Evidence based Dentistry: From Research to Clinical Practice

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Editorial

A dental professional is always concerned towards the best care for the patients. In today's world, the responsibility of evaluating the available evidence before recommending the best management for an oral health problem rests with the treating dentists. With a plethora of literature on the management strategy for a dental disease available from textbooks, journal publications, guidelines from professional associations and experts' opinion, it is a maze for the dentists to go through before hitting on the right evidence.

Evidence based approach to clinical decision-making is a conscientious, explicit and judicious use of the best available evidence to make an accurate assessment of the patient's needs in order to recommend the best possible management [1]. This approach is guided and need to be in line with the patient's preference and values. Archie Cochrane is one of the early pioneers who questioned our understanding and importance of medical opinions versus evidence [2]. Evidence are accurate and reliable than medical opinions. It is imperative for all practicing dentists to go for evidence based dental care than relying on their experience and expert opinion.

Systematic search of literature and other resources is an important strategy for identifying the best evidence which is valid, specific and reproducible. Systematic Reviews (SR) are an important source that tries to answer a relevant and important research question from the existing literature. They are systematic and non-biased and have a search strategy prior to the conduct of the SR. Dentists can rely on the evidence and conclusions from a SR.

However there are some important limitations of SR. The conclusions derived from SR and Meta-Analysis (MA) (if performed) would vary in the level of evidence. The Quality of Evidence (QoE) relates to its strength, certainty and confidence which are very important in adopting this evidence into clinical practice. It is left to the authors of SR to evaluate the strength of the evidence and this can introduce a subjective bias based on the belief of the authors. To overcome these serious limitations various tools and guidelines have been developed to objectify the grading of evidence from low to high.

The GRADE approach is one of the popular methods used in a SR to evaluate the level of evidence [3]. The QoE is affected by risk of bias, imprecision, indirectness, inconsistency and publication bias. The GRADE approach rates the QoE as very low to very high based on the above criteria in an objective and reproducible manner.

The dentists have an important responsibility of providing the best possible care for their patients. They should be able to appraise the available evidence and recommend the most appropriate care for their patients.

References

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