Editorial

Evidence based oral healthcare

Effective delivery of oral healthcare stands firm on two very important pillars – clinical expertise of the care provider and more importantly patients' needs and preferences, both of which inform decision making. Complexity increases with the fact that both these aspects are subject to variation, and hence, comes into play the most critical element of clinical decision making, that is, the best scientific evidence available. Together, this helps to inform or develop clinical guidelines and recommendations to offer healthcare to patients, based on sound principles of management. So from the level of 'Evidence based Medicine' it moves to 'Evidence based practice.'

'Evidence based practice' or 'Evidence based medicine' are the recent 'buzzwords' in healthcare delivery, and have been increasingly adopted by dentistry as well. 'Evidence based dentistry' (EBD) was first introduced by Gordon Guyatt at McMaster University in Ontario, Canada in the 1990s. It was a small segment of the larger perspective of evidence-based medicine. American Dental Association has defined evidence-based dentistry as: "an approach to oral health care that requires judicious integration of systematic assessments of clinically relevant scientific evidence, relating to the patient's oral and medical condition and history, with the dentist's clinical expertise and the patient's treatment needs and preferences." The learning curve of this process, firstly requires an understanding and formulating need of information (the relevant research question); followed by extensive, systematic literature search for the level of evidence of available, appraisal of the level of evidence for its validity, application to practice, and then self-evaluation of the process and performance. To facilitate the young graduates with this learning process, the American Dental Education Association (ADEA) has incorporated the definition of evidence-based dentistry into the core competencies of its dental education programs. These competencies have focused on development of skills reflective of evidence based dentistry.

Evidence Based Medicine is integrating individual clinical expertise and best external evidence. Gold standard of research is randomized

prospective double blind trial with adequate enrolment and inclusion criteria. Current POEM is Patient oriented Evidence that matters. Meta-analysis is evaluation of numerous randomized control trials which have filters of inclusion and statistical analysis, presented as Confidence interval. Cochrane collaboration is collection of meta-analysis, the best evidence (Level 1).

Need of hour is inclusion of EBD across dental education curricula globally, continuing education programs to strengthen the learning process, development of resources that guide this learning process, availability of resources to appraise and integrate the level of evidence to practice. The current issue of Journal of Oral biology and Craniofacial research is attempting to facilitate availability of evidence for integration into practice. It has been planned to incorporate systematic reviews and meta-analysis (considered as the highest level of scientific evidence) on some of the most relevant topics pertinent to oral healthcare delivery that can actually make a difference in decision making or reinforce clinical judgements that we already follow. A word of caution for the readers is that 'no evidence' available should not be interpreted as 'no effect'. Probably that requires much higher quality research to define or categorise the level of evidence. Also, the clinician needs to prioritize the purpose of looking for the evidence, and the interpretation should follow. Ultimately, the clinical judgement is in the hands of the clinician.

To summarize, Evidence based Dentistry is needed for quality healthcare, with the right research question being asked and the right maths of outcomes being explored.

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