

A Comparison of Anxiety, Hopelessness, and Smoking-Related Metacognition Levels Between Cancer Patients Who Continue Smoking and Those Who Quit

Nida Üstün, Umut Varol, Osman Hasan Tahsin Kılıç, Aysel Başer

ustunnidaa@gmail.com

COAN: 00070IMCIDU2024

ABSTRACT

Background: Continuing smoking among cancer patients is a significant risk factor that negatively affects treatment adherence and exacerbates psychosocial issues. The aim of this study is to examine differences in health anxiety, hopelessness levels, and smoking-related metacognitions between cancer patients who continue smoking and those who have quit. These findings are expected to contribute to providing psychosocial support for cancer patients in the process of quitting smoking.

Materials and Methods: Our study included cancer cases under follow-up and treatment in the medical oncology outpatient clinic at İzmir Seyfi Demirsoy Training and Research Hospital. A total of 179 cases were assessed using a demographic data form, the Beck Hopelessness Scale, the Health Anxiety Inventory-Short Version, and the Metacognitions about Smoking Questionnaire. Participants' nicotine dependence levels were measured with the Fagerström Test included in the demographic data form, and they were divided into two groups: those who continued smoking and those who had quit.

Results: Among the participants, 72.1% were female ($n = 129$), and 27.9% were male ($n = 50$). A total of 46.6% (83 individuals) reported continuing to smoke, while 53.4% (95 individuals) indicated they had quit smoking. The mean Fagerström score was $2.42 (\pm 2.935)$, indicating the level of nicotine dependence. The average Beck Hopelessness Scale score was $4.84 (\pm 4.206)$, the Health Anxiety score was $14.11 (\pm 8.939)$, and the Smoking Metacognitions Scale score was $37.88 (\pm 15.832)$.

Significant correlations were found among these measures: there was a positive, moderate correlation between the Fagerström score and the Beck Hopelessness Scale ($r = 0.303$, $p < 0.01$), indicating that higher nicotine dependence was associated with increased hopelessness. A negative, weak but significant correlation was observed between the Fagerström score and Health Anxiety ($r = -0.241$, $p < 0.01$), suggesting that higher nicotine dependence correlated with lower health anxiety. Additionally, the Fagerström score and Smoking Metacognitions Scale showed a positive, strong correlation ($r = 0.460$, $p < 0.01$), demonstrating a strong association between nicotine dependence and metacognitions related to smoking. A positive, moderate correlation was also found between the Beck Hopelessness Scale and Smoking Metacognitions ($r = 0.307$, $p < 0.01$). No significant correlation was found between the Beck Hopelessness Scale and Health Anxiety, or between Health Anxiety and Smoking Metacognitions.

Conclusion: This study reveals key relationships between smoking-related metacognitions, nicotine dependence, hopelessness, and health anxiety in cancer patients. Stronger nicotine dependence correlates with higher hopelessness and smoking-related metacognitive beliefs, which aligns with previous findings linking addiction to negative cognitive patterns (1,2). A weak negative correlation between nicotine dependence and health anxiety suggests that more dependent smokers may have lower health anxiety, possibly due to desensitization (3). These results highlight the need for interventions targeting metacognitive beliefs to enhance