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**HEALTH SCREENING RESULTS OF STUDENTS
ON A PRE-REGISTRATION TIME IN A TURKISH UNIVERSITY**

ABSTRACT

For Turkey; if we think that university personel, their first degree relatives and university students are taking their health utilities from school-based health centers in the universities; we can easily understand the importance of researches in these places. To reveal common health problems in the university youth and to emphasize the role of school-based health centers is our main objective in this study. On a pre-registration time in the Faculty of Education of Celal Bayar University, in Turkey, 920 students have been examined carefully and screened by a questionnaire survey asking self-reported demographic properties, illness, and addictive behaviors. Main health problems were headache in 7.3% of students, sinusitis in 5.6%, anemia in 5.1%, former hepatitis A history in 3.3%, gastritis in 3.2%, pollen allergy in 2.6% and obesity in 0.8% of patients. Overall smoking ratio found 45.9% of students. A correlation found between smoking and alcohol drinking (correlation $R=0.347$). A significant relationship found between sinusitis and heavy smoking (One-Way ANOVA, $p=0.004$).

Keywords: School-Based Health Center, Addictive Behavior, Health Utility

**BİR TÜRK ÜNİVERSİTESİ'NDE KAYIT DÖNEMİNDE ÖĞRENCİ SAĞLIK TARAMASI
SONUÇLARI**

ÖZET

Türkiye için; üniversite personelinin, birinci derece akrabalarının ve üniversite öğrencilerinin sağlık hizmetlerini üniversite sağlık merkezlerinden aldıklarını düşünürsek; bu merkezlerde yapılacak çalışmaların önemi daha iyi anlaşılmaktadır. Celal Bayar Üniversitesi Eğitim Fakültesi'ne kayıt döneminde başvuran 920 öğrenci dikkatli bir şekilde muayene edilerek, demografik özelliklerini, hastalıklarını ve bağımlılık durumlarını saptamaya yönelik hazırlanan bir anket uygulanmıştır. Öğrencilerin %7.3'ünün ana sağlık problemi baş ağrısı iken, sinusit %5.6, anemi %5.1, geçirilmiş hepatit-A öyküsü %3.3, gastrit %3.2, polen alerjisi %2.6 ve şişmanlık %0.8 oranında dikkat çeken rahatsızlıklardır. Sigara içme sıklığı %45.9 saptanmıştır. Alkol ve sigara kullanımı arasında anlamlı bir ilişki bulunmuştur (correlation $R=0.347$). Benzer şekilde, sinüzit ve ağır sigara içiciliği arasında da anlamlı ilişki saptanmıştır (One-Way ANOVA, $p=0.004$).

Anahtar Kelimeler: Üniversite Sağlık Merkezi, Bağımlılık, Sağlık Hizmeti



1. INTRODUCTION (GİRİŞ)

For Turkey; school-based health centers in the universities are the places that serve preventive health care, care of minor illnesses, injuries, stable ongoing medical conditions, social services, dental screening, reproductive and mental health counseling [1]. Although every school-based health centers have the same program design, their working styles differ from one school to another.

In our country, as it is in all over the world; school-BASED health centers in the universities are growing day by day. When we review the literature, we see that in United States (USA) the number of school-based health centers has grown from 40 in 1985 to >900 in 1996 and currently there are nearly 1400 school-based health centers nationwide [2 and 3]. So, the reason why these patients apply to these health centres is very important.

Literature regarding health services of universities is very poor worldwide [4]. In Turkey, this duty is achieved by outpatient clinics situated in campuses. Those institutes provide health opportunity to students by screening, prevention, treatment of diseases and education about health either by lectures or by visual educational commodities such as billboards and announcements. The duty of School-based health centers' duties are arranged by High Education Council (YÖK) in 1983-1984 [5].

Campus is a little town that its needs are not different from a big town. Besides education and learning activities go on, health problems should be treated. Health's integrity with education gets more successes to students and more savings to the university itself.

2. RESEARCH SIGNIFICANCE (ÇALIŞMANIN ÖNEMİ)

On a pre-registration time in the Faculty of Education of Celal Bayar University, in Turkey, 920 students have been examined carefully and screened by a questionnaire survey asking self-reported demographic properties, illness, and addictive behaviors. School-based health centers in the universities give health prevention and qualified treatment opportunities providing money and time savings.

3. MATERIAL AND METHOD (MALZEME VE YÖNTEM)

On the 2005-2006 education years' pre-registration time, in the Faculty of Education of Celal Bayar University in Turkey, students who use services provided by the school-based health centers, have been screened by a questionnaire survey besides physical examination. Total 920 students are accepted for the study. In this survey, students asked whether they have had an illness in the past 3 months, illness and addictions (cigarette smoking and alcohol drinking). Results are investigated statistically by SPSS version 11.0 software. $p < 0.05$ is defined as statistically significant.

4. RESULTS (SONUÇLAR)

Headache was noted in 7.3% of students (2 of them were diagnosed with migraine). Sinusitis in 5.6%, anemia in 5.1%, former hepatitis A history in 3.3%, gastritis in 3.2%, pollen allergy in 2.6%, obesity in 0.8% of patients, echzema in 5 students, former nephritis history in 2, hypertension, psoriasis, glaucoma, asthma, epilepsy, goiter and former tuberculosis history in 1 student respectively (Figure 1).

Overall smoking ratio found 45.9% where 55.1% were male and 44.9% female. More than one-half of students had smoked more than one pocket a day (55.2%). 16.2% smoked less than 1 pocket and 28.6% one-quart and half pocket. Only 3.5% of students denoted that they had drink.

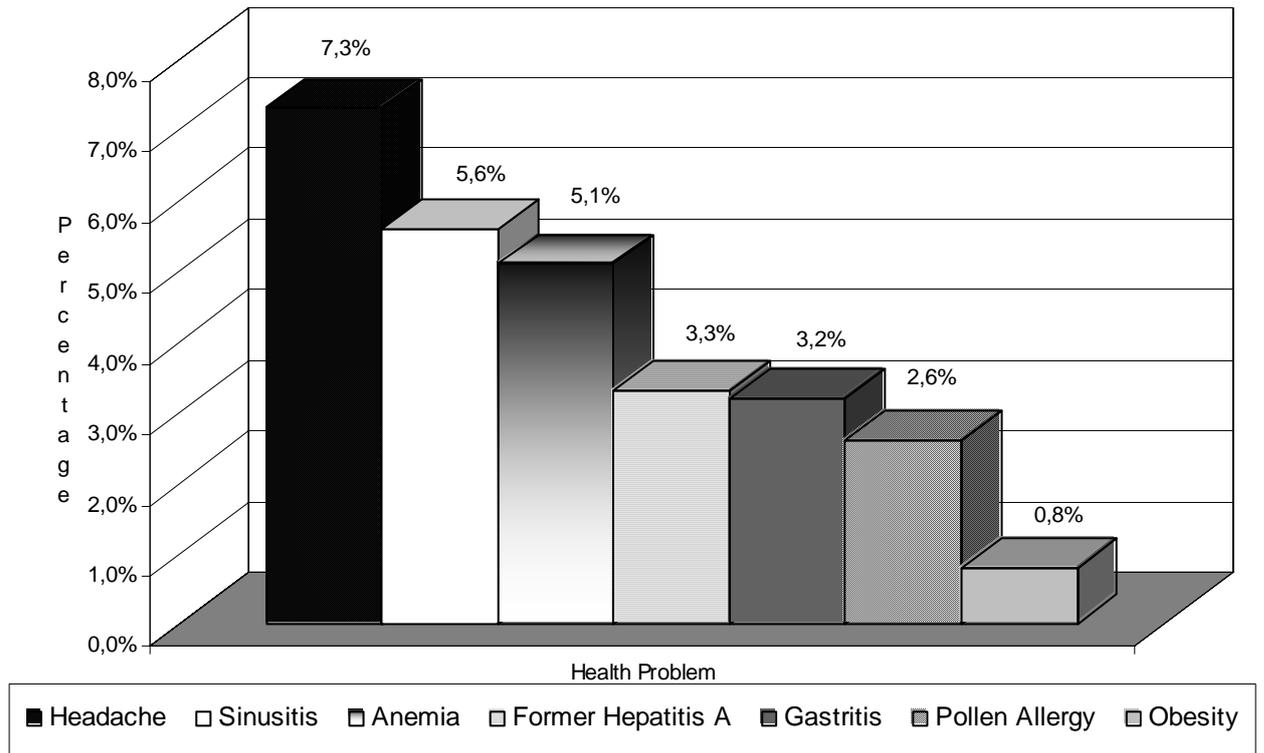


Figure 1. Main common diseases self-reported by students on pre-registration time in faculty of education, Celal Bayar University, Turkey

(Şekil 1. Celal Bayar Üniversitesi Eğitim Fakültesi öğrencilerinin önkayıt dönemindeki sağlık taraması genel sonuçları)

At the same time, significant correlation found between smoking and alcohol drinking ($p=0.000$, Somer's correlation coefficient $d=0.310$, Pearson correlation $R=0.347$).

In addition, sinusitis occurred more in smoker students than non-smokers (One-way ANOVA, Post-hoc test, $p=0.004$).

A significant relationship found between alcohol drinking and gastritis co-occurrence (One-way ANOVA, Post-hoc test, $p=0.032$).

Moreover, a poor correlation found between headache and anemia ($p=0.000$, Somer's correlation coefficient $d=0.159$, Pearson correlation $R=0.161$).

Students smoking much more than 20 cigarettes a day had more former hepatitis A history than those of smoking less than 10 cigarettes a day (One-way ANOVA, Post-hoc test, $p=0.000$). Students smoking 10 to 20 cigarettes a day suffered migraine much more than those of smoking less than 10 cigarettes a day (One-way ANOVA, Post-hoc test, $p=0.000$).

5. DISCUSSION (TARTIŞMA)

Efficacy of school-based health centers in the universities is approved by most of students. In a study, exploring the satisfaction of health service, 86% of students rated quality of care and privacy satisfactory to excellent [6]. Health screening trials of students fulfilled every year in every university. In another study in Hong Kong, similar results obtained [7].

Moreover, school-based health center diminished also emergency department visit rate. This ratio found as 41 to 57% of diminution in



a study. This is because accessible and prevention-oriented health has been provided in school-based health centers [8].

In 19 universities of a province of China, overall smoking prevalence among 1845 students was 52.6% [8]. In USA, according to Youth Risk Behavior Surveillance System (YRBSS), 29% of college students were current cigarette smokers [10]. In a study fulfilled in a Turkish University with 1474 students, this ratio was 42.5% [11]. In a Spanish study, smoking ratio found as 44% [10]. In our survey, we found it as 45.9%. Nevertheless, concurrence of alcohol and smoking was denoted in various studies [11, 13, 14 and 15].

Also in our study, alcohol drinking found correlated with smoking. In one study which compares the use of physical and mental health services for adolescents who are enrolled in managed care and have access to a school-based health center with adolescents enrolled in managed care without access to an school-based health center; it is shown that school-based health centers are particularly successful in improving access to and treatment for mental health problems and substance abuse [16].

Sinusitis found frequently among heavy smokers in our study. According to literature, sinusitis is one of the upper airway complications of smoking [17].

We found a significant relationship with migraine occurrence and heavy smoking. According to the literature, smoking is one of the predisposing factors of migraine [18].

Despite a poor correlation found between anemia and headache, some studies denote that treatment of anemia increase health-related quality of life including relief of headache too [19].

We found also a significant relationship with alcohol drinking and gastritis. In addition, effects of alcohol consumption upon gastritis and gastrointestinal system are well shown in the literature [20 and 21].

While obesity found in 0.8% of students in our study, this problem was enormous (19.5%) in the universities in USA [10].

6. CONCLUSION (SONUÇ)

Health screening of university students provides determination of health problems in youth population, prevention of diseases and more powerful treatment opportunities. By the diminution in emergency care use and visit rates, school-based health centers increase not only health care satisfaction but also institutional money and time saving. At the same time, these health centers are a guarantee for uninsured students.

NOTICE (NOT)

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