The catastrophic failures of public health

When in 1854, the British anaesthesiologist and pioneer epidemiologist John Snow ordered that the handle of a communal water pump in London be taken off, a raging cholera epidemic subsided. His action is widely recognised as one of the first applications of public-health principles for disease prevention and control. Much of the subsequent spectacular progress in public health in the 19th and early 20th centuries was due to a better understanding of microbiology and the transmission of infectious diseases, together with the recognition of the importance of clean water, hygiene, and sanitation. Physicians, hand-in-hand with engineers and town planners, had a substantial role in the planning and provision of sewage plants and water pipes, and in improving housing conditions. Following these early successes, many serious infectious diseases were prevented and even eradicated in much of the developed world by childhood vaccination programmes—another uncontested triumph for public health.

Now at the beginning of the 21st century, hardly a week goes by without further evidence that developed countries are at the dawn of an exploding new threat to population health, which will reverse many gains made by improved diagnosis and treatment. This threat is not the emergence of new infectious diseases, such as SARS or avian influenza, and it is not the potential for exposure to chemical or biological weapons. It is much simpler and less glamorous, but arguably much more difficult to combat. People are getting fatter and less physically active, and are therefore more prone to killer chronic illnesses, such as cardiovascular disease, stroke, cancer, and diabetes.

The latest figures from the Centers for Disease Control and Prevention, published last month and drawn from interviews of almost 100 000 adult Americans, confirm that more than 60% are overweight or obese. They also reveal that 39% do no physical activity in their leisure time. Still more concerning are data indicating that even young children are overweight and less active than 10 or 20 years ago. In one recent study, researchers have shown that the average waistline of children has gone up by two clothes’ sizes over the past 20 years. Many reports also indicate that poor and less well educated people are disproportionately more affected than those who are better off.

But what are public-health physicians and government policy makers doing about this state of affairs? There is no co-ordinated strategy, and there is a very poor information base on effectiveness, let alone cost-effectiveness, of interventions and health promotion efforts that are at best piecemeal, at worst non-existent. Derek Wanless in his second report for the UK Government, Securing Good Health for the Whole Population, released last week, rightly criticises the prevailing short-term target culture, the lack of clear objectives and quantification of outcomes, and the failure to take cost-effectiveness into consideration. Properly thought out prevention strategies implemented now, especially targeting young adults and children, will save the resources necessary for treatment of chronic diseases later. But where are the zealous physicians and public-health advocates of the 19th and early 20th centuries? Where is the new Jenner, Semmelweiss, Virchow, and Snow? Public health has become complacent. It is failing.

Two potentially far reaching approaches are needed. First, serious poverty-reduction strategies would enable many more people to make the right choices for disease prevention. Second, the discipline of urban planning for health needs to be strengthened. A start to encourage regular physical activity would be, for example, to turn cities and towns into safe places for pedestrians, cyclists, and children. If walking, cycling, and playing outside were incorporated into everyday activity, the recommended targets of 30 minutes physical activity per day for adults and 60 minutes for children could be achieved easily by many. In Germany and the Netherlands, 34% and 46% of urban journeys are made by walking or cycling, compared with 7% in the USA.

Perhaps much could be gained if public-health doctors were to report to Government finance departments, where at least multidisciplinary thinking is the norm. Ministries of Health, by contrast, are too subservient to professional interests and lack the range of policy intruments to tackle the real causes of poor population health. Our public-health leaders must replace prevarication with imagination.

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