

The *glue* that brings dentistry together

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Tackling inequalities is at the core of dental public health. Through the prism of the Welsh Designed to Smile initiative, **Maria Morgan**, an authority on dental public health, illustrates what excellence might look like.

Dental public health puts the practice of dentistry in context within society and seeks to answer questions at a population level. This contrasts with clinical practice which operates at an individual level. For me as a long term practitioner of dental public health I see it as

the glue that brings together the many and varied aspects of dentistry and other related subjects to help reduce inequalities and improve the health of the population.

The development of dental public health in the UK has its origins in the local treatment services established during the nineteenth

century. As far back as 1885, Mr WM Fisher of Dundee called for legislation to secure compulsory attention to the teeth of school children, and the first few school dentists were appointed soon after. Widespread concern over the poor health of British young men followed the Boer War (1899-1902), where

Dental public health comprises:

- Epidemiology
- Evidence-based practice
- Health promotion
- Demography
- Health service management and planning
- Statistics
- Health economics
- Sociology and psychology

Fig. 1 Some of the disciplines contributing to DPH

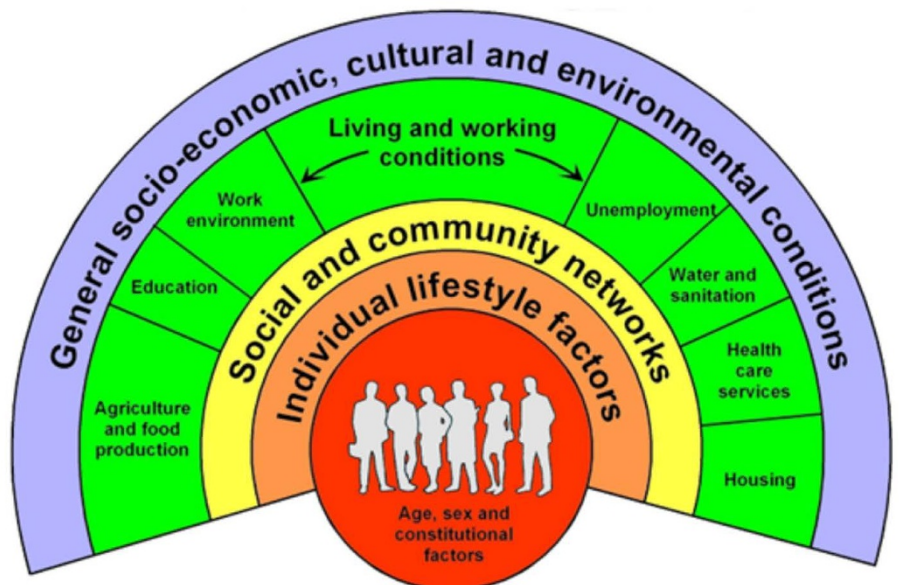


Fig. 2 The wider determinants of health. Source: Dahlgren and Whitehead, 1991²

many recruits were considered unfit to go to war. This led to a reappraisal of public health and, with regards to dental hygiene, the coining of the phrase ‘you can’t fight if you can’t bite’.

The school dental service began to emerge after the introduction of the 1907 Education Act and the Maternity and Child Welfare Act of 1918 prompted the concept of priority-group treatment. The community/primary care dental services as we now know them, began to evolve.

The formal definition of dental public health goes like this: Dental public health is the science and the art of preventing oral disease, promoting oral health and improving the quality of life through the organised efforts of society. The “science and art” relates to the fact that dental public health draws on the skills and expertise of a wide range of disciplines, from the arts and the sciences, to deliver its goals (Figure 1).

Three core functions of public health, which includes public health dentistry as well as medicine, have been defined as assessment, policy development and assurance. Tackling inequalities in health as a fundamental goal of dental public health requires an inclusive approach. We need to work with those who can influence the wider determinants of health such as education, the workplace and food producers (Figure 2).

Figure 3 outlines the components of the 3 core functions of dental public health and relates this to how we in Wales used our public health practice to address high levels of tooth decay in children and the inequalities of experience.

Designed to Smile is a great example of dental public health in action. It is the community dental service teams in Wales who are responsible for supporting schools and nurseries to deliver supervised toothbrushing and the application of fluoride varnish for those in the target areas and age groups. Dental nurses, hygienists, therapists and dentists all contribute to the delivery of the programme as well as key partners in schools, nurseries, primary care, nutrition and dietetics and other partners all working to improve the health and oral health of children living in Wales.

From a wider dental team perspective – all of the operational managers responsible for delivering Designed to Smile, working across seven Local Health Boards in Wales, trained as either dental nurses, therapists or hygienists – all delivering public health in action!

If you would like more information about Designed to Smile go to <https://www.designedtosmile.org/welcome-croeso/welcome/>

Fig. 3

A public health approach to a public health problem in Wales

ASSESSMENT involves 3 elements:	ASSESSMENT IN PRACTICE
<p>Assess the prevailing status and health needs of the community</p> <p>Analyse the determinants and contributing factors of disease locally and the adequacy of existing health resources</p> <p>Investigate adverse events and health hazards</p>	<p>In the early 2000’s the NHS dental epidemiology programme showed that the dental health of 5 year olds living in Wales was the worst amongst the UK countries</p> <p>And we also noted that there were wide inequalities of experience of tooth decay in this age group with the Welsh Valleys experiencing the worst levels</p>
POLICY DEVELOPMENT also has 3 stages:	POLICY DEVELOPMENT IN PRACTICE
<p>Prioritising needs from community needs assessment</p> <p>Planning in terms of an action plan for the community, with a long-range strategic plan reflecting wide participation</p> <p>Advocacy which requires establishing networks of support and communication with health related organisations, the media and the general public</p>	<p>As a result of the assessment (described above) we developed an action plan to introduce Designed to Smile – a national oral health promotion programme with supervised toothbrushing in nurseries and primary schools to deprived areas of Wales</p> <p>We established networks with government (education and health departments), schools and nurseries, health visitors and dental teams working in the community dental services in Wales to help deliver Designed to Smile – to address poor oral health and the wider determinants of health</p>
ASSURANCE practices describe:	ASSURANCE IN PRACTICE
<p>management plans</p> <p>implementation and evaluation of mandated programmes and services</p> <p>informing and educating the public about current health status, health care needs, positive health behaviours and health care policy issues</p>	<p>Designed to Smile is monitored centrally on an annual basis (by yours truly!) and formal evaluation is also undertaken by colleagues working in academic dental public health – to ensure that NHS resources are being used safely, robustly and cost effectively</p> <p>The programme is also monitored locally by the community dental service team who perform Quality Assurance visits to schools and nurseries to ensure safe delivery of Designed to Smile on a day to day basis</p>

The benefits of becoming a BASCD member include:

- Opportunities to shape the future of Oral Health Promotion; its scope of work through policy development and committee involvement in education, policy and standards
- Being kept up to date with all issues relating to the promotion of population oral health
- Free online access to Community Dental Health Journal including back issues.
- Updates from affiliated groups, like the European Association for Dental Public Health (EADPH) and the National Oral Health Promotion Group (NOHPG)
- Save money with competitive member-only rates for the BASCD and EADPH conferences
- Access to data relating to UK national dental surveys
- Access to policy statements and reports
- Networking opportunities with like-minded people at BASCD events, meetings and conferences.
- Continue your professional journey great value CPD available at bi-annual conferences
- Peer networking opportunities through committees and access to online specialist network
- Vote and speak at BASCD Annual General Meetings
- Regular BASCD newsletter including wider public health news
- Connect with us on social media – Twitter @BASCD_uk
- Be part of BASCD council, help shape the future of our association.

Having originally trained as a home economics teacher in the 1980s followed by several years working in wider public health, I started in dental public health in 1997. The British Association for the Study of Community Dentistry (BASCD) has been invaluable to my personal development; I found my professional “home”. BASCD’s mission:



Fig. 4 Dewi the Dragon the Designed to Smile Mascot at the National Eisteddfod

‘DENTAL PUBLIC HEALTH IS THE SCIENCE AND THE ART OF PREVENTING ORAL DISEASE, PROMOTING ORAL HEALTH AND IMPROVING THE QUALITY OF LIFE THROUGH THE ORGANISED EFFORTS OF SOCIETY.’

“working with and supporting members and partners to improve population oral health and reduce health inequalities.” reflects my career aspirations.

If you are interested in dental public health, oral health promotion and prevention of disease then BASCD may be the professional society for you too! Consider joining us.

BASCD members include: nutritionists, sociologists, psychologists, health service managers, statisticians, health intelligence and public health specialists as well as members of the dental team – dentists, hygienists, therapists and nurses, in fact anyone involved in Dental Public Health.

To join please complete contact us at bascd@outlook.com.

References

1. The Bangkok Charter for Health Promotion in a Globalized World, WHO, 2005
2. Dahlgren G, Whitehead M. Policies and strategies to promote social equity in health. Institute for Future Studies. Available from: <https://core.ac.uk/download/pdf/6472456.pdf>; 1991.

Maria Morgan Bsc (Hons), PGCE, MPH, MPhil, FHEA, FFPH

Maria is a Senior Lecturer in Dental Public Health in Cardiff and leads the work of the Welsh Oral Health Information Unit. This involves dental epidemiology and monitoring Designed to Smile, the Welsh school-based toothbrushing programme. Maria is also the Membership Secretary for BASCD.

When she isn’t counting teeth or toothbrushing sessions (or tweeting on oral health) she is probably investigating novelty sweets, sports drinks, breakfast cereal portion sizes, or opportunities for skill-mix in care homes.

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