

Towards a healthy progression





**T**HOMAS Edison got it partially right when he said that “the doctor of the future will give no medicine but will interest his patients in the care of the human frame, in diet and in the cause and prevention of disease.” While administering medicine is still a practice in the treatment of patients, health sciences has developed into a multi-disciplinary field that is concerned not only with the treatment of diseases but also the improvement and advancement of all aspects of wellness and health care.

“When we mention the health science industry, it encompasses the life sciences, health care and medical diagnostics and is facilitated by research in fields such as biomedical science, biotechnology, clinical laboratory science, medicine, nursing, nutrition, pharmacy and public health,” says Dr Rozita Rosli from the Faculty of Medicine and Health Sciences, Universiti Putra Malaysia (UPM).

The study of health sciences has evolved to include age-old traditional medicine such as Ayurveda and acupuncture of the East, new discoveries of stem cells and genes from hard core basic science. Some universities offer courses that incorporate elements of complementary medicine in their curriculum. In our country, the potential of stem cell and genomics as well as development of local herbal products for health is being explored.”

While the advent of science and technology has revolutionised the practice of medicine, Professor Dr Promwichit, deputy vice chancellor (research and innovation) of UTKERSKILL University College of Health Sciences, maintains that the industry is progressing at a fairly rapid pace.

The study of Health Sciences has taken a back seat over the centuries in many countries. Research

a  
h  
c  
t  
h  
h  
e  
tl  
'r  
ir  
se  
T  
e  
sc  
T  
qu  
pe  
ac  
W  
in  
wa  
Ro  
is  
We  
he  
Ma  
mu  
We  
is s  
ma  
“  
for  
The  
tak  
If th  
anc  
pro

and development had been focused on technical disciplines, which is why technological development had flourished whereas health sciences did not," he elaborates.

"But in the late 1990s, there was a heightened 'realisation' of the importance of health sciences and healthcare. Then suddenly the demand everywhere for health science personnel increased. This led to a migration of qualified health science personnel to economically advantaged countries in the West. And, that is how the interest in health sciences was resurrected."

At the local level, Dr Rozita feels that the industry is still lagging behind its Western counterparts. "The health science industry in Malaysia currently is very much dependent on the West. However, the scene is slowly changing," she maintains.

"I believe the prospect for growth is always there. The motivation for research takes its cue from consumers. If the general public trust and backs local products, progress could proceed

faster."

Nevertheless, job prospects for graduates in this field are very promising. According to a study conducted by MASTERSKILL in 2007, there are plenty of career opportunities for health science professionals in Malaysia and other developed countries.

"Currently, the personnel to patient ratio in Malaysia is high. Ideally, there should be around 800 to 1,000 health science personnel in each discipline," says Professor Promwicit. "In Malaysia, with its population of 25 million, there is a demand for 31,250 health science personnel in every discipline; double that figure in the case of nurses."

The country's growing popularity as a medical tourism destination has also contributed to the demand for graduates in this field. "We believe that medical tourism can play an important role in generating income for the country," says Professor Salmaan H. Inayat-Hussain, Dean and Professor of Toxicology of Universiti Kebangsaan Malaysia's (UKM) Faculty of Allied Health and Sciences.

"Specialised centres such as allied health hospitals can be developed to cater to medical tourism needs."

However, Professor Promwicit notes that there is a downside to medical tourism.

"Many countries have initiated medical tourism programmes. Malaysia should not be an exception. However, medical tourism should be encouraged with caution," he advises.

"Malaysia had once eradicated tuberculosis, malaria and a few more diseases. But currently we are back to square one. In short, the country should not allow free entry for unhealthy tourists. Patient screening should be implemented."

Meanwhile, Dr Rozita, who believes that biomedicine should join the ranks of medicine, dentistry, pharmacy, and dietetics as a professional degree, makes the case for more professionals in this field. "Biomedicine plays a critical role in linking the science of biology and medicine. At the moment, there seems to be a huge wall that separates the two. Both have to learn

to recognise each other's need and potential," she asserts.

"At UPM, the reason for housing medicine and health sciences in the same faculty is the hope that the close proximity of the two will encourage communication and collaboration."

Aside from the emergence of new discoveries and technology, the field of health sciences has also been affected by growing awareness among patients of their rights as consumers. This needs to be taken into account in the curriculum.

"Ten years ago there was no emphasis on soft skills. Now the emphasis is moving towards more holistic and well-rounded graduates who can meet the current demands of consumers. As time passes, society's needs from graduates evolve. Expectations are higher," says associate professor Rohani Arshad, director of MAHSA's Centre for Postgraduate Studies.

While the country's graduates have always been evaluated in terms of examinations, K. Soundrajah, course co-ordinator for postgraduate programmes at MAHSA, says globally there is a move towards competency-based education.

"A doctor could have passed his exams with flying colours and be very good at diagnosis, but have poor bedside manner or rapport with his patients and subordinates, which means he would fail in communications and soft skills. This kind of evaluation is continuous, and as important as knowing theory. We are expecting postgraduates to lead and innovate, not just to maintain the status quo," he explains.

"To be a proper professional you must be

able to make your own decisions, based on your own knowledge and skill, not as a person who is taking instructions from someone else. An example would be nurses who take instructions from doctors. Now nurses are moving away from that paradigm to be professionals in their own right, where they make decisions based on their expertise in their own field. Professional development means being autonomous in that way."

Another aspect of their profession graduates should take responsibility for is the moral issues and ethical considerations involved. "These issues are being taught in classes, but their application in the wards is more important than just learning them. Application means you need a clinical supervisor to go with the student and demonstrate how to talk and explain to patients," explains Associate Professor Rohani.

"But most importantly, the clinical supervisor must also be of a certain calibre to be able to identify the needs of both the patient and the student. This is where awareness of cultural, social and religious needs comes in, especially with the development of medical tourism. This is why we need postgraduate students with more in-depth knowledge in these areas."

The demand for graduates in the health sciences will continue to rise in tandem with the progression of the industry.

Moving forward, the challenge for institutions of higher learning will be to produce individuals who are not only qualified for positions in the industry; they must also be conscientious and cognizant of their roles as professionals who provide an important service to society.