Impact of Participating in the Mind-Body Medicine Course on Empathy, Mindfulness and Well-being

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Co-Director, CAM Graduate Program
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Washington, DC USA
Empathy decline during medical school and residency compromises striving towards professionalism and may threaten health care quality.
52.8% of medical students who responded had elements of burnout. Students with burnout were more likely to report engaging in 1 or more unprofessional behaviors than those without burnout (35.0% vs 21.9%; odds ratio [OR], 1.89; 95% confidence interval [CI], 1.59-2.24).
Competency-Based Medical Education

1. Effective Communication
2. Basic Clinical Skills
3. Using Basic Science in the Practice of Medicine
4. Diagnosis, Management and Prevention
5. Life-long Learning
6. Self-Awareness, Self-Care, and Personal Growth
7. Social/Community Contexts of Healthcare
8. Moral Reasoning and Clinical Ethics
9. Problem-solving
Mind-Body Medicine Program at Georgetown U School of Medicine

Goal

To increase student understanding of self-awareness and self-care by providing a unique experiential and didactic introduction to Mind-Body Medicine

Nancy Harazduk, MEd, MSW
Director, Mind-Body Medicine
Mind-Body Medicine Program at Georgetown U School of Medicine

Objectives

➤ To increase self-awareness of emotional, physical, mental, social and spiritual aspects of one’s life

➤ To increase personal self-care through guided experiences and daily practice.

➤ To foster non-judgmental, supportive collegial relationships
**Mind-Body Medicine Program**
at Georgetown U School of Medicine

- **Format of groups:**
  - 10 students and 2 faculty facilitators per group
  - Participants (voluntarily sign up for the course) meet once a week for 2 hours for 11 weeks per semester for this “journey of self-discovery”

- **Structure of Each Session**
  - A safe environment must be created that adheres to certain guidelines
    - confidentiality, respect, compassionate listening, non-judgment
  - Check-in (sharing of new reflections and insights)
  - Introduction of a new mind-body medicine skill
  - Process the experiential exercise (sharing insights)
Mind-Body Medicine Program at Georgetown U School of Medicine

Skills and Experiences

- Meditation (mindfulness/awareness, concentrative)
- Guided Imagery (several types)
- Autogenic training/biofeedback
- Art (emphasis on non-cognitive approaches)
- Music (used in meditation and imagery sessions)
- Movement (shaking, free movement, exercise)
- Writing (journals, dialogues, service commitment)
- Group support
I feel that I have the capacity to deal effectively with the stresses of medical school.
I have an appreciation for my classmates' concerns and struggles.
I have doubts about whether pursuing a medical degree is suitable for me.
# Measures for Mind-Body Project at GUMC

<table>
<thead>
<tr>
<th>Construct</th>
<th>Measure</th>
<th># Items</th>
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</thead>
<tbody>
<tr>
<td>Stress</td>
<td><strong>Perceived Stress Scale (PSS)</strong> (J Health Soc Behav 24: 385-396, 1983)</td>
<td>10</td>
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<tr>
<td>Mindfulness</td>
<td><strong>Freiberg Mindfulness Inventory (FMI)</strong> (Personality Individual Differences 40: 1543-1555, 2006)</td>
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<tr>
<td>Mindfulness</td>
<td><strong>Mindfulness Awareness Attention Scale (MAAS)</strong> (J Personal and Soc Psych 84:822-848, 2003)</td>
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<td>Positive and Negative Affect</td>
<td><strong>Positive Affect Negative Affect Schedule (PANAS)</strong> (J Personality and Soc. Psych 80:6; 1063-1070, 1988)</td>
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<tr>
<td>Emotional Intelligence</td>
<td><strong>Trait Meta Mood Scale (TMMS)</strong> (Acad Med. 80:10: S34-S37, 2005)</td>
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<tr>
<td>Empathy</td>
<td><strong>Interpersonal Reactivity Index (IRI)</strong> (J SAS Catalog of Selected Documents in Psychology 10: 85, 1980)</td>
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</table>
Mind-Body Medicine Program at Georgetown U School of Medicine

Outcomes

- Perceived Stress *(Perceived Stress Scale)*
- Mindfulness *(Freiburg Mindfulness Inventory)*
- Empathy *(Interpersonal Reactivity Index)*
Emotional Intelligence Scale Results

Interpersonal Capacity
Empathetic Concern

Average Scores

MBS Group

January 2006
May 2006
Trait Meta Mood Scale
Attention to Feelings

Pre-MBM
Males (n=23): 42.4
Females (n=45): 41.8

Post-MBM
Males (n=23): 44.0
Females (n=45): 46.8
Interpersonal Reactivity Index
Perspective Taking

Pre-MBM

Males (n=25)
19.1

Females (n=47)
17.7

Post-MBM

Males (n=25)
20.9

Females (n=47)
20.3
Interpersonal Reactivity Index
Empathetic Concern

Pre-MBM

Post-MBM

Males (n=24)  
Females (n=47)
Interpersonal Reactivity Index

Personal Distress
(in response to distress of others)

Pre-MBM

Males (n=24) 8.0
Females (n=46) 10.4

Post-MBM

Males (n=24) 7.0
Females (n=46) 8.6
Perceived Stress Scale

Pre-MBM
- Males (n=23): 16.1
- Females (n=46): 18.0

Post-MBM
- Males (n=23): 13.0
- Females (n=46): 13.4
## Perceived Stress Scale (PSS)

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>P-value</th>
<th>Effect size (d)</th>
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<tbody>
<tr>
<td><strong>n = 118</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-MBM</td>
<td>18.2 ± 6.0</td>
<td></td>
<td></td>
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<tr>
<td>Post-MBM</td>
<td>13.7 ± 5.3</td>
<td></td>
<td></td>
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<tr>
<td>Difference</td>
<td>-4.5 ± 5.7</td>
<td>&lt; 0.001</td>
<td>0.76</td>
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</table>
## Mindfulness (FMI)

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<tr>
<td><strong>n = 118</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Pre-MBM</strong></td>
<td>36.4 ± 6.4</td>
<td></td>
<td></td>
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<tr>
<td><strong>Post-MBM</strong></td>
<td>42.5 ± 5.5</td>
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<tr>
<td><strong>Difference</strong></td>
<td>6.1 ± 5.8</td>
<td>&lt; 0.001</td>
<td>0.96</td>
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### Positive Affect

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<th>Mean</th>
<th>P-value</th>
<th>Effect size (d)</th>
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<tbody>
<tr>
<td>Pre-MBM</td>
<td></td>
<td>34.2 ± 5.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Post-MBM</td>
<td></td>
<td>38.1 ± 5.9</td>
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<tr>
<td>Difference</td>
<td></td>
<td>3.9 ± 5.2</td>
<td>&lt; 0.001</td>
<td>0.67</td>
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### Negative Affect

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<th>Mean</th>
<th>P-value</th>
<th>Effect size (d)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-MBM</td>
<td></td>
<td>21.7 ± 6.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Post-MBM</td>
<td></td>
<td>18.7 ± 5.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Difference</td>
<td></td>
<td>-3.0 ± 5.2</td>
<td>&lt; 0.001</td>
<td>0.45</td>
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</table>
## Bivariate Analysis with the Change in Mindfulness (FMI)

<table>
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<tr>
<th></th>
<th>r</th>
<th>P-value</th>
<th>n</th>
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<tbody>
<tr>
<td>ΔPSS</td>
<td>-0.627</td>
<td>&lt; 0.001</td>
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<tr>
<td>ΔPANAS Positive</td>
<td>0.443</td>
<td>&lt; 0.001</td>
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<tr>
<td>ΔPANAS Negative</td>
<td>-0.474</td>
<td>&lt; 0.001</td>
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Implementation and Scope of the Mind-Body Medicine Skills Program

Over 15 years

- >120 trained faculty facilitators (clinicians, scientists, educators)
- >1,400 medical students participated
- >360 graduate students (MS and PhD)
- >120 nursing students
- >800 students (Law, Business, Foreign Services Schools at GU)
- >70 faculty participants (including from curriculum committee)

Over 300 groups and over 3000 participants

Embraced by the School of Medicine as essential for a core competency (self-awareness and self-care)
Students in Georgetown University School of Medicine’s Mind-Body Skills course begin a session with a period of meditation.

Spotlight on Mind-Body Skills: A unique program blends science and humanism by fostering student self-awareness and self-care. See page 2
Faculty Training in Mind-Body Medicine

November 9–12, 2017

Educating for Enhanced Self-Awareness and Self-Care

Originating at Georgetown University School of Medicine, this experiential program provides faculty at health professional schools with the training, tools, and strategic thinking necessary to implement mind-body medicine skills groups in their institutions.

During a three-day weekend retreat on Maryland’s Eastern Shore, faculty will be introduced to meditation, guided imagery, biofeedback, breathing techniques, and other mind-body approaches that can alleviate stress and foster self-awareness and self-care. Participants will experience the power of these approaches first-hand while learning how to lead mind-body groups for students.

The program includes seven group sessions, several individual activities, short didactic presentations, and daily yoga. Participants are provided with all course materials, enabling them to launch similar programs in their institutions after the retreat.
Institutions Implementing Programs in Mind-Body Medicine

- Georgetown University School of Medicine (medical students, residents)
- University of Cincinnati College of Medicine (medical/allied health/7 colleges)
- University of Alabama at Birmingham School of Medicine (medical students)
- Oregon Health and Sciences University (medical students)
- University of Washington (medical students)
- University of Vermont (medical students)
- University of North Dakota Medical School (medical students)
- Charite University Medical School, Germany (medical students)
- University of Essen-Duisenberg Medical School, Germany (medical)
- University of Liverpool, UK (medical students)
- Texas College of Osteopathic Medicine (medical students)
- Stanford University, Anesthesia Residency Program
- University of Western States (chiropractic and other CAM professions)
- Oregon College of Oriental Medicine (acupuncture and DAOM)
- Utrecht Medical School, Netherlands (medical students)
- Mid-Sweden University, Sweden (nursing students)
- Ben Gurion University School of Nursing, Israel (faculty retreat)
Promoting self-awareness and reflection through an experiential Mind-Body Skills course for first year medical students

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¹Department of Neurology, Georgetown University, ²Philadelphia College of Osteopathic Medicine, Philadelphia, PA, ³Department of Physiology, Georgetown University, Washington, DC, ⁴The Center for Mind Body Medicine, Washington, DC

Themes:
• Connections
• Self-discovery
• Stress Relief
• Learning: New Skills and Academic Achievement
• Insights into Medical Education
Making Better Doctors – Using Mind-Body Medicine Skills as a Self-Care Element in Medical Education at the Charité University Medical School

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\textsuperscript{b} Center for Integrative Medicine, University of Maryland School of Medicine, Baltimore, MD, USA

\textbf{Stress and Its Consequences at Medical School}

The education at a medical school is a time of significant psychological distress for physicians in training [1]. High workloads associated with stress are common to the medical profession and ethical conflicts as well as the exposure to human suffering and death are additional stressors for medical students.

\textbf{Mind-Body Medicine as a Self-Care Element in Medical Schools}

The preventive aspect of MBM characterizes the earlier the better approach for implementing it as self-care element into medical education. The Association of American Medical Colleges – Section on Integrative Medicine and Mind-Body Medicine, in coordination with the American Board of Integrative Medicine and Health, recommend a comprehensive curriculum for medical students, residents, and faculty in MBM.

This paper provides an overview of how MBM can be integrated into medical education and discuss the potential benefits and challenges of such an approach.
Participating medical students showed significantly increased empathic concern and decreased personal distress compared to controls at 12 months follow-up.
Conclusions

- Enhancing mindfulness through an experiential mind-body medicine skills course is associated with decreased medical student stress and increased elements of emotional intelligence, including empathy.

- These curricular interventions may attenuate the decline in empathy seen during medical training and improve the quality of health care.