Use of Mind-Body Therapies in Psychiatry and Family Medicine Faculty and Residents: Attitudes, Barriers, and Gender Differences

Victor Sierpina, MD,[1#] Ruth Levine, MD,[1] John Astin, PhD,[2] and Alai Tan, MD, PhD[3]

Background: Mind-body medicine (MBM) approaches to many health problems have been well documented in the literature, including through multiple meta-analyses. Efficacy has been well demonstrated in conditions such as headache, irritable bowel syndrome, anxiety, fibromyalgia, hypertension, low back pain, depression, cancer symptoms, and postmyocardial infarction. However, an apparent disconnect (ie, translational block) prevents more widespread adoption of such therapies into practice. Biofeedback, relaxation therapy, hypnosis, guided imagery, cognitive behavioral therapy, and psychoeducational approaches are the domain of MBM we examined in assessing physician attitudes, beliefs, and practices.

Methods: Using a Web-based survey, we obtained responses from 74 faculty and resident physicians in the Department of Family Medicine and the Department of Psychiatry. Our response rate was 69%. We conducted descriptive statistics, bivariate analysis, and multivariate analysis using a logistic regression model. Various statistics were chosen depending on the nature of analyzed variables. Synoptic tables are presented.

Results: Comparing these cohorts, we found little difference between physicians in the two specialties, but substantial reports that barriers to the use of MBM were largely based on lack of training, inadequate expertise, and insufficient clinic time. Lack of expertise and insufficient clinic time were higher among family physicians than among psychiatrists. There was a high interest in both groups in learning relaxation techniques and meditation and lower interest in biofeedback and hypnosis. Female physicians were significantly more likely to use MBM, both with patients and for their own self-care, and were less likely to be concerned that recommending these therapies would make patients feel that their symptoms were being discounted. Female physicians also had significantly higher beliefs about the benefits of MBM on health disorders in several of the conditions examined, with a consistent though nonsignificant trend in others.

Key words: Mind-Body therapies, medical education, translational barriers

(Explore 2007; 3:129-135. © Elsevier Inc. 2007)

INTRODUCTION

A substantial body of research suggests that numerous mind-body medicine (MBM) interventions can be effective adjunctive therapies for an array of health-related problems. However, these therapies have for the most part remained at the margins of mainstream medical education and practice, despite the presence of well-conducted clinical trials and meta-analyses of randomized controlled trials in the peer-reviewed literature.[1-3] Evidence that biobehavioral factors are linked to health in integrated, complex ways continues to mount. Stress and coping behaviors have important implications for the initiation or progression of many major diseases. Health-enhancing or health-impairing behaviors impact the treatment of many of the major illnesses of our society.[4] For example, a meta-analysis of trials of MBM interventions found a 41% reduction in all causes of mortality and a 46% reduction in nonfatal cardiac recurrences in two years, following incorporation of psychosocial treatments into cardiac rehabilitation.[5] Multiple studies in cancer patients show that various MBM interventions can improve quality of life, reduce pain, nausea, and improve physical functioning.[6] Other conditions in which best clinical evidence has been found for the effectiveness of mind-body approaches include incontinence disorders, surgical outcomes, insomnia, headache, chronic low back pain, osteoarthritis, rheumatoid arthritis, and hypertension.[1]

Although Engel's biopsychosocial model of care[7] is fairly well grounded within generalist areas such as family medicine, the pressures of practice, role modeling by teachers, and expectations by patients all drive the continued dominance of a biomedical model. Psychiatry training and practice also has developed a larger emphasis on neurobiological mechanisms and somatic treatments to the exclusion of more comprehen-

1 University of Texas Medical Branch, Galveston, TX
2 California Pacific Medical Center, San Francisco, CA
3 Office of Biostatistics, Department of Preventive Medicine and Community Health, University of Texas Medical Branch, Galveston, TX
The opinions expressed are those of the authors and do not necessarily reflect the views of the National Institutes of Health, the National Institute on Aging, or the National Center for Complementary and Alternative Medicine.
Supported by Mind-Body Exploratory and Development Grant 1 R21 AG023951-01 from National Institute of Aging and Office of Biobehavioral and Social Science Research (VS), R01 AT00869-04 from the National Center for Complementary and Alternative Medicine (JA); and CAM Education Grant 1 R25 AT00586-01 from the National Center for Complementary and Alternative Medicine (VS).

Corresponding Author. Address:
301 University, Department of Family Medicine, University of Texas Medical Branch, Galveston, TX 77555-1123
e-mail: vssierpi@utmb.edu

ISSN 1550-8307/07/$32.00

doi:10.1016/j.explore.2006.12.001

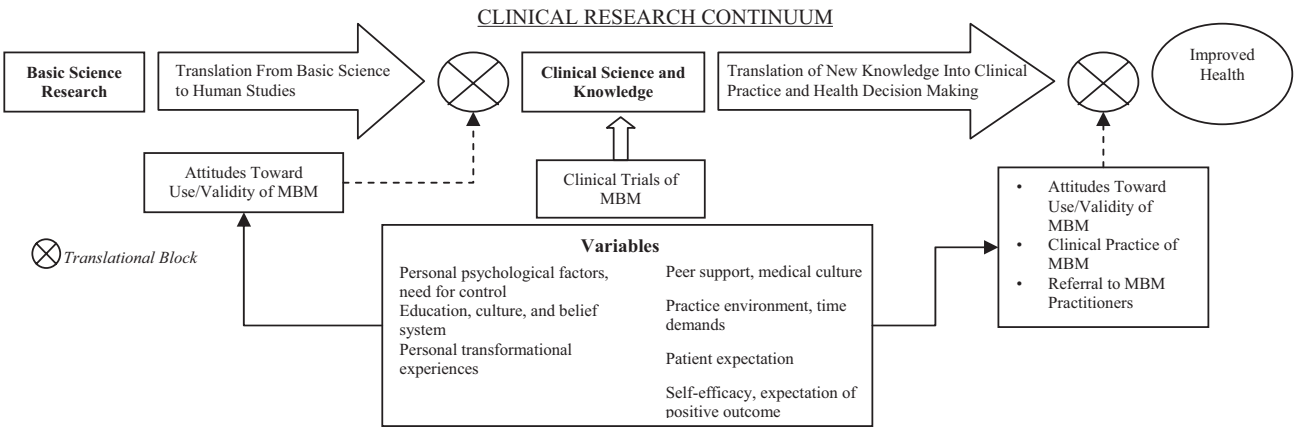

Figure 1. From research to health outcomes: translational blocks to mind-body medicine.

sive therapies that address the multiple domains of human experience that can impact health and well-being.

Survey data have shown that even though there is considerable acceptance of MBM techniques (eg, biofeedback, relaxation, hypnosis, and meditation) among primary care providers, significant numbers of physicians would not consider using these therapies despite belief in the evidence supporting them.[8] Indeed, studies indicate that nonbiological (ie, psychosocial) factors continue to be overlooked or frequently missed in clinical encounters[9-14] and are frequently not well integrated into undergraduate and graduate medical education.[15,16] Research also suggests that empirically supported mind-body interventions for common problems are underutilized by patients.[1,17,18]

These attitudes among professionals result in translational blocks to the adoption of such therapies into both training and practice. A major issue challenging future funding for basic and clinical science in MBM is that research findings in MBM are not consistently implemented into practice; this results in a failure to prescribe these treatments in appropriate circumstances (Figure 1).

Research from animal and other basic science studies in the mind-body domain, such as genetic, behavioral, and physiological studies, is often not imported into the clinical trials. This is in part because the culture and belief models in the predominant biomedical science culture emphasize and reward physicochemical remedies such as pharmacotherapy over behavioral interventions. This translational block is perpetuated by a number of attitudes listed in Figure 1 that persist despite increasingly sophisticated and mechanistic explanations of MBM through known cellular, genomic, functional imaging, neuroimmunological, and endocrinological pathways. The next phase of translational blockage occurs after the clinical trials themselves, as noted in the studies above, are performed and reported. Practice constraints, training, patient expectations, and the general biomedical culture often prevent the movement of these trials into clinical application and thus into the improvement of public health. We explore some of these issues in this report.

We scaffold our work onto data from an NIH-funded national survey of 1,058 physicians addressing similar issues in MBM carried out by one of our authors (J.A.) and which examined educational issues but did not gather data about psychiatry as a specialty.[19] Our project builds upon these in two ways: (1) by confirming them in our institutional setting and (2)2 by using our pilot project as a test bed for study of the translational process in clinical and training settings in family medicine and psychiatry.[1,19]

Our study was based on the following preliminary hypotheses:

1. A number of specific factors can be identified that block the integration of MBM into patient care. These include but are not limited to lack of education about the efficacy of MBM approaches and how these therapies can be integrated into care, lack of peer support, provider discomfort with the intangibles of the biobehavioral domain, time pressures in practice, concerns about patient expectations, and a culture of medicine grounded in the biomedical model.[20]
2. Personal exposure to MBM techniques and experiences will improve the acceptance of these methods among clinicians. The three lead authors communicated in person, by phone, and by e-mail to craft an abbreviated 16-item online survey (derived from the 12-page, 20-minute national survey) that took less than 10 minutes to complete. We designed it to capture, with fewer questions, the key barriers to the use of MBM, such as training, lack of time, and reimbursement, and expanded it with questions regarding positive correlations of MBM use with gender and personal usage. We used a similar ordinal rating format. Because we were examining the training setting, we specifically asked about *knowledge* of the evidence of MBM as well as the *perception* of the evidence existing for clinical applications to common problems in psychiatry and primary care, such as anxiety, depression, headache, back ache, hypertension, irritable bowel syndrome, and fibromyalgia. We also targeted questions on interest in using and learning about biofeedback, meditation, hypnosis, guided imagery, relaxation therapies, yoga, and tai chi. The finalized survey is available at http://cam.utmb.edu/resources/First-UTMB-CAM-MindBody-Survey.pdf.