

Evaluation of attitude, knowledge and practice of nursing and midwifery students about AIDS

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Abstract

One of the most basic ways to deal with AIDS is to raise public awareness about the nature of the disease and ways of transmission and prevention. This research aimed to investigate knowledge, attitude and practice of nursing and midwifery students of Shahid Sadoughi University of Medical Sciences about AIDS. The population of this descriptive-analytical study was all nursing and midwifery students of Yazd University of Medical Sciences. A questionnaire was used to collect data. Finally, the required analyzes were performed using SPSS software version 22. A significant relationship was found between the degree and age. The average level of attitude of women was lower than that of men, so women have a higher and better attitude than men. There was a significant relationship between other variables of marital status, field of study, degree, residence status and attitude level. Also, there was a significant relationship between age and attitude level. Based on the obtained results, in general, the knowledge, practice and attitude of nursing and midwifery students are at a moderate level. More careful planning is needed to prevent and raise students' awareness, especially as medical students are exposed to patients with AIDS.

Keywords: AIDS, Students, Nursing, Midwifery, Yazd.

INTRODUCTION

Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome (HIV/AIDS), the disease without limits, is recognized as one of the most severe health difficulties of the world [1,2]. HIV has spread exponentially around the world since the first case was identified in the United States in 1981 [3,4]. Young individuals aged 15 to 24 accounted for more than half of all new infections in the world. 6,000 young persons are infected with HIV every day, or more than five in every minute [3,5].

The characteristics of university students, such as their age, motivation, exposure to new experiences, and other qualitative driving indexes, enhance their danger of HIV/AIDS infection. The students' rate of information, boldness and function against the disease can be a foundation for behavioral and social interventions [6-9].

On the other hand, designing a suitable HIV alertness platform for a detailed aim group must be pertinent to its requirements, and can be planed only after defining the current awareness,

belief attitude, and practice template of that specific group [10, 11].

Therefore, aim of current study was to consider knowledge, attitude and practice of nursing and midwifery students of Yazd about AIDS.

MATERIALS AND METHODS

In this descriptive-analytical study conducted in 2020, all nursing and midwifery students of Yazd University of Medical Sciences entered the present study after being examined in terms of entry and exit criteria and obtaining consent for the study. Inclusion criteria including nursing and midwifery students who were willing to participate in the study and also failure to complete the questionnaire were considered as exclusion criteria.

Limitations included lack of access to all students and unwillingness to cooperate or incomplete answers to research questions.

The study consisted of a questionnaire with 4 sections. The first part included the demographic characteristics of age, gender, etc. The second part included the questions related to awareness; the third part of the questions is students' attitudes toward AIDS and the fourth section included students' performance toward AIDS.

Sampling was by census. This study was approved by the ethics committee of Shahid Sadoughi University of Medical Sciences in Yazd with the code of IR.SSU.MEDICINE.REC.1399.313.

The awareness questions were three-choice and included true, false and do not know. To the correct answer a score of 1, I do not know was given 0 and wrong -1. Awareness level based on scores obtained and based on the number of questions was divided to good (from score 13-19), moderate (8-13), poor (equal to or less than 7). The performance section was divided into 3 groups: good (5-7), moderate (3-5) and poor (equal to or less than 3).

The collected data were entered into the statistical software SPSS Version 18 (Statistical Package for the Social Sciences, SPSS, Chicago, IL, USA). Student's t test, Chi-Square test and Odds ratio were performed for comparing between two groups. Significance level was considered 0.05.

RESULTS

200 midwifery and nursing students were interviewed in this study. 62.5% of the respondents were women and 56.5% of the respondents were single. In terms of field of study, 69% were studying nursing and 95% were studying for a bachelor's degree. In terms of residence, 63% of non-dormitories and the age group of 20 to 22 years have the most respondents; the average age of respondents is 22.

There was no significant relationship between gender and level of awareness ($p=0.38$). There was a significant relationship between educational level ($p=0.008$) and age ($p=0.01$) with the level of awareness (Table 1).

Table 1: Assessing the level of students' knowledge about AIDS based on demographic characteristics, educational level and place of residence

Variables	Grouping	level of awareness			p-value
		Good Number (%)	Moderate Number (%)	Week Number (%)	
Gender	Male	43 (57.3)	25 (33.3)	7 (9.3)	0.38
	Female	80 (64)	39 (31.2)	6 (4.8)	
Marital status	Single	67 (53.9)	37 (32.7)	9 (8)	0.57
	Married	56 (64.4)	27 (31)	4 (4.6)	
Field of study	Nursing	86 (62.3)	43 (31.2)	9 (6.5)	0.92
	Midwifery	37 (59.7)	21 (33.9)	4 (6.5)	
Educational level	Bachelor	118 (62.1)	62 (32.6)	10 (5.3)	0.008
	Master	5 (50)	2 (20)	3 (30)	
Place of residence	Dormitory	50 (67.6)	20 (27)	4 (5.4)	0.40
	Non-dormitory	73 (57.9)	44 (34.9)	9 (7.1)	
Age (Year)	18	12 (44.4)	13 (48.1)	2 (7.4)	0.01
	19	16 (59.3)	11 (40.7)	0 (0)	
	20	27 (75)	6 (16.7)	3 (8.3)	
	21	21 (65.6)	10 (31.2)	1 (3.1)	
	22	28 (63.6)	15 (34.1)	1 (2.3)	
	23	12 (57.1)	7 (33.7)	2 (9.5)	
	24≤	7 (53.8)	2 (15.4)	4 (30.8)	

There is a significant relationship between gender and level of performance ($p=0.003$). There is a significant relationship

between the field of study and the level of performance ($p=0.00$) (Table 2).

Table 2: The relationship between students' performance toward AIDS based on demographic characteristics, educational level and place of residence

Variables	Grouping	level of performance			p-value
		Good Number (%)	Moderate Number (%)	Week Number (%)	
Gender	Male	51 (68)	15 (20)	9 (12)	0.003
	Female	61 (48.8)	22 (17.6)	42 (33.6)	
Marital status	Single	62 (54.9)	25 (22.1)	26 (23)	0.28
	Married	50 (57.5)	12 (13.8)	25 (28.7)	
Field of study	Nursing	92 (66.7)	25 (18.1)	21 (15.2)	0.00
	Midwifery	20 (32.3)	12 (19.4)	30 (48.4)	
Educational level	Bachelor	106 (55.8)	36 (18.9)	48 (25.3)	0.76
	Master	6 (60)	1 (10)	3 (30)	
Place of residence	Dormitory	40 (54.1)	19 (25.7)	15 (20.3)	0.1
	Non-dormitory	72 (57.1)	18 (14.3)	36 (28.6)	
Age (Year)	18	13 (48.1)	7 (25.9)	7 (25.9)	0.53
	19	16 (59.3)	5 (18.5)	6 (22.2)	
	20	24 (66.7)	3 (8.3)	9 (25)	
	21	16 (50)	6 (18.8)	10 (31.2)	
	22	21 (47.7)	11 (25)	12 (27.3)	
	23	15 (71.4)	4 (19)	2 (9.5)	
	24≤	7 (53.8)	1 (7.7)	5 (38.5)	

DISCUSSION

In current study, there was a significant relationship between educational level and age with the level of awareness. There is a significant relationship between gender, the field of study and level of performance toward AIDS.

A research of 219 dental students was conducted in India. There was no discernible difference in the students' attitudes between the three classes. Results exhibited no significant relationship between the awareness of HIV and the students attitude about patients with this disease [12].

In a related study conducted in Iran in 2018, 203 medical and nursing students were randomly chosen. In that study there was a significant association between awareness with the background of study, educational level and age. Also, no significant correlation was detected between function and attitude with the level of education, age and field of study [13].

A research was also directed on 666 students designated by group accidental sampling during 2009-2010 in Saveh city of Iran. There was significant correlation between awareness level and sex and data foundations [14].

In a separate study conducted in Hamadan in 2014-2015, 320 students from schools of nursing, medicine, paramedical sciences, and midwifery were chosen by sampling ways. The findings revealed that there was no substantial difference between gender and AIDS skills and attitudes. Also, between school and learning level of students and their awareness and attitudes no significant alterations was detected [15].

CONCLUSION

Based on the obtained results, the knowledge, practice and attitude of nursing and midwifery students are at a moderate level. On the other hand, midwifery students are at a lower level than nursing students, so there is a need for more training in this area, especially in the field of performance in the face of contaminated situations. More careful planning is needed to prevent and raise students' awareness, especially as medical students are exposed to people living with AIDS.

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Conflict of Interest

We declare that we have no conflict of interest.

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REFERENCES

1. 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(2):51.

2. Wang Y, Cochran C, Xu P, Shen JJ, Zeng G, Xu Y, *et al.* Acquired immunodeficiency syndrome/human immunodeficiency virus knowledge, attitudes, and practices, and use of healthcare services among rural migrants: a cross-sectional study in China. *BMC Public Health*. 2014; 14(1):1-10.
3. 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):1-8.
4. Nakashima AK, Fleming PL. HIV/AIDS surveillance in the United States, 1981–2001. *JAIDS Journal of Acquired Immune Deficiency Syndromes*. 2003; 32:S68-S85.
5. Tiznobeik A, Refaie M, Soltanian A. Knowledge, attitude and practice of nursing and midwifery students toward post exposure prophylaxis for HIV infection. *Scientific Journal of Iran Blood Transfus Organ*. 2013; 10(3):305-311.
6. Negeri EL. Determinants of risky sexual behavior, relation between HIV risk perception and condom utilization among Wollega University Students in Nekemte Town, Western Ethiopia. *Science, Technology and Arts Research Journal*. 2014; 3(3):75-86.
7. Unasho A, Tadesse T. Assessment of potential risky sexual behaviors among Dilla University students: A survey study for enhancing self-protection from human immunodeficiency virus (HIV) infection. *Journal of AIDS and HIV Research*. 2013; 5(7):235-248.
8. Kaufman MR, Cornish F, Zimmerman RS, Johnson BT. Health behavior change models for HIV prevention and AIDS care: practical recommendations for a multi-level approach. *Journal of acquired immune deficiency syndromes (1999)*. 2014; 66(Suppl 3):S250.
9. Kelly JA, Kalichman SC. Behavioral research in HIV/AIDS primary and secondary prevention: Recent advances and future directions. *J Consult Clin Psychol*. 2002; 70(3):626.
10. Gaash B, Ahmad M, Kasur R, Bashir S. Knowledge, attitude and belief on HIV/AIDS among the female senior secondary students in Srinagar District of Kashmir. *Health and Population-Perspectives and Issues*. 2003; 26(3):101-103.
11. 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(2):78-86.
12. Patil PB, Sreenivasan V, Goel A. Knowledge of HIV/AIDS and attitude of dental students towards HIV/AIDS patients: A cross-sectional survey. *Journal of education and ethics in dentistry*. 2011; 1(2):59.
13. Amiri M, Khosravi A, Sakhaee S, Raei M. Knowledge, Attitude and Practice of Nursing and Medical Students about HIV/AIDS and Hepatitis. *The Open Public Health Journal*. 2020; 13(1).
14. Mohammad Nejad E, Shariat E, Akbari Kaji M. Knowledge and Attitude of Students of the Azad University of Saveh about AIDS. *J Res Dev Nurs Midwifery*. 2012; 8(2):43-49. [In persian]
15. Yazdi-Ravandi S, Taslimi Z, Shamsaei F, Ghaleiha A, Salemi Shakoori S, Nikkhah A. Knowledge and attitudes toward AIDS among students of Hamadan university of medical sciences, 2015: Comparison between medicine, nursing and paramedical Faculty. *Pajouhan Scientific Journal*. 2015; 14(1):22-29. [In persian]