Mind-Body Medicine: Definitions, Techniques and Evidence for Breast Cancer Survivors

Mark D. Gilbert, MD, Dip ABPN, FRCP(c)
Associate Professor of Clinical Psychiatry, University of Arizona;
Associate Medical Director of Psychosocial Oncology, University of Arizona Cancer Center;
Director Mind-Body Medicine Skills Group Program,
University of Arizona Health Network
Objectives

1-List strategies for mind body techniques for breast cancer survivors.

2-Describe strategies of mind body techniques for breast cancer survivors.

3-Outline resources to identify mind body techniques resources in your community.

4-Outline the data supporting the use of mind body techniques in breast cancer survivors.
What is it?

- Unites modern and traditional medicines, psychology, nursing, nutrition, and exercise physiology
- Addresses a framework of attitudes and behaviours that surround a medical condition
  - Benson
Applies scientific method to psychological and social phenomenon in relation to health and disease
Is interested in the interaction of thoughts, emotions, behaviors, spiritual faith and an individual’s relationship to the environment and how those factors affect medical illness
Teaches responsible health care
The Goals

• Reduce symptoms, reduce need for access to health care interventions & services
• Develop the patient’s understanding of the disease or symptom process
• Help the patient develop a sense of control and well-being
• To examine and reduce contributing lifestyle, diet, stress and physical tensions

- J. Gordon
The Core Principles of Mind-Body Medicine

Mind-Body Medicine is a way of perceiving and practicing medicine that mirrors and integrates every facet of life

♫ Mind-Body Medicine weaves together the central components that contribute to an individual’s experience, and in so doing honors that weaving as a sum greater than its individual parts

♫ The practice of Mind-Body Medicine makes it incumbent upon physicians to develop life skills so as to promote understanding, respect, and value for others

♫ Mind-Body Medicine emphasizes the concept of healing as much as it does curing
Healing

An intentional process by which a human being is motivated to accept their authentic life, through the exploration of internal thoughts, feelings, physical and spiritual connections - in a non-judgmental way and in a trusting environment. As the result of this acceptance, meaning and purpose transform suffering, and the individual’s perception is that life’s harmony and integrity are restored.

- Mark D Gilbert, MD
For a patient with life threatening illness, fixing is a goal, but also a form of judgement. When we serve a patient we see and trust their wholeness and foster their hope, and promote healing (Remen).

Hope is the positive expectation for meaning attached to life events. (Eric Cassel) Hope lies in meaning that is attached to life, not in events themselves. If there is meaning, there is Hope.
Dr. Michael Lerner, Co-Founder, Commonweal
Stress After the Diagnosis of Breast Cancer

• QOL – how the patient feels physically and emotionally, their degree of social support, how well he/she functions in the world, and the level of distress from cancer and it’s treatments are strong determinants in how well and how long someone with cancer will live.

• Patients who are more optimistic and energetic, have greater social support, are more involved in their usual activities, and more hopeful about their future are more likely to feel better and may indeed live longer (Gordon)
The Techniques

- Relaxation
- Imagery
- Cognitive Restructuring
- Emotive-Expressive
- Expressive arts
- Humor
- Healthy Lifestyle (Nutrition, Exercise)
- Spiritual Connection
- Connection of Purpose
- Group Support
Relaxation Techniques

- Meditation – focusing (concentric), mindfulness (Vipassana), movement meditation
- Autogenic Training
- Progressive Muscle Relaxation
- Biofeedback
- Relaxation Response
- Hypnosis
Imagery is the thought process that invokes and uses the senses. (J. Achterberg)

- Imagery utilizes vision, hearing, smell, taste, movement and touch
- Imagery is the communication mechanism between perception, emotion and bodily change
- Our body does not discriminate between sensory images in the mind and what we call reality

In an altered state we are capable of more rapid and intense healing, growth, learning and change
Imagery Can Result in:

- Relaxation
- Stress Reduction
- Pain Reduction
- Modulation of Mood
- Stimulated Immune Response
- Tolerating Difficult Procedures
- Encourages Active Participation in One’s Own Care
- Self-Empowerment
- Discover Meaning/Insight into Illness
- Enhanced Self-Awareness
Cognitive Behavioral Techniques
3 Cognitive Behavioral Techniques

Our Perceptions:

- Are based on what we perceive as taking place
- Thoughts, feelings and beliefs combine to influence how we behave and who we are
- Perceptions are how we view ourselves, the world and all events
- Our own unique view is based on our entire life experience
- Our thoughts impact our feelings and behaviors
- Meaningful change involves acknowledging and owning our thoughts, and taking responsibility for them
- By identifying core hurts from the breast cancer survivors’ past history, they can examine distorted, inaccurate thoughts and re-establish their core worth, and hope in life
Emotive Expressive Techniques

- Research has shown that repressed feelings have been strongly implicated in suppressing immunity and contributing to illness.

- Appropriate identification of feeling states and their healthy expression in a trusting environment is critical for breast cancer survivors’ health (Cunningham).

- Health is not just about thinking happy thoughts, but is about expressing authentic feelings (Pert).
Expressive Arts

 asserted that authentic expression of feelings, thoughts, and spiritual connection through art and through journaling significantly improves the health of cancer patients and reduces hospitalization, improves quality of life. (Pennebaker)

Expressive writing consists of writing one’s deepest feelings and thoughts about life experiences. (Pennebaker)

Recent study demonstrated almost half of participants who wrote about life experiences for 20 minutes per day, began having a different outlook on their illness and reported positive feedback. (Pennebaker)

Practicing expressive writing has dramatic impact on cancer patients’ lives. Over 50% report a different outlook on their illness and this is linked to a significant improvement in their physical quality of life. (Pennebaker)
Humor

The potential downside of laughter is small, particularly if elected by patients…the promise of improved mood and quality of life without notable negative side effects is reason enough to implement experimental laughter programs in health care settings ...(yet) the decisive connection is yet to be made between the intensive research in psychoneuroimmunology and the field of humor. “This is in part due to under funding, poor research

- Robert Provine, U. of Maryland
Lifestyle Choices

- Nutrition for optimal health (decrease fats, refined sugars, meats; increase fruits, cruciferous vegetables, and fish; omega-3s, tea, vitamin D, etc.)
- De-toxification and avoidance of toxic chemicals and minerals
- Exercise (decreases incidence of cancer)
Spirituality is a belief system focusing on intangible elements that impact vitality and meaning to life’s events.

‡ 79% Americans believe spiritual faith can help one recover from illness, injury, or disease.

‡ 56% believe that their faith helped them recover from illness, injury or disease.

‡ 63% believe doctors should talk to patients about their spiritual faith.

‡ 10% of doctors have done so.
...it is a perspective, a way of looking at the world that is expressed in the way we live and the way we experience our lives...at the core of this way of being is the fundamental principal that *Life is Sacred.*

**How core spiritual beliefs may affect health:**

- I am an external spirit, a child of God, and I trust that whatever God brings me is ultimately for my spiritual growth and development.
- I am an accident of nature, a speck of dust in the passing wind; what happens to me is one of no concern to any larger entity or plan, and there is nothing I can do about it.
- I am a conscious co-creator of my universe. Decisions and mental patterns I create can alter and change my physical reality.
- I am a sinner and have offended a wrathful God. God has chosen to punish me for my evil deeds by giving me this awful disease.
- I am human, I am alive, I am a mystery. I don’t know where I came from or where I am going, but I am going to do whatever I can to live and to be healthy.
The risk of dying from all causes is up to 35% lower for people who attend religious services once or more a week than for those who attend less frequently.

Religious people who attend live longer, and remain in better health.

They have stronger immune systems than their less religious counterparts (lower blood levels of interleukin-6).

- Harold Koenig, Professor, Duke University
Victor Frankl, Nobel laureate, found that it is purpose that keeps people alive.

The cancer patient as survivor is challenged by loss of treatment team support, a new life often with less energy; disfigurement; financial and work challenges, and a change in nature of relationships.

It is critical for the breast cancer survivor that they re-establish purpose in their life.
Group Support

Mind-Body Medicine Skills Groups for breast cancer patients – over 30 years of research demonstrating large significant decrease in depression and anxiety, increased quality of life, improved interpersonal relationships and better communication with health care professionals.

Now balance tilting toward longevity benefits for longevity (Anderson)
The Research

- Psychological stress causes decreased lymphocyte proliferation and reduced Natural Killer Cell (NK) cell cytotoxicity, and there is good evidence that cellular immune response is also adversely effected.

- Psychological stress can modulate IFN-gamma and IL-2 synthesis.

- Emotionally negative stressors can delay wound healing, increase risk of infection and prolong infection time.

- For post-surgical breast cancer patients: those with greater stress have lower NK cell activity, diminished responsiveness to IFN-gamma (immune modulator), and lower antibody responses to immune insult.
Patients with emotional repression have been shown to have poorer immune responses and in some studies greater recurrence and higher mortality from breast cancer.

Breast cancer patients who perceive themselves to have more trusting, intimate friendships have significant more longevity.

In 20 year review of support groups for cancer: consistent informational, emotional, and instrumental benefits were identified for all groups studied.

A meta-analysis of 37 papers over 16 years supported the usefulness of psychosocial interventions for improving the QOL in adult cancer patients.
The mind-body medicine skills groups were seen by participants to provide:

» a unique sense of community
» unconditional acceptance
» cancer information
» emotionally challenging (vs. support from family and friends)
» increased empowerment
» increased confidence
» facilitate positive relationships with family and friends
» relieves burden of care and provides a safe space for expression of emotion
» sense of control increased via self, living with cancer, interactions with others (i.e. MDs)
<table>
<thead>
<tr>
<th>Intervention</th>
<th>Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supportive-expressive</td>
<td>mood, anxiety, social support, QOL</td>
</tr>
<tr>
<td>Imagery and Relaxation</td>
<td>anxiety, cortisol and cell counts</td>
</tr>
<tr>
<td>Educational</td>
<td>pain, vitality, physical function</td>
</tr>
<tr>
<td>Cognitive Behavioural</td>
<td>purpose, optimism, cortisol</td>
</tr>
<tr>
<td>Mindfulness</td>
<td>anxiety, self-efficacy, cells, QOL</td>
</tr>
<tr>
<td>Supportive</td>
<td>loneliness, anxiety, social</td>
</tr>
<tr>
<td>Multidimensional Mind-Body Group</td>
<td>anxiety, mood, social support, purpose, QOL, pain, self-efficacy</td>
</tr>
</tbody>
</table>
Coping styles among breast cancer survivors characterized by helplessness and hopelessness coping styles have a detrimental effect on survival (fighting spirit does not seem to improve it) – Greer

Relaxation techniques decrease levels of stress and improve immune functioning, decrease chemotherapy side-effects, decrease anxiety and depression, and decreased pain (Bridge, Wallace)

Guided imagery and yoga with mindfulness meditation in breast cancer patients creates altered cortisol and immunity consistent with less stress and higher QOL (Carlson)

Imagery with relaxation significantly enhances T-cell and NK cell activity, enhances QOL and emotional expression, improves pain control and decreases side-effects of treatments (Leon-Pizzara)
The ideal way to provide competent mind-body medicine skills for your patients is either to contact an academic institution that runs certified courses in Mind-Body Medicine, and ask them for the name of a trained clinician who practices near your community, OR

Take the course yourself (even better!)

Books and tapes can be helpful, though do not replace direct clinical help. Resources for online bibliographies include the Harvard Mind-Body Medicine Institute (www.mbmi.org), the Center for Mind-Body Medicine (www.cmbm.org) or UMass Stress Reduction Clinic (www.mindfulnesstapes.org)
The Mind-Body Skills Group:  
A proven model for service in health care

- A confidential group setting

- Elective (freedom of choice) experience

- Non-judgmental environment

- Combines opportunity for sharing of emotion, exploration of concerns, learning experiential tools for stress reduction and awareness, and education about attitudinal shift, system dynamics and coping skills
Healing circle - opportunity to share emotions, thoughts, sensory awareness and spiritual connection

Education - evidence-based learning about the science of pschyoneuroendocrineimmunology (PNEI), the history of mind-body medicine, stress physiology, cognitive behavioural theory, emotional awareness, genograms, body awareness, spiritual awareness, nutritional awareness, imagery, humour and health, forgiveness, and other issues

Experiential - learning relaxation techniques, journaling, art expression, biofeedback, cognitive restructuring, gentle exercise, and others

PROMOTES HOPE, HEALING and HEALTH
Relaxation
Mindfulness Meditation
Progressive Muscle Relaxation
Biofeedback
Movement Mediation
Focusing Meditation
Autogenic Training
“I’m learning how to relax, doctor—but I want to relax better and faster! I WANT TO BE ON THE CUTTING EDGE OF RELAXATION!”
Expression and Coping Arts

Art Expression

Imagery
“This is my relaxation tape—
it’s the sound of ocean waves crashing
onto the shore, snatching my boss’s body off
his beach chair and carrying him out to sea.”
Family Genograms

Connections
Themes
Family Roles, Communications, Tasks
Emotional Models
Impact of Diagnosis and Addressing the Caregiver
Cognitive Re-structuring

Re-thinking Thinking
Spirituality
“Hope is the thing with feathers that perches in the soul…”

- E. Dickinson
Based on well-documented medical research it is incumbent upon the health care provider serving the cancer survivor to utilize (or refer their patient) to therapists who can utilize mind-body medicine skills as an adjunct to other therapeutic modalities. Decreased stress, increased hope, social support, stabilized mood, healthy lifestyle and emotional authenticity are all components that have been show to make or break a cancer survivor’s future.