

Table II: Questionnaire questions and answers of students

Question	Yes	No	No idea
1 An HIV transporter and AIDS patient are the same.	143(14.9%)	751(78.2%)*	66(6.9%)
2 HIV / AIDS is a viral disease, not genetic.	866(90.2%)*	76(7.9%)	18(1.9%)
3 There is definitive treatment of HIV / AIDS.	28(2.9%)	826(86%)*	106(11%)
4 People with AIDS / HIV virus carriers may appear healthy.	898(93.5%)*	31(3.2%)	31(3.2%)
5 If you get the appropriate treatment, becoming an HIV carrier is the same as having a chronic disease like diabetes or hypertension.	372(38.8%)*	389(40.5%)	199(20.7%)
6 HIV is a virus that weakens the immune system.	935(97.4%)*	9(0.9%)	15(1.6%)
7 AIDS is a sexually transmitted disease.	77(8%)	859(85.9%)*	24(2.5%)
8 People with homosexual relationships have a higher incidence of HIV / AIDS.	631(65.7%)	211(22%)*	118(12.3%)
9 An HIV + pregnant woman can get HIV to her unborn baby.	735(76.6%)*	110(11.5%)	115(12%)
10 An HIV + breastfeeding mother can infect her baby with HIV.	583(60.7%)*	195(20.3%)	182(19%)
11 Handshaking with an AIDS patient or sharing personal items (such as teacup, towels or dress) can cause HIV infection.	82(8.5%)	821(85.5%)*	57(5.9%)
12 Uncontrolled blood transfusion after HIV + person and forging with the same tools cause HIV / AIDS infection.	924(96.3%)*	13(1.4%)	23(2.4%)
13 If HIV+ a patient-contaminated needle is sinked in a healthy person, there is a risk of HIV transmission.	930(96.9%)*	12(1.3%)	18(1.9%)
14 One way to prevent HIV / AIDS is to be vaccinated.	104(10.8%)	703(73.2%)*	153(15.9%)
15 The only way to prevent HIV / AIDS in sexual intercourse is to use monogamy and condom.	254(26.5%)	620(64.6%)*	86(9%)
16 Condom use protects against sexually transmitted HIV.	58(6%)*	789(82.2%)	113(11.8%)
17 Health workers are in a high risk group for HIV / AIDS.	835(87%)*	69(7.2%)	56(5.8%)
18 Use of protective equipment by healthcare workers reduces HIV transmission.	913(95.1%)*	16(1.7%)	31(3.2%)
19 The health worker has the right to know the patient's HIV / AIDS status.	911(94.9%)*	28(2.9%)	21(2.2%)
20 I avoid the follow-up and treatment of HIV / AIDS + patients.	124(12.9%)	691(72%)*	145(15.1%)
21 I do not want to perform the operation of an HIV / AIDS positive patient.	211(22%)	541(56.4%)*	208(21.7%)
22 It annoys me that people around me know that I'm following HIV / AIDS + patients.	123(12.8%)	759(79.1%)*	78(8.1%)
23 It annoys me that people around me know that I'm following HIV / AIDS + patients.	144(15%)	700(72.9%)*	116(12.1%)
24 HIV/AIDS+ people must be treated in different health care institute and/or in different units.	401(41.8%)	425(44.3%)*	134(14%)
25 Families of HIV / AIDS + persons should be informed of the situation.	111(11.6%)	756(78.8%)*	93(9.7%)
26 The HIV / AIDS test cannot be performed without the patient's knowledge.	637(66.4%)*	189(19.7%)	134(14%)
27 I have problems if I discriminate against HIV/AIDS + patients.	686(71.5%)*	113(11.8%)	161(16.8%)

*The correct answers are marked with an asterisk (questions 1-18). Instead of determining the correct answer regarding ethical issues, we marked the answers of the majority with an asterisk.

DISCUSSION

With increasing rates, HIV / AIDS is an important health problem affecting the whole world. Research has shown that young people are vulnerable to HIV / AIDS. Today, HIV / AIDS has no radical treatment, educating young people to combat this disease is an effective method. HIV cases reported in Turkey in 2012 was observed to be increased in 2016 up to 2.5 folds. It is also noteworthy that the age range of the cases varies between 20-24 years of age⁹. HIV education can not only help students develop and sustain safer behaviors but will also reduce stigmatization and discrimination towards people living with HIV¹⁷. It was thought that the students of the medical faculty who were selected as the study universe would be useful for informing the young population and improving their approaches to the patients¹⁸.

When the answers of the students to the questionnaires were evaluated, it was seen that their general knowledge level about HIV / AIDS was high (table II). However, some questions and students' answers were found worthy of discussion. The students gave a low response rate (38%) to the question: "If you get the appropriate treatment, becoming an HIV carrier is the same as having a chronic disease like diabetes or hypertension" We noticed that this problem was not sufficiently understandable. Because "There is definitive treatment of HIV / AIDS." for question 86% of the students have answered correctly by saying no. There isn't radical treatment of AIDS today. However, quality of life and duration of the patient can be increased with various antiviral drugs^{3,12}.

The correct answer rate of the students was quite high in the questions about the ways of transmission. "People with homosexual relationships have a higher incidence of HIV / AIDS." the question surprised the students. 65.7% of the students said yes to this question. When the studies in the literature are examined,

it is reported that this sexually transmitted disease is more common among heterosexuals than in homosexuals in recent years⁷.

The answers to the questions about the ways of protection were important to us and the students had a high percentage of correct answers. The answer to the question of condom use, which is the most important way of protection in sexual transmission, was interesting. "Condom use protects against sexually transmitted HIV" the question 82.2% of students answered wrongly. When health professionals are used properly; have reported that condoms prevent sexual transmission of HIV¹⁷. This question may have been misunderstood by the students or sexual problems in the middle east region are not explicitly spoken or sexual life outside marriage is less than in other societies, perhaps this, may have affected the response to the question. Therefore, this issue was pointed out in the training seminar.

HIV / AIDS is the disease in which ethical principles are most discussed. Although society has different ideas, the rights of people with HIV / AIDS are guaranteed by law^{4,19}. In this context, the students' answers about attitudes and behaviors were important for us. 72% of the doctor candidates stated that they would not avoid the treatment and follow-up of HIV / AIDS patients. This is a very promising response. The question "I do not want to perform the operation of an HIV / AIDS positive patient." 56.4% of the students gave a positive answer by saying no. Physician and physician candidates may not want to perform surgical of HIV-infected persons due to the risk of transmission. Ethical debates are continuing, but if infection control methods are provided, doctor candidates have informed that they can perform surgery safely. Thereby, physician candidates were encouraged to treat patients with HIV / AIDS.

Doctor candidates were again unsure of ethical issues, they alleged that "HIV / AIDS patients should be treated in different health institutions and/or different units." However, legal rules prohibit the isolation of people with HIV / AIDS from society. The principle of respect for the autonomy of the individual protects the rights of persons in their workplaces, health institutions and other public institutions. The freedom of life of individuals like treatment and work cannot be restricted by others²⁰.

Should the family of HIV / AIDS patients be informed? The answer to the question is clearer in recent years. The privacy of patients cannot be violated. However, if the patient does not want to explain the situation his or her sexual partner and if a healthy person is at risk of infection, the doctor may inform the patient's sexual partner for protection. The doctor candidates knew that confidentiality was important and 78.8% responded correctly¹⁹. In an article published in 2008, Li and colleagues report to a patient's partner that the statement made by the doctor caused the life of the partner²¹. We talked about the results of informing the family in educational seminars. Because the legislation is not sufficiently clear on this issue in Turkey.

CONCLUSIONS

UNESCO prepared a new educational guide on World AIDS Day. Today the world is trying to stop HIV / AIDS cases by 2030. He realized that one of the most important methods for this was the training of young people. In our study, we measured the HIV / AIDS knowledge level of 960 medical school students, the results were not bad but were not sufficient for us. For this reason, a training seminar was given by the academicians of the Department of Infectious Diseases and Infectious Diseases of Atatürk University Faculty of Medicine on December 1, 2019 World AIDS Day. The questions that students answered incorrectly were pointed

out. Prospective physicians now report that they trust them more about HIV / AIDS. We think that training seminars should be expanded and more young people should be reached. Sufficient time should be spent for HIV / AIDS and young people should be reminded with brief educations.

Ethics Committee Approval: The study initiation, ethical approval was obtained from the ethical board of the university where the study was conducted. The research protocol was approved by the Atatürk University Medical Faculty research ethics committee before the study (Ethics Committee Approval Number: B.30.2.ATA.0.01.00/314).

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