8th International Conference on ADDICTIVE DISORDERS AND ALCOHOLISM

May 17-18, 2018 Singapore

The effectiveness of GSC, nicotine and combination treatment on smoking cessation of COPD patients

Fatemeh Taghizadeh and Mehran Zarghami Mazandaran University of Medical Sciences, Iran

Statement of the Problem: Chronic Obstructive Pulmonary Disease (COPD), usually caused by tobacco smoking, is one of the leading causes of morbidity and mortality. Smoking cessation at an early stage of the disease usually stops further progression. A study was undertaken to determine if diagnosis of airway obstruction was associated with subsequent success in smoking cessation, as nicotine gums (2 mg), or GSC (guided self- change) and combine (nicotine and GSC).

Methodology & Theoretical Orientation: We did a randomized-controlled trial in Sari, Iran, between Sept 6, 2016, and Sept 5, 2017. Adult (≥45 years) smokers wanting to quit were randomized (with computerized block randomization), sex [men], and COPD, nicotine gums (2 mg), or GSC (guided self- change) and combine (nicotine and GSC). The primary outcome was FEV1 and biochemically verified continuous abstinence at 6 months (exhaled breath carbon monoxide measurement <6 ppm). Primary analysis was by intention to treat. This trial is registered with the Iran Clinical Trials Registry, number IRCT201609271457N11.

Findings: 57 people were randomized (19 to GSC, 19 to nicotine gum and 19 to combine of them) and were included in the intention-to-treat analysis. At 6 months, verified abstinence was 15.8% (9 of 57) with GSC, 7% (4 of 57) with nicotine gum and 15.8% (9 of 57) with combine. In order to study and compare nicotine and combination therapy groups with GSC, it was determined by multivariate analysis of GEE that FEV_1-pred levels in the nicotine group were lower than GSC and were statistically significant marginally (-0.28, CI0.95: -0.57-0.01) and PV=0.05. Also, this variable was less in the combined group than in the GSC group, but this difference was not statistically significant (-0.16, CI0.95: -0.44-0.1) and PV=0.26. The level of FEV_1-act in the nicotine group was lower than the GSC group and was statistically significant (-0.5, CI 0.95: -0.9 - (- 0.12)) and PV=0.009). Also, this variable was also lower in the combined group than in the GSC group and was statistically significant (-0.72 - (- 0.05)) and PV=0.03. The FEV_1-actpred level in the nicotine group was lower than the GSC group and was statistically significant (-9.7, CI 0.95: -17.9 - (- 1.5)) and PV=0.02. Also, the level of this variable in the combined group was lower than the nicotine group, but it was not statistically significant (-7.4, CI 0.95: -15.8-0.9) and PV=0.08.

Conclusion & Significance: The effectiveness of GSC on smoking cessation and increasing FEV1 in 6 months was significant.

fatemehtaghizadeh93@gmail.com