

Editorial

Humanities & Basic Medical Science



Korean Bureaucrats Underestimate the Medical School Curriculum, Taking Anatomy Education as an Example

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► See the article “A Brief Review of Anatomy Education in Korea, Encompassing Its Past, Present, and Future Direction” in volume 39, number 20, e159.

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Basic Medical Science

No one will dispute the fact that medicine is a science. Therefore, the curriculum of medical education should include teaching principles based on scientific grounds as well as teaching how to treat patients. This principle - basic medical science - is the first gateway for freshmen at medical schools. Courses that teach this principle include anatomy, physiology, biochemistry, microbiology, pathology, and so on. Only when mastering these subjects the next step is to start with clinical medicine that deals with real human patients. This is the outline of medical education.

The Korean government unilaterally announced that it would implement a total of 5,000 students each year for five years by rapidly adding 2,000 to the current 3,000 students, starting in 2025.¹ The Korean medical community strongly protested. Under the current infrastructure, it is very natural that a rapid increase will cause great chaos in the medical school education field. For example, as many as 200 students have been assigned to a medical college with a current quota of 50. As classrooms and practice laboratories are geared to just 50 students in that college, it is clear what will happen if there are 200 new students every year.

A typical example is the disruption of anatomy cadaver dissection. If there were previously 5 students assigned per cadaver, now 20 students should be assigned per cadaver.

Most professors of all medical schools throughout this country have criticized government policy, but the Government remains stubborn. Even a vice minister of Korean Ministry of Health and Welfare refuted this: “Cadavers can be shared with each other in medical schools across the country. If this is not enough, we can also consider importing as some foreign countries do.”²

To the best of my knowledge, I've never heard of a country exporting cadavers *in toto*. Even if there is, it's probably a felony. The vice minister is not a medical school graduate. Therefore, he is insulting not only the anatomy education but also the people who donated the cadaver because he has no idea about the medical school education and its ethics.

In other words, Korean bureaucrats underestimate the medical school education.

Let me be clear, the medical school curriculum is not that easy, as you think of it.

Speaking of which, let's talk about anatomy.

My Memories of the Cadaver Dissection

Modern medicine began with the establishment of anatomy. The ultimate goal of all medicine is to treat patients, so grasping the normal body structure of humans is more important and fundamental than any other knowledge. Therefore, anatomy is the first subject that a new medical student meets and must master.

The first time I learned anatomy was in 1981. A total of 25 groups of 100 students - 4 students per cadaver were arranged. After we all gave a sincere Mass to those who were willing to donate their bodies to honor their souls, we finally got to meet cadaver. With the disgusting smell of formalin filling the dissection room, various mummified bodies were placed per table. Here and there, our co-eds were shocked, terrified, and were weeping. Some fainted while hyperventilating and were carried away by an assistant. We men pretended not to be terrified because "we are men!" But, indeed, we were also shocked and terrified. I thought 'Ah, this is only one thing I have to do for a year, right?' However, the adaptability of human was so great. It took only a week for our co-eds, who cried and even fainted on the first day, to work most enthusiastically on cadaver dissection and to study Grant's Atlas of Anatomy simultaneously.

I didn't know at that time till I reflect it now that I had a really good educational environment.

From the standpoint of my own experience, cadaver dissection is not that simple. Learning the structure of the human body seems to be easy to master only if you read and memorize textbooks and atlas, but that is not the case at all. In fact, you must touch the cadaver directly, make an incision, identify the arteries, veins, nerves and organs by comparing them with illustrations in atlas one by one, and make each knowledge implemented to your hands as well as to your hippocampus. These collections of knowledge are established inside each person as a concept of human beings, and act as fundamental knowledge unconsciously when actually treating a patient in the future.

By the way, if 20 students are assigned per cadaver, will they be able to study properly?

The Current Status and Concerning Future of Anatomy Education in Korea

In this issue, the review by Kim et al.³ timely presents important subjects and data about the current status and anticipation of anatomy education in Korea. They conducted a survey targeting 40 medical colleges nationwide and have shown that the current nationwide student-to-anatomy professor ratio is 24.4 students per professor, and the ratio of students per cadaver is 7.4 (3,246 students/450 cadavers). They anticipated that approximately 20 more anatomy professors and 68 additional cadavers would be required for an increase of 500 students. About 41 more professors and 135 additional cadavers would be needed for

an increase of 1,000 students. If the Korean government stubbornly insists on increasing the number of students by 2,000, roughly 82 more professors and 270 additional cadavers would be necessary. No one will think these estimates are feasible, unless one is insane. It is anticipated that anatomy education in Korea, which had been barely able to withstand poor infrastructure, could end up ruined. The real problem is that it is not limited to anatomy education. Anything messy can happen if each medical school has an excess of students beyond their capacities.

Medical school education does not mean that students are crammed into a lecture hall and only lectures are given in an infused manner. Do you train doctors who deal with patients' lives through education consisting of only students, professors, and textbooks?

Medical schools that are not supported by infrastructure and various resources are nothing more than poor training centers.

Until the Flexner report was published in 1910, there were a number of substandard medical schools and doctor training centers in the United States.⁴ By undergoing strict self-purification on scientific grounds, America is boasting the world's best quality of medicine today. Why does the Korean government bother to recreate this precedent when this has already happened in the past more than 100 years ago?

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