Chapter 1
Why Teach Mindfulness to Clinicians?

PreambleMourning Rounds

> ‘Good morning’, I said.
> ‘Come closer’, she asked.
> I usually did not, could not,
> standing in the doorway.
> ‘Do you need anything?’
> ‘Come closer’, she said.
> ‘I am close’. I thought.
> The room was small, filled by her bed.
> ‘I mean near the bed – next to me – so I can see you.’
> I moved closer, foreseeing her death, which I could not prevent.
> ‘I like it when you are close.’
> I moved even closer, reaching for her hand.
> ‘That’s what I really wanted
> – to touch your hand – to thank you.’
> She smiled, her face aglow,
> and I wept silently
> as I moved even closer
> to kiss her cheek
> to thank her
> for asking me to come closer
> when I thought I could not [1].

Who is this physician standing at the threshold of the patient’s hospital room attending to her from what he perceives as a safe distance? When did he become more at ease extending words from the doorway rather than taking her hand at her bedside? Why did he not enter when asked to do so?

We offer here a hypothetical narrative about this physician who was once a medical student with an ardent desire to care for his fellow human beings.

On the morning of these Mourning Rounds, the physician rose at dawn, slipped into dark blue trousers, selected a light blue shirt, adjusted a silk tie and tiptoed out so as not to rouse his wife. He is a man who attends to details and his attire reflects that. In fact, all of his clothes were hung up colour coded so that he could dress

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without turning on the light. This ritual of leaving home and arriving at the hospital at 7 AM for rounds has been an integral part of his life for 35 years. Following a short drive to the hospital, he went to his office, donned a white coat, clipped his badge to the pocket and draped his stethoscope around his neck. He is a cardiologist and being a specialist gives him a sense of accomplishment and satisfaction. He aspired to be a doctor ever since he read the book *Great Expectations* when he was 12 years old. Having been born into a working man's family with immigrant grandparents, he was never prodded to become a physician. His colleagues would describe him as exceptionally competent, reliable, honest, hardworking and well read.

On the morning of these particular rounds, he was alert albeit somewhat tired – working into his 60s has taken its toll. Before reaching the doorway of the woman who requested his presence, he had reviewed the night shift events with the chief resident, checked in on several other patients, answered two pages and responded to a 45-year-old male admitted into the emergency department. All routine.

Nonetheless, many aspects of his work were taxing, not least of which were its unpredictability and dealing with uncertainty. Patients and their diseases could make demands at any time, and the best way forward is never as clear as it appears in textbooks. He could complete his weekend call schedule and drop into sleep only to have an ER nurse waken him abruptly. The physician would dutifully drive through the darkness back to the hospital. Another trying part of his job was related to how the health-care system had changed over time. With technological advances more attention is now paid to screens than patients. Paper work stole time from patient care.

Last year a younger friend and colleague died suddenly of a MI while on vacation. The cardiologist sometimes ponders his own heart because his partner placed a stent in one of his own coronary arteries a decade earlier. Yet, he tries to not dwell on this fact believing genetics alone were responsible; his paternal grandmother died of a MI at 58 and his father had bypass heart surgery at 73. The stress of his job and the need for self-care were not generally taken into consideration as denial can be common among doctors regarding their own health. After all, acknowledging the relationship between mind, emotions and the heart was a mysterious and less tangible world than that of pharmaceuticals and surgical procedures and one from which many doctors prefer to retreat.

By the time he stood in that doorway, he had more patients die under his watch than he could name. In the past he had attended their funerals but only rarely did so now. This woman, with her impending demise, was one more of many. Did facing her death force him to face his? His training in residency and medical school had failed to prepare him for this as it did for many of his colleagues [2]. While he remains a moral man, one guided by liberal values, his heart had gradually hardened. This had happened so insidiously that he was not conscious of it. Likely, as suggested by Shapiro [3], this loss of felt emotion began when he was a medical student, observing his teachers suppressing or denying theirs rather than allowing sadness, regret, confusion, surprise, appreciation and joy – the entire range of emotions – to serve as guides connecting them to patients in a meaningful way. This was one way, or so it seemed, to protect oneself from burnout.

Did *who* was in the bed influence his stance near the door? He had been her husband's physician before congestive heart disease and diabetes took him down. The physician resigned himself to such inevitable outcomes. He had learned Spanish in college, even brushed up on it later so that he could communicate with patients like them. Her request for closeness, a gentle hand in hers, was congruent with her culture where touching is part of loving life and others. When he kissed her cheek, his mind flooded with memories of his deceased father who, being of Ukrainian decent, affectionately kissed his family members on the mouth. They were wet, those kisses. Just like the tears. When he thanked her with this gesture, his heart softened and in that moment they could both feel healing taking place.

This narrative highlights some of the reasons why we should teach mindfulness to clinicians. In this chapter we will touch upon how mindfulness contributes to medical students', residents', physicians' and other clinicians' well-being. A more comprehensive review is provided in Chap. 2 where we also summarise how mindfulness contributes to clinical practice. In subsequent chapters we present how, when and where teaching Mindful Medical Practice can be carried out in a contextualised, effective and sustainable way.

1.1 Medical Students

Shapiro suggested some time ago that medical education can have the effect of reducing empathy and putting trainee doctors out of touch with their emotions and how to be at ease with them. This is often seen as a way of 'hardening' students for the demands of their future work and protecting them from vicarious stress or having emotions impair judgment. However, in response to declining empathy and increases in stress and distress among medical students [4], elective programmes that teach mindfulness have been offered and studied for two decades. As early as 1998, Shapiro and her colleagues examined outcomes for medical students who took the structured 8-week Mindfulness-Based Stress Reduction (MBSR) programme developed at the University of Massachusetts Medical School by Kabat-Zinn and his colleagues [5]. In the first randomised control trial reported [6], premed, first and second year medical students were assigned to either the MBSR or wait-list control group – the latter were crossed over once the wait period was over. The MBSR programme was enhanced with exercises designed to enhance listening skills and empathy. Results favoured those in the MBSR group in that there were decreases in psychological distress and increases on empathy and spiritual experiences. Similarly, a randomised clinical trial conducted by the same researchers [7] almost a decade later compared three groups: (1) 1-month mindfulness meditation (a brief version of the MBSR programme), (2) somatic relaxation training and (3) control. The two intervention groups showed reductions in psychological distress and increases in positive mood states compared to the control group, but the meditation group showed the best results for positive mood states, reduction in rumination and distractive thoughts.

Other medical schools reported similar results when students were taught mindfulness [8]. Rosenzweig et al. [9] used a prospective cohort study design with 140 second year medical students who took the MBSR programme over 10 weeks. A non-randomised control group who attended seminars on complementary medicine served as a comparison. Pre-post-MBSR changes showed improvements on mood disturbance at the end of the programme, while those in the control group worsened over time. Eighty-eight per cent of the students in the MBSR group rated mindfulness as helpful or very helpful.

These early programmes were delivered as electives, so it is possible that the students who attended may not be typical of the entire cohort. One of the authors (CH) had found great benefit in personally applying mindfulness over many years and felt motivated to provide such content for training doctors. In 2002 a mindfulness programme was integrated as an assessable part of core curriculum. A description of this work and the results of the programme are presented in Chap. 2 [10]. Subsequent studies have shown that the mindfulness component of this programme also increases study engagement across the rest of the medical curriculum [11].

In a relatively large Norwegian study that included medical and clinical psychology students in a randomised clinical trial of a slightly modified MBSR (shorter class times and home practice assignments), significant effects were found for those taking MBSR on mental distress, well-being and non-reactivity but not for school-related stress or burnout [12]. Improvements were more evident in women, but the study may have been underpowered as only 26 men took the MBSR course. Interestingly, class attendance and home practice served as moderators; students who were more engaged in the practice showed better outcomes.

While a consensus is emerging that students who practise mindfulness benefit from it, little is known about which aspects of these programmes are helpful for students. A randomised controlled trial in which medical students were simply requested to practise meditation daily at home with CDs for 8 weeks indicated that, compared to the control group, these students perceived stress to be reduced and had lower anxiety scores both at the end of the practice time and at 8 weeks post-intervention follow-up. Apparently even this stripped down version of mediation training can be useful. While this may seem surprising, a systematic review and meta-analysis of meditation programmes for psychological stress and well-being based on 47 trials with 3,515 participants [13] found a moderate level of evidence for improvements in anxiety, depression and pain.

1.2 Residents

Fifteen years ago while teaching fourth year medical students, one of the authors (PLD) heard a story that influenced her decision to bring mindfulness into medical practice despite many obstacles. While in training, a surgical resident's brother died. Naturally he desired to attend his funeral. When he requested a leave of absence, the resident was turned down because no one was willing to cover for him.

The room fell silent while we reflected on this sad turn of events. Then the students engaged in a discussion of: What should the resident have done (he did not attend the funeral)? What would you do? What kind of work environment and culture would deny a 2-day leave during a family crisis? Some said they had chosen a particular specialty (e.g. dermatology) so as to be able to live more 'normal' lives. More than a few were young women who wondered when and how they would start a family.

Reports of resident burnout and mental health issues are alarming and have serious consequences for their lives and medical practice [14]. Lebensohn et al. [15] conducted a longitudinal study of 172 family medicine residents and found that emotional exhaustion, depersonalization (two scales from the burnout measure), positive affect and life satisfaction deteriorated over the 2-year training period. Residents deemed to be 'at risk' had lower levels of emotional intelligence, gratitude and mindfulness.

While websites (outlined in Chap. 6) indicate that there are mindfulness-based programmes being offered to help them cope better with the high demands of this phase of their training, we could not find published studies regarding of the impact of teaching them mindfulness skills [16].

1.3 Physicians

We propose that the cardiologist depicted in the narrative is typical with regard to the types of stressors he was exposed to and his struggle with emotional distance. He was constrained by the medical culture that has little tolerance for 'weakness' (e.g. doctors often go to work when they are sick) or expressed emotion. He, like many others, had to deal with the inherent strains of practising medicine over decades in the context of a shifting health-care system. Poor attitudes towards self-care and personal development can be seen as being embedded in the medical culture. Indeed, there are increasing calls for doctors to acknowledge and respond to these needs as illustrated by this quote from a surgical journal. 'Research shows that stress without conflict resolution may lead to burnout, which can contribute to impaired technical performance, medical errors, physical and mental health problems, and even increase the risk of suicide. Therefore, it is crucial that surgeons, and the organizations that train and employ them, recognize the early signs of stress and burnout, adopt adaptive coping strategies, and maintain a culture wherein work-life balance and surgeon well-being are shared goals' [17].

There are numerous sources of stress for physicians; some are external, such as a heavy patient load, time pressure, interpersonal staff conflict, lack of autonomy in the work environment, record keeping requirements, potential for litigation and financial concerns (e.g. debt load following training, high costs for insurance and office operations). Some stressors are internal, such as personality characteristics (e.g. perfectionism, obsessive-compulsive traits), harsh self-judgment, poor emotional regulation and vicarious trauma. Interestingly, cultivating self-compassion is

associated with greater well-being and an enhanced attitude to self-improvement, an ability to learn from mistakes and aim for positive role models [18].

The need to address these issues was recognised by Irving et al. [19] who, in 2009, concluded that mindfulness aided health-care professionals (medical and psychology students, nurses, doctors, social workers, among others) to cope with the challenges they face on a daily basis. In fact, studies from around the world substantiate these results. Marin-Asuero et al. [20] working with primary care physicians in Spain, Moody et al. [21] supporting paediatric oncologists in Israel and New York, Lovas et al. [22] training dentists in Canada and Krasner et al. [23] in the United States who offered a modified version of MBSR with primary care physicians – to name but a few – all point to the benefits of training physicians to be able to handle stress and their emotions better, as well as communicate with more awareness, and balance their work-personal lives. Importantly, follow-up data show that these benefits are proving to be lasting [19, 24].

1.4 Well Clinicians Promote Wellness and Healing in Their Patients

Epstein and Krasner [25] stress the importance of promoting physician resilience as a gateway to providing quality patient care. Self-awareness and self-monitoring are viewed as precursors to becoming resilient and clinically competent as well as enhancing communication. For example, one needs to notice the presence of bias or that negative emotions are arising or thoughts are confused before being able to deal with events effectively. Impaired doctors make over six times as many clinical and technical errors because of a lack of self-monitoring [26], but by recognising external and internal stressors before one reacts to them, the clinician can make discerning decisions with regard to the optimal course of action. By combining mindfulness with congruence, i.e. awareness of the self, the other and the context, we contend that physicians can foster healing and be healed in the process of their work [27].

Krasner et al. [23] not only found that primary physicians who took their year-long course felt better, but they also reported a positive impact on empathy and psychosocial beliefs (e.g. the importance of attending to the patient's narrative about illness) consistent with patient-centred care. Focus groups conducted with some of these participants revealed that the physicians' ability to be attentive and listen deeply to patients' concerns helped them to respond to patients' needs more effectively [28]. For example, one doctor said,

> As far as my patients go; I am much more curious, instead of resentful. So when I'm running behind and a patient comes in with, you know, some vague sort of complaint, I try to switch my mind… OK, try to be more curious about it and forget the emotions you are feeling, just be curious, and that has really helped.

Similarly, in another qualitative study of Mindfulness-Based Medical Practice for health-care professionals [29], half of whom were doctors, one participant said,

> It's new territory for me in my everyday practice, and I think I am able to listen better to what people have to say because I am trying to really just be there as opposed to 'o.k. I have a role to play, I'm here to listen but I have to fix you'… And I noticed that when I have this experience that even if something difficult has happened there is a very empathetic interaction. I think I don't have a plan that I came in with and I just… I just was present and that worked, by itself.

1.5 Conclusion

Thus, we conclude this chapter with the proposal that teaching Mindful Medical Practice may result in a win-win-win situation such that clinicians and patients benefit, directly and indirectly. One would anticipate that the health-care system would also note benefits, such as fewer errors, reduced litigation, increases in patient adherence to medical recommendations and satisfaction, as well as a greater sense of meaning and community in those who choose to serve their fellow human beings with the three C's: care, competence and compassion.

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