Providing all children with the quality dental care they deserve

We have some of the best data for the dental disease experience in children in the UK through a tradition of dental health surveys carried out every 10 or so years. Over the last 30 years, these surveys have provided us with figures, which have been interpreted by the academics in Dental Public Health and politicians alike to convey to the world the tremendous dental health that children of the UK enjoy. However, these headline statistics mask the high levels of disease borne by many children, usually from deprived backgrounds, the burden of managing, which falls upon the shoulders of the clinicians on the coal face. The situation is exactly the same in the most developed and developing countries where dental caries levels increase many fold with increasing deprivation quintiles. I was fortunate enough to listen to a talk from professor Damle, and it has become increasingly clear that developing countries like India where large discrepancies exist between rich and poor face real challenges.

Some readers will be surprised to know that even in a very rich and affluent European country such as the UK, the published Care Index for 5-year-old children, reflecting the percentage of caries that is treated with restorative care, is <20%. Even for 11-year-old children, where only caries in the permanent teeth at the level of dentin was considered, the care index on average was around 41%, but could be as low as 20% in some parts of the country, meaning that in some areas, four out of five permanent decayed teeth where caries was into dentin were not being restored. These figures should send a shiver down the spine of every dental health professional, who believes that dentistry is a caring profession. How can we condone the non-treatment of a disease that carries such a high morbidity and knowingly put the child at risk of pain and suffering? In a wealthy nation like the UK, where health services are extremely well organized, if this is the existing situation, what might be the case in poorer countries. The recent debate in the UK on whether to restore decayed primary teeth at all was sparked by the publication of a paper, in which the discussion, conclusions and extrapolation of the results by the authors was far-fetched, speculative and not a true reflection of the methodology and the results of the study. The most important conclusion of the study that there was no difference in the outcome measures of pain, extractions, etc., between teeth that were restored or left unrestored cannot stand up to scrutiny because the quality of the restorations performed in the teeth to which the unrestored teeth were compared was unspecified. Other studies have shown that untreated caries in young children, especially pre-schoolers carries a high morbidity, including pain. The most recent study clearly showed that the proportion of children with sepsis increases markedly with caries experience and this problem can be mitigated if more caries is treated. The authors, who based their findings on a sample of nearly seven thousand 5-year-old children in Scotland, concluded rightly that the findings of their study would not support a policy of non-intervention for deciduous teeth. It is obvious that when the presenting complaint is that of sepsis, the tooth is more likely to be extracted. Milsom et al. showed that extraction in pre-school children was highly likely to be associated with fear of dental procedures. This in my view is as strong an argument as any for good quality restorative care for carious primary teeth, with restorations that are performed to standards that do not circumvent the basic principles of restorative dentistry, as is often the case when primary teeth are restored in general dental practice. Wedging a dollop of glass ionomer between cavity walls after inadequate removal of caries without local analgesia is not good quality restorative dentistry and it is no surprise that such restorations fail frequently further precipitating the myth that restorations in primary teeth don’t work as well as in the permanent. Children deserve better. Dentists need to be better trained in the diagnosis of the state of pulp in response to proximal caries in primary molars. It was shown three decades ago that pulp inflammation sets in early especially for proximal caries, and precedes the exposure of the pulp. A high failure rate of restorations in general dental practice is a reflection that many such teeth are restored without due consideration to the pulp inflammation, longevity of restorative materials or principles of cavity design. Teeth with proximal caries are
usually restored with conventional restorations when they should have been restored after pulp therapy (pulpotomy) has been carried out to remove the inflamed part of the primary dental pulp. This would certainly put an end to the myth that that the restoration of primary teeth is futile.

Within the practice of the professions, these days there is now a legal entity known as a “duty of care”. This means that, in dentistry, every dentist who takes on a patient for dental care/treatment must make every effort to ensure that the patient receives a proper standard of care. In pediatric dentistry, there remains some degree of controversy as to what such a term means. The problem arises because of two factors. At first children are not always easy to care for because of differing levels of co-operation and secondly because the primary teeth eventually exfoliate. Therefore, any restorative treatment that is needed must be of limited duration. Adding the two entities together many dentists have taken the view that there is no need to carry out restorations in primary teeth, but to leave them to be shed as and when the permanent teeth erupt.

However, there is one important issue to be highlighted. If the socio-economically deprived bear the larger burden of disease, then it is also obvious that this state of economic deprivation also means that they will not access dental care as readily as more affluent in society. Hence, it is important that the focus of health care provision in any country reflects this reality. Programs that target those who are most vulnerable in our society should be taken forward and implemented. Also, good quality restorative care is essential and young dentists should also learn the forgotten art of prevention and public health. Alas, too many of our young students wish to be the practitioners of the “art” of dentistry rather than the “science” of dentistry. Dental schools must teach all students their Ethical responsibilities, their duty toward their profession, to the patients and to society. No profession will ever gain prominence if the sole object of those professionals is self-centered development and financial motives. We all owe a debt to our society and country, which we must fulfill in our own small way through caring ethically for those under our care.

It is obvious to me that those who feel that providing good quality restorative dentistry with local analgesia in children is tantamount to “traumatic dental treatment” have never provided such care and are ignorant of the positive effects that good quality dental care has on the child’s long term dental attitudes. We all hear the people who advocate a non-interventionist approach call for evidence when challenged. There is ample evidence in the literature to show that primary teeth restored following principles of good restorative practice do very well indeed and excellent success rates have been reported.

Also, in countries where emphasis is on restorative dentistry for children, fewer children are subjected to the archaic practice of extractions of teeth under a general anesthesia as practiced rampanty across the UK. In no other European country is the use of dental general anesthesia for extractions of children’s teeth so prevalent and this is unlikely to change unless care indices improve in general dental practice and the dentists apply the same principles to restore primary teeth as they do permanent teeth. Many argue in western nations that restorative interventions in primary dentition are not evidence-based. Of course, it would be great to have results from a prospective randomized control study, but until one is carried out we cannot sweep under the carpet the overwhelming evidence of the longevity of those restorations and techniques for primary teeth that are performed to the highest standards of principles of restorative dentistry. Also, in my opinion, it would be unethical for any clinical trial to include a group where no treatment is offered for caries, a disease, which is known to progress and carries a risk of morbidity. I have been unable to find any convincing evidence in the literature that leaving untreated primary teeth would not cause at least discomfort and in many cases pain and suffering for the children. Any funding organization would have to appraise itself of this ethical dilemma before committing to funding such a trial. It would be more prudent to compare the traditional way primary teeth are restored in general dental practice with the way that would be advocated by specialist Pediatric Dentists in a prospective setting. Such a trial would be useful and would also win the support of those clinicians who feel that children deserve the best possible care for the restoration of their dentition.

It is more than likely that the majority of children in the world will be treated in general dental practices in the near future and not by specialists. Only a small percentage of children will be treated in specialized pediatric dentistry practices. We must ensure that those children who still get caries do not suffer further from the provision of poor care and its consequences. Specialists in hospitals treat children on a daily basis with severe facial infections caused by poor restorations, placed with a disregard to restorative principles, or a non-interventionist “keep under observation” approach. This has implications for the child’s immediate well-being, future attitudes and also has serious cost implications for the health services. Majority of emergencies can be averted by simple interventions thus avoiding a traumatic event in a child’s life that might have a lifelong negative impact on their dental attitudes. So what are the responsibilities of specialist pediatric dentists? In India where there are nearly 300 dental schools, with the world’s largest number of pediatric dentistry Postgraduate programs, the number of specialists trained every year is substantial. Pediatric dentists must provide ethical specialist care for those children who are not easily treated in general practice. These include children with behavior management issues, medically compromised children, children with developmental and genetic anomalies such as amelogenesis imperfecta or hypodontia, and management of traumatic injuries in
children. But more importantly pediatric dentists should set an example for everyone by upholding ethical practice and providing leadership in implementation of public health programs targeting those in our society who are unfortunate to still suffer from preventable dental disease.

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How to cite this article: Duggal M. Providing all children with the quality dental care they deserve. Contemp Clin Dent 2014;5:3-5.