

# Training doctors for a post-pandemic world

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For *The Straits Times*

When the Covid-19 pandemic is finally over, what will we have learnt? Healthcare professionals have done their best to cope with the unprecedented challenge posed by Covid-19, and in many cases their performance and conduct have been truly heroic. But there have been missteps, too, and training the next generation of physicians will require a new paradigm for medical education.

What additional skills will future physicians need to navigate the post-pandemic world? The answer lies in a more pragmatic, holistic

and realistic “world view” as to what constitutes good health based on the following key concepts.

## **HOLISTIC VIEW**

For physicians of the future, the narrow view of clinical competence and the ability to diagnose and cure disease will not be enough. They must acquire a more integrated understanding of what constitutes good health, be reminded of the “humanity” in medicine, and affirm the principle that healthy lives include physical, mental, social and spiritual well-being.

This goal will require a more societal and “systems-based thinking” approach. Doctors will need to appreciate not only the influence of social determinants but also that of rapidly evolving sectors beyond health. Importantly, in an age of unprecedented technological

innovations in big data, artificial intelligence and informatics, they will have to understand the invaluable role these drivers will play in future health improvement.

This first goal can be achieved through teaching innovations that restore humanity in medicine by, for example, highlighting the intersection between health and art. In addition, a greater awareness of the history of human health and medicine will lead to better decision-making. As Spanish-American philosopher George Santayana famously said: “Those who cannot remember the past are condemned to repeat it.”

## **CRITICAL INQUIRY**

The second concept derives from the current toxic environment of misinformation, falsehoods, pseudo-scientific “facts” and the outright denial of science itself.

Future physicians must guard the sanctity of inquiry, critical thinking and scientific evidence in guiding decision-making. Future physicians must also be “data savvy” and be able to tap into the detailed health data available at both the national and global levels.

In the larger context of how

public policies impact society, future physicians must also be aware of the role and value of evidence in shaping such policies within the health sector and beyond. The need to have an inquiring mind was succinctly expressed by American physicist Richard Feynman who said: “I would rather have questions that can’t be answered than answers that can’t be questioned.”

The goal of developing an inquiring mind can be achieved, for example, by exposing students to the principles and foundations of the scientific method, paradigms of research and by requiring student-driven research projects.

## **GLOBAL MINDSET**

Beyond the shores of a small island like Singapore, and as eloquently expressed by former Singapore diplomat Kishore Mahbubani, the “coronavirus is telling us to be a citizen of our country, and our world”. “The disease has shaken the human species to the core, but we must grasp the metaphysical messages it is sending. To survive in the short term, we need national solidarity – but to survive in the long term, we need global solidarity.”

The third goal, therefore, in the training of future physicians, is that they must become global-minded leaders contributing to the betterment of well-being for humanity as a whole.

They should be aware not just of matters related to “global health”, but also of existential challenges in the much larger context of “planetary health”.

This objective can be achieved by introducing relevant topics throughout the curriculum which go beyond traditional biomedical and clinical dimensions. These courses should include economics, development, business, history, politics, behavioural sciences and ecology, among others.

## **ATTITUDE OF HUMILITY**

Finally, to achieve these crucial goals for the next generation of physicians, educators must adopt a similar attitude of humility. Defensive reactions to medical students’ questions are counterproductive. Instead, educators should exemplify the empathy expected of these future doctors and encourage them in their aspirations. Traditional didactic approaches should be

replaced by project and group work led by the students themselves.

In the post-pandemic era, online teaching and hybrid classes are likely to become the norm. To keep students engaged, educators will need to employ new teaching methods, such as interactive tasks, breakout sessions and thought experiments. The coming academic year will test educators’ humility, agility and adaptability.

Indeed, the pandemic presents an opportunity to develop a new paradigm for medical education.

It is no longer sufficient for physicians of the future to commit to the dictum of “first, do no harm”. They must embrace a broader mindset of “first, do good for humanity” – to value humility, inquiry and solidarity in order to help ensure the well-being and survival of the human species.

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