
Complaints related to smoking cessation

Gamze ÇAN¹, Funda ÖZTUNA², Murat TOPBAŞ¹

¹ Karadeniz Teknik Üniversitesi Tıp Fakültesi, Halk Sağlığı Anabilim Dalı,

² Karadeniz Teknik Üniversitesi Tıp Fakültesi, Göğüs Hastalıkları Anabilim Dalı, Trabzon.

ÖZET

Sigara bırakma ile ilişkili yakınmalar

Sigarayı bırakma sırasında başta yoksunluk bulguları olmak üzere yaşanan sorunlar bırakmayı güçleştirmektedir. Bu çalışmada amaçlanan, sigarayı bırakan kişilerde ortaya çıkan şikayetlerin sıklığı ve şiddetini tanımlamak, böylece sağlık personeline yol göstermektir. Çalışmada, sigara bırakma polikliniğine başvuran ve sigarayı bırakan 194 hastanın verileri değerlendirilmiştir. Sigara bırakma programında davranışsal danışmanlık ve nikotin destek tedavisi uygulanmaktadır. Hastalar sigarayı bıraktıktan sonraki en az iki yıl süresince takip edilmekte ve yakınmaları tespit edilmektedir. Sigarayı bırakan 194 hastanın 102 (%52.6)'si değişik yakınmalara sahipti. Hastaların en sık yaşadığı sorunlardan biri kilo alımı idi. Hastaların ifadelerine göre en az 1 kg en fazla 16 kg, ortalama 6.8 ± 3.8 kg kilo artışı olmuştu. Hastaların 17 (%8.7)'si iştah artışından şikayet etmektedir. İştah artışı olanlar anlamlı olarak daha fazla kilo almıştı ($p=0.001$). Alınan kilo ortalaması yönünden bakıldığında ise iştah artışı olanlar 4.6 ± 2.3 kilo alırken, iştah artışı olmayanlar 7.3 ± 3.9 kilo almıştı ve fark anlamlı idi ($p=0.033$). Hastaların 38 (%19.6)'i ağız, diş eti veya dilde oluşan lezyonlardan yakınmaktaydı. On iki (%6.1) hastanın gerginlik, huzursuzluk, sinirlilik, uykusuzluk, 9 (%4.6) hastanın sigara içme isteği, 9 (%4.6) hastanın baş ağrısı, 8 (%4.1) hastanın kabızlık, 7 (%3.6) hastanın uyku hali, uyuşukluk, konsantrasyon bozukluğu yakınmaları olmuştu. Sigarayı bırakan hastalardan yakınması olan 102 hastanın 45 (%44.1)'i, yakınması olmayan 92 hastanın ise 57 (%62)'si yeniden sigara içmeye başlamıştı. Yakınması olanlar anlamlı olarak daha az sigara içmeye başlamıştı ($p=0.013$). Sağlık personelinin sigarayı bırakacak kişilere yaşanacak sorunların sıklığı, şiddeti ve çözümü ile ilgili verecekleri danışmanlık hizmetleri sigarayı bırakma başarısını ve bırakmayı sürdürme süresini arttıracaktır.

Anahtar Kelimeler: Sigarayı bırakma, oral lezyon, kilo alma, yakınma.

Yazışma Adresi (Address for Correspondence):

Dr. Gamze ÇAN, Karadeniz Teknik Üniversitesi Tıp Fakültesi, Halk Sağlığı Anabilim Dalı,
61080 TRABZON - TÜRKİYE

e-mail: gcan@meds.ktu.edu.tr

SUMMARY**Complaints related to smoking cessation**Gamze ÇAN¹, Funda ÖZTUNA², Murat TOPBAŞ¹¹ Department of Public Health, Faculty of Medicine, Karadeniz Technical University, Trabzon, Turkey,² Department of Chest Diseases, Faculty of Medicine, Karadeniz Technical University, Trabzon, Turkey.

Problems experienced during quitting smoking, particularly withdrawal symptoms, make giving up difficult. In this study the description of the complaints arising in individuals quitting smoking thus acts as a guide for health professional who dealt with smoking cessation. Data belonging to 194 patients applying to the smoking cessation clinic and quitting smoking were analysed. Behavioural counselling and nicotine support therapy are administered in the smoking cessation programme. Patients are followed up for at least two years after quitting cigarettes, and their complaints are determined. One hundred and two (52.6%) of the 194 patients quitting smoking had various complaints. One of the most frequently experienced problems was weight gain. According to patients' statements, an average weight gain of 6.8 ± 3.8 kg, minimum 1 kg maximum 16 kg, occurred. Seventeen (8.7%) patients complain of increased appetite. Those with increased appetite gained the most weight, to a significant extent ($p=0.001$). In terms of average weight gain, those with increased appetite gained 4.6 ± 2.3 kg, while those without increased appetite gained 7.3 ± 3.9 kg, and the difference was significant ($p=0.033$). Thirty-eight (19.6%) patients complain of lesions in the mouth, gums or tongue. Twelve (6.1%) patients had complaints of tension, restlessness, nervousness or sleeplessness, 9 (4.6%) of a desire to smoke, 9 (4.6%) of headache, 8 (4.1%) of constipation, and 7 (3.6%) of drowsiness, numbness or concentration impairment. Forty-five (44.1%) of the 102 patients with smoking cessation related complaints and 57 (62%) of 92 patients with no complaints recommenced smoking. Significantly fewer of those with complaints began smoking ($p=0.013$). Counselling services to be provided by health personnel regarding the frequency, intensity and resolutions of problems experienced by those quitting smoking will increase cessation success and duration.

Key Words: Smoking cessation, weight gain, oral lesion, complaint.

Both globally and in Turkey smoking cessation guides are being prepared and health personnel are playing an increasing role in cessation (1-4). Of cigarette smokers, 70% wish to give up completely, 46% attempt to give up every year, and 70% apply to health institutions to seek assistance in this regard (2). Millions of cigarette smokers in Europe wish to give up and attempt to do so several times. However, due to the strong substance dependence involved, success is a difficult matter (5).

Cigarette smoking is defined as substance addiction, and nicotine is the agent causing that addiction. With cigarette cessation, drug withdrawal, nervousness, headache, increased appetite, bradycardia, deceleration in EEG, amnesia, confusion, sleep disorder, reduced concentration, impaired psychomotor performance and gastrointestinal defects can all appear in the ad-

dict in the event of deprivation (6). It has been observed that those quitting cigarettes experience various problems, particularly withdrawal symptoms.

The complaints experienced during quitting are factors that make it more difficult. For example weight gain after smoking is commonly cited, especially among women, as a primary reason for not trying to quit and for relapsing after cessation (7). For smoking cessation clinic personnel to know about these complaints will improve the duration of patient success. The aim of this study was to describe the complaints occurring in individuals wishing to give up and to serve as a guide for health personnel.

MATERIALS and METHODS

Data from 194 out of 350 patients applying to the Karadeniz Teknik University Medical Faculty

Cigarette Cessation Polyclinic and quit smoking were analyzed in detail.

Our polyclinic has been active since April 2000, and works jointly with the Public Health and Chest Diseases Departments. Patients are monitored by the same doctors in both departments. At patients' initial examination physical examination is used together with the Fagerstorm test, based on six questions and a scale of 10 points, in the determination of nicotine dependence (8). Percentages of smoke free, by year, were 53.5%, 43.1%, 36.6%, 34.6% and 34.6%.

Behavioral counseling and nicotine replacement therapy are provided in the cigarette cessation programme (2). Patients are followed up for at least two years after quitting. Patients are invited for checks, if possible, on the first day, the first week and the first month after quitting; otherwise telephone conversations are held. Subsequently, they are called for monitoring in the third month, and monitoring is performed with occasional telephone calls and the organizing of activities. In addition to file data, patients are asked about their cessation related complaints. The chi-square test and student's t-test were used in analysis of data. Data are expressed as percentage and mean \pm standard deviation.

RESULTS

Seventy-eight (40.2%) of the 194 patients wishing to give up cigarettes were women, and 116 (59.8%) were men; 144 (74.2%) patients were high school graduates and above. Patient characteristics are summarized in Table 1.

Six (3.1%) of the 194 patients quitting smoking had used bupropion; 54 (27.8%) had received nicotine patch and 3 (1.5%) had received nicotine gum replacement therapy. Of the 194 patients, 102 (52.6%) had various complaints after giving up cigarettes.

The problems and prevalence thereof experienced by patients after cessation are summarized in Table 2. As can be seen, one of the most frequently encountered problems was weight gain. According to patients' statements, average weight gain was 6.8 ± 3.8 kg (min 1 kg-max 16 kg).

Table 1. Some characteristics of patients quitting cigarettes.

Characteristic	Mean \pm SD (min-max), n (%)
Gender	
Male	116 (59.8%)
Female	78 (40.2%)
Education	
< 8 years	50 (25.8%)
\geq 8 years	144 (74.2%)
Age (years)	38.0 \pm 11.8 (14-73)
Average length of cigarette smoking (years)	19.8 \pm 11.6 (0.5-55)
No. of cigarettes smoked per day	20.1 \pm 10.5 (2-60)
Level of nicotine dependence (points)	5.4 \pm 2.0 (1-10)
Length of cessation (months)	14.2 \pm 17.0 (0.03-62.9)

Table 2. Complaints reported by patients quitting cigarettes.

Complaint	Number	% (n= 194)
Weight gain	54	27.8
Tongue, gum or oral lesions	38	19.6
Increased appetite	17	8.7
Tension, restlessness, nervousness, sleeplessness	12	6.1
Desire to smoke	9	4.6
Headache	9	4.6
Constipation	8	4.1
Drowsiness, numbness, concentration impairment	7	3.6
Coughing, phlegm production	5	2.6
Shortness of breath, palpitations, chest pain	3	1.5
Dry mouth, dry lips	2	1
Numbness in lips	2	1

Increased appetite is one of the striking complaints, with 8.7% of patients complaining of this. Eleven (64.7%) out of 17 individuals with increased appetite, and 43 (24.3%) of the 177 who reported no appetite increase gained weight ($p= 0.001$). In terms of average weight gain, those with increased appetite gained 4.6 ± 2.3 kg and those without increased appetite gained 7.3 ± 3.9 kg, the difference being significant ($p= 0.033$).

Thirteen (23.2%) of the 56 patients receiving replacement therapy (gum or patch) gained weight, and 41 (29.7%) of the 138 patients not receiving replacement therapy gained weight. The correlation between weight gain and replacement therapy was not statistically significant ($p= 0.461$).

Another major patient complaint was lesions appearing in the mouth, gums or tongue. Two patients had consultations with the dermatology department due to the severity of the aphthous lesions occurring in the mouth, gums and tongue. Lesions in other patients healed within a week with no need for any treatment. Despite therapy, these two patients were unsuccessful and recommenced smoking.

The problem of constipation experienced by eight patients was resolved by nutrition regulation and the use of various herbal teas. One of the patients underwent gastroenterological examination due to a history of spastic colon, and laxatives were prescribed for three patients.

Sixteen (8.2%) of the patients mention nicotine withdrawal symptoms such as craving for nicotine (4.6%), difficulty concentration and restlessness (3.6%). These were quite intense in the first few days after quitting, but declined increasingly in subsequent days.

Forty-five (44.1%) of the 102 patients giving up smoking who had complaints, and 57 (62%) of the 92 patients without complaints recommenced smoking. Those with complaints began smoking significantly less ($p= 0.013$).

DISCUSSION

In addition to the difficulties in smoking cessation, the problems experienced post-cessation continue to affect cigarette deprivation. Unfortu-

nately there were a few studies in Turkey about results of smoking cessation polyclinic. In our study various complaints arose in 52.6% of those quitting. Some individuals recommenced smoking because of these complaints, particularly oral lesions and weight gain.

In our study, the fact that monitoring took place over the telephone constituted an important restriction on the determination of certain problems experienced post-cessation. This restriction was encountered in data obtained regarding level of weight gain and the characteristic of oral lesions.

Many studies have reported weight gain after quitting cigarettes (9-14). Weight gain is thought to be related to increased energy uptake, reduced metabolic rate, a low level of physical activity and an increase in lipoprotein lipase activity (15). Levels of weight gain in studies vary. In some studies it is determined as less than 4.5 kg, though there is also research reporting a weight gain of at least 11 kg in 13% of individuals quitting smoking (13). In our study, patients reported a minimum gain of 1 kg and a maximum of 16 kg. Average weight gain was 6.8 ± 3.8 kg. Patients complaining of weight gain were counseled at the diet polyclinics and their diets regularized. To limitation of the carbohydrates, to increase of the amount of high fiber foods in diet, to exercise regularly such as walking, swimming, bicycling was recommended to patients.

One of the noteworthy complaints was increased appetite. Only 8.7% of patients complained of this. There was a significantly greater weight gain among patients stating that their appetites had increased ($p= 0.001$). In terms of average weight gain, those whose appetites increased gained 4.6 ± 2.3 kg, and those with no appetite increase gained 7.3 ± 2.3 kg, and the difference was significant ($p= 0.033$). This finding may be a pre-cessation appetite increase and an indication that a weight problem may be experienced and explained in terms of more careful patient self-evaluation. Since they are more sensitive to the issue, these individuals realize their appetite has grown and gain less weight by paying attention to their food intake.

It has been stated that nicotine replacement therapy delays post-cessation weight gain (16). No statistically significant correlation between weight gain and replacement therapy was determined in our research ($p= 0.360$). Few people received nicotine replacement therapy in our study. In Turkey, nicotine patch and chewing gum preparate costs are not met by health institutions, leading to many patients not using replacement therapy.

In our study, sixteen (8.2%) of the patients mention nicotine withdrawal symptoms such as craving for nicotine, difficulty concentration and restlessness. Uzaslan et al. reported that nicotine withdrawal symptoms experienced by smoking cessation clinic's patients were craving for nicotine 24%, irritability and anxiety 16%, increased appetite and weight gain 15%, difficulty concentrating 9%, restlessness 9% (17). These percentages were higher than our results.

Another problem experienced post-cessation is lesions forming in the mouth, gums or tongue. Various studies have determined that oral lesions occur after quitting cigarettes (16,18,19). According to patients' own statements, the fact that evaluation was carried out imposed a restriction on the study and was important in attracting their attention to this. Two of our patients with serious lesions recommenced smoking, despite consultations with the dermatology department.

Cigarettes shorten stomach emptying time and increase intestinal activity. This effect is in direct proportion to the number of cigarettes smoked per day (20). In our patients quitting smoking a constipation problem related to intestinal activity was experienced in the first days. This was a problem encountered by few patients in our study-2.06%. Warning patients in this regard prior to cessation can prevent a troublesome process being experienced. From that point of view, for patients' with such a tendency to constipation adjusting their diet towards high fiber foods generally resolves the problem.

Health personnel who will provide smoking cessation counseling having a knowledge of the problems likely to be encountered and the solu-

tions to these, and warning patients concerning them will allow them to be prepared in the face of withdrawal symptoms and outcomes such as oral lesions, and may also permit precautions to be taken for some problems such as constipation and weight gain. Uzaslan et al. reported that nicotine withdrawal symptoms; craving for smoking and stress where the most stated reason for the first month relapses where as sudden economic and physiological stress, increased appetite, weight gain and dependence were the most stated reasons for the relapses in the first year quitting (17). In our study we see from those patients with complaints beginning to resume smoking that the counseling and support measures we provide during polyclinic activities have a strong effect during cessation. We are of the opinion in the light of these tests that they can reduce the negative effects on continued cessation of withdrawal symptoms and other problems in terms of relief from substance dependence, which is in any case no easy matter.

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