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## the editor's corner

The dental literature these days abounds with messages that we are surrounded and we might as well accept the fact that our profession is going to be changed by a whole variety of antagonists. That may well become true regardless of the attitudes of the profession, but it is disturbing to note that there is no substantial evidence to support contentions that the public will benefit from any of the "innovations" in the delivery of dental care that are being encouraged.

In May 1978, the Department of Health Education and Welfare published a book entitled "Factors which affect the utilization of dental services" (DHEW Publication No. (HRA) 78-64) with the subtitle "A Review and Analysis of the Literature." The comments and conclusions of this report are a sweeping indictment of the entire body of literature on this subject.

Some of the comments are:

Most of the literature is also noteworthy for its limited conformity with the basic principles and methodologies of scientific research.

Comparison of seemingly similar studies is often invalid due to lack of standardized measurement.

... the widespread use of unvalidated personal interviews, the absence of controls to isolate the specific effects of the explanatory factors, and the retrospective nature of the data were common weaknesses.

The conclusion of the report included the following excerpts:

First, . . . Research efforts have been dissipated in such a way that the cumulative evidence on any one specific topic is still insufficient to warrant confident conclusions, fully supported by



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the weight of scientific evidence.

Second, the general quality of existing research is not high. Most studies have been based on methodologies which deviate from the accepted ideals of scientific inquiry. *A priori* reasoning and resultant hypotheses are noticeably scarce in this literature. Measurement errors and unvalidated data are common. Statistical tests were seldom used to their full potential. Further, the significance of reported results would be diminished by methodological problems even if the studies had been coordinated and focused on a few topics. The usefulness of future research in this area will depend to a large degree on its rigorous adherence to the principles of research methods of the social and behavioral sciences.

Third, . . . Utilization statistics do not provide any details about the specific services which will be purchased or the combinations of dental manpower needed to produce them. Finally, new research should be oriented towards the future. Even though the existing literature gives only a limited understanding of the utilization of dental services from 1960 to the mid-seventies, the dental sector is currently experiencing some changes which suggest that the near future may be very different from the recent past. The most significant explanatory factors of the last decade may already be replaced by new factors such as prepayment (dental insurance), increases in the numbers and types of dental providers, advertising by dentists, changes in state licensure laws, and significant demographic shifts and related changes in our society. To be useful, research should now address the potential impact of these new explanatory factors. Further analysis of old data, even if undertaken to correct some of the methodological problems found in the existing literature, would not likely yield the types of information that will be needed to plan for the impact of the new forces which are affecting dental care.

This report stated, as plainly as one can, that the entire literature on the utilization of dental services from 1960 to the mid-seventies is almost completely worthless. Yet, it is this body of literature which forms a basis for teaching, encouraging, and implementing changes in the system of delivery of dental services. While it is not reasonable to oppose all changes in favor of a status quo, at the same time it is not reasonable to foster changes in the entire system of the delivery of dental care and then study

them for their validity; and with a research community that has shown no aptitude for the task.

We are all at once on the short end of decisions aimed at denying the scientific method and at eliminating the distinction between a profession and a business, between a specialist and a generalist, and between a profession and a craft. Even if what we consider to be right may ultimately prevail, the interim is going to be a stressful time in which orthodontists must stay on top of what is happening in their own practices and in their own areas, and be prepared to compete and/or adjust if local conditions threaten their practice success. The individual orthodontist must deal with what is actually happening — with todays that may be chaotic and tomorrows that are unpredictable.

You may derive small comfort from this, but the individual orthodontist still has the opportunity to achieve success if he is fortunate enough to find a favorable environment or, even in a hostile environment, if he pays extraordinary attention to treatment management, office management, and people management. □