Awareness of Sexually Transmitted Diseases (STD) Among the Students of an International University.

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Abstract: The aim of this study was to show the awareness about STDs among the university students and to improve their knowledge how to protect themselves from STDs. This study confirms that there are considerable gaps in knowledge and awareness on major STDs in adolescents living in Cyprus. Our results underline the importance of the objectives set for adolescents' sexual and reproductive health in Cyprus, especially education on all aspects of sexuality and reproduction.

1. Introduction

Sexually transmitted diseases (STDs) are a major health problem affecting especially young people, not only in developing, but also in developed countries. Incidences of sexually transmitted diseases (STD) are dramatically increasing among the young population. The knowledge and awareness concerning sexually transmitted diseases (STDs) is the most attractive issue of the day (4). The requirements for adolescents’ health care include a knowledge about recommended vaccinations and counseling to prevent or reduce risk factors of STD’s (1). In 2008 it has been predicted that the new case of HIV was identified in 1985 (with 3 cases), reported HIV/AIDS cases have been increased in Turkey (total cases 46 in 2003 and 99 cases in 2014). Total cases at the end of 2014 were 9191 and the incidence rate was 0.12. Just in 2014 HIV diagnosed cases are 1585, and 80.4% are male and 91.74% are at 20-59 age group. As CDC estimation and as in many developing countries half or more of all STD infections occur among young people less than 25 years. These results are also reflecting the incidence of the sexually transmitted diseases among the young population. Effective STD prevention among young population is the key for the future course of the STD infections.

After the 1990s, the diagnoses of sexually transmitted diseases increased, in particular syphilis, gonorrhoea and chlamydia have been reported in several European countries, especially among teenagers 16-19 years old. The problem with most STDs is that they can occur without any symptom and can thus be passed on unaware during unprotected sexual intercourse. Also the diagnostic tests become more sensitive.

In Turkish society, more than 50% of the population discussing STDs is considered taboo where ethics and social factors give rise. It has been considered in many publications that parents have a crucial role in influencing their children’s sexual behaviors, therefore parent-adolescents communication is an effective way to increase the knowledge and awareness about sex-related topics and can reduce risk behaviors and can encourage making a healthy sexual decision. Girne American University has total 15334 students from Turkey (60%), from 84 different countries (from Asia, Africa, Middle East and Europe) (27%), and Cyprus(14%).

The aim of this study was to show the awareness about STDs among the university students and to improve their knowledge how to protect themselves from STDs.

2. Materials and Methods

Our study was performed by using a standard questionnaire titled “Awareness of Girne American University students about STDs” and which is concerning protection and knowledge about STDs.

2.1. Background of students and study site;

Girne American University (GAU) has total 15334 students from Turkey (60%), from 84 different countries (from Asia, Africa, Middle East and Europe) (27%), and Cyprus(14%). GAU is consists of 10 faculty (Engineering, Communication, Politics, Law, Humanities, Education, Business and Economics, Journalism, Architecture, Design & Fine Arts, Pharmacy, Health Sciences,) and 8 different schools (Nursery, Vocational, Sports, Aviation, Marine, Health, Performing Arts, Tourism and hospitality).

2.2. Questionnaire design and administration

The questionnaire was designed according to the STD-related information of US Centers for Disease Control and Prevention (CDC) and World Health Organization (WHO). Twenty-six questions asked about demographic information’s, attitudes and knowledge about STDs.

2.3. Ethics and confidentiality

The survey practitioners guaranteed the security and
confidentiality of all the submitted questions to the students and we didn’t want them to write their names. Ethics approval was obtained from the Ethics Committee of Girne American University.

2.4. Data analysis
SPSS version 13 (SPSS, Chicago, USA) was used for all analyses. The Chi square method was used for analysis of single-choice and multiple-choice questions. All statistical tests were two-tailed, and a p-value < 0.05 was considered statistically significant. Correct answers for the knowledge section were taken from the US CDC and WHO guidelines.

3. Results
A total of 404 students participated in this study. Care was taken to ensure that no one missed out from answering any question. 196 (48.4%) female and 208 (51.4%) male students completed our survey. The age range of participants was 17 to 34 years. 164 (40.7%) participants were among health students whereas 239 (164) participants were among non-health students. Nearly all of the students (98.5%) never get married. Monthly family income of 221 (54.6%) participants was >750 USD. 199 (49.1%) participants indicated that they shared a house with their colleagues during education period. More than half of the participants (n=235, 58.0%) indicated that they obtain information about STDs from more than one specific source. The major source that students getting information about STD are from visual media374 (90%), TV/radio 253 (63%), friends 303 (75%), print media 202 (50%) and family 192 (47%).

205 (50.6%) participants expressed that they feel confident and 154 (38.0%) participants feel partially confident about their knowledge in sexually transmitted diseases. On the other hand, 41 (10.1%) participants expressed that they do not feel confident about their knowledge in sexually transmitted diseases. 257 (63.5%) participants signified that they course’s do not involve education about STDs, and 273 (67.4%) participant would like to have education about STDs during their degree course’s. Only 72 (17.8%) participants expressed that they had STD check before. 172 participants (42.5%) indicated that they would fully trust to their partners about being STD-free whereas 80 (19.5%) indicated that they would never trust their partners and protect themselves about STD transmission. Nearly all of the participants (n=309, 90.9%) were aware that a healthy looking person may carry STDs. Most of the participants (n=342, 84.4%) agreed that university should have an STD counselling centre (STD clinic). 145 (35.8%) participants believed in that all the STDs can be fully treated whereas 237 (58.5%) participants believed in that it is not possible to fully treat all the STDs. 165 (40.7%) participants don’t know any risk factors about STD infections and 93 (23.0%) participants attempted with nonsense risk factors. Remaining of the participants could give at least one risk factor for STD infection. Only 17 (4.2%) of the participants admitted had an STD before. There were 5 different STDs observed among these 17 (2 female and 15 male) participants. These were fungal infections, gonorrhoea, syphilis, urinary tract and HPV infections. Only 1 participant admitted to experience more than one STD.

278 (69%) of the participants knew a method how to protect themselves from STDs. 108 (26.7%) participants believed that the most effective way of protection from STDs is condom usage, whereas according to 25 (6.2%) participants the most effective way of protection from STDs is not to have sexual intercourse. 150 (37.0%) participants could not know anything about STD symptoms whereas 144 (35.6%) participants know the STD associated symptoms.

4. Conclusion
STDs are a major health problem in the worldwide. These diseases have a higher incidence and prevalence in developing countries. The antimicrobial resistance of these microorganism is also a threatening factor. Otherwise missing diagnose and failure to treat infections, can have deleterious effects during pregnancy and on the newborn in these countries. The common opinion is developing countries have a higher incidence and prevalence rate of STDs. In developing countries this rate can be 20 times higher than developed countries (4).


The various socio-economic and demographic factors play a crucial role in influencing STDs in Cyprus. The purpose of this study was to investigate the association between knowledge and utilization of sexual and reproductive healthcare services among the students of an international university. The survey questions eliciting information about the knowledge of STDs including modes of transmission, symptoms, and curability, ways of prevention of the six most common STDs: herpes, human papilloma virus (HPV), syphilis, chlamydia, gonorrhea and HIV/AIDS. As a common opinion that there is a relationship between education level and the knowledge and awareness on STDs, our results indicates that students knowledge and awareness about the sexual behaviors and sexually transmitted diseases is insufficient.. The prevalence of sexually active students diagnosed with an STD during their lifetime was below 4.2% for students of both genders. Because of the financial costs students
cannot go to the hospital for diagnosis and treatment. Also it shows that sexually active students are generally less protected than the older students. Sexual awareness and behavior, were much greater in forth grade than in first-grade students. The results of our study should not be generalized to all Turkish students, because our studied group was limited to small community.

In low- and middle-income countries, adolescents are not able to get sufficient access to sexually transmitted infections and sexual and reproductive health services. Addressing clinic systems and providing behaviors may improve uptake. In some publications adolescents predicted that lack of the services provided for this aim and not knowing where to go for services were barriers to awareness about sexual and reproductive health or sexually transmitted infections care. Usually, the studies reported low levels of knowledge and awareness of STDs, with the exception of HIV/AIDS. This study confirms that there are considerable gaps in knowledge and awareness on major STDs in adolescents living in Cyprus. Our results underline the importance of the objectives set for adolescents’ sexual and reproductive health in Cyprus, especially education on all aspects of sexuality and reproduction.

According to our results university management decide to open a clinic as a counseling center (one family practioner, one psychologist and one nurse) for sexually transmitted diseases. Every day 5-10 students are coming to this center for consulting their problems about STDs.

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