European Archives of
PAEDIATRIC DENTISTRY

Editorial: Experience versus Evidence?

Over the past 20 years there has been a substantial change in the way clinical dental practice is accomplished. During the previous two hundred years, since dentistry started to separate from medicine, practitioners constantly tried out different ways of restorative work, management, artificial teeth etc. but in an entirely empirical way. Reading the 19th century literature one is amazed at the substances put into teeth, many quite damaging.

The advent of the clinical trial, beginning in 1858 and more recently the concept of the Randomised Clinical Trial (RCT) has completely changed how we assess what treatments are acceptable. We call this evidenced-based dentistry. In the past ten years other concepts, SIGN and CONSORT, have also been introduced. This is a modern and necessary approach within our societies. However there are branches of dentistry, and Paediatric Dentistry is one, where the evidence-based approach is nowhere near as simple and indeed even appropriate in deciding what is best clinical practice. There are a number of examples of these.

We need to know if a restorative material or a clinical technique is scientifically superior to another and what is in the best interests of child patients. But how can that be done in an entirely objective way? Treatments or materials that are used have to be done in an entirely consistent way. But each child is different with different intra-oral conditions, upbringing and attitudes that may well affect how the material or technique is used. Researchers conducting a clinical study or trial need to be blind to the material/technique used but it is so obvious in many cases that such objectivity is practically almost impossible. For example using preformed metal crowns versus complex composite resin restorations. It is very obvious which is which. There is also here the question of comparisons – should they be within a mouth or between patients when we do not know that the life-styles or intra-oral conditions are equal.

Over the years another problem with assessing clinical techniques is the very long time it may take to achieve a result. A good example here is the controversial use of space maintainers. When primary molars are prematurely extracted some teachers advocate the placing of space maintainers, others do not as the evidence is limited. Assuming that such appliances may be needed at 4 or 5 years of age a clinical result in a randomised clinical trial would not be validly seen until about 12 years of age, when premolars are erupting. That would mean a study duration of nearly 9 years. However, who would want or could do such a trial?

When we now consider the validity of dental behavioural management techniques for children how are we to have studies that conform to evidence based dentistry, Cochrane directives, SIGN and CONSORT? Suppose I want to compare two contrasting behavioural techniques in order to find out if one is superior to another. Do I treat a child with approach A on the first visit and B on the second visit? Or do I treat child 1 with approach A and child 2 with approach B? Are the children entirely comparable? In the past most behavioural management techniques have been developed by a large number of clinicians reporting their experiences over many years, certainly since the 1920s. Attempts have been made to carry out research studies but none could be considered evidence based or would conform to the modern concept of SIGN. Do we then dismiss entirely all of 80 years worth of reports? Of course not.

Accordingly we have to proceed with what we have, which is a large body of literature – and, yes, much of it empirical.

The EAPD Clinical Affairs Committee is tasked with producing Guidelines and several years ago started work on a Guideline for Behavioural Management. A draft document was produced but when circulated for comment was not accepted by a significant number of EAPD members. Indeed, a counter document was submitted. Many months of discussion ensued but without resolution of the conflicting opinions.

As this conflict could not be resolved by the Clinical Affairs Committee the EAPD Executive Board asked a group of the 'Old Elephants' to look into this dilemma. Their conclusion was that a Guideline produced under the confines of SIGN etc was not possible, for reasons discussed above. Accordingly, the Old Elephants were asked to prepare a review paper considering the literature that could be used as Guidance. Note here the term Guidance, and not Guideline, as being more appropriate. After many drafts and improvements a paper has been produce and is published herein in this issue of our Journal. This paper aims to bring together what we know about behavioural management in paediatric dentistry but without being prescriptive. As a review of the literature it aims to provide some guidance on the subject and which the authors hope will stimulate discussion and interest.

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