

# Geographic distribution of private dentists in Hong Kong in 1989 and 1998

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**More than 80% of the dentists in Hong Kong are in private practice and third party payment schemes are uncommon. Thus, most dentists have to work according to the rules of a free market and have to respond to the demands of the population. Using official data, it was found that the geographic distribution of private dentists was highly uneven. In 1989, the dentist to population ratio in the commercial districts was below 1:2,500 while in the new towns the ratio was larger than 1:20,000. There has been an improvement in the availability of dentists in the under-served areas during the past 10 years although there are still a considerable number of dentists practising in the areas on both sides of the Victoria Harbour.**

Before the reversion of sovereignty to China in July 1997, Hong Kong was a British colony. Most of the legal and social systems in Hong Kong follow that of the United Kingdom and dentistry is no exception. However, dental care services for the general public in Hong Kong are mainly provided by private dentists on a fee-for-service basis and third party payment schemes, such as the General Dental Service in the UK or dental insurance plans, are uncommon.<sup>1</sup> To a great extent, private dentists in Hong Kong have to work according to the rules of a free market and need to tailor their practices, including the type of service and location, to the demands of their clients.

Although the regulation of dentistry in Hong Kong started in 1914 with the passing of a Dentistry Ordinance and establishment of a Dental Board, it was not until 1980 that formal university training in dentistry was offered by the University of Hong Kong which until now is the only

## In brief

- The overall dentist to population ratio in Hong Kong was 1:4,600 in 1989 and 1:4,300 in 1998
- During the past 10 years, more dentists established their practices in new towns than in commercial districts

dental school in Hong Kong.<sup>2</sup> Before the 1980s, most private dentists in Hong Kong established their practices in the central commercial districts or in the older residential areas. Although Hong Kong is only about 1,000 km<sup>2</sup> in size, the distribution of dentists at that time was highly uneven. With an annual output of about 50 locally-trained dentists since 1985, there has been a tendency for dentists to establish or relocate their practices in the new towns and in areas where there were relatively few dentists. The objective of the present study was to show graphically the change in geographic distribution of private dentists in Hong Kong during the past 10 years.

## Materials and methods

Information used in this study came from two official sources — the govern-

ment Census and Statistics Department and the Hong Kong Dental Council (HKDC). The number of residents living in different districts of Hong Kong in 1989 and in 1998 were estimated from the results of the population-by-census conducted by the government in 1986<sup>3</sup> and 1996,<sup>4</sup> respectively.

The number of private dentists practising in different districts was calculated from the dentists' list published by the government.<sup>5-6</sup> Any dentists who want to practise dentistry in Hong Kong have to register with the HKDC and to renew their practising certificate annually. Dentists in Hong Kong are also legally required to report to the HKDC the addresses in which they practise dentistry for monetary gain. Every year the Hong Kong government publishes a complete list of registered dentists in the government gazette which contains the names, qualifications and practice addresses of all dentists. Thus, the information contained in the dentists' list is regularly updated.

In this study, the following method was used to calculate the number of full-time equivalent (FTE) dentists in each district because some dentists practised in more than one location and no information was available on how much time they spent in each of their practices. If a dentist had only one practice, the FTE for the district in which the practice was located was assigned a value of one. If a dentist had more than one practice, eg 'n' practices, located in different districts, each district was allocated an FTE of 1/n for that dentist. For example if a dentist had two clinics, one in District A and one in District B, then an FTE of 1/2 was added to the number of dentists in District A and also to District B. The dentist to population ratio in each district was calculated by dividing the number of residents in that district by the number of FTE dentists.

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**Results**

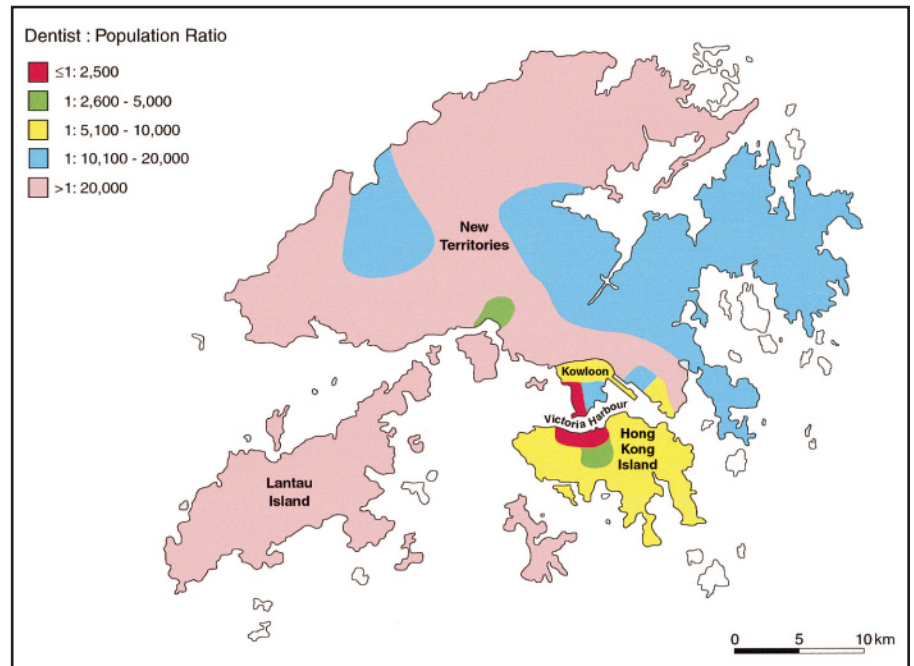
The estimated population size in Hong Kong in 1989 was 5.7 million and there were 1,236 registered dentists. Thus the overall dentist to population ratio was 1:4,600. More than 80% of the dentists were in private practice and it can be seen in figure 1 that there were relatively many dentists (a low ratio of less than 1:2,500) practising in the commercial districts on either side of Victoria Harbour, whereas in the new towns in the northern and western parts of Hong Kong the dentist to population ratio was very high, more than 1:20,000.

The estimated population in Hong Kong last year (1998) is 6.6 million and there are 1,542 registered dentists, giving a dentist to population ratio of 1:4,300. The majority of the dentists, more than 80%, are in private practice and the geographic distribution is shown in figure 2. Although the distribution of dentists in Hong Kong is still quite uneven, with many still practising in the central commercial districts, there has been an improvement during the past 10 years in the availability of dentists in the under-served areas.

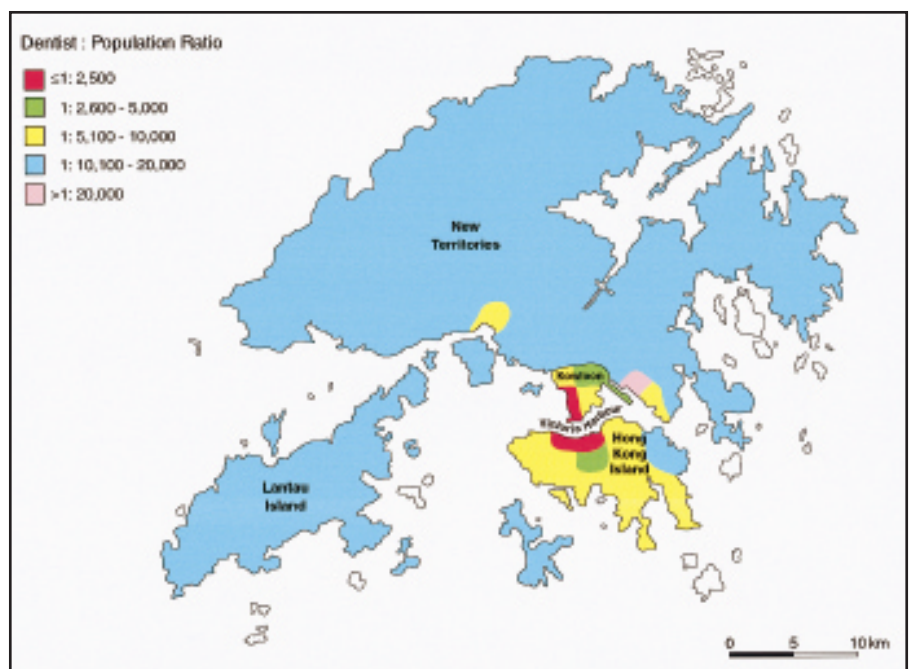
**Conclusion**

During the past 10 years, more dentists established their practices in new towns than in commercial districts, thus improving the availability of dental services in the under-served areas. However, there is still a 10-fold difference in the dentist to population ratio between the new towns and the established areas.

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- 4 Census and Statistics Department. *Tables for district board districts and constituency area: population by age and sex*. Hong Kong: Government Printer, 1997.
- 5 *Dentist list 1989*. Hong Kong: Government Printer, 1989.
- 6 *Dentist list 1998*. Hong Kong: Government Printer, 1998.



**Fig. 1 Dentist to population ratios in different districts in Hong Kong in 1989**



**Fig. 2 Dentist to population ratios in different districts in Hong Kong in 1998**