
Attitudes of Undergraduate Medical and Non-Medical Students towards Acquired Immune Deficiency Syndrome (AIDS)

Abdul Muniem Al-Dabbagh

DM, FICMS

Abstract

Background:

Aim of the study: To assess the personal attitudes of undergraduate medical and non-medical students towards HIV/AIDS and to determine the effect of the curriculum applied in the colleges of medicine regarding HIV/AIDS on the attitudes of medical students towards those affected by HIV/AIDS compared with that of non-medical.

Methods: Questionnaire survey using structured, self-administered questionnaire consisted of 15 closed-ended questions concerning personal attitudes towards HIV/AIDS was distributed to 400 undergraduate students from Colleges of Medicine, Science and Arts in Al-Mustansiriya University during the period from the 1st of October 2004 through May 2005

Results: The study showed that 38.5% of medical and 50.5% of non medical students had poor, and 32.5% of medical and 29.5% of non medical students had fair, and 29% of medical and 20% of non medical students had good attitudes scores. There was significant association between attitudes scores and the category of students. ($\chi^2 = 6.832$, $p=0.033$).

Conclusion: A high percentage of students showed negative attitudes towards those affected by HIV/AIDS that was based mainly on a misconceptions and fears which have no scientific justification ,and the AIDS-related information provided by the curriculum applied in the colleges of medicine regarding HIV/AIDS did not cover all HIV/AIDS scope, and did not correct the existing misconceptions among medical students ,therefore no clear impact was reflected on their personal attitudes towards those affected by HIV/AIDS.

Keywords: Students, attitudes towards HIV/AIDS.

Introduction:

The Acquired Immune Deficiency Syndrome (AIDS) is the expression of a spectrum of disorders caused by cellular and humeral immune dysfunction resulting from infection by Human Immunodeficiency Virus (HIV). Since AIDS was recognized as distinct new disease entity in 1981, over 50 million individuals worldwide have been infected by HIV, of those more than 90% in developing world^[1].

Today some 37.8 million people are living with HIV which killed 2.9 million in 2003 and over 20 million since the first cases of AIDS were identified in 1981^[2]. The prevalence of HIV infection in Iraq is low and the cumulative number of reported cases since the first cases of the infection were recognized in the country in 1986 to the year 2005 is only 260 cases, this was mainly due to the prevailing religious, social, and cultural values in addition to the applied strategies for prevention and control^[3].

Because of the serious impact HIV/AIDS upon people and societies, with its related stigma and discrimination which

may be the greatest obstacle to action against the epidemic for individuals, communities as well as political, business and religious leaders^[4], all effective means should be used to combat this disease and limit its spread. The level of knowledge on HIV/AIDS and attitudes of people towards patients are important in eradicating the disease.

College students represent a dynamic and highly educated group in the society, and they are expected to play a crucial role in limiting the spread of HIV/AIDS and promoting the health education about HIV/AIDS in the country, so the present study aimed to assess their personal attitudes towards those affected by HIV/AIDS.

Subjects & Methods:

A structured, self-administered questionnaire consisted of 15 closed-ended questions; including 27 different statements concerning personal attitudes towards HIV/AIDS was distributed to 400 undergraduate students from Colleges of Medicine, Science and Arts in Al-Mustansiriya University. The students included 200 medical students and 200 non-medical students. The questionnaire was adapted according to the WHO Research Package: Knowledge, Attitudes, Beliefs and Practices on AIDS, 1990^[5], and the United Nations Children's Fund (UNICEF) 1999:

KABP Survey for adult men and women target groups [6] and other survey questionnaires used in the similar studies. It has been modified to suite the Iraqi culture and norms, reviewed and evaluated by expert's specialists from the Ministries of Health and Higher Education and Scientific Research. All the statements in the questionnaire were translated into Arabic and the clarity and time needed to complete it were assured by a pilot study comprising of 20 students from College of Arts. So, as a result the average time needed to complete the questionnaire was estimated to be approximately 20 minutes. Some modifications then made on the questionnaire and final version of it had been distributed to study groups. The students required to respond with (Yes), (No), and (Not Sure). Scores were assigned for each response. Thus a total score of (38) was adopted, and the scores of each student were calculated on the basis of a score (2) for the correct responses and (1) for (Not Sure) and (0) for the incorrect responses. Attitudes scores are then categorized according to above and below the median of the total scores in to Poor (≤ 18), Fair (19-28)

and Good (29 or more) attitudes scores, The collected data was analyzed statistically with Statistical Package for Social Sciences (SPSS) version (11.5) programme.p value equal to or less than 0.05 considered significant.

Results:

Among the 400 students recruited in the current study, 218 (54.5 %) were females and 182 (45.5%) were males. The mean age of the whole cohort was 22.5 years (range 20-25 years). The responses indicated that only 12% of medical and 8% of non medical students accept living in the same house with someone who is HIV positive. Eating and drinking with someone who is HIV positive was accepted only by 11% of medical and 4.5% of non medical students. The presence of an HIV infected person in classroom or work place was accepted by 19% of medical and 12.5% of non medical students. Playing group- sport with HIV positive persons was accepted by medical more than non medical students (32% vs. 17%). The majority of medical and non medical students refused eating in restaurants if one of its workers is HIV positive (80.5% and 84% respectively). While taking care of some one in family if he become sick with AIDS was accepted by medical more than non medical students (77.5% vs. 63.5%). Willingness to keep association with a close friend when he tested HIV positive was more among medical than non medical students (60% vs. 39%) (Table 1).

Table 1: Distribution of students according to their attitudes towards some issues related to HIV/AIDS

Statements	Response	Medical		Non - Medical	
		No.	%	No.	%
Accept living in the same house as HIV positive person	Yes	24	12	16	8
	No	117	58.5	125	62.5
	Not Sure	59	29.5	59	29.5
Accept eating and drinking with HIV positive person	Yes	22	11	9	4.5
	No	136	68	152	76
	Not Sure	42	21	39	19.5
Accept the presence of HIV positive person in classroom or work place	Yes	38	19	25	12.5
	No	104	52	123	61.5
	Not Sure	58	29	52	26
Accept playing group - sports with HIV positive person	Yes	64	32	34	17
	No	93	46.5	132	66
	Not Sure	43	21.5	34	17
Accept eating in a restaurant if one of its workers is HIV positive	Yes	13	6.5	9	4.5
	No	161	80.5	169	84
	Not Sure	26	13	23	11.5
Accept taking care of someone of your family if he /she become sick with AIDS	Yes	155	77.5	127	63.5
	No	16	8	24	12
	Not Sure	29	14.5	49	24.5
Still associate with one of your close friends if he tested HIV positive	Yes	120	60	78	39
	No	33	16.5	36	18
	Not Sure	47	23.5	86	43

Regarding HIV testing, 58.5% of medical and 57% of non medical students expressed willingness to have voluntary HIV test, and 95.5% of medical and 88% of non medical students agreed that any couples planning for marriage should be encouraged to have HIV test, and pregnant women should be encouraged to have HIV test early in pregnancy, this was appreciated by the majority

of medical and non medical students; 84.5% and 86% respectively (Table2).

Regarding attitudes towards being HIV positive, 63.5% of medical and 55.5% of non medical students considered HIV a death sentence and 54% of students in both groups considered being HIV positive a stigma; however 72% of students indicated that they will live with the disease and seek medical advice (Table 3).

Table 2: Distribution of students according to their attitudes towards HIV testing

Statements	Response	Medical		Non - Medical	
		No.	%	No.	%
Are you willing to have a voluntary HIV test	Yes	117	58.5	114	57
	No	66	33	50	25
	Not Sure	17	8.5	36	18
Should any couple planning for marriage get HIV test	Yes	191	95.5	176	88
	No	8	4	16	8
	Not Sure	1	0.5	8	4
Should any pregnant women get HIV test early in pregnancy	Yes	169	84.5	172	86
	No	24	12	20	10
	Not Sure	7	3.5	8	4

Table 3: Distribution of students according to their attitudes towards being HIV positive:

Statements	Response	Medical		Non - Medical	
		No.	%	No.	%
Do you consider that a death sentence	Yes	127	63.5	111	55.5
	No	38	19	54	27
	Not Sure	35	17.5	35	17.5
Do you consider that a stigma	Yes	108	54	108	54
	No	71	35.5	60	31
	Not Sure	21	10.5	30	15
You live with and seek medical advice	Yes	144	72	144	72
	No	26	13	22	11
	Not Sure	30	15	34	17

Regarding disclosure of HIV status, this survey sought to determine what proportion of students would be willing to disclose their status, having discovered that they had contracted HIV, 80% of medical and 84% of non medical students indicated that they would tell someone about their diagnosis. Medical students indicated that they would tell medical professionals (68.5%), parents (54%), wife/husband (43%), brothers/sisters (36%), while non- medical students stated that they would tell parents (63.5%), medical professionals (62.5%), brothers or

sisters (39%), wife or husband (30.5%) (Table 4).

The best way to deal with HIV /AIDS patients is to allow them to remain in family and community as long as possible and take precautions to avoid HIV transmission, this fact was appreciated by 63% of medical and 53.5% of non medical students. While 38.5% of medical and 44.5% of non medical students thought that HIV /AIDS patients should be kept in hospital for the rest of their lives, and 46% of medical and 48% of non medical students thought that we should isolate HIV/AIDS patients from other people in the community (Table5).

Table 4: Distribution of students according to their attitudes towards disclosure of HIV status:

Statements	Response	Medical		Non - Medical	
		No.	%	No.	%
Had HIV would you tell any one?	Yes	160	80	168	84
	No	26	13	14	7
	Not Sure	14	7	18	9
If yes, who would you tell *		108		127	63.5
- You're Parents?		72	54	78	39
- Your brothers / sisters?		86	36	71	30.5
- Your wife / husband?		43	43	41	20.5
- Your friends?		137	21.5	125	62.5
- Medical professionals?			68.5		

* More than one answer possible.

Table 5: Distribution of Student according to their attitudes towards dealing with HIV / AIDS patients:

Statements	Response	Medical		Non - Medical	
		No.	%	No.	%
We keep them in hospital for the rest of their lives	Yes	77	38.5	89	44.5
	No	87	43.5	76	38
	Not Sure	36	18	35	17.5
We isolate them from other people in the community	Yes	92	46	96	48
	No	77	38.5	64	32
	Not Sure	31	15.5	40	20
We allow them to remain in family and community as long as possible.	Yes	126	63	107	53.5
	No	51	25.5	53	26.5
	Not Sure	23	11.5	40	20
We let them live freely in the community without supervision	Yes	13	6.5	20	10
	No	159	79.5	145	72.5
	Not Sure	28	14	35	17.5

Regarding care and support for HIV/AIDS patients, 70% of medical and 57% of non medical students indicated that all are responsible of providing care and support for HIV/AIDS patients, while 22.5%

of students in both groups think that the government is responsible (Table 6). Regarding attitudes scores, there was significant association between attitudes scores and the category of students ($\chi^2 = 6.832$; $p=0.033$) (Table 7).

Table 6: Distribution of Student according to their attitudes towards care and support for AIDS patients:

Responsibility of	Medical		Non - Medical	
	No.	%	No.	%
The government	45	22.5	45	22.5
The AIDS patient families	6	3	18	9
The community	9	4.5	23	11.5
All	140	70	114	57

Table 7: Distribution of students according to their attitude scores:

		Category of Students				X ² ; P
		MEDICAL		NON-MEDICAL		
		NO	%	NO	%	
Attitudes Scores	GOOD	58	29	40	20	6.832; 0.033*
	FAIR	65	32.5	59	29.5	
	POOR	77	38.5	101	50.5	

*Significant $p \leq 0.05$

Discussion:

Attitudes towards HIV/AIDS patients:

HIV/AIDS has been accompanied by an adverse societal reactions to persons identified and labeled as having the virus, not among general public but among health providers, professionals and paraprofessionals. Reactions such as stigmatization, silence, denial and discrimination need to be addressed [7]. In order to assess the personal attitudes of students towards HIV/AIDS, the present study included a series of statements about some issues related to HIV/AIDS. The responses revealed presence of negative attitudes among medical and non medical students towards HIV/AIDS patients, where more than half of them refuse living, eating, working or playing group- sports with HIV infected individuals and more than 80% of them refuse eating at restaurants if one of its

food-service workers is HIV positive and more than 25% of them either refuse or not sure about providing care to HIV/AIDS patients. These misconceptions regarding attitudes reflect a false perception of the disease among students; therefore this call for a well structured health education programmes to address such misconceptions. Such negative attitudes were also observed among fifth year dental students in our country, where, 52.3% of students refuse to treat HIV infected persons [8]. Similarly a study among dental personnel in Syria found that 66.8% of participant refuses the treatment for HIV infected persons and only 33.2% of them accept treating HIV/AIDS patients [9]. In Sultanate of Oman medical and non-medical students expressed fears regarding eating, working, or living with infected individuals where 45.7% of them accept the presence of HIV positive person in the same classroom or work place [10]. The negative attitudes were also observed among paramedical students in Saudi Arabia, where only 14.4% of males and 12.3% of females accept home care for HIV/AIDS patients and

19.1% of males and 18.2% of females accept HIV/AIDS individuals at work ^[11].

Attitudes towards HIV testing:

The study attempted to gauge the students' receptiveness to HIV testing, where more than half of them expressed willingness to have such test, while others either unwilling or uncertain. These results were close to that of the study among fifth year dental students where 63.5% of them agreed on performing such test ^[8], but differ from that in Sultanate of Oman, where 83% of medical and non medical students expressed willingness to have HIV test ^[10]. Because HIV positive patients could be symptom- free this may encourage a pre-marital check of the partner before marriage, which is crucial for prevention of HIV/AIDS, this fact was supported by medical more than non medical students. All pregnant women should be counseled about HIV early in pregnancy and encouraged to be tested for HIV infection as a routine part of standard antenatal care ^[12]. In this study, about 15% of students either disagree with or were uncertain about this statement.

Attitudes towards being HIV positive:

AIDS-related stigma and discrimination directly hamper the effectiveness of AIDS responses. Stigma and concerns about discrimination constitute a major barrier to people coming forward to have HIV test and directly affect the likelihood of protective behaviours ^[2]. The present study sought to determine the personal reactions of students to HIV/AIDS. They were asked about being HIV positive, having discovered that they had contracted HIV. Although more than 70% of students indicated that they would live with the disease and seek medical advice, more than 50% of them consider having HIV a death sentence and stigma. These negative reactions to HIV indicate a false perception of the disease among students needs to be addressed in order not to be a barrier to a voluntary testing. National KAP survey carried out in Barbados showed that 71.9% of participants consider being HIV positive a death sentence, while 37.7% indicated that they would live with the disease and seek medical advice and 28.8% who were uncertain ^[7].

Attitudes towards disclosure of HIV status:

Given the stigma attached to HIV/AIDS, persons with the disease or the virus are likely to conceal their HIV for fear of

rejection, stigmatization and ostracism ^[7]. This study sought to determine what proportion of students would be willing to disclose their HIV status. Although the majority of them expressed willingness to disclose their HIV status, still about 20% of them were either unwilling or uncertain. These results were comparable with that of the National Survey in Barbados, where 74.5% of respondent indicated that they would tell someone about their HIV status ^[7].

Dealing with HIV/AIDS patients:

The study also sought to determine students views on the best way to deal with HIV/AIDS patients. Their responses reflected negative attitudes towards those infected by HIV, where 38.5% of medical and 44% of non medical students believe that we should keep HIV/AIDS patients in hospital for the rest of their lives, and 46% of medical and 48% of non medical students believed that we should isolate them from other people in the community. A study carried out in Sana'a, Republic of Yemen, revealed a common attitude that AIDS patients need to be isolated and should receive special care in special health setting and over all 65% thought that AIDS patients need to be cared for at special AIDS hospitals ^[13]. In Cairo, Egypt a study showed that 61% of family planning clients believed that infected persons should be avoided and segregated ^[14].

Attitudes towards care and support for HIV/AIDS patients:

In this study, 70% of medical and 57% of non medical students agreed that all are responsible of taking care and support for HIV/AIDS patients, while 22.5% of students in both groups thought that the government is responsible and some others thought that families of HIV/AIDS patient are responsible. In Sana'a, a study revealed that 51% of participants thought that only specialized staff should provide care to AIDS positive patients and 21% thought that family members should provide this care. Others mentioned volunteers or that AIDS patients themselves should care for each other ^[13].

Conclusion:

A high percentage of students showed negative attitudes towards those affected by HIV/AIDS that based mainly on a misconceptions and fears which have no scientific justification, and the AIDS-related information provided by the curriculum applied in the colleges of medicine regarding HIV/AIDS did not cover all HIV/AIDS scope, and did not correct the existing misconceptions among medical students, therefore no clear impact was reflected on their personal attitudes towards those affected by HIV/AIDS.

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*Department of Community Medicine, College of Medicine,
Al- Mustansirya University*