When Our Medical Students Learn Anatomy, They See a Person, Not a Specimen

In 1986, a Buddhist nun named Cheng Yen started a hospital in Hualien, a rural, mountainous region in eastern Taiwan, a half-day's journey from population centers like Taipei. A few years later, after launching the Tzu Chi Medical College (now Tzu Chi University's School of Medicine, which is still the only medical school in the region), Dharma Master Cheng Yen persuasively broached what is for many an uncomfortable topic: letting a loved one will their body to science. "At life's end," she said, "turn the useless into great use: donate to medical education."

At the time, medical students in Taiwan dissected unclaimed bodies with no information about who those individuals were. The sole purpose of working on cadavers was to gain knowledge on anatomical structures. But Cheng Yen wanted her students to gain more than that: empathy for people and society. She insisted that dissected bodies be willed to the school with the consent of their families and that the anatomy course build on a philosophy to "ease the soul of the deceased and calm the mind of the surviving family." And so her approach, which grew into the Silent Mentor Program at Tzu Chi University's medical school, embraces the identity of the body donor, emphasizing the humanity of the deceased as a silent teacher and altruistic mentor. The program has also transformed physicians' training in universities in Taiwan, Singapore, China, Malaysia, and beyond.

I have directed the Silent Mentor Program since 1997. In Taiwan, the body of a loved one is seen as belonging to the

family, rather than the deceased, and bringing together the family and medical students is deeply meaningful for both. In our classes, medical students, surgical trainees, nurses, and other clinicians learn about anatomy and medical techniques—but they also learn about the body donor's life and desire to contribute. Medical students and clinical trainees meet family members and write poems or letters to their "silent mentors" describing what they are learning. When the course is complete, students place their mentors in coffins and send them for cremation. Then they join the family to honor the cremains.

Popular accounts of the Silent Mentor Program are quick to mention how it has eased shortages of medical cadavers. This is true; just two years after its launch, Tzu Chi University began working with donors and their families to transfer hundreds of donated bodies to longer-established and better-known medical schools in Taiwan, which later developed their own programs. At the University of Singapore, my colleagues tell me, pledges to donate have increased from around 30 to around 5,000 in little more than ten years.

Benefits go far beyond the number of donations, however. There is some evidence that our approach helps medical students quiet the discomfort many of them experience when working with a corpse and enhances their scientific learning. The Silent Mentor Program has been invaluable in training surgeons in minimally

invasive laparoscopic techniques, now used for essentially all hysterectomies and gynecological cancer surgeries performed at Tzu Chi. My colleagues report that the program can "reduce stress for teachers and trainees, shorten the learning curve, and increase the safety of patients."

But I think the effects of the program on medical education are much more profound: it enhances the humanity of clinicians and those they serve. I know of no equivalent counterpart in Western medical education that so thoroughly integrates an exploration of the body with an understanding of the individual. The field of medicine exists to take care of people, but the gray and grueling atmosphere medical schools create seems to drive away essential human characteristics that medical professionals need. Several lines of research show that empathy decreases over the course of medical education. And yet it is hugely important to patient care: those who trust their doctors are more likely to divulge pertinent details, and empathy is associated with better patient compliance, recall, and ability to follow recommendations.

The recent explosive growth in biomedicine alongside high-tech imaging and manipulation tools help physicians see patients' tissues and even cells in increasing detail, but these tools further obscure the view of a patient as a whole person. Despite calls to integrate the humanities and bedside skills with medical education, relevant instruction in humanity and compassion is too often kept at the periphery of coursework, squeezed in almost as an afterthought. This dehumanizing atmosphere is perversely at odds with the warm good will of those persons who offer their bodies selflessly to benefit future doctors and their patients; medical education can learn much by taking their silent mentorship seriously.

Stripping identity away

The view of a person as a mere collection of tissues and organs is particularly evident in traditional anatomy programs, like those I trained in. All over the world, cadavers are stripped of their identities in labs. As a master's student at National Taiwan University, I dissected unclaimed, nameless bodies with the sole purpose of gaining anatomical knowledge. Later, when I trained and tutored at US medical schools, I saw much the same thing with formally donated bodies. We never learned their names or anything about their lives—they were reduced to their anatomy.

Meanwhile, the surviving family is, almost without exception, left without any knowledge or say in how their loved one is handled. This is underscored by the admission this year by an American medical school that it would stop accepting bodies into its willed body donor program because it had lost track of dozens of bodies' identities and could not return remains to families as promised.

Western medical schools have defaulted to depersonalized routines and values to deal with human donations. This traditional practice of concealing the identity of the donor

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argues that anonymity lessens the emotional stress of the anatomy laboratory experience and allows for distance, objectivity, and the learning of basic anatomical facts. It nevertheless removes the person or patient aspect of the body and substitutes that with a cadaver specimen or cadaveric materials. This approach to the use of the donor body appears to be an ethnocentric concern not shared by Asian cultures.

And such forced anonymity does not stop the students or educators from having thoughts about and even spiritual connections to the bodies they are working on; I remember similar feelings during my own anatomical training and research at National Taiwan University and University of Wisconsin-Madison. I sometimes wondered about the life of the person that I was dissecting and how his body became my learning material.

Medical students are forced to detach their feelings from the body lying on the table. Anatomy labs, and medical education more generally, end up unwittingly teaching a kind of emotional compartmentalization. Consequently, busy clinicians think about organs before the whole body, the living person, or loving family; the health care they provide becomes a series of biomedical measures to rectify an abnormality. To families suffering loss, grief, and uncertainty (and who may struggle to afford a clinical visit), modern medicine assumes a ruthless mask, cold and psychologically distant when connection and compassion are most needed.

A donor with a name

In 1995, I was working as an associate professor of anatomy at National Taiwan University (NTU) when Tzu Chi's medical school approached me. I was a logical choice for recruitment. I grew up in Hualien, and Taiwan (like many places) has a long-standing shortage of anatomists. In 1997, I was a jointly appointed professor at both universities. A few years later, I made the unusual decision to quit NTU (giving up a government pension) and move to Hualien to head the Silent Mentor Program in gross anatomy. We subsequently added a program for surgical training. We now run eight surgical silent mentor workshops a year: three for the medical students, postgraduate physicians, and residents within the Tzu Chi hospital system and five for surgeons and other specialists from various clinical societies in Taiwan and internationally.

Our program begins several weeks before trainees come to their dissection or operating tables. First, they travel, sometimes for hours, to meet the donor's family in their home to learn who the person was and what they hoped to give by donating their bodies.

On the day before the first dissection or operation, families are invited to the Tzu Chi medical school for a beginning ceremony. The trainees assigned to each table share what they've learned about their silent mentor's life to other students, faculty, family, and volunteers. After that, families walk in rows into the dissection or operation room to tables marked with their loved one's name and photograph. Students and family stand side-by-side to remove the blessing sheet covering the face of the body donor. There are often tears from both groups.

Before each session starts, trainees stand by the table and maintain a reverent silence for one minute, practicing contemplation and thanking their mentors. At the end, trainees bow to their mentors to honor them and express gratitude. In the course of their work, students never refer to cadavers or corpses, instead describing them as mentors, or with their name.

women whose husbands had been silent mentors opted to become mentors themselves upon their death, as did the daughter of a man who had been one of our earliest silent mentors.

Students consistently report that their interactions with families increase their motivation to learn in their class. So does hearing directly from family members about their loved one's wishes. One woman, whose husband died unexpectedly at 52, told students, "I would rather have you make 20 practice cuts on my husband than to see you make any mistake on patients." A 2016 survey of surgical trainees in the Silent Mentor Program reported that all found it "meaningful" or "very meaningful." Both students and family members see conducting dissections as carrying out the deceased's will.

The Silent Mentor Program grew out of a Buddhist tradition, but the values of compassion and respect are not exclusive to Buddhism. Malaya University in Malaysia, for example, has worked with silent mentors and families who followed Catholicism and other Christian denominations as well as Hinduism and other religions. Medical schools in Singapore and Malaysia have adopted the program

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At the end of the semester, the gross anatomy dissection students reshape their silent mentor's body by placing all the organs and tissues back in their original positions and suture the skin stitch by stitch. This simple courtesy may seem excessive, but it allows the body to be returned whole, reassuring the family that their loved one has been treated with respect. Students wrap the bodies in gauze and dress them in formal clothes. The families then join the students to place the silent mentors in caskets, along with letters, poems, and other remembrances the students have written. Walking together, students and family send the coffins to the local crematorium and then gather for a gratitude ceremony that includes recapping the life history of each mentor. The families do not walk into the large university rooms as strangers; our students find them and greet them. I have seen decades-long friendships develop between students and their silent mentors' families.

For the family, we hope the transparency, participation, and interaction in the program helps the survivors gain inner peace and ease their grieving. And family members often tell us that it does serve this purpose. In recent years, several

in full. Schools in countries such as China and Thailand have adopted crucial pieces of the program, including the gratitude ceremonies where family members participate and donors are thanked by name.

All these humanistic interactions are time-consuming and require tedious planning. Perhaps it seems impractical, even wasteful, to those considering the discipline of anatomy alone, itself often considered only a small corner of medical education. But the silent mentor concept elevates anatomy by properly contextualizing the human body—and medicine within families, society, and our mutual interdependencies. Incorporating the humanity of body donors through students' interaction with their families is like a renaissance in anatomy teaching.

I have taught anatomy for 40 years, and, although I am not religious, I believe the gratitude, respect, and love the program promotes is both the essence of health care and of life itself. For my last lectures, I will lie down.

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