



The Effect of the Ministry of Health's Periodic Free Drug Policy on Smoking Cessation Polyclinic

Sağlık Bakanlığının Dönemsel Ücretsiz İlaç Politikasının Sigara Bırakma Polikliniğine Olan Etkisi


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ABSTRACT

Aim: The aim of this study is to evaluate the effect of periodic free drug applications of the Ministry of Health on Smoking Cessation Polyclinic (SCP) and the success rates of the treatment methods used.

Material and Methods: A total of 1861 patients applied to SCP in a county state hospital in Şanlıurfa between January 1 and December 31, 2017 were included in this study. Patients not smoke for at least six months were accepted as non-smokers. Each patient was followed up for at least six months. The data was calculated as number and percentage.

Results: According to months the highest application was seen in December. In July and November, there was a significant decrease in the number of patients applying to SCP. It was determined that 80.0% of the patients received behavior therapy, 20.0% received pharmacological treatment. Utilization of pharmacological treatment was the lowest in July with no patient and the highest in November with 96.8%. The rate of quitting with pharmacological treatment was 27.4% while this rate was 18.9% with behavioral therapy.

Conclusion: The Ministry of Health's periodic free drug application policy has a direct impact on SCPs. This may be the reason for resistance in patients to smoking cessation with behavioral therapy. Smoking cessation treatments should be provided throughout the year. It is recommended that free drug treatments include all drugs and supply from pharmacies through report. We think that with these arrangements, the compliance of patients to treatment and their determination to quit smoking will increase.

Keywords: Behavior therapy; health policy; pharmacotherapy; smoking; smoking cessation

ÖZ

Amaç: Bu çalışmanın amacı Sağlık Bakanlığı'nın dönemsel ücretsiz ilaç uygulamalarının Sigara Bırakma Polikliniği (SBP)'ne olan etkisi ve kullanılan tedavi yöntemlerinin başarı oranlarının değerlendirilmesidir.

Gereç ve Yöntemler: Bu çalışmaya 1 Ocak ve 31 Aralık 2017 tarihleri arasında Şanlıurfa'da bulunan bir ilçe devlet hastanesinde SBP'ye başvuran toplam 1861 hasta dahil edildi. En az altı ay boyunca sigara içmeyen hastalar sigarayı bırakmış olarak kabul edildi. Her hastanın en az altı ay süreyle takibi yapıldı. Elde edilen veriler sayı ve yüzde olarak hesaplandı.

Bulgular: Aylara göre en yüksek başvurunun Aralık ayında olduğu görüldü. Temmuz ve Kasım aylarında ise SBP'ye başvuran hasta sayılarında belirgin bir düşme vardı. Hastaların %80,0'inin davranış terapisi aldığı, %20,0'sinin ise farmakolojik tedavi aldığı tespit edildi. Farmakolojik tedavi uygulaması en düşük hiç hastanın olmadığı Temmuz ayında ve en yüksek ise %96,8 ile Kasım ayında idi. Farmakolojik tedavi ile bırakma oranı %27,4 iken davranış terapisi ile bırakma oranı ise %18,9 idi.

Sonuç: Sağlık Bakanlığı'nın dönemsel ücretsiz ilaç uygulama politikası SBP'yi direkt olarak etkilemektedir. Bu durum, hastalarda davranış terapisi ile sigara bırakmaya karşı bir direnç nedeni olabilmektedir. Sigara bırakma tedavilerinin yıl boyu karşılanması gereklidir. Ücretsiz ilaç tedavilerinin tüm ilaçları kapsamı ve rapor karşılığı eczanelerden temini yoluna gidilmesi önerilir. Bu düzenlemeler ile hastaların tedaviye uyumu ve sigara bırakma kararlılığının artacağını düşünmekteyiz.

Anahtar kelimeler: Davranış tedavisi; sağlık politikası; farmakoterapi; sigara içme; sigarayı bırakma

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INTRODUCTION

Smoking is an important public health problem, and there has been no sign of improvement. It results in social and economic harm, is responsible for numerous diseases, and decreased quality of life. Cigarette addiction treatment is important for public health, preventive medicine, and chest diseases (1,2). Even simply explaining the harms of smoking and recommending a patient to quit may increase the likelihood of smoking cessation (3). With respect to cessation therapies, behavioral training and pharmacotherapy are two proven approaches to therapeutic support (3,4). The aim of this study was to evaluate the application of The Ministry of Health's periodic free drug delivery policy, the methods and success rates of treatments used in Smoking Cessation Polyclinic (SCP).

MATERIAL AND METHODS

This is a retrospective registry-scan design study performed between January 1, 2017 and December 31, 2017. A total of 1861 patients who had applied to the SCP of Şanlıurfa Ceylanpınar County State Hospital were included in the study. Quarterly reports of 1861 patients admitted to the SCP were evaluated. Drug therapy and behavior training were recorded in terms of supportive therapy. The data were organized as quarterly reports requested by the Ministry of Health. Persons who did not smoke for at least six months were considered as nonsmoker who quit smoking. For this reason, regardless of which month they applied, patients were followed up for at least six months. This study was approved by the Harran University Ethical Committee (01.02.2018; session: 02; decision no: 08).

Statistical Analysis

Descriptive statistics of the data were calculated as numbers and percentages in quarterly periods for each treatment method.

RESULTS

Of the 1861 patients admitted to the SCP, 1489 (80.0%) were received behavior therapy and 372 (20.0%) were received pharmacological treatment (Table 1). When the distribution of treatment modalities by months was examined, it was observed that the lowest number of pharmacological treatment was in July with no patient and the highest number was in November with 60 (96.8%) applicants. Behavior therapy was at its lowest in November with 2 (3.2%) patients and highest in July with 34 (100%) patients (Table 1).

When the smoking cessation status of the patients admitted to the SCP was examined according to treatment methods, 102 (27.4%) of the 372 patients received pharmacological treatment were shown to have quit smoking since three months while 102 (27.4%) patients had not quit smoking, and there were 168 (45.2%) patients with unknown status (Table 2).

When the smoking cessation status of the patients who had applied to the SCP and received behavioral therapy was examined, of the total 1489 patients, 282 (18.9%) had quit smoking while 672 (45.1%) of them continued to smoke. The number of patients with unknown status was 535 (35.9%) among patients who had received behavioral therapy (Table 3).

Table 1. Monthly distribution of treatment modalities of patients admitted to smoking cessation polyclinic, n (%)

	Pharmacological Treatment	Behavior Therapy	Total
January	1 (0.8)	130 (99.2)	131
February	4 (3.1)	125 (96.9)	129
March	11 (6.5)	157 (93.5)	168
April	21 (15.8)	112 (84.2)	133
May	20 (13.8)	125 (86.2)	145
June	32 (22.7)	109 (77.3)	141
July	0 (0.0)	34 (100)	34
August	51 (20.1)	203 (79.9)	254
September	45 (35.4)	82 (64.6)	127
October	42 (29.8)	99 (70.2)	141
November	60 (96.8)	2 (3.2)	62
December	85 (21.5)	311 (78.5)	396
Total	372 (20.0)	1489 (80.0)	1861

Table 2. Three monthly smoking cessation status of patients receiving pharmacological treatment, n (%)

	Stopped	Not stopped	Unknown	Total
Jan-Mar	12 (75.0)	4 (25.0)	0 (0.0)	16
Apr-Jun	25 (34.2)	10 (13.7)	38 (52.1)	73
Jul-Sep	20 (20.8)	46 (47.9)	30 (31.3)	96
Oct-Dec	45 (24.1)	42 (22.5)	100 (53.5)	187
Total	102 (27.4)	102 (27.4)	168 (45.2)	372

Jan-Mar: January to March, Apr-Jun: April to June, Jul-Sep: July to September, Oct-Dec: October to December

Table 3. Three monthly smoking cessation of patients receiving behavior therapy, n (%)

	Stopped	Not stopped	Unknown	Total
Jan-Mar	88 (21.4)	274 (66.5)	50 (12.1)	412
Apr-Jun	87 (25.1)	80 (23.1)	179 (51.7)	346
Jul-Sep	32 (10.0)	167 (52.4)	120 (37.6)	319
Oct-Dec	75 (18.2)	151 (36.7)	186 (45.1)	412
Total	282 (18.9)	672 (45.1)	535 (35.9)	1489

Jan-Mar: January to March, Apr-Jun: April to June, Jul-Sep: July to September, Oct-Dec: October to December

DISCUSSION

In our study, the number of patients who applied to the SCP in one year was 1861. Behavior therapy was not conducted in November, while pharmacological treatment was highest at 96.8%. In July, no patient was given pharmacological treatment. The rate of patients receiving behavior therapy was 80.0% and pharmacological treatment was 20.0%. With respect to pharmacological treatment, it was found that 27.4% had stopped smoking, 27.4% had not quit and their status was unknown in the 45.2% of patients. With regard to behavior therapy, 18.9%

had quit, 45.1% had not and no determination could be made for 35.9% of the patients.

At the end of one year, smoking cessation success rates were found to be 30% in a study by Bakkevic et al. (5), 37.4% in a study by Yaşar et al. (6), and 27.9% in a study by Çelik et al. (7). Our study showed lower smoking cessation rates at the end of three months compared these studies.

While there is one smoking cessation outpatient clinic in South Africa (8), the number in Turkey was 25 in 2002 and had exceeded to 400 in recent years (1). The extensive healthcare service provided at these outpatient clinics includes the distribution of some 300000 pharmacotherapy drugs free of charge - as such, it is important that these resources are used efficiently within the context of public health strategies (9). In our hospital, smoking cessation counseling was provided to 1861 patients at the SCP. Our relatively low smoking cessation rates might be explained by some factors related both subjects and SCPs. Pıçakçıefe et al. (10) reported that the most frequent applications to the SCP were in the spring. In our study, the highest number of applications was in the December. The high level of pharmacological treatment in November and the exceptionally high level of admissions to the SCP in December coincided with the Ministry of Health's free distribution of smoking cessation drugs. The refusal of behavior therapies by these patients can only be explained by their requests for pharmacological treatment.

As pharmacotherapy is expensive and was provided by free of charge by the Ministry of Health, there is evidence to suggest that patients have attempting to secure the drug in advance for later use (11).

In their study, Berkeşoğlu et al. (12) found that the success rate for quitting was 30.9% among those receiving free medication provided by the Ministry of Health, while the success rate for treatment in the paid group was 18%. Similar studies reported no difference in smoking cessation rates between those in receipt of paid/free medication (13,14).

In the most comprehensive study involving smoking cessation medications in China, 43% of the patients received pharmacotherapy (15). In our study, only 20.0% of patients received pharmacotherapy.

In the literature, the combination of pharmacotherapy and behavior education treatment resulted in a one-year cessation rate of 52.3%, and a rate of 14.0% for behavior therapy alone (12). In our study, the combination of pharmacotherapy and behavior therapy resulted in a cessation rate of 27.4%, whereas 18.9% of the patients who received only behavior therapy were successful in stopping smoking.

It has been shown that with respect to smoking cessation rates, that encouraging patients to stop has a better outcome than making no recommendations at all (16). A high level of patient compliance has also been shown to be effective in the patient's successfully stopping smoking (17-19). Although there is evidence to suggest that encouraging patients to stop smoking (by issuing coupons, paying cash, and giving gifts) results in an improvement in both short and long term success rates, debates continue on this matter (20). Encouraging the patient as well as his or her physician are other issues discussed in relation to these processes (21).

Most smokers perceive deterioration in their quality of life over time (11). They then try to quit smoking to halt this downward trend, however, most of these efforts fail (22). Smoking cessation will be more effective if such patients know that professional support is available and that pharmacotherapy support will be provided when necessary (23).

A number of findings in our study about SCP have been reported previously in the literature. These are:

- The Ministry of Health's periodic unpaid drug delivery policy is applied in a different city, different month in the year;
- Some of the smoking cessation drugs are not in stock while some are also plentiful.
- Admissions for the use of drugs in the months when they are declared to be free of charge or to take drugs for later use indirectly leads to rejection of behavior therapy;
- If the SCP is the only program in the health center, the performance of the attending physician will vary from month to month, as such, the motivation of follow-up of patients or of those who have been recently admitted to the program may decrease.
- Lack of regular follow-up of patients and insufficient supportive treatment may lead to resistance and hopelessness, such as the idea that patients will not be able to quit smoking despite the use of behavior or pharmacotherapy.
- Monitoring of the use of smoking cessation drugs, addressing possible questions, and eliminating problems will increase compliance and stability of treatment.

As a result, a behavior therapy in patients who want to quit smoking is important. In addition to behavior support, pharmacotherapy may positively affect treatment success. The periodic free drug delivery policy of the Health Ministry directly affects the SCP and may result in resistance on the part of patients to behavior therapies. Like other medicines used in the treatment of chronic diseases, smoking cessation treatments should be supplied year-round by pharmacies on the production of a report. In addition, in order to follow-up the patient and increase the success of cessation treatments, the drugs should be supplied in packages of 2-weeks duration. We think that with these arrangements, the compliance of patients to treatment and their determination to quit smoking will increase.

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