Heart Disease: The Mind-body Connection

In medical matters of the heart, your mind can be either your best friend or your worst enemy. What you think and feel, and how well you deal with those feelings, can affect your physical health in myriad ways.

The connection between your state of mind and the state of your heart is complex. Some effects are direct and dramatic. Others are less direct but potentially just as profound. Here are some of the emotional factors considered most likely to influence your heart's health:

**Stress**

This is the body's natural response to threats, also known as the fight-or-flight response. In primordial times we may have used it to react quickly when confronting a saber-toothed cat. Nowadays, we may experience it when someone cuts us off in traffic, or when we're fighting podium terror before a speech.

There's no missing the mind-body link here: As you feel a burst of fear or rage (or both), a surge of adrenaline is released into your heart. Your blood pressure rises, your muscles tense and your blood vessels contract. Your blood platelets become stickier, to improve clotting (just in case that saber-toothed cat catches up with you). Your heart speeds up and consumes more oxygen—which in turn puts pressure on the coronary arteries. If those arteries can't get enough blood to the heart, you may have angina or chest pain.

When the danger or excitement is past, your body relaxes. Or at least it should. If you have trouble working off the tension of life's daily crises and frustrations, you may be putting your heart at risk with lower-level but constant stress. It's not clear if this form of stress directly causes heart disease, but it can't help. That's why stress management is a key part of cardiac rehabilitation programs.

**Depression**

Clinical depression (shown by symptoms such as persistent sadness, fatigue and insomnia) is a serious danger for heart patients. It's all the more treacherous because it's often not recognized and treated. The National Institute of Mental Health estimates that about one in three people who have survived a heart attack experience major depression in a given year.

Studies show depression raises the risk of second heart attacks and increases a patient's disability. It may do this, in part, by acting directly on the body in ways similar to stress—by making platelets sticky, for instance. The indirect effects are easier to trace. Depressed patients are less motivated than psychologically healthy ones to follow the orders of doctors, nurses and other caregivers. They're more likely to abuse alcohol, eat unwisely or fail to get enough sleep.
Loneliness

Social isolation is not in itself an emotional illness, but it contributes to others, such as depression, that can afflict heart patients. Just as depression can get in the way of recovery, emotional support from friends or family can make recovery easier.

Hostility

Your anger can be killing you, say researchers who have studied the relation between cardiac risk and feelings of hostility. A study by Swedish scientists, for instance, found that both social isolation and suppressed anger impair the heart's ability to vary its rate in response to daily stress. In a study of nearly 13,000 participants, published in 2000 in the journal Circulation, those most prone to anger were almost three times more likely to have a heart attack than those with low anger. In a 2002 study in the Archives of Internal Medicine, hot-tempered medical students were three times more prone to premature heart disease and five times more likely to have early heart attacks than colleagues who stayed cool under stress.

The link between anger and heart disease may also be indirect, though no less real. Those who nurture feelings of distrust and resentment toward others also probably are contributing to the isolation that makes their recovery difficult.

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