

Winning research: charting the Hong Kong experience with dengue fever

According to the popular press, medical research is all about 'breakthroughs'—sudden leaps in knowledge about disease processes or treatments.

Those working toward such breakthroughs tell a different story. They are rarely leaps but rather the result of painstaking accumulation of knowledge about a disease, where it has come from, why it has developed and what it is doing in our bodies and populations.

So it should come as no surprise that the three research papers that came in 'neck and neck' in the voting for the *Hong Kong Medical Journal's* (HKMJ's) Best Original Paper of 2008 were all papers that were thorough examinations of diseases and their evolution in the Hong Kong population.

As one international judge put it they were all "asking questions about risk factors and the like for diseases which are relatively common in Hong Kong".

The three contenders for the title, *Risk factors associated with human immunodeficiency virus (HIV) infection among attendees of public sexually transmitted infection clinics in Hong Kong: implications for HIV prevention* (Lee & Ho); *Identifying prognostic factors for survival in advanced cancer patients: a prospective study* (Lam et al); and *Review of dengue fever cases in Hong Kong during 1998 to 2005* (Chuang et al) were all praised for their quality and detail by members of the HKMJ's international editorial advisory board.

Lam et al's paper on prognostic factors in advanced cancer patients, published in the December 2007 issue was described as "a paper with important features which can be rapidly applied to other communities" and as "a well documented prospective study with impact on an important medical topic".

Lee & Ho's analysis of the major risk factors associated with HIV seen in patients attending public sexually transmitted infection clinics (published in the August 2008 issue) was described as having "extensive implications" and as "a valuable paper from the viewpoint of risk factors that are particular to the island [Hong Kong]".

In the end, Chuang et al's review of the clinical and epidemiological features of all the cases of dengue fever managed in Hong Kong from 1998 to 2005 clinched it by impressing the judges with its thoroughness and relevance to medical practice. "It gave a very nice epidemiological picture of the disease in Hong Kong which will be of great use to the public health people as well as the clinicians."

Chuang et al's findings are relevant beyond Hong Kong. Their description in this paper of a case of dengue fever transmitted via blood transfusion, was



Dr Vivian Chuang, on behalf of the authors, receives the Best Original Paper Medal from Dr Richard Kay, Editor-in-Chief of the HKMJ, at the Conferment Ceremony of the Hong Kong Academy of Medicine on 19 December 2008

a world-first and has already been discussed in the letters page of the *New England Journal of Medicine*.

After receiving the Best Original Paper Award on behalf of her team, Dr Vivien Chuang explained that the study aimed to examine the nature of the outbreak in Hong Kong.

"A case report for the first locally acquired dengue fever case has been published but a comprehensive review on dengue fever in Hong Kong is lacking," said Dr Chuang.

"Therefore, a joint Hospital Authority and Centre for Health Protection study group has been set up and tasked to carry out a comprehensive review on the clinical and epidemiological profile of dengue fever cases in Hong Kong."

Dr Chuang said the retrospective nature of the study made it difficult to get uniform data on all cases. "Some data fields were not stored in the computerised system, which were needed to be retrieved by the hand-written medical records. Most of these data fields were not recorded systematically, eg, clinical signs and symptoms, physical findings, resulting in missing data. The varying quality of information in the medical records also created difficulties on data collection."

While delighted to have received the Best Original Paper Award, Dr Chuang pointed out "this honor does not go to myself only, but to all working group members who work jointly together, otherwise, this paper will not be a success."

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