

## Preface

Just over 10 years ago, the American Dental Association produced its original policy statement on evidence-based dentistry (February, 1999). Later that year, a colleague at UCLA School of Dentistry, Professor Lindemann, told me “Francesco, you really should look into this evidence-based dentistry.” His suggestion changed my research direction, and, I suppose, that moment was the true genesis of this book.

Of course, the movement toward evidence-based practice in dentistry had been ushered in a few years earlier by medicine (evidence-based medicine). The notion had spread fast both nationally and internationally and across fields, and, within a few years, one could find common references to evidence-based nursing, evidence-based specialties across the branches of health care, and even evidence-based law, economics, and the like. As I began to explore the field, I was fortunate to develop colleagues interested in evidence-based research (EBR) and decision-making in the health sciences in general, and in dentistry in particular, across the globe.

Students and post-docs in my research group became increasingly actively engaged in this new and cutting edge field, and we soon published a carefully crafted definition of the meta-construct of evidence-based dentistry [1], and of salient issues in this emerging field [2]. In 2003, the *Brazilian Journal of Oral Sciences* invited me to be the guest editor of a special issue dedicated to evidence-based dentistry – to my knowledge, the first ever peer-reviewed journal dedicating a special issue to evidence-based dentistry. By 2006, when the *California Dental Association Journal* invited me to do the same, evidence-based dentistry was fast becoming established in the national and international dental literature. Working on both these issues was transforming, that is, it gave me a broad awareness of the depth of the field, its potentials, impediments, hurdles, and benefits.

It was during that time that my students, coresearchers, and I realized the methodological void that still remained to be addressed in the field. We developed the Wong scale [3] to assess and to quantify the quality of the research methodology, design, and data analysis based on commonly accepted criteria, and soon revised it and improved its validity and reliability [4]. We refined our skills in research synthesis, and in our ability to generate the best available evidence, be it in dentistry, medicine, alternative and complementary medicine, or any domain of the health sciences [5]. We realized that, whereas our research group was well versed in obtaining a consensus of the best available evidence, we had done little in terms of utilizing the evidence-based paradigm to optimize clinical outcomes. We were aware of the need to fill the gap between clinical practice based on the evidence, patient-oriented evidence that matters (POEM), and research synthesis (or, specifically for the field of dentistry: research evaluation and appraisal in dentistry [READ]) [6], and endeavored to do more in that domain. Hence this book.

Upon this fertile ground, an idea burgeoned, which we shared with Stephanie Benko at Springer, and the proposal for this comprehensive book addressing cutting edge issues about utilizing evidence-based concepts in clinical practice in order to optimize clinical outcomes was in the making. Soon, Irmela Bohn (Springer) stepped in the project, and we were most fortunate because, without Irmela's expertise, patience, and guidance, the project would have remained just that: an idea – a good idea perhaps, but just an idea. I will never be able to thank Irmela enough for her dedication, encouragement, and superlative hard work along the way.

It was mainly because of her, and through her consistent support that the project really took a life of its own. And soon I was discussing it with selected colleagues in various countries – from Brazil to Nigeria, from Romania to the US - inviting them to be on the editorial team. Together, we carefully chose the “rose” of experts in the field to invite to contribute chapters. Therefore, of course, I must thank profusely my friends and colleagues – Drs. Brant, Neagos, and Oluwadara – who worked long and arduous hours on this project as coeditors. Without them, the final product would never have achieved the level of perfection and excellence it has.

My profound thanks, which I know are shared as well by the coeditors, go to the authors of the chapters in this work. They wrote assiduously, edited and perfected their chapters patiently responding to each and every one of Irmela's and my and the coeditors' requests for timeliness, precision, format, and all the possible details one could imagine. It is their expertise and their dedication to this project that makes this book the superb *ouvrage* and the timely and critical anthology of evidence-based decision (EBD)-making in health care the high quality product that it is.

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## References

1. Chiappelli F, Prolo P (2001) The meta-construct of evidence based dentistry: Part I. *J Evid Based Dental Pract* 1:159–165
2. Chiappelli F, Prolo P, Newman M, Cruz M, Sunga E, Concepcion E, Edgerton M (2003) Evidence-based dentistry: benefit or hindrance. *J Dental Res* 82:6–7
3. Wong J, Prolo P, Chiappelli F (2003) Extending evidence-based dentistry beyond clinical trials: implications for materials research in endodontics. *Braz J Oral Sci* 2:227–231
4. Chiappelli F, Prolo P, Rosenblum M, Edgeron M, Cajulis OS (2006) Evidence-based research in complementary and alternative medicine II: the process of evidence-based research. *Evid Based Complement Altern Med* 3:3–12
5. Chiappelli F (2008) The science of research synthesis: a manual of evidence-based research for the health sciences – implications and applications in dentistry. NY, NovaScience, pp 1–327
6. Chiappelli F, Cajulis OS (2008) Transitioning toward evidence-based research in the health sciences for the XXI century. *Evid Based Complement Altern Med* 5:123–128