'Cold Turkey' is Best Way to Quit Smoking, New Study Says

By ACSH Staff — March 14, 2016

Cigarette smoking is without a doubt the greatest public health villain in the United States — indeed worldwide. It causes about one of every five deaths in the U.S. annually — on the order of 480,000 deaths, according to the CDC. Of course, the best way to cut this number is for people to never begin smoking, but for those who have already started, quitting is known to reduce the health risks over time.

The big question is, how to do it?

Between the chemical addiction to nicotine, the psychological dependence, and the physical movements involved, smoking addiction is one hard nut to crack. There are, however, various modes of help available — pharmacological treatments, as well as nicotine replacement therapy (NRT) such as patches, gum, and lozenges. The question remains, is it more effective to just quit abruptly, or is a gradual reduction in the number of cigarettes smoked before quitting a better strategy?

A new study published in the Annals of Internal Medicine seeks to shed light on this issue. Dr. Nicola Lindson-Hawley from the University of Oxford, UK and colleagues studied the efficacy of the abrupt versus the gradual approaches to quitting. They randomly assigned about 700 smokers, from 11 primary care practices, to quit either abruptly or gradually. On average, the participants were 49 years old, had smoked 20 cigarettes daily, and were scored as highly dependent on the Fagerström Test for Cigarette Dependence. About half were women. Although they were not assigned based on their personal preferences for how to quit, these preferences were noted.

All participants were asked to set a "quit day" two weeks after they enrolled in the study — and during those weeks their behavior differed only by whether they were quitting abruptly or gradually.

In the gradual group, participants were asked to reduce their smoking to one half of their baseline rate by the end of the first week, and to one fourth of that by the quit day. Nurses helped the smokers create their reduction schedules, and discussed strategies to help them adhere to the
schedules. These gradual quitters were given nicotine patches, as well as a choice of nicotine gum, lozenges, nasal spray, sublingual tablets, inhalers or mouth spray to help alleviate nicotine withdrawal symptoms.

The second group — the abrupt quitters — were asked to continue smoking normally and not reduce their cigarette use. They were also given nicotine patches, but no other quitting aids.

On the day before quitting, and four weeks and six months after the quit day, participants' carbon monoxide (CO) levels were assessed — a level ≤ 10 ppm was considered evidence of abstinence. CO is a by-product of respiration and of smoking, so some will always be present in expired air — but the level would be higher in expired air from a smoker.

At four weeks-post quit day, 39 percent of the gradual-cessation group and 49 percent of the abrupt-cessation group demonstrated abstinence — the "risk" of quitting was 20 percent lower in the gradual-cessation group. At six months, again the abrupt cessation group were better at quitting — the quitting risk was 29 percent lower in the gradual group.

The authors summarized their findings thus:

"We found clear evidence that quitting abruptly was superior in the short and longer term. Adherence to behavioral instructions and prequit NRT was good, and medication was well-tolerated. Participants who preferred to quit gradually were less likely to achieve abstinence, regardless of how they were allocated to quit."