

Association between Stress and Smoking

Introduction

- Mental health is a significant aspect of public health in the UK.
- Stress has often been associated with various coping behaviors which include tobacco smoking.
- It is important to evaluate the association between smoking and stress so that appropriate models and interventions can be developed for application on people who want to quit smoking.
- The aim of this study is to assess the relationship between stress and smoking.
- The objective is to find a body of knowledge on the topic for adequate reviewing and conclusions to be made.

Methods

- This is a secondary research that involves reviewing already existing bodies of knowledge on the topic of smoking and mental health.
- The databases included in this study include Pubmed, NCBI, and Science Direct.
- Search Keywords included: Mental health, stress, smoking, tobacco smoking, Quitting smoking, mentally ill smokers.
- Sources were included if they were relevant to the topic, not more than 10 years old, and were not specifically systematic reviews.

Literature review

Author(s), title, and year of publication	Aim of study	Methods and Sample size and characteristics	Summary of main findings
Colin P Mendelsohn, Dianne P Kirby, David J Castle Smoking and mental illness. An update for psychiatrists 2014	Literature review on smoking and mental illness to provide evidence-based guidelines for psychiatrists to help smoking patients quit.	A narrative review of the literature with a special focus on the Australian context was adopted	Smoking is often neglected in psychiatric practice although it is a significant contributor to the health gap between people with mental illness and the general population, and the motivation to quit smoking is lower among people with mental illness.
Henri-Jean Aubin, Hans Rollema, Torgny H. Svensson, Georg Winterer Smoking, quitting, and psychiatric disease: A review 2012	Assessing the connection between nicotine dependence, withdrawal symptoms, and mental illness	A scoping review methodology on existing literature from Science Direct, Pubmed, and NCBI databases.	Nicotine dependence remains an undertreated and under-recognized problem among people with mental illnesses despite effective smoking pharmacotherapies and psychosocial interventions.

Literature review

Michael H. Lawless, Katherine A. Harrison, Gregory A. Grandits, Lynn E. Eberly, Sharon S. Allen. Perceived stress and smoking-related behaviors and symptomatology in male and female smokers 2015	Investigating the association between smoking and stress, as well as the influence of sociodemographic variables.	The study was a retrospective analysis of 62 smokers (41 males, 21 females) enrolled in a smoking cessation study.	A strong positive association was observed between perceived stress and nicotine withdrawal symptomatology in smokers of both sexes, with a larger effect seen in women.
Damee Choi, Shotaro Ota, Shigeki Watanuki. Does cigarette smoking relieve stress? Evidence from the event-related potential (ERP) 2015	To investigate whether cigarette smoking relieves stress by measuring the late positive potential (LPP), a component of the event-related potential (ERP)	Experimentation method was used on 14 young male Japanese smokers.	suggested that cigarette smoking decreased anxiety, and, perhaps, stress too.
Tina Jahnel, Stuart G. Ferguson, Saul Shiffman & Benjamin Schüz Daily stress as link between disadvantage and smoking: an ecological momentary assessment study 2019	To examine daily stress experience as a process linking social disadvantage to smoking behavior using a socio-ecological perspective.	A sample of 194 daily smokers, who were not attempting to quit, recorded their smoking and information about situational and contextual factors for three weeks using an electronic diary assessed using Ecological Momentary Assessment.	An increase in stress led to an increase in smoking. There was a positive association between stress and smoking.

Results

- Most sources indicate a positive correlation between stress and smoking.
- Although mentally ill smokers have indicated their willingness to quit, their outcomes are not as strong as those of people without such mental illnesses.
- Despite the availability of effective smoking pharmacotherapies and psychosocial interventions, nicotine dependence is still under-recognized and undertreated.
- Smoking has been found to help with anxiety and stress.

Discussion

- From the results above, various themes were found including:
 - The availability of effective smoking pharmacotherapies and psychosocial interventions to help people quit smoking.
 - The positive correlation between smoking and deteriorating mental health.
 - The use of smoking as an intervention for anxiety and stress disorders.

Conclusion

- Research has associated an increase in mental stress with a similar corresponding increase in smoking.
- Smokers with mental illnesses are less likely to be motivated to quit smoking when compared to smokers who do not have such mental health issues.
- Smoking is often used as an intervention for anxiety and stress.
- Although there are effective smoking pharmacotherapies and psychosocial interventions, nicotine dependence remains largely under-recognized and undertreated.

Conclusion

- Aubin, H. J., Rollema, H., Svensson, T. H., & Winterer, G. (2012). Smoking, quitting, and psychiatric disease: a review. *Neuroscience & Biobehavioral Reviews*, 36(1), 271-284.
- Choi, D., Ota, S., & Watanuki, S. (2015). Does cigarette smoking relieve stress? Evidence from the event-related potential (ERP). *International Journal of Psychophysiology*, 98(3), 470-476.
- Jahnel, T., Ferguson, S. G., Shiffman, S., & Schüz, B. (2019). Daily stress as link between disadvantage and smoking: an ecological momentary assessment study. *BMC public health*, 19(1), 1-8.
- Lawless, M. H., Harrison, K. A., Grandits, G. A., Eberly, L. E., & Allen, S. S. (2015). Perceived stress and smoking-related behaviors and symptomatology in male and female smokers. *Addictive behaviors*, 51, 80-83.
- Mendelsohn, C. P., Kirby, D. P., & Castle, D. J. (2015). Smoking and mental illness. An update for psychiatrists. *Australasian Psychiatry*, 23(1), 37-43.