

CHAPTER III: MIND-BODY MEDICINE

Stress, Altered Mental States, and Illness

I'm particularly delighted that the government has taken such an active interest and is helping to apply science to a field that previously had been a kind of wild and woolly domain. I'm also delighted that Dr. Stephen Straus, the head of the National Center for Complementary and Alternative Medicine, is here with a number of members of his staff. The work that they're doing is extraordinarily important in helping us bring science to an area that previously has lacked it. What I hope to do with you tonight is review 2 areas of research involving possible effects of mind on brain and body. But first, as you know from getting here in the rain and as I know from flying here, traveling can be a stressful situation, and I have one potential solution for that problem here. This will be my only psychopharmacology slide. What I hope to do is review with you the relationship between stress, stressful situations, including medical illness, and altered mental states. The fact that we enter an altered mental state when we're stressed provides a rationale for the use of artificially induced altered mental states, like hypnosis, in better helping us to manage stress. I'll show you some evidence about hypnosis and its effects on brain and body. Then I will turn to cancer and to evidence that stress also plays a role in the progression of cancer, and there are different techniques, group supportive techniques, that can help people better manage the stress of cancer. We'll try to conclude with some ideas about how altering sensation may help us alter the course of illness as well.

We think of disease as a stressor, in fact, as a series of ongoing stressors. It includes some physical symptoms like pain. It includes the existential questions that we have when we're ill, changes in family and social roles, undergoing treatments that are themselves stressors, and changes in our social environment and function. So one can think of being ill as a series of stressors. In this sense, it makes sense to consider the way in which people respond to other stressors, so I show you here 2 images. One is the image of a woman who herself had metastatic breast cancer who made this model of what her body looked like as a result of the effects of having cancer. She and her support group

said, on September 12, 2001, “Welcome to my world. Now you know what it feels like to be attacked.” And her body felt attacked in the way in which we all did. So I want to start out talking about the experiences we have when we undergo trauma like the time that affected the World Trade Center and the Pentagon not too long ago. There are 3 domains in which stress affects us. One of them is emotion. Very often, we don’t have words for the emotions that we’re feeling. It’s been called speechless terror. This is a problem limiting our ability to process the impact of what goes on during stressful situations, and it’s also a problem because we have trouble explaining to others what it is that we’re experiencing. Secondly, stress alters cognition. We have difficulty understanding what it is that’s going on. I was on the other side of the country on 9-11. There were 3 car accidents in our parking lot on that day. Now it’s not a very complicated parking lot; there aren’t usually 3 accidents a day. People thought they were functioning well, but in fact, they weren’t.

So it is clear that stress affects our ability to process information. One of the problems when you’re undergoing stress of medical illness or other kinds is that not only do you have the problems related to the illness itself, but everything is up for grabs. You don’t have routines anymore. Your processing abilities are often overwhelmed by the array of decisions that you have to make in relation to an illness. We also often enter an altered mental state when we’re coping with these stressors. Now you might not know it unless I told you, but these are people exiting the World Trade Center shortly before it collapsed. With the possible exception of this lady here, most of them don’t even look particularly distressed. They’re doing what they need to do—putting one foot in front of the other to try and get out. But in fact, they are substantially distressed, and they’ll have to deal with that distress later. So it’s another situation in which we enter an altered mental state that alters the visibility of our distress and even our ability to comprehend how distressed we are.

The third critical component of stress response and how we need to deal with it, which I’ll talk about more in the second half of my talk, is social contact. I particularly love this image because it conveys 2 emotions: one is the terror of what’s happening on 9-11, but

the other is this tremendous closeness. One way to effectively modify strong emotion is to pair it with another strong emotion. Many people who are suffering serious stress find that being close to other people who are undergoing similar stress is a powerful way to modify that emotion. The same feeling experienced close to someone else who's also going through it is very different from suffering the situation alone. So we're finding that social connection is a powerful way of reducing stress as well.