Dental Work Force in China

Eli Schwarz[1*], Edward C.M. Lo[2], and Lin Huan Cai[3]

[1]Executive Director, International Association for Dental Research, 1619 Duke Street, Alexandria, VA 22314-3406; [2]Associate Professor, Faculty of Dentistry, University of Hong Kong, Hong Kong SAR; [3]Associate Professor and Head, Department of Preventive Dentistry, Sun Yat-Sen University of Medical Sciences, Guangzhou, People's Republic of China; *corresponding author, es@iadr.com

J Dent Res 80(11):1962, 2001

TO THE EDITOR:

Baker and Zhou (*J Dent Res* 80:1872, 2001) provide some interesting comments about our study on the oral health situation in Southern China (Schwarz *et al.*, 2001). During the planning of that study, we did contemplate the inclusion of a dental health services research component to gain further insight into the supply and demand side of the dental care scene. However, as often happens in field research, we had to prioritize our resources and chose to concentrate on the individually based measurable variables. Thus, in principle, the data basis for some of the issues discussed by Baker and Zhou is relatively weaker than for the oral health data.

We are uncertain of the role of Table 1 juxtaposing the 1971-74 US data and the Chinese data from the 1990's and especially the use of the term "extensive needs". With regard to the Chinese children, there is no doubt that the unmet need in the deciduous dentition is considerable, and although the overall DMF at age 12 is low, the decay portions in both age groups constitute close to 100% of the respective def/DMF index. With regard to the Chinese adults, it was found that none of the middle-aged and only a few percent of the elderly subjects did not have any normative treatment need. More than half of the subjects in both age groups were assessed to be in need of simple dental treatments only, which may include scaling, filling, extraction, and prosthesis. About one-fifth of the middle-aged and more than one-third of the elderly subjects had a normative need for complex dental care. About two-thirds of the middle-aged and half of the elderly subjects had a perceived need for dental treatment, and the treatment items requested were few. Thus, the prevalence of normative dental treatment need among the adult Southern Chinese was found to be high, but the treatments were mainly simple ones. However, the prevalence of perceived treatment need in this population was low, and the correlation between these two types of treatment needs was low as well (Lo *et al.*, unpublished).

We have not seen any signs that there is a push to increase the number of university-trained dentists in the country at large. In fact, it would seem that the training of middle-level dentists is undergoing change. Many of these schools have stopped training dental personnel, while some have turned to training post-secondary/non-degree personnel, which is higher than middle-level dentists but lower than tertiary education. This may slow the increase of dentists in Guangdong. At an annual growth rate of 3%, it would take more than 20 years to double the number of dentists from 3 to 6/100,000, which would still be far below the standard in Western countries. It is difficult to imagine a crisis in the near future due to the number of dentists trained. Rather, the problem lies with the oral health care and financing systems. At present, most of the dental care service is provided in public hospitals, and the university dental graduates cannot set up their own private clinics freely. The reliance on the public hospitals to invest in new dental clinics to absorb the new graduates is a major problem.

However, is it really reasonable to make productivity comparisons between the largely under-described dental care system in China and the thoroughly described and analyzed system of the USA, where the predominant mode of operation is a well-defined solo private practice? Anyway, as previous health services research has illustrated, it is not an easy task to make direct inferences from the structure or function of the dental care system to oral health outcomes (Chen *et al.*, 1997). As alluded to above, it may well be that the present normative need in the adult population is simpler than that in a comparable population in the USA, but it is unlikely that the continuing economic development would not affect the perceived need for dental care in the population, even in areas such as implants and cosmetic dentistry, which are already provided to a very small proportion of the population. Due to the extreme complexities of the Chinese society, both in regard to local-regional-central government issues and in regard to the uneven urban-rural development, we are not convinced that the traditional textbook health services planning scenarios can be applied without a lot of reservations; thus, we would like to see planning models applied that are based on the actual societal parameters in China.

In conclusion, we feel very uncertain about making firm predictions or recommendations in this area on the basis of the data available at present.

REFERENCES

Chen M, Andersen RM, Barmes DE, Leclercq M-H, Lyttle CS (1997). Comparing oral health care systems. Geneva: World Health Organization.

Schwarz E, Zhang HG, Wang ZJ, Lin HC, Lo ECM, Corbet EF, *et al.* (2001). An oral health survey in southern China, 1997. *J Dent Res* 80(Spec Sect):1451-1495.