EDITORIAL

# Infectious diseases from a Hong Kong perspective

This issue of the Journal includes a series of seminar articles on infectious diseases. They exemplify some of the recent problems in this field of medicine both generally, and from a Hong Kong perspective. Hong Kong has an extremely high population density, a subtropical climate, and hygienic standards which are sometimes suboptimal. These are all factors which favour the rapid dissemination of infection. Contrary to most countries with such conditions, Hong Kong also has well-developed medical services and excellent facilities for medical research and education.

For a visiting clinical microbiologist and infectious disease physician from a country (Sweden) which in many ways is the opposite to Hong Kong—low population density, a cold climate, and generally very high hygienic standards—it is apparent that Hong Kong has a multitude of opportunities to establish itself as one of the leading infectious disease research centres in the world. Examples of research areas where Hong Kong offers unique access to large numbers of patients are hepatitis A, B, and C, tuberculosis, and malignant diseases such as nasopharyngeal cancer and primary liver cancer resulting from Epstein-Barr virus infections and hepatitis, respectively.

For example, Drs Ho and Chan in their paper[1] discuss the increasing clinical problem of hepatitis A in Hong Kong. Improved general hygienic standards have resulted in a shift towards higher age groups at which hepatitis A is now contracted. While the infection is normally subclinical in young children, it causes marked symptoms in adolescents and adults. Contrary to the doubts about efficacy of vaccination expressed by Drs Ho and Chan, I think there are possibilities to achieve long-standing immunity after two doses of one of the inactivated vaccines. Vaccinations against enteric infections such as cholera and typhoid have taught us that in a population with high endemicity for a disease, protection after vaccination is due to constant challenge of the immune system.[2,3] Controlled trials of the immunogenicity and safety of a combined hepatitis A and B vaccine in neonates seem worthwhile, and there is no better place to do such trials than in Hong Kong.

Who are the actors in the field of infectious disease research in Hong Kong? Similar to the United Kingdom, the scientific basis is provided mainly by the departments of microbiology. The clinical initiatives are taken by a large variety of disciplines, often with excellent results, as exemplified by the recent report on the treatment of ulcers caused by *Helicobacter pylori*.[4] However, one misses clinical infectious diseases as an academic discipline in Hong Kong. Infectious diseases as a subspeciality to microbiology, internal medicine, and sometimes also paediatrics, exists in the United States and most of Europe. Sometimes clinical infectious disease specialists are wrongly looked upon by microbiologists and other clinicians as a threat. Instead they should be looked upon as a means to strengthen the positions—clinically and scientifically—of microbiology, internal medicine, and paediatrics.

What could clinical infectious diseases contribute to academic medicine in Hong Kong? There are some rather obvious deficiencies in the facilities for care of infections in Hong Kong. For instance, it is surprising that both of the two otherwise well-equipped university hospitals lack adequate isolation facilities. At the Prince of Wales Hospital, a case of chickenpox cannot be contained and the infection is therefore likely to spread to other patients and any staff members who are not immune. In addition to the medical hazards, this results in unnecessary disruptions to hospital routines. Another example where isolation units are needed, and increasingly will be in the future, is for patients with infections caused by bacterial strains which are multiply antibiotic resistant. The alternative to having a well-equipped and adequately staffed infectious disease ward is to close down wards if, for example, a totally resistant strain of *Enterococcus faecium* is introduced into the hospital environment.

Hong Kong, as with other countries, will perform more transplantation procedures in the future. Most of the problems these patients experience are infectious complications. Access to experienced infectious disease consultants would most likely improve the quality of post-transplantation care given. Also, Hong

Kong will not be spared from the acquired immunodeficiency syndrome (AIDS) epidemic—it is just a few years behind elsewhere. When the number of AIDS cases increases, there will be considerable need for competent infectious disease physicians.

As highlighted in some of the seminar papers in this issue, the proper use of antibiotics is essential, not only to avoid the emergence of resistance, but also to provide the best possible care to patients, and to contain costs. An infectious disease specialist combines the clinical and microbiological expertise needed to gain the optimal use of antibiotics in a modern academic hospital. Medical education, the quality of medical care, and the scientific efforts in the field of infectious disease would benefit from a strengthening of the position of clinical infectious diseases in Hong Kong. This should not be at the cost of—but to the benefit of—specialties such as clinical microbiology and internal medicine.

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## References

1. Ho YY, Chan BC. Does Hong Kong need hepatitis A vaccine? HKMJ 1995;1:137-139.
2. Holmgren J, Svennerholm AM, Jertborn M, et al. An oral B subunit: whole cell vaccine against cholera. Vaccine 1992; 10:911-4.
3. Levine MM, Kaper JB. Live oral vaccines against cholera: an update. Vaccine 1993;11:207-12.
4. Sung JJ, Sydney SC, Ling TK, et al. Antibacterial treatment of gastric ulcers associated with *Helicobacter pylori*. N Engl J Med 1995;332:139-42.