

KNOWLEDGE LEVEL OF TRAKYA UNIVERSITY MEDICAL SCHOOL STUDENTS ABOUT SEXUALLY TRANSMITTED DISEASES

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ABSTRACT

Aims: In this study it is aimed to evaluate the knowledge level of Trakya University Medical School Students about sexually transmitted diseases (STDs) and to see the effect of committee education system.

Methods: A cross sectional survey was applied to Trakya University Medical School 1st, 2nd, 3rd and 4th grade students. Four-hundred and seven students responded a survey which contained 15 questions. Knowledge level of the students on STDs was described by number (percentage) and chi-square test which are descriptive statistics.

Results: 3rd and 4th grade medical students' knowledge level was found significantly higher than the 1st and 2nd grade medical students' ($p=0,0001$). It was found out that gender doesn't have any effect on the knowledge level (for 1st and 2nd grades $p=0,285$, for 3rd and 4th grades $p=0,134$).

Conclusion: It was seen that the lessons that are given in Trakya University Medical School with committee system partially increased the knowledge level on STDs.

Key Words: Sexually transmitted diseases, medical education, medical school students

INTRODUCTION

Sexually transmitted diseases which are also a very important public health problem are transmitted to a million people everyday according to the World Health Organization (WHO) data. According to the same data; Chlamydia, gonorrhea, syphilis and trichomoniasis which are the most seen four infections affect 500 million people every year. While more than 530 million people carry Herpes Simplex Virus 2 (HSV 2) which causes genital herpes, Human Papilloma Virus (HPV) is seen in more than 290 million women (1).

STDs have wide spectrum of transmission ways and clinical course. Besides being transmitted sexually, it can also be transmitted by body liquids and through wounds. They can also be transmitted by blood products and tissue transfer and from mother to child during pregnancy, childbirth and breastfeeding (2,3). Most of the infected people are asymptomatic and this is a serious threat of the infection being spread. On the other hand, symptomatic patients have symptoms such as vaginal and urethral discharge, itching, ulceration on geni-

tal area and abdominal pain. Life threatening occasions such as severe neurological symptoms, immunodeficiency and malignancy in AIDS, cervix cancer in HPV infections may also happen. Doctors have a great role in prevention of these diseases by educating the public besides treating them. The major roles of doctors are telling about the transmission ways and the prevention clearly, having the patient get the right diagnosis and treatment along with his or her partner.

In this study, the effect of medical education on doctor candidates that are studying in Trakya University is searched and it is aimed to create awareness on this topic.

MATERIAL AND METHODS

It was a cross sectional survey study that was carried on between April-May 2014 on Trakya University Medical School 1st, 2nd, 3rd and 4th grade students. It was aimed to reach all of 1st, 2nd, 3rd and 4th grade students of Trakya University Medical School ($n=857$). In this extent, on voluntary basis, 114 the first, 124 second,

59 third and 110 fourth grades, a total 407 students were reached. Surveys were applied at classrooms and practice rooms, during lessons by getting the permission of faculty members.

The participants were applied a survey that has 15 multiple choice questions which were chosen from "Ministry of Health of Republic of Turkey Family Planning and Maternal and Child Health Directorate General: Educational Guide of Sexually Transmitted Diseases". Prevention of STDs, transmission ways, diagnosis, symptoms and physician's approach to the patient were asked in the survey.

In the evaluation, it was considered that while 1st and 2nd grade medical students haven't had the lessons about STDs, the 3rd and 4th grade have already had. Survey results are expressed by SAYI VE YÜZDE DEĞERLERİ which are descriptive statistics. For comparison of knowledge levels of 1st and 2nd grade with 3rd and 4th grade students on STDs, chi-square test was performed by using SPSS software. $P < 0,05$ value was considered statistically significant.

RESULTS

It was found that amount of minimum right answers of 1st and 2nd grade students that participated to the study was 1 and amount of maximum right answers was 12 (median=7). It was also found that the 3rd and 4th grade medical students' amount of minimum right answers was 3 and the amount of maximum right answers was 13 (median=9) (Table 1). It was seen that knowledge level of the 3rd and 4th grade medical students was significantly higher than 1st and 2nd grade medical students ($p=0,0001$).

It was seen that gender has no effect on knowledge level (For 1st and 2nd grade $p=0,285$, for 3rd and 4th grade $p=0,134$) (Table 1).

%89,5 of 1st and 2nd grade and %92,9 of 3rd and 4th grade students gave the right answer to the first question that was about the transmission ways of STDs. No significant difference was detected between two groups ($p=0,239$).

%23,5 of 1st and 2nd grade and %23,1 of 3rd and 4th grade students gave the right answer to the second question that was about the prevention ways of the disease. No significant difference was detected between two groups ($p=0,915$).

%89,5 of 1st and 2nd grade and %78,7 of 3rd and 4th grade students gave the right answer to the third question that was about the physicians' examination of the patient about STD risks. Significant difference was detected

between two groups ($p=0,003$).

%58,5 of 1st and 2nd grade and %69,8 of 3rd and 4th grade students gave the right answer to the fourth question that was about the right way to use a condom. Significant difference was detected between two groups ($p=0,023$).

%84 of 1st and 2nd grade and %90,5 of 3rd and 4th grade students gave the right answer to the fifth question that was about the knowledge of high risk sexual behaviors. No significant difference was detected between two groups ($p=0,057$).

%85,7 of the 1st and 2nd grade and %88,2 of 3rd and 4th grade students gave the right answer to the sixth question that was about transmission ways of HIV. No significant difference was detected between two groups ($p=0,473$).

%55 of 1st and 2nd grade and %88,2 of 3rd and 4th grade students gave the right answer to the seventh question that was about the symptoms of STDs. Significant difference was detected between two groups ($p=0,0001$).

%15,5 of 1st and 2nd grade and %21,9 of 3rd and 4th grade students gave the right answer to the eighth question that was about Hepatitis B, candidiasis, gonorrhoea, and bacterial vaginosis. No significant difference was detected between two groups ($p=0,102$).

%23,1 of 1st and 2nd grade and %67,5 of 3rd and 4th grade students gave the right answer to the ninth question that was about the diseases that cause genital ulcer. Significant difference was detected between two groups ($p=0,0001$).

%28,2 of 1st and 2nd grade and %46,7 of 3rd and 4th grade students gave the right answer to the tenth question that was about symptoms of bacterial vaginosis. Significant difference was detected between two groups ($p=0,0001$).

%16 of 1st and 2nd grade and %38,5 of 3rd and 4th grade students gave the right answer to the eleventh question that was about complications of STDs. Significant difference was detected between two groups ($p=0,0001$).

%21,8 of 1st and 2nd grade and %18,9 of 3rd and 4th grade students gave the right answer to the twelfth question that was about doctor's approach on controlling of STDs. No significant difference was detected between two groups ($p=0,474$).

%45,8 of 1st and 2nd and %54,4 of 3rd and 4th grade students gave the right answer to the thirteenth question that was about approach that can support behavioral changes on the patients with STDs. No significant difference was detected between two groups ($p=0,086$).

%22,3 of 1st and 2nd grade and %42 of 3rd and

4th grade students gave the right answer to the fourteenth question that was about syphilis, Human Papilloma Virus, Trichomoniasis and Herpes Genitalis diseases. Significant difference was detected between two groups ($p=0,0001$).

%60,1 of 1st and 2nd grade and %69,8 of 3rd and 4th grade students gave the right answer to the fifteenth question that was about the basic knowledge of STDs. Significant difference was detected between two groups ($p=0,044$).

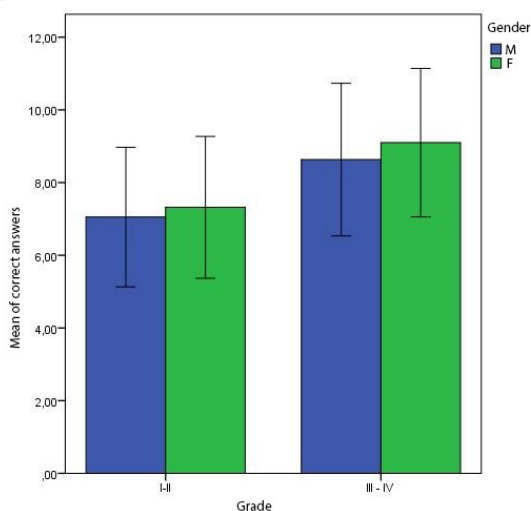


Table 1: Mean of correct answers for each grade

DISCUSSION

In our study, effectiveness of education was searched by measuring the difference in knowledge level between Trakya University Medical School the first and second grade students who haven't had the classes about STDs and 3rd and 4th grade students who have already had the classes. With the integrated system which is run in our faculty, at the seventh committee gynecology & obstetrics and urology lessons are given to the third grade students when infectious diseases lessons are given at seventh, eighth, ninth and eleventh committees. When the fourth grade students have gynecology & obstetrics and urology clinical rotations, they also have lessons from the department of infectious diseases about STDs. The first and second grade students have a program focused on basic sciences. Considering this education program, 3rd and 4th grade students are expected to have a better knowledge on STDs than the first and second grade students. As seen in the results of the survey, education made a significant difference on the students ($p=0,0001$). The question that has the highest rate of being answered correctly by both groups of students is

the first one which is about transmission ways of STDs. %89,5 of the first and second grade students and %92,9 of 3rd and 4th grade students gave the right answer to this question ($p=0,239$). We think that the reason of the question being answered correctly with similar and high rates in groups is because the information needed to answer the first question correctly can be learnt from the social environment or media.

The eighth question which requires clinical knowledge about various diseases such as Hepatitis B, AIDS, candidiasis, gonorrhea and bacterial vaginosis has the lowest rate of being answered correctly by both groups (1st and 2nd graders %15,5; 3rd and 4th graders %21,9; $p=0,102$). Both educated and uneducated group answered this question correctly with a low rate. This leads to think that theoretical education isn't enough either and theoretical knowledge must be practiced at clinics on patients.

The question that reflects the effects of education the most is the ninth question which is about diseases that cause genital ulcer (1st and 2nd graders %23,1; 3rd and 4th graders %67,5). Even though the education given by Trakya University Medical School makes a significant difference on knowledge level of students about STDs, 3rd and 4th grade medical students have an average of correct answers are 9 out of 15 questions. The results of 3rd and 4th grade students had a significant difference in the questions of bacterial vaginosis symptoms (10th question), complications of STDs (11th question), syphilis, HPV, Trichomoniasis, Herpes Genitalis infections (14th question) but the correct answer rates still didn't reach to %50 (3rd and 4th graders' correct answer rate: 10th question %46,7; 11th question %38,5; 14th question %42). In the 3rd question which is about the physicians' examination of the patient about STD risks, the correct answer rate of 3rd and 4th grade students is statistically significantly lower than 1st and 2nd grade students'. Even though, these results show a significant effect of education on knowledge level, they are not satisfying for the doctor candidates as they carry the mission of being informative about the transmission ways, courses and prevention ways of STDs besides treating them. It is also found that the doctor candidates don't have enough knowledge level about basic risk management questions which must be asked to the patients while taking medical history. With education, no significant increase was seen on knowledge level about prevention ways and how to tell them to patients. Finally, these results lead to think that the current education program isn't giving required information about STDs for primary care physicians. It is thought that highlighting prevention ways of STDs, putting emphasis on practical education with patients,

arranging education programs in which students are more active during the year are going to be useful for doctor candidates to be more equipped.

Ethics Committee Approval: This study was approved by Trakya University Faculty of Medicine Scientific Researches Ethics Committee.

Informed Consent: Written informed consent was obtained from the participants of this study.

Conflict of Interest: The authors declared no conflict of interest.

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