Knowledge, Beliefs and Attitudes towards AIDS among Intermediate and Secondary School Teachers; Baghdad

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Abstract

Back ground: AIDS is considered a dreaded disease. According to recent estimates, 42 million people suffer from HIV/AIDS (90% of these being in the developing countries), with 5 million people newly infected with HIV and 3.1 million deaths in the year 2002 globally. At present, there is no effective vaccine to prevent the disease. Hence, Health education (Information, Education and Communication) activities bringing about behavioral changes in the community, promoting healthy sexual behavior and preventing the risky ones is the best possible solution to the problem of AIDS.

Objectives: To find out the knowledge, beliefs and attitudes regarding various aspects of HIV/AIDS amongst intermediate and secondary school teachers in Baghdad.

Methods: For this cross-sectional study, we randomly selected 48 intermediate and secondary schools covering the 6 educational directorates in Baghdad, and 642 teachers serving in these schools were selected to answer the questionnaire containing different statements concerning basic knowledge of the human immunodeficiency virus (HIV) and Acquired Immune Deficiency Syndrome (AIDS).

Results: Revealed an intermediate overall awareness about HIV/AIDS.

Conclusions: Study highlights the need for teaching the proper aspects of HIV/AIDS curriculum in Iraqi schools. **Keywords:** HIV/AIDS Knowledge, believes and attitudes, teachers.

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Introduction

uman immunodeficiency virus (HIV), the causative agent of acquired immune deficiency syndrome (AIDS) has no cure at present and treating patients with AIDS would require big financial resources (1). Health education is still the best tool to prevent infection. The level of knowledge on HIV/AIDS especially among school teachers is important in preventing the disease (1, 2).

Human immunodeficiency virus was discovered in the early 1980's and since that time, the spread of HIV is continuously alarming ⁽³⁾. Nowadays, it is almost impossible to find a country that has not reported HIV or AIDS cases to the World Health Organization (WHO) ⁽⁴⁾.The HIV epidemic continues to spread at a rate of 6000 new infections per day making it the most serious health problem particularly in Africa and Asia ^(4, 5).

HIV prevalence is increasing steadily, particularly among persons practicing high-risk behavior. Sexual transmission is now the predominant mode of HIV transmission in the Eastern Mediterranean Region ⁽⁶⁾. It is mostly males who are affected as most cases (three quarters) are among males, making the male to female ratio 3:1. The age group of 14-30 years accounts for 80% of all cases ^(7,8)

Teachers' health attitudes are usually a reflection of their knowledge, beliefs and perceptions on health. Such knowledge, beliefs and attitudes could be disseminated from teachers to their pupils, who represent the fastest growing segment of the population and as the majority of the victims of HIV/AIDS are very young, under the age of 30 years, in the sexually active phase of life. It is, therefore, essential to "catch them young" (9, 10).

The history of AIDS cases in the Iraq began in the mid of 1986. Reporting started after the introduction of diagnostic techniques in 2000. By 2004, 260 cases had been reported (85% male and 15% female), Most of these cases (84%) were traced to transfusion of infected blood and blood products imported from countries known later to have a high prevalence of HIV infection. A few of these cases (11%) were related to individuals having sexual relations outside their country and in 5% from infected mother to her child (11). From that history the prevalence of HIV/AIDS in Iraq is still low, and this is probably due to religious and cultural factors but the initial denial response of the national health authorities changed. The national authorities have now become actively involved in the prevention and control of human immunodeficiency virus (HIV) infection. With a relatively low HIV prevalence across the Region, now is the time to act. Efforts need to be focused on the most vulnerable populations, among whom interventions can have the greatest impact; these include young people ^(1, 6, 7, 12). The governmental education system in Iraq provides 6 years of primary education (starting from the age of 6 years), 3 years of intermediate and 3 years of secondary education. The students at the intermediate and secondary stages usually between 13-20 years old which reflect the stage of moral judgment. Proper education for people (especially

those adolescent at 13-18 years) will be an effective factor in reducing the spread of HIV within this and other neighboring countries (13, 14, 15). An important starting point for designing proper prevention tools is to understand how much people know of HIV/AIDS, especially among the educated persons (16, 17). This study attempts to highlight lacunae in the knowledge of Intermediate and secondary school teachers with respect to cause, effect, and modes of transmission and methods of prevention of HIV/AIDS as well as to explore attitudes towards prevention, treatment or care of a person with HIV/AIDS.

Methods

This cross sectional study was carried out from the period 1st September 2004 through to 31st October 2005. According to a new Ministry of Education division, Baghdad is divided into six educational directorates three in Al-Rusafa and three in Al-Karkh sectors. A cluster sample of 48 schools were selected (four intermediate and four secondary schools from each directorate) and all the teachers (N=642) serving in those schools were chosen. Information regarding their health information was collected using a structured questionnaire (locally constricted) of 20 different statements concerning basic knowledge of the human immunodeficiency virus (HIV), its modes of transmission, risk behaviors, prevention, treatment, beliefs as well as attitudes towards The data collected was analyzed statistically using statistical package for social sciences (SPSS) program for Windows.

Results

Among the 642 teachers, the males constituted 65.1% (418 males) and the females constituted 34.9% (224 females). Fifty-one percent of the respondents were from the secondary school, while 49% were intermediate school teachers **Table-1.** The mean age of the whole sample was 32 years (range 25-58 years). All the teachers had completed high education (institutes or colleges), the duration of their occupation as a teacher (Table 1) The distribution of the study sample regarding the level of the schools and the gender of the teachers.

ranged between one and 35 years with a mean of 12.3 years, 81% of them teach for more than 5 years, and 78% of them were married

All the respondents were heard about AIDS but surprisingly, 25.4% of the participants think that AIDS is not caused by a virus or they do not know **Table-2**

(Table-2)
The Distribution of the Teacher's Responses Regarding the
Cause of AIDS

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Causes	No. of teachers	%	
Virus	479	74.6	
Bacteria	86	13.4	
Genetic	31	4.9	
Unkno	24	3.8	
wn			
Don't know	22	3.3	
Total	642	100	

Ninety-three point nine percent of the respondents were aware that HIV is a dangerous, lifelong infection. There is very strong agreement that those having extramarital sexual relations "sex with multiple partners" (99%) and homosexual (97.5%) are the high risk group, while those having religious believes and practices are mostly protected (95%), while those having information about the disease in 5%.

Regarding the prevalence of the disease in Iraq, 58.5% thought it was low, 33.1% don't know and 8.4% thought it was high. While regarding global prevalence, the majority of the teachers (95.4%) thought that the highest prevalence of the AIDS was in USA and 4.1% in Europe. Most of the teachers (96%) consider sex is the source of transmission. Although the majority of them were highly educated, only 6.4% of them knew that AIDS can be transmitted via needle injections and 1.8% transplacentally (**Table-3**), and some of them recorded also wrong answers (**Table-4**).

School level	No.	No. of teac	hers	To	tal	
		Male	female	No.	%	
Intermediate	24	205	108	313	49	
Secondary	24	213	116	329	51	
Total	48	418	224	642	100	

(Table-3)
The Distribution of the Teachers Regarding the Correct
Answers about the Mode of AIDS Transmission

Correct mode of transmission	No. of teachers	(%)
Sex relations	616	96
Blood transfusion	230	35.9
Needle injections	41	6.4
Transplacental	11	1.8

(Table- 4)
The distribution of the teachers regarding the wrong answers
about the mode of AIDS transmission

Wrong mode of transmission	No. of teachers	(%)
Touching &kissing	33	3.9
Food & drink	16	1.9
Mosquito	4	0.5

Regarding the appearance of the signs and symptoms, the majority of the teachers (72.8%)

recognize that the patient may have the virus without signs and symptoms (table 5).

(Table-5)
The Teacher's Responses Regarding AIDS's Signs and Symptoms.

Responses	No. of teachers	%
The patient may not have signs and symptoms.	613	72.8
The patient always has signs and symptoms.	208	24.7
The signs and symptoms appear only in the beginning of	21	2.5
the disease		
Total	842	100

6.1% of the respondents think it is curable if treated early and 74% knew that no available vaccine is a fact and an overwhelming majority (94%) considered the role of the religious community important in AIDS control.

Although most of the participants (96%) agreed that HIV positive patients should not be separated or prohibited from eating or playing sports with others, but the majority (85%) seems hesitant to take care of AIDS patients. Getting checked for HIV in case of suspicion was supported by 83.1% of the participants. Among the respondents, 78% were against AIDS patients living freely in the community and as many as 81% of the participants exhibited a readiness to have an HIV test, and 56% were favor of informing their family in the event they tested positive for HIV, while 72% showed an unwillingness to take care of AIDS patient.

The majority of the participants (79%) acquired information about AIDS from the mass media, whereas only 3.4% obtained their information directly from medical sources, the other 17.6% get the information from their friends.

The majority of the participants (89%) have the desire to learn more about the disease and 98% of them agree to participate in prevention program.

Discussion

An important starting point for designing proper prevention tools is to know how much people know of HIV/AIDS, especially among the educated persons and those who give education to the general population. Thereafter, the knowledge and attitudes toward HIV/AIDS can be established within the community as a whole (19, 20). The intermediate and secondary school teachers represent a dynamic, highly educated and highly positioned group in the Iraqi society. Therefore, they are expected to play a crucial role in limiting the increasing number of HIV cases and in promoting the health education in Iraq.

Although all the teachers are highly educated subjects, the results indicated some disappointing facts on basic knowledge, for example, 25.4% of the participants either think that AIDS is not caused by HIV or they do not know and 41.5% of them not aware about the size of the problem in Iraq and more than 90% do not know the global distribution of the disease. The study showed that the majority of teachers blame the sexual relations in disease transmission and the role of religious community in AIDS prevention and control. This

finding is consistent with Islamic values and norms⁽⁶⁾. We found that knowing about HIV/AIDS did not mean that the teachers were aware about its various modes of transmission and the means to prevent it. Over 95% of the respondents were aware of unsafe sex/multiple sex partners as a mode of transmission but 35.9% were aware of blood transfusion and 6.9% of the use of nonsterile needles and syringes while vertical transmission as a mode was known only to a 1.8% of them and these may relate to the source of information of teachers in our country. This study also found that 27.2% of the teachers do not know that a patient without sign and symptoms may have the HIV and could be infected. Lack of knowledge about modes of transmission or the sub clinical stage of the disease is reflected in a similarly poor awareness about preventive measures and may affect any control program. This might be due to the controversy of these issues and the lack of solid evidence as the mass media in general and TV in particular is the source of information in the majority of teachers (88%). Some misconceptions were observed, in the present study, regarding interaction with infected individuals especially taking care of an AIDS patient or informing their family in the event they tested positive for HIV (21). These misconceptions regarding the attitudes reflect a false perception of the disease among those highly educated. Knowledge alone is not sufficient to bring about behavioral change although the majority of the teachers will to learn more about the disease or participate in a preventive program (22, 23).

Conclusions

- The intermediate and secondary school teachers represent a dynamic, highly educated and highly positioned group in the Iraqi society, therefore, they are expected to play a crucial role in HIV\AIDS controlling program in promoting health education in Iraqi community.
- Although all the teachers are highly educated, the results indicated some disappointing facts concerning the causative agent, modes of the transmission of the disease, and the size of the problem in our country.
- Majority of teachers emphasized on the role of religious community in AIDS prevention and control, which is consistent with Islamic values and norms.

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