

# Medical Education in the United States, in the United Kingdom and in Japan

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I am a medical student in Tokyo, Japan. The curriculum of my school offers us the chance to participate in outside clerkships at the start of our final year. So, after my performing clinical clerkships in Tokyo for 1 year, I took the opportunity to experience British and American medicine “back-to-back” in the last 6 months: 1 month in General Practice in London, 1 month in the Accident and Emergency Department at St. Thomas’ Hospital in London, and 1 month here at the University of California, San Francisco (UCSF).

**Japan:** There are 79 medical schools in Japan, or approximately 1 school for every 1.6 million people. Undergraduate medical education lasts 6 years, typically consisting of 4 years of preclinical education and 2 years of clinical education. High school graduates are eligible to enter medical school. At 36 schools, college graduates can be offered admission, but they take fewer than 10% of the available positions. There were about 46,800 medical students in 2006; 32.6% were women. Since 1990, Japanese education has undergone significant changes, with some medical schools implementing integrated curricula, problem-based learning tutorials, and clinical clerkships. A model core curriculum proposed by the government in 2001 outlined a core structure for undergraduate medical education, with 1,218 specific behavioral objectives. Medical school curricula now included more activities that mimic clinical practice such as problem-based learning and organ-based curricula and the objective structured clinical examination (OSCE). A nationwide common achievement test

was introduced in 2005; students must pass this test to qualify for preclinical medical education. This test is similar to the United States Medical Licensing Examination Step 1 but is not a licensing examination. After completing the first 4 years of medical school but before starting clinical clerkships, students must pass computer-based tests and the OSCE. The National Examination for Physicians is a 500-item examination that is given once a year. Every year about 90% of examinees pass. In response to criticism and concerns, the Japanese government has also implemented 2 major changes in the postgraduate medical education system. First, a 2-year structured internship is now required for all medical school graduates. Second, an internship matching system was adopted. I think more clinical knowledge is obtained in these 2 years than in medical school.

**United Kingdom:** In the UK, students enter medical school after high school as in Japan but attend for only 5 years. Below is an example of a curriculum in the UK (King's College, London).

The first year and second year: The scenarios will vary from individual case problems to broader social and epidemiological issues. Most scenarios are introduced by a clinician, who indicates the relevance of the science to follow. A final summing-up session for each week will bring together the important learning issues for the week and return them to a clinical context.

The third year: Clinical teaching is integrated across the major specialities relating to diseases of the abdomen, chest, and head with an introduction to clinical pharmacology and therapeutics. You develop the skills of history-taking first learned in the clinical contact sessions in the second year and begin to learn the basic skills of clinical examination, diagnostic reasoning, interpretation of pathological and radiological data and practical procedures

such as venopuncture and basic resuscitation.

The fourth year: In year 4 students build on the basic knowledge and skills developed in the third year in adult medicine, surgery, and psychiatry and extend them to special groups of patients. You will develop the special communication skills required for these groups of patients and will gain an understanding of ethical issues and their application in the context of the sensitive areas that the management of these patients presents. You will learn about the psychological and socioeconomic circumstances of patients, particularly those who are more vulnerable and disadvantaged from age and dependency, and the role of the multidisciplinary team in the care of dependent patients. There will be teaching in public health, epidemiology, pharmacology, therapeutics and the laboratory sciences as applied to the year 4 specialities.

The fifth year: You will be required to demonstrate competence in the clinical skills appropriate to commencing work as a doctor. You will be expected to show professional attitudes in your work based on an informed understanding of ethical and professional issues. You will complete a series of clinical attachments in medicine, surgery and general practice. You will become a member of the care team, whether in primary care or in hospital, and will play an active role in the care team, linked to the work of other junior medical staff.

**UK Experience:** During my stay in London, I had a chance to see the year 2 and final-year OSCEs. In the final year, the 20 stations include religious issues and difficult personalities. In the year 2 OSCE, the stations including blood pressure measurement and explanations about examinations. I felt that students in the UK spend most of their time with clinical matters and

start to study medicine from the beginning of medical school. The licensure examination comprises the final year OSCE and written tests. About 10% of students fail the OSCE every year. After medical school, graduates enter a residency program for 2 years for basic training.

**US:** I found an interesting article about a curriculum used in the US,

The Harvard Medical School-Cambridge Integrated Clerkship (HMS-CIC) is a redesign of the principal clinical year to foster students' learning from close and continuous contact with cohorts of the patients in the disciplines of internal medicine, neurology, obstetrics and gynecology, pediatrics, and psychiatry. With year-long mentoring, students follow their patients through major venues of care. Students participate in weekly, case based tutorials integrating instruction in the basic sciences with training to address the common and important issues in medicine, as identified by national organizations. In addition, they participate in a social science curriculum that focuses on self-reflection, communication skills, ethics, population sciences, and cultural competence. In the pilot year, HMS-CIC students performed as well as traditional students in the National Board of Medical Examiners examination and the OSCE, and they scored higher on a year-end comprehensive surveys, HMS-CIC students were much more likely to see patients before diagnosis and after discharge and to receive feedback and monitoring from experienced faculty than were their traditionally educated peers.

US Experience

What I felt most is that there are many students and physicians here at UCSF from all over the world who have strong enthusiasm and who study and work so hard to absorb new things. This was the most impressive thing for me.

In Japan, teaching tends to be concerned more about basic things, such as disease mechanisms and the disease itself. In the UK, they study more about clinical topics, such as how to talk with patients, how to examine them, and what drug to use.

In the US, I felt that both basic and clinical topics are studied. One reason is you have a chance to do research during college, after college, or at medical school. I was able to spend a day at Dr. Hashimoto's lab at San Francisco General Hospital; I saw college students and students who will enter medical school the following year working with doctors and writing articles. I came to think of medicine as a science and as a treatment for patients.

As far as my clinical clerkship is concerned, at ground rounds, I was surprised to see residents were given prizes according to the students' voices. At university hospitals, residents also teach students. An attending physician works with 1 resident, and the resident works with 1 student. I thought that was a good way for teaching and studying.

In medical education, clinical education tends to start as early as possible all over the world. To become a physician, we need to obtain knowledge, clinical skills, and communication skills. To achieve the necessary knowledge and skills, merely reading books, talking to patients, or watching physicians perform examinations or treatment are not enough. I need to always think about what I want to be and what I have to be for patients and to continue to study. UCSF made me think like this.

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#### Refererences

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