

MINDFUL DENTIST

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ABSTRACT

Dentistry typically induces more fear than any other form of healthcare. Dental anxiety challenges patients and providers alike, creating barriers to care, increasing pain perception, and increasing the time and effort required to complete treatment. While patient-centered dentistry invites us to care for the person attached to the teeth, many dentists feel ill-equipped to handle the many emotions that arise during dental treatment. Mindfulness, awareness with an intention of kindness, and the practices that cultivate it are invaluable to the provision of patient-centered care in four respects: 1) it provides balance to the dental professional during stressful times, 2) it cultivates the qualities of a patient-centered health care provider: Equanimity, Attentiveness, Self-awareness, and Empathy, 3) it guides actions necessary to meet a patient's needs, 4) it provides techniques that patients can themselves use to find balance during stressful times. All of these fruits of mindfulness practices are demonstrated in three true vignettes of fearful patients who were treated by the author. Video footage of the three stories is also provided.

KEYWORDS: Dentists, Mindfulness, Patient-centered care, Dental anxiety, Pain perception

Forehead beading with sweat, hands white-knuckling the chair, breathing short and shallow- a familiar scene to any dental professional. So many people fear dentistry. In fact, “dental care has historically been characterized as generating more fear and anxiety than other forms of health care.”¹ Consider this: physicians deal with conscious patients but don’t regularly perform procedures on them; most surgeons regularly perform procedures, but their patients are typically sedated or unconscious; dental professionals, by contrast, regularly perform complex technical procedures on fully conscious patients. During dental procedures, physical discomfort can arise, for example, the dreaded injection of local anesthesia. But there’s more to fear than just physical discomfort. The typical dental treatment situation, characterized by inability to talk while positioned under a bright light with people hovering overhead (doesn’t this look like a police interrogation?) understandably evokes feelings of intimidation and anxiety.

Unmanaged dental fear comes with a cost. “Dental fear and anxiety not only prevents patients from seeking treatment but also interferes with the efficiency of treatment.”² Fear and pain are intimately intertwined- fear can augment the perception of pain, pain can augment fear. In the process, patients struggle, providers struggle. Interestingly, research has found that patients want us to help them manage the emotions that arise during dental treatment. A study by Hornung and Massagli found that “patients have two main goals in seeking health care services. The first goal is to obtain an accurate diagnosis and receive competent and appropriate treatment. The second goal is *relief of fear and anxiety* that accompanies illness.”³ Further, malpractice studies in both medicine and dentistry point to how much patients value the quality of our relationship with them versus the technical quality of care. In fact, when patients sue, it is usually not due to issues of technical quality of care but, rather, due to how we relate and communicate.^{1,4,5} Thus, a dental professional who can support a patient in fear not only minimizes malpractice risk but also increases their patients’ loyalty, satisfaction, and trust.

While I have always felt a great deal of empathy for my patients, trying to manage my patients’ fear, while also juggling the many technical demands of dentistry and my own stress, proved overwhelming for many years. I would frequently lose my balance trying to do it all- provide the perfect filling, provide education, provide comfort when pain or fear emerged- and invariably fall way behind schedule while running as fast as I could, breathless.

ENTER MINDFULNESS

I first learned about mindfulness practice as a way of caring for myself. Repeated trauma in childhood left a deep imprint that occasionally would surface as anxiety and depression. A crowd of critical voices chased me everywhere insisting, “you’re going to fail,” “you’re not doing enough,” “not doing it right.” Fortunately, I

found a gifted therapist who taught me meditation practices which cultivate mindfulness, awareness of the present with an intention of kindness. With practice, I learned how to recognize fear's many manifestations in my own body and mind, how to allow it to be felt, and to hold it with care. As my mindfulness increases, a much gentler new inner dialogue emerges. The inner voice calmly notes difficult experiences with care, "anxiety is here" and "this is hard for you." As I found a sense of balance and the cloak of my own suffering lightened, I also noticed that I was better at companioning others' suffering.

Mindfulness practice cultivates qualities that support not only the well-being of health care professionals but also the ability to provide whole person care. A growing body of research, including brain studies, documents the effectiveness of mindfulness practice in cultivating four core qualities: E.A.S.E. - Equanimity, Attentiveness, Self-awareness, and Empathy. First, increased equanimity and decreased stress has been noted in health care professionals as a result of mindfulness practice.⁶⁻⁹ A possible mechanism by which mindfulness practice increases equanimity is by down-regulation of the amygdala, the area "which is overactive in people with stress, anxiety, and depression."¹⁰ Next, attentiveness, something our modern world puts to test,¹¹ affects not only relational skills but also the ability to deliver technical quality of care safely. Increased attentiveness has been measured in brain function and anatomy because of mindfulness practice.¹²⁻¹⁴ Third, self-awareness helps us notice our own emotions, impulses, cognitive biases, and prejudices and rather than react unconsciously, choose wise responses.^{15,16} Because of this, "formal training in self-awareness has been recommended to potentially enhance evidence-based decision making, patient-centered care, communication, cultural competency, team-building, professionalism, personal development, and self care."¹⁷ Brain changes have been found in the areas of awareness as a result of meditation practice.¹⁸ The fourth core quality of a health care professional that mindfulness cultivates, empathy, is the quality that patients value most of all.^{19,20} Ironically, empathy has been noted to decline during the course of training.^{21,22} Increased empathy as a result of mindfulness has been measured on self-rated measures^{7,9} as well as on brain scans.²³

A health care professional who embodies the qualities of mindfulness: Equanimity, Attentiveness, Self-awareness, and Empathy, is better able to provide whole person care. "Given that mindfulness....allows for clear thinking and open-heartedness, it fits the overarching goal in medical practice to cure disease when possible and alleviate suffering in a compassionate manner."²⁴ Thus mindfulness benefits patients indirectly by encountering their provider's presence. A more direct benefit of mindfulness practice can be enjoyed by patients when we teach them specific techniques they can practice during dental procedures. Practices such as awareness of the breath or body scan (scanning the body for sensations) allow the patient to shift the focus from the thoughts that generate fear to the direct experience of the moment.²⁵ This can provide ballast to a fearful patient.

The vignettes that follow illustrate both indirect (qualities of mindful providers) and direct benefits (practice techniques) of mindfulness.

SOFT BELLY

Little Marcel sits frozen in the dental chair, his scuffed sneakers barely reaching halfway down the dental chair. "Open wide." Tense silence, no response. "Marcel, I need you to open your mouth or we can't do your filling." An internal tightening arises in my chest and I wonder how long it will take and how much coaxing it will take to do this restoration. Time is running out, the schedule packed. Then, I notice Marcel's hands wringing each other, and something softens in my chest. "Are you scared?" He nods in affirmation, tears welling up in his dark eyes. My heart pulses. "Are you afraid it's going to hurt?" He nods again, now the tears overflow, streaming down his trembling cheeks. I rest my hand on his shoulder gently. "I see that you're scared and I understand why it might be scary for you. A lot of kids are nervous when they go to the dentist!" I sit totally still and silent with him for a few moments, breathing with his fear and my uncertainty. After just a matter of seconds the tears stop and his face relaxes, seeming reassured, more receptive. "I promise to do my very best to make it very easy, and you can stop me anytime you need a break; just raise your hand to let me know," I explain.

"Can you put your hands on your belly and fill up your belly with air like a balloon? Can you hold it a few seconds and now let the air out of the balloon, feeling your hands come down? Try that again, feeling your hands go up as you breathe in and down as you breathe out." I explain everything he will feel each step of the way- the pinch of the needle, the buzzing of the drill- repeatedly reminding Marcel to come back to the belly. Within just a few minutes, the procedure is complete. Marcel smiles with pride... and relief. *To view a video of this patient, please go to the following web address: <https://youtu.be/-9YDISng6Y4>.*

ALL IS WELL NOW

"Just like before, you're going to feel some shaking and then a slight pinch in the back." I start to inject the local anesthesia. "Nice deep breath. See if you can stay in the belly and feel the exhale especially...slow deep breaths. If it's possible, let the belly go up on the inhale and down on the exhale. Beautiful...how was that?" "Great!" He nods his head in disbelief. "Thank you."

Nicholas has avoided dental care for many years due to fear. Today he has returned for second round of extractions. A big, burly man in his sixties with round cheeks and nose and big, soft eyes. Today, he reveals more about the history of his dental fear. When I ask what it was like going to the dentist in the past, he lets out a big sigh. "Going to the dentist was terrifying...just the sound of the drill was enough to make me have

cold sweats and shiver.” “As a youngster, there wasn’t one dentist that I met...who took the time, patience...or did anything to make the injection easier. It was barbaric.” He describes an accident with a truck 13 years ago when he lost several teeth. After that, he avoided dental care completely, until coming here a few weeks ago.

Time for the extractions. Nicholas can’t talk now without stopping the procedure, so I go into a sort of continuous check-in monologue.

“You’re going to feel a quick push. Now it will feel heavy...are you OK? A little more pushing, doing alright? Let me know if you need a break. Check in with the belly and notice what it feels like, what it’s doing. The tooth might crumble now. Doing OK?”

As I push I hear a quiet “ow.” With his history, I know this moment could reignite his fear. Without hesitation I offer, “want me to numb that some more?”

“Yeah, right in this spot here.”

“Sure!” I’m relieved that he feels comfortable enough to ask for what he needs, a good sign that trust is still alive. “Feeling anything here? How about here? OK here too?” Soon we are done.

Amazed that he seems so at ease, I ask Nicholas what makes it possible to undergo dental procedures, after fearing for so long. “The way you speak to me...explaining what’s going to happen before you do it...so I know what to expect, warning me of pain, and sharing what I can do to alleviate it. Breathing helps so much. When you tell me to take deep breaths, the pain is less; it really works.” *To view a video of this patient, please go to the following web address: <https://youtu.be/9VZILgjCEiU>.*

DON’T JUST DO SOMETHING, SIT THERE

The hygienist hovers behind me as I adjust a patient’s denture, signaling me to come check her patient. Walking together towards her operatory she describes whom I will meet. “Doc, I don’t think you will have anything to do here so it should be quick: seventy years old, no teeth, wants dentures, but too terrified. It took major effort just to get her to sit in the chair.” Awareness of a thought, “I don’t want to deal with this” and a sense of irritation. At the moment of this awareness, an internal shift occurs. Noticing my own thought and emotions creates a space between the experience and my reactions to it, allowing me to choose my response. I set an intention to show up fully and to help this person as best I can.

She sits on the edge of the seat as if poised for escape, trembling and tense. Blonde hair pulled back, too tightly. Wide-rimmed glasses cover most of her face and lips drape the toothless space underneath. "Hello Joyce, I'm Dr. D'Arro. Nice to meet you. Welcome to our office." I sit down next to her and smile. "What brings you here today?" She tells me how much she wants to have teeth, that she has not had teeth for decades but that she is so terrified of the dentist, she almost cancelled her appointment today. It was a nightmare just to come here, just to sit here.

"Why do you think it's so frightening to be here? Can you tell me your story, Joyce?" I reassure myself how little time it takes to connect when I bring full attention. I bring my attention to the area of my own heart. Sitting still and silent, I rest my focus on Joyce. "When I was a little girl, one day my grandmother said we needed to go visit a friend. We went for a ride and stopped at the dentist office. I was tied to a chair and my front teeth were ripped out. I haven't had teeth ever since." She trembles as she speaks. But above the dark clouds of her terror, I sense a brightness and clarity, her clear and intense wish to move beyond.

I look in her eyes, touching her cold hand, "Joyce, it makes total sense that you would be terrified after this experience. I really honor you for the courage it took to come here. I'm wondering what would make it possible to move forward. What if you knew you could stop at anytime?" She agrees that would be very reassuring. "If you are willing to try, I am willing to take a chance and try to get your smile back. We can take baby steps. I will explain everything you will feel and most importantly, you can stop me whenever you want. This is my promise." She lets out a mini-exhale, as if a full exhale might collapse her loosely-assembled pieces. Her arms reach out to hug.

Over the next few months, Joyce is faithful to her appointments, always on time despite having her heart in her throat. She has a new smile now, but it's more than the denture teeth that make her smile so brightly. Her eyes and entire face shine with confidence and joy. *To view a video of this patient, please go to the following web address: <https://youtu.be/OXa4nvr-WA4>.*

WHAT IS MY JOB?

If someone had asked me soon after completing my training what was my job as a general dentist, I would have replied confidently, "to identify oral disease, offer treatment options, and render the chosen treatment." After all, my entire training had focused on the science and mechanics of diagnosis and treatment of dental conditions. All my testing for licensure verified knowledge of the science of teeth and specific skills required to fix teeth. None of my training or testing was focused on caring for the person attached to the teeth.

As I progress through my career, a new focus has emerged. I am more comfortable now with the mechanics of dentistry and more adept at staying centered in the face of stress; I am able to widen my focus to the

person attached to the teeth, including their concerns and fears, as well as how to manage them. Mindfulness practice enables me to *be* what I must: Equanimity, Attentiveness, Self-awareness, Empathy. Mindfulness at work guides what I must *do* or *not do* for a patient, in order to convey understanding, acceptance, and care.

A mindful approach to dentistry, while paramount to caring for myself and others, brings its own challenges. Having tasted the richness of engaging with the whole person in my chair, I no longer want to just pull the tooth. I want to listen to people discuss their fears and wishes. I want to provide reassurance and offer options when a procedure becomes uncomfortable. Yet there are times when depletion of my resources confines me to the mechanics of a procedure. There are times when excessive pressure to meet quotas allows for minimal connection only. I find myself increasingly dismayed at a credentialing system that tests only for scientific knowledge and technical skills, at the exclusion of relational skills. Most importantly, I find myself increasingly unwilling to performing “assembly-line dentistry” and an increasing desire to meet people where they are with an open heart. Perhaps this is what a paradigm shift feels like: dissatisfaction with the status quo, then resistance, and, ultimately, change. I hope this is the case for our professional community.

The stories shared here of Marcel, Nicholas, and Joyce captured successes—patients who were able to complete their treatment and remain connected and comfortable in the process. What about the patients who cannot tolerate the whole treatment or who never return to attempt completion? Perhaps their fear is too great, or social factors interfered. While we cannot control the many factors that allow patients to return and complete their treatment, we can control whether we are fully present for the moments we share together. Did I share my full attention? Did I meet the person in my care with kindness? Did I provide the best technical care the patient would allow? If so, then I performed my job to the best of my abilities. A dentist's work is compensated with more than one type of currency. When I treat others with mindfulness, I am rewarded with connection to another, and then I am truly rich.

ACKNOWLEDGEMENTS

The author would like to thank the patients in the vignettes for entrusting themselves to her care and for generously allowing their stories to be shared for our benefit and that of other dental patients.

COMPETING INTERESTS

The author declares no competing interests.

FUNDING

The author received no funding for this article. ■

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