

AIDS Awareness: An Iranian Case Study at Ferdowsi University of Mashhad

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ABSTRACT— *The present study aimed to assess Iranian university students' awareness about AIDS and their perspective on HIV-positive patients. The study also took into account the relationship between the university students' attitudes toward AIDS patient and their sensitivity towards AIDS. The required data for this survey study was obtained through the use of a questionnaire. The target population for the research consisted of Ferdowsi University of Mashhad university students during the 2014/2015 academic year. The questionnaire was distributed among the students and the analysis was done using Cochran's formula and stratified random sampling. Sample size consisted of 230 male and female students. Data analysis was carried out using SPSS (Version 21) software. Research findings indicated that there was a positive correlation between the students' awareness level and their perspective towards HIV-positive patients. In other words, with the increase of awareness about AIDS, students could gradually formulate a more positive perspective towards AIDS patients. The results also showed a negative correlation between students' awareness level and their sensitivity to this issue. This means that students became less sensitive to AIDS as a taboo while becoming more knowledgeable regarding AIDS. Furthermore, the achieved findings demonstrated a significant relationship between the mean of awareness level in two variables of gender and academic degree. Finally, the mean of the students' level of awareness about AIDS, their perspective about AIDS patients, and their sensitivity were respectively evaluated as high, high, and moderate.*

Keywords—AIDS, awareness, perspective about AIDS, university students

1. INTRODUCTION

AIDS is a global epidemic disease and the HIV virus is considered a global threat. During recent decades, dealing with HIV has become the most daunting challenge for health care systems all over the world [10]. AIDS is one of the most unprecedented diseases in the history of mankind in terms of its breadth and depth of prevalence. The whole world has been affected by this disease since its first discovery in 1981 [2]. Overpowering the most productive population, recent AIDS epidemic has deprived the society of its youth's energy and power. Besides the physical and mental impacts, AIDS causes a huge economic burden on the society which sums up to two thirds of the total health care budget in some countries [7]. In many countries AIDS stems from intravenous drug addiction, unemployment, poverty and prostitution and is the second important infection that leads to death [14]. Owing to the fact that there is still no ultimate cure for AIDS, the best way to fight the disease is prevention. Various studies have proven that ample knowledge about AIDS can decrease high-risk behaviors of the young population [13, 3]. This goal can be achieved through awareness raising and enhancing the youth's knowledge about AIDS in order to help amend youth's habits and behaviors. According to

various reports by the end of 2013, over 35 million are suffering from AIDS worldwide and 95% of them live in developing countries [5]. Centers for disease control and prevention have announced that the number of HIV-positives is exponentially increasing in Iran [7]. The findings obtained from the University of Medical Sciences and Health Services up to the end of September 2013, revealed that 27,041 people are suffering from AIDS in Iran. 89.3% of these patients are male, while 10.7% are female. 45.9% of the patients are between 25-34 years old.

Based on a report in 1986 [17], some of the major causes of AIDS are: shared needles among addicts (68.1%), unprotected sex (12.7%), blood transfusion (0.9%), and HIV-infected mother to child transfer (1.2%). Also about 17.1% of HIV causes still remain a mystery to us. Comparing these percentages with cases having been reported in 2012 [18], the percentage of outbreaks through needle sharing, unprotected sex and HIV-infected mother to child transfer were respectively 52%, 33.2%, and 3.4%. The unknown causes were also reported as 11.4 % of patients. This reveals that while some factors were better controlled by governments, most leading causes greatly increased during the 26 years time laps.

Since the disease adversely affects the young generation and obliterates the productive power of the most active population of the society, it has a significant impact on the experts and the educated population, families, food security and social capital. It also has a negative impact on the sustainable development of the country; therefore, prevention from contracting the disease can be of great help in improving the public health and the overall economic development.

According to research, young people are the high-risk groups for HIV infection for many various reasons [11]. Based on these findings and by considering the importance, and vulnerability of the young population in a society, the present study aimed to investigate the students' awareness and sensitivity towards AIDS and their perspective regarding AIDS patients.

Research hypotheses

- There is no significant relationship between the students' awareness level about AIDS and their perspective regarding AIDS patients.
- There is no significant relationship between the students' awareness level about AIDS and the importance of AIDS in the society.
- There is no significant difference between the mean of the students' awareness level about AIDS and their academic background level.
- There is no significant difference between the mean of the students' awareness level about AIDS and their marital status.
- There is no significant difference between the mean of the students' awareness level about AIDS and their gender.

2. METHODOLOGY

The present study is a cross-sectional survey and since its findings can be used by the authorities it can be considered as an applied and practical research. The target population for the present research consisted of all students studying at Ferdowsi University of Mashhad, Iran during the 2014/2015 academic year and at all academic levels. Stratified random sampling was utilized to select a sample size of 230 students.

Validity and Reliability of the Questionnaire

The questionnaire's face and content validities were confirmed by the experts in the related field. The reliability of the questionnaire items was asserted by Cronbach's alpha coefficient (See Table 1). 19 items were used to assess the students' level of awareness about AIDS, five items to investigate their perspective regarding HIV positive patients, and five items to evaluate the negative impact of AIDS on society.

Table 1
Results from Cronbach's alpha test

Variables	Number of Items	Cronbach's alpha	Total items
Awareness level	19	0.72	29
Perspective regarding AIDS	5	0.60	
Negative Impact of AIDS	5	0.75	

3. RESULTS

The average age of students in the research sample was 20.46, and the age range of all students was 17 to 29. 69.1% of the participants were male and 30.9% were female. 84.5% of participants were single and 15.5% were married. 89.7% of the participants were Undergraduate students, and 10.3% of them were Graduate and PhD students.

Based on the findings of the present research, the students' awareness was high (84.6%), and their perspective toward HIV-positive patients and the patients' presence in the society was also evaluated as positive. In other words, students believe that HIV-positive patients can have a normal life provided they observe certain principles and there is no need to quarantine them. Moreover, 52% of the participants treated AIDS as a social issue (See Table 2).

Table 2: Descriptive findings of research variables

Variables	Average	Percentage
Awareness level	80.37	84.6
Perspective on AIDS	20.45	81.8
Negative Impact of AIDS	13.12	52.4

T-test results (Table 3) showed a significant difference between the awareness level of male and female students. Statistically, the awareness level of male students was higher than females (sig=0.032).

Table 3: Results of T-test in order to evaluate the awareness level of male and female students

Gender	Mean	Standard deviation	Standard error	T	Significance level
Male	81.86	7.07	0.656	-2.166	0.032
Female	79.15	8.19	1.148		

Single and married students' awareness level about AIDS was relatively the same (Table 4) and so these two groups have relatively similar knowledge about the disease.

Table 4: Results of T-test in order to evaluate the awareness level of single and married students

Marital status	Mean	Standard deviation	Significance level
Single	80.96	7.60	6.12
Married	81.77	6.99	

The obtained results also indicated a significant positive relationship between the students' awareness level and their academic degree. This in turn means that the higher the students' academic degree, the higher their awareness level (Table 5). This shows that the level of education is an affective variable in increasing the awareness level of students. In other words, students with higher education are more aware about AIDS than others.

Table 5: Results of T-test in order to evaluate the mean of awareness level

Academic degree	Average	Standard deviation	Standard error	T	Significance level
Graduate and PhD	85.35	7.11	1.72	2.82	0.010
Undergraduate	80.16	7.54	0.630		

Correlation analysis between students' AIDS awareness level, their perspective regarding HIV-positive patients and the negative impact of AIDS in society is shown in Table 6.

Table 6: Results of Pearson coefficient test regarding research variables

Independent variables	Awareness level	
	r	Sig
Perspective regarding HIV-positives	0.474	0.000**
Negative Impact of AIDS	-0.154	0.040*

The results of the correlation analysis among the variables showed that:

1. The students' awareness level about AIDS has a significant and positive relationship with their perspective on HIV-positive patients. In other words, the higher the students' level of knowledge was regarding AIDS, the more positive their perspective became towards HIV-positive patients. Consequently, the society would have a better understanding of the disease and treat the patients more fairly. As a result, people would not fear this disease and HIV-positive patients,

and in addition, patients could improve their capabilities to become more active members in the society.

2. There is a significant and negative relationship between the students' awareness level about AIDS and the importance of AIDS in the society. In other words, the higher the students' level of knowledge regarding AIDS, the less sensitive they were to the disease and HIV-positive patients. In this regard, we can conclude that enhancing students' awareness level about AIDS and its causes can decrease sensitivities, since this knowledge introduces AIDS as a chronic controllable and preventable disease. Less sensitivity does not mean that this issue is not important in the society; however, it shows that the prevalence of the disease increases only if members of the society are failing to observe some principles which prevent them from being infected with the disease.

4. DISCUSSION AND CONCLUSION

Gaining knowledge is the most essential element of augmenting healthy behaviors and lifestyle. Thus, improving the students' awareness about the HIV virus can greatly affect controlling the spread of the disease. In fact, this awareness helps students change their beliefs and attitudes, and amend their unhealthy behaviors in order to prevent the spread of AIDS.

Based on the results of this study, the students' awareness level regarding AIDS and its causes are at a high level (84.6%). This finding indicates that students mostly know about HIV transmission and prevention. These findings are consistent with the findings of similar studies conducted by [12], [15], [4], [6], [1], [16], [9], and [8]. In this study, there was a significant difference between male and female's awareness level about AIDS ($p < 0.05$) which showed that male students are more aware than females (Table 3). This finding is in line with a study conducted by [11] in Tehran.

Furthermore, the results also show that there is no significant relationship between marital status and level of knowledge but despite this fact, the average rate of married students' awareness level is higher than other people. Divorced students had the lowest level of awareness about AIDS. A significant positive relationship has been observed between academic degree and awareness level. In other words, students having higher levels of education have more information in this regard. Finally, a significant correlation was observed between awareness level and two variables of student perspectives regarding HIV-positive patients and negative impact of AIDS in the society. The students' awareness level about AIDS has a significant positive relationship with their perspective of HIV-positive patients. In other words, the higher the students' knowledge of AIDS, the more positive their perspective toward the patients were. There is a significant negative relationship between the students' awareness level about AIDS and the negative impact of AIDS in society. In other words, the higher the students' level of knowledge regarding AIDS, the less sensitive they were to the disease and HIV-positive patients. In this regard, it can be alleged that enhancing students' awareness level about AIDS and its causes can decrease sensitivities, since this knowledge introduces AIDS as a chronic controllable and preventable disease.

The findings show that students have a positive perspective toward HIV-positive patients. The overall mean of this variable among the participants was 81.8. It is also demonstrated that students' sensitivity to this disease is at the moderate level (52.4%). According to the results, we can say that fortunately there is a relatively high level of disease awareness among the students and this is due to the awareness raising in recent years that has tried to de-taboo the disease and its sufferers. It has been proven that students with a higher academic degree have more knowledge about AIDS. This awareness helps people to form a positive perspective regarding HIV-positive patients, and consequently be capable of confronting this disease. This awareness informs people that AIDS is not a crime and infected people should not be treated as criminals.

Another positive result of enhancing students' level of awareness about AIDS is decreasing their sensitivity and anxiety. Findings of this study show that students with higher level of awareness can behave more sensible and reasonable. Therefore, they are not always anxious when communicating with HIV-positive patients and they do not discriminate against them.

The authors of this study believe that improving the students' level of awareness about AIDS is the most essential means and the most important coping strategy. This issue is of greater importance for females who will be mothers of the society in the future. The more aware the mothers are, the healthier our future society will be. The results of the present study also indicated a lower level of awareness regarding HIV among females, and so more attempts should be made to inform females regarding AIDS. On the other hand, it was found that media and especially TV programs is the most important source of spreading the news about the disease. This result has also been reported in a study conducted by [2]. It demonstrates the necessity of varying sources especially in academic environments which involve a large number of students. As a matter of fact, educating students equals with educating the society. In this regard, planning for special programs such as conferences, publishing journals and brochures, and inviting people to give talks on the disease can be effective in increasing the students' level of AIDS awareness.

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