TRENDS IN HEALTH POLICY: LESSONS FROM AN INTERNATIONAL PERSPECTIVE[1]

ALEX ROBERTSON
DEPARTMENT OF SOCIAL ADMINISTRATION
UNIVERSITY OF EDINBURGH

At the time of its inception in 1948, it was widely believed by planners, politicians, practitioners and the public that, following a period of initial heavy usage as the backlog of hitherto untreated illness received attention, the scale and cost of the National Health Service would decline as the amount of illness in the population was reduced. This expectation itself reflected two fundamental, related and erroneous assumptions. First, health 'needs' were construed as finite. Once the barrier of cost had been removed, and the needs arising from untreated sickness had been dealt with, only a maintenance level of medical provision would thereafter be required. Second, the path to health was presumed to lie through the provision of medical services. It was assumed that, by achieving the effective deployment of and universal access to medical resources through the administrative unification of available services, a high level of health would be guaranteed.

To take the latter point first, it is something of a truism that what the NHS provides is in fact a national *sickness* rather than a national *health* service. The efforts of the NHS, in other words, are concentrated on dealing with diseases once they have appeared, rather than on the development of policies for the prevention of disease and the promotion of positive health. In this respect, the UK shares a common pattern with other Western countries. The last forty years have seen the most dramatic expansion ever in medical knowledge and technology. This expansion has emerged within, and tended further to consolidate, the dominance of clinical medicine. An important consequence of these developments has been that medicine has become increasingly specialised and dependent on

(expensive) hospital-based facilities (Mechanic[2]; Illich[3]). As against this, the work of McKeown[4], Powles[5], Illich[3] and Smith[6] indicates that the contribution of clinical medicine to the dramatic decline in the rate of mortality from infectious diseases over the last century has in fact been relatively small. According to these authors, this reduction can be attributed largely to improvements in nutrition and the general living standards of the populations of developed countries, rather than to medical interventions, including immunisation programmes (although these again emerge as more important than advances on the clinical front).

With reference to the notion that health needs are finite, experience subsequent to the NHS's introduction has demonstrated this assumption to be false. One of the most important trends to have emerged in developed countries during the course of the present century has, as indicated above, without doubt been the transformation that has taken place in the patterns of illness which befall the populations of such nations. As infectious diseases have abated, so especially has infant mortality diminished and the proportion of the population surviving into the middle and later years of life expanded. Medicine has in consequence now increasingly to cope with the mainly chronic and degenerative conditions which beset old age. Tuberculosis, influenza, typhoid and diphtheria have been supplanted by cancer, rheumatism, arthritis, afflictions of the respiratory tract, mental disorder and heart disease as the main problems calling for medical attention in industrialised societies (e.g. Omran[7], Lalonde[8], Parry[9], Milio[10,11]). As opposed to the relatively brief and normally well-defined (acute) disease process of infectious illness, degenerative diseases are chronic as to duration, insidious in their onset, and irregular and episodic in their manifestation of symptoms (Wadsworth et al.[12]).

These developments have profound implications for both the content and the shape of medical services in advanced societies. Zola and Miller[13], for example, point out that 'success' in treating chronic conditions tends to be judged by relative rather than absolute criteria. Traditional notions of 'disease' and 'health' lose most of their relevance (see also Oldham[14]). Improvement rather than complete cure becomes the target of medical intervention. Concepts of 'adaptation' and of behaviour which is more or less 'successful' given the context in which the patient has to act, take the place of more categorical notions. The medical contribution to dealing with such problems may largely be defined as those of support, maintenance and repair, rather than of recovery and cure (Mustard[15]).

Contrary to the expectations of its founding fathers, therefore, the NHS has seen neither a reduction in the 'need' for its services, nor a decline

in the proportion of national resources requiring to be spent on it. In fact, and in common with all other countries of the Western world, the United Kingdom has, over the last thirty years, had greatly to expand the proportion of her Gross National Product that is devoted to expenditure on health (e.g. Ehrlich[16], Maxwell[17], Wing[18], Swedish Institute for Health Economics[19]). Apart from the change in illness patterns and the (in part) resultant increase in demand for medical services, any attempt to provide a satisfactory explanation of these trends would clearly also require to note the advances – indicated above – which have taken place in medical technology, and the cost of providing such facilities; the labour-intensive nature of medical care, coupled with the rise in manpower costs of the last several years; and the rise in public expectations of what constitute acceptable standards of care for groups like the mentally ill, the handicapped and the elderly who have often been neglected in the past. It may, however, be worth adding that the UK has been rather more successful than most countries in containing the rate of that increase – probably in large part because such decisions are taken within a political arena, as part of the annual budget allocations, in which the claims of health care must vie with other appeals for expenditure priority (e.g. Klein[20]).

Policy Responses

The pressures generated by these financial and medical demographic trends have elicited two general types of response from health care systems. First, is a series of attempts to cater for increased (or at least undiminished) levels of demand whilst holding the cost of the service constant – essentially through better management of those services – as is obviously reflected in the approaches criticised by David Hunter and Robin Milne in their chapters in the present volume (see also Bevan et al[21]) and through improving the 'effectiveness' and 'efficiency' of existing treatments (Cochrane,[22]), McLachlan[23], Clark and Forbes[24]). In recent years, of course, the claim has also been advanced that these objectives might best be attained by expanding the private sector for medical care. The second approach – reducing people's dependency on health services – has been a development primarily of the last few years. One aspect of this has been the emergence of initiatives designed to promote 'self-help' in dealing with medical problems (Robinson and Henry[25], Hatch and Kickbusch[26]). Second, is a range of preventive strategies, introduced with varying emphases and in various settings internationally, which will form the main focus of the remainder of this paper.

Prevention and Degenerative Disease

The potential for preventive programmes in dealing with degenerative disease has been widely acknowledged within the NHS. The consultative document on 'Prevention and Health'[27], prepared jointly by the Health Departments of Great Britain and Northern Ireland outlines historical trends and regional and social-class variations in different types of disease, together with some of the scientific, ethical and other issues related to the development of preventive strategies. The Scottish Health Education Group (formerly the Scottish Health Education Unit) and the Health Education Council have done valuable work in promoting and conducting research and evaluation on health education activities, identifying priority areas for health education at national level and drawing up programmes of health education for promotion both nationally and locally (Yarrow[28], Woodman[29], Billington and Bell[30], Billington et al[31], Sutherland[32]). Among other things, the Scottish Health Education Unit produced various reports on patterns of alcohol use, particularly among young people, and was followed by the DHSS with a discussion document on 'Drinking Sensibly'[33]. Interesting discussion papers have also been produced on safer pregnancy and childbirth[34] and avoiding heart attacks[35].

When, however, one searches for more explicit policy statements, the picture appears rather less impressive. The purpose of the SHHD[36] memorandum on 'The Way Ahead' was (p.3) to 'set out guidelines for the development of the Health Service in Scotland for the next few years'. The last of the six 'main principles' identified as priorities is the:

> 'encouragement of preventive measures and the development of a fully responsible attitude to health on the part of the individual and the community'.

But despite a claim that these principles are to be 'developed in detail in the memorandum', the proposals for prevention amount to two paragraphs (*ibid.* pp.19-20), drawing the reader's attention to the DHSS[27] 'consultative document'; encouraging Health Boards and the Health Education Unit to increase resources for health education; exhorting local authorities to sustain their existing level of commitment to environmental health matters; and, with a comment on the state of Scottish dental health, urging Health Boards and Regional Councils to give serious consideration to the question of fluoridation of water supplies.

The equivalent English document is labelled 'Further discussion of the Government's National Strategy'[37] and devotes six paragraphs to preventive matters, in the course of which it is stated that one of the principal aims of preventive initiatives should be to encourage individuals

to accept greater responsibility for their own health. The report stresses the potential role of community health services in the early detection of disease and in giving health advice to individuals. The remaining paragraphs point to the desirability of increasing the number of Health Education Officers; argue that 'every effort should be made' to increase the rate of take-up of vaccination programmes; point to the benefits of family planning and health authorities' responsibility for training staff in this field; and refer to the preventive role of statutory and voluntary social services in work with children and in giving temporary relief to families caring for handicapped or 'disturbed' relatives (*ibid.*, pp.8-9).

Scottish (and English) preventive strategies are therefore based on attempts to change individual behaviour through health education; support for vaccination and environmental health services; and statements about the need for integration between health and social work services. Two principal conclusions perhaps emerge from this review. First, and even allowing for the complexity of the issues the documents are addressing, the 'strategies' appear as sets of modest, discrete and not terribly well-connected elements which seem likely to provide only partial coverage of the problems they are addressing. Second, and perhaps reflected in the first, is the fact that the search for appropriate responses tends to be conducted within the limits set by existing administrative/service structures and responsibilities.

The UK health services are not of course alone in the relative paucity of their present policies for preventing chronic disease (e.g. German Federal Centre for Health Education[38]). But in the case of Scotland at least, there is perhaps some cause for surprise in the total lack of any reference to developments in two nations – Canada and Norway – with which this country has traditionally had rather close links, and in which innovative and interestingly-contrasted approaches to health promotion are currently being implemented. Let us compare these two separate developments and discuss their potential relevance for preventive policies in Scotland.

An International Comparison

The Canadian Approach

The Canadian Government's publication of its 'working document' on *A New Perspective on the Health of Canadians*[8] represented an undoubted landmark in thinking about preventive strategies for dealing with the health problems of developed countries. The document is

remarkable for its vigour of expression and for the general clarity of its analysis, as well as for its willingness to accept and promote what are at one level fairly radical conclusions.

The 'New Perspective' essentially presents a plan for the health of the Canadian people. It proposes a shift in approach from that which informed previous reports on health care policies in Canada. These had been primarily concerned with the organisation and provision of health services[39,40]. The 'New Perspective' focuses on the causes of health and illness as these relate especially to Canada, and their implications for the prevention of illness and the development of programmes for the promotion of (positive) health.

Lalonde's report proposes a conceptual framework for health care – the 'Health Field Concept' – which outlines the directions from which health problems should be approached, and which is presented as a workable basis for the development of health services in any country. Health services are placed in the context of the 'Health Field', which is seen as comprising four broad sets of elements which affect an individual's health. The component parts of this health field are[8,pp.31-32]:

(a) *Human Biology* – defined as 'all those aspects of health... which are developed within the human body as a consequence of the basic biology of man and the organic make-up of the individual'. It includes the various body systems, genetic inheritance, the processes of maturation and ageing, etc.

(b) *Environment* – which 'includes all those matters related to health which are external to the human body and over which the individual has little or no control'. In addition to such factors as pollution and control of the quality of food and drugs, this element also recognises the importance of stress and the effects of rapid social change as factors in ill-health.

(c) *Lifestyle* – which consists of all of the 'decisions by individuals which affect their health and over which they more or less have control'.

(d) *Health care organisation* – which is seen as comprising 'the quantity, quality, arrangement, nature and relationships of people and resources in the provision of health care'.

The health field concept offers several advantages as a framework for understanding health problems. First, it points to the importance of factors

other than health services within the field of health. Second, it is comprehensive, in that health problems can be traced to one or other of these elements, or to a combination of them. This means that, in principle, it becomes possible to plan health policies more effectively, with due recognition of the potential contribution of the different elements to health problems and solutions. Third, the notion of a 'health field' permits one to analyse the relative significance of each of the four elements, as well as the interactions between them, as causal factors in illness and death. Planners of preventive programmes can thus focus attention on the factors that are most important for any given problem. The document cites the example of death from traffic accidents, in which analysis indicates that the main factor is risks taken by individuals (lifestyle) with lesser importance given to the design of cars and roads (environment) and the availability of emergency treatment (health care organisation). Related to this is a fourth feature, in that the health field concept permits a further sub-division of factors. With traffic deaths, for example, the influence of lifestyle can be further disaggregated to the risks associated with driving under the influence of alcohol or drugs, carelessness, failure to wear seat belts, and speeding.

The health field concept thus provides an original and important tool for the determination of policies and priorities. It has the potential for identifying unexpected or hitherto unrecognised factors in the causation of death and illness. In particular, it places health services in a broader context and so allows one to make a rational assessment of the extent to which investment in them, relative to other elements, is likely to produce an effective return. Within such a framework, public policy can also be co-ordinated; so that the work of government departments responsible, for example, for roads and industrial developments can be related in a systematic way to the concerns of those departments more explicitly concerned with health, rather than leaving those relationships to proceed in the *ad hoc* and fragmented way in which developments have traditionally tended to take place.

Priorities and Strategies

With its emphasis on prevention, the Lalonde document undertook an analysis of the major causes of premature death in Canada by re-analysing mortality statistics for 1971. In order to do this, the report introduced a new concept, that of potential years of life lost, or PYLL (Lalonde[8], Chapter 3; see also Romeder and McWhinnie[41]). A death occurring between the ages of 1 and 70 is, by the Lalonde definition, a premature death, with the number of years before the age of 70 at which a death occurred giving the PYLL figure. Thus, a man dying of lung cancer at the age of 44 would

contribute 26 (70 – 44) PYLL to the total for the appropriate disease category.

An analysis using this measure identifies ischaemic heart disease, road accidents and other types of accidents as the three main causes of premature death among males; for females, the main factors were motor vehicle accidents, diseases of the respiratory system, and other types of accident. Because all of these result to some degree from known factors in the environment, lifestyle and human biology, it is argued that, if the health of the Canadian nation is to be enhanced, it will be necessary to shift the balance of effort and commitment away from simply providing health services, towards a more preventive policy. It is, however, argued in addition (Lalonde[8], p.37) that the shift of emphasis towards attacking the causes of illness will not jeopardise existing commitments to the provision of services. If the incidence of illness can be reduced by prevention, then the cost of present services will decline. The problem is seen as a collective one, in that the causes of illness are thought to be embedded in Canadian society, and the cost of their treatment shared throughout society. Consequently, solutions will involve the entire nation.

Working therefore towards the two broad objectives of (a) reducing health hazards for 'high-risk populations' and (b) improving the accessibility of good health care facilities for those whose present access is unsatisfactory, it is suggested that the health field concept leads to five broad categories of strategies for future action. These strategies are (Lalonde[8],p.66 et seq; see also Gellman et al.[42]):

(i) *A health promotion strategy,* which comprises a set of twenty three more specific strategies aimed at informing, influencing and assisting individuals and organisations to accept more responsibility for their own health. More specific strategies involve programmes of education on nutrition; intensive use of recreation facilities; identification of high risk groups in the population; and the development of a home fitness test (the Fitkit) to enable Canadians to evaluate their own physical state.

(ii) *A regulatory strategy,* which is aimed at using the regulatory powers of the Federal Government to reduce hazards to health and encouraging and assisting the various provincial governments to use their legislative powers to the same end. The eight more specific strategies drawn together under this heading include such proposals as regulations for improving the nutritional content of food; laws governing the use of seat belts; and increased control over health

hazards from pollution, radiation, etc.

(iii) *A research strategy,* designed to help discover and apply the knowledge required to solve health problems. The fifteen strategies suggested for inclusion under this rubric essentially relate to the development of a research programme on the underlying causes of fitness, sickness and death; the development of more effective statistical indicators; and research on the relative effectiveness of different forms of health care provision and approaches to changing behaviour.

(iv) *A health care efficiency strategy,* the objective of which is to help the provincial governments (which of course in Canada enjoy a high degree of autonomy from the Federal Government, having primary responsibility for administering their own systems of health care within broad Federal standards) reorganise their health care systems so that the three elements of cost, accessibility and effectiveness 'are balanced in the interests of Canadians' (Lalonde[8]p.66). It comprises twenty suggested strategies, which cover such possibilities as financing health care in such a way as to provide incentives for providing satisfactory care at the lowest cost; training programmes for various types of health professionals; and the introduction of measures, including the use of expert committees, to diminish the time between the development and application of knowledge.

(v) *A goal-setting strategy,* comprising seven suggested strategies with the purpose of setting specific targets for health improvement, and improving the efficiency of the system of health care. These targets include specified reductions in the incidence of mortality and morbidity from particular diseases, with specific dates by which such reductions are to be achieved; setting standards for both the mental and physical care systems; and the extension of national nutrition standards to include definite recommendations on safe levels of intake for hazardous substances occurring naturally in food.

An Evaluation

Given the two general objectives of reducing health hazards and improving the accessibility of health care, the health field concept accordingly made it possible to develop a conceptual framework comprising five main strategies and seventy four specific proposals within which health issues can be analysed in full perspective, and health policy developed for future years. From the point of view of prevention, the

approach suggested is to identify those members of the Canadian population who are at high risk in relation to major health problems, and to devise programmes aimed at reducing these risks. The route to the achievement of these goals lies, with the guidance provided by the health field concept, through the application of knowledge, faith and political will; and a concerted effort by professions, scientists, education, government, industry, voluntary associations and private citizens (*ibid.* p.63). Several points need to be made about this analysis. Let us concentrate first on the health field concept.

Although human biology is included in the health field, and comment is made on the crucial role it plays in dealing with such costly diseases as arthritis, diabetes, atherosclerosis, cancer, mental retardation, genetic disorders, and congenital malformation, the discussion of this element is not really expanded very much further. The analysis therefore effectively concentrates on environment, lifestyle and health care organisation.

It is therefore at least implied that the development of preventive policies around the area of human biology will at this stage be heavily dependent on further basic research. At present, it would seem that the most likely path for the development of policy related to human biology traverses the territory of genetic research. Knowledge about the inheritance of genetic disorders resulting in serious disease makes it possible, through genetic counselling, contraception and therapeutic abortion, to reduce the incidence of serious genetic disorders. According to McKeown[4,43] there are three sets of issues which need to be considered before wholeheartedly attempting to develop preventive programmes. These relate to questions of ethics, effectiveness and desirability. Under the ethical question, would it be right (morally or otherwise) to control human breeding? Genetic programmes are in danger of reducing human beings to the status of objects, and this raises religious and other objections.

From the point of view of effectiveness, McKeown points out that knowledge is at present very obscure. How many conditions, for example, are due to a single gene? And if conditions are recessive or polygenic, how effective are counselling or other kinds of programmes likely to be? How meaningful is it, for example, for potential parents to be told that they have a one in four, or a one in eight, etc. chance of producing a genetically-disordered offspring? McKeown also makes the point that mutation is not an insignificant factor, though not the most common element in genetic disorders. Again, this points to the inadequacy of knowledge in this area at present. Finally, McKeown suggests that it is worth at least raising the question (closely related to the ethical issues alluded to earlier) of whether

it is desirable that a society should aim to control its breeding in such a way as at least to increase the proportion of genetically well-endowed people; and potentially, to restrict its further progeny to those with what are deemed to be 'acceptable' genetic characteristics.

Whilst it is obviously important, from a scientific point of view, that research on these matters should continue, the issues pointed to above would seem seriously to undermine the preventive potential of genetic approaches.

Environmental concerns transcend the traditional public health measures of sanitation and immunisation, and protection from pollution and harmful consumer goods. Aspects of rapid social change are included as necessary for a full environmental analysis. For example, the economy is on the one hand linked to attitudes causing ill health and death, which are considered (Lalonde[8], p.5) the 'dark side of economic progress'; whilst on the other hand, and in particular in relation to occupational health, the 'protection of economic activity' should form 'a healthy balance' with concern for (*ibid.*) the 'quality of the environment and life' to foster individual development. This represents a move into territory identified by the (Canadian) Royal Commission on Health Services[39] as important, but beyond its terms of reference. Action over environmental causes is seen as beyond the individual's ability and is thus accepted by the Lalonde report as the responsibility of the state.

Life style is the 'aggregation of decisions by individuals which affect their health and over which they more or less have control'(Lalonde[8] p.32). In consequence (*ibid.* p.26):

> 'individual blame must be accepted by many for the deleterious effect on health of their respective lifestyles. Sedentary living, smoking, over-eating, driving while impaired by alcohol, drug abuse and failure to wear seat belts are among the many contributors to physical and mental illness for which the individual must seek some responsibility and for which he should seek correction'.

It is, however, accepted (*ibid.*pp.36-36) that it is often difficult to separate environmental influences from individual choice, because the former can influence the latter. Yet, a perspective on health policy which holds a person responsible and consequently able to choose expresses (*loc.cit.*):

> 'faith in the power of free will, hobbled as this power may be at times

by environment and addiction'.

Thus, in the interests of fostering individual freedom, but with an eye to the influence of the environment, and despite the difficulties of isolating the two as independent forces, the individual is held responsible.

This is an immensely important point. The range of measures available to governments in their attempts to change people's eating, exercise, smoking and other habits essentially consists of legislation, taxation and persuasion. With respect to legislation, there is of course a continuing debate over the rights of individuals to choose to indulge in 'unhealthy' or high-risk activities such as driving without a seat belt or crash helmet, and of the rights of governments to penalise them for doing so; but one does not wish to enter into that argument here. Fiscal measures are of course widely (if rather unsystematically) used; although McKeown[43] makes the interesting point that the potential for the differential use of subsidies for 'healthy' products and taxes on 'unhealthy' products has been nothing like sufficiently recognised. But while recognition is given in the Canadian document to such fiscal and legislative possibilities, by far the greater emphasis in the argument and in the development of programmes since its publication has been on changing life style through the 'softer' approach of advertising and persuasion.

There has of course been considerable discussion over the relative merits of attempts to effect lifestyle changes through 'blanket' programmes of advertising aimed at all members of the community, as opposed to identifying 'high-risk' groups of individuals in the community and concentrating one's efforts on them (see, for example, Stern et al.[44], Blackburn[45], Farquhar et al.[46], Breslow[47]). The Stanford Three Cities Project[46] indicated that substantial changes could be introduced in life style through a general programme of advertising (backed up in certain cases by instruction and discussion) throughout a community; whilst the Multiple Risk Factor Intervention Trial (the 'Mr Fit' programme) indicated the success of the selective approach with high-risk individuals. As demonstration projects, however, both of these experiments suffer from the fact that no follow-up investigation was conducted, to determine how permanent or otherwise are any changes produced by such methods; and Gray and Blythe's[48] review of health education programmes leads them to be rather pessimistic about their effectiveness (see also certain of the papers in Billington and Bell[30] and Billington et al.[31]).

Two sets of issues are raised by such approaches. First, is the obvious and basic problem of knowledge. This is recognised, of course, in the

specification within the 'New Perspective' of a research strategy. Given the complexity of the aetiology of most degenerative diseases – with what seems likely to be a multifactorial pattern of causality in most instances (Oldham et al.[14], Morris[49], Wadsworth et al.[12]) – and given also that one has to depend on fairly complex inferences from probabilistic statistical data, is one ever likely to acquire a sufficiently secure knowledge-base to provide an indisputable foundation for any preventive programme (see, for example, DHSS[27]pp.66-68; Mustard[15], Mettlin[50])? The health-risks associated with such substances as cholesterol, sugar, saccharine and refined white flour have been identified and repudiated with equal fervour. Convincing statistical arguments can still be advanced even against the assertion that smoking causes lung cancer. This problem is recognised in the working document[8],pp.57-8:

> '...many of Canada's health problems are sufficiently pressing that action has to be taken on them even if all the scientific evidence is not in. The Chinese have an expression 'moi sui' which means to 'touch, to feel, to grope around'. It reflects a deliberate approach to innovative and creative action even when scientific certainty and predictability are in question'.

Whatever type or mixture of lifestyle prevention programmes one adopts, however, one must surely also relate these to environmental factors. To attempt to change individual behaviour through personal persuasion alone is to take a rather naive and atomistic view of the position of the individual in society. Thus, one has at least to take note of the possible effects of peer-group pressures and commercial advertising on individual choices – as is in fact acknowledged in the 'New Perspective' (*ibid.*, pp.35-36). In addition, however, there are powerful commercial vested interests which make it at least difficult for individual choice to operate entirely freely. Thus, how effective are strictures against high-cholesterol diets likely to be in countries – like Canada and Great Britain – where the dairy industry is important? With particular reference to Scotland, the same question could obviously be posed in relation to alcohol and tobacco. In addition, campaigns against the consumption of bread made from super-refined flour operate at the very least under a disadvantage in countries where the mass production of such bread has led to economies of scale which make it cheaper than bread made from wholemeal flour (see also Mustard[15]).

Compared with such problems lifestyle prevention obviously presents a relatively easy option for governments to tackle. The Lalonde document pins its faith on the ability of knowledge, harnessed to collective effort and

commitment to produce desired changes. Ultimately, its stance tends to be politically naive. The history of attempts to implement policies based on the New Perspective's approach tend to highlight this problem (e.g., McEwan[51]). Lifestyle change represents the 'soft underbelly' of the health field; and it is to this area that government policies in most countries have tended to be directed, whilst other elements of the health field have been ignored. To anticipate arguments I intend to raise later, the emphasis on 'soft' persuasion-oriented approaches to lifestyle change are obviously attractive to individualistic societies such as Canada (and Great Britain). Current health policies need not only to be based on (limited) knowledge, but must also rely on the support of key groups in society. The Canadian policy is attempting to transcend the interests of the various groups concerned through rhetorical appeals which propose increased health as a national goal.

With reference to the health care system, the basic argument of the New Perspective is that previous emphasis has been on the allocation of cash for illness which has already been experienced. Such services need some improvement in terms of accessibility, efficiency, responsiveness to local needs, and more effective distribution of staff among and within them. But the services themselves are constantly claimed to be of such effectiveness that they need not be changed in order to improve health. Consequently, the main area for improvement in terms both of increasing health and reducing expenditure lies in prevention.

Certain points deserve to be noted about these arguments. First, rather than being based on analyses of the causes of *changes* in morbidity and mortality over the years, the appeal is based on statistical and causal analyses of *illness*. As a result, the question of how much and what kind of impact health care has had on health is never systematically examined. Second, the argument of the document is that health services are no longer the source of health improvement. The question obviously then becomes why? Is it because they are highly effective in dealing with acute illness, but costly and ineffective in dealing with chronic illness? In short, what is the justification for maintaining a commitment to their provision and tying further expenditure on them to reductions, due to changed behaviour, in the number of (degenerative) conditions requiring treatment by the health services? Third, to what extent will the health care system in the future be *caring*, rather than *curing*? How valid will it therefore be to maintain services at their present level? And if chronic illnesses are characterised by slow onset, with patterns of eruption of symptoms which are originally treated as acute illness, but which are very difficult to diagnose; and if the ages affected span from 40 onwards, rather than simply being the elderly,

how effective are treatment-oriented services in dealing with them[52]?

Since the commitment is to provide health services in order to meet consumer demand, it would appear that doctors' responsibilities will remain in health care, rather than health promotion. From the above, the relevant questions appear to become: (a) what is the proven effectiveness of health services?; (b) what, if any, is the role of the medical practitioner in reducing demand?; (c) in a situation where demands on the health services will continue to be met, and the doctor remains in the same relationship to the consumer as previously obtained, will this 'new perspective' make for any reduction in expenditure on health services?

Using the very basic distinction between 'process' and 'outcome' evaluation[53], there is no clear indication in the Lalonde text that 'effectiveness' means 'outcome', as distinct from 'process' or organisation of health care. One of the research strategies contains 'effectiveness' in its formulation – an evaluation of mass-screening programmes. But none of the health care efficiency strategies seems to view 'effectiveness' in terms of the ability of treatment to improve health. They deal instead with such matters as accessibility, efficient allocation of human and financial resources, and planning mechanisms.

Assessment

The 'New Perspective' therefore relies upon change in the behaviour of doctors and (more importantly) consumers to slow the rate of growth in health services, while proposing no reduction in the availability of services. It proposes an esssentially voluntary, persuasion-oriented programme, based on changing lifestyle and environment. The Canadian public is being asked to assume a major responsibility for illness and health. The document therefore strongly reinforces a traditional theme of individual responsibility; is apparently new in its support for environmental reform (although, as has been argued above, this is given much less prominence than lifestyle); but encourages both life style and environmental improvements as a means of expanding existing health services, whilst limiting the proportion of the Canadian national income which goes on health.

The working document is therefore caught on the horns of a particularly subtle dilemma. It does appear to be responding effectively to concerns about health care – in terms of both the types and cost of contemporary health problems. But it implies that a causal approach to health care will best serve the individual. The nature of the policy problem

is therefore shifted from effectiveness and control, to that of the causes of illness and health. It is accordingly implied that the road to solving modern disease trends and rising health costs is through the expansion of scientific knowledge and a co-ordinated national effort. A social policy is promulgated which seeks to harness and diffuse energy across the whole of Canadian society in order to cope with illness and foster health[52]. The problem of power and of vested interest is thereby ignored. The strategy remains primarily individualistic, being limited for the most part to government-initiated programmes in health education. For these reasons, it seems unlikely to succeed. To quote Mustard[15] for example:

> 'a nutrition policy developed and started by government will have little impact if done in isolation from the groups concerned with producing and marketing food. If such a policy is to have any hope of success, agriculture, food processing, food marketing, consumer and corporate affairs and other groups would have to be involved. If agriculture goals are set with an economic focus we will not necessarily have the best foodstuffs from a nutrition standpoint. If food processing and marketing also have mainly an economic focus, the same problems occur'.

The Case of Norway

In an article critical of contemporary developments in health policies in the West, Ringen[54] (see also Milio[11]) also comments that health policies in Norway have shared the same general trend. A Norwegian Ministry of Social Affairs White Paper[55], for example, acknowledged that the bulk of health expenditure now goes on supportive services which are not effective in promoting health. Contemporary developments represented a drain on national resources, rather than contributing to an increase in the total amount of social resources: indeed, no more than 0.2 – 0.3% of the total health budget was at that time (1976) allocated to well-defined preventive activities. In common with their Canadian counterparts, Norwegian health planners conclude that future improvements in health will depend on preventive programmes, rather than on an increase in expenditure upon, or the development of services in, the conventional health sector. And as in the case of Canada, the issue tends to remain at the level of exhortation, but without the elaboration of a set of health strategies such as are outlined in the Canadian document. As with Canada, no specific evaluation is made of the services; nor any suggestion given that reductions should take place in expenditure on these services themselves.

Norway has, however, at the same time been developing a nutrition and food policy, independent of its health policies, whose aims, methods and procedures might well serve as a model for those whose more overt responsibility is for health (Royal Ministry of Health and Social Affairs[55,56]). The policy itself relates to two major concerns (e.g. Ringen[54], Milio[11]). First, is the assumption that certain causal factors can be addressed in order to remedy specific health problems which are believed to be related to nutrition. More specifically, it is assumed that heart diseases can be reduced through a reduction in the cholesterol content of the diet; that dental diseases and diseases of the digestive tract can be remedied by reducing carbohydrates in the form of sugar and by increasing the fibre content of the diet; and thirdly, that a high prevalence of anaemia among women may be remedied by increasing the iron content of the diet.

Second, the nutrition and food policy is also motivated by a concern with the global food situation. Noting that developed countries have a diet characterised by domestic animal products, especially protein, whilst the diet of the peoples of developing countries is characterised by vegetables, especially starches and carbohydrates, the Norwegian policy is attempting to increase Norwegian domestic self-sufficiency in food and thereby reduce demand on the limited supply of foodstuffs on the world market.

By contrast with the individualism of the Canadian policy, with its emphasis on individual responsibility and change of behaviour through persuasion, the Norwegian policy attempts to manipulate the environment in such a way as to make it easier for individuals to make 'healthy' choices. Following, for example, an analysis of cardiovascular disease in Norway from 1951 to 1978 and a review of experiments in Norway and other countries relating to prevention of cardiovascular diseases[56], it is concluded that dietary measures could make for a significant improvement. It is intended that the amount of total energy intake provided by fats should be reduced by about 7% by the year 1990; and that this reduction should be compensated for through an increase in the intake of carbohydrates, whilst sugar consumption as a source of energy should also be reduced. Similarly, the use of polyunsaturated fatty acids in the total fat intake should be increased. The goal is to reduce the ratio of saturated to unsaturated fatty acids, which is at present about 4 : 1, to a level of 2 : 1 by 1990. Similar recommendations relate to the intake of fibre; and reference to the differing experiences of other countries leads the authors to conclude that iron enrichment of the diet would not be justified (*ibid*,p.16).

In order to effect these and other changes, a system of consumer and

producer subsidies has been introduced to make 'healthy' foods cheaper than 'unhealthy' ones, along with a variety of regulatory measures designed to outlaw foods which are deemed to be a danger to health. The policy has three components (see, for example, Milio[10],p.180). The first is developing a co-ordinated series of programmes of subsidies aimed at meeting national goals. Given the agreed need to expand Norway's relatively small agricultural sector, subsidies are being made to those involved in food production to invest in commodities which will help develop rural areas. In addition, domestically-produced foodstuffs are subsidised in order to make them cheaper than imported products, provided those foodstuffs contribute to nutrional goals. In particular, it was proposed that potatoes be subsidised as part of the attempt to increase the country's consumption of non-refined carbohydrates, although as yet various problems have prevented the implementation of this suggestion[57]. In order to reduce the consumption of fat, especially of cholesterol and polyunsaturated fats, margarine is favoured over butter and low-fat milk is favoured above whole milk. To reduce the proportion of fat to body-weight among animals, the system also has reduced support for concentrated animal feeds, which has also tended to diminish milk production and encourages the presence of roughage in cattle feed.

The second aspect of the Norwegian policy framework is designed to deal with problems of transferring from one form of agricultural production to another. For example, producers receive investment subsidies to enable them to purchase equipment and expand their total acreage of arable land. Base prices have been established for all products, together with a system of quotas for the production of particular foodstuffs[54].

Thirdly, a health education and information programme is being implemented, which goes far beyond the simple delineation of the health-related effects of different types of foodstuff. Its intention is in addition to improve people's understanding of food production, of the price of food, and of the private and public sector determinants of the kind of food that is available[56,54].

Like the Canadian 'new perspective', the Norwegian nutrition and food policy may therefore be seen as an attempt to apply current knowledge and thinking about the causes of common modern diseases to eradication or reduction of those diseases. However, the Norwegian policy does not commit the error of regarding individuals in isolation from their environment. The flaw at the heart of the Canadian policy is its failure to recognise and attempt to tackle the problem of power.

A recent document has also questioned the effectiveness of medical services in dealing with chronic conditions, as a means of opening a debate about ways of reducing the cost and increasing the effectiveness of those services (J. Grund et al.[58]). But with reference to the more specific concerns of this paper, Norway's nutrition policy recognises that consumers cannot effectively make choices on their own. Two major policy means have been identified for the development of the Norwegian nutrition and food policy (Ziglio[59]):

(1) An administrative framework which was set up in order to ensure the co-ordination and future continuation of the policy[55].

(2) The identification of workable means of implementation, which can be summarised as
(a) consumer education
(b) pricing policy.

In respect of the means of implementation, the nutrition and food policy is sensitive to the needs of three basic 'constituencies', namely, consumers, producers, and Norwegian social organisation. The Norwegian policy is characterised by a consensus approach, recognising and relating to the needs of producers, rather than seeking a crude confrontation with them. By contrast with the Canadian approach which attempts to transcend the interests of different groups by proposing increased health as a national and 'neutral' goal, the Norwegian policy has specified its objectives, then involved producers in the political processes necessary for setting out the procedures to attain them. As Ziglio[59] points out, Norwegians are finding that political and economic realities necessitate compromise. It was of course realised from the outset that this would be so. What was not known, and is still not clear, is the extent to which the various factions may be able (and prepared) to compromise.

Conclusions

The Canadian new perspective is based upon an important and highly intelligent analysis of the factors contributing to health. Its ultimate weakness is perhaps its assumption that knowledge obtained from this framework, in combination with goodwill, will be enough to overcome the future health problems of Canadian society. The Norwegian approach is based on a less comprehensive (though no less intelligent) analysis of contemporary health problems, but has placed the need to develop a politically-feasible set of procedures at the heart of its aproach. Any attempt to develop preventive programmes for Scotland would obviously

do well to use Lalonde's new perspective as a basis for understanding the boundaries and determinants of the health problems involved, but proceed along policy steps guided by the Norwegian initiative. Since, however, it is always dangerous to abstract social products and processes from their own immediate context, it may be worth ending with one or two caveats – less as reasons for not attempting to implement a strategy along the same lines as the Norwegian approach than as a reminder that such an implementation would need to adapt certain features to a more specificaly Scottish environment.

First, it is important to recognise that the agricultural sector in Norway is a relatively weak factor within the country's economy. By contrast with the large and 'export-oriented' Canadian agricultural system, Norway's agriculture is 'import-oriented'[(59)]. In situations where agriculture is important for the overall balance of payments (as is the case for Canada) it seems likely that it will be rather more resistant to change, particularly during periods of economic recession. In this respect, Norway was in a much easier position, at the time of the formulation of its Nutrition and Food Policy, than was Canada to make its agricultural policies consistent with the objectives of a policy for health. In this connection, Milio[(11)], for example, observes that the political action for creating structural changes was implemented at a time of growing uncertainty over essential foreign food imports and when new oil wealth became available (see also Milio[(60)], pp.176-178).

Second, Norway has a number of structural and political characteristics which perhaps make it much more possible to implement a policy of this kind than would be the case in many other countries. Ringen[(54)], for example, points out that the population is only 4 million and is extremely homogeneous in its social, ethnic and attitudinal characteristics. With respect to the agricultural sector, there has been an active relationship between farming organisations and the government over a number of years, where the latter has attempted to exert a degree of control over future developments, through a structure and tradition of decision-making built on participation by a whole range of interested parties in discussions and decisions, with an emphasis on achieving consensus policies which satisfy the main needs of the dominant groups involved, but which are also acceptable to parties with a less central stake in the isue (see also Milio[(11)]). In addition, almost all wholesale production and distribution of foods is done through producers' co-operatives, so that a structure for co-operation between farmers and the government has been cultivated over a long time; and this, according to Ringen[(54)] has probably, more than anything else, made the nutrition policy possible.

Finally, there is a factor more specifically related to our own internal political situation. A government which subscribes to the same sentiments as those voiced by Mr William Ross in 'The Way Ahead', but wedded to a rhetoric of individual initiative and responsibility seems unlikely to embrace such a policy with much enthusiasm. Consumer subsidies, for example, are not part of the current government's policy repertoire. At best, it might therefore be expected to continue its present rather lukewarm support for health education, with added superficial invocations of the notion of individual responsibility for health. But this final element is not immune to change and the two previous points merely underline the fact that we must appreciate that health promotion programmes need to integrate the question of health into a wider social, economic and political context. The potential for influencing lifestyle, and thus in the long term for improving or maintaining health, lies in the capacity to cope with such uncertainties and difficulties[(59)].

References

1. This paper is based on an article by the same author entitled 'Salute e politica sanitaria: tendenze presenti e sviluppi futuri', which appeared in G. Bertin, M. Niero and E. Ziglio (eds) *Politiche di Welfare State e Modelli Decisionali*, Unicopli, Milan, 1983.

2. D. Mechanic, 'The growth of medical technology and bureaucracy: implications for medical care', *Health and Society*, 55 (1977), pp.61-78.

3. I. Illich, *Limits to Medicine*, Penguin, Harmondsworth, Middlesex, 1977.

4. T. McKeown, *The Role of Medicine: Dream, Mirage or Nemesis?*, Nuffield Provincial Hospitals Trust, London, 1976.

5. J. Powles, 'On the limitations of modern medicine', *Science, Medicine and Man*, 1 (1973), pp.1-30.

6. F.B. Smith, *The People's Health, 1830-1910*, Croom Helm, London, 1979.

7. A.O. Omran 'Changing patterns of health and disease during the process of national development'; in G.L. Albrecht and P.C. Higgins (eds) *Health, Illness and Medicine: A Reader in Medical Sociology*, Rand McNally, Chicago, 1974.

8. M. Lalonde, *A New Perspective on the Health of Canadians: A Working Document,* Information Canada, Ottawa, 1975.

9. M. Parry, 'Health care' in R. Underwood (ed) *The Future of Scotland,*Croom Helm, London, 1977.

10. N. Milio, *Promoting Health through Public Policy,* T.A. Davis, Philadelphia, 1981, ch.2.

11. N. Milio, *Primary Care and the Public's Health: Judging Impacts, Goals and Policies,* D.C. Heath & Co., Lexington, Mass., 1983, ch.2.

12. M. Wadsworth, W. Butterfield & R. Blaney, *Health and Sickness: the Choice of Treatment,* Tavistock, London, 1971.

13. E. Zola & R. Miller 'The erosion of medicine from within' in E. Freidson (ed.) *The Professions and their Futures,* Free Press, New York, 1975.

14. J. Oldham, G. Pickering et al. 'The nature of essential hypertension'; *Lancet,* 1 (1960), pp.61-78.

15. J.F. Mustard, 'Health, Health Care and Public Policy', paper delivered to the Canadian Club on 11.1.77.

16. D.A. Ehrlich (ed.), *The Health Care Cost Explosion: Which Way Now?,* Henry Dunant Institute, Bern, 1975.

17. R. Maxwell, *A Simple Man's Approach to Health Economics,* London, 1977.

18. A Wing, 'The impact of financial constraint', in G. Scorer and A. Wing, (eds), *Decision-Making in Medicine: the Practice of its Ethics,* Edward Arnold, London, 1979.

19. Swedish Institute for Health Economics, *The Costs of Health Care: Trends and Determining Factors,* Report No.3, Lund, 1981.

20. R. Klein, *The Politics of the National Health Service,* Longman, London, 1983, ch.4.

21. G. Bevan, H. Copeman et al. *Health Care: Priorities and Management,*

Croom Helm, London, 1979.

22. A. Cochrane, *Effectiveness and Efficiency: Random Reflections on Health Services,* Nuffield Provincial Hospitals Trust, Oxford, 1972.

23. G. McLachlan (ed), *A Question of Quality?: Roads to Assurance in Medical Care,* Nuffield Provincial Hospitals Trust, Oxford, 1976.

24. E.M. Clarke and J.Q. Forbes, *Evaluating Primary Care,* Croom Helm, London 1979.

25. M. Robinson & E. Henry, *Self-Help and Health,* Martin Robertson, London, 1977.

26. S. Hatch & I. Kickbusch (eds.), *Self-Help and Health in Europe: New Approaches in Health Care,* World Health Organisation, Copenhagen, 1983.

27. DHSS, *Prevention and Health: Everybody's Business: A Reassessment of Public and Personal Health,* HMSO, London, 1976.

28. A. Yarrow, "Scotland", in German Federal Centre for Health Education, *Health Education in Europe: Organisation, Activities, Research Projects, Professional Preparation, Plans for the Future,* International Journal of Health Education, Geneva, 1972, pp.15-18.

29. G.W. H. Woodman, "England, Wales and Northern Ireland", in German Federal Centre for Health Education, *op.cit.*, pp,4-15.

30. D.R. Billington & J. Bell (eds), *Attitudes and Health Education,* Scottish Health Education Unit, Edinburgh, 1978.

31. D.R. Billington, J. Bell, M. Gass & C. Maxwell (eds), *Research in Health Education,* Scottish Health Education Unit, Edinburgh, 1979.

32. I. Sutherland (ed.), *Health Education,* Allen and Unwin, London, 1979, chapters 1 & 12.

33. DHSS, *Prevention and Health: Drinking Sensibly. A Discussion Document,* HMSO, London, 1981.

34. DHSS, *Prevention and Health: Reducing the Risk: Safer Pregnancy and Childbirth,* HMSO, London, 1977.

35. DHSS, *Prevention and Health: Avoiding Heart Attacks,* HMSO, London, 1981.

36. SHHD, *The Health Service in Scotland: The Way Ahead,* HMSO, Edinburgh, 1976.

37. DHSS, *Priorities in the Health and Social Services: The Way Forward,* HMSO, London, 1977.

38. German Federal Centre for Health Education, *op.cit.*

39. Royal Commission on Health Services, *Report,* (3 vols), Queen's Printer, Ottawa, 1964.

40. Department of National Health and Welfare *Task Force Reports on the Cost of Health Services,* (3 vols.), Queen's Printer, Ottawa, 1970.

41. J-M. Romeder & J.R. McWhinnie, *The Development of Potential Years of Life Lost as an Indicator of Premature Mortality,* Canadian Department of National Health and Welfare, Ottawa, Long Range Health Planning Staff Paper.

42. D. Gellman, G. Lachaine et al. 'The Canadian approach to health policies and programs', *Preventive Medicine,* 6 (1977), pp.265-75.

43. T. McKeown, 'Health and humanism', in G. McLachlan (ed.) *Problems and Progress in Medical Care, 5th Series,* Nuffield Provincial Hospitals Trust, Oxford, 1977.

44. M.P. Stern, J.W. Farquhar et al. 'Results of a two-year health education campaign on dietary behaviour', *Circulation,* 54, (1976), pp.826-33.

45. H. Blackburn, 'Coronary disease prevention. Practical approaches to risk factor changes', *Advanced Cardiology,* 20 (1977), pp.1-9.

46. J.W. Farquhar et al. 'Community education for cardiovascular health', *Lancet,* 1 (1977), pp.1192- 95.

47. L. Breslow, 'Risk factor intervention', *Science,* 200 (1978), pp.908-12.

48. M. Gray & M. Blythe, 'The failures of health education', in P. Atkinson et al. (eds), *Prospects for the National Health,* Croom Helm, London, 1979,

49. J.N. Morris, *The Uses of Epidemiology,* Livingstone, Edinburgh, 1967.

50. C. Mettlin, 'Prerequisites of successful lifestyle intervention', *Social Science and Medicine,* 13A (1979), pp.559-62.

51. E.D. McEwan 'Have Lalonde's health-care ideas died of neglect?', *Toronto Financial Post,* 14.10.78; p.6.

52. M. McGuire, *The 'New Perspective" and Group Interests,* unpublished M.A. thesis McMaster University, Hamilton, Ontario, 1977.

53. A. Robertson and J. Gandy 'Policy, practice and research: an overview', in J. Gandy, A. Robertson and S. Sinclair (eds), *Improving Social Intervention: Changing Social Policy and Social Work Practice through Research,* Croom Helm, London, 1983.

54. K. Ringen, 'The "new ferment" in national health policies: the case of Norway's nutrition and food policy', *Social Science and Medicine,* 13C (1979), pp.33-41.

55. Royal Ministry of Health and Social Affairs, *On Norwegian Food and Nutrition Policy,* Report No.32 to the Storting (1975-76), Oslo, 1976.

56. Royal Ministry of Health and Social Affairs, *On the Follow-Up of Norwegian Nutrition Policy,* Report No.11 to the Storting (1981-82), Oslo, 1981; pp. 1218.

57. I am grateful to Erio Ziglio, graduate student in the Department of Social Administration at Edinburgh University, for providing up-to-date information from his current research on this matter.

58. J. Grund, P.F. Hjort et al. *Helseplan For 1980 Ara,* Gyldendal Norsk Ferlag, Oslo, 1982, ch.5.

59. E. Ziglio, 'The Canadian and Norwegian approaches to health promotion policy'. Unpublished seminar paper, Department of Social Administration, University of Edinburgh, March, 1984.

60. N. Milio, 'Promoting health through structural change: analysis of the origins and implementation of Norway's farm- food-nutrition policy', *Social Science and Medicine,* 15 A (1981), pp.721-34.

Scottish Government Yearbook 1985