

EVIDENCE BASED DENTISTRY

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BACKGROUND:

Dentistry is a rapidly changing profession and it is challenging for the clinically practicing dental professionals to keep up with the complex needs and advances, along with managing patients. In a country like Nepal, where access to information is limited and often second hand, most of the dental surgeons depend on scientific sessions, old journals or the internet to quench their thirst for knowledge. Most research papers published in dentistry have very little or no scientific basis to support improvement of the health care of patients.

As we leave the dental college and start practicing dentistry, our so called experience starts increasing along with skills, but there is evidence in Medicine that expertise and effectiveness in some areas begin to deteriorate the moment physicians leave medical school. This phenomenon has been called "the slippery slope of clinical competence."¹

Some of our dental surgeons not only in Nepal but globally continue to use the same treatments and techniques learnt in dental school, which represented the best practice at that time. When some new findings or techniques are better than the current practice of the surgeon in his/her clinical management strategy, finding the time to acquire the knowledge to make these decisions often seems next to impossible.

When we read an article from a journal of different associations or independent bodies, we believe every bit of it, without putting in any thoughts on maybe the article is biased or is tinkered with. Likewise, when we have eminent speakers coming from different parts of the world, most of us start believing every word of his/her without any analysis and at times, start practicing onto our patients. It becomes more of an "Eminence based dentistry" rather than evidence based one. Our desire of keeping up to date is often tinged with doubt about the claims of superiority of these new treatments or products.

Now the question arises how to keep up with all the advances along with being able to provide the best for all of our patients at that given point of time? Evidence based Dentistry, comes in the forefront, when we are mixing the best clinical care along with the evidence base.

SO, WHAT IS EVIDENCE BASED DENTISTRY?

Definitions:

Following are few of the definitions that have been provided by different authorities on Evidence Based Dentistry:

- "the conscientious, explicit, and judicious use of current best evidence in making decisions about the care of individual patients. Its practice means integrating individual clinical expertise with the best available external clinical evidence from systematic research."
- 'practice that integrates evidence, clinical experience and patient preference'. (BDJ)
- An approach to oral health care that requires the 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. (American Dental Association)
- the practice of dentistry that integrates the best available evidence with clinical experience and patient preference in making clinical decisions. (New Zealand Dental Association)
- "The conscientious, explicit and judicious use of current best evidence in making decisions about the care of individual patients to encourage the ordinary dental practitioner in primary dental care to look for and make sense

of the evidence available in order to apply it to every day problems.” (Canadian Dental Association)

How it started?

Archie Cochrane (1909-1988) considered to be “the Father of Modern Evidence Based Medicine/ Dentistry”, in 1972, challenged medical establishment and reflected that very few clinical decisions made in the health services are undertaken as a result of good evidence. Even though there are 2 million biomedical articles published annually in some 20,000 journals, of which some 500 are related to dentistry, there was no mechanism until recently to systematically review these and disseminate the result as a good practice. In 1992, the Cochrane Collaboration was formed to address this problem and Cochrane Oral Health Group to address dentistry subsequently.

<http://www.cochrane-oral.man.ac.uk/default.htm>

Cochrane Oral Health Group has so far 26 reviews and 33 protocols that have been published ranging from “Adhesives for fixed orthodontics brackets” to “Pulp treatment for extensive decay in primary teeth” in their review section, followed by “Anterior repositioning splint for TMJ displacement” to “Topical fluoride for treating dental caries” in their protocol section.

WHERE ARE THE RESOURCES?

Besides Cochrane, there are other resources such as Bandolier, EBD journal, NICE, Centre for Evidence-Based Dentistry at <http://www.ibs.ox.ac.uk/cebd/> and all are considered to be the resources for best evidences. In the days to come we can expect more of the evidence on good practice available to us.

Yet, there are many areas in dentistry where there is lack of evidences. Therefore, it is the duty of every practitioner to find out the best practice at that point of time by reading valid clinical trials and critically

appraising it and coming to the decision that its application in his/er practice will be beneficial to the patients. The internet has vast resources that can be used for the benefit of our patients. Meta Analysis of Randomised Control Trial, i.e. a summary of the results of several studies that are compared in humans, are prospective with a control group and randomly allocated samples are regarded as best evidences. Whereas, evidence obtained from expert committee reports or opinions and/or clinical experience of respected authorities are graded to be of lesser value.

World Health Organization has provided access to hundreds of journals free of cost for the developing countries such as Nepal through its site www.healthinternetwork.org which can be used for accessing the latest journals such as Evidence Based Dentistry. With the knowledge of critical reading of a research paper acquired, practitioner can judge the research.

CONCLUSION

Evidence Based Dentistry is making an impact already in our clinical decision making process and will be making a greater impact in the days to come, helping us in delivering better and appropriate care for our patients. It is certainly going to meet the challenges of practicing dentistry in a new and exciting way.

REFERENCES

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2. Raj K RajaRayan: OBE: Evidence Based Dentistry A Compendium of Helpful Information A Resource Tool For the Busy Dental Practitioner
3. Glossary of Evidence- based terms, *J Evid Base Dent Pract*, 3:176-80, 2002.

ANSWER TO CROSSWORD 6
ACROSS
1. ALVEOLITIS 7. PONTIC 10 BUR 12 DEANS 13. APEX 14. AMALGAM 17. LIGATURE 21. TEST 22. ISTHMUS
25. GLOVES 26. MALIGNANT 30. ANKYLOSED 31. FLUORIDE 32. FLOSS 33. UVULA 34. BRANEMARK
36. CIDEK 37. XENOGRRAFT 38. BROACH 39. CHISEL 40. MNOMUCLEOSIS
DOWN
1. ANODONTIA 2. LEJONT 3. ENAMEL 4. OPG 5. INLAY 6. CONE-CUT 8. RUGAE 9. EPULIS 11. BRACET
12. DICSTEMA 14. PIT 15. XEROSTOMIA 18. BULMIA NERUOSA 19. STIPPLING 20. BONE 23. MAT OCCUSION
24. EMBRASSURE 27. PKT 28. CYST 29. COL 35. KEU