Instead of Antidepressants, Should Doctors Prescribe Nicotine?

By Alex Berezow — June 15, 2018

We always knew when our PhD advisor was applying for a grant. He would pace the hallways, then go outside and smoke. A lot. (Thankfully, he's quit since then.)

Why do smokers find such solace in cigarettes? It may be the nicotine. Several years ago, a (very) small experiment suggested that people who were intentionally provoked into becoming angry were less likely to retaliate [2] if they were wearing a nicotine patch.

That's an interesting finding because, as the original study [3] explains, "Deficits in anger management may be a risk factor for smoking initiation and nicotine addiction." In other words, people who have a hard time controlling their emotions may turn to smoking as a way to self-medicate.

New CDC data completely supports that assertion. The figure below depicts the percentage of people (by age group) with varying levels of mental distress who smoke. (Mental distress was defined as feeling "1) so sad that nothing could cheer you up, 2) nervous, 3) restless or fidgety, 4) hopeless, 5) that everything was an effort, or 6) worthless" over the past 30 days.)
The pattern is quite clear. The more mental distress a person has, the more likely the person is to smoke. Of course, this study does not prove causation, but given what we already know about smoking, a causative link between stress and smoking is definitely suggested. This has profound implications for society's debate over marijuana and e-cigarettes.

**Self-Medicating with Marijuana and E-Cigarettes**

The first implication involves marijuana. Some research suggests that marijuana can increase the incidence of mental illness, such as schizophrenia. But just as likely -- if not more likely -- is that people who are prone to developing a mental illness choose to self-medicate with marijuana. If a stressed-out smoker finds peace through nicotine, it is quite possible that a person experiencing paranoia may find solace in THC.

The second implication involves e-cigarettes. E-cigarettes provide users with a dose of nicotine minus most of the nasty carcinogens found in tobacco smoke. These devices are not harmless and should not be thought of as such. However, if e-cigarettes can (1) provide smokers a way to quit and/or (2) provide stressed out people a way to relax that doesn't involve smoking cigarettes, then shouldn't e-cigarettes be considered a useful part of our public health arsenal?

Currently, people who suffer stress, anxiety, or depression are often put on antidepressants or anxiolytics. Is that really a better solution than nicotine? Nicotine is demonized because of its association with tobacco, but in reality, it's a relatively harmless drug, similar to caffeine.

Our society's struggle with opioids, depression, and suicide may require out-of-the-box thinking. Perhaps nicotine as a therapeutic agent could play a constructive role.