

## THE PREVALENCE OF PSYCHOACTIVE SUBSTANCE USE AMONG MIDDLE SCHOOL STUDENTS IN THE TURKISH REPUBLIC OF NORTHERN CYPRUS

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### Abstract

This study is a follow-up study of the study which was conducted in 1999. In the light of the recent results, this study's aim is to investigate prevalence of psychoactive substance use; such as cigarettes, alcohol and others, and to see the change in ratios compared to previous years. This study was conducted in March 2015, with 1487 secondary school students from state schools and private schools in TRNC. A questionnaire form consisted of questions about socio-demographic characteristics, use of cigarettes, alcohol and other psychoactive substances was administered to the students. Results showed that, the percentage of smoking at least once was 8.9%, alcohol use percentage was 36.3%, use of other psychoactive drugs (OPD) was 5.5% and the use of illegal substances was 3.9%. Research findings indicated that there is an increase in the use of different kinds of psychoactive substances.

**Keywords:** Psychoactive substance use, prevalence, risk factors, secondary school students

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## Introduction

The use of psychoactive substances is one of the most important problems in the world and needs to be overemphasized (Ögel, Tamar, Evren, Çakmak, 2000). Psychoactive substance use is considered to be a serious public health problem today, because it affects the physical, psychological and psychosocial life of a person, harms the social and economic structure of societies and starts at an early age (Qadri, 2013). Rapid industrialization, urbanization and changing forms of life have put children into the struggle of surviving and have pushed many of them into the dark world of substance abuse as a shelter (Simatwa, 2014). According to recent researches, the age of psychoactive substance use has decreased and the use of these substances among adolescents increased (Durandı et al., 2013). As a consequence, prevention efforts have focused on young people which considered to be one of the most important, leading risk groups (Botvin, 1995; Ögel, 2002). In 2007, a study of young people in Canada, confirmed that up to %50 of the adolescents seeking substance abuse treatment has a comorbid mental health disorder, such as depression or anxiety (CCSA, 2007). According to the United Nations Office of Substance and Crime Global Youth Network (UNODC) report in 1999, the prevalence of life long cannabis use among 15-16 year old students is, 4.5% to 5% in Asia, 1% to 35% in various parts of Europe, 40.9% in USA and 42.8% in Ontario, Canada (UNODC, 2001).

In recent years, the name of the Turkish Republic of Northern Cyprus has often comes up with the use of psychoactive substances, as the TRNC's location is on the way of substance trafficking (Booth, 1996). TRNC is on the route of substance traffic which known as "Golden Crescent" and starts from Afghanistan, Pakistan and Iran and goes all the way to Europe. This road, also known as the Balkan road, reaches to Cyprus as well, while making its way to south. It is known that they use this route starting from Turkey and continue via Bulgaria, Romania, Hungary, Czech and Slovakian Republics (UNODC, 2012). It is also reported that a significant portion of the heroin reaches the UK, is also taken through Turkey and Cyprus (TUBİM, 2012).

Researches on understanding the meaning of substance use in the TRNC has gained momentum in recent years, as is around the globe. Recently, researches in the TRNC have shown a tendency to increase in substance

abuse and exploitation (Çakıcı, Karaokçu and Çamlıköylü, 2006, EMU-PDRAM, 2015).

The first study on the subject in Northern Cyprus was done with 2215 high school second year students in 1996, showed that 47.2% of them tried cigarettes, 80% of them tried alcohol and 5.5% had tried at least one other psychoactive substance in their lifetime (Çakıcı et al., 1996). In 1999, the same study was repeated with 641 high school second year students who represent the same population and the results showed that 40.6% of tried smoking, 79.7% of them used alcohol and 8.3% of them used other psychoactive substances (Çakıcı et al., 1999). In a survey conducted on young people aged 15-16 years in the TRNC, among the second year high school students the prevalence of smoking was 32.2%, the frequency of alcohol use was 85.9%, the frequency of other psychoactive substance abuse was 8%, volatile substance abuse was 3.3%, hypnotic drug use was 2.4%, cannabis was 2.2%, ecstasy was 1.8%, cocaine was 0.7% and heroin was 0.6% (Çakıcı, Çakıcı and Eş, 2010). A survey conducted with 34 high schools and 2114 high school second year students in TRNC in 2011 showed that; the smoking prevalence was 6.8%, alcohol consumption was 75.6% and prevalence of other psychoactive substances usage was 10.0% (Eş, 2015). In 2015, a study with 2236 students showed that, 31% of them smoked, 69.7% of them used alcohol, 5.6% of them used DPM in their lifetime and compared to the high school study in 2011; smoking was increased while alcohol and DPM use was decreased (Çakıcı et al. 2015). According to the first research on the 5th grade students in primary school in TRNC in 2015, 10.9% of students tried smoking at least once in their lifetime, 23.5% of them used alcohol and 1.2% of them used DPM. The fact that the Turkish Republic of Northern Cyprus is a country in a small island and that psychoactive substances are easily accessible makes it possible for new substances to spread rapidly (Çakıcı, 2000).

As of now, there is only one research in the TRNC that involves middle school students aged 13-14 (Çakıcı et al., 2001). In the survey conducted with middle school third graders, the prevalence of smoking was reported as 19%, the prevalence of alcohol was 61.9% and the other psychoactive substance rate was 5.8% (Çakıcı, Çakıcı and Subaşı, 2001).

This study is the follow-up study of the work done in 1999. In the light of previous findings, the aim of this research is to investigate the prevalence and risk factors of cigarettes, alcohol and other psychoactive substances in middle schools in the Turkish Republic of Northern Cyprus and also to find

out the changes in rates compared to previous years. With the help of the data which obtained from these studies; it will be possible to develop up-to-date preventive programs and public health policies.

## **Methodology**

### ***Participants***

Study's questionnaires were evaluated by the Ministry of National Education and the Turkish Education Board, and the written approval was obtained as a result of the examination. The study was conducted in March 2015, in all state secondary schools and private colleges affiliated to the General Directorate of Secondary Education and Vocational Technical Education in the TRNC under the Ministry of National Education and Culture. In the academic year 2014-2015, there were a total of 31 secondary schools affiliated to TRNC General High School. A total of 10148 children were students at these middle schools. The plan was to include 1564 students who were detected by stratified sampling method in this study.

### ***Instruments***

The survey form used in the research was the same form used in 1996, 1999 and 2001 high school prevalence studies. The survey which was given to the students; contained questions about sociodemographic characteristics, smoking, alcohol and psychoactive substance use. The section on cigarette, alcohol and other psychoactive substances in the survey was based on the questions of the European Schools Research Project (ESPAD) Alcohol and Other Matters (Hibbel et al., 1995, Hibbel et al. 1998). Questions about sociodemographic data were prepared by the researchers. The survey was prepared to be filled by the students themselves.

### ***Data Collection***

The data collection phase of the study was carried out by a team of authors and professors and students of the Psychology Department of the Near East University. Before the survey, the interviewers were informed about the form in detail. Each class was informed by the authors about the study topic beforehand. Students were informed that this research is purely scientific work and that the answers will be confidential. Upon entering the classes, the teachers who were in the class were asked to leave and the students

were allowed to fill the form with only the interviewers present; and they were solely helping the students when necessary.

## **Analysis of Data**

The data obtained in the study were analyzed by a computer using Statistical Package for Social Science (SPSS) 21 software package program. Descriptive statistical methods were used in the study and chi-square ( $\chi^2$ ) statistical method was used in user-nonuser comparison of socio-demographic characteristics. Logistic regression analysis was used to determine the relationship between risk factors such as gender, age, place of birth, living with, education, religion, smoking and alcohol use and being drunk (independent variables) and illicit drug use (dependent variables).

## **Results**

This study was conducted in March 2015 in all public secondary schools and private colleges affiliated to the General Directorate of Secondary Education and Vocational Teaching Teaching in the TRNC under the Ministry of National Education and Culture. In the academic year 2014-2015, there were a total of 31 secondary schools in the TRNC General Secondary School. A total of 10148 children were students at these middle schools. 1564 students who were detected by stratified sampling method were included in this study. 737 of the students (49.6%) were female and 750 (50.4%) of them were male students. The average age of the students were  $13.31 \pm 1.12$ . 883 (60%) of the students were citizens of the TRNC, 420 (28.6%) of them were from Turkey and 168 (11.4%) of them were citizens of other countries. 490 (33%) of them were grade 6 students, 467 (31.4%) of them were 7th grade students and 526 (35.4%) of them were 8th grade students.

This study showed that, 5.7% of the students tried smoking at least once in their life time. 6.4% of the females and 4.9% of the males smoked at least once. There was no statistically significant difference in the rates of smoking between male and female students. The rate of students smoking at least once in the last year, was 2.5%. 2.9% of the females and 2.1% of the males have smoked at least once in the last year. The rate of students smoking at least once in the last 30 days, was 1.1%. 1.4% of the females and 0.7% of the males have smoked at least once in the last 30 days. 63.2% of the students smoke to have fun. 59.2% of the girls and 67% of the men

smoke to have fun. No statistically significant difference was found when male and female students were compared by the reasons of smoking.

The rate of students using alcohol at least once in their lives was 16.2%. 16.2% of the females and 16.1% of the males tried alcohol at least once in their lifetime. The rate of students using alcohol at least once in the last year was 14.5%. 15,6% of the females and 13,5% of the males have used alcohol at least once in the last year. The frequency of students using alcohol at least once in the last 30 days was 4.4%. 5.9% of the females and 6.9% of the males drank alcoholic beverages at least once in the last 30 days. 98% of the students have never been drunk during their lifetime. 6,1% of the females and 7,2% of the males become drunk at least 1-2 times. 0.1% of the females and 0.8% of the males become drunk 40 or more times. 0,5% of the females and 0.9% of the males used alcohol twice in the last 30 days. 39.6% of the females and 34.7% of the males use alcoholic beverages to have fun.

This study shows that, lifetime prevalence of using psychoactive drugs at least once was (OPD) 5.5% and illegal substances was 3.9%. It also shows that lifetime prevalence of ecstasy use was 0.9%, cannabis was 0.9% and synthetic cannabinoid was 0.8%. Most commonly used drugs among OPD were; benzodiazepine (2.1%), volatile substances (1.6%) and pills with alcohol (2.2%). Prevalence of using cocaine, heroin, amphetamine, LSD, ecstasy and anabolic steroid were between 0.5 and 0.9%. Most common reason of using OPD were entertainment, curiosity and irritability. Studies show that the first use of OPD decreased to the age of 11 and below. Smoking, alcohol use and becoming drunk at young age are the risk factors of becoming illegal drug users.

Table 1 provides a comparison of some sociodemographic characteristics of students who use and do not use an illegal substances.

**Table 1.** Comparison of some sociodemographic characteristics of students who use and do not use illegal substances

<b>Groups</b>	<b>Non-User</b>		<b>User</b>		<b>x<sup>2</sup></b>	<b>p</b>
	<b>n</b>	<b>%</b>	<b>n</b>	<b>%</b>		
<b>Sex</b>						
Female	628	96,8	21,9	3,2	1,357	0,240
Male	618	95,5	29	4,5		
<b>Place of birth</b>						
Turkey	909	96,5	33	3,5		
Cyprus	304	95,5	16	5,0		
United Kingdom	18	94,7	1	5,3		
Other	24	100,0	0	0		
<b>Monthly income of the family</b>						
1000 TL and less	48	94,1	3	5,9	2,523	0,258
1000-2000	413	94,9	22	5,1		
2000-4000	632	07,1	19	2,9		
4000 and above	151	96,8	5	3,2		
<b>Loss of year</b>						
Yes	1058	96,6	37	3,4	2,709	0,100
No	197	94,3	12	5,7		
<b>Mother's level of education</b>						
Illiterate	64	92,2	5	7,2	6,667	0,155
Primary school	319	97,3	9	2,7		
Secondary school	201	98,0	4	2,0		
High school	443	95,3	22	4,7		
University	214	95,1	11	4,9		
<b>Father's level of education</b>						
Illiterate	39	92,9	3	7,2	2,302	0,630
Primary school	280	97,2	9	2,7		
Secondary school	251	95,8	4	2,0		
High school	438	95,8	22	4,7		
University	227	95,1	11	4,9		
<b>Smoking</b>						
Once a week or less	1215	96,7	42	3,3	64,850	0,000
More than once a day	7	53,8	6	46,2		
<b>Alcohol</b>						
Once a week or less	1139		42	3,6	41,258	0,000
More than once a day	96,4		8	27,6		
	21					
	72,4					
<b>Becoming Drunk</b>						
Three times and less	1161	96,5	42	3,5	13,206	0,000
More than three times	45	86,5	7	13,5		

When Table 1 is examined, it is seen that the students who using an illegal substance or not, do not differ according to gender, place of birth, monthly income of the family, year loss, mother's education level and father's education level. Regarding cigarettes, alcohol use and drunkenness, it was found that those who smoked 1 or less a day, those who drink 1 or less alcohol a week, and those who become drunk less than 3 times a week were more likely to use illegal substances.

Table 2 shows the results of logistic regression analysis of the risk factors that are effective in the use of illegal DPM in middle school students.

**Table 2.** Investigation of the risk factors that are effective in the use of illegal DPM in middle school students by logistic regression analysis

Sociodemographic variables	Pre-Test	95% Confidence Interval
Sex (female/male)	1,403	(0,732-2,488)
Passing the class (failed / passed)	1,742	(0,893-3,399)
Place of birth (Turkey/Cyprus)	1,450	(0,787-2,671)
Age (14 and above/13-12-11 years old)	1,501	(0,835-2,697)
Mothers' education (high school and above/below)	1,927	(0,791-4,694)
Fathers' education (high school and above/below)	1,851	(0,601-5,703)
Monthly income of the family (2000 and above/below)	1,588	(0,511-4,936)
Smoking (more than once a day/less)	24,796	(7,986-76,989)**
Drinking alcohol (more than once a week/less)	10,331	(4,326-24,674)**
Being drunk (more than once a week/less)	4,300	(1,831-10,098)**

\* $p < 0,05$ , \*\* $p < 0,01$

When Table 2 is examined; it is seen that the monthly income of the family, father's level of education, mother's level of education, age, place of birth, grade and gender variables are not a risk factor of illegal DPM using, however, smoking, alcohol use and becoming drunk 3 times a week represents risk factors in the use of DPM.

## Discussion

This study reveals that substance use among middle school youth is an important problem in the TRNC. This study was carried out to determine the prevalence of substance use among the secondary school youth in TRNC (Çakıcı et al., 2001), and as it includes all secondary schools, refers to the same age group and consists of the same questions; serves as a 15 year old follow-up survey and has enabled us to monitor the changes of the rates in substance preferences in the TRNC.

The survey shows that, 8.7% of students tried smoking at least once in their life. In 2001, this ratio was found to be 19.7% among third-year students (Çakıcı et al., 2001) and the rate among middle school students was 12.4%. Similarly, in another study conducted in Turkey, 29.3% of students reported using cigarettes at least once in their life (Özcebe, 2008). In the ESPAD project which includes 26 countries (Hibell et al., 1997) in 1995, 31 countries (Hibell et al., 2000) in 1999 and 36 countries (Hibell et al., 2012), the rate of smoking among students in the TRNC as well as Turkey, shown to be lower compared to the results of studies done in the same age group with similar method in ESPAD countries.

In the study, 36.3% of alcohol use was observed among young people at least once in their life. The prevalence of the use of alcohol was found to be 61.9% (Çakıcı et al., 2001) In a previous survey conducted among the middle school students and in this study, it was determined that the alcohol consumption rate use was 49.3% in the same age group. However, alcohol use was found to be at higher levels when compared to previous studies. It seems that; young people in Croatia, Estonia, Italy, Portugal, Slovakia, Slovenia, Sweden, Ukraine and Turkey are using alcohol in their homes as they are in the TRNC. In Denmark, the Faroe Islands, Finland, Iceland, Lithuania and Norway, the most used places are friends' houses; in South Cyprus and Czech Republic mostly used places are discos, in Ireland it is bars and in Bulgaria they use it in pubs and far from family control Çakıcı et al., 2015, Simatwa, 2014).

In the secondary school study in the TRNC, we learned that the rate of middle school students using DPM at least once in their life was 5.8% in 2001 and in 2015 it was 5.5%, a similar rate among young people. DPM ratio was found to be 4.9% among all middle school students. Nevertheless, it is observed that illegal drug use rate has increased to 3.9%. According to NIDA's research report in 2011, half of the adolescents were found to use illegal substances at least once (Murphey, Barry, Vaughn, Guzman

and Terzian, 2013) despite the challenges on collecting data on illegal substance use in adolescents.

Bonsai has become the most popular ingredient in recent years. The use of bonsai is spreading very rapidly in the TRNC in recent years, since it is cheap. In recent years, it has been seen that the use of synthetic cannabinoids is spreading and replacing the cannabis and ecstasy (Doğan and Demirci, 2014). However, 0,9% of ecstasy and 0,9% of cannabis use in this study revealed that ecstasy and cannabis use was less than synthetic cannabinoid usage compared to previous studies. It was determined that the overall rate of synthetic cannabinoid use was 0,8% in this study, and the rate of synthetic cannabinoid use was 0,6% among third grade middle school students.

There is an upward trend in cannabis use among young people in schools for years. On the other hand, it was observed that the rate of cannabis use in this study was 0,9% and 0,8% among third grade middle school students. It has been found that cannabis use rate was 2.7% in high schools and 2.9% in overall community (Çakıcı et al., 2015, Çakıcı et al., 2003). Contrary to the results of previous surveys, all previous reports, school researches and studies on addicts show that most used illegal substance in the TRNC is cannabis (Çakıcı, 1999, Çakıcı and Çakıcı, 2000a, 2000b, Çakıcı et al., 2003, Çakıcı et al. 2000, Çakıcı et al., 2006, Çakıcı et al., 2015).

In this study, it was found that the rate of volatile substance use among middle school students was 1.6% and 1.8% among third grade middle school students. Although volatile substance use tends to decline over the years, it is still the most common substance after cigarettes and alcohol. The study also shows that volatile substance use, follows after pill use (diazem etc.) for treatment and the use of other pills. The fact that volatile substances are easier to find and cheaper than other substances may be helping these substances to spread (Pandina and Hendren, 1999). It is seen that the most commonly used substance after cigarettes and alcohol are volatile substances in the studies carried out in Turkey (Yazman, 1995; Ögel et al., 2001, Ögel et al., 2005).

The use of sedative-hypnotic tablets among young people has shown increase in 1996 to 1999 (Çakıcı ve Çakıcı, 2000a), however it's been stable since 2004 (Çakıcı and Çakıcı, 2000b). According to NIDA's research report in 2011, it was found that 22% of the 12th-year-olds tried prescription drugs at least once in their life without medical supervision (Murphey et al., 2013). And in this study, the rate of pill use (diazem, etc.) for treatment was found to be 2.1%, the use of other pills was 2.2%, and the use of some

pills with alcohol was 1.2%. In addition, among the third grade middle school students; the use of treatment pill (diazem etc.) was determined as 2.1%, the use of other pills was 2.5% and the use of some pills with alcohol was 1.8%. It has been determined that the rate of pill use for treatment (diazem etc.) and the use of other pills has increased compared to previous years according to previous findings. It was thought that the use of these pills would be reduced by the introduction of the doctor's prescription to these sedative-hypnotic pills which can be controlled by the Ministry of Health of the TRNC and sold with three copies of green prescriptions which was free to be provided from pharmacies without the need for a doctor's prescription until 2000 (Çakıcı et al., 2015; Karaokçu, 2000; Çakıcı, 1999). According to this study, there is still an increase in the use of therapeutic tablets (diazem, etc.) and other tablets, therefore it suggests that there may be a corresponding increase, since these tablets are present in the students' homes, and therefore easy to access.

The prevalence of lifetime use of cocaine, heroin, amphetamine, LSD, ecstasy and anabolic steroid was found as 0.5-0.9% in the study. When the prevalence of the use of these substances among middle school third grade students was examined, it shows that the rate of cocaine was 0.4%, heroin was 0.4%, amphetamine was 1.0%, LSD was 0.8%, ecstasy was 1.2% and anabolic steroids was 1.0%. These findings are higher than the rates of 0.2-0.6% in 1996 (Çakıcı and Çakıcı, 2000a) and 0.3-0.7% in 1999 (Çakıcı and Çakıcı, 2000b). A threefold increase in the use of ecstasy from 1996 to 2004, the substance used in the highest proportion among these substances, is noticeable. In 2011, the study showed a decrease in the use of ecstasy, but this study found that the rate of use was 0,9%. Until 2004, the use of ecstasy was increased due to the absence of ecstasy in the TRNC laws as an illegal substance, but after it is outlawed as an illegal substance in 2004, there was a tendency to decrease in the ecstasy use from 2004 to 2011. However, as has been the case in recent years, there has been a rapid increase in the use of ecstasy and similar stimulants among young people in the TRNC (Yazman, 1995, Johnston et al., 2000, Yacoubian et al., 2002, UNODC, 2004). According to the research report in 2011, it has been determined that the most frequently used substances in the last 30 days by 8 to 12 graders; are cannabis, amphetamines, volatiles and hallucinogens (ecstasy and LSD) (Murphey et al., 2013).

In this study, the rate of substance testing of male students was higher than that of female students. Similar trends have been observed in all school surveys (Çakıcı and Çakıcı, 2000a; 2000b). Turkey (Ögel et al., 2005), European countries (Hibell et al., 1997) and USA (Johnston, 2000) have also been found to have a higher use rate among males. In this study, it was

observed that the use of sedative-hypnotic pills rate was found to be about the same rate in male and female students, unlike recent years. In 1996, 1999 and 2004 high-school studies also found that the use of sedative-hypnotic pills was higher among females than among males (Çakıcı and Çakıcı, 2000a; 2000b). In the 1999 ESPAD study, male students were more likely to use in South Cyprus, while females in Czech Republic, Poland, France, Lithuania, Hungary, Portugal, Romania and Bulgaria had higher rates of use (Hibell et al., 2000). Ögel (2005) reports that sedative-hypnotic pills are drugs that can be found at home and that these drugs can also be easily accessed by girls. It is known that volatile substances and sedative-hypnotic drugs are used more commonly among students since they are easy to access (Çakıcı et al., 2001).

The results of the study indicate that the rate of psychoactive substance use among young people in TRNC is lower than in European countries, however there is an increase in illegal substance use. It also shows that the tendency of using many psychoactive substances has increased. The fact that alcohol rates are especially high in TRNC teenagers, suggests that alcohol use should be focused on in the preventive programs. The increase in non-therapeutic use of prescription pills reveals the need to raise awareness of the families of young people. Also for the DPM; counter measures should be taken against the use of volatile substances, cannabis, synthetic cannabinoids and ecstasy. Repeated prevalence studies within the middle schools in the TRNC, can able us to monitor the changes in the substance use rates in the TRNC and show us which topics should be emphasized in the preventive programs by determining the preferred substances.

This study covers all middle school classes. However, a group of similar aged young people who do not attend school are out of coverage. In order to be able to demonstrate the psychoactive substance use profile of the TRNC youth; studies that include young people with a wider age range and who are not continuing their education, should be performed.

## Bibliography

- Botvin, G. (1995). *Principles Of Prevention*. RH Coombs, D Ziedonis (Eds), Handbook On Drug Abuse Prevention, Allyn& Bacon, Boston, p.19-43.
- Booth, M. (1996). *Haşhaştan Eroine: Uyuşturucunun 6000 yıllık Öyküsü*. Arıkan Ö. (Çeviren). Sabah Kitapçılık ve San. Ve Tic. A. Ş. İstanbul.
- Canadian Centre on Substance Abuse. *Substance abuse in Canada: youth in focus*. Ottawa: The Centre; 2007.

- Connolly, G. M., Casswell, S., Zhang, J. F., Silva, P. A. (1994). Alcohol in the mass media and drinking by adolescents: a longitudinal study. *Addiction*, 89(10), 1255-1263.
- Coşar, B. (1996). Alkol Bağımlılığında psikososyal faktörler. *Psikiyatri Psikofarmakoloji Psikoloji Dergisi*, 4(2), 13-18.
- Çakıcı, M. (1999). Madde kullanıcılarının özellikleri: Türkiye’de çok merkezli bir araştırma (Birinci Aşama). *3P Dergisi*, 7 (Ek.1), 34-36.
- Çakıcı, M., Çakıcı, E. (2000a). *K.K.T.C. Lise Gençliğinde Uyuşturucu Madde Kullanımının Yaygınlığı 1996*. Lefkoşa, KKTC Başbakanlık Devlet Basımevi.
- Çakıcı, M., Çakıcı, E. (2000b). *K.K.T.C.Lise Gençliğinde Uyuşturucu Madde Kullanımının Yaygınlığı 1999*. Lefkoşa, KKTC Başbakanlık Devlet Basımevi.
- Çakıcı, M. (2000). *KKTC Araştırmaları ile Uyuşturucu Madde Kullanımı*. Lefkoşa: KKTC Devlet Basımevi.
- Çakıcı, M., Çakıcı, E., Tamar, D., Ögel K, Özkürkçügil, A. (2000). KKTC madde kullanıcılarının özellikleri ve Türkiye’deki kullanıcılar ile karşılaştırılması. *Kıbrıs Türk Tıp Dergisi*, 1(1): 7-13.
- Çakıcı, M., Çakıcı, E., Subaşı, B. (2001). *KKTC Ortaokul Öğrencileri Arasında Madde Kullanım Yaygınlığı*. 8. Ulusal Sosyal Psikiyatri Kongresi Bilimsel Çalışmaları (28-31 Mayıs 2001, Lefkoşa), 176-182, Lefkoşa
- Çakıcı, M., Çakıcı, E., Bekiroğulları, Z., Aksoy, A., Tatlısu, Ö. (2003). *Kuzey Kıbrıs’ta Madde Kullanımının Yaygınlığı*. Lefkoşa, Kıbrıs Türk Ruh Sağlığı Derneği Yayınları.
- Çakıcı, M., Karaokçu, H., Çamlıköylü, F. (2006). *KKTC’de Uyuşturucu Madde Kullanımı Raporu*. Uyuşturucu ile Mücadele ve Önleme Komisyonu (UMÖK). KKTC Başbakanlık Devlet Basımevi, Lefkoşa.
- Çakıcı, M., Çakıcı, E., Eş, A. (2010). Kuzey Kıbrıs Türk Cumhuriyeti Lise Öğrencilerinde Psikoaktif Maddeleri Kullanma Yaygınlığı. *AnatolianJournal of Psychiatry*, 11, 206-212.
- Çakıcı M, Çakıcı E, Ergün, D., Onur, Ç. (2015). *Kuzey Kıbrıs Türk Cumhuriyeti’nde Lise Öğrencileri Arasında Psikoaktif Madde Kullanımının Yaygınlığı Raporu, 2015*. Yayınlanmamış Rapor.
- Çakıcı, M., Çakıcı, E., Karaaziz M, Subaşı B, Bayramoğlu R, Taşcıoğlu G. (2015). *Kuzey Kıbrıs Türk Cumhuriyeti’nde Psikoaktif Madde Kullanımının Yaygınlığı Raporu, 2015*. KKTC Başbakanlık Uyuşturucu ile Mücadele Komisyonu, Lefkoşa Psikiyatri Merkezi (LEPİM). KKTC Başbakanlık Devlet Basımevi: Lefkoşa.
- Çakıcı, M., Çakıcı, E., Keskindağ, B., Karaaziz, M. (2015). *Kuzey Kıbrıs Türk Cumhuriyeti’nde Psikoaktif Maddelerin Kullanım Yaygınlıkları ve Risk Etkenleri Raporu, 2015*. Yayınlanmamış Rapor.
- Doğu Akdeniz Üniversitesi- Psikolojik Danışmanlık ve Araştırma Merkezi (2015). Kuzey Kıbrıs’ta Uyuşturucu Madde Çalışmaları Raporu. Retrieved from: <http://pdram.emu.edu.tr/wp-content/uploads/2012/11/Rapor.pdf> (20.05.2015)

- Durand, V., Hennessey, J., Wells, D. S., Crothers, L. M., Kolbert, J. B., Lipinski, J. and Hughes, T. L. (2013). Bullying and Substance Use in Children and Adolescents. *Addiction Research & Therapy*, 4, 2-6.
- Eş, A. (2015). Lise Öğrencilerinde Sigara, Alkol ve Psikoaktif Madde Kullanımı ile Stresle Baş etme Yöntem ve Kontrol Odağı İlişkisi. Yayınlanmamış doktora tezi. Yakın Doğu Üniversitesi, Lefkoşa.
- Hibell B., Anderson B., Bjarnason T., Kokkevi A., Morgan M., Narusk A. *The 1995 ESPAD (European School Survey Project on Alcohol and Others Drugs) Report: Alcohol and Other Drugs Use Among Students in 26 European Countries*. The Swedish Council for Information on Alcohol and Other Drugs (CAN), Council of Europe, Co-operation Group to Combat Drug Abuse and Illicit Trafficking in Drugs (Pompidou Group), Modin Tryck AB, Stockholm September 1997.
- Hibell B., Andersson B., Ahlström S., Balakireva O., Bjarnason T., Kokkevi A., Morgan M. *The 1999 ESPAD (European School Survey Project on Alcohol and Others Drugs) Report: Alcohol and Other Drugs Use Among Students in 30 European Countries*. The Swedish Council for Information on Alcohol and Other Drugs (CAN), Council of Europe, Co-operation Group to Combat Drug Abuse and Illicit Trafficking in Drugs (Pompidou Group); Modin Tryck AB, Stockholm December 2000.
- Hibell B., Guttormsson U., Ahlström S., Balakireva O., Bjarnason T., Kokkevi A., Kraus L. *The 2011 ESPAD (European School Survey Project on Alcohol and Others Drugs) Reports: Substance Use Among Students in 36 European Countries*. The Swedish Council for Information on Alcohol and Other Drugs (CAN), The European Monitoring Centre for Drugs and Drug Addiction (EMCDDA), Council of Europe, Co-operation Group to Combat Drug Abuse and Illicit Trafficking in Drugs (Pompidou Group); Modin Tryck AB, Stockholm May 2012.
- Johnston L. D., O'Malley P. M., Bachman J. G. (2000). *Monitoring the future: National survey results on drug use 1975-1999*. National Institute on Drug Abuse. NIH Publication No:00-4803.
- Karaoğlu, H. (2000). *Kuzey Kıbrıs'ta Uyuşturucunun Ölüm Büyüsü*. Lefkoşa, Işık Kitabevi Yayınları.
- Murphey, D. Barry, M., Vaughn, B., Guzman, L., Terzian, M. (2013). Adolescent Health Highlights: Use Of Illicit Drugs. *Child Trends*, 11.
- Ögel, K., Tamer, D., Evren, C., Çakmak, D. (2001). *Gençlerde madde kullanım yaygınlığı ve özelliklerinin değerlendirilmesi: 2001 araştırma sonuçları*. Yeniden Sağlık ve Eğitim Derneği, yayın no:2, İstanbul.
- Ögel, K. (2002). *Madde Bağımlılığını Önleme: Anne, Baba ve Öğretmenler İçin Bir Kılavuz*. IQ Kültür Sanat Yayıncılık, İstanbul, p.114.
- Ögel, K., Taner, S., Eke, C. Y., Erol, B. (2004). Madde bağımlılığını önlemede öğretmen ve ebeveyn eğitimlerinin etkinliğinin değerlendirilmesi. *Anadolu Psikiyatri Dergisi*, 5(4), 213-221.
- Ögel, K., Taner, S., Eke, C., Erol, B. (2005). *İstanbul Onuncu Sınıf Öğrencileri Arasında Tütün, Alkol ve Madde Kullanımının Yaygınlığı Raporu*. Yeniden Yayın no:15, İstanbul.

- Pandina, R., Hendren, R. (1999). *Other drugs of abuse: inhalants, designer drugs, and steroids. Addictions: A Comprehensive Guidebook*, McCrady BS, Epstein EE (Ed), New York. Oxford University Press, p.171-184.
- Qadri, S., Goel, R.K.D., Ahluwalia, S., Pathak, R., Bashir, H. (2013). Prevalence And Pattern Of Substance Abuse Among School Child In Northern India: A Rapid Assessment Study. *International Journal Of Medical Science And Public Health*, 2(2).
- Rahman, M.M., Ahmad, S.A., Karim, M.J., Chia, H.A. (2011). Determinants of smoking behaviour among secondary school students in Bangladesh. *Journal Of Community Health*. 36(5)
- Simatwa, E.M.W., Odhong, S.O., Juma, S.L.A., Choka, G.M. (2014). Substance Abuse Among Public Secondary School Students: Prevalence, Strategies And Challenges For Public Secondary School Managers In Kenya: A Case Study Of Kisumu East Sub County. *Educational Research*. 5(8): 315-330.
- Stacy A. W., Zogg J. B., Unger J. B., Dent C. W. (2004). Exposure to televised alcohol ads and subsequent adolescent alcohol use. *Am J Health Behav*, 28(Supply.6), 498-509.
- TUBIM. National Drug Report 2012, Ankara, Department of Anti-Smuggling and Organized Crime Publications, 2012.
- United Nations Office on Drugs and Crime Global Youth Network. World situation with regard to drug abuse, with particular reference to children and youth. Vienna: The Network; 2001.
- United Nations Office on Drugs and Crime (UNODC), World Drug Report 2004. United Nation publication, Sales No. E.04.XI.16.
- UNODC. Birleşmiş Milletler Uyuşturucu ve Suç Ofisi (UNODC), *Dünya Uyuşturucu Raporu*. Birleşmiş Milletler Yayınları, 2012, Sales No. E.12.XI.1., s. 1.
- Yacoubian, G. S., Arria, A. M., Fost E., Wish, E. D. (2002). Estimating the Prevalence of Ecstasy Use Among Juvenile Offenders. *Journal of Psychoactive Drugs*, 34, 209-213.
- Yazman, Ü. (1995). Lise Gençliğinin Psikoaktif Maddelere Bakışı ve Kullanım Oranlarının Türkiye – İstanbul Örneği ile İncelenmesi. Uzmanlık Tezi, İstanbul.