Will the "JMU System" Stop Medical System Collapse?

JMAJ 53(4): 257-258, 2010

Kazuyuki SHIMADA*1

Jichi Medical University (JMU) was established in February 1972 to train competent general clinicians who are willing to commit to healthcare in depopulated areas such as rural areas and remote islands. Back then lack of physicians, especially in mountainous regions, remote islands and depopulated areas, was a serious problem in Japan. JMU was established based on the concept of setting up a medical school in a joint effort of 47 prefectures to train physicians who are willing to work in rural areas. JMU and JMU Hospital were built on a vast vacant lot that used to be a livestock breeding station in Shimotsuke city, Tochigi prefecture, which is in the central Kanto plain.

Two or three enrollments from each prefecture are accepted by JMU every year. The first stage entrance examination takes place in each prefecture, and the second stage examination is given at JMU to select competent students with a passion for providing community healthcare services in their home prefecture in the future. Students will spend all six years of their college life living in dormitories to develop a spirit of selfsufficiency and harmonization as well as a sense of responsibility. They will also strengthen ties with their home prefectures and gain a deeper understanding of community healthcare in rural areas. Education provided by JMU focuses on integrated and holistic medicine. After graduation students go back to their home prefectures and serve as community healthcare providers with medical knowledge and skills they acquired at JMU and a sense of responsibility. Tuitions and other relevant expenses will be loaned to students. If they work at governor-designated public hospitals for a specified period of time after graduation, their loans will be remitted.

At first some people were skeptical about the feasibility of the JMU system. However, over 3,000 JMU graduates are now active at the front lines of community healthcare since the first graduating class of 105 students left in March 1978. Under the cooperation of prefectures, nearly all JMU graduates have smoothly completed their obligated period of services (about nine years) in their home prefectures, and many of them (about 70%) remain there and work as community healthcare providers.

In Japan, problems such as lack of hospital physicians, physician concentration in urban areas and uneven physician distribution across clinical departments have considerably worsened in magnitude and dimension in recent years due to failed healthcare policies and medical education. Existence of a number of core community hospitals is at stake, which is also a major social issue. To tackle these problems the Japanese government decided to increase the physician count. Medical school enrollment, which used to be limited, has been increased by more than 1,200 in the past three years. Most of the increased enrollment is allocated to the "local student allotment" in the entrance examination system of local medical schools. The local student allotment is a special enrollment system that targets local high school graduates in the hopes of relieving local physician shortage. About 70% of medical students at national universities are from other prefectures and mostly return to their home prefectures or work in urban areas after graduation. Few of them remain as local physicians. Meanwhile, medical schools established their own local student allotment one after another, presuming local students are likely to remain in their home prefecture

^{*1} President, Jichi Medical University Medical Association, Tochiqi, Japan (kazuyuki@jichi.ac.ip).

even after graduation. Some of these medical schools have a scholarship program that requires recipients to work locally after graduation. Other medical schools recruit applicants who promise to pursue a community health career from all over Japan on concern that limiting enrollment to local students may compromise the quality of future physicians. Specifically, students are required to accept a condition at the time of admission that they work at hospitals in their home prefectures for a certain period of time after graduation. The JMU system is now used by medical schools nationwide.

However, establishing a local student allotment does not instantly lead to the development of physicians who find working in the local community worthwhile and naturally commit to community healthcare. Universities have started to focus on physician education to promote commitment to community healthcare. Education programs that require practical training at local welfare institutions and hospitals are about to be developed at many universities. These movements in fact reflect exactly what JMU has been emphasizing in physician education since its establishment.

JMU is currently enrolling 650 students, including 129 females, from first to sixth year. Current faculty size is 870; all faculty members are dedicated to physician education and research activities in general education, basic medicine and clinical medicine. Curriculum is developed to make students acquire higher basic clinical skills by the time they graduate. Throughout six years, students' motivation to become general physicians will be maintained, and their voluntary effort to learn medicine will be supported. The pass rate for the national examination for medical practitioners among JMU students is almost 100% every year, which is usually the highest rate in the nation.

Whether the local student allotment system established at medical schools nationwide can achieve its intended goal, as the JMU system had,

and work miracles in the collapsing community healthcare is entirely unknown for now. Providing special medical education to only certain students in a class is unlikely. It is quite difficult to motivate medical students accepted under the local student allotment system to commit to general medicine/community healthcare and acquire required knowledge and skills as well as to integrate them in or differentiate them from the education system for most other medical students at the same time.

JMU Hospital is a general hospital with 1,135 beds. Over 600 clinicians work at JMU Hospital. The Jichi Medical University Medical Association consists of 147 professors and associate professors working at JMU Hospital. JMU Hospital is operating in top gear as a local tertiary medical center. Several years ago more than 35,000 patients per year were transferred into JMU Hospital to seek primary to tertiary emergency medical care. JMU Hospital and nearby local medical associations are working in close cooperation. After numerous discussions about emergency medical care issues between the Jichi Medical University Medical Association and local medical associations, out-of-hours and emergency medical centers were opened by members of local medical associations to provide primary emergency care. The number of patients visiting the JMU Hospital emergency medical center seeking treatment for mild symptoms remarkably decreased after the operation of such local emergency medical centers took off. Consequently, admission of emergency patients and the number of inpatients at JMU Hospital increased. The roles to be fulfilled by JMU Hospital in community healthcare are now appropriately allocated.

The Jichi Medical University Medical Association will firmly maintain the JMU spirit and continue developing good healthcare professionals. As an advanced treatment hospital, JMU Hospital will provide advanced medical care and fulfill its obligations based on appropriate rolesharing with other local medical institutions.