

**Subject:** Debate

**Date:** Wednesday, 27 May 2009 at 17:45:47 British Summer Time

**From:** Nigel.Harradine@bristol.ac.uk

**To:** Michael Mew

Dear Michael,

A few points will hopefully be helpful.

The colleagues whom I copied in are the executive and trustees of the BOS because you wrote to me in my current position as chairman, so they should hear my reply.

I would gently say that your father has been given and has taken many opportunities over many years to present his ideas. It is also true that he has been treated with very considerable politeness and by people who have not gone into the general media to say that other colleagues are ruining faces.

It is also true that when invitations to present his views to a particular audience have not been repeated, it has been because of the feedback from audiences. For example, it is slightly unkind to say to yourself but nevertheless true that his customary invitation to speak to the registrars in Bristol for a whole day was eventually discontinued because they firmly recommended their teachers to spare the next course from this session. This was not suppression, but the result of educational feedback.

I do understand of course, that it is very hard for you to have an objective view on these aspects and I respect that personal difficulty.

Regarding the question of a debate, there is much that could be pertinently said, but a few points may be the most helpful.

Firstly, public debates tend to be confrontational rather than constructive. They tend to generate heat rather than light (listen to the house of commons). Challenging people to joust does not have a good track record of leaving knowledge advanced or patients better off. In fact it can be counter-productive.

Knowledge advances through hypotheses being formed and tested. Arguing about ideas is less helpful than testing them. As it happens I think it is the mainstream view that environmental factors are not well documented. This leaves the field open to speculation and assertion and you are as free as anyone to put forward ideas. As you say, many ideas are indeed hard to disprove. You refer to putting statements to the test and that indeed is how knowledge advances. Proponents of an idea should suggest how they can be practically tested and if possible be involved in that testing. This is entirely open to you as to all of us, but especially relevant to those who feel strongly about an idea.

I would gently urge you to shift from the mindset of "proving me right or wrong". This is in tune with the approach of someone spoiling for a fight on a topic. I and most orthodontists are open to the idea that environmental factors are under-appreciated and ill-understood. I don't feel the need to prove someone wrong who agrees with that. I would personally encourage any sound investigation which aims to explore a hypothesis about an environmental factor. The BOSF or any teaching and research group would I am sure look very objectively at any good proposal

research group would I am sure look very objectively at any good proposal. Would it not be great if we could identify and measure a definite environmental factor which was amenable to practical change? The fact that this has yet to happen is not because of some worldwide conspiracy - we would all like to be associated with such a breakthrough. The prosaic fact seems to be that this is just a difficult area to test and measure.

Lastly, I would say that it will be much better for everybodys patients if there is no public slanging match on any orthodontic issue and particularly one where there is little hard evidence. This is not an area in need of purported whistle blowing or sensational claims, particularly of the type which lead for example to many children getting measles because of the claim that a vaccine was causing autism. We have to ask ourselves what were the motives of that doctor? I can suggest several but none are compatible with ethical professional conduct.

Mike, by all means put forward hypotheses in a cogent manner. Even better, suggest a method by which one might be tested. This would be better for being in good meetings and journals rather than in other publications and arenas which are less bothered about truth and more about sales. You will not need an opponent for this. I shall personally always be happy to hear your views and give them good consideration.

best wishes  
Nigel

--On 26 May 2009 09:41 +0100 Michael Mew <[mikemew@gmail.com](mailto:mikemew@gmail.com)> wrote:

Dear Nigel and Colleges,

It does surprise me that, while malocclusion is being treated without a working knowledge of its causes and few of the treatment methods provided address for any of the suspected causes, you would consider not entering an open conversation to discuss the need for a debate on the issue.

You did engage me quite happily behind closed doors, including 15 of your esteemed colleges, an intimidating list of important and impressive names, but do not seem happy to continue the conversation in public. This is not in the spirit of scientific protocol. I would like to respond to your email, stating that I propose that the environment causes nearly all malocclusion and it is not a mixed cause with the genes, giving ample room for a debate. But this should be an open debate for dentistry not a closed debate for a selected group of orthodontists. Are you are acting as the Chairman of the BOS on behalf of its members (including myself).

All I ask for is an open, fair and free conversation to allow the evidence to speak for its self. This is the foundation of evidence based medicine. This is what has been denied to my Father for 30 years and attempts by him to be heard have been suppressed, while few if any of you have a great understanding of his beliefs. When have any of you put to a fair test anything that he has previously said? He has always been very polite about all of you, which I know has not been reciprocated.

To the rest of this group, I don't know if you have given your expressed consent to be copied into this conversation. I feel that it is now appropriate for you to state if you are not in agreement with the approach and content of Nigel's conversation so far. Could you respond in reasonable time or be considered in agreement.

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Nigel you engaged me in a discussion on the aetiology not the other way around. You were responding to the editorial "The Black Swan" which clearly stated that the true test of a philosophy is not to be proved but that it cannot be disproved. Now it should be for you to prove me wrong rather for me to prove myself right. The measure of a scientist is their willingness and ability to defend what they believe, and I for one am willing and happy to defend my beliefs. Which one of you is also?

Thank you for your time.  
Yours sincerely,

Mike

-----Original Message-----

From: [Nigel.Harradine@bristol.ac.uk](mailto:Nigel.Harradine@bristol.ac.uk)  
[<mailto:Nigel.Harradine@bristol.ac.uk>] Sent: 22 May 2009 08:34  
To: Michael Mew  
Cc: 'Joffe Les'; 'Murray Alison'; 'Tidy David'; [AliMurray@aol.com](mailto:AliMurray@aol.com);  
[ann.wright@bos.org.uk](mailto:ann.wright@bos.org.uk); [d.e.j.b@btinternet.com](mailto:d.e.j.b@btinternet.com); [helen@bools.plus.com](mailto:helen@bools.plus.com);  
[helennewbrook@btinternet.com](mailto:helennewbrook@btinternet.com); [pearsonkj@aol.com](mailto:pearsonkj@aol.com); [pjmcc@talktalk.net](mailto:pjmcc@talktalk.net);  
[sadafkhan86@hotmail.com](mailto:sadafkhan86@hotmail.com); [S.Cunningham@eastman.ucl.ac.uk](mailto:S.Cunningham@eastman.ucl.ac.uk);  
[tracyposner@positivecomm.com](mailto:tracyposner@positivecomm.com)  
Subject: RE: Debate

Dear Mike  
I'll have a think about the usefulness of sending my mail to the editor of the BDJ.  
Why are you so keen on looking for an opponent?

Nigel

--On 21 May 2009 23:56 +0100 Michael Mew <[mikemew@gmail.com](mailto:mikemew@gmail.com)> wrote:

Dear Nigel,

Thank you very much for your well considered answer. I was not expecting this to become such a popular conversation. With great respect I must take issue with a number of points in your email. I will seek to respond to these points but please could you send this to the editor of the BDJ, as I would prefer an open discussion.

There are certainly some gaps in our understanding, and if we want the truth then we must start with the aetiology. We have to review what we know and see if there is some sense to it all. And a debate would be an excellent way to start that.

A debate should be scientific, interesting, educational and fun.

On the separate issue, could we possibly discuss placing an advertisement in the BOS asking for an opponent? Why not one of you?

Very best wishes,

Mike

-----Original Message-----

From: [Nigel.Harradine@bristol.ac.uk](mailto:Nigel.Harradine@bristol.ac.uk)  
[mailto:[Nigel.Harradine@bristol.ac.uk](mailto:Nigel.Harradine@bristol.ac.uk)] Sent: 19 May 2009 22:50  
To: Michael Mew  
Cc: Joffe Les; Murray Alison; Tidy David; [AliMurray@aol.com](mailto:AliMurray@aol.com);  
[ann.wright@bos.org.uk](mailto:ann.wright@bos.org.uk); [d.e.j.b@btinternet.com](mailto:d.e.j.b@btinternet.com); [helen@bools.plus.com](mailto:helen@bools.plus.com);  
[helennewbrook@btinternet.com](mailto:helennewbrook@btinternet.com); [pearsonkj@aol.com](mailto:pearsonkj@aol.com); [ljoffeorth@aol.com](mailto:ljoffeorth@aol.com);  
[pjmcc@talktalk.net](mailto:pjmcc@talktalk.net); [sadafkhan86@hotmail.com](mailto:sadafkhan86@hotmail.com);  
[S.Cunningham@eastman.ucl.ac.uk](mailto:S.Cunningham@eastman.ucl.ac.uk); [tracyposner@positivecomm.com](mailto:tracyposner@positivecomm.com)  
Subject: Debate

Dear Mike

A debate is an interesting idea. One challenge with this particular debate is that I feel that the hypothesis that malocclusion is caused by a mixture of genes and environment is fairly uncontentious. The mainstream view of the aetiology of malocclusion surely is that it is indeed a mixture. This is mainly a statistical deduction and the result of the well known observations on the Mary Rose skulls and the plague pit skulls. This is what I teach all the undergrads at Bristol and my predecessors before me. Of course very little light has been shed in research as to what the environmental factors are (although there are well known hypotheses relating to airways, pollen, diet, tooth wear etc) and even less light has been shed on any successful intervention with a possible environmental factor apart for the very small effect from Linder Aronsen and his adenoidectomy advocacy of 20 years ago. Even there, he was not attacking the environmental factors which might cause adenoidal enlargement. So I feel your summary of aetiology in the editorial is very mainstream in its broad thrust and i am not sure anyone one would argue against it, although the truth of these well-known more specific hypotheses about airway etc is unknown.

When going on to remedies which are put forward as influencing the environment, of course I realise that you feel that what your father has always referred to as orthotropics is put forward as potentially influencing the environmental factors but given a whole day to present on this in Manchester a few years ago, John was equally at a loss to suggest a line of experimentation that might shed light on our ability to identify or influence an environmental factor. I clearly recall that he felt that some analysis of 3/4 face photos was likely to be the best source of evidence about the effect of treatment. Also i recall that he was unable to offer a series of cases of his own or suggest another clinician who was practising orthotropics who might have some cases which could be prospectively followed. He did mention Harry Orton who had died several years previously as someone who had used his Mew 1 appliance and I remember using that myself when i first met and spoke at length with your father in 1979 when I was working with Harry. As you know, that appliance aligned the arch before using a functional appliance of your choice including your fathers design. As with the majority of clinicians I remain keen on functional appliances, but am not aware of any of them influencing the proposed environmental factors such as diet, breathing, pollen etc. We do all of course get some very impressive results sometimes when growth turns out to be favourable, but we know that in those case we may well have seen that growth in the absence of treatment which is why controlled trials are so informative. There is little doubt that arch expansion can favourably influence nasal airflow and this is undergoing a renewed popularity of investigation, but whether this change in airflow lasts or is more than a side effect of tooth movement or influences future malocclusion is at present

debatable.

So the problem with a debate on genes and environment in aetiology is that it is likely to consist of agreement that both are important, then the putting forward of some hypotheses about environmental factors on which we have little fact to chew over and then an amount of shoulder shrugging.

Regarding the separate issue of the hypothesis that orthotropics effects environmental factors, there are two hurdles to be overcome. Firstly in the 30 years in which I have heard John refer to it on many occasions I have not gained a useful working knowledge of what exactly it is other than the use of functional appliances, arch expansion and possibly some imprecisely defined orofacial exercises. It is fair to say that this is an obstacle to its adoption by another clinician. Secondly, it is only those who practice a technique who can test that technique. Many techniques have been compared e.g. fixed vs removable functional appliances, early vs later treatment of class 2, functional vs fixed appliances for class 2, orthodontics vs surgery. Other novel and at first sight rather unlikely treatment approaches such as reverse pull headgear, RME, all sorts of applications of TADS, self-ligation, have all found enthusiasts and then increasingly good scrutiny and quantified assessment. Even uncomfortable, complex and difficult appliances such as the Frankel which I myself used on a good number of cases in the 1970s found a significant following for a while. A challenge with orthotropics is the lack of adopters and therefore of cases to match and compare.

So although I love debate, I am not sure that aetiology is a fruitful source of difference of opinion. Regarding orthotropics as a potential influence on the environment, I think a lack of users and of comprehension of the proposed distinctive elements hinders the prospects of a further debate being useful at this stage.

Regarding the lack of hard evidence on environmental factors, I suspect that a problem is that changing a proposed influence or number of influences over a long term is difficult in an individual or a society and may be difficult ethically in the absence of sufficient reason to support the intervention. At least we are in good company - we don't yet know much about what causes some people to get osteoarthritis, but we do at least now have excellent hip replacements.

best wishes  
Nigel

--On 19 May 2009 21:20 +0100 Michael Mew <[mikemew@gmail.com](mailto:mikemew@gmail.com)> wrote:

Dear Nigel Harradine

I hope that you have received the letter that I sent to you via the BOS. In this I ask if you could, as the Chairman of the BOS, ask if one of your members would like to stand against me in a debate. The hypothesis to be tested would be "Malocclusion is caused by the environment and modified by the genes".

I have over the last few months received several emails from the BOS on subjects such as consultant positions or 2nd opinions for cases, and was wondering if an email could be sent to all the BOS members on this subject. If between us we could write a few lines and send them out, it would then help me to organise such an event. It would be best to meet you but I believe that you are not based in London so that would depend on our movements in the near future.

It really would be a pleasure to meet up with you or even to discuss this by email.

Very best wishes,

Mike

PS Attached is the letter that I sent you and the editorial

No virus found in this incoming message.  
Checked by AVG - [www.avg.com](http://www.avg.com)  
Version: 8.5.283 / Virus Database: 270.12.29/2114 - Release Date:  
05/19/09 06:21:00

No virus found in this incoming message.  
Checked by AVG - [www.avg.com](http://www.avg.com)  
Version: 8.5.339 / Virus Database: 270.12.36/2128 - Release Date: 05/22/09  
06:03:00