

## From tuberculosis to pandemic flu—respiratory medicine turns a full circle

There is a reassuring orderliness about a career in respiratory medicine that started when Hong Kong made its name as a centre for managing tuberculosis (TB) and ended as the territory was described as being the best prepared to manage pandemic influenza.<sup>1</sup>

But on closer examination, the ‘circle’ that closed when Professor Lam Wah Kit retired from the University of Hong Kong last month is of a much broader nature than the one he joined as a young medical graduate in 1972.

Pandemic influenza, SARS, avian influenza, all technically respiratory infections, are no longer the domain of the respiratory physicians. “These are now managed by a multi-disciplinary team,” said Lam. “No one specialty can be in the driving seat.”

Not only that, patients, who were once expected to simply keep quiet and take their medicine, have become partners, participants in managing their health. While some physicians are not overly fond of this new type of questioning, internet-informed patient, Lam says he wants to see more patient involvement in policy and education. Now taking up an honorary fellowship of the Hong Kong Lung Foundation he says, “I want to see the patient education groups, support groups having more participation in the Hong Kong Lung Foundation—it should also have their input.”

Back in the early 1970s, when Lam decided to train as a physician in order to specialise in respiratory medicine, the discipline was all about managing an infectious disease—TB—and not much else.

“At that time respiratory medicine was about anatomy, physiology and tuberculosis...We can still see in the Chinese films from then: people cough, it’s blood—and that’s it—it’s TB, the terrible disease.”

“When I was a medical student a number of new strategies for TB—trials mainly in collaboration with the MRC (Medical Research Council, UK), studies of different regimens were being conducted...Hong Kong was a meeting of east and west. Our ‘west’ provided the technology and science; our ‘east’ meant a compliant population more agreeable to studies”.

Hong Kong was also home to some remarkable chest physicians at that time, notably Sisters Mary Aquinas and Gabriel O’Mahoney who, working at the Ruttonjee Sanatorium, laid the foundation for the use of DOTS (Directly Observed Treatment Short Course) for TB long before its use became the global standard it is now.

Despite being in a world TB capital, Lam did not choose thoracic medicine because he had a passion for infectious disease. His real interest was doing something about lung cancer, which, though imposing a significant burden of disease on the Hong Kong population was, at that time, an under-recognised problem.

### Reference

1. Political and Economic Risk Consultancy (PERC) report. 2009 May 6.



Treating tuberculosis at the Ruttonjee Sanatorium (courtesy of the Hong Kong Tuberculosis, Chest and Heart Diseases Association)

“If you look back, lung cancer began to be a killer in Hong Kong in the 60s but it wasn’t recognised enough: the respiratory illnesses we learned most about were TB, pneumonia, may be asthma, COPD.”

There was one feature of particular interest, not just to Hong Kong but the rest of the medical world. “In Hong Kong we noticed one very special difference. Most of our women with lung cancer were non-smokers, even though the men were smokers.”

Lam and a multidisciplinary group including surgeons, pathologists and radiologists, were able to look at the genetic basis of lung cancer in Hong Kong women, while other colleagues charted the epidemiology. Between them they began to build a picture of non-smoking women whose environments—spending long hours in small confined spaces with smoking husbands—and genetics (having the GST-TI-null genotype) put them at greater risk of developing adenocarcinoma of the lung via the EGFR mutation pathway.

Medical advocates like Judith Mackay, used the information garnered in Hong Kong and elsewhere to campaign against smoking, focusing particularly on the dangers of passive smoking. Their achievements, getting indoor smoking banned from most public places, and fundamentally changing attitudes to smoking is something he would not have envisaged as a young medical student, said Lam.

“Thirty years ago smoking was not regarded as anti-social—it was the norm...if you stared at someone for smoking next to you, they’d just stare back! Now you can see now that smoking has become very anti-social: I like the way Hong Kong people are—very law-abiding!”.

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