

Fluoridation: A cost-effective, simple solution



David Westgarth

Editor, *BDI in Practice*

There are some things in life so easy and obvious to implement that you wonder why they weren't done sooner. For me, one of those things is water fluoridation. Surely, it is so obviously a public health benefit that it should have been done before now, no?

But no is the answer. There have been no new schemes in the UK for more than thirty years, leading to worsening oral health inequalities, now exacerbated by the pandemic.

Something needs to change, and I spoke to **Simon Hearnshaw**, the Chair of the Local Dental Network for North Yorkshire & Humber and coordinator of the National Community Water Fluoridation (CWF) Network, about where water fluoridation goes from here.

What is it others can't see that dentistry does?

SH I think for many outside of the profession, it takes time to get a grip on the evidence base and science around fluoridation that support the benefits that fluoridation can deliver. In Hull, for example, we could see clinically and socially there was an incredible need in the community for something to be done to redress oral health inequalities. There comes a point where we wondered as a local Dental Committee if we were making a dent in the oral health problems faced on a daily basis. That was when we – the Local Dental Network - decided to drive a water fluoridation campaign for Hull, one that

broadened out to become national, so we were ready to support any local authority moving forward. Initially this was difficult, particularly when water fluoridation was labelled 'too difficult to get through' and you were perhaps considered unusual for bringing up the subject in meetings. Our strength though was that we were campaigning as primary care clinicians and no one could argue with the disease we were seeing, the inequalities and the need for change. In Hull we treated families from North Lincolnshire where the water is fluoridated. We could see the differences and see the inequality, all of it preventable. The early days from 2012 were difficult though.

Why do you think that was?

SH It was just post the protracted campaign to achieve water fluoridation in Southampton and everybody was disillusioned. The facts around Southampton sometimes get lost, by the way. The judicial review ruled in favour of CWF in Southampton but the legislation introduced in 2012, Andrew Lansley's Health and Social Care Act, put paid to it by devolving responsibility to local authorities. Ironically, this is now due to be reversed so that Government can take back control of implementing fluoridation schemes.

You also need to remember that while they're a minority, the anti-fluoride movement are a loud bunch that use emotive language designed to play on your basic human instincts to unsettle and undermine confidence. They're also intimidating at times, and they get too much of a platform, particularly on social media. In 2021 we are beginning to understand the dangers of misinformation and what the WHO describes as an info-demic but in 2012 we weren't sure how to respond. So we decided to counter this using an information website called One Part Per Million and social media platform basically communicating

the facts, the science and the benefits to communities, plus of course the social justice message of health fairness across the social health gradient. These messages across social media are beginning to have an effect, helping to balance the negative 'noise' that misrepresents the science and causes confusion.

How much of a problem are these voices?

SH They are as vociferous as they were, but it is reassuring to see they're not going unchallenged. There is a strong link between the anti-vax movement and anti-fluoridation, an association thrown into sharp relief by COVID-19. Given the vaccine appears to be the route out of the pandemic, the voices of the anti-vaxers are losing credibility. As a result, there is a definite shift in public perception, and the international pro-fluoridation lobby has done some incredible work, pushing the science behind how effective the public health measure can be.

As a network, we've also realised there is no benefit to getting drawn into discussions and debating the value of evidence as opposed to bad science – particularly on social media platforms – with anti-fluoride protestors. It's the collective aim of the network to reinforce the positives of fluoridation – of which there are so many – rather than respond to claims based on 'bad science', so to speak.

In the early days where did you find support and what were the group's first steps?

SH The work of the British Fluoridation Society (BFS) is hugely important. The BFS massively supported our work in Hull in the early days of the campaign and still so do,

and were one of the founding members of the National CWF Network. Membership of the BFS is free to join and signing up for their newsletter is an excellent way of keeping up to date with developments. PHE have also been excellent, supporting the development of the Local Dental Network knowledge around fluoridation and working on resources.

Equally, the membership of the CWF Network is beginning to work collectively as a campaigning team, advocating the benefits of fluoridation as a measure to improve health and reduce inequality. As we approach the first public consultation for a number of years, I believe the Network is in a good place to be a strong voice for positive change.

If the network consists of mainly dental voices, isn't it important to secure the support of organisations outside the profession?

SH Yes, it's incredibly important. Dentistry rightly sees the benefits of fluoridation and perhaps there's an assumption among us that those outside the profession will also see them, and maybe we don't work hard enough to push the positive messages. As a profession we know fluoridation is common sense and a really easy win for dental public health. There are no significant adverse health effects besides the small risk of very mild fluorosis, which we know can be mitigated. You only need to look at Birmingham – their water has been fluoridated for decades. If there were any adverse health effects, these would have been seen and reported on by now. What we do see is water fluoridation reducing the differential between the oral health of children in more deprived areas compared with wealthier areas.

The CWF Network is represented across the entire dental team and this is really the strength of the campaign. The website was funded entirely from LDC contributions which sends an incredibly powerful message around grassroots support for fluoridation. We also have membership across associations and Colleges. More recently we have representation from paediatricians within medicine and children's charities – so we are gradually making the cross-over outside of dentistry.

Are these the messages the network is trying to push out?

SH Very much so, yes. Look at the government's White Paper released in March that described how effective water fluoridation can be – from a public health standpoint. Oral health inequalities persist, are increasing

and have been made significantly worse by COVID-19, so the time to act and build in 'prevention resilience' measures is now. Water fluoridation is the most cost-effective measure of all, requiring no compliance.

Modelling indicates £1 spent on fluoridation in more deprived areas can secure £12.71 in savings after just 5 years, through reduction in treatment need, which means that schemes pay for themselves and actually contribute savings. The return on investment is there, and in this day and age, that's just as important as the public health measure itself.

What did you make of the White Paper?

SH It was a form of validation for every voice within the network who has tirelessly championed the benefits of water fluoridation. Voices like Alan Johnson, Eddie Crouch, Nigel Carter, Barry Cockcroft, Ian Mills, Mike Lennon, Chris Groombridge, Tom Robson, Claire Stevens and John Beal – to name but a few – have been instrumental in getting us to where we are today.

The call for a sensible, community-based public health programme is well overdue. The Paper is impactful and contains proposals – in the main – that we have been calling for over a number of years. What's of more importance is the Paper indicates that politicians are also starting to see the impact fluoridation could have, and that's when change begins to happen. If there is no cost to local authorities – many of whom have had their budgets decimated due to COVID-19 – and it is run through central government, a huge barrier has been overcome.

How can we make sure it goes ahead and is delivered upon?

SH We have to pick up the momentum that was developing pre-pandemic. In the North East, Durham, Sunderland, Northumbria and South Tyne were considering proposals that have been shelved due to the pandemic. The North East is an excellent starting point – Hartlepool's water supply is naturally fluoridated, there are several local fluoridation schemes and, where there is fluoridation, oral health levels are significantly better than that of their neighbouring towns and cities. We are also aware of several other Councils, mainly in the North of England, who are actively looking at the feasibility of schemes. Councils understand the inequality arguments and see fluoridation as a way to reduce decay, reduce pain and sleepless nights and reduce

general anaesthetic extractions for children – improving lives.

There will be – and have to be – public consultations for open discussion to take place and to assess the oral health needs in the community prior to implementation. It will take time – there are infrastructure considerations to take into account – and so the sooner we can use the momentum of the White Paper to get the ball rolling, the better.

Has there ever been such an opportunity to finally implement water fluoridation?

SH I don't think so. We are all buoyed by the White Paper.

You look back on the unanimous LDC Conference motions, the unity throughout the network, the work done by the British Fluoridation Society and international lobbying to gather a substantial body of evidence to show fluoridation's benefits – it's all been hugely important and invaluable. It is now the job of everyone within the network and the wider dental team to take the time to communicate the benefits of fluoridation and to reassure patients who have concerns that fluoridation is a huge benefit to public health. To get to this point, where huge change is potentially right around the corner, is an opportunity we all must seize upon. ♦

Links

One Part Per Million: <https://onepartpermillion.co.uk>

Public Health England: Water Fluoridation resources: https://khub.net/web/phe-national/public-library/-/document_library/v2WsRK3ZIEig/view/210540449?_com_liferay_document_library_web_portlet_DLPortlet_INSTANCE_v2WsRK3ZIEig_redirect=https%3A%2F%2Fkhub.net%3A443%2Fweb%2Fphe-national%2Fpublic-library%2F-%2F-document_library%2Fv2WsRK3ZIEig%2Fview%2F174089826%3F_com_liferay_document_library_web_portlet_DLPortlet_INSTANCE_v2WsRK3ZIEig_redirect%3Dhttps%253A%252F%252Fkhub.net%253A443%252Fweb%252Fphe-national%252Fpublic-library%252F-%252F-document_library%252Fv2WsRK3ZIEig%252Fview%252F174103489

The British Fluoridation Society: <https://bfsweb.org>

<https://doi.org/10.1038/s41404-021-0719-2>