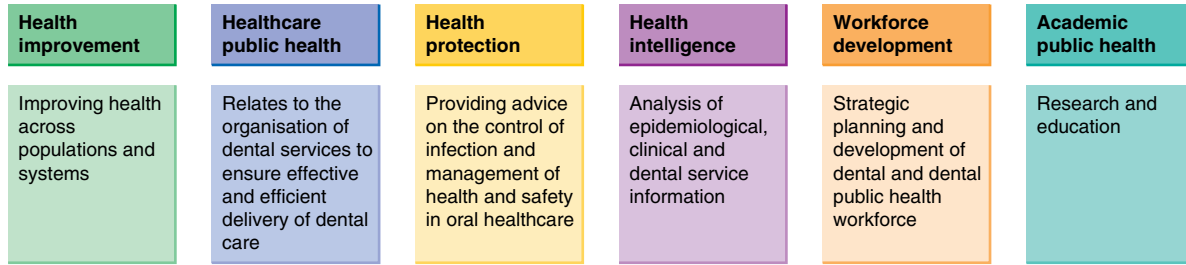


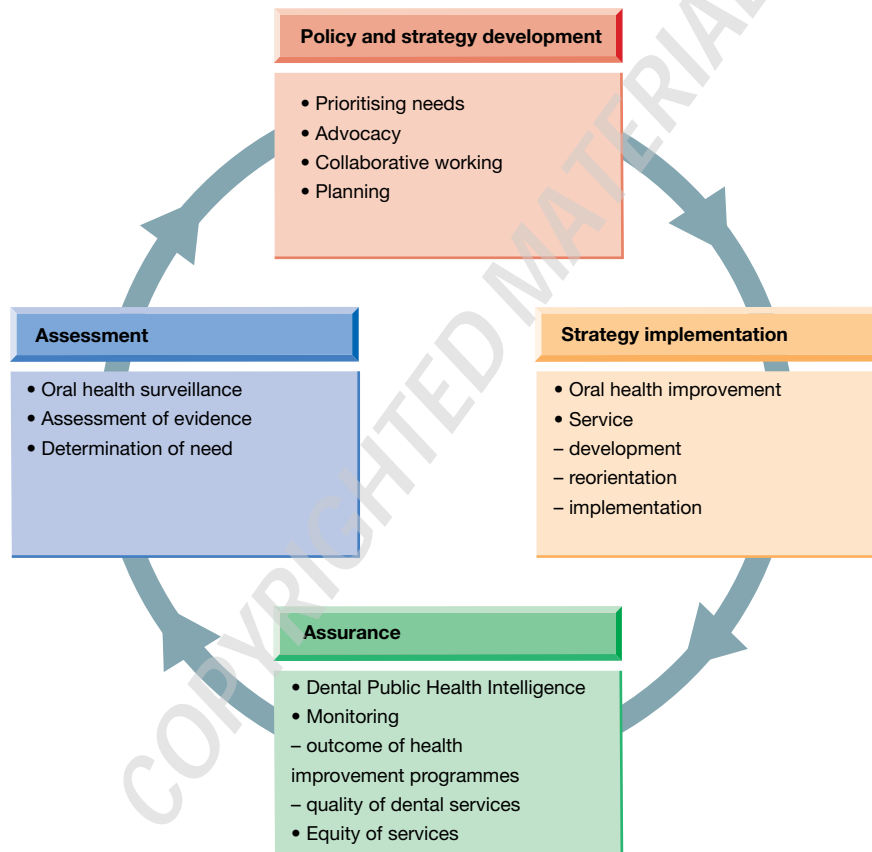
# 1

## What is dental public health?

**Figure 1.1 The essential elements of dental public health.** Source: Adapted from a diagram produced by the British Association for the Study of Community Dentistry.



**Figure 1.2 Components of dental public health practice**



In contrast to clinical dental practice, where the focus is on looking after individual patients, in dental public health practice, the focus is on populations or defined groups within a population. As outlined in Table 1.1, the definition refers to **science**. Dental public health requires a sound knowledge of the factors influencing the aetiology, detection, measurement, description and prevention of oral disease, as well as the promotion of oral health. It also refers to **art**. This involves advocacy, policy development and the politics of how

dental care is prioritised, organised, monitored and paid for in societies.

The essential elements of dental public health are shown in Figure 1.1.

The key components of dental public health practice and how these relate to one another are shown in Figure 1.2. The core values of public health practice are as in Table 1.2.

A comparison between clinical dental practice and dental public health practice is shown in Table 1.3.

**Table 1.1** Definition of dental public health

*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.*

**Table 1.2** Core values of public health practice, as defined by the Faculty of Public Health in the UK

- Equitable
- Empowering
- Effective
- Evidence-based
- Fair
- Inclusive

**Table 1.3** A comparison between clinical dental practice and dental public health

Individual clinical practice	Public health practice
Individual patients	Populations and defined groups within populations
Examination	Epidemiology, surveys
Diagnosis	Assessment of need
Treatment planning	Prioritisation and programme planning
Informed consent for treatment	Ethics and planning approval
An appropriate mix of care, cure and prevention	Programme implementation
Payment for services	Programme budgeting/finance
Evaluation	Appraisal and review

**Table 1.4** The public health approach as applied to dentistry

**Dental public health:**

- Is concerned with the oral health of populations
  - in a city or defined geographical area
  - in a particular group of the population defined by a common demographic, e.g. children, older people
  - in a group of people with social circumstances in common, e.g. homeless people, people with drug and substance abuse problems.
- Recognises that responsibility for health and prevention of oral disease is shared between individuals and healthcare professionals and that people should be empowered to look after their own health.
- Is conscious that as health is markedly linked to people's lifestyles and life circumstances, it needs to take account of how the risk of poor oral health is not equal across populations, e.g. levels of dental caries in children are closely correlated with social and economic deprivation.
- It implies that to improve health, it is necessary to work on policy development at a high level and across disciplines. As an example, legislation making the wearing of seat belts compulsory is important in preventing facial injuries in road traffic accidents; taxing tobacco sales is important in moderating smoking. In health improvement programmes in schools, dental public health practitioners need to work outside of health and collaborate with school teachers and education authorities.

## The public health approach

The Faculty of Public Health, the professional body that is responsible for setting standards in public health practice in the UK, describes the public health approach as follows:

- population-based
- emphasising collective responsibility for health, its protection and disease prevention
- recognising the key role of the state, linked to a concern for the underlying socio-economic and wider determinants of health, as well as disease
- emphasising partnerships with all those who contribute to the health of the population.

How this applies to dental public health is shown in Table 1.4.

## Key disciplines in dental public health

In order to practise dental public health, knowledge of the following disciplines is important.

### Oral epidemiology

Oral epidemiology is the study of oral health and oral disease and their determinants in populations.

### Demography

This refers to measurements and statistics that describe populations. It involves recording factors such as the age structure, ethnic composition and educational attainment of the population.

### Medical statistics

Understanding numbers and the inferences that can be drawn from them is a key skill in reviewing disease trends and service provision, as is the ability to appraise and conduct dental research.

### Health promotion and health improvement

Health promotion is the process of enabling people to increase control over their health and its determinants, thereby improving

their health. Health improvement recognises that the determinants of health can be outside an individual's control and is designed to address so-called wider determinants of health such as education, housing and employment. It is also designed to address the gaps in health between areas of high and low social and economic provision – gaps known as 'health inequalities'.

### Sociology

Sociology is the study of the development, structure and functioning of human societies. Understanding these factors is important in improving health and organising healthcare services.

### Psychology

Psychology is the branch of science that deals with the human mind and its functions. In a public health context, understanding psychology is important in relation to behaviour change.

### Health economics

Health economics concerns the need for, demand for and supply of health and healthcare. In dental public health, it relates to how resources are distributed and the effectiveness and efficiency of services. Understanding how care is commissioned and paid for is an important element of how dentistry is organised and delivered, and dental public health practitioners need a clear understanding of these issues.

### Health services management and planning

Dental services compete with other forms of healthcare, whether paid for by the state or individuals. They, therefore need to be organised, managed and planned. The allocation of resources within a publicly funded dental service should be proportional to the need and likelihood of benefit. Dental public health practitioners will be called on to give advice to health service managers and finance officers on the appropriate allocation of resources and to offer guidance on how dental services are planned and delivered.

### Evidence-based practice

Evidence-based practice is designed to ensure that, wherever possible, the dental care that is delivered has been shown to be the most efficient and effective. It is the role of dental public health practitioners to facilitate such practice. Those responsible for dental public health need to understand the theory of evidence-based dentistry to support the improvement of oral health and the delivery of effective care.