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Some sociodemographic factors on smoking cessation rate in Konak smoking cessation outpatient clinic

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ABSTRACT

The aim of this study was to describe the sociodemographic characteristics and evaluate effects of attitudes and knowledge about smoking on the effectiveness of smoking cessation in patients attending to Konak Smoking Cessation Outpatient Clinic (SCOC). In this retrospective study, files of patients that admitted to İzmir Konak SCOC between 2009 and 2010 were investigated. Patient files consisted of; i) the "Patient Evaluation Form" ii) the Fagerstrom Test, iii) the Hospital Anxiety and Depression Scale (HADS). A patient who didn't smoke for a year was accepted as cessation and other cases were accepted as recurrences. Chi-square, Mann-Whitney, and Student's t-test were used for statistical analyses. 1.508 patient files were examined. 50.0% of the patients were female, mean age was 42.37±12.17, dependency score was high/very high in 52.9% of the cases. The "cessation" rate was 38.7% for the whole group. Cessation rate of the 15-19 age group was lower compared to other age groups ($p<0.05$). Cessation rate was lower among singles compared to married or divorced/widows ($p<0.05$). The cessation rate of students was lower compared to working and non-working patients ($p<0.05$). The average age of starting smoking was 16.87±4.86. The risk of recurrence was higher in the presence of other people smoking at home or at work (RR: 1.4, $p<0.001$). Increase in the Fagerstrom dependency anxiety and depression scores were observed in the case of recurrence ($p<0.001$). The cessation rates to quit smoking were lower, the younger the age the patient started smoking ($p<0.05$). Cessation rates of patients attending to Konak SCOC after one year follow ups are high. Interventions to increase the application rates of young people and the promotion of integrated health activities for adolescents will increase the efforts toward the tobacco epidemic.

1. Introduction

Tobacco use is a risk factor for the six leading causes of death in the world; coronary heart diseases (CHD), cerebral vascular diseases, lower respiratory tract infections, chronic obstructive pulmonary disease, tuberculosis, and tracheal-bronchial-lung cancer. Worldwide, tobacco use is responsible for 12% of all deaths in people 20 years and older (World Health Organization (WHO), 2008). In 2014, around 5 million adults died due to tobacco use. This means one death in every six seconds. Among all deaths, the two WHO regions with the highest tobacco usage rates are America (16%) and Europe (16%). In all WHO regions, deaths due to tobacco usage are higher in man according to women (WHO, 2012).

Tobacco use is quite common in Turkey. In Turkey,

approximately two out of five men and one out of five women are smokers (Bilir, 2009). According to the "Turkey Chronic Respiratory Diseases (Asthma-COPD) Prevention and Control Program Action Plan (2009-2013)" one of the strategies under the title "To prevent the development of chronic airway disease, reduce morbidity and mortality" is to reduce tobacco use (Ministry of Health of Turkey, 2009). In the Strategic Plan (2013-2017) of the Ministry of Health of the Turkish Government, the current situation and tobacco control targets are stated as follows: Rate of tobacco use among adults (15 years and older) was 37.3% for male population in 2012. The target is to reduce tobacco use of men to 30% by 2017 and to 22% by 2023. The same rate for women was 10%.7 in 2011. The target is to reduce tobacco use among women to 10% by 2017 and to 8% by 2023 (Ministry of Health of Turkey, 2012).

All the activities of this legislation and practices are reflected in the survey results. When results of the Global Adult Tobacco Survey held in 2008 conducted by the Turkey Statistical Institute (TUIK) are compared to results of 2006, a decrease from 33.4% to 31.3% is observed in general population. About 7% of smokers quit smoking and tendency to quit tobacco use is more common among young people (TUIK, 2008).

The most important achievement in the fight against smoking is to prevent people start smoking (primary prevention). However, when current smoking rates are put into consideration, cessation policies also come to the fore. Therefore, Smoking Cessation Outpatient Clinics (SCOC) were established in Turkey in order to support the cessation of the smoking habit. In 2012 the number of these clinics was 413 and served to 498.294 people between January 2011 and March 2012 (Ministry of Health of Turkey 2012b).

In our study, the aim was to describe the sociodemographic characteristics and evaluate effects of attitudes and knowledge about smoking on the effectiveness of smoking cessation in patients attending to Konak SCOC.

2. Matherial and methods

2.1. Design of the study

In this retrospective study files of patients that admitted to İzmir Konak SCOC between 2009 and 2010 were reviewed. Treatments and follow-ups were conducted by three certified doctors. In this study, sampling was not used. All of the 1.508 patient files were examined.

2.2. Definition of study area

Konak SCOC is a health unit consisting of one education room, two examination rooms and patient waiting area. Patients attending the SCOC first are invited to join a group meeting, consisting of groups between 10-20 people and are given information about the hazards of smoking, and the system of the SCOC. Patients who decide to "quit" are given individual appointments. Follow ups are planned according to the patient. Patients who don't visit the clinic regularly are called by phone after three months, six months and one year and are asked about their status. Cessation treatment is given by doctors, certified for "tobacco treatment and training". This certificate is approved by the Ministry of Health. Medical and behavioral therapy are used for all patients. Patients are expected to continue the follow ups for at least one year. CO measurements were conducted at the beginning of the treatment and once or twice at some follow ups, in order to show the patients their "success" and ensure motivation.

2.3. Tools

Patient files consisted of; i) the "Patient Evaluation Form" containing questions about demographic characteristics, smoking attitudes and behaviors, ii) the Fagerstrom Test, used for detecting the level of dependency, and iii) the Hospital Anxiety and Depression Scale (HADS). Fagerstrom Test for Nicotine Dependence has been developed to determine the level of physical dependence on nicotine. This test consists of six simple questions. Each question has 2-4 answers (yes/no, multiple choice). Each answer is scored between 0 and 3, and the total score of the test varies from 0 to 10. While 0-3 points show a low degree of addiction, 4-6 points stand for intermediate, and 7-10 points stand for a high degree of nicotine addiction (Fagerstrom et al., 1990).

The HADS has been developed by Zigmond and Snaith in 1983 to determine the risk and measure the level and change of anxiety and depression in patients. The Turkish validity and reliability study for this scale was conducted by Aydemir et al. (1997). This test does not intend to diagnose patients physically ill or patients attending to primary health care units, but to determine risk groups for anxiety and depression as soon as possible. The test consists of 14 questions. While seven questions assess anxiety, the other seven questions aim to assess depression. Questions about anxiety are given with even numbers and questions about depression are given odd numbers. Responses are collected using a Likert scale, scored between 0-3. Scoring of each item in this scale is different. Questions 1, 3, 5, 6, 8, 10, 11 and 13 gradually decrease in power and scoring is from 3 towards 0 (3, 2, 1, 0). On the other hand items 2, 4, 7, 9, 12 and 14 are scored from 0 towards 3. For the anxiety subscale, scores of questions numbered 1, 3, 5, 7, 9, 11 and 13, and for the depression subscale 2, 4, 6, 10, 12 and are collected. For both subscales, the range of scores varies between 0 (lowest) through 21 (highest). The cut-off point of the Turkish version of HADS is determined as 10 for the anxiety subscale and as 7 for depression (Dönmez et al., 2012).

2.4. Definitions

Having not smoked for a year was considered as "cessation" and continuing/re-starting smoking as "recurrence". Information about the "cessation or recurrence status" of patients was obtained by telephone follow ups or by declaration of patients visiting the SCOC after completing one year follow ups. Necessary permits to carry out the study were taken from the Public Health Directorate of Izmir.

2.5. Statistical analyses

SPSS 15.0 was used for statistical analyses. Descriptive data is given by number, percentage and mean values (with standard deviation and minimum-maximum) and median values (with interquartile range [IQR]). Chi-square, Mann-Whitney, and Student's t-test were used for bilateral comparisons.

2.6. Ethics

Approval for the study was granted by Izmir Public Health Directorate and Konak Community Health Center.

2.7. Limitations

In this study only the files of Konak SCOC were used. Patient files were manually filled by the doctors and no detailed electronic records were available. Therefore it was not possible to group patients according to their medical treatment time and type of medication.

Another limitation might be the group education given at the beginning of the treatment. We must accept that patients deciding to take an appointment after this pre-education were probably more motivated and more likely to "quit".

3. Results

In this study 1.508 patient files were examined. %50.0 (n=754) of the patients were female, %67.7 (n=1.02) were married, mean age was 42.37±12.17 (min=15, max=80) and median age was 42 (IQR25=33, IQR75: 51). There was no statistically significant difference between mean age of men (42.93±13.14) and women (41.80±11.09) (t=1.808; p=0.07).

High school and/or higher educational attainment rate was 61.0% (n=920) and the rate of patients actively working in a job was 55.8% (n=841). 3.3% of these applicants (n=50) were students.

Some socio-demographic characteristics of the study group are presented in Table 1.

The dependence score was high/very high in 52.9% (n=797) cases, medium in 14% (n=221) and low / very low in 33.2% (n=500) of the cases.

The "cessation" rate was 38.7% (n=584) for the whole group. There was no significant difference between the cessation rates of men (%40.7, n=307) and women (%36.7, n=277) (p>0.05).

Table 1. Sociodemographic characteristics of the study group

Characteristics (N: 1.508)	n (%)
Gender	
Male	754 (50.0)
Female	754 (50.0)
Age (years)	
15-19	34 (2.3)
20-29	199 (13.2)
30-39	391 (25.9)
40-49	463 (30.7)
50-59	292 (19.4)
60 and over	129 (8.6)
Marital status	
Married	1021 (67.7)
Single	449 (29.8)
Widow/divorced	38 (2.5)
Educational level	
Illiterate	20 (1.3)
Literate	26 (1.7)
Primary school	356 (23.6)
Junior high school	186 (12.3)
High school	434 (28.8)
University	486 (32.2)
Working status	
Employed	841 (55.8)
Unemployed	617 (40.9)
Student	50 (3.3)

There was a statistically significant difference between cessation and recurrence among different age groups; the cessation rate of the 15-19 age group was found to be lower compared to other age groups ($p<0.05$). We also found that the rate of quitting smoking was lower among singles (never married before) when compared to married or divorced/widows ($p<0.05$). The risk of "recurrence" was significantly higher among singles compared to married (RR=1.4; %95 CI=1.11-1.78, p=0.005).

There was no correlation between cessation/recurrence and educational level (p>0.05).

The cessation rate of students was lower compared to working and non-working patients ($p<0.05$). Also the risk for "recurrence" was higher in students compared to the rest of the group (RR=2.8; %95CI=1.3-5.9, p=0.006).

Distributions of cessation and recurrence status of the study group according to some socio-demographic features are presented in Table 2.

The average age of starting smoking in the study group was 16.87±4.86 (min: 4 max: 48) and the median age of starting smoking was 17 (IQR25=14, IQR75=19). There were 12 cases who started smoking under the age of seven, and five patients started smoking over 40 years of age.

Emulation (48.8%, n=736), curiosity (35.5%,

Table 2. Distribution of cessation and recurrence of smoking cessation according to some sociodemographic characteristics

	Cessation (%)	Recurrence (%)	x^2; p
Gender			
Male	307 (40.7)	447 (59.3)	2.515; 0.113
Female	277 (36.7)	477 (63.3)	
Age group (years)			
15-19	6 (17.6)	28 (82.4)	
20-29	69 (34.7)	130 (65.3)	
30-39	147 (37.6)	244 (62.4)	12.912; 0.024
40-49	177 (38.2)	286 (61.8)	
50-59	127 (43.5)	165 (56.5)	
60 and over	58 (45.0)	71 (55.0)	
Marital status			
Married	413 (40.5)	608 (59.5)	
Single	151 (33.6)	298 (66.4)	9.290; 0.010
Divorced/widow	20 (52.6)	18 (47.4)	
Educational level			
Illiterate	5 (25.0)	15 (75.0)	
Literate	14 (53.8)	12 (46.2)	
Primary school	132 (37.1)	224 (62.9)	10.328; 0.066
Junior high school	79 (42.5)	107 (57.5)	
High school	151 (34.8)	283 (65.2)	
University	203 (41.8)	283 (58.2)	
Working status			
Employed	321 (38.2)	520 (61.8)	
Unemployed	253 (41.0)	364 (59.0)	8.849; 0.012
Student	10 (20.0)	40 (80.0)	
Total	584 (38.7)	924 (61.3)	

and stress/sadness (18.0%, n=271) were the main reasons to begin smoking.

Fear of future illnesses (%67.3, n=1.015), the idea of giving harm to others (%42.3, n=638) and economic reasons (%35.6, n=537) on the other hand, were the main reasons for wanting to quit smoking.

Having cancer him/herself or knowing a family member having cancer, having a respiratory system disease or any other systemic disease did not affect cessation p>0.05 for each).

The risk of recurrence was higher in the presence of other people smoking at home or at work (RR= 1.4, %95 CI=1.1-1.7, p<0.001). "Having tried to quit before" had no impact on cessation (p>0.05).

The relation between smoking cessation cessation/recurrence, Fagerstrom dependency score, anxiety and depression scores and the age of starting smoking were assessed.

Increase in the Fagerstrom dependency anxiety and depression scores were observed in case of recurrence p<0.001 for each). In addition, the cessation rates to quit smoking were lower, the younger the age the patient started smoking (p<0.05) (Table 3).

4. Discussion

In this study, smoking cessation cessation/recurrence points were evaluated according to certain sociodemographic characteristics. Gender and education level had no effect on smoking cessation (p>0.05). However, recurrence to quit smoking appears to be higher in the 15-19 age group than other age groups. In this study, being a student and being single has also been identified as a risk of recurrence in smoking cessation (p<0.05). It can be said that the "age" variable reflects the status of being "unmarried" and being a "student" since most of the younger participants were students and singles.

Although no evidence was shown between the age of starting smoking and cessation/recurrence on quitting smoking in this study (p>0.05), low cessation rates of smoking cessation among younger age groups demonstrates the importance of interventions held to prevent starting tobacco use at these ages. This study was conducted on the records of the people, who decided to quit smoking and admitted to SCOC. The median age for starting smoking in this group was 17 and this is a late age to start smoking, considering the general population of Turkey. By the Psychiatric Association of Turkey, it is estimated that the age of starting smoking is 10-11 years old. It should be considered that this very young group don does not think about quitting smoking and therefore don't apply to any healthcare provider. In a study by Arguder et al. (2013) conducted in Ataturk Training and Research Hospital, the median age of starting smoking among patients who admitted the SCOC was reported 16 years which is similar to our study. In the study above, gender, educational level, marital status and age of starting smoking was similar in both groups (cessation/recurrence). It must be considered that "cessation" was defined as "three months for the cessation of smoking cessation", while in our study the criteria was "one year". However, results of our work were similar to the results of Arguder and friends (2013). In a study by Fidan et al. (2005) smoking cessation rate was lower among patients who started smoking 15 years and earlier which is compatible with our results.

In studies investigating the reasons for starting smoking, main causes among college/university students are found to be; distress/anxiety, friends, psychological problems, stress, emotional space and emulation (Picakciefe et al., 2007; Hassoy et al., 2011). In a study among High School students, curiosity, peer pressure, and stress have been reported as the most common reasons for starting smoking (Golbasi et al., 2011). In another study conducted in primary schools, curiosity came to the fore as the main reason. In our study, emulation, curiosity, and stress/sadness causes

Table 3. Relationship between cessation/recurrence status and Fagerstrom dependency, anxiety and depression scores

Spearman correlation (r; p)	Fagerström score	Anxiety score	Depression score	Starting age of smoking
Cessation/recurrence	r=0.156 p<0.01	r=0.118 p<0.01	r=0.108 p<0.01	r=- 0.058 p<0.05

have been identified as the main reasons for starting smoking. We can say that results are consistent with literature. Some publications outside of Turkey also state similar results (Hamzacebi et al., 2008; Taheri et al., 2014; Povlsen et al., 2016).

Fear of future illnesses, idea of giving harm to others and economic reasons were the main reasons for wanting to quit smoking in our study. Similarly in Fidan's study, fear of future illnesses, existing disease, idea of giving harm to others, public pressure and economic reasons were reasons why patients wanted to quit smoking (Fidan et al., 2005).

The presence of other people smoking at home or at work was another risk factor affecting cessation negatively in our study. Fichtenberg and Glanz (2002) reported that working in establishments that restrict smoking, decreased frequency and daily cigarette consumption. In a study with participants from Canada, USA, Britain, and Australia, it was shown that no-smoking family members increase the frequency of attempts to quit smoking as well as the cessation of smoking cessation (Borland et al., 2006). These results are also similar to our study.

In a study conducted on 1.567 students at Kocaeli University, it was reported that close to half the students tried to quit smoking at least once, but could not be cessationful (Boyaci et al., 2003). Mayda et al. (2007) also reported in a study that among medical school students in Duzce, three-quarters of the students tried but could not succeed quit smoking. Literature results indicate that attempts to quit smoking show recurrence in the absence of professional support. In our study, the impact of having tried to quit smoking earlier on "cessation" was not observed. This result can count as evidence that smoking cessation can be successful on the "first attempt" if professional support can be provided.

In our study, the withdrawal of the age of starting smoking at an early age resulted to lead to a decrease in smoking cessation. Boyaci et al. (2003) obtained similar results in their study.

The role of negative effects of smoking on the cardiovascular and respiratory systems and on the pathogenesis of cancer is well known (Şahin and Güven, 2011). Therefore, smokers with chronic diseases or having sick friends/family are expected to be more motivated to quit cigarettes. But in this study, having cancer him/herself or knowing a family member having cancer, having a respiratory system disease or any other systemic disease did not affect cessation. The reason for this may be that the study population included also young people.

"Recurrence" was higher when Fagerstrom dependency, anxiety and depression scores showed increase. Teneggi and colleagues (2002) reported that nicotine addiction affected treatments to quit smoking. The association of smoking addiction with mental illnesses such as depression and anxiety are known. In a one-year follow-up study by Yasar and friends (2014), "cessation" rates showed decrease with high dependency scores, but no evidence was shown for the effect of anxiety and depression. Although anxiety and depression usually show comorbidity in smokers, the fact that anxiety and depression can be influenced by many factors may affect cessation negatively. However, as we expected in our study, the presence of anxiety and depression decreased cessation of smoking cessation.

To conclude, one year "cessation" rates of patients attending to Konak SCOC are high. Interventions to increase the application rates of young people (promotional activities, collaboration with family physicians, educators, employers, etc.) and the promotion of integrated health activities for adolescents will increase the efforts toward the tobacco epidemic. Anxiety and depression must be taken under consideration due to comorbidity and adverse effects on therapy.

REFERENCES

Argüder, E., Karalezli, A., Hezer, H., Kılıç, H., Er, M., Hasanoğlu, H.C., Demir, P., 2013. Factors affecting the success of smoking cessation. Turkish Thoracic Journal. 14, 81-87. doi: 10.5152/ttd.2013.18.

Aydemir, Ö., Güvenir, T., Küey, L., Kültür, S., 1997. Validity and reliability of Turkish version of hospital anxiety and depression Scale. Turkish Journal of Psychiatry. 8, 280-287.

Bilir, N., 2009. Level of tobacco control in Turkey. Turkish Thoracic Journal. 10, 31-34.

Borland, R., Yong, H.H., Cummings, K.M., Hyland, A., Anderson, S., Fong, G.T., 2006. Determinants and consequences of smoke-free homes: findings from the International Tobacco Control (ITC) Four Country Survey. Tobacco Control. 15(Suppl 3):iii42-iii50.

Boyaci, H., Çorapçıoğlu, A., Ilgazlı, A., Başyiğit, İ., Yıldız, F., 2003. The evaluation of smoking habits in Kocaeli University students. Solunum Hastalıkları. 14, 169-175.

Dönmez, S., Dağ, H., Kazandı, M., 2012. The determination of pregnant women's anxiety and depression risk levels before amniocentesis. Journal of the Acibadem University of Health Sciences. 3, 255-261.

Fagerstrom, K.O., Heatherton, T.E., Kozlowski, L.T., 1990. Nicotine addiction and its assessment. Ear Nose Throat J. 69, 763-765.

Fichtenberg, C.M., Glantz, S.A., 2002. Effect of smoke-free workplaces on smoking behavior: Systematic review. BMJ. 325(7357):188.

Fidan, F., Pala, E., Ünlü, M., Sezer, M., Kara, Z., 2005. Factors affecting smoking cessation and success rates of the treatment methods used. The Medical Journal of Kocatepe. 6, 27-34.

Golbasi, Z., Kaya, D., Cetindag, A., Capik, E., Aydogan, S., 2011. Smoking prevalence and associated attitudes among high school students in Turkey. Asian Pac. J. Cancer Prev. 12, 1313-1316.

Hamzaçebi, H., Ünsal, M., Dabak, Ş., Bilgin, S., Aker, S., 2008. Smoking prevalence of smoking and affecting factors in primary school students in Tekkeköy, Samsun. Toraks Dergisi. 9, 34-39.

Hassoy, H., Ergin, I., Davas, A., Durusoy, R., Karababa, A.O., 2011. Determining the factors effecting the cigarette, narghile and hand-rolled tobacco smoking among medical technology vocational training school students and evaluation of their opinions about starting and continuing with their habits of smoking. Respiratory. 13, 91-99.

Mayda, A.S., Tufan, N., Baştaş, S., 2007. Attitudes towards smoking and frequency of smoking among students of Düzce Medical school. TAF. Prev. Med. Bull. 6, 364-370.

Picakciefe, M., Keskinoglu, P., Bayar, B., Bayar, K., 2007. [Smoking prevalence among Muğla school of health sciences students and causes of leading increase in smoking]. TAF Prev. Med. Bull. 6, 267-272.

Povlsen, L., Aryal, U.R., Petzold, M., Krettek, A., 2016. Adolescents' knowledge and opinions about smoking: A qualitative study from the Jhaukhel-Duwakot Health Demographic Surveillance Site, Bhaktapur District, Nepal. Int. J. Adolesc. Med. Health. 2016 Apr 9.

Smoking and Mental Health. 2008. file:///C:/Users/Acer/Downloads/f-11-sigara-ve-ruh-sagligi-32.pdf (Access: 25.05.2016).

Şahin, U., Güven, G.S., 2011. Smoking in elderly and efforts to cessation Is it worth dealing? Academic Geriatrics. 3, 1-12.

Taheri, E., Ghorbani, A., Salehi, M., Sadeghnia, H.R., 2014. Cigarette smoking behavior and the related factors among the students of Mashhad University of medical sciences in Iran. Iran Red. Crescent. Med. J. 17, e16769.

The Psychiatric Association of Turkey. Nicotine (smoking) addiction. http://www.psikiyatri.org.tr/pagepublic.aspx?menu=50 (Access: 25.05.2016).

Teneggi, V., Squassantre, L., Iavarone L, Milleri, S., Bye, A., Gömeni, R., et al., 2002. Correlation and predictive performances of saliva and plasma nicotine concentration on tobacco with drawal-induced craving. Br. J. Clin. Pharmacol. 54, 407-414.

Turkey Statistical Institute. 2008. Global Adult Tobacco Survey-2008.

Uysal, M.A., Kadakal, F., Karşıdağ, Ç., Bayram, N.G., Uysal, Ö., Yılmaz, V., 2004. Fagerstrom test for nicotine dependence: Reliability in a Turkisk sample and factor analysis. Tüberküloz ve Toraks Dergisi. 52, 115-121.

WHO. 2008. WHO Report on the Global Tobacco Epidemic.

WHO. 2012. WHO Global Report: Mortality Attributable to Tobacco.

Yaşar, Z., Kurt, Ö.K., Talay, F., Kargı, A., 2014. One-Year Follow-up results of smoking cessation outpatient clinic: Factors affecting the cessation of smoking. Eurasian. J. Pulmonol. 16, 99-104.

Zigmond, A.S., Snaith, R.P., 1983. The hospital anxiety and depression scale. Acta Psychiatrica Scandinavica. 67, 361-370.