

## What is the Most Important Factor in Patient Treatment?

Dr Franck Renouard is an oral surgeon from Paris. To describe him as a “Renaissance Man” would not be a large stretch. He is a clinician of high regard, a past president of the European Association for Osseointegration, an educator, a renowned speaker, and a pilot. Interestingly enough, he manages to link his career in dentistry and his sideline in aviation into philosophical discussions that lead to the betterment of implant dentistry.

It was his observation that many adverse outcomes in aviation occur for reasons that are not mechanical in nature. In fact, the current thought is that aviation disasters are more often the result of pilot errors, events that he describes as “human factors,” rather than problems with the aircraft itself.

I had the privilege of visiting with Dr Renouard at a meeting in Australia a little more than 18 months ago. His presentations at this meeting went far beyond the technical discussions that we usually present. He described many issues that complicate treatment. His keen analytical mind has helped him explain and address complications, methods of avoidance, and solutions.

I have discussed with Franck Renouard different ways to publish his and his colleagues’—René Amalberti and Erell Renouard—thought-provoking ideas in JOMI. Dr René Amalberti is one of the pioneers in Human Factors research. After a residency in Psychiatry, he integrated the French Airforce in 1976, got a permanent research position in 1982, and a PhD in cognitive psychology in 1992, becoming Professor of Medicine. During his career, he worked as head of Human Factors and Flight Safety of the European

Joint Aviation Administration and then Head of the national research program Quality Safety in Ground Transportation. He has authored more than 100 papers, chapters, and books, most on quality, safety, and resilience in complex systems. Erell Renouard is a member of Paris Sciences Po’s staff, a leading university in the humanities and social sciences, and she managed for several years a blog about medical errors, their consequences, and their prevention.

The difficulty we had was that their studies and solutions do not fit the normal outline for a clinical research project. This is not to say that their topic has not been researched; indeed, it has undergone extensive investigation in many medical fields. Relative to dentistry, however, and particularly as it relates to implant dentistry, this topic has received little attention.

Now is the time to correct this oversight. Below is the abstract from an article by Dr Renouard and colleagues that discusses the question: Are “human factors” the primary cause of complications in the field of implant dentistry? The full article can be found on the JOMI website ([www.quintpub.com/journals/omi](http://www.quintpub.com/journals/omi)).

I’m sure that you will find their thought-provoking discussion stimulating, and this information will likewise allow you to improve your practices while considering these “human factors.”

Steven E. Eckert, DDS, MS  
Editor-in-Chief

### Are “Human Factors” the Primary Cause of Complications in the Field of Implant Dentistry?

Franck Renouard, DDS/René Amalberti, MD, PhD/Erell Renouard

*Complications in medicine and dentistry are usually analyzed from a purely technical point of view. Rarely is the role of human behavior or judgment considered as a reason for adverse outcomes. When the role of human factors is considered, these are usually described in general terms rather than specifically identifying the factors responsible for an adverse event. The impact of cognitive and behavioral factors in the explanation of adverse events has been studied in other high-stakes areas such as aviation and nuclear power. Specific protocols have been developed to reduce rates of human error, and, where human error is unavoidable, to lessen its impact. This approach has dramatically reduced the incidence of accidents in these fields. This article aims to review how a similar approach may prove valuable in the reduction of complications in implant dentistry. INT J ORAL MAXILLOFAC IMPLANTS 2017;32:e55–e61. doi: 10.11607/jomi.2017.2.ea*