

## **Extended Abstract**

### **Results of Smoking Cessation Clinic in Erenköy Mental and Neurological Diseases Training and Research Hospital: An Investigation Into the Effects of Cognitive Behavioral Intervention and Pharmacotherapy**

#### **Introduction**

Nicotine addiction is major health problem that causes illness and death worldwide. This study aimed to determine the factors affecting successful smoking cessation among moderate–high nicotine dependent smokers who attended a clinic-based smoking cessation treatment, including pharmacotherapy and cognitive behavioral intervention.

#### **Methods**

This study used a retrospective natural follow-up design. A routine interview form and the Fagerström Test for Nicotine Dependence (FTND) were filled out by all patients who attended the Erenköy Mental and Neurological Diseases Training and Research Hospital Smoking Cessation Clinic between November 2017 and February 2018, and they were diagnosed with nicotine-use disorder by a psychiatrist. For this study, patients were eligible if they were aged 18–65 and were willing to participate in the initial 30–45-minute interview and provide follow-up data.

Additional diagnosis of an acute psychotic episode, psychotic disorder, or mental retardation was used as exclusion criteria. Based on the FTND score, smokers with low and low-to-moderate nicotine dependence were excluded from the study. Thus, all participants had moderate–high nicotine dependence. This was done to ensure that we could reliably assess the effectiveness of the smoking cessation treatment used in this research. The follow-up for all patients was routinely planned at the beginning of the treatment, and all patients were followed up by phone calls or face-to-face interviews at the end of three months, six months, and one year.

There were 117 patients who met the specified criteria and commenced their smoking cessation treatment at the clinic between November 2017 and February 2018. Of these, data for 102 patients were available at the three-month, six-month, and one-year follow-ups. Thus, the 15 patients whose follow-up data was not available were excluded from the study. Successful smoking cessation was defined as continuous non-smoking for six months since the day of cessation, in accordance with the literature. Smoking situations at the one-year follow-up were used to determine relapse rates.

#### **Results**

Of the 102 patients included in the study, 48% were female. The average age was  $40.63 \pm 10.98$  years and the average cigarette consumption was  $24.97 \pm 11.47$  packs/year.

Smoking cessation rates were 65.7% at the three-month follow-up and 47.1% at the six-month follow-up. The latter statistic met our threshold for successful smoking cessation. Those who quit smoking were more likely to be older than those who did not. The marital status of those who successfully quit smoking was divorced (68.4%), married (48.1%), and single (30.8%). Working in a smoking environment was found to negatively affect quitting success.

Behavioral recommendations and cognitive interventions were made to all patients. Patients who used nicotine patches, gum, and both patch and gum were grouped as Nicotine Replacement Therapy (NRT). NRT pharmacotherapies were prescribed at the following rates: Nicotine patch plus gum: 19.6%; nicotine gum: 5.9%; and nicotine patch: 4.9%. The quit rates for NRT were 45%, 50.0%, and 60%, respectively. Non-NRT pharmacotherapies were prescribed at the following rates: Varenicline: 63.7% and Bupropion: 5.9%. The quit rates were 44.6% and 66.7%, respectively. Giving pharmacological treatment for sufficient time and the number of control interviews were significantly associated with increased quit rates.

At the one-year follow-up, it was determined that 11.8% of the patients who quit smoking had relapsed, and 35.3% had not started smoking again. There were no statistically significant differences in the six-month smoking cessation rate and one-year relapse rates between NRT and non-NRT treatments.

## **Discussion**

In this study, the quit rate was 65.7% at the three-month follow-up and 47.1% at the six-month follow-up. In previous studies evaluating the results of smoking cessation treatment in our country, it has been reported that quit rates range from 36.5% to 65.0% after three months and from 27.6% to 48.5% after six months. Although our study only included those with moderate–high nicotine dependence, it is thought that the reason for the high quit rates at the three- and six-month follow-ups may be the effectiveness of the cognitive behavioral technique used.

We found that the rate of smoking cessation increased significantly with an adequate duration of pharmacological treatment and by increasing the number of control interviews with patients. Similarly, previous studies have found that compliance with treatment is the main determinant of successful smoking cessation. Also, consistent with the literature, our results suggest that maintaining adequate pharmacotherapy and providing frequent support to patients increases quitting success.

All patients were offered regular face-to-face interviews and a supply of pharmacotherapy in the first three months of their treatment, but the mean duration of the treatment was 6.55 weeks, and the mean number of control interviews was 1.47. The patients stated that they faced difficulties in getting appointments when they phoned,

because the system was fully booked. Patients also stated that the difficulties they faced in receiving medication caused them to stop the treatment early. In the future, setting appointment dates in advance and allowing longer interviews may increase the success rate of the treatment. In addition, increasing the number and accessibility of free treatment facilities may also increase treatment success.

Psychiatrists need to play a greater role in this field to (1) increase the use of smoking cessation therapies, which have been proven to be effective and cost effective and (2) help patients overcome their internal barriers to smoking treatment and quitting. The results of this study will provide new information on the approach to tobacco addiction in psychiatric practice and offer insights for further research.