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The Missing Link Between Mind and Body

A Review of

The Psychoneuroimmunology of Chronic Disease: Exploring the Links Between Inflammation, Stress, and Illness

by Kathleen Kendall-Tackett (Ed.)

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For many years, arguably since the beginning of time, people have had an intuitive sense of the connections between illness and emotions. Traditional healers from many different cultures (Chinese, Indian, Native American, for example) have not made a distinction in their healing work between physical illness and mental illness. Hippocrates taught that our state of mind influences our health. The relationship between asthma and stress was understood long before the mechanism of action was known.

But in recent years, medicine has veered as far from this holistic understanding of human functioning as has probably ever been seen. The mind-body relationship lost credence when developments in understanding of human anatomy and disease processes led to a more mechanistic understanding of human health. In our modern scientific era, there is a tendency to discount any phenomenon not "proven" through research. Professions that base their healing on mind-body connections have been looked down upon. Even psychologists, whose work is often poised at the intersection of mind and body, have been the victims of these attitudes and have heard psychology referred to as art rather than science (as if art were a bad thing!).

What Kathleen Kendall-Tackett's book attests to is that this trend has been relatively short-lived. For the last couple of decades, the psychoneuroimmunological research literature has been growing, and in recent years the number of studies has increased dramatically. Scientists have embraced this field and are producing large numbers of good studies attesting to the relationships between mind and body and taking the understandings further than even the more holistically oriented healers have dared or have been able to do.

In an interesting quirk of fate, suddenly, hard-core scientists find themselves talking, thinking, and acting in a remarkably holistic way. I don't know how they feel about this, but I, for one, am thrilled, and I think that my fellow psychologists, particularly health psychologists, will feel a similarly pleasant vindication while reading Kendall-Tackett's book *The Psychoneuroimmunology of Chronic Disease: Exploring the Links Between Inflammation, Stress, and Illness.*

These developments are reminiscent of another process that has been unfolding during approximately the

same time period. Just as the mechanistic understanding of human health is now being supplanted by a more holistic view, so too are some of the basic tenets of the Industrial Revolution being debunked by scientists studying the effect of industry on our climate.

Mechanistic views of health and of industry are not sustainable and don't hold up under scientific scrutiny, though full acknowledgment in both of these fields is slow in coming. Science is opening up new vistas and the possibility of new ways of doing things, namely holistic medicine, and a green economy. Just as environmentalists have talked for years about the need to change human behavior to protect the planet, so have psychologists talked for years about the need to manage stress and other emotions in order to protect health.

In the scientific work of this new breed of holistically oriented researchers, a common thread has emerged that seems capable of explaining a large array of health concerns. Inflammation. The missing link. The idea that emerges throughout this book is that inflammation is a significant part of the connection between mind and body.

While acute stress appropriately activates the immune system, chronic stress tends to blunt immune response. Inflammation is a critical component of immune response. But when the inflammatory process is prolonged, it can give rise to a range of illnesses. Inflammation is implicated in cardiac disease, dementia, sleep disorders, rheumatoid arthritis, inflammatory bowel disease, and asthma, for instance. Research is showing that by managing inflammation, one can manage these conditions. Stress can encompass a number of human experiences, including trauma, depression, hostility, and loneliness. And all of these emotions are being shown to cause or increase inflammation.

Here are a few of the more interesting and perhaps surprising of the findings summarized in this book about the interrelationships among emotions, illness, and inflammation: Inflammation increases in response to perceived danger (p. 16); poor sleep quality elevates biomarkers of inflammation (p. 68); allostatic load (the cumulative effects of stress) contributes to the development of osteoporosis (p. 206); and the omega-3 fatty acids EPA and DHA are effective in treating both cardiovascular disease and depression, often in combination with medications, and higher levels are associated with increased stress resilience (p. 236).

The body's function is complex, so by nature discussions of the mechanisms involved in stress responses are complex. And *The Psychoneuroimmunology of Chronic Disease* summarizes such a burgeoning literature that it has an astonishing number of references, which is, of course, helpful. Kendall-Tackett tries to address the need of scholars to understand the intricacies of the biological mechanisms and the need of clinicians to find the clinical implications. But the in-text references can make the narrative a bit hard to navigate, as can the complex technical language.

Overall, though, a good balance is struck, with painstaking attention paid to the science and good overviews given by plain-language summaries and bulleted lists of key points at the end of each chapter. An index also helps the reader to find specific information. Though this is an edited volume, there generally is consistency of style and quality across chapters.

Is inflammation theory a fad? Kendall-Tackett convincingly addresses this question in the epilogue. She states that many strands of inquiry have all led to the same place, which increases the odds that these researchers are triangulating on something important. To this clinician/reader, the staying power of these findings is in the treatments that can flow from them. What emerges is that there are many paths to treatment.

For depression, for instance, according to solid research cited in the book, a patient can expect relief by exercising, taking fish oil or St. John's wort, and/or participating in cognitive therapy—all of which lower inflammation. So medication isn't the only option. Similarly, for posttraumatic stress disorder, it is reasonable to expect that physical interventions can reduce psychological symptoms.

With the publication of *The Psychoneuroimmunology of Chronic Disease* our understanding of the relationships between mind and body takes a leap forward toward a more holistic conceptualization of illness. Another aspect of traditional holistic approaches to healing is the understanding that the spiritual

realm is intimately related to both mental and physical health. I wonder if we can look forward to a time in the near future when scientists will discover and document the mechanisms underlying the intuitively understood connections between spirituality and physical and mental health.

Psychospiritualneuroimmunology, anyone?