The barrage of negative information about cigarette smoking seems never ending. In addition to the association between cigarette smoking and the development of coronary heart disease, chronic lung disease, and many forms of cancer, we now learn that patients who continue smoking after percutaneous coronary intervention (PCI) have a smaller benefit in quality of life and functional status than patients who did not smoke and patients who quit after the procedure. The meticulous work of Cohen and colleagues documents this phenomenon beyond any doubt, and their information can be readily translated into direct discussions with patients.

See p 1369

Because most PCIs are performed in circumstances in which substantial survival benefit is not a realistic expectation, the major reason for doing such procedures is to improve functional status. A patient who continues to smoke after PCI receives about one-half the benefit as someone who stops smoking and only one-third the benefit as someone who never smoked.

This study brings to mind several issues that may be worthy of consideration by readers of Circulation. First, why do we not measure important ancillary issues more often when we do a first-rate clinical trial? Second, given the mountain of evidence indicating that smoking will probably shorten smokers’ lives and the lives of people around them and increase the chance that such people will be functionally miserable, what on earth possesses people to smoke? Third, what is our obligation regarding using expensive medical care technologies in people who continue to smoke? And finally, what financial responsibility should be borne by people who ignore medical advice and knowingly engage in habits that will increase costs to their insurance companies?

Cohen et al took advantage of quality-of-life data that were collected as part of a clinical trial designed to gain approval to market a coronary stent. Although the development of the stent itself was a remarkable achievement, this study demonstrates how useful it can be to take advantage of carefully controlled measurements to gather information that can be used to improve the health status of patients like those in the trial. Such studies are not free; however, the incremental cost of collecting the smoking data was certainly dramatically lower than the cost of performing an independent study of the relationship between smoking status and outcome with PCI, and finding a sponsor to fund such a study would be unlikely. Federal and other funding agencies should seriously consider awarding small grants to support such ancillary data collection efforts in clinical trials to provide critically important information that cannot be obtained in any other way.

A rational model of healthy behavior would exclude the possibility of continuing to smoke immediately after an invasive procedure that carries the risk of PCI. However, 21% of patients did so. In our society, an unfortunately high percentage of teenagers smoke, and globally, the rate of smoking continues to rise. The predictions of future excess deaths and preterminal disability from smoking are staggering, with global mortality expected to rise from 3 million deaths 10 years ago to 10 million deaths in 2025.

What is wrong with these people? The answer seems to lie in 3 fundamental principles of human behavior. First, people are not good at thinking about probabilities. The immediate gratification of a cigarette weighs much more heavily in a person’s consciousness than a nebulous future risk. Second, smokers generally associate smoking with a positive sensation. In the paradigm of drug safety, one could argue that smoking represents a decision to trade off a short-term, self-perceived, improved quality of life for a higher long-term risk of death and disability. Third, tobacco smoking is addictive, and we are increasingly learning that certain people are more prone to addiction than others. In this sense, youthful indiscretion and daring can become a physical problem reinforced by unalterable physiological urges.

Some cardiologists have recommended withholding revascularization therapy in patients who refuse to stop smoking. Although this approach may be gratifying to the cardiologist (his or her patients will have better outcomes), it represents an abdication of a fundamental responsibility of healthcare providers—to help those in need. It also fails to take into account the mounting evidence about the power of addiction, which must lead us to believe that once a young person has become addicted to the contents of cigarettes, the addiction itself becomes a medical problem. The hope in the data presented in this issue of Circulation is that the benefits of stopping smoking are measurable in a period of 6 to 8 months. Therefore, instead of castigating smokers, cardiologists should redouble their efforts to appropriately counsel patients and to provide effective therapies for those who are addicted.
Over the past decade, the physician has become a “double agent,” charged with acting on behalf of the individual patient while being judged on an ability to maintain a positive financial bottom line for the employer. If we succumb to the urge to punish those who do not obey instructions, we will have turned our backs on the Good Samaritan tradition that distinguishes medicine from businesses that are focused on the generation of profit.

In response to the findings of this study and multiple other sources of evidence, cardiologists should redouble their efforts to assist patients with a smoking habit to discontinue the habit immediately. The effort will require a combination of consistent advice to patients combined with effective behavioral and pharmacological therapy aimed at a serious addiction that is the world’s leading cause of self-inflicted disability and death.

References

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Cigarette Smoking: How Much Worse Can It Get?
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