The Geography of Prosthodontics

The changes in prosthodontics during the last few decades have been enormous. Numerous new materials and methods have appeared—and some have also rapidly disappeared. The scientifically based development of dental implants is frequently stated to be the most dramatic and important event in the history of prosthodontics. And certainly, implant-supported prostheses can give great improvement in oral function to edentulous patients who have difficulties adapting to removable dentures. There are many patients who have testified that functional improvement has been followed by a substantial psychologic recovery from the mental depression caused by denture problems. This obvious success for dental implants has been reflected in prosthodontics journals, in numerous books, and in new journals dedicated to implant dentistry. However, when applauding this admirable evolution, it should be remembered that the majority of edentulous people in the world will have to be treated with a simpler, less expensive method, which necessitates continuing clinical and scientific interest in improving conventional prosthodontic management.

In a recent conference on optimized therapy for the edentulous predicament (American Academy of Prosthodontics, Halifax, Canada, May 1997) it was indicated that to date about 2 million people worldwide have received treatment with osseointegrated dental implants. This group, impressive as it may seem, constitutes only about 1/1,000 of all edentulous and partially edentulous people in the world. These figures are a rough estimation, but are based on recent reports from the biggest implant manufacturers and available epidemiologic and demographic data. A variety of responses can result from such figures, from manifestations of joy among implant manufacturers at the growth potential in the implant market, to serious considerations among dental educators about how to construct an adequate curriculum in prosthodontics that balances new concepts with traditional knowledge.

An illustration of the situation in a rapidly developing country is found in a recent article on dental care in China.[1] The Chinese population comprises 1.2 billion people, or about 20% of all the people in the world, but according to a survey in Beijing in 1992, only a few hundred Chinese patients have been treated with oral implants. There is an obvious interest in this field of dentistry in China. The article maintains that "imported implants are too expensive for Chinese patients, and therefore good qualified domestic implants and cheaper imported implants have a great market potential." It is probable that not only implant manufacturers but also dental educators and researchers could benefit from a collaboration with Chinese colleagues in the expected process of change.

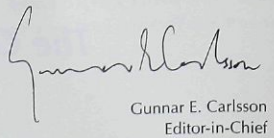
Even though the reduction of edentulism is proceeding rapidly in many countries, there will remain, for a long period of time, a large proportion of edentulous people. In fact, recent estimation in the USA has suggested that the number of edentulous people will be about the same in 2020 as it is now. This is a result of the accelerating growth of the elderly population, which will counteract the estimated reduction of the rate of edentulism in the elderly from about 35% now to 15% in 2020.[2] Therefore, dentists must retain the skills and knowledge to treat edentulous patients, and many of the individuals who will seek dental care in the next decades are likely to be old and possibly physically frail.

Dental health is rapidly changing in many parts of the world. But there are still great differences in dental health between countries, and also within countries: between urban and rural areas and with respect to age and socioeconomic factors.[2,3] The provision of prosthodontic treatment to the population also differs much throughout the world. This is mainly a result of variation in cultural and socioeconomic factors, including availability and educational level of the dentists. The dentist-to-population ratio varies extremely around the globe, from about one dentist per 1,000 persons in some Scandinavian countries to less than one dentist per 100,000 persons in several nonindustrialized countries. Most prosthodontic care is supplied by general practitioners and by dentists specially trained in prosthodontics. According to the FDI's Basic Facts (1990), less than one third of the world's countries had recognized prosthodontics specialists at the end of the 1980s. Although formal recognition of a specialist in prosthodontics usually requires additional postgraduate training of approximately 3 years, there are great differences in the specialist programs in various centers.[3]

The differences indicated above, together with the perpetual changes in the conception of treatment need, must necessarily strongly influence the prosthodontic treatment provided to patients around the world. There is very little

systematic documentation of the consequences of these variable conditions on dental care, and particularly on prosthodontic care. To remedy this lack of knowledge, heroic epidemiologic investigation might be necessary. *The International Journal of Prosthodontics* would welcome articles that reflect the variability in prosthodontic practice around the world.

In a recent thought-provoking symposium in Germany (Quintessence, Düsseldorf, June 1997) on treatment concepts, six professors and chairmen of prosthodontic departments in three German-speaking countries participated. Each speaker first gave a lecture on his (yes, there was no female prosthodontist among them) treatment philosophy, and then each presented an outline of diagnosis and treatment planning for a difficult patient. They had received background information including radiographs for this patient prior to the symposium but were asked not to discuss treatment planning with each other before the presentation. It was interesting to see the variation in therapeutic solutions suggested. These colleagues were from three neighboring countries and they spoke the same language (although with varying "dialects"). It is probable that still greater differences in concepts would appear if prosthodontists from more distant places and with greater variation in culture and language had participated. To further explore the unknown "Geography of Prosthodontics," the IJP would welcome papers describing diagnostic and treatment concepts from various parts of the world with due consideration to prevailing socioeconomic and therapeutic traditions.



Gunnar E. Carlsson
Editor-in-Chief

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2. Marcus PA, Joshi A, Jones JA, Morgano SM. Complete edentulism and denture use for elders in New England. J Prosthet Dent 1996;76:260–266.
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IADR Arthur R. Frechette Prosthodontic Research Award Competition

The Arthur R. Frechette Research Award in Prosthodontics recognizes original research by new investigators and is sponsored by the Prosthodontic Research Group of the IADR and supported by Whip Mix Corporation. The award carries a cash prize of $1,000.

The winner for 1997 was Dr David G. Gratton, School of Dentistry, University of Iowa, for his research "Dynamic Fatigue at the Dental Implant Fixture/Abutment Interface."

Applications are requested for the 1998 Frechette Award in Prosthodontics. Researchers carrying out original research are eligible for the award if they have been the primary author of no more than three articles published in refereed dental journals.

Research submitted for either the AADR meeting in Minneapolis or the IADR meeting in Nice, France is eligible for consideration for the Frechette Award, provided it has not been published elsewhere or will be under consideration for another award. Abstracts must be submitted to the Prosthodontic group of the AADR/IADR by September 19, 1997 for the AADR and January 9, 1998 for the IADR through the usual AADR/IADR procedures and must be clearly labeled as a Frechette New Investigator Award candidate. Concurrently, four copies of the abstract together with a letter stating that the paper represents original research conducted by the applicant, that the applicant has published no more than three first-author dental articles, and that the research is not under consideration elsewhere must be submitted to:

Frechette Award presentation, 1997. From left to right: Dr Stephen Rosenstiel, Director, IADR Prosthodontics Group; Dr W. Michael Mansfield, Technical Representative, Whip Mix Corporation; Dr David G. Gratton, Winner, 1997 Frechette Award; Dr Clark M. Stanford, Research Mentor, University of Iowa; Dr Brian J. Knopf, Vice President, Whip Mix Corporation.

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