

Mind-Body Training for At-Risk Populations: Preventive Medicine at its Best

Charles Elder, MD, MPH, FACP

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This article is a companion to “Transcendental meditation and reduced trauma symptoms in female inmates: A randomized controlled pilot study,” available at: www.thepermanentejournal.org/issues/2017/6290-meditation.html, and on page 39 and to “Reduced trauma symptoms and perceived stress in male prison inmates through the Transcendental Meditation program: A randomized controlled trial,” available at: www.thepermanentejournal.org/issues/2016/fall/6227-incarcerated-healthcare.html and in the Fall 2016 issue of *The Permanente Journal*.

Kaiser Permanente, and like-minded institutions, strongly emphasize health promotion and disease prevention in caring for our patients. We screen our population for breast cancer in an effort to achieve early detection, so appropriate curative treatment can be offered in a timely way. We promote vaccination programs to prevent outbreaks of infectious diseases. We prescribe statins for primary and secondary prevention of cardiovascular disease, expending considerable energy and resources to maximize levels of appropriate prescribing on a population-based level to reduce the incidence of cardiovascular events. We actively and systematically screen for alcohol abuse at routine primary care visits, identifying patients who might not otherwise seek intervention. These, and innumerable other such efforts, share the worthy goal of preventing the occurrence, or complications, of serious diseases.

TWO PAPERS

In this issue and in the Fall 2016 issue of *The Permanente Journal*, Nidich and colleagues^{1,2} have reported results of two clinical trials of a standardized, evidence-based mind-body intervention delivered to inmates incarcerated in three state prisons in Oregon. These projects offer insight and guidance toward advancing the scope, and paradigm, of our preventive medicine efforts.

In the article published in Fall 2016,² Nidich et al randomly assigned 180 male inmates in the Oregon state correction system to either Transcendental Meditation (TM) instruction or a no-intervention control group. TM is a popular mind-body technique that, from a research and therapeutics perspective, offers the important advantage of a standardized, reproducible 7-step instruction protocol. At 4-month follow-up, the intervention group showed significant reductions in total trauma symptoms and perceived stress compared with control.

The article in this issue¹ describes the same meditation intervention offered to female inmates. Twenty-two women incarcerated at an Oregon correctional facility were again randomly assigned to TM instruction or a wait-list control group. At four-month

follow-up those in the meditation group showed significant improvements relative to control on the Posttraumatic Stress Checklist Civilian Version Total Trauma scale.

These 2 projects are to be contextualized within the framework of previously published literature in this area. In prison inmate populations, previously published data suggest that TM instruction may effectively reduce recidivism. In one paper,³ a sample of 259 male felon parolees of the California Department of Corrections who had voluntarily learned the TM technique while incarcerated were compared in a retrospective analysis with matched controls and found to have significantly less recidivism at 1 year, and again at 5-6 years. In addition, stress can adversely affect a range of health conditions, including both mental health and cardiovascular outcomes.⁴ Meditation instruction has been shown in multiple previous studies to favorably modify physiologic indicators of stress and to improve clinical outcomes for patients with anxiety,⁵ posttraumatic stress disorder,⁶ substance use disorders,⁷ and cardiovascular disease.⁸

DESIGN

The design of these studies is relatively simple, although the enterprise itself is extraordinarily bold. Walking into a prison and systematically providing TM instruction to inmates, then measuring and publishing the results, requires a certain degree of chutzpah. Solid evidence base and long history of use notwithstanding, it may not always be so easy to convince the administrators of the prison, and the relevant government officials, of the feasibility and cultural appropriateness of mind-body instruction. Of course, one must also offer an intervention that has credibility and acceptability among the inmates themselves. A principle advantage of the TM technique in this regard is a time-tested, standardized intervention protocol. That is to say, in the final analysis the instructor need only stick with the script. Indeed, the sponsor of these projects, the David Lynch Foundation, has funded programs that have successfully provided TM instruction to a range of at-risk populations, including students in low-income, inner-city schools, veterans with PTSD, victims of domestic violence, and war refugees suffering from PTSD.⁹

IN PRISON IN PERSON

From a clinical perspective, the two papers by Nidich exemplify an approach that can expand the scope and paradigm of our current preventive medicine efforts. In the case of breast cancer screening, for example, we generally require a patient to come

Charles Elder, MD, MPH, FACP, is Physician Lead for Integrative Medicine at Kaiser Permanente Northwest; Affiliate Investigator at the Center for Health Research in Portland, OR; and Associate Editor for Integrative Medicine at *The Permanente Journal*. E-mail: charles.elder@kpchr.org.

to an imaging center in a hospital or clinic to receive a procedure (mammography). In contrast, in these projects, the evidence-based intervention is taken directly to the environment where it can be best accessed by the target population. A high-risk target population is reached, in the prison environment, in a reasonably efficient way. It is difficult to imagine any other practical mechanism for delivering such an intervention to this population. Some might argue that mind-body interventions can be offered online, but again many individuals who are indigent, elderly, incarcerated, or otherwise disadvantaged may be unable or unwilling to engage in an online format. In addition, a meditation technique such as TM is both sophisticated and subtle. For instruction to be effective, the technique must be taught in person, by a trained instructor. Waiting for these inmates to come to a clinic or meditation center after they have returned to the community would, in essence, mean that they would never receive the benefits of the program.

SELF-CARE FOR LIFE

We immunize our patients to prevent influenza. To be effective, however, the immunization must be re-administered every year. In the case of mind-body instruction, the intervention provides a self-care skill that can last a lifetime. Once taught the technique, an individual can use the skill for the duration of his or her life, as a stress management tool, providing ongoing benefits across a range of domains. We prescribe statins to reduce the incidence of heart attack and stroke. However, many patients taking statins suffer from myalgias, or otherwise find these drugs difficult to tolerate. In contrast, the mind-body intervention generally has no adverse side effects. Indeed, in addition to helping the inmate cope with the stress of incarceration, there possibly may be a range of additional “side benefits,” ranging from reduced recidivism to improved cardiovascular health.

PREVENTION

Conceptually, there are also good reasons to consider that a mind-body intervention of this type can be cost effective. Reducing recidivism can, at a societal level, save the expense of additional incarceration. There is also an additional potential economic benefit in returning the inmate to a productive role in society. Within the domain of health care, there is evidence that meditation instruction may reduce health care costs.¹⁰

Finally, many of our most challenging patients suffer from chronic pain, substance abuse, and multiple simultaneous medical and social challenges. The primary care physician often feels frustrated and powerless when the situation is complex, the resources are limited, and the patient’s core challenges seem beyond

the scope of routine biomedical practice. Mind-body interventions can provide the patient with a simple self-help tool that can effectively reduce anxiety, help treat substance abuse, reduce inmate recidivism, and help address a range of medical conditions.

In the end, prevention efforts need not, and should not, be limited to procedures and drugs. Nor must such interventions be confined to hospitals and clinics. Data suggest that we can not only prevent disease, but can also promote health and well-being with evidence-based mind-body interventions that are safe, cost-effective, and beneficial across a range of medical, psychological, and social challenges. ❖

Disclosure Statement

The author(s) have no conflicts of interest to disclose.

How to Cite This Article

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The Ideal

The aim of medicine is to prevent disease and prolong life;
the ideal of medicine is to eliminate the need of a physician.

— William J Mayo, MD, 1861-1939, American physician and surgeon, cofounder of the Mayo Clinic