

Assessment of knowledge, attitude and practice of students of Shahid Sadoughi University of Medical Sciences about AIDS

Jamshid Ayatollahi^{1,2}, Masoud Yazdi³, Seyed Alireza Mousavi¹, Mahdie Hamidfar¹, Seyed Hossein Shahcheraghi¹

¹ Infectious Diseases Research Center, Shahid Sadoughi Hospital, Shahid Sadoughi University of Medical Sciences, Yazd, Iran

² Hematology and Oncology Research Center, Shahid Sadoughi University of Medical Sciences, Yazd, Iran

³ Medical Student, Shahid Sadoughi University of Medical Sciences, Yazd, Iran

*Corresponding Author: Dr. Seyed Hossein Shahcheraghi, Infectious Diseases Research Center, Shahid Sadoughi Hospital, Shahid Sadoughi University of Medical Sciences, Yazd, Iran Email: shahcheraghi@gmail.com

Abstract

AIDS is a deadly disease that weakens the human immune system. It seems necessary to monitor the knowledge and attitudes of different groups in society, especially students in relation to AIDS. Therefore, this study aims to determine the level of knowledge, attitude and practice of medical interns in the medical school of Yazd Shahid Sadoughi University of Medical Sciences about AIDS. This study was descriptive and cross-sectional. The sampling method was census and all interns of Yazd University of Medical Sciences during 2021-2022 were included in the study. The data collection tool in this study was a two-part questionnaire. Finally, the collected data were entered into SPSS, were analyzed. In terms of HIV awareness, 15.1% were poor, 34.5% moderate and 50.4% good. There was no statistically significant difference between the frequency distribution of interns' knowledge, attitude and practice based on gender, age, marital status and place of residence. According to the results of this study, it can be concluded that medical interns had acceptable knowledge and attitudes towards HIV.

Keywords: AIDS, Awareness, Attitude, Medical Interns.

INTRODUCTION

AIDS (Acquired Immune Deficiency Syndrome) is one of the most common causes of death and is one of the leading causes of death worldwide [1,2]. Today, HIV is a chronic disease due to the availability of antiviral therapy, and physicians in every field of medicine face HIV-infected people [3-5]. This requires all medical staff to have sufficient and correct knowledge about AIDS and a professional attitude towards the disease [6].

The prevalence of HIV in any society is determined in part by the knowledge of its members about safe sexual behaviors and the prevention of HIV transmission [7,8].

It is very important that medical interns are aware about AIDS and have a positive attitude towards people with the disease so that they can become better doctors with the high knowledge according to medical standards [9,10].

Therefore, this study was designed to determine the knowledge, attitude and practice of medical interns of Shahid Sadoughi

University of Medical Sciences in Yazd about AIDS.

MATERIALS AND METHODS

This study was as descriptive and cross-sectional. The sampling method was census and all interns of Yazd University of Medical Sciences during 2021-2022 were included in the study.

This study was done after the agreement of the ethics committee of Shahid Sadoughi University of Medical Sciences of Yazd with ID of IR.SSU.MEDICINE.REC.1398.152.

Inclusion criteria included willingness to participate in the study and exclusion criteria was in complete information of the patients.

The data collection tool in this study was a two-part questionnaire, the first part of which included demographic information of interns including: gender, age, marital status and residence status and the second part was including awareness, attitude and performance towards HIV prevention.

HIV awareness section: A total of 19 awareness questions (13 questions about public awareness and 6 questions about specific awareness): Three-choice awareness questions (including yes, I do not know, no). The correct answer was given a score of 2, I do not know a score of 1 and the wrong answer was given a score of 0. The total score was between 0 to 19 and based on the average score, the interns' knowledge was divided into three categories: good (score 14-19), average (13-18) and poor (≤ 7).

Attitude towards HIV (5 questions in total): Attitude I totally agree, score 4, I agree, score 3, I have no opinion, score 2, I disagree, score 1 and I completely disagree, score 0. The total score was between 0 to 20, and based on the average score, the interns' attitude was divided into three categories: good (score 14-20), average (13-18) and poor (≤ 7).

Performance section on HIV prevention (4 questions in total): The correct answer was given a score of 2, I do not know a score of 1 and the wrong answer was given a score of 0. The total score was between 0 to 4 and based on the average score, the interns' performance was divided into three categories: good (score 4), average (2 and 3) and poor ($1 \geq$).

Finally, the collected data were entered into SPSS (version 22), using statistical tests were analyzed. $p < 0.05$ was considered as a significant level.

RESULTS

119 interns were included in the study. Of these, 52.9% were female and 47.1% were male.

The mean age of study participants was 24.56 years, the mean knowledge score was 12.26, the mean attitude score was 12.37

and the mean performance score was 1.12. In terms of HIV awareness, 15.1% were poor, 34.5% moderate and 50.4% good.

There was no statistically significant difference between the frequency distribution of interns' HIV awareness status based on gender ($p = 0.477$) (Table 1).

Also, there was no statistically significant difference between the frequency distribution of interns' attitudes toward HIV based on gender ($p = 0.782$). There was no statistically significant difference between the frequency distribution of interns' performance status in relation to HIV prevention based on gender ($p = 0.334$).

There was no statistically significant difference between the frequency distribution of interns' HIV awareness status ($p = 0.198$), attitudes ($p = 0.982$) and performance status ($p = 0.062$) based on place of residence.

There was no statistically significant difference between the frequency distribution of interns' HIV awareness status based on marital status ($p = 0.117$) (Table 2).

There was no statistically significant difference between the frequency distribution of interns' attitudes ($p = 0.301$) and performance status ($p = 0.222$) toward HIV in terms of marital status.

There was no statistically significant difference between the frequency distribution of interns' awareness about HIV based on age ($p = 0.932$) (Table 3).

There was no statistically significant difference between the frequency distribution of interns' attitudes ($p = 0.595$) and performance status ($p = 0.250$) toward HIV in terms of age.

Table 1: Frequency distribution of awareness status of interns towards HIV based on gender

Gender	Awareness status			Total N (%)
	Poor N (%)	Moderate N (%)	Good N (%)	
Female	9 (50)	19 (46.3)	35 (58.3)	63 (52.9)
Male	9 (50)	22 (53.7)	25 (41.7)	56 (47.1)
Total	18 (100)	41 (100)	60 (100)	119 (100)
P-value	0.477			

Table 2:

distribution of awareness status of interns towards HIV based on marital status

Marital status	Awareness status			Total N (%)
	Poor N (%)	Moderate N (%)	Good N (%)	
Single	14 (77.8)	22 (53.7)	42 (70)	78 (65.5)
Married	4 (22.2)	19 (46.3)	18 (30)	41 (34.5)
Total	18 (100)	41 (100)	60 (100)	119 (100)
P-value	0.117			

Frequency

Table 3: Frequency distribution of interns' awareness about HIV based on age

Age (year)	Awareness status			Total N (%)
	Poor N (%)	Moderate N (%)	Good N (%)	
23-23.9	0 (0)	3 (7.3)	5 (8.3)	8 (6.7)
24-24.9	8 (44.4)	17 (41.5)	26 (43.3)	51 (42.9)
25-25.9	9 (50)	18 (43.9)	26 (43.3)	53 (44.5)
26-30	1 (5.6)	3 (7.3)	3 (5)	7 (5.9)
Total	18 (100)	41 (100)	60 (100)	119 (100)
P-value	0.932			

DISCUSSION

In the present study, in terms of HIV awareness, 15.1% were poor, 34.5% moderate and 50.4% good. In terms of attitude towards HIV, 10.9% were poor, 51.3% moderate and 37.6% good. There was no statistically significant difference between the frequency distribution of interns' knowledge, attitude and practice in terms of variables: gender, age, marital status and place of residence.

A study was performed among the students of Xinjiang University. 74.5% of students had awareness score $15 <$. Average knowledge marks were considerably greater among men. Nevertheless only 33.3% of the participants had attitude as positive about AIDS and HIV patients. Average attitude marks were not considerably various based on gender, study main, study time or culture. According to high danger actions related to transmission of HIV, almost 16% of students had one risk manner associated with uncovered sexual contact. Great-risk manner was considerably greater among men and one year students ^[11].

Another study evaluated the attitudes, knowledge and opinions to AIDS among a group of students at fitness institutions in Yemen. This study was directed on several students designated by cluster selection. Students had a moderate rate of knowledge about AIDS (mean of 67.6% were accurate on all subjects). However, almost 82% told that HIV virus could be spread by sexual contact as unprotected. Attitudes about people existing with AIDS displayed that almost 60% of students were approving and positive. There was an identical view among individuals that persons with this disease required to be corrected (65%) and separated (41%); nevertheless, near to 87% were wanted to keep about an infected case ^[12].

The next study was intended to investigate the awareness about AIDS among non-medical and medical courses students in Iran. The frequency distribution of learning, marital condition, alcohol consumption, smoking and psychotropic matter usage, occupation, and foundation of information varied considerably between two groups of students of study. There was an important alteration between the two groups about awareness and performance about HIV. There was no considerable variation between the groups of study based on attitude of students to AIDS. The results also showed a significant association between marital condition and performance, learning and attitude, and smoking rate and awareness among the medical cases. There was no a significant variation between the main demographic parameters and awareness, attitudes and performance about AIDS among the non-medical individuals ^[13].

CONCLUSION

According to the results of this study, it can be concluded that medical interns had acceptable knowledge and attitudes towards HIV but poor performance in HIV prevention. Therefore, holding training workshops to increase the performance of medical interns for HIV prevention appears necessary.

Acknowledgement

The authors like to acknowledge the staff of Infectious Diseases Research Center of Shahid Sadoughi University of Medical Sciences, Yazd.

Conflict of Interest

None declared.

Financial Support

None declared.

REFERENCES

- Mulu W, Abera B, Yimer M. Knowledge, attitude and practices on HIV/AIDS among students of Bahir Dar University. *Science Journal of Public Health*. 2014;2:78-86.
- Gemeda TT, Gandile AU, Bikamo DS. HIV/AIDS knowledge, attitude and practice among Dilla University Students, Ethiopia. *Afr J Reprod Health*. 2017;21:49-61.
- Siegel K, Lekas H-M. AIDS as a chronic illness: psychosocial implications. *AIDS*. 2002;16:69-76.
- Nubed CK, Akoachere J-FTK. Knowledge, attitudes and practices regarding HIV/AIDS among senior secondary school students in Fako Division, South West Region, Cameroon. *BMC Public Health*. 2016;16:1-10.
- Tan X, Pan J, Zhou D, Wang C, Xie C. HIV/AIDS knowledge, attitudes and behaviors assessment of Chinese students: a questionnaire study. *International journal of environmental research and public health*. 2007;4:248-53.
- Clumeck N, Pozniak A, Raffi F, Committee EE. European AIDS Clinical Society (EACS) guidelines for the clinical management and treatment of HIV-infected adults. *HIV Med*. 2008;9:65-71.
- Centers for Disease Control (US). Recommendations for prevention of HIV transmission in health-care settings. *US Department of Health and Human Services, Public Health Service, Centers for Disease Control*. 1987;36(2):3-18.
- Hussain MA, Chauhan AS, Pati S, Nallala SS, Mishra J. Knowledge and attitudes related to HIV/AIDS among medical and allied health sciences students. *Indian Journal of Community Health*. 2011;23:96-98.
- Verma RK, Wong S, Chakravarthi S, Barua A. An assessment of the level of awareness, attitudes, and opinions of the medical

students concerning HIV and AIDS in Malaysia. Journal of clinical and diagnostic research: JCDR. 2014;8(4):HC10.

10. Shiferaw Y, Alemu A, Girma A, Getahun A, Kassa A, Gashaw A, *et al.* Assessment of knowledge, attitude and risk behaviors towards HIV/AIDS and other sexual transmitted infection among preparatory students of Gondar town, north west Ethiopia. BMC Res Notes. 2011;4:1-8.
11. Maimaiti N, Shamsuddin K, Abdurahim A, Tohti N, Memet R. Knowledge, attitude and practice regarding HIV/AIDS among university students in Xinjiang. Global Journal of Health Science. 2010;2:51.
12. Al-Rabeei NA, Dallak AM, Al-Awadi FG. Knowledge, attitude and beliefs towards HIV/AIDS among students of health institutes in Sana'a city. Eastern Mediterranean Health Journal. 2012;18(3).
13. Pourjam R, Kandi ZRK, Estebarsari F, Yeganeh FK, Safari M, Barati M, *et al.* An analytical comparison of knowledge, attitudes, and practices regarding HIV/AIDS among medical and non-medical students in Iran. HIV/AIDS (Auckland, NZ). 2020;12:165.

Note: This is an open access article distributed under the terms of the Creative Commons Attribution Non-Commercial (CC BY-NC 4.0) License, which allows reusers to distribute, remix, adapt, and build upon the material in any medium or format for noncommercial use only, and only so long as attribution is given to the creator.