

# “Booster Shots” of Humanism at Bedside Teaching

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## I. INTRODUCTION

Most medical education programmes in Taiwan accept students upon high school graduation. Medical education used to consist of seven years with the last year being an internship. Since 2013, medical students have graduated at the end of six years, and the internship has been moved to a postgraduate year. In both formats, students have been offered medical humanities courses in the “pre-med” phase, i.e. the first two years of medical school. From the third year onward, however, students rarely have exposure to subjects related to humanism, other than courses on medical ethics and some problem-based learning case discussions. Moreover, medical students have had very little exposure to humanities in high school. Such limited exposure to humanities during medical school can have detrimental effects on cultivating humanistic physicians in Taiwan.

It is known that the majority of medical schools in the U.S. are post-baccalaureate system, i.e. most of the medical students have already had exposure to humanities courses during undergraduate years. Yet research shows that medical students in the U.S. have problems with empathy decline as they advance through medical school (Neumann et al., 2011). The Arnold P. Gold Foundation has been advocating for infusing the human connection into healthcare, and Plant, Barone, Serwint, & Butani (2015) articulated very well the need to take humanism back to the bedside. Lacking these efforts, the empathy decline among medical students in Taiwan could conceivably be even more serious than in the U.S.

This paper advocates for the importance of instilling humanism at the bedside during clinical rotations to serve as “booster shots” to enhance the medical humanities learned by students in the pre-med phase.

## II. MY PERSONAL EXPERIENCES IN LEARNING AND TEACHING AT THE BEDSIDE

Following my graduation from medical school at National Taiwan University School of Medicine in 1969, I completed a four-year residency in the Neurology & Psychiatry Department at Taiwan Medical University Hospital (1970-1974) and did an attending year before I went to the University of Minnesota to start another residency program in Neurology (1975-1978). In Minnesota, I was deeply impressed by the bedside teaching of my respected mentor, Dr. A. B. Baker, the chairman of the Neurology Department. I vividly remember one unforgettable incident – before he did a “straight leg raising test” (Swartz, 2014) on a female patient suffering from sciatica, he first asked for a towel to cover the area between the patient’s legs before raising her leg to test the possibility of sciatic nerve entrapment. He clearly demonstrated sensitivity to the patient’s potential feeling of embarrassment caused by performing such a test while surrounded by students and residents. Through several of these “enlightening moments” at the bedside, he demonstrated his famous quote: “Students learn from observing how you do, rather than from what you say.”

Since then, I have continued my interest in bedside teaching while teaching at the University of Kansas

Medical Center (1979-1998) and upon my return to Taiwan in 1998.

It is my personal conviction that bedside teaching should include not only medical knowledge and skills but also bedside manner, sympathetic listening and empathetic communication. Such teaching can serve as “booster shots” during clinical years to enhance the humanism that medical students learn in earlier years. For more than a decade, I have been conducting regular bedside teaching in three teaching hospitals for 5<sup>th</sup> or 6<sup>th</sup> year medical students at National Yang Ming Medical University, National Taiwan University, and National Cheng-Kung University during their clerkship rotating through neurology.

I would like to present the following two cases to illustrate how to enhance students’ sensitivity to the suffering of others (patients and their families), while also teaching neurological examination techniques, differential diagnoses, and management.

### III. CASE 1: A PATIENT WITH MYASTHENIA GRAVIS WHO SUFFERS FROM DIPLOPIA

The diagnosis was delayed by his presenting chief complaints as “dizziness,” for which he visited several ENT doctors, until finally he was referred to neurologists. Students were puzzled by how the patient could “confuse” diplopia (“double vision”) with dizziness. I then demonstrated to students how to self-induce diplopia by stretching out their left arm, with index finger pointed to the sky, and then continue to stare at this finger while trying to apply pressure to their right eyeball with their right hand. This would artificially create different positions of the eyeballs (dysconjugation), resulting in problems with the fusion of two images projected from the retinae to the brain. This caused “double vision” and a dizzy feeling, which was exactly what happened to this patient. Students then appreciated what the patient was suffering and understood why the patient could perceive “double vision” as “dizziness.”

### IV. CASE 2: A PATIENT AT THE END-STAGE OF AMYOTROPHIC LATERAL SCLEROSIS, A DEVASTATING MOTOR NEURON DISEASE THAT HAS NO EFFECTIVE TREATMENT

After the student presented the history of the patient, I reminded students to find out how we could help such a seemingly “medically helpless” patient. After observing severe bulbar symptoms and demonstrating the coexistence of upper and lower motor neuron signs at bedside, I thought it might be a good case to lead the

patient into a discussion of serious issues related to end-of-life.

So I posed a question – “What do you worry about the most?” – trying to lead the patient into a discussion of whether he would consider accepting emergent intubation followed by long term ventilation when he developed difficulty with breathing. Unexpectedly, the patient responded, “What I worry about the most is my daughters’ education.” He then went on to share with us his story of how his lack of formal education due to poverty led him to the life-long misery of humiliation at work. Consequently, he has tried to save as much money as possible for his two daughters’ college education. Unfortunately, his financial status had been seriously compromised by his loss of job and increasing medical expenses since he became ill, at a time when his two daughters would soon graduate from high school.

After we left the patient and started discussing the patient’s neurological findings, one student reminded us that we had not discussed how to help this patient. She went on to share with us her thoughts: she would like to see the patient’s daughters, discuss with them whether they themselves were interested in going to college, and if so, she would urge them to speak to their father about their desire to work in the daytime and to attend college through evening school.

We were all impressed by this student’s thoughtful proposal, and I went on to praise her, saying that she had beautifully illustrated the truth of the following statement: “Although there is nothing more that can be done for the body, this does not mean that there is nothing more that can be done for the sick person” (Cassell, 2004).

### V. GENERAL DISCUSSION OF HOW I CONDUCT BEDSIDE TEACHING

At the end of my bedside teaching, I usually ask students to share what they have learned. Students tend to recall cognitive learning, i.e. medical knowledge of diagnosis and treatment as well as clinical skills in neurological exam. Then under prompting, they begin to share their observations of behavioral/affective aspects and express their empathy towards the suffering of patients and their families. Some of them voice their appreciation for bedside manner and communication skills demonstrated by the medical team. At the end, I have consistently tried to raise their sensitivity and draw attention to the patient’s suffering. Lately, I like to share with students the joy of reading Dr. Charon’s succinct article, “To See the Suffering,” in which she writes, “To see the suffering might be what the humanities in medicine are *for*, and

that those who become capable of seeing the suffering around them in medical practice both experience the cost of countenancing the full burden of illness and death and, simultaneously, comprehend with clarity the worth of this thing, this life.” (Charon, 2017)

## VI. MY PERSONAL PLEA FOR THE INTEGRATION OF CLINICAL MEDICINE AND HUMANITIES IN MEDICAL EDUCATION PROGRAM

Attention to humanistic issues at the bedside demonstrates to students the relevance and application of humanities in individual cases and leads to a deeper appreciation of what they have learned about medical humanities during their pre-med years. Consequently, such bedside teaching can serve as “booster shots” to rekindle students’ interest in the humanistic aspects of patient care. However, it is difficult to expect lasting effects on the attitudes and behaviors of medical trainees unless such teaching can be frequently and widely practiced throughout clinical rotations.

Therefore, I would like to recommend that more attending physicians in teaching hospitals should be encouraged to teach humanism at the bedside. Medical schools should set a high priority for the clinical faculty to help students enhance their sensitivity “to see the suffering” and develop empathy towards patients. If possible, such efforts should be incorporated into faculty development programs for clinical teachers from all clinical departments in teaching hospitals.

## Note on Contributor

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## Declaration of Interest

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