex and Faculty/school to which

participants of this study belonged to. Sex is used as a stratifying factor to have a balanced gender mix. The other two factors were used to see the effect of information materials and/or sources on behavioral change brought. Following this participants were randomly selected. The number of participants from the faculty of Education was 134(117 of them from the first year and 17 from the fourth year). And the number of samples from the Medical school were 18 (7 and 11 from the fourth year and first year respectively).

Instrument of data collection

The primary instrument of data collection was questionnaire. The questionnaire basically has two sections. The first part is designed to collect personal information of respondents. The second part, which consists of 23

items, is prepared to assess the potentialities of HIV/AIDS information to change knowledge, attitude and practice of students on different aspects of the diseases and the status of behavioral change brought by students. After preparing the first draft, the questionnaire was pre-tested and amendments were made accordingly.

Method of Data Analysis

Data was collected and tabulated. Then, it was analyzed using SPSS windows version 10.

Ethical considerations

Ethical issues were taken care of by the consent of the participants and the researchers. Any information given by participants was kept confidential. Moreover, very sensitive issues were discussed with health professionals in the university.

RESULTS

The findings of the study were presented and analyzed in this chapter.

Table 1. Number of participants in the study

Year level	Faculty/School						Grand Total
	Education			Medical			
	Male	Female	Total	Male	Female	total	
First	25	92	117	3	8	11	128
Fourth	3	14	17	1	6	7	24
Total	28	106	134	4	14	18	152

As indicated in the table above, a total of 152 students from two faculties were enrolled in the study giving a response rate of 100%. The majority of the participants 134 (28 female and 106 male) belong to the faculty of education out of which 117 were first year students

and 17 were fourth year students. The rest 18 respondents were from the medical faculty. Of these, 11 (3 females and 8 males) were at their first year of study where the remaining 7 (1 female and 6 males) were fourth year students.

Table 2. Sources of information on HIV/AIDS

Sources of HIV/AIDS information	<i>Response</i>	Faculty/School and Level of education				Total	Percent
		Education		Medical			
		First	Fourth	First	Forth		
Radio	Yes	101	14	5	4	124	81.5
	No	13	3	6	2	24	15.7
Newspaper and Magazine	Yes	89	15	11	3	118	77.6
	No	24	2	-	3	29	19.1
Television	Yes	91	13	7	3	114	75
	No	21	4	4	3	32	21.1
Video film	Yes	44	7	2	1	54	35.5
	No	69	10	9	5	93	61.2
Leaflets and pamphlets	Yes	37	12	6	4	59	38.8
	No	76	5	5	2	88	57.9
Posters	Yes	50	7	7	1	65	42.8
	No	63	10	4	5	82	53.9

As it can be seen in table 4, the most widely used source of information on HIV/AIDS was radio 81.5% followed by newspaper and Magazine, 77.6%. According to the data, the use of television as sources of HIV/AIDS

information stood third in use, 75%. The least was video film, 35.5% where leaflets and pamphlets a little better used than video films, 38.8%. Posters were used as information sources in 42.8% of the cases.

Table 3. Perception of participants towards HIV/AIDS information sources.

Characteristics of sources of information	Faculty/School				
	Response	Education	Medical	Total	Percent
Persuasive	Yes	68	8	76	50
	No	41	8	49	32.24
	NR	25	2	27	17.76
Group specific	Yes	44	4	48	31.6
	No	60	8	68	44.74
	NR	30	6	36	23.68
Acceptable	Yes	92	11	103	67.8
	No	24	4	28	18.42
	NR	18	3	21	13.82
Comprehensive	Yes	66	9	75	49.3
	No	50	6	56	36.8
	NR	18	3	21	13.82
Boring	Yes	58	5	63	41.4
	No	51	11	62	40.79
	NR	25	2	27	17.76
Fear arousing	Yes	74	8	82	53.9
	No	38	7	45	29.6
	NR	22	3	25	16.4

Quite more than half of the respondents, 67.8% rated that presently available HIV/AIDS information materials are acceptable. About 82(53.9%) respondents reported that the sources of information are rather fear arousing.

Exactly half of the participants revealed sources of information are persuasive, where at the same time about 63(41.4%) classified the as boring.

Table 4. Knowledge of respondents on modes of transmission.

Mode of transmission	Faculty/School				Total	Percent
	Education		Medical			
	First	Fourth	First	Fourth		
• Homosexual practice						
Yes						
No	-	-	-	-	-	-
NR						
• Monosexual practice						
Yes	104	15	10	7	136	89.5
No	9	2	1	-	12	7.9
NR	4	-	-	-	4	2.6
• Sharing food from the same dish						
Yes	8	4	1	1	14	9.2
No	105	13	10	6	134	88.2
NR	4	-	-	-	4	2.6
• Infected blood transfusion						
Yes	105	16	11	7	139	91.4
No	8	1	-	-	9	5.9
NR	4	-	-	-	4	2.6
Sharing sharp instruments						
• Yes	86	15	8	7	116	76.3
• No	27	2	3	-	32	21.1
• NR	4	-	-	-	4	2.6
• Inhalation use of towel						
Yes	8	6	1	-	15	9.9

<i>No</i>	105	11	10	7	133	87.5
<i>NR</i>	4	-	-	-	4	2.6
• Common use of towel						
Yes	12	4	1	-	17	11.2
<i>No</i>	101	13	10	7	131	86.2
<i>NR</i>	4	-	-	-	4	2.6
• Insect bit						
Yes	17	7	-	-	24	15.8
<i>No</i>	96	10	11	7	124	81.6
<i>NR</i>	4	-	-	-	4	2.6

* *NR- No response*

From table 4, one could possibly deduce that the majority of respondents 91.4% indicated that they believe infected blood transfusion is the major mode of HIV/AIDS transmission. None of the respondents mentioned homosexuality as mode of transmission. When 76.3% of the participants pointed out sharing sharp instruments as a possible means of transmission, 15.8%, 9.2% and 11.2% of the respondents reported the possible mode of transmission through insect bite, sharing food from the same dish

and common use of towel respectively. Still, 9.9% of the participants stated the possibility of transmission as a result of inhaling infected air. Regarding the overall knowledge of respondents on modes of transmission of the virus, the majority of medical school students know about the different ways of transmission with an overall knowledge score of 91.7% and the rest have poor knowledge. Putting this figure aside to that of the overall knowledge score of students of the faculty of education on

modes of transmission of HIV/AIDS, 82.8%, it can be generally deduced that there is better awareness about this aspect of the virus in medical school than education.

Table 5. Risk perception of susceptibility to HIV/AIDS.

Knows being at risk of HIV infection	Year Level			Faculty/School						#	%			
	First			Fourth			Education					Medical		
	F	M	T	F	M	T	F	M	T			F	M	T
Yes	6	21	27	2	10	12	7	26	33	1	5	6	39	25.7
No	22	79	101	2	10	12	21	80	101	3	9	12	113	74.3

As clearly shown in the above table, quite a lot more than half of the participants, 74.3% repudiate their susceptibility to HIV/AIDS. On the contrary, the remaining 25.7% admitted the risk of being HIV infected. In other words only 25.7% of the respondents take in to account the probability that AIDS can happen to them.

Analysis of the overall concerns of the study subjects towards the expectation that AIDS corded possibly happen to them indicated that most of the fourth year students than first, most medical faculty students than education expect the risk of being infected in a wider extent.

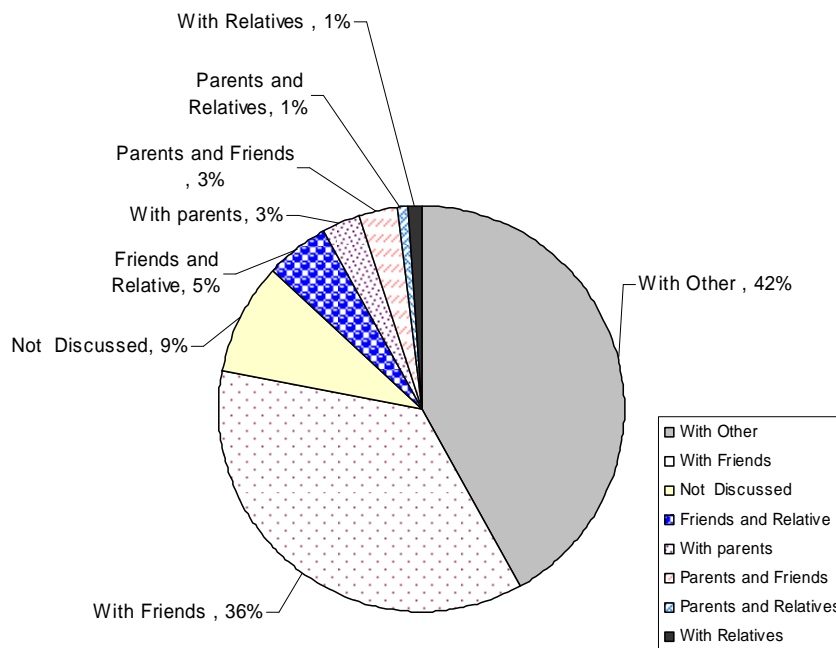


Fig 1 Information exchange on HIV/AIDS

As it can be depicted from the above figure, only 9.2% of the respondents admitted that there is no exchange of ideas concerning HIV/AIDS. The remaining large proportion of the respondents, 90.8% stated that they practice open discussion with parents and friends on ideas pertaining to HIV/AIDS. Of these, not much less than half, 40.8% of the respondents, mentioned that they exchange information with people other than

parents, relatives or friends. While 36.2% of the respondents noted that they exchange information with friends, only 0.7% of the participants indicated that they discuss such affairs with relatives. Still 3.3% made it known that they make discussion on such affairs with parents. A similar proportion of the participants 3.3% reported that they exchange information with parents and friends when 5.3% of them.

Table 6: Attitude towards people living with HIV/AIDS

Attitude statement	Year level		Faculty/School			
	First	Fourth	Education	Medical	Total	Percent
I will treat them positively	122	17	122	17	139	91.4
I will terminate my relation with them and/or treat them negatively	3	7	9	1	10	6.6
NR	3	-	3	-	3	1.97

According to the data in the table above, the majority of the respondents 91.4% expressed a positive attitude to keep on getting on with people living with HIV/AIDS. Nevertheless, 6.6% of the respondents reported that they will terminate any sort of relation with infected persons. Here, almost all of the respondents of the medical faculty, 94.4% said that they will treat HIV infected people with accurately and some manner as any one is being treated.

DISCUSSION

In the pages to follow, the findings are discussed in relation to the major

research questions of the study and theoretical frameworks.

Radio newspapers and magazines, television, video film, leaflets and pamphlets and posters were cited as HIV/AIDS information materials and/or sources by 81.58%, 77.6%, 75%, 35.5%, 38.8% and 42.8% of the cases respectively. The participants noted that radio is the most widely used source information followed by newspapers and magazines, and television. This finding is consistent with what was reported by Solomon (2004) and Beyene (1997) that radio and TV are the main sources information in teaching about HIV/AIDS. These media should be

employed extensively to halt the HIV pandemic.

The accessibility of HIV/AIDS information materials is unquestionably increasing. This being true, the participants perception towards the materials is worth to be considered.

Concerning the perception of participants towards HIV/AIDS information materials, 50%, 31.6%, 67.8%, 49.3%, 41.4%, 53.9% of the respondents pointed out that the currently available information materials/sources are persuasive, group specific, acceptable, comprehensive, boring, and fear arousing respectively. On the other hand, 32.24%, 44.74%, 18.42%, 36.8%, 40.79%, and 26.9% of the respondents indicated that HIV/AIDS information materials and/or sources are not persuasive, group specific, acceptable, comprehensive, boring, fear-arousing respectively. As it can be seen, a considerable proportions of the participants evaluated and/or judged the presently available HIV/AIDS information materials /sources negatively. Similarly, a study conducted in Jimma area on knowledge,

attitude and practice showed that there are different IEC materials which are used for education purposes by concerned authorities and anti-AIDS clubs. But, programs are poorly implemented due to lack of acceptance and beauty for most people.

Some of the problems in the use of information, education and communication (IEC) materials could be language barriers, uneven distribution of materials, lack of clarity of the message, less attractiveness and poor interpretation of the message.

Though there are some misconceptions and indications of poor knowledge, knowledge on the modes of transmission is adequate. This is in agreement with findings of other studies (Tefera 2004, Zerai 2005). But, there existed a difference in knowledge across faculty/school. The majority of medical school students know about the different ways of transmission with an average knowledge score 91.7%. The over all knowledge score of students in the faculty of education on the modes of HIV/AIDS transmission was 82.8%. From this it can be inferred that there is better awareness about the transmission

modes in medical school than education faculty.

Concerning the risk perception of susceptibility to HIV/AIDS, 25.7% of the respondents take into account the chance that HIV/AIDS can happen to them. On the contrary, the large majority (74.3%) of the respondents did not consider themselves as being at the risk of HIV/AIDS infection.

Faculty/school wise, most medical school students than those participants from the faculty of education expect the risk of being infected in a wider extent. This may be attributed to the fact that participants from the medical school deal with the issue in their day to day academic life. As far as the year level of participants is concerned, most of the participants from the fourth year expect the risk of being infected than those participants in the first year. This may be due to differences in experience.

Information Exchange on HIV/AIDS

Regarding participants habit of exchanging information on HIV/AIDS, 90.8% stated that they practice open

Attitude towards people living with HIV/AIDS

discussion on ideas pertaining to HIV/AIDS with different people. Of this, a significant proportion (36.2%) of the respondents have been exchanging information/knowledge on HIV/AIDS with friends. This may be due to the increased similarity in age, language, need, etc between study participants and their peers. This signifies the importance of peer education in the HIV/AIDS prevention. This is also indicated in other studies (Solomon 2004).

On the contrary, 9.2% of the respondents reported as they have not exchanged information/knowledge on HIV/AIDS. This may be resulted from the negative impact of different personal and psychosocial factors.

Across faculty/school, more respondents from the faculty of education failed to be open and discuss issues related to HIV/AIDS than participants in the medical faculty. When we see the problem across year of study, more first year participants than those participants from the fourth year told as they made no discussion.

Concerning the attitude of respondents towards people living with HIV/AIDS, 139 (91.4%) respondents seem to have a positive attitude towards persons living with HIV/AIDS. On the other hand, 10 (6.6%) of the respondents expressed their negative attitude towards people living with the virus. Though the proportion of respondents with such an attitude is very small, it could initiate people living with the virus to make irresponsible acts. Such an attitude may be resulted from the fear arousing power and death orientedness of currently available HIV/AIDS information materials and sources.

CONCLUSIONS AND RECOMMENDATION

Conclusions

Based on the results obtained and discussions made, the following conclusions could be made.

1. Different HIV/AIDS information materials/sources were cited by participants. Of these, Radio, Newspapers and Magazines, Television video film, leaflets and pamphlets, and posters were cited by 81.58%, 77.6%, 75%, 35.5%, 38.8% and 42.8% of the cases. Radio ranked first followed by newspapers and magazines, and television.
2. Results of this study made clear that majority of the participants had good knowledge about the different modes of transmission. This is evidenced by the fact that 89.5%, 91.4%, 76.3% of the respondents cited monosexual practice, receiving infected blood, sharing skin piercing materials as major modes of transmission respectively. Regarding their practice, majority of the respondents 21 (13.82%) witnessed that they use condoms only occasionally. On the other hand, 17 (11.18%) of the respondents reported that they use condoms persistently. More over, it was found out that 10 (6.58%) of the respondents have never used condoms. As far as attitude is concerned, 139 (91.4%) respondents seem to have a positive attitude towards people living with HIV/AIDS. Where as, 10(6.6%) of the participants expressed their negative attitude.
3. It is hardly possible to say that due attention is given in understanding environmental and contextual factors in which students live. This is

because a significant proportion of students' evaluation perceived currently available materials negatively 32.24%, 44.74, 18.42%, 36.8%, 40.79% and 29.6% of the respondents indicated that the existing materials are not persuasive, group specific, acceptable, comprehensive, boring, and fear arousing respectively.

4. Respondents have not used their high level of knowledge about HIV/AIDS to bring desirable behavioral and attitudinal changes, and correct high risk behaviors. Therefore, it will be sound to conclude that knowledge on HIV/AIDS does not guarantee a change in the risk behavior of respondents. Though participants exhibited good level of knowledge, they themselves reported as they were involved in a number of riskier behaviors. This is evident in that the large majority (74.3%) of the respondents did not regard themselves as being at the risk of HIV/AIDS infection. In addition 21 (31.82%) respondents use condoms only at times and 10 (6.58%) participants assured as they have never used condoms. More over, information exchange on HIV/AIDS with others is very limited. What is more worse is

that some participants have negative attitude towards people living with HIV/AIDS.

5. The field of study and year level to which participants belonged to have an impact on the level of behavioral change brought.

Recommendations.

1. The university should encourage continuous panel discussions between students, instructors and other staff members on HIV/AIDS. The university should also have its own information materials in addressing the university community with appropriate information.
2. Trained personnel such as psychologists and other experts should be involved in the designing and dissemination of effective HIV /AIDS information. HIV/AIDS information should be life –oriented, short and precise, novel and practical.
3. Youths should be involved in designing and disseminating HIV/AIDS information. This will make youths develop a sense of responsibility so that they can be good

models. As a result, they can influence their peers positively towards the desired behavioral change.

4. The anti-AIDS club in the university should be given due attention since peer educators are effective agents in bringing desired behavioral change.
5. Faculty/School as well as year of study based intervention programs should be designed.
6. Before designing and disseminating HIV/AIDS information different attributes (such as age, language, socio-Cultural and psychological factors) of the target audience should be studied. As a result, it will be easier to identify appealing approaches and methods, which motivate the target group. This in effect will facilitate the effectiveness of HIV/AIDS

information in bringing the desired behavioral change.

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