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Dr Richard Cure

A former student of Dr Richard Cure's, Runa Mowla-Copley had the pleasure of interviewing the man himself. Dr Cure is head of Dentistry Studies as well as course and clinical director in orthodontics at the University of Warwick

Firstly, what motivated you to become an orthodontist?
I became increasingly fascinated by the 'problem solving' aspect, which required greater understanding of growth and development and the biological processes associated with tooth movement. Also, I felt that orthodontics gave aesthetic treatment options for patients which involved less invasive dentistry, preserving natural tissues.

As Warwick's head of Dentistry Studies, what do you consider the major challenges facing dental education today and what changes would you recommend?
There is a growing recognition that, whatever our GDC registration status, continuing lifelong education is required and will be the norm as opposed to the exception. Post-registration qualifications will increasingly need to show levels of quality assurance not previously required. In the future, simply turning up for a programme will not be proof of CPD or competence. Courses will need to be fit for purpose and have summative assessments mapped to learning outcomes. These processes will become increasingly subject to scrutiny, as will educators and educational institutions. Also, as the majority of dental care is carried out in primary care, I feel that more dental education should be based in quality assured, primary care practices, overseen and regulated by universities. However, far stricter regulatory control over both educators and delivery sites is required than currently exists.

Congratulations on submitting your PhD - has this changed your outlook on dental education?
Thank you and yes it has. I am embarrassed to admit that, despite being actively involved in dental education, both as an educator and examiner for over 20 years, I had little knowledge of how we actually learn, especially as adults. My PhD is on interprofessional education for the orthodontic team. I believe that more dental education should involve the whole team and in an interprofessional environment. Despite the GDC documenting in 2004 the importance of the dental team, the majority of dental education still does not reflect this. As a profession, in the majority of teaching environments, we do not educate interprofessionally, but hopefully that will change as the benefits are recognised.

What aspects of the Warwick MSc in orthodontics course do you enjoy teaching the most?
Essentially I am still a clinician. Our patients are most important and, as such I enjoy discussing clinical cases the most. However, the intricacy in orthodontics is the understanding of what is happening biologically, so I enjoy discussing this and trying to explain what physiological processes are going on when we apply forces to teeth. Case assessment and diagnosis is critical, plus recognising the need for on-going therapeutic diagnosis throughout treatment, especially when tooth movement is not progressing how we expected it to.

Among your many achievements, what are you proudest of in dentistry?
Seeing other people develop and feeling that I have helped their progression. One of my team once said to me 'thanks for giving me the opportunity to do this and for believing in me that I could do it.' It sounds very twee, but that made me feel very humble and proud at the same time.

What do you consider the biggest changes in either the practice or the science of orthodontics? What changes do you think we can expect in the next decade?
I think the biggest changes have been in the orthodontic team, including orthodontic therapists and extended duties orthodontic nurses. Also changes in appliance systems, some good and others less so. In the next decade, the delivery of orthodontic treatment will be increasingly team based, specialist led and with appliance systems focused on light, consistent forces.

Recognising the importance of physiological tooth movement is critical and appliance systems will need to provide more evidence of the forces applied to teeth – as clinicians we are responsible for the treatment we deliver and we should insist on companies providing more evidence on force levels.

Dr Runa Mowla-Copley BDS DipOrth graduated from Sheffield University and has worked at a number of prestigious orthodontic practices in London, including the award-winning Elleven Orthodontics. A member of the British Orthodontic Society (BOS), she has a special interest in interceptive orthodontics. Runa is also an expert in dental marketing and PR. She is now based at Knightsbridge & Quadrant Orthodontics in London.

There has been a huge surge in short orthodontic courses aimed at GDPs. What advice do you have for dental practitioners interested in orthodontics?
If you do not understand and cannot explain what is happening when you are moving teeth, then you are putting your professional registration at risk. I am very concerned that many courses aimed at GDPs are simply geared to selling products. However, are these companies there to support the GDP when things go wrong? My advice to GDPs is to look for orthodontic education that provides the level of knowledge and qualification that allows them to recognise appropriate cases to treat, understand what they are doing when treating cases, and as such, be able to be supported by their defence society if things do not go according to plan. Look for education that does not simply give a certification of completion of use of a certain appliance system, but one that teaches orthodontics, is not limited to one appliance system and ends with an orthodontic qualification which is of value because it has to be earned.

In your opinion, is there a need to change the way postgraduate dental programs in the UK educate orthodontists?
In my view, there should be one treatment standard – the best possible. Education should mirror this. As such, the learning outcomes should be those set by the SAC (Specialist Advisory Committee) in orthodontics. Quality education should be uppermost; there should be more emphasis on who delivers the education and less on where it is delivered. We have to be more flexible and, in my opinion, educate interprofessionally. Educating postgraduates, orthodontic therapists and orthodontic nurses in an interprofessional environment is, in my opinion, a very viable alternative approach for the future.

And where do you see postgraduate dental education heading in the future?
It will be more flexible, increasingly self-funded and quality assured. Summative assessment will be required for CPD; new assessments will be developed which are meaningful and be usable towards further qualifications. Post-registration qualifications will be increasingly sought after, as more and more registrants will recognise that their colleagues are becoming more qualified than they are. The quality will improve as increasing regulatory demands are placed on education providers. An increasing amount of postgraduate education will be delivered on an outreach basis, in quality assured primary care environments. This will need to be highly regulated to maintain and increase standards.

What is the most unusual experience you have had during your orthodontic career?
Hard question to answer. I suppose receiving a referral of a dog! I saw the prospective 'patient' and owner, who did not want a vet to be consulted, as having an anterior crossbite would affect the breeding potential. I politely declined the chance to treat! Gaining patient consent would have been interesting though!

What qualities do you think a good clinical teacher should possess?
Recognition that they can learn from students, a willingness to listen and continually evaluate their own beliefs. Good clinical teachers should still be active in clinical practice, be up to date, happy to accept that how they did things five years ago may now be outmoded and be continuing their own education. I feel it is now appropriate for clinical educators to have a formal qualification in medical/clinical/dental education. Also, an understanding of adult learning. Adult education is increasingly about facilitation and recognising the need to understand different students learn in different ways.

Has the political environment affected your work?
Yes. I think it has affected all of us in dentistry and wider afield too. There is a reduction in state funding for dentistry and an increased patient expectation level. It is the same in dental education. More expectation with less resources. That puts increasing pressure on everyone.

Many clinicians get very excited with the idea of decreasing treatment time by using self-ligated brackets, but after evaluating recent papers, it was found that one cannot treat patients any faster. What are your thoughts on this?
Self-ligation is one of the current major talking points in orthodontics. It divides opinion. I think the main problem is that the wrong questions are being asked and the focus should not just be on comparing mechanical systems. If we carry out, for example, extraction-based treatments with self-ligation mechanics, the cases are unlikely to be finished any quicker. I think there is still much to learn. The focus should be more on the forces applied and whether they are more biologically appropriate. There is a lot of evidence relating to orthodontic forces and the type of resorption which results. I think we may find evidence in the future that self-ligation mechanics allow us to apply lighter forces more consistently to more teeth than other systems and that this is more biologically appropriate.

As course director at Warwick what changes have you made over the years?
Team members have been increasingly integrated into the education process and all the evidence shows that this is beneficial. Also, I have tried to make sessions increasingly interactive and explain the importance of self-direction. Focus in orthodontics is on understanding as opposed to remembering facts. Some people find that hard and still want to revert to a more traditional undergraduate approach where all the information is provided, to read and remember. In depth understanding requires a different approach; harder for students at first but much more rewarding eventually.

Looking back at your career, would you do anything differently?
Hmmm, not sure. It's always tempting to look back and think it would have been better if…. Some things I may have done earlier, such as my PhD, but I am not sure I would have got as much out of it if I had.

What are your interests outside of work?
Sport. I'm no good at it but love snowboarding. I watch football regularly – I go with a few pals and my kids. Also, I now have two grandchildren, so that's a new dimension to life!

And finally do you have any pearls of wisdom you can share with our readers?
Wow – not sure I have any, but here goes! Dentistry is a stressful occupation and I think it is important to try and keep fit. Continuing education and further reputable post-registration qualifications will become increasingly important, so choose both wisely.

Most of all, put quality and patient care uppermost and you will be happy and successful in what you do.

For more information on the MSc in orthodontics at warwick visit: www2.warwick.ac.uk/fac/med/study/cpd/dentistry/orthodontics/

Improving orthodontic outcome

Dr John Bennett recently gave one day programs in Manchester and London with DB Orthodontics. *Orthodontic Practice* interviewed him after the London course, and here is what he had to say

Dr Bennett, for many years you were part of the international lecture scene, but it is some time since you talked in UK. Can you tell us why that is?
I have been busy in Dubai, because nine years ago I left England to join a new orthodontic program at The European University College in Dubai Healthcare City. I had been lead partner in the London practice at 53 Portland Place for more than 20 years, but after we transferred it to 21 Devonshire Street[1] I was happy to leave it in the capable hands of Dr Stephen Hopson, and took the chance to seek new challenges. Dubai offered full-time teaching, and was mostly an excellent experience, working with 28 residents and top orthodontists like Donald Ferguson, Jon Årtun, and Ahmed Ismail. However, I never intended to finish my days in the UAE, and I went back to international lecturing in 2013 and I will resume UK residency in April this year.

You developed MBT with Dr McLaughlin and Dr Trevisi in 1997, but how did the System 4.0 philosophy begin and develop?
Yes, in the past I was sometimes introduced as the 'B' in MBT! But that goes back to a technique we developed almost 20 years ago. There is always room for improvement, and Dr Dan Fischer reminds us in his lectures 'If you're not making changes, then you're not making progress'. Dr Rick McLaughlin and I have continued to work at this, and I spend time in San Diego almost every year. Last year I was there for six weeks. We have brought in a wide range of improvements to create System 4.0, and our work can be summarised as 'keeping the best, and improving the rest'.

Concerning brackets, in the early 2000s, like everyone else, we evaluated self-ligating brackets (SLBs) but found that they did not work well with our mechanics. We needed high-quality tie-wing brackets, but were concerned about the accuracy of MIM production[2] and wanted to go back to milled brackets, which had been so successful in the early days. We went to Opal because it uses the latest CNC (computer numerical control) methods to manufacture more accurate brackets. This was a turning point for us, and we are happy working with such a motivated and ethical company. In general, the orthodontic world is moving away from SLBs, and as they return to tie-wing brackets, clinicians will be seeking more accurate manufacture than in the past.


Dr John Bennett

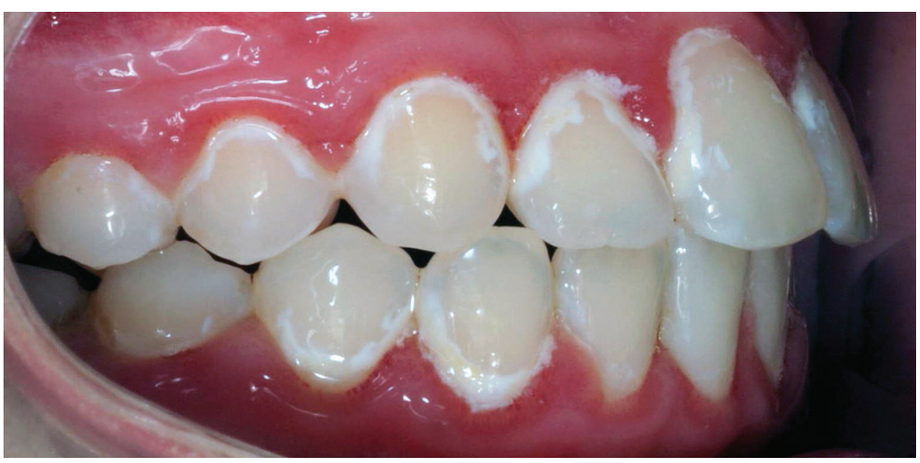
What type of orthodontists are the best candidates for your courses and what are the key things they take away?
The current one-day program is called 'Improving Orthodontic Outcome' and as the title implies, it is aimed at any orthodontist seeking ways to get better results. There is truth in the saying 'If a job is worth doing, it is worth doing well'. This certainly applies to orthodontics, and is a clear take-home message. For example, it is no more difficult to place the brackets correctly than to make careless errors, and accurate bracket positioning will certainly improve outcome. In general, the course has a focus on quality care, and offers ideas at all stages, from record taking through to finishing and retention.

I have been friends with David Burdess for many years, and it is a pleasure to be associated with DB Orthodontics, which is well known as a family-run, high-quality and ethical company. It was no surprise that the Manchester and London programmes were so well organised. Because of the widespread interest in System 4.0 I have agreed to give the course one more time in Dublin on April 18. Looking ahead, for those who want to take their knowledge of System 4.0 further, the new book is now available[3] and we expect to have Dr McLaughlin presenting in London in May 2016. There is widespread interest in his two-year program[4].

What do you feel have been the most important recent advances in orthodontics?
In general there is a pendulum effect with new developments. An initial belief may be 'this will be the big new advantage in orthodontics' and this is followed by huge over use. Later, comes a more realistic approach, enthusiasm wanes, and the idea settles into more appropriate usage, or may even be abandoned. This can be said of TADs, Class II correctors, SLBs, and (more worrying) CBCT imaging. If we take CBCTs as an example, we know that X-ray dosage is much bigger than with panoramic views, but we don't have clear

Dr Rick McLaughlin
Dr Rick McLaughlin is expected to give a two day course in London in May 2016. There is widespread interest in his two-year program. www.mclaughlince.com

IDBS - Indirect bonding provides for greater accuracy in bracket positioning, a more comfortable patient experience, and more affective use of 'doctor time'.



WSLs - We are seeing the wider use of sealants, such as Opal Seal, as a measure to protect enamel and avoid white spot lesions during orthodontics.

independent information on this. Some feel that CBCT images may be justified in only 1% of orthodontic cases or less, but usage is much wider and may be increasing. This is a concern, particularly for youngsters.

And what do you think/hope the next one will be?

Anyone visiting the London practice or Dr McLaughlin's beautiful new practice in San Diego, will find Indirect Bonding Systems (IDBS) being used, and this method has been favoured for more than five years. However, a show of hands at the recent courses indicated that fewer than 2% of the audience were placing brackets by IDBS. There are big advantages to making this switch, because it provides for greater accuracy in bracket positioning, a more comfortable patient experience, and more effective use of 'doctor time'. Along with a demand for more accurate brackets, I expect to see the wider use of sealants as a measure to protect enamel and avoid white spot lesions (WSLs) during orthodontics. Instead of etching a small enamel area for the bracket base, the whole labial surface can be etched and sealed with a top quality sealant such as Opal Seal, which can be expected to absorb and release fluoride ions. There is a continual move in favour of the 0.022 slot and I expect the 0.018 slot to be abandoned in the next few years. The smaller slot was introduced to reduce force levels when only steel or gold wires were available, and before we had today's range of nickel-titanium options. A show of hands indicated 99% of the doctors in the London and Manchester programs were in the 0.022 slot.

Are there areas where you feel orthodontic treatment in the UK is significantly ahead or behind other countries?

I am not well placed to make comments on this, but in most countries we find a wide range of treatment care and orthodontic outcome. High-quality treatment can normally be found in most countries, because some orthodontists will realise there is always room at the top, and will position their practices accordingly. Sometimes at the courses there is a comment about treatment limitations within the NHS, but this should not be a barrier. I was obliged to work in the scheme in the early years in Beckenham, to earn a living and provide for my family, but I chose to take every Tuesday as 'my day' to treat just a few patients optimally, to develop skills and to prove to myself that I could do it. This remains an option for young orthodontists who are idealists, but are working in the NHS.

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3 Bennett J, McLaughlin R. 2014 Fundamentals of Orthodontic Treatment Mechanics ISBN 978-0-9564555-2-9 Available from DB Orthodontics or Amazon.com
4 The McLaughlin two-year program www.mclaughlince.com

For further courses from DB Orthodontics please visit http://www.dborthodontics.co.uk/orthodontic-courses.html