Creating a Culture of Mindfulness in Medicine

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ABSTRACT

Background: Well-documented challenges faced by primary care clinicians have brought growing awareness to the issues of physician wellness and burnout and the potential subsequent impact on patients. Research has identified mindfulness as a tool to increase clinician well-being and enhance clinician characteristics associated with a more patient-centered orientation to clinical care.

Objective: The overall goal of our intervention was to promote the cultivation of mindful awareness throughout our health system, creating a culture of mindfulness in medicine.

Methods: We developed a systems-level strategy to promote health and resilience for clinicians and patients by preparing a group of clinician leaders to serve as catalysts to practice and teach mindfulness. The strategy involved 3 steps: (1) select 5 primary care leaders to help foster mindfulness within both health care delivery and education; (2) provide funds for these leaders to attend advanced mindfulness training designed specifically for clinicians; and (3) foster mindfulness within our health system and beyond via collaborative planning meetings and seed money for implementation of projects.

Results: All 5 leaders endorsed the personal value of the mindfulness training, with some describing it as life-changing. Within 8 months, 4 of the leaders fostered a wide variety of mindfulness activities benefitting colleagues, medical students, and patients across our state and beyond.

Conclusion: We found that the value received from our investment in mindfulness far exceeded our relatively low cost, although further evaluation is needed to prove this.

INTRODUCTION

Providing primary care has become increasingly complex. The need to frequently address multiple medical issues at each patient visit, an insufficient number of primary care clinicians, increased workloads with a high number of hours worked per week, rising costs, inadequate reimbursement for aspects of care management, increased administrative requirements, and suboptimal self-care can contribute to professional burnout.[1-4] Evidence suggests that clinician burnout can negatively affect patient care.[5] The idea to create a culture of mindfulness in medicine within our academic health system germinated when Integrative Medicine Department faculty, in response to these well-documented challenges facing primary care clinicians, sought to promote mindful awareness, a practice that they found to be rewarding both personally and professionally.

Mindfulness has been defined as "moment-to-moment, nonjudgmental awareness. It is cultivated attention in a particular way, namely, on purpose in the present moment."[6] Mindfulness involves removing oneself from autopilot to live in the moment. To provide excellent patient-centered care, clinicians and staff must be fully present, flexible, and recognize their own patterns and beliefs, but this is not always easy. One can further develop this capacity through practice—cultivating mindfulness.

A growing body of research supports the benefits of mindfulness in medicine. Krasner et al demonstrated that an educational program in mindful communication that focused on self-awareness improved clinician well-being (burnout and mood) and increased behaviors and cognitions consistent with a patient-centered approach to care.[7] Beckman et al interviewed a random sample of the primary care clinicians who had completed this earlier study's mindful communication program. One of 3 main themes to emerge from these in-depth interviews was that mindfulness skills improved clinicians' ability to listen more attentively and respond more effectively to their patients.[8] Fortney et al conducted a pilot study that provided abbreviated, tailored mindful-

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ness training (18 hours) to 30 primary care clinicians.[9] Study participants improved at all 3 subsequent data points compared to baseline, with data at 9 months post-intervention showing statistically significant reductions in measures of job burnout, depression, anxiety, and stress. In an observational study of 45 clinicians and 437 patients, Beach et al found that clinicians who rated themselves higher on a mindfulness scale were more likely to have a more patient-centered pattern of communication. Furthermore, their patients were more likely to rate highly both the clinician's communication, as well as the overall quality of medical care they received during the past 6 months.[10]

The purpose of this paper is to describe a program to promote mindful awareness for clinicians, trainees, staff, and patients.

METHODS

Population

The initial population for our program was primary care clinician leaders within our academic health system, which involves clinical and teaching sites across our state.

Goal of the Intervention

The overall goal of our intervention was to promote the cultivation of mindful awareness throughout our health system. Our strategy involved 3 steps.

Step 1: Select 5 primary care leaders to help foster mindfulness within both health care delivery and education.

Potential leaders were recruited from primary care departments in our health system via electronic and posted announcements and word of mouth; they submitted brief written applications. Project directors selected 5 leaders based on their availability to attend a 4-day continuing medical education (CME) workshop on mindful communication and responses to 3 questions, which asked them to describe (1) their training and experience in mindfulness or other contemplative practices; (2) why they desired further training in mindfulness; and (3) how they would incorporate the concepts gained from the workshop into their areas of leadership.

Step 2: Provide funds for these leaders to attend advanced mindfulness training designed specifically for clinicians.

A grant provided funds for the leaders to attend a 4-day CME workshop entitled *Mindful Communication: Bringing Intention, Attention, and Reflection to Clinical Practice,* which was offered by The Mindful Practice in Medicine Institute at the University of Rochester School of Medicine and Dentistry in May 2012. The training was directed by faculty physicians, whose research with primary care clinicians has demonstrated that training in mindful communication can increase clinician well-being and enhance clinician characteristics that are associated with a more patient-centered orientation to clinical care.[7,8] Participants included about 50 clinicians from a variety of specialties and more than 6 countries.

Course objectives prepared participants to (1) incorporate mindful practice curricula into undergraduate, graduate, and continuing education programs; (2) lead experiential exercises that involve meditation, mindfulness, self-awareness exercises, narrative writing, group discussion, and didactic material; and (3) enhance their own capacity for self-awareness and self-monitoring, including attentive observation, curiosity, informed flexibility, and presence. Topics included "noticing" (ie, learning to be more observant and attentive with patients), managing uncertainty, responding to suffering, dealing with conflict, and approaching death and dying.

Step 3: Foster mindfulness within our health system and beyond via collaborative planning meetings and seed money for implementation of projects.

Leaders met with the project directors following the course to identify ways to foster mindfulness within their respective areas of work. Grant funding provided $500 for each leader to initiate the mindfulness activities of his or her choice appropriate to that leader's unique settings.

Data Collected

We collected the following data: the number of primary care leaders who completed brief written applications for the leader positions and the disciplines, departments, roles, and physical locations of the chosen leaders; the 5 leaders' written and verbal feedback about the *Mindful Communication* CME program and the number of these leaders who continued to promote mindfulness within their respective program areas following the training; and the leaders' written and verbal reports of the ways in which they used their seed money to promote mindfulness and the numbers and qualitative descriptions of mindfulness activities they undertook along with the number and type of attendees for each of these programs.

RESULTS

Effects on Clinician Leaders

Twelve clinicians applied for our 5 available positions. The selected leaders are clinicians (physicians, a physician assistant, and a counseling psychologist) from 2 departments (Family Medicine and Medicine/Division of General Internal Medicine) with diverse roles within our organization: teaching and research faculty, program director, and clinic director. Their work settings are scattered across the state and include medical student education, family medicine resident education, and urgent care.

All 5 leaders provided feedback on the benefits of the mindfulness communication CME course they attended. The leaders strongly endorsed the value of the training with comments such as "This may be the most rewarding CME course I have ever attended. I plan to use the skills I learned in my life and work for years to come," and "Attending this retreat was an incredible gift

Table. Mindfulness Activities

Activity	Audience/Attendees
Medical Students	
Incorporation of mindfulness content into the TRIUMPH curriculum through readings, poetry, and humanism rounds to share clinical narratives, exercises in meditation, compassion and self-care.	24 third- and fourth-year medical students/year.
Humanism rounds to share clinical narratives and emotional responses to challenging patient cases.	175 third-year medical students/year on OB/GYN rotations.
Clinicians and Clinic/Hospital Staff	
Didactic lectures on mindfulness and/or experiential exercises.	28 family medicine residents in 2 cities.
Four-week class (90 minutes once/week) in mindfulness techniques.	11 urgent care clinic practitioners and staff.
Three-hour conference on mindfulness and physician self-care.	20 medical staff in an urban location distant from our academic health center.
Brief mindful training exercise at an integrative medicine retreat.	30 family medicine faculty and staff.
Article on mindfulness for a clinic staff newsletter.	40 clinic staff.
Presentation discussed mindful communication, with an emphasis on the potential personal and professional life-enhancing benefits of cultivating a mindfulness practice in daily life.	150 physician assistants attending a statewide conference.
Two 6-week classes "Mindful Movement for Stress Management" (30 minutes once/week).	30 clinic and hospital staff.
Patients	
Grant funding secured to offer "Mindful Movement for Stress Management" classes.	30 patients.

Abbreviations = TRIUMPH, Training in Urban Medicine and Public Health; OB/GYN, obstetrics and gynecology

personally and professionally." Three of the 5 responded affirmatively to a question posed 7 to 8 months following the course, asking them if they believed their personal and/or professional lives were different because of the training. The benefits they described included a better focus on breathing and being emotionally present; the cultivation of an affectionate, nonjudgmental relationship with their thoughts; continued mindful reflective work; and daily meditation practice. Two did not respond to the follow-up question.

As with any therapeutic approach, the practice of mindfulness does not provide the same meaning and utility for everyone. One leader, while noting that "the conference was refreshing and helped me to recharge my batteries—much needed," reflected that mindfulness is a great practice but is not the "be-all and end-all" for people who find meaning and support through faith-based approaches, such as prayer. This leader chose not to personally lead future mindfulness activities but promoted mindfulness indirectly.

Effects on Systems

Seed Funds

Leaders used their seed money in a variety of ways. One used the funds to further the mindfulness outreach activities (begun independently of this project) of a physician colleague, thus creating a sixth project leader. Another leader hired an experienced mindfulness instructor who helped provide training for staff in a clinical environment. Several leaders purchased either training materials and/or equipment such as yoga mats and meditation cushions for their respective clinics. These continue to be used for mindfulness meditation instruction and practice for medical students, residents, staff, and patients.

Mindfulness Activities

During the 8 months of the project following the CME, our leaders initiated a wide variety of mindfulness activities across our academic health system and the state. This involved 10 different activities with a total of 538 participants. A summary of these activities and the audience/attendees is provided in the Table.

Qualitative data helped show the benefits of the mindfulness activities for our health care system. Following is a description of representative activities with our 3 target populations: (1) medical students, (2) clinicians and clinic/hospital staff, and (3) patients.

Medical Students

Mindfulness practice is now part of the core curriculum for students in the Training in Urban Medicine and Public Health (TRIUMPH) program, a health track that prepares students to care for urban, medically underserved populations. Students apply and are selected for the program during their second year. They then move to an urban setting, where they complete most of their third and fourth years of medical school.[11] The TRIUMPH curriculum includes several full days of exercises devoted to exploring mindful practice, compassion, enhancing self-awareness, and building resilience. Students are introduced to a variety of techniques to enhance these skills including yoga, meditation, walking, noticing, and breathing exercises. They review and develop personal health plans to enhance their own well-being. They learn and practice appreciative inquiry through discussion of challenging patient scenarios in "humanism rounds" on a monthly basis. Students have reported that mindful practices helped them retain their compassion, avoid burnout, and prevent them from becoming jaded as they care for patients from

disadvantaged backgrounds. They have requested more time to cultivate mindful practice and have worked with faculty to incorporate exercises into the weekly curriculum. One of our faculty leaders was selected by medical students to receive a national award for humanism in medicine through the Gold Foundation and the American Association of Medical Colleges.

Clinician and Clinic/Hospital Staff

A 4-week program in mindfulness techniques, including meditation and movement, was offered to clinicians and staff of an urgent care clinic with the assistance of the UW-Health Mindfulness Based Stress Reduction (MBSR) program. The class met for 90-minute sessions weekly for 4 weeks. Eleven participants were given instruction in MBSR and meditated together. Elements of Tai Chi (mindfulness in motion) were demonstrated and practiced by the participants. Discussions were held regarding the application of mindfulness principles in the workplace; ie, how efforts to remain present with patients help clinicians and patients to make a deeper and more meaningful connection, and how to communicate more effectively. A core group of coworkers was established who could actively work to promote mindfulness in the workplace by offering support to coworkers in informal discussions, focusing on the importance of nurturing the clinician-patient connection through mindfulness. The 11 individuals who participated, as well as 8 additional staff who were interested but unable to attend, expressed a willingness to meet in the future for practice and to consider ways to build a culture of mindfulness.

The sixth colleague who joined the project offered a "Mindful Movement for Stress Management" class to 15 clinic and hospital staff. Employee wellness staff assisted in marketing the class in order to reach a broad group of potential participants. Class registration filled to capacity within 24 hours. Participants included both clinicians and staff from nonclinical units. The class was held for 30 minutes once a week for 6 consecutive weeks over the lunch hour.

The class introduced the concept of mindfulness and helped participants cultivate an awareness practice to help manage stress. Participants were taught breathing techniques and physical postures as tools to help anchor their attention to the present moment. They learned that when they more fully inhabit the present moment, a greater sense of ease and well-being are often experienced. Participants identified common stress patterns that are held in the physical body and learned how breath and body movements can facilitate release of those patterns. They were asked to practice a specific technique, such as the 4-7-8 Relaxing Breath exercise,[12] daily at home. Although the techniques take only about 5 minutes once or twice a day, they can provide a sense of continuity throughout the week. The class taught participants what they could do for their own health—helping people to live better with whatever conditions or situations they have. The leader offered a second 6-week session for 15 participants in a different location. An employee wellness staff member attended a session with the intention of learning how to teach a similar class. More sessions are planned for the future.

Our sixth leader also helped spread mindfulness content to a medical center outside our own system. Interactions between our leader and a physician from that center inspired the physician to attend a week-long mindfulness retreat and then form a weekly meditation group for medical colleagues.

Patients

Inspired by the experiences of offering classes for staff, the sixth leader subsequently sought and received grant funding to develop and lead a mindfulness class as a tool to manage stress for internal medicine patients who have been identified as high utilizers of health care visits. A phone message this leader received from one of the patients attests to the helpfulness of this approach for that patient: "I really, really like the mindfulness class. I have the start of Alzheimer's disease and my short-term memory is really poor. This is really stressful for me. I have never, ever liked meditation in my life. I enjoy this class 110%. Mindfulness is such a nice way to meditate. I am so happy I have found a style I enjoy." The clinician is investigating how to transition this type of mindfulness class into group visits.

DISCUSSION

The number of primary care clinicians (12) who applied to be one of our 5 leaders gave us an early indication of the interest in this project. We were encouraged that more leaders were interested in the mindfulness communication training than our project was able to support. Our efforts were strengthened by leaders' reports about the personal and professional value of the mindfulness communication CME and by their preparation to serve as catalysts to launch additional projects. We also experienced and respect that mindfulness does not have the same meaning and utility for all. An avenue for further research may be to identify characteristics of those who report great benefit from mindfulness practice as well as those who find other practices more sustaining.

The Institute for Healthcare Improvement (IHI) has embraced a *triple aim* to improve health care in the United States: (1) improving the individual experience of care, (2) improving the health of populations, and (3) reducing the per capita costs of care for populations.[13] Others have focused attention on a fourth interrelated goal—improving the well-being of clinicians.[14-16] Mindfulness can impact all of these critical dimensions of health care.

In a study of mindfulness meditation and moderate exercise intervention to prevent acute respiratory infection (ARI), researchers noted a reduction in incidence, severity, and duration of ARI with meditation and exercise.[17] They further documented

the added value of mindfulness—health-related cost savings, mainly from a reduction in missed days of work.[18] Likewise, we note the many returns on our investment in a CME course on mindful communication for 5 of our clinical leaders. Our total project budget was under $15K. For $5225 ($1045/per person) plus travel expenses of $2915 (a total of $8140), our leaders received content that some reported as life-changing. For an additional $3144 (initially budgeted as $500/leader for a total of $2500), they added value by initiating and sustaining a variety of mindfulness activities benefitting colleagues, medical students, and patients across our state and beyond.

Within the 1-year span of this project, we provided a means of mindfulness communication training for 5 clinical leaders and initiated a range of mindfulness activities in our state and beyond (one of our leaders has transitioned to a new role out-of-state). Based on existing mindfulness research,[7-10,17,18] we believe that sustaining and building upon these initiatives will help to create health and resilience for clinicians and patients alike. However, more methodologically rigorous projects employing sound recruitment procedures, adequate sample size for statistical analysis, pre and post measures, and ultimately randomized controlled trials would be needed to prove the benefits of our initial system-wide approach to establish a culture of mindfulness in medicine, as well as each of our mindfulness initiatives. In the meantime, colleagues in other health systems may appreciate learning more about mindful clinical practice, for example, as described by Epstein who wrote, "As a link between relationship-centered care and evidence-based medicine, mindfulness should be considered a characteristic of good clinical practice."[19] We hope our model of a system-wide approach to promote mindfulness within healthcare is helpful to others as well.

CONCLUSION

Our project to promote mindfulness within our academic health system using primary care clinician leaders as catalysts resulted in a number of positive outcomes. We feel that our investment in the promotion of mindfulness yielded benefits that far exceeded our relatively low cost, although further evaluation is needed to prove this.

"Mindful practice has enriched my life, my teaching, and my interactions with others," noted one of our leaders. In this time of great challenge for primary care, this is no small accomplishment. We offer this narrative of our experience as an approach that other health systems may want to consider in the quest to improve health care for patients and clinicians alike.

Acknowledgements: The authors express their gratitude to the Mental Insight Foundation for funding this initiative; to Luke Fortney, MD, for his key role in the conceptualization and initial stage of this project; to Deborah Raehl, DO, for her involvement as one of our 5 leaders, to Ronald Epstein, MD, and Michael Krasner, MD, for directing and facilitating the Mindful Communication workshop and their valuable mindfulness research, and also to Patricia Luck, MBChB, MPhil, and Frederick Marshall, MD, for facilitating the workshop.

Funding/Support: A grant from the Mental Insight Foundation provided support for this project. The funder had no other role in this project.

Financial Disclosures: None declared.

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