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Knowledge Level of Young Patients with Substance Dependency About Sexually Transmitted Diseases and Family Planning and the Effect of Education

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ABSTRACT

Knowledge level of young patients with substance dependency about sexually transmitted diseases and family planning and the effect of education

Objective: We aimed to evaluate the knowledge level of young patients (aged between 15-25) with substance dependency about sexually transmitted disease (STD) and family planning (FP) and organized an education in order to inform them and correct their knowledge, if inappropriate and measured the efficacy of this education.

Method: This descriptive and cross-sectional study was performed between 1 March 2010 and 31 March 2010. A total of 42 patients either hospitalized or outpatient, diagnosed with substance dependency according to DSM-IV were included in the study at Akdeniz University Alcohol and Substance Dependency Research and Treatment Center (AMBAUM). A standardized education on STD and FP was given to these young patients and a questionnaire consisting of 20 questions was performed before and after the education.

Results: After a standardized education on STD and FP, number of correct answers increased for all questions and this reached to statistical significance for 15 of 20 questions (75%). When total scores were considered, the mean total score of the former test was 11.28±2.52 and the mean total score of the latter test was 16.85±2.20.

Conclusion: According to the results of the study, young patients with substance dependency have inadequate knowledge about STD and FP, and education programme significantly increases the level of knowledge. It seems reasonable to include an education about STD and FP to alcohol and substance dependency rehabilitation programmes.

Key words: Substance dependency, sexually transmitted disease, family planning

ÖZET

Madde bağımlılığı tanısı alan gençlerde cinsel yolla bulaşan hastalıklar ve aile planlaması ile ilgili bilgi düzeyi ve verilen eğitimin etkisi

Amaç: Bu çalışmada, 15–25 yaş arası madde bağımlılığı tanısı alan gençlerin cinsel yolla bulaşan hastalıklar (CYBH) ve aile planlaması (AP) konularındaki bilgilerini tazelemek, yapılan eğitim ile eksik ve yanlış olan bilgilerini tamamlamak veya düzeltmek ve yapılan eğitimin etkinliğini değerlendirmek amaçlanmıştır.

Yöntem: Çalışma 01-31 Mart 2010 tarihleri arasında yapılmış tanımlayıcı ve kesitsel bir araştırmadır. Akdeniz Üniversitesi Alkol ve Madde Bağımlılığı Araştırma ve Uygulama Merkezi'nde (AMBAUM) yatan ya da poliklinikte ayaktan tedavi alan, DSM-IV'e göre madde bağımlılığı tanısı almış 42 hasta çalışmaya alınmıştır. Gençlerin hepsine, CYBH ve AP konularını içeren standart bir eğitim verilmiş, ayrıca eğitim öncesi ve sonrası olmak üzere 2 defa 20 soruluk bir anket formu uygulanmıştır.

Bulgular: CYBH ve AP konularını içeren standart bir eğitim sonrası, tüm anket sorularına verilen doğru cevaplarda bir artma gözlenmiş ve soruların 15'inde (%75) ise bu artış istatistiksel olarak anlamlılık göstermiştir. Toplam puana bakıldığında ise, ön test anket puan ortalaması 11.28±2.52, son test anket puan ortalaması 16.85±2.20 bulunmuştur.

Sonuç: Araştırma sonuçlarına göre, madde bağımlısı olan gençlerin hem CYBH hem AP hakkındaki bilgi düzeylerinin oldukça yetersiz olduğu ve verilen eğitimin bilgi düzeylerini önemli derecede arttırdığı gözlenmiştir. CYBH ve AP hakkındaki eğitimlerin alkol, madde tedavi ve rehabilitasyon programlarına eklenmesi yararlı olacaktır.

Anahtar kelimeler: Madde bağımlılığı, cinsel yolla bulaşan hastalıklar, aile planlaması

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INTRODUCTION

All young people worldwide are under risk of sexually-transmitted diseases (STD). STD consists of diseases such as syphillis, hepatitis B and C, gonorrhea, HIV and trichomoniasis. The risk increases due to lower age of contacting sexual issues, early starting age of sexual activities and increasing age of

marriage. Lack of information and skills about STD and prevention in young people and difficulties in access to preventive measures cause higher incidence of these diseases (1). Adolescence and youth are periods which people discover sexuality and become sexually active but not having adequate experience and information. This confronts them with undesired pregnancies, complications of these pregnancies and various problems like STD. For this reason, increasing information of this age group about sexuality and family planning (FP) is important for general public health (2).

Substance abuse which is a widespread social problem can cause several complications which may threaten life. STD come first among these complications. It was reported that intravenous substance use which is an important risk factor for STD is increasing in our country (3,4). It was also shown that STD are increasing in Turkey as well (5). When HIV/AIDS cases in Turkey are examined according to transmission routes, it was shown that etiological causes were heterosexual sexual contact in 50.8, homosexual sexual contact in 8.1%, intravenous substance dependence in 5.88%, transfusion in 2.27%, mother-to-child transmission in 1.66%, hemophilia in 0.5% and unknown causes in 30% (6).

Research and sexual health training experiences showed that young people do not have adequate information about reproductive physiology, prevention from pregnancy and basic sexuality such as HIV/AIDS and reproductive health (7). In a study done in United States, correct respond rate of young people between the ages of 13–15 to questions asked about reproduction, STD and FP was 40% aproximately and reproductive physiology was found to be the subject that they had the least information (8). To our knowledge, there is not any study that investigated information of substance dependent young people on STD and FP and impact of training on level of information. In this study, we aimed to inform young people under treatment for substance dependence about STD and FP and evaluate the efficacy of the training.

METHODS

This is a descriptive and cross-sectional study done between March 1st and March 31st, 2010 in Akdeniz University Alcohol and Substance Dependence Research and Implementation Center (AMBAUM). Forty-two young people between the ages of 15 and 25 who was defined as young according to WHO criteria, diagnosed as "Substance Dependent" according to DSM-IV diagnostic criteria, getting treatment in- or outpatient basis and volunteered to participate in the study were included in the study. A questionnaire which was prepared by the investigators according to literature containing pre- and post-tests was administered to the participants. In the questionnaire, questions 1, 2, 3, 4, 5, 7-18 were on STD and questions 6, 19, 20 were on FP. Questions consisted of definition of STD, in whom STD are seen, symptoms, complications, routes of contamination, and concerning the FP, issues such as importance of condom and preventive methods. One point was given to each correct answer and maximum score was determined as 20 points corresponding to total 20 questions. An audio-visual standard training was given to participants by one of the investigators (ward nurse) then. The subjects covered in the training were: in whom STD are seen, symptoms, complications, routes of contamination and risky conditions in substance dependence and concerning FP, issues such as importance of condom and preventive methods. Pre-test was required to be answered in 20 minutes and training of 30 minutes duration was given after pre-tests were collected. Non-formal method was followed during training and question and answer method was used. Answers were not given directly. Same questionnaire was administered as post-test just after training ended.

Statistical Analysis

Statistical analyses were done by Statistical Package for Social Sciences (SPSS v16.00). Numbers and percents were given for data analyses and paired t-test and McNemar tests were used for statistical analyses. $p<0.05$ was taken as statistically significant.

RESULTS

Among participants included in the study, 85.7% (n=36) were men and 14.3% (n=6) were women. Mean age was 20.40±2.49 (between 17 and 25) and 69% were

Table 1: Number and percentage of correct answers of participants in the study

Questions	Pre-test n (%)	Post-test n (%)	p*	Questions	Pre-test n (%)	Post-test n (%)	p*
QUESTION 1	15 (35.7)	31 (73.8)	p<0.001	QUESTION 11	25 (59.5)	39 (92.9)	p<0.001
QUESTION 2	16 (38.1)	40 (95.2)	p<0.001	QUESTION 12	28 (66.7)	38 (90.5)	p=0.021
QUESTION 3	16 (38.1)	33 (78.6)	p<0.001	QUESTION 13	28 (66.7)	37 (88.1)	p=0.049
QUESTION 4	18 (42.9)	28 (66.7)	p=0.021	QUESTION 14	28 (66.7)	38 (90.5)	p<0.001
QUESTION 5	16 (38.1)	30 (71.4)	p<0.001	QUESTION 15	24 (57.1)	38 (90.5)	p<0.001
QUESTION 6	25 (59.5)	35 (83.3)	p=0.006	QUESTION 16	18 (42.9)	36 (85.7)	p<0.001
QUESTION 7	29 (69)	40 (95.2)	p<0.001	QUESTION 17	23 (54.8)	38 (90.5)	p<0.001
QUESTION 8	30 (71.4)	41 (97.6)	p<0.001	QUESTION 18	24 (57.1)	33 (78.6)	p=0.078
QUESTION 9	32 (76.2)	39 (92.9)	p=0.065	QUESTION 19	14 (33.3)	19 (45.2)	p=0.302
QUESTION 10	38 (90.5)	40 (95.2)	p=0.687	QUESTION 20	27 (64.3)	35 (83.3)	p=0.077

Comparison of mean pre-test, post-test total scores; t=-14.792, p<0.001 (Paired-t Test).
*McNemar test was used.

primary school graduates, 54.8% were unemployed and 97.6% were single. It was found that 21.4% of participants used alcohol, 100% used cigarette, 54.8% used hashish, 16.7% used ecstasy, 7.1% used cocaine, 97.6% used heroine before treatment at some period in their lives.

Pre-test mean score was 11.28±2.52 (between 5 and 17), post-test mean score was 16.85±2.28 (between 10 and 20) (t=-14.792, p<0.001).

When correct answers to different questions by participants were examined, highest proportion of correct answer in pre-test was to question *"Except for sexual intercourse are AIDS, Hepatitis B and syphilis transmitted by blood?"* (90.5%). Lowest proportion of correct answer in pre-test was to question *"Is birth control pill an effective prevention method?"* (33.3%). In the pre-test, participants responded to the statements *"Seven thousand young people are infected by HIV everyday"* and *"Half of HIV cases are seen between 15 and 24 age group"*, the definition of STD and answered the question of *"In what conditions are STD seen more often?"* correctly by 71%, 69%, 76.2% and 64.3%, consecutively.

When correct answers to post-test given to participants after training were examined, highest proportion of correct answer was given to question *"Seven thousand young people are infected by HIV everyday"* (97.6%) and lowest proportion of correct answer was given to question *"Is birth control pill an effective prevention method?"* (45.2%). Participants correctly responded STD definition by 92.9%, statement of *"Half of HIV cases are seen between 15 and 24 age group"* by 95.2% and *"In what conditions are STD seen more often?"* by 73.8%. Between pre- and post-test, when each question was compared one-by-one, correct answers to all questions about STD and FP issues were increased and in 15 of these questions (75%), this increase was statistically significant (Table 1).

DISCUSSION

Excessive risk taking behaviors in substance-dependent young people, impairment of judgement under substance influence, increased impulsive behaviors, erroneous thoughts and negative behaviors during sexual intercourse increase risk of CTD. Moreover, individual under substance influence does not use FP and this may lead to serious health problems such as undesired pregnancies and abortion. Impulsive behavioral temperament characteristic was comprehensively defined as an important risk factor for alcohol and substance abuse disorders (9).

In substance abuse which can be related to several physical and social problems, several transmittable diseases such as AIDS can be observed due to syringe exchange between people using intravenous substances and sexual intercourse with substance abusers with STD (10). STD is an important health problem widely seen in Turkey as well as worldwide (11). Prevalence of pre-marital sexual relationship is increasing in many places of the world. In some African countries 43% of young people under the age of 20 had sexual contact and this figure was reported 20% in Latin America. When developed countries are viewed, it was reported

that in US 68% and in France 72% of young people under the age of 20 had sexual activity (12). Factors such as social groups, media, disruption of traditional family structure, increasing immigration and urbanization accelerate sexual activity. Parallel to rapid urbanization, late marriage, increased economical status and increasing educational possibilities, prevalence of pre-marital sexual activities are increasing among young people compared to previous years albeit not as much as in developed countries (13). Excessive risk taking behaviors in young people with substance abuse, impairment of judgement under substance influence, sharing syringes, impulsive behaviors, changing sexual partners frequently, lack of using condoms in both vaginal and anal intercourse, common toothbrush use increase transmission of STD. Increasing prevalence of sexual experience compared to previous years and increasing substance dependence in Turkey which has young population show the importance of sexual training and consultancy about STD and FP young people.

In the study of Topbaş et al. (14), although it was found that 95% of young people know the name of at least one FP method, when knowledge level of FP methods were examined, it was found to be lower than it should be in both males and females. In the study of Tekbaş et al. done in 3309 young men in Ankara (15), they were found to have low knowledge scores about STD and FP. In another study, 91.2% of students stated that sexual training was not given properly during school education and they need a systematic training program about sexuality (16). When young people were asked what kind of information they need about sexual health, they wanted to become conscious about STD first. The group called "young" is especially under risk of STD due to their physical, social and economic characteristics (17). High prevalence of STD, difficulties in clinical and laboratory diagnosis, serious complications if untreated show that these diseases are highly important for human health (18). For these reasons, informing young people who are one of the most sensitive groups about STD is very important.

In the study of Uzun and Kişioğlu (19), prevalence of adequate knowledge score about STD in young people was found 35.9% and mean knowledge score was found 4.8±2.3 over 10 full score. In another study, it was found that although most of the young people know about prevention methods from STD, knowledge level about symptoms of STD was found to be quite low (1). Similarly, it is noteworthy that proportion of participants knowing symptoms of STD was found low (38.1%) in our study as well. In the study of Özcebe and Dam (1), when knowledge level of young people about family planning was evaluated, majority were found to have moderate level of knowledge. Proportion of knowing FP methods before being informed was found similar (59.5%) in our study.

Nearly all of the studies were done in healthy adults and there is no study investigating STD and FP among young people with substance dependence. Results of our study showed that knowledge level is also low in young people with substance dependence who are under higher risk when STD and uncontrolled sexual activation are considered and this may be reversed by even short-term trainings.

CONCLUSION

Results of our study showed that STD and FP should especially be a part of similarly designed studies and training programs organized for young people. Consultancy for STD and FP is an important opportunity for training people. Training makes prevention from STD and treatment more effective; moreover, young people adhere to treatment better when they understand the importance of the issue (1).

It is noteworthy that young people with substance dependence both have inadequate level of information and do not care about birth control methods. It will be beneficial to add trainings about STD and FP to rehabilitation programs in alcohol and substance dependence treatment centers. Causes of STD in substance abusers should be understood carefully and preventive and therapeutic methods should be developed, patients should be evaluated with care individually and society and young people should be informed adequately.

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Questionairre Form

KNOWLEDGE LEVEL OF SEXUALLY TRANSMITTED DISEASES AND FAMILY PLANNING OF YOUNG PEOPLE HAVING SUBSTANCE DEPENDENCE DIAGNOSIS AND EFFECT OF TRAINING ON KNOWLEDGE LEVEL

Dear young people,

Statements below were developed to evaluate your knowledge level about sexually transmitted diseases and family planning. It is important for us to examine these statements carefully and answer them correctly. Your answer will only be read by investigators and not be used for other purposes. Please tick the most proper number for you beside each item below. Please show your answer by putting X to only one box that fits you.

We would like to say that this study is very important to develop the quality of training for sexually transmitted diseases and family planning which will be organized for young people and enlighten further studies in this field.

THANK YOU for your interest and responses.

Investigator
Hacer Yalnız, midwife

NOTE: If appropriate for post-test, please write your name and family name or a nickname which you will not forget in the second administration of the questionnaire.

Name, family name: …… or Nickname:……..

1) In which conditions are sexually transmitted diseases seen more often?
   a) Substance dependents
   b) Men and women with multiple sexual partners
   c) Lower frequency of condom use
   d) None
   e) All

2) What are the symptoms of sexually transmitted diseases?
   a) Pain when urinating
   b) Colorful and bad smelling flow from penis or vagina
   c) Swelling of groins
   d) Itching at reproductive organs
   e) All

3) What happens if sexually transmitted diseases are not treated?
   a) Infertility in both men and women
   b) Risk of getting AIDS increases.
   c) Infections, pneumonia, permanent sequelae and deaths may occur.
   d) Social consequences.
   e) All

4) Which one of the following is not a sexually transmitted disease?
a) Hepatitis-B b) AIDS c) Fungus d) Herpes e) Kidney stone

5) Which one of the following is not a symptom of AIDS?
a) Recurrent fever and night sweating
b) Rapid weight loss of unknown origin
c) Increase in appetite
d) Swelling of cervical, axillary and inguinal lymph nodes
e) Continuous fatigue

6) Which one of the family planning methods also protect from sexually transmitted diseases?
a) The pill b) RIA c) Injection d) Condom e) None

Answer the questions below by choosing only one of the true/false choices.

7) Half of HIV cases are seen between 15 and 24 age group. T F

8) Seven thousand young people (10-24 age group) are infected by HIV everyday. T F

9) Infections of reproductive organs caused by micororganisms transmitted by sexual intercourse from human to human are called Sexually Transmitted Diseases. T F

10) AIDS, Hepatitis B and syphilis are also transmitted by blood except sexual intercourse. T F

11) Non-sterile syringes used for drugs are main causes of contamination. T F

12) Genital Herpes shows itself with small sores like cold sore filled with fluid in genital organs. T F

13) Hepatitis-B may cause liver cirrhosis and cancer. T F

14) The most effective prevention method from hepatitis-B is vaccination. T F

15) Hepatitis C is widely seen in drug users by contamination from syringes. T F

16) Disease symptoms are seen after approximately 10 years (between 3 and 12 years) or more in AIDS. T F

17) AIDS can be transmitted by using the same glass. T F

18) AIDS is not transmitted by blood. T F

19) Birth control pill is not an effective method of prevention. T F

20) Intrauterine devices are used by men. T F