

CHAPTER 2

THE COSTS OF ANGER

It's Thursday morning. George has been working on the Whitehorse account all week when his boss calls him into the office and tells him to drop everything and start working on the Twingle project. George feels victimized. The Twingle project is much less prestigious than the Whitehorse account. It's not fair—he was just starting to get into it, and now he's out. He's upset, and tells his boss so in no uncertain terms, storming out of the office.

On the face of it, George's anger in this situation seems justified. And his display of strong feelings might even serve to let his boss know about his degree of commitment. Perhaps the boss will realize that his decision was unfair, and change his mind.

Perhaps. But let's look at more of George's behavior to get a better perspective. This is not the first time that he's blown up at work. In fact, there have been three other episodes in the past thirty days alone. First, there was the incident with the equipment supplier, who admittedly was two days late delivering a part that George needed. Then there was the angry exchange with a coworker about who had priority using the copy machine. Worst of all was that misunderstanding with a customer who had complained to his boss. Maybe the customer was being unreasonable, his boss had said, but that was no excuse for George to be sarcastic and rude.

On further analysis, it turns out that George has lost two previous jobs because of conflicts at work, and he's received low performance evaluations for poor people skills. But the picture is even worse in his personal life. His wife filed for divorce eighteen months ago saying she couldn't stand living with him anymore. He's also been estranged from his sixteen-year-old daughter ever since he blew up and made a scene at her birthday party. And even his brother won't talk to him anymore after that incident at the bowling alley. To top it off, a recent physical found that George has high blood pressure.

Taken one at a time, each of the events referred to above might be justified or understandable. But added together, they point to a chronic anger pattern that is emotionally and physiologically damaging.

Physiological Costs of Anger

There's nothing wrong with occasional, moderate anger. It creates no lasting harm. But chronic, sustained anger can be a serious problem. By keeping the body in a constant state of emergency, chronic anger can contribute to hypertension, heart disease, and increased mortality from *all* causes. This chapter will begin by exploring what we know about how anger impacts your health. Later we'll look at the emotional and interpersonal costs of chronic anger.

Anger and Hypertension

"High" blood pressure can be understood by thinking about garden hoses. Let's say that you have two garden hoses, one a half-inch in diameter and the other a quarter-inch in diameter. If you attach the half-inch hose to the faucet and turn the valve all the way you will get a steady stream of water. However, if you attach the quarter-inch hose to the same faucet, and turn the valve all the way as before, you will get a much stronger stream. Anger is associated with high levels of norepinephrine, which tends to constrict blood vessels. This raises blood pressure as surely as if you had switched to a smaller diameter hose.

The idea that unexpressed anger (anger-in) could lead to high blood pressure has been circulating for more than half a century. In 1939, Franz Alexander suspected that his hypertensive patients were having trouble with feelings of anger and an inability to express them. This failure to express angry feelings, he argued, could lead to chronic activation of the sympathetic nervous system, and high blood pressure. Research as early as 1942, by Hamilton, confirmed that unexpressed anger was inextricably linked to hypertension. In 1982, Diamond reviewed four decades of research involving the role of anger and hostility in essential hypertension and coronary heart disease. He described the hypertensive individual as someone "ridden with hostility and constantly guarding against impulse expression." In the same year, Gentry studied the effects of habitual anger coping styles on over a thousand subjects. With this larger sample, he showed categorically that chronic suppressed anger increased the risk for hypertension.

Research by Dimsdale and associates (1986) once again confirmed that higher blood pressure is significantly related to suppressed anger. In fact, "normotensives" were twice as likely as "hypertensives" to be free of suppressed anger. All in all, there are dozens of studies linking anger-in with hypertension. You will find the most significant of these listed in the appendix.

It's clear from the research literature that the inability (or unwillingness) to express anger contributes to the development of hypertension for many susceptible people. But that's only half the story. As it turns out, people who tend to show more hostility and act more aggressively towards others (anger-out) also have higher blood pressure rates than normal.

In a 1979 study, Harburg and his associates asked people how they would deal with an angry and arbitrary boss. People's responses were categorized into three different coping strategies. The first, walking away from the situation (anger-in), was associated with people who had high blood pressure readings. The second strategy, protestation (anger-out), included behaviors such as confronting the boss or reporting him to the union. This strategy was associated with people whose blood pressure was even higher than those using the walk-away coping style. A third group used a style dubbed "reflection." These people, who said that they would try to talk to the boss later, after he had cooled down, were found to have the lowest blood pressure rates.

A host of other studies (see the Appendix for a sampling) all confirm the basic hypothesis that chronically expressed anger is associated with high blood pressure and hypertension. So it doesn't matter whether anger is suppressed or allowed to blow. Either way, your blood pressure tends to go up. It's the anger itself that's harmful, not the choice to express it or hold it back.

Anger, Hostility, and Cardiovascular Disease

In the 1950s, San Francisco cardiologists Meyer Friedman and Ray Rosenman began their seminal work on the psychosocial risk factors that underlie blocked arteries, angina pains, and heart attacks. Eventually they were able to identify a cluster of personality traits that appeared to be linked to coronary heart disease. Using the nonpejorative term "type A," they described someone who had the traits of time urgency (always in a hurry) and competitiveness. In addition, this person was highly ambitious, hyperaggressive, and experienced free-floating hostility. The type A person can be seen as someone seething with anger, always ready to boil over.

In the 1960s Friedman and Rosenman (as reported in the classic, *Type A Behavior and Your Heart*, 1974) conducted the massive Western Collaborative Group Study on 3,500 healthy men. Eighty percent of those men who had heart disease could be classified as "type A." Over the eight-and-a-half-year course of the study, type A men were twice as likely to have heart attacks as type Bs. Rosenman (1985), in his reanalysis of the Western Collaborative Group Study data, found that the anger-hostility dimension proved to be crucial. It was, in Rosenman's words, "the dominant characteristic among the coronary prone type A behaviors."

Evidence from the Western Electric Study, done by Shekelle and associates in 1983, tends to corroborate Rosenman's findings. Of the 1,877 men studied in Chicago, those who scored high on a hostility scale were one and a half times more likely to have a heart attack than men who had lower hostility scores. Further corroboration comes from a follow-up study of 255 male physicians who completed the Hostility Scale while in medical school. Men who scored at the median or below in hostility had one-sixth the incidence of coronary heart disease twenty-five years later, compared to those who had scored higher on the scale (Barefoot et al. 1983).

Heart disease starts early for those who are chronically angry. Grunbaum and his research group (1997) studied the association between anger or hostility and coronary heart disease in children and adolescents. Their review of epidemiological studies uncovered a strong connection between anger and pathologic changes in the arteries of young school-age children. For additional research on the relationship between hostility and coronary heart disease, see the appendix.

So far we've described research showing that the *feeling* of hostility is related to heart disease. But there is also abundant evidence that *expressed* hostility is strongly associated with coronary artery disease—for people of all ages. Kawachi and associates (1996) conducted a seven-year follow-up study of 1,305 men. They concluded that high levels of expressed anger are a risk factor for cardiac heart disease among older men. Siegman and associates (1987) found that expressed hostility was related to the severity of coronary artery disease in patients 60 years or younger.

The evidence is clear and overwhelming. Chronic anger and hostility can cause serious damage to your heart and arteries.

Anger, Hostility, and Death from All Causes

In 1989, the *New York Times* carried an article reporting on the results of a twenty-five-year follow-up study of law students. Among other health evaluations, the law students had taken a test measuring hostility. A striking fact emerged from this study. Twenty percent of those who had scored in the top quarter on the hostility scale were dead. This was compared to a death rate of only 5 percent for those students who had scored in the lowest quarter on the same test.

Similar results were found by Shekelle and associates in 1983. A twenty-year follow-up study of nearly two thousand initially disease-free employees of the Western Electric Company showed that high hostility scores were related to increased mortality *from all causes*.

The Finnish Twin Cohort study (Koskenvuo, et al. 1988) provides corroborating evidence from a different culture. Using a simple three-item hostility measure and a sample of 3,750 men, they found that high self-ratings of hostility were associated with increased all-cause mortality over a three-year follow-up period.

Clearly, the evidence overwhelmingly suggests that chronic anger and hostility can lead to overall poorer health, and even a likelihood of premature death.

Emotional and Interpersonal Costs of Anger and Hostility

While the physiological effects of anger, such as hypertension and artery disease, can become dramatically obvious, the emotional and interpersonal effects are more subtle. It may simply be a lonely feeling as friendships drift away. Or a sense of isolation at work because colleagues avoid making contact. Or a lack of intimacy in personal relationships as your partner becomes more guarded.

A host of studies (see the appendix) have found that high scores on hostility are associated with fewer and less satisfactory social supports. Greenglass (1996), for example, studied a sample of 252 male and 65 female managers in Canada. Those with high scores on anger-in reported receiving less support from family members. They also reported less trust in their close relationships.

Jerry Deffenbacher and his colleagues (see the appendix for a full list of research articles) have done the most extensive research on how chronic anger affects personal and work relationships. For example, Hazaleus and Deffenbacher (1986) found that 45 percent of angry males in their sample had suffered a terminated or damaged relationship during the previous year. Among other results, Deffenbacher (1992) found that angry individuals suffer significant disruptions in work or school performance, and that high anger people drink more alcohol and get drunk more often. Houston and Kelley (1989) also reported a strong relationship between anger scores and overall levels of conflict in both the family of origin and current marriages.

In 1981, Jones and his associates, found a significant relationship between hostility and loneliness. Angry people end up feeling painfully disconnected from others. When Hansson and associates reviewed the research on loneliness in 1984, they found that anger cuts people off from social support in two ways. Angry people have cynical attitudes toward others, and are therefore unable to recognize support when it's available. Similarly, their unrealistic and overly demanding expectations make the available support seem not "good enough." No matter how sincerely interested others may be in helping, the angry person is unable to experience or appreciate that support.

It's clear that angry people keep others at arm's length. In so doing, they experience less support and a greater sense of loneliness than their less hostile peers.

Assessing the Cost of Anger for You

Using the worksheets on the next page, we want you to make an honest assessment of all the ways in which anger has had a negative impact on your life. Once you have completed the exercise, it may become much clearer exactly how much anger has cost you personally. You will be ready to move on to the next chapter, which will help you to understand your anger.

PERSONAL COSTS OF ANGER—Worksheet

In the spaces provided below, write brief descriptions of how anger has affected you in each area. Put an asterisk by any numbered item that feels like a crucial reason for you to learn more about anger management.

1. How anger has affected my work relationships (include jobs lost or jeopardized):

2. How anger has affected the relationships to my family of origin (including parents, siblings, and extended family):

3. How anger has affected my marriage or intimate/romantic relationships:

4. How anger has affected my children:

5. How anger has affected my friendships (including lost friends and strained relationships):

6. How my anger has harmed people who aren't family or friends (including the names of all the people my anger has hurt—on a separate sheet if necessary):

7. How my anger has affected my health and physical well-being (including stress-related illnesses/problems and physical discomfort from anger reactions):

8. How anger has endangered me (including reckless driving, physical fights, hurting myself by hitting things, legal problems, etc.):

continued on next page

PERSONAL COSTS OF ANGER—Worksheet cont.

9. How anger has affected me financially (include bad decisions made in anger as well as material things broken or damaged):

10. How anger has affected me spiritually (including bad behavior that goes against my personal code of ethics or sense of right and wrong):
