Original Article ICNSJ International Clinical Neuroscience Journal

Knowledge and Attitude in Hamadan University of Medical Sciences Students toward AIDS: A Cross- Sectional Study from West of Iran

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ABSTRACT

Background: Young people are the major group at risk of acquiring Acquired Immunodeficiency Syndrome (AIDS) worldwide. It is one of the health problems in the world, in particular in developing countries. In this study, knowledge and attitude in Iranian students toward HIV and AIDS was assessed.

Methods: This investigation was a descriptive cross-sectional study. Totally 509 students were selected from Hamadan University of Medical Sciences schools by sampling methods in 2014-2015. To collect data, the demographic and the international AIDS questionnaire was used.

Results: It was found that the means and standard deviation of knowledge score and attitude towards AIDS in general were 53.86±6 and 20.21±3.29, respectively. The results showed that no significant differences were seen between gender and level of knowledge (P=0.391) and attitude (P=0.104) about AIDS. The results of the Kruskal-Wallis test showed a significant difference between faculty and students knowledge (P=0.012). Also, the findings illustrated that there was no significant relationship between faculty (P=0.147) and level of education (P=0.289) and their attitude to AIDS sufferers.

Conclusion: The overall rate of knowledge and attitude about HIV/AIDS among students in Hamadan University of Medical sciences was acceptable. It is proposed that information about AIDS/HIV issues included as part of the course content for all students. Young people are most at risk for HIV infection and proper training is essential to increase young people knowledge.

Keywords: Knowledge; Attitude; AIDS

ICNSJ 2017; 4 (3) :103-106 www.journals.sbmu.ac.ir/neuroscience

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Received: Jun 20, 2017 **Accepted:** July 17, 2017

INTRODUCTION

The number of people defiled with the Human Immunodeficiency Virus (HIV) and Acquired Immunodeficiency Syndrome (AIDS) has expanded. According to the World Health Organization (WHO) report, the prevalence rate of HIV/AIDS in Iran has increased from low to concentrated (Center for Disease Control, 2008). The spread in the overall population is below 1%; this rate, however, has outstripped 5% in some high-risk groups [1,2]. In Iran, the prevalence of HIV infection is less than 1% in the public population. According to the result of a systematic review, the range of HIV prevalence is from 0 to 26.6%, and the pooled prevalence of HIV in male is 13.6% in Iran [2-4].

As a preventative strategy, targeting population during the early stage of an epidemic is more cost effective than at later stages. Prevention is also much cheaper to implement than curative means [5]. Also, it is the most important approach to control and reduce HIV/AIDS infection [6,7]. The pharmacological treatments can slow down the course of disease and reduce the mortality and morbidity, but these drugs are expensive and unavailable in most developing countries [7,8].

Over the past decades, adolescent productive and sexual health concerns have increasingly been on national agendas. For many countries, these concerns have been driven by the high prevalence of HIV/AIDS among young people [9]. Globally, it is known that there is a lack of HIV knowledge among youths between the ages of 15 and 24. The WHO stated that youths are at the core of preventing the progression of the HIV/AIDS pandemic. The WHO estimates that youths aged 15–24 comprise 50% of all new HIV infections and consequently must be targeted for education in decreasing transmission and the stigmatization of an HIV diagnosis [10,11]. According to the last Iranian population census in 2012, approximately 48.82 % of the citizens belong to the 10–34 years of the age group. This group is at risk of HIV/AIDS infection due to several factors such as first sexual experiences, the higher proportion of sexually transmitted diseases, addiction that begins usually at this age, and so on [4,12].

The study of knowledge of HIV/AIDS is considered as a basic first step in the education process and prevention of the disease [11,13]. Therefore, the present study was designed to assess the knowledge and attitude of Iranian students to a better understanding of the beliefs and viewpoints of this key sector of the community with respect to AIDS. Also, it can help build foundations for changing social norms, improving population-level interventions, and much more.

MATERIALS AND METHODS

This descriptive cross-sectional study was carried out from February to August 2015 among the students from Hamadan University of Medical Sciences in Hamadan City, Iran. This study has been approved by the University Research Ethics Committee. A sample of 509 students was included in the study from eight different faculties; the individuals consented to participate in this survey. The stratified random sampling method was used to select the students from the faculties; data were collected by the International AIDS questionnaire filled in by the students. Demographic information such as age, gender and educational level was recorded. International AIDS questionnaire, consisting 18 questions, was developed to examine four aspects of the knowledge and attitudes about AIDS that included attitudes about people living with HIV, HIV risk perception, Knowledge of the relevant facts AIDS, Answers scoring was according Likert 5 Triad (strongly disagree, disagree, do not know, agree, strongly agree). Each item was rated in a Likert scale from 1, strongly disagree up to 5 strongly agree, so that high score in each item indicates higher knowledge and attitude. We used descriptive methods such as frequency, percentage, mean, standard deviation, etc. to describe data and analyze the data. Moreover, we used the Mann-Whitney and Kruskal-Wallis test to compare two independent groups through SPSS software, version 16. P-values less than 0.05 ($P< 0.05$) were considered to be statistically significant.

RESULTS

In this study, 509 students of Hamadan University of Medical Sciences were selected as a study sample. It included 208 males and 301females. The mean age of the students participating in the study was 66.3 ± 84.22. The male and female age averages were 63.22±91.3 and were 98.22±47.3, respectively. Among the faculties, the most samples were, respectively, in Nursing and Midwifery, Medicine, Health and Paramedical (Table 1).

The results showed that the mean and standard deviation of knowledge score about AIDS was 53.86±6 in general, and in males and females were 53.20±6.58 and 54.31±5.53. Given that the maximum score of knowledge was 65, students ' knowledge was desirable. Also, female's awareness was a little higher than that of males. According to the non-normal data, we used non-parametric tests (Table 1).

The results of the Mann-Whitney test showed that there was no significant difference between gender and level of knowledge about AIDS (Table 1), although the mean of females' knowledge about AIDS was a little more ($P=0.124$). The Kruskal-Wallis test results showed the significant a difference between faculty and students knowledge ($P=0.012$). It seems that this significant difference may due to the different students' knowledge in School of Nursing and Midwifery, School of Dentistry, International, Rehabilitation, health. Also, the results showed that there was not a significant difference between the awareness about AIDS and students' degree ($P=0.626$).

According to Table 1, the mean and standard deviation of attitude towards AIDS in general was 20.21±3.29 and in males and females were, respectively, 20.00±3.15

Table 1. Students' scores of AIDS knowledge and attitude of based on demographic variables.

Variable	Number (%)	knowledge		attitude	
		Mean±SD	*P*-Value	Mean±SD	*P*-Value
Gender					
Male	208 (41)	53.20±6.58	*P*=0.124	20.00±3.15	*P*=0.078
Female	301 (59)	54.31±5.53		20.35±3.39	
Faculty					
Nursing & Midwifery	107 (21)	55.40±4.70		20.24±3.31	
Medicine	106 (20.8)	54.28±6.86		19.55±3.64	
Health	101 (19.8)	53.67±5.31		20.59±2.78	
Paramedical	97 (19)	53.79±5.75	*P*=0.012	20.52±3.58	*P*=0.147
Rehabilitation	18 (3.5)	53.67±5.31		21.11±3.32	
Pharmacy	20 (3.9)	52.50±8.00		20.40±2.45	
Dentistry	32 (6.3)	51.40±7.11		19.78±2.95	
Degree					
International	29 (5.7)	52.10±6.13		19.93±3.32	
Ph.D.	28 (5.5)	53.82±6.61		19.39±4.66	
MSc	52 (10.2)	54.73±6.21	*P*=0.626	20.55±2.97	*P*=0.289
BSc	254 (49.8)	54.00±5.26		20.37±3.29	
M.D & D.D & Pharma.D	175 (34.3)	53.86±6.00		20.00±3.12	

20.35±3.39. Given that the maximum score of attitude was 25, student's attitude towards AIDS patients is desirable. There was no significant difference between the attitudes of male and female students (P=0.078). Further, it was found that a significant relationship was not observed between the faculty (P=0.147) and the level of education (P=0.289) and their attitude to AIDS sufferers.

DISCUSSION

The results showed that knowledge about AIDS and attitude towards people with HIV is desirable. Also, there is no significant difference between gender and level of student's awareness and attitude about AIDS. Moreover, the findings showed that between gender and knowledge and attitude about AIDS, there was no statistically significant relationship (P<0/05), while the awareness of the female was higher than that of the males.

Kruskal-Wallis test results showed that there was a significant difference between the scores of students' knowledge toward AIDS and their faculties. This significant difference is due to differences in nursing and midwifery students' knowledge with dental, International, rehabilitation and health students. Also, there isn't a significant difference between the knowledge about AIDS and students' educational levels. The results also showed that between student's faculty and educational level and their attitudes toward AIDS patients there isn't a significant difference.

In consistent with our results, Omidvar and et al in 2000 showed that among nursing student in Babol, only 3.2% of the students had insufficient knowledge about AIDS and 96.8% had good knowledge [14]. Another similar study on 383 female students in Nagasaki, Japan in 2000 by Maswanya et al, showed a high awareness about AIDS [5]. Medical science university students, especially medical students, nurses and paramedical staff, according to their subjects, especially their courses associated with various diseases, such as infectious diseases, have relatively good knowledge and awareness. However, in non- medical students, there is a less chance. It is recommended that this information issues be included as a part of the course content plan for non-medical students. In this study, there was a statistically difference between knowledge about AIDS in nursing and midwifery students in comparison with dental and health students; it seems that it is due to the beginning of the period of nursing and midwifery that included related courses, and the students have a favorable knowledge.

The results of this study showed that between gender with knowledge and attitudes about AIDS, there is no significant relationship. In parallel with our study about gender and knowledge and attitudes about AIDS, Mirnejad et al in 2009 [15] and Fathi et al in 1997 were done [16]. It can be due to equal access to information for male and female students in University of Medical Sciences. Also, it is not consistent with the study of Mohmmadnejad et al in 2012 [17], Oliveira et al in Brazil, 2002 [18] and Savaser in 2003 [19], this can be because of population differences and time period among these surveys, because knowledge and attitude has improved in recent years.

Young people are most at risk for HIV infection, proper training is essential to raise young people knowledge. It

is clear that chronic diseases affect to the all aspects of life and reduce the quality of life [20,21].

We had some limitations in this study. The data collection was based on using self-report questionnaires; it may be some questionnaires, which have not been completed truly. Also, the other limitation of the study was available sampling.

CONCLUSION

It seems that given raise knowledge about AIDS transmission, prevention and treatment of this disease and proper attitude towards patient s is necessary. Leaders and officials should design and implement prevention programs and foundations with regard to social conditions and cultural programs to increase knowledge and improve the attitude of the society about this illness.

ACKNOWLEDGMENTS

The study was financially supported by Student Research Center of Hamadan University of Medical Sciences, Hamedan, Iran (Grant No. 9312126434).

REFERENCES

1. Mojtahedzadeh V, Razani N, Malekinejad M, Vazirian M, Shoaee S, Saberi Zafarghandi MB, et al. Injection drug use in Rural Iran: integrating HIV prevention into iran's rural primary health care system. AIDS Behav. 2008 Jul;12(4 Suppl):S7-12.
2. Haghdoost AA, Mostafavi E, Mirzazadeh A, Navadeh S, Feizzadeh A, Fahimfar N, et al. Modelling of HIV/AIDS in Iran up to 2014. J AIDS HIV Res. 2011;3(12):231-9.
3. Khajehkazemi R, Osooli M, Sajadi L, Karamouzian M, Sedaghat A, Fahimfar N, et al. HIV prevalence and risk behaviours among people who inject drugs in Iran: the 2010 National urveillance Survey. Sex Transm Infect. 2013 Nov;89 Suppl 3:iii29-32.
4. Shamsipour M, Khajehkazemi R, Haghdoost AA, Setayesh H, KarimanMajd S, Mostafavi E. Knowledge, Attitude, and Practice of Clerical Students with Respect to HIV/AIDS in Iran, 2011. J Relig Health. 2016 Feb;55(1):26-37.
5. Maswanya E, Moji K, Aoyagi K, Yahata Y, Kusano Y, Nagata K, et al. Knowledge and attitudes toward AIDS among female college students in Nagasaki, Japan. Health Educ Res. 2000 Feb;15(1):5-11.
6. Mahat G, Scoloveno M. An HIV/AIDS education intervention for Nepalese adolescent females. Nurs Clin North Am. 2006 Sep;41(3):409-23, vii.
7. Mondal MNI, Khan MAR, Islam MR, Mamun A. Commercial sex workers in brothels are hallmark of HIV epidemic in Bangladesh. Pakistan Journal of Social Sciences. 2005;3(9):1152-8.
8. Uddin A, Isaramalai S-a, Thassari J, Student RM (2014). Knowledge and Attitude regarding HIV/AIDS Prevention among Adolescents in Bangladesh. Faculty of Liberal Arts, Prince of Songkla University. 2014: 1-16
9. http://www.cdc.gov/publication/pdf/pp-ch.7 CHAayURf.
10. Retrieved WHOYpAwohitHAp, www.who.int/child-adolescent health/HIV/HIV_adolescents.htm f.
11. Othman SM. Knowledge About HIV/AIDS Among High School Students in Erbil City/Iraq. Glob J Health Sci. 2015;7(1):16.
12. Tavoosi A, Zaferani A, Enzevaei A, Tajik P, Ahmadinezhad Z. Knowledge and attitude towards HIV/AIDS among Iranian students. BMC public health. 2004;4(1):1.
13. Huda MN, Amanullah A. HIV/AIDS-Related Knowledge among Secondary School Students in Bangladesh: A Cross-Sectional Study. Adv Infect Dis. 2013;3(04):274.
14. Omidvar SH. Knowledge level and Attitude of midwifery and nursing students regarding AIDS Babol, 2000. J Babol Univ Med Sci 2003; 5(2):37-41.
15. Mirnejad R, Kiani J, Jeddi F, Alaedini F. Knowledge, attitude and practice of Iran University of Medical Sciences Students about AIDS. Iran Journal of Nursing. 2009;21(56):17-26.
16. Fathi Y TM Knowledge and attitude of Hamedan University Non-Medical Students towards ADIS. Journal of Guilan University of Medical Sciences. 1197;4(1):40-46.
17. Mohammad Nejad E SE, Akbari Kaji, M. Knowledge and Attitude of Students of the Azad University of Saveh about AIDS. Journal of Research Development in Nursing & Midwifery. 2012;8(2):43-49.
18. Oliveira E, Narendran S, Falcao A. Brazilian dental students' knowledge and attitudes towards HIV infection. AIDS care. 2002;14(4):569-76.
19. Savaser S. Knowledge and attitudes of high school students about AIDS: A Turkish perspective. Public Health Nurs. 2003;20(1):71-9.
20. Yazdi-Ravandi S, Taslimi Z, Jamshidian N, Saberi H, Shams J, Haghparast A. Prediction of quality of life by self-efficacy, pain intensity and pain duration in patient with pain disorders. Basic Clin Neurosci. 2013;4(2):117-24.
21. Yazdi-Ravandi S, Taslimi Z, Saberi H, Shams J, Osanlo S, Nori G, et al. The role of resilience and age on quality of life in patients with pain disorders. Basic Clin Neurosci. 2013;4(1):24.