Music and Medicine in Concert

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s I reflect on my journey throughout medical school, residency, and fellowship, I often return to the formative lessons received at the piano. Music taught me more than how to play; it taught me how to listen. It taught me how to discern the unspoken, appreciate the role of silence, and make use of nonverbal cues to express a more universal language. The ability to move past mistakes, listen for subtle changes in tone that underly deeper meanings, make space for poignant pauses, and realize when to retrace and rethink are all inspired by lessons initially learned by my former self when I was an 8-year-old piano student.

Take Your Foot Off the Pedal

"You have to take your foot off the pedal," my piano teacher sternly reprimanded me. I was a beginning piano student at the time, around 8 years old. My feet dangled just far enough to reach the piano pedals, which provided a fanciful echoing effect through sustained notes. The keyboard I practiced on at home did not have a pedal function and I was still learning how to properly master this instrument, which was many times my size. It was not immediately obvious to me that I had to lift my foot off the pedal after playing a wrong note in order to prevent the unpleasant discord from torturing my poor piano teacher further. Only after the sound dissipated was I able to continue anew with the remainder of the measure. So many times, throughout my training, whenever I had made a mistake, I had the tendency to replay it in my head on an endless loop. It was not until later that I realized the importance of letting go and moving forward with a fresh perspective.

Recognize the Change in Tone

One particularly poignant memory that highlighted the importance of recognizing a change in tone involved a patient I saw during my fellowship. He was an elderly man who came to clinic for a seemingly routine follow-up, which he had done for many years. I asked him about any changes that had taken place in the 6 months since our last visit, and he mentioned that he had started a new side job to help with management

of real estate properties. I noticed that as he described this new role, he shifted his tone half a step down. It was a change that could have almost been imperceptible, yet it resonated with me like a minor key shift within a familiar tune. It would have been easy to end the visit without questioning further since nothing else appeared obviously amiss. But I gently probed, asking about why he had decided to take this new job and disturb his peaceful retirement. I remember the hesitation that lingered in his voice before he revealed that his wife had died suddenly a few months ago. The job, he confessed, was more an excuse to get out of the house and socialize with other people than a financial necessity. It gave him a semblance of normalcy amid his fresh loss. He was grateful I asked and provided him the opportunity to offload some of his pain. And I was thankful he shared this important transition with me.

Remember the Importance of Pausing ("Rest Notes")

In music, silence is as much a part of the symphony as the notes themselves. Similarly, in medicine, silence holds profound meaning. Allowing space for patients to speak, to gather their thoughts, and to express their feelings can often be more informative than a battery of tests. Silence has the power to invite honesty and reflection, creating a sanctuary where patients feel heard and understood. In music, rests are not empty spaces but rather planned pauses that give shape to the melody, allowing the notes to breathe and resonate more deeply. In medicine, these pauses are the moments of silence a physician offers-moments when words are not needed and empathy instead fills the space, when the physician speaks with nonverbal body language that needs no formal interpretation. Amid the often frenzied, hurried pace of medicine, we also need to allow ourselves the time and space to process our own emotions, explore our interests, and understand our unique selves. Medicine is ultimately about people taking care of people and we must allow ourselves the same "breaths of fresh air" that we encourage for our patients.

Remember to "D.S. al Coda" (Repeat a Previous Section of Music Before Concluding)

Another lesson from my musical background that parallels my medical training is knowing when and how to go back and repeat as needed. In music, the term D.S. al Coda stands for Dal Segno al Coda, which means to return back to "Dal Segno" (the sign) and play until you reach "al Coda" (the coda mark). Oftentimes, especially in neurology, the diagnosis is not initially clear, and it can take multiple attempts to review key symptoms, reconsider differential diagnoses, and possibly reexamine the patient and retake the history. Symptoms evolve, patient circumstances change, and sometimes important details emerge only later. In the hospital, when there is a particularly puzzling or concerning patient on the list, I would take a moment and "D.S. al Coda"-to go back, repeat my examination, ask new questions, or rephrase previous ones. It was in these follow-ups that I often uncovered crucial information that had been overlooked or initially withheld. Being curious enough to question prior assumptions and go back to a previous point in time can make all the difference. If nothing else, patients truly appreciate the additional time and attention.

Another example of "D.S. al Coda" occurs when students, residents, fellows, and attendings each perform their own corresponding rituals, oftentimes in succession, while taking care of patients. Although it may seem like the same questions are being asked and the same examinations are being performed repeatedly, every time this ritual takes place, a subtle nuance is introduced. This might feel burdensome to the patient

who doesn't understand its purpose, but it serves a crucial role in the process, intertwining the different stages of physician development like a key refrain in a timeless symphony. It is another example of how we are dual physician/artists, practicing an ancient "art of medicine," and carrying forth a lasting legacy.

For me, music and medicine serve as essential partners, acting "in concert" and requiring both sensitivity and skill. Music demands my technical expertise and emotional depth. It prepares my mind and heart for the complex and compassionate demands of medical practice. Medicine, with its requirements for active listening and methodical assessments, finds its echo in the disciplines of habit and precision fused with the expressiveness of music. This enchanting duet enhances and builds upon the other, providing lessons that resonate with musician and physician alike. Each time I reflect on this beautiful 2-part harmony, I find new notes of wisdom that I can apply to my own life.



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