

"Think Globally, Act Locally"

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he title of this article is taken from the 1998 World Development Report of the United Nations Development Program, for, arguably, many local dental issues today cannot be fully understood unless seen in the context of the global economy.

The current use of the term *economic globalization* simply indicates the extent to which all national economies have become closely interdependent. Certain contemporary economic events have pushed economic globalization forward: The Third World debt crisis and the development by the International Monetary Fund and the World Bank of structural adjustment programs to deal with the crisis have brought many national economies closer together. The adoption by industrialized countries of neoliberal economic policies has resulted in the abolition of exchange controls. Also, developments in communications technology mean that capital can now be moved from state to state much faster and that changes in one economy can now reverberate almost instantly in others.

Concomitant with these economic changes has been the political process that ended the Cold War. The Soviet Union no longer exists, and Western national and transnational corporate interests now condition and shape how the globalized economy operates.

Economic Globalization and Oral Health

One notable result of the globalized economy has been the widening of the gap between the rich and the poor both between countries and within countries. To point to economic globalization or any one of the factors already identified as the sole cause of this growing gap would be erroneous. Nonetheless, current economic policies do seem to have contributed to an increase in the number of people now living in absolute and relative poverty. There is substantial evidence that this increased poverty is deleteriously affecting the public health. Oral health is not immune to such influences.

The major determinants of a number of oral conditions appear to have a socioeconomic basis in which economic globalization could be playing a part. These conditions include oral cancer, cancrum oris (noma), dental caries and periodontal diseases.

Oral Cancer

The prevalence of oral cancer seems to be increasing in many parts of the world. This increase is particularly worrying because of the large percentage of the world's population in developing countries (80%) and the relative lack of detection and treatment services and facilities in those countries. Any reduction in already inadequate services can only worsen the situation.

Restrictive tobacco legislation in many industrialized countries, the reduction in exchange controls and the ease of capital transfers make developing countries an increasingly attractive market for tobacco manufacturers.

Cancrum Oris

Cancrum oris or noma has for many years been known to be highly prevalent in poor communities. In communities where ANUG (acute necrotizing ulcerative gingivitis) and noma are being studied, there is a suggestion that increased numbers of cases are now being reported.² At present, the evidence for the increase remains circumstantial, and it is again difficult to isolate the effects of economic globalization from other confounding factors, such as war and drought.

Dental caries

A recent study has reported a relatively weak but significant association between the Human Development Index (HDI) of a country and the reported dental caries experience of 12-year-olds. In addition, relationships have been identified between a number of indicators used in the compilation of the HDI and dental caries: growth in per-capita gross national product, mean years of schooling, infant mortality rate and under-five mortality.³

Periodontal Diseases

Similar relationships have recently been reported between destructive periodontitis (mean number of sextants scoring 4 using the Community Periodontal Index of Treatment Needs, for example) the HDI and the mean years of schooling, infant mortality rate and under-five mortality rate.⁴

There is, therefore, some evidence linking higher levels of dental caries and destructive periodontitis with higher levels of poverty and lower levels of socioeconomic development, as represented by these parameters, which would be susceptible to global economic changes. But it is not a simple linear relationship, at least for dental caries. The World Health Organization data, for example, show clearly that the biggest problem in terms of dental caries prevalence occurs in the medium-income countries that are experiencing economic transition.⁵

The Impact on Practice

It is suggested that the impact of economic globalization is likely to be twofold: the pattern of oral diseases will change, and therefore the practice of dentistry will change. The available evidence suggests an increase in the amount of oral diseases of different types in different countries, depending upon the country's level of socioeconomic development (not just the size of its economy). Oral health in countries with economies in transition, showing economic growth as well as development, will be most affected. For dentists serving population groups whose socioeconomic status is improved by economic globalization, the practice of elective dental care as sophisticated as anywhere else in the world will be possible and probably demanded. For dentists serving groups who either become impoverished by the process of economic globalization or whose income simply remains at a subsistence level, unless they adapt their dentistry and develop new ways of meeting the growing and possibly changing oral health needs, there is little to look forward to. *

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The views expressed are those of the author and do not necessarily reflect the opinion or official policies of the Canadian Dental Association.

References

- 1. Johnson NW. A global view of the epidemiology of oral cancer. In: Johnson NW, editor. *Risk markers for oral diseases.* Cambridge: Cambridge University Press; 1991. Vol. 2: p. 3-27.
- 2. Ndiaye FC, Bourgeois D, Leclercq MH, Berthe O. Noma: public health problem in Senegal and epidemiological surveillance. *Oral Dis* 1999; 5:163-6.
- 3. Hobdell MH, Lalloo R, Myburgh NG. The Human Development Index and per capita Gross National Product as predictors of dental caries prevalence in industrialized and industrializing countries. *Ann N Y Acad Sci* 1999; 896:323-31.
- 4. Hobdell MH, Narendran S, Jen D. The Human Development Index and *per capita* Gross National Product as predictors of periodontal disease prevalence in industrialized and industrializing countries. *J Dent Res* 2000; 79:581.
- 5. Lalloo R, Myburgh NG, Hobdell MH. Dental caries, socio-economic development and national oral health policies. *Int Dent J* 1999; 49:196-202.

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