

### TRANSFORMING EVIDENCE INTO DENTAL RESEARCH AND PRACTICE- NEED OF THE HOUR



Undoubtedly, evidence based dentistry has created a new age of dentistry in the western part of the world, predominantly the developed countries but the change needs to be directed towards India as the patients are questioning for more accountability in health care protocols and practices. According to health care estimates, 30-45 % of us would not receive treatment for which evidence is there, while 20-25 % would indeed receive healthcare for which evidence of harm is proven. Therefore, the prime focus ought to be on translating evidence into practice. Evidence based research is not a quest regarding articles and information from different sources but as its definition says is a scientific way of integrating research into a healthy practice keeping patient needs and factors in mind, the backbone of which would be knowledge base of the dentist in its application for clinical practice. Several of the old school reformists would say that it could make dentistry a branch where thought processes of individuals would get obsolete, that is, removing the art out of dentistry and making it mechanical. But the new age of evidence based research is not biased towards evidence alone and calls for an approach where external evidence needs to be tempered with internal experience. Dentists must take responsibilities in the implementation and being themselves the mainstay of evidence based practices. For example, in a field like pathology the

pathologist is the main protagonist of evidence based studies. The tissue which is removed from the living person is processed and placed on a slide for real time diagnosis may be subjected to interpretative judgment besides various other challenges. Thus, if pathology needs to sustain as a medical specialty, its emphasis on the word 'experience' needs to be modulated along with scientific evidence.

Laboratory standardization is another issue of immediate concern which should to be addressed since investigating tools are not put into optimal use as adjuncts for clinical diagnosis and this makes the specialty more vulnerable to be excluded from the list of best practices. Most of the literature in pathology, for example are based on experience since case series are nothing but assembled experience of authors and editorials, discussion, reviews are again authoritative expressions in areas of interest of these authors themselves. Evidence based practice depends on a constant source of innovation in scientific accumulation of information and thus requires the least bias in studies such as Randomized Controlled Trials or Systematic Reviews. There has been a steady growth of systematic reviews in dental field which is very heartening and it is thus a paradigm shift of researching the research which is required today.

Dentist should be aware of simple tools which can help him evaluate a certain clinical situation and conduct treatment based on

thorough protocol of literature review to bring in the best in his practice. Concepts of antibiotics in toothache, pit & fissure sealants have all undergone a drastic change through evidence based information in portals like the Cochrane reviews and Cancerlit.

Thus, new age dentistry requires dentist to be focused while at the same time receptive to change, which is a constant in research that could usher the era of dental science beyond 21<sup>st</sup> century. Research needs to be probably directed where most care is being delivered if it needs to be understood by the practicing dentist. Time has also come to question old didactic methodologies and teaching from text books which need to make way for evidence based literature as was done by David Sackett (who coined the term evidence based medicine). He had evolved a concept by starting at school at Oxford where patients were treated by trainees right from the first year of enrollment.

We need to bridge the gap between the dentist and the researcher for a successful implementation into clinical dental practice

the methodologies which were the by-product of this research. In the certain countries, the concept of Dental practice based research networks (DPBRN) has been useful to bridge this gap. These DPBRNs have brought a new thrust to evidence based practices as it promotes the concept of 'what we see/ observe is what we do in our practice' which further gets implemented as the new laws and rules of treating patients. Finally, we are highly fortunate to be in this era of information boom or internet explosion and we should make use of this opportunity to bring evidence into practice for a more efficient dental practice based on the best available scientific evidence.

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