

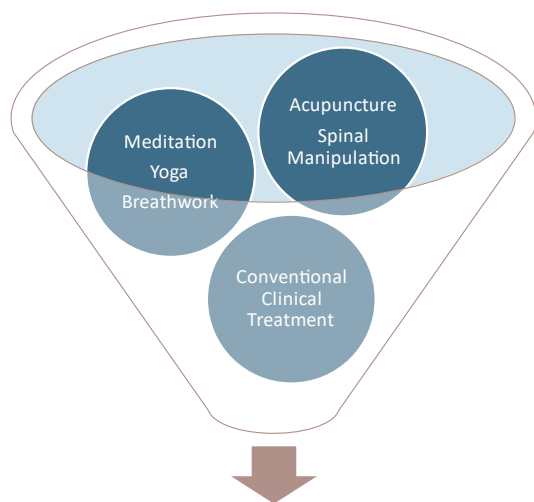
Mental & Physical Health

The Mind-Body Connection – Is this the Next Frontier?

In our first of this series of articles, [The Evolution of Healthcare - Article 1](#), we introduced recognition of the evolution of healthcare to address the whole person, and related opportunities to support a broader set of health care needs relative to primary prevention and health promotion, in addition to management of disease and illness. This second article will focus specifically on the mind-body connection, and ways in which paying attention to physical, mental, and emotional health can lead to improved outcomes and even help to address some of the fragmentation currently experienced across the health care system.

Consider this - A broken leg is typically very straightforward to diagnose and treat, and its cause is easy to identify and understand. However, many health conditions are not so clear cut and more often than not, embody a direct correlation (if not potential causation) between mind and body, where an individual's mental state of mind and emotions play a significant role.

Mind-Body Connection in Practice



There is growing evidence that an array of mind-body therapies can be used as an effective complement to conventional clinical treatment for a number of chronic conditions. These include medical conditions like coronary heart disease, insomnia, chronic back pain, arthritis, some cancers, in addition to improvements in postsurgical outcomes.

The use of mind-body practices has been shown to have a direct impact on a wide variety of bodily functions, and when properly engaged and deployed, can have a positive impact on blood pressure, cholesterol levels, metabolism (insulin resistance, as a case in point), mood state, and sleeping patterns/quality. And that's not all. Mind-body practices also help address health care concerns that are not necessarily metabolically related, such as issues related to physical pain due to injury and even one's state of mental health.

Fifty or so years ago, mind-body practices such as meditation were considered outside the realm of conventional medical treatment. Today,

mind-body connectivity is now an increasingly accepted approach to healthcare including a wide range of behavioral and lifestyle interventions, typically in combination with more traditional clinical treatment protocols. The “patient” is viewed more holistically, with the acknowledgement that many physical conditions are caused as much by lifestyle, dietary habits, activity level and life stressors as they are by other causes such as infection, genetics, and physical trauma.

This type of integrated approach benefits from a partnership among medical and mind-body specialists (examples of the latter include biofeedback practitioners, chiropractors, acupuncturists, nutritionists, spiritual counselors, and yoga instructors). Another important aspect of so called “mind-body medicine” is that the patient plays an active role in developing and maintaining the integrated treatment plan, with a strong emphasis on patient education and self-management as central to the overall approach.

The optimal timing for integrating these practices varies, and more often arises as patients move through more conventional care, motivated by the desire to mitigate side effects and other emerging challenges to quality of life. Adopting a realistic framework for what to expect and the likelihood of deriving meaningful results seems to be an important element in perceptions of success and willingness to engage. Helpful questions to ask at the outset include:



What are the goals (better manage stress to decrease risk of future illness, minimize impact of current symptoms and disease, reduce dependency on pharmaceuticals or side effect of treatment?)



What appeals to each individual (creative/mindful or physical engagement, related physical, intellectual and/or spiritual characteristics?)



Overall, what is realistic (how much time is involved, any financial constraints, other limitations?)

Role of Mind-Body Connection in Chronic Illness

A common misperception when referencing mind-body connection within the context of illness or symptom management is the implication that what the patient is experiencing is somehow “in their head.” A better way to think about this is to correlate “mind” in this context with various mental states such as thoughts, emotions, attitudes and beliefs, and mood state. In addition to the better-known realization that stress can play a significant role, an individual’s actual thought pattern and what they believe can also affect their health, especially within the context of chronic illness. For that reason, many mind-body therapies focus on helping patients become more conscious of mental state(s) and using this increased awareness as a guide. Examples include using cognitive behavioral therapy for patients who present with negative thought patterns, and a combination of activities such as yoga, meditation, and conscious breathing to help manage stress.

Effectively managing chronic disease very often requires lifestyle changes such as improved diet, exercise, and sleep habits. However, the ability to initiate and maintain these changes is strongly influenced by attitudes, beliefs, and state of mind. Getting in touch with one’s mind and body in a meaningful way is believed to have a positive influence on desire to do the right thing as it pertains to health and management of chronic disease.

Here are some specific examples for consideration, that cut across metabolic and non-metabolic disease states – illustrating the wide potential application of mind-body approaches.



Heart Disease

Consider the case with heart disease. There are many known lifestyle circumstances and behaviors that come into play (e.g., diet, lack of exercise, environmental factors like air quality, exposure to pollutants, etc.). It is also the case that emotional state, everyday stressors and even attitudes toward health and wellness itself present physical challenges that add personal risk related to the prospect of developing heart disease, as well as its successful treatment and ultimate outcomes. Not to mention, ongoing quality of life while living with illness.

In fact, heart disease (specifically coronary artery disease) is one of the best known and accepted areas in which there is outcome data on the positive results associated with a more integrated and holistic approach to treating both the mind and body, in recognition of that connection as it relates to overall health. Lifestyle, emotional and social healing practices, and recommendations are now mainstream adjuncts to more traditional therapies employed in the treatment of heart disease and related illnesses.

Mind-body practices often recommended in the treatment of heart disease include guided imagery, meditation, stress reduction cognitive therapy, and biofeedback.



Cancer Care

With respect to the treatment of many cancers, mild to moderate levels of physical activity has been shown to improve quality of life with concomitant decreased fatigue, and improvements in mood, sleep quality and appetite. There are of course many types of cancer, all with varying extent and etiology of disease. However, there are definitive areas of cancer care for which integrative (mind-body) healing practices are now more routinely considered with the expected benefits of stimulating the immune system, managing side effects of the cancer itself and/or its treatment, and otherwise improving quality of life.

Cancer care practitioners have undertaken more organized evaluation and application of integrative practices (so-called “integrative oncology”) for a more evidence-based approach addressing patients more holistically and paying attention to their overall experience and state of being. Direct applications include improving patient tolerance to chemo and other therapies, optimizing control of their primary and secondary symptoms, and even expanding options for end of life and palliative care.

Examples of specific mind-body approaches used in cancer care include:

- Meditation (decreases anxiety, improves pain tolerance and sleep),
- Massage Therapy (relieve pain, increase mobility, improve lymphatic drainage, and address chronic fatigue),
- Acupuncture (help with nausea associated with chemotherapy, post-operative healing, ease muscle tension).



Back Pain

Pain, particularly in the lower back, is a common problem impacting a sizable portion of the overall population at some point in their lives. It is important to recognize that back pain is primarily a symptom with many different causes, including nerve and muscular issues, degenerative disc disease, and arthritis. The most important aspect of back pain relates to how it impacts daily functioning.

Many people suffering from back pain have started exploring integrative therapies, including mind-body practices and related stress reduction. People who suffer from back pain experience either chronic persistent pain, or occasional acute episodes. Regardless, in part because the long-term use of oral medications (NSAIDs, muscle relaxers, pain management) is not optimally effective and carries significant risk of side effects and dependence, alternative strategies are all the more appealing.

Back pain has been shown to have a strong association with mood and mental health, including depression, substance abuse, chronic stress, and anxiety disorders. An individual’s coping skills, attitudes and other illness-related behaviors all impact the perception of pain. There is relatively strong evidence of positive effects of cognitive therapies, progressive muscle relaxation, and mindfulness-based stress reduction (e.g., combination of yoga and meditation) – the latter now used in over 200 hospitals and medical centers to complement medical management of chronic pain and stress-related disorders.

(John E. Sarno 1991)

Mind-Body Therapies – the Case for Disease Prevention, Symptom and Therapy Optimization



Disease Prevention:

The primary role of mind-body therapies in the prevention of disease relates to stress prevention and management. Research has over and over again demonstrated that prolonged stress contributes to illnesses such as hypertension, heart irregularities, anxiety, insomnia, chronic fatigue, onset of type 2 diabetes, and a variety of digestive disorders. Long term unabated stress also suppresses the immune system, which increases the likelihood of disease and difficulty in its management.



Symptom Management:

Mind-body therapies and practices can also impact how someone experiences symptoms. Any woman who has used mindful breathing during childbirth can attest to this. Mind-body practices foster a sense of control, enhance optimism (feeling of well-being) and in some cases simply provides social support (a sense of not being in it alone) that improves coping skills, adherence to treatment protocols, and quality of life.



Treatment Outcomes:

Mind-body therapies and practices can also help improve treatment outcomes by facilitating the body's power to heal itself via its impact on immune functioning, blood pressure, cortisol and other stress-related hormonal levels – even reducing in some cases the need and/or dosing for medications.

Barriers to Adoption

Although the benefits of mind-body connection and related therapies are more widely accepted, not everyone is ready to embrace these tools. Some characteristics of these therapies make them more difficult to study than, for example, standard drug treatment. Further, obtaining reliable data when it comes to the mind-body connection and its effect on chronic illness can be challenging. This has inhibited more even adoption within mainstream medical practices. It also raises interesting questions about reliability overtime and when and how to integrate for optimal results.

Some reasons cited for why establishing evidence has been challenging include:

- ✓ Mind-body therapies often employ multiple approaches in yielding results, making it hard to link outcomes to specific alternative treatment modalities (yoga includes a variety of postures, also uses mindful breathing and meditation).
- ✓ Often includes a hands-on therapist or practitioner, so double blind studies are impossible.
- ✓ Are frequently used in conjunction with traditional interventions, making it difficult to define cause-effect relationships between and among therapies and results.
- ✓ Can offer numerous outcomes that are hard to quantify. For example, studies on meditation have measured everything from objective elements such as decreased heart rate and body temperature, to subjective results such as overall well-being.
- ✓ Other examples of factors hard to measure:
 - ? How engaged is the patient and/or therapist?
 - ? How to quantify mental state of mind (e.g., overall wellbeing)
 - ? If study takes place outside of a clinical setting, how to control potentially confounding environmental factors.
 - ? Numerous potential outcomes complicate study – for example, studies on meditation have measured everything from objective elements (heart rate and body temperature) to subjective matters (relative anxiety levels).
- ✓ Because focus is on the whole person, changes may be more gradual and subtle than for a specific intervention like surgery.

Conclusion

As conventional medical practice in the U.S. and elsewhere attempts to move forward with developing models for integrating mind-body practices into overall health care and medical education curriculums, there is an important opportunity to more formally study and learn how best to personalize these approaches and maximize their public health potential.

- ✓ There is a need to understand whether particular approaches are more likely to help certain people, with certain conditions and emotional states.
- ✓ Whether psychological and/or other factors predict who will respond best to certain practices.
- ✓ What constitutes optimal “dosing” and how best to incorporate with more traditional approaches to yield best results.
- ✓ To what extent can these practices shift the course of diseases and reduce the need for pharmaceuticals and expensive treatments and diagnostics, and thus play a more important and recognizable role in optimizing care and reducing burden and cost on the health care system overall.

More robust, controlled (as best can) prospective and comparative effectiveness trials as well as basic research into the physiological underpinnings of mind-body effects are required so it's full potential and promise can be realized.

In our next article, we will look more closely at specific interventions and modalities under the umbrella of mind-body approaches to health care and wellness/prevention, and their application.

Works Cited

John E. Sarno, MD. 1991. *Healing Back Pain: The Mind-Body Connection*.