

Contemporary Themes

Three types of health education

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There are at least three types of health education. The first and most common is education about the body and how to look after it. The provision of information and advice on human biology and hygiene is vital for each new generation. The second is about health services—information about available services and the “sensible” use of health care resources. But the third, about the wider environment within which health choices are made, is relatively neglected. It is concerned with education about national, regional, and local policies, which are too often devised and implemented without taking account of their consequences for health. This third type is part of the currently moribund public health tradition. At a time when many are trying to improve methods of health education at least equal attention should be paid to its content.

A typology of health education

An illustration might clarify these three different types of health education and what is meant by finding a balance between them.

The example concerns cycling. Type 1 health education would be concerned with helping the individual to cycle safely, from using clear hand signals to wearing easily visible clothing. From the perspective of promoting health (rather than preventing ill health) type 1 health education would deal with issues such as cycling and physical fitness and the associated sense of wellbeing. Type 2 might offer advice on, for example, what to do in an accident, or whether and how the older cyclist should seek a periodic medical examination.

Type 3 health education, on the other hand, would be concerned with public understanding of how to create a safe and healthy environment for cycling. It could cover the costs of building safe and attractive cycleways and the comparative costs of different forms of transport; the practicalities of designating certain roads (especially those leading to schools) as “cycle roads” and restricting vehicles; Dutch (and other extensive) experience of cycleways and traffic regulations that protect the cyclist; and education about the results of surveys indicating that a high proportion of people would cycle if it were made safer and more congenial¹—and so on.

This example suggests that health education restricted to types 1 and 2 is partial to the point of being socially irresponsible.

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Social responsibility is not discharged merely by inculcating safer cycling habits—on lethal roads. On average, we kill 17-18 people a day on the roads, of whom, typically, one is a pedal cyclist.² Education should also be concerned with developing a transport policy to allow cycling under sane conditions.

Type 3 health education and health policy

The concept of type 3 health education is highly relevant to a wide range of policies (as opposed to an activity such as cycling) in which health issues are currently given scant regard—for instance, agricultural and food policies. Food consumption patterns are shaped by national and international policies apparently untouched by health considerations, such as prices and subsidies decided by the EEC or because of Cabinet concern for the balance of payments. Health educators could help people gain insight into the current restrictions in their choices about what they consume.

Transport is another area where a type 3 approach to health education would be valuable. Health educators could help local and national efforts to lower the overall need for transport (by, for example, encouraging greater local and regional self-sufficiency in goods and services). They could also inform people of the health implications of different patterns of transport, from relatively hazardous forms (such as motor vehicles and especially motor cycles) to safer and otherwise healthier methods, such as use of railways and waterways, cycling, and, not least, walking.

Agricultural, food, and transport policies are part of a much broader issue that should be of concern to health educators—the extent to which we live in a society that too often damages rather than promotes health. Many contemporary health problems result from what may reasonably be characterised as a religion—our preoccupation with economic growth. The serious and adverse health consequences of pursuing indiscriminate economic growth have been described extensively elsewhere^{3 4}; suffice it to say here that health education should, in the last analysis, contribute to developing a society based on an economy that promotes health and wellbeing rather than one that too often pursues “wealth” at the expense of health.

Health education in relation to tobacco smoking illustrates this. Without denying the valuable contributions of Action on Smoking and Health (ASH), the national health education organisations, the Royal College of Physicians, and the notable stand taken by Sir George Young, Parliamentary Under-Secretary for Health,⁵ there is still a gross imbalance between types 1 and 2 and type 3 education in relation to smoking. Insufficient attention is paid to what might be called the “tobacco-promoting environment.” The common assumption is that the Government is too dependent on tax revenues from tobacco to take effective action against smoking, particularly at a time of economic recession and cuts in public expenditure. The public is rarely informed, however, that income from tobacco advertis-

ing is seen by some as being critically important for the survival of an advertising-dependent press. (Dr David Owen went on record, when Secretary of State for Health, as stating that this was the issue that prevented stronger action.⁶)

Equally, much greater understanding is required about such issues as how far smoking acts as a tranquilliser in an over-pressured society and about means of reducing damaging stress; the use of tobacco as "one of the few pleasures in life"; the role of multinational companies and the possibilities for structural changes in tobacco firms and tobaccoists (ranging from greater diversification to nationalisation or municipalisation); the pressures on politicians and civil servants.

How goods are produced, as well as what is produced, is also an important health issue. Many jobs damage health either directly (through exposure to chemicals, unsafe machines, and so on) or indirectly (through destructive stress or boredom). Furthermore, it is not commonly recognised that the experience of being out of work involuntarily may contribute to illness and death.⁷⁻⁸ The disabling effects of both unchosen unemployment and damaging employment can be solved only through changes in the organisation and meaning of work and the creation of more socially useful employment that would, for example, tackle as a matter of urgency problems such as inadequate and badly insulated housing. The initiatives of the Lucas Aerospace Shop Stewards Combine in going over to health-promoting products⁹ and the work of the Centre for Alternative Industrial and Technological Systems¹⁰ show that this is not as Utopian as is commonly supposed.

Clearly, for individual health educators to stimulate and encourage change in the complex patterns of national policies is extremely difficult. National associations of health professionals and other groups could, however, have an important influence. Indeed, a few national associations to some extent already undertake activities of precisely this nature. A seminal report by the Council for the Education and Training of Health Visitors, for example, concluded that "... the health visiting profession has a responsibility to influence policies that affect health and in order to achieve this, health visitors will have to engage in political activity."¹¹ Such adult approaches to "politics" must be applauded and others encouraged. The reports of the Royal College of Physicians on smoking and the BMA's recent report on alcohol dependence are other illustrations. Professional associations could do much more to act as "type 3" educational groups.

Much of this section has been concerned with the need for type 3 health education about national policies. We must, however, mention a complementary version, particularly suited to local problems. This has been dubbed, by J Hubley in a paper at the 10th International Conference on Health Education, September 1979, the "community development approach to health education." It has its roots both in developing countries and in the American "war on poverty" in the 'sixties. Some pioneering work in Scotland has suggested that it can have an impact in areas of multiple deprivation where types 1 and 2 health education have met with little success. The essence of this approach is that health educators enter into a dialogue with the community, encouraging its members to articulate their needs, and conveying skills and information to help them take action to overcome health and related social problems.

Also at the local level, health educators could direct a strong effort towards outdated nutritional practices within institutions, such as menus in schools, colleges, and hospitals. They could help to "make the healthier choices the easier choices" in such notorious trouble spots as school tuckshops, confectioners, and checkout points in supermarkets by, for example, encouraging the replacement of sweets by inexpensive fresh fruit and nuts. They could stimulate teachers in schools and colleges to teach sound nutritional principles and practices in "home economics" classes and thereby end much unwitting *miseducation*. Health educators could also help people to discover neglected but valuable foodstuffs, such as pulses and wholemeal products, including pasta.

Type 3 health education and the public health tradition

Type 3 health education is sensitive to the dynamic relationships of people with their environments. These ecological and political concerns place it firmly within the public health tradition. Indeed, "human ecology" is a contemporary synonym for public health. Some of the lessons to be learnt from the history of public health may reinforce the previous argument. The more important battles for public health (the battles to change the environment rather than individuals) have the following characteristics in common.

Firstly, public health is a "social change movement." The problem of sewage in drinking water was not solved by ignoring the environment and appealing to individuals to boil their drinking water. In contemporary terms, responsibilities for public health are not met simply by telling people to "look after themselves," to "adopt healthy lifestyles," and to "be responsible."

Secondly, precisely because public health is a social change movement, it tends to be opposed by all of the essentially conservative forces in society, from those deliberately preserving their financial interests—for example, the controllers of the transnational companies—to the majority of economists, whose guiding assumptions were formed in a world where oil was plentiful and pollution apparently peripheral. (The heads of most of our economists probably represent the most serious of Britain's problems with obsolete capital equipment. The difficulty, however, seems to be worldwide.)

On this subsidiary theme of the pervasive opposition to public health, we must refer to another form of health education increasingly common in both the Western and Third Worlds, which might be called "pseudo-health education" (M Daube, personal communication). This is the commercially sponsored educational material found everywhere from classrooms to hospital wards. It is issued by virtually every major company, marketing board, and council: Flora and the Milk Marketing Board are just two examples. The "free" or subsidised posters, leaflets, and other publications issued by such bodies have an air of neutrality, which may at least to some extent conceal the promotion of legitimate but different and frankly commercial interests.

Chadwick and others, in their attempts to provide clean drinking water, were opposed not only by the city fathers and the civil engineers but by most doctors. Equally regrettably, the medical profession joined the churches in opposition to the birth control campaigners such as Annie Besant and Francis Place. Effective public health is never "conventional wisdom" but rather, as the Swedish director of health education is reported to have said, "raising hell to reach heaven"—constructive but peaceful social change for health.

Conclusion

Our argument has not strayed as far from a typology of health education as it may seem. The public health tradition appears moribund, the specialty of community medicine having largely become "illness service administration."¹² Nevertheless, "it is by no means too late for a change in direction."¹³ The present context is a difficult one for type 3 health education but it may be ripe for change.

We are encouraged to note, for example, that the latest paper issued by HM Inspectorate on health education in the secondary school curriculum¹⁴ recommends a balance between all three types. Content should "include knowledge and consideration . . . [of] the structure of the human body, and its physical and emotional functions" (type 1); "social and medical services" (type 2); and "the influence of social and environmental factors on personal and community health before and after birth—for instance, quality of housing; opportunities for leisure; drugs; alcohol; smoking; pollution"—(type 3).

Increasing attention is being paid to "developing more

effective methods and . . . monitoring and validating existing and new techniques" for health education.¹⁵ While more evaluation of how best to transmit "healthy" messages is welcome, it can distract from the careful scrutiny of what is being transmitted. Increased "effectiveness" can come from improving means of communication, but it currently seems more likely to result from changing the content and focus of education.

A discussion of such issues should address the equally important questions of whose job it is to undertake type 3 health education, who should provide the resources, and what forms of training are most appropriate. At a time when health professionals are under great pressure and not infrequently denigrated as "unproductive workers," careful thought needs to be given by all those concerned to the most effective means of organising health education.

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Lesson of the Week

Unusual presentation of appendicitis

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Acute appendicitis may present in unusual ways, particularly in the elderly. Consequently this treatable condition must be considered as a possibility in a variety of clinical problems.

Case report

A 72-year-old man was admitted to hospital as an emergency with a five-month history of upper abdominal pain and intermittent vomiting of darkly coloured vomit. Five days before admission his symptoms had worsened and he had been vomiting continuously. Four days before admission his right thigh had become swollen and painful, and he had great difficulty in walking. He had had to stay in bed and had two rigors. He gave no history of malaena or injury to his right leg, but he did suffer from angina, which was controlled with atenolol.

On examination he was pale, cold, and clammy, and clearly very ill. His temperature was 36°C, his pulse 88 beats/min, and his blood pressure 96/50 mm Hg. The result of examination of his heart was normal, but he had fine crepitations over both lung bases. His abdomen was distended, but there were no localising signs, and his bowel sounds were normal as was a rectal examination. His right thigh was externally rotated, swollen, and warm, and there was erythema over the medial aspect; it was tender all over, and we could elicit crepitus. His femoral pulses were feeble on both sides. His haemoglobin

Creptant cellulitis of the thigh may be caused by perforation of a retrocaecal appendix into the retroperitoneal space.

concentration was 16 g/dl, and his white cell count $11 \times 10^9/l$ ($11\,000/mm^3$), of which 87% were neutrophils. His blood urea concentration was 16.7 mmol/l (100 mg/100 ml), and his blood glucose concentration 10 mmol/l (180 mg/100 ml). Pus aspirated from the right thigh grew *Bacteroides* and *Streptococcus faecalis*, but there was no growth on blood culture. Abdominal radiographs showed normal distribution of gas in the bowel, and radiographs of the right thigh showed gas in the soft tissues (fig). There was no air under the diaphragm or in the abdominal wall.

Despite treatment with intravenous gentamicin, cephaloridine, and corticosteroids, the patient died from peripheral circulatory failure 18 hours after admission. Necropsy showed a retrocaecal appendix, which was 9 cm long and normal apart from the tip, which was embedded in the wall of an abscess cavity 5 cm in diameter. Infection had spread into the right psoas muscle and into the muscles of the upper right thigh, but there was no evidence of femoral vein thrombosis.

Discussion

Non-clostridial creptant cellulitis is rare, but it has been reported after severe trauma, incomplete irrigation of wounds,

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