New med school going big on simulation

Actor-patients, portable ‘operating theatre’ will feature in curriculum

STUDENTS of the third medical school to open here in 2013 will be trained to put the patient at the heart of what they do.

To do this, simulation education will be made a big part of the curriculum at the Lee Kong Chian School of Medicine.

Students learning to stitch up a wound will, for example, be faced with an actor wearing a silicone “wound”, who can be primed to cry in pain or be plain difficult to handle.

This method of learning is gaining popularity in medical schools, said Dr Roger Knee-bone, a professor of surgical education at Imperial College London.

He explained that students who stitch up artificial wounds without an actor present would not behave as they would with a real person.

“When you do such procedures, you have to talk to the person instead of just tying knots on them,” he said.

These actors posing as patients will also give students practice in taking medical histories and in conveying bad news, added the professor.

Prof Knee-bone was in town last week to promote simulation in medical education at the medical school’s lecture series held at Tan Tock Seng Hospital, a National Healthcare Group (NHG) institution.

The NHG is a partner of the medical school, which is to be jointly run by Imperial College and the Nanyang Technological University (NTU).

The medical school will have an initial intake of 50 students and will step this number up to 150.

It will have two campuses, one at NTU’s Yunnan Garden campus, and the other next to Tan Tock Seng Hospital.

The school’s senior vice-dean Martyn Partridge, a professor of respiratory medicine at Imperial College, said: “We believe that service needs to be put back into medicine through a truly patient-centred approach.”

To ensure that patient-centredness is a default approach among its graduates, the school will run at least three sessions using actor-patients every year, he said.

And to give medical students experience in an operating theatre, the school will use a portable version of it called an igloo.

Prof Knee-bone, inventor of the portable operating theatre called an igloo, believes it will gradually play a bigger role in medical education.

“The first time a student goes near a patient, he should feel confident and competent. This is about preparation for good clinical practice.”

Prof Partridge agreed, saying: “Igloos are fantastic - they can be used for as many as 10 surgeries a day.”

But the simulation training using actors also enables the students to gain skills without jeopardising the safety of patients.

The igloo is now being used only in Imperial College London, but Prof Knee-bone said he believes it will gradually play a bigger role in medical education, especially in Britain where clinical exposure is decreasing.

“The other two medical schools here, the Yong Loo Lin School of Medicine at National University of Singapore (NUS) and the Duke-NUS Graduate Medical School, also use simulation in their curricula.

Prof Knee-bone said, however, that as good as simulation training is, it is still not a substitute for good clinical education.

Prof Partridge agreed, saying: “The first time a student goes near a patient, he should feel confident and competent. This is about preparation for good clinical practice.”

Shaped like an actual igloo, Prof Knee-bone’s invention can be inflated to the size of a real operating theatre and set up anywhere to create a simulated training environment, such as when all other simulation centres on campus are occupied.

The igloo also looks and sounds like a real operating theatre for a realistic training experience, which can be fitted out with hospital equipment as well.

Cameras placed within it record the training proceedings so teams can review their performance.

In the igloo, students perform, for example, key-hole surgery on a dummy that can breathe, blink and has a beating heart. Controlling the dummy are the trainees, who can induce it to produce physiological responses to moves made by the students.

This way, students will build the clinical skills necessary to handle any kind of medical situation that may come at them in real life, said Prof Knee-bone.

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