Commentary
It is not just the broad street pump

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I congratulate Gillam and Maudsley on a wide-ranging review of the topic, and I appreciate being asked to provide a commentary as someone from outside the UK with a different experience and point of view on public health and training in public health for medical students.

Let us start with the idea that medical students and tomorrow's doctors are vital to the medical community and the health system, but they are also part of the educated population of a country. Today, everyone can see on television and on the Internet quite sophisticated programs on public health issues, globally and locally, such as on the BBC, and much of it of superb quality. This means that the public has access to information and attitudes about public health that the medical graduate needs to know about. Public health is now more than ever part of the general culture.

It now seems important to recognize that public health is not only a medical field, it is broadly multi-professional and it is implemented through multi-dimensional sets of programs and activities staffed by professionals from backgrounds as varied as nursing, veterinary, laboratories, sociology, anthropology, economics, law and many other fields. Public health is part of the activities of governmental agencies but also many non-governmental organizations, advocacy groups and even the private sector, such as food, vaccine and pharmaceutical manufacturers.

Clearly, medical students should have basic courses in public health as should all health professions. Indeed, there is good justification to have public health courses as part of undergraduate studies not only in the health sciences fields, but also in liberal arts studies such as sociology, anthropology, economics and especially as a requirement for many graduate studies programs in such fields.

The great achievements of public health in the twentieth century were outlined by the US Centers for Disease Control showing that health and life expectancy in the USA improved dramatically, as it did in all industrialized countries. Since 1900, average lifespan lengthened by >30 years; 25 years of this gain were attributable to advances in public health. This includes: control of infectious diseases through water safety and sanitation, improved medical care and immunization; motor vehicle safety; safer workplaces; reduced mortality from coronary heart disease, strokes; safer and healthier foods; healthier mothers and babies; family planning; fluoridation of drinking water; and recognition of tobacco as a health hazard. The list included many topics in which the medical practitioner plays a key role and others where regulatory and legislative functions are the key to health promotion, such as in anti-tobacco legislation and in food fortification.

The UK tradition in epidemiology is rich and goes back a long time before the Broad St pump, let us say to James Lind and his classic controlled trial of treatment of scurvy in 1747. More recently, the UK Science Council studies in 1991 established than folic acid taken by women before pregnancy reduces the incidence of neural tube defects. Yet, while mandatory fortification of flour has been implemented in more than 50 countries including Canada, the USA and many countries in Latin America, the Middle East since 1998, the Food Standards Agency recommendation in 2007 proposed mandatory fortification of British flour has not yet been adopted in the UK.
The medical students are part of the medical community of tomorrow. If they are not exposed to such ideas, how can they understand this broad scope of public health and its multi-dimensional societal aspects? How can they deal with the growing evidence base and public awareness of nutrition, SARS, pandemic influenza, new vaccines, chronic diseases and many other public health challenges?

A New Public Health should be part of the educational curriculum of medical schools as well as those of nursing, pharmacy, basic medical sciences and all other health sciences, but also in the social science faculties. Anthropologists, sociologists and economists should have basic knowledge of the history of population health, which is one of the important subjects of their disciplines to study.4

The goals set out for education in public health by the General Medical Council are reasonable and achievable. Whether graduate studies in public health should be is another issue. The context of postgraduate education for public health is one which might also benefit from review in the UK, as suggested by the authors. Public health training in the UK is mainly located in Departments of Public Health within Medical Faculties, and under the specialty requirements of the Faculty of Public Health. This tradition may need revision in years to come, in view of the multi-disciplinarity of the profession and its standards. A greater degree of independence from medical specialty requirements may become essential to meet the broader requirements for population health for eligibility for grants for research and for student scholarships in the future.

Seen from abroad, the great UK traditions of public health may need revitalization in keeping with international best practices in undergraduate exposure to public health in both preventive medicine and population or ecological health. This may involve developing schools of public health, possibly independent of medical faculties, to promote a proactive, multi-disciplinary environment for education, research, advocacy and service in a new public health to meet international accreditation standards such as may develop in Europe, as well as for medical students and for other students of health-related professions.

References