contained by tight central control of cash limited budgets. This system was, however, inflexible, and towards the end of the 1980s, with increasing pressure on public spending on health, a desire for change emerged (partly to counter constant demands for increased funding): "the command-and-control system of the NHS lacked flexibility, incentives for efficiency, financial information (and hence accountability) and choice of providers of secondary care."¹ The NHS reforms have introduced more flexibility in some areas—for example, local pay bargaining.

The OECD's report notes large increases in expenditure since 1990 but underplays the potential trade off between flexibility and cost containment objectives. It acknowledges that the reforms have required higher spending, to define and monitor contracts and increase financial and other information. But it ignores the more important possible long term loss of cost control through the introduction of trust status and more flexible employment regulations. Salaries and wages make up around 80% of expenditure on hospital and community health services,³ and expenditure on staff is the dominant factor contributing to overall NHS costs. Now that trusts may employ staff on locally determined contracts this may lead to cost inflation. Such inflationary effects might be increased if trusts were given access to private capital, which could enable competition on the basis of apparent "quality" rather than simply price—as in the United States.

The British system embodies "a much cherished principle—free access by all citizens to comprehensive medical care."¹ In some areas this principle of equity has been eroded, particularly in dental and optical care, prescription charges, and access to some services, such as infertility treatment.⁴ The existence of general practitioner fundholders as a "separate (and more effective) group of purchasers"¹ has also raised concerns about an explicitly two tier service.⁵ The report states that the answer to this potential inequity is to extend fundholding and general practitioner based purchasing to cover more patients, but the research evidence to support this unequivocal statement is not clear.

The report praises Britain's allocation of health budgets to regions by a weighted capitation formula as "one of the most sophisticated and effective methods of allocating health resources to areas of need."¹ It does not, however, address problems of subregional allocation or the fact that the formula applies only to hospital and community health services and not to primary and social care. Several authors have called for primary care budgets also to be allocated by formula⁶⁻⁸—to give "equal access to the gatekeeper."⁶

The final objective of health care reform is efficiency, and the OECD's report is enthusiastic in its belief that the internal market can increase efficiency. This, however, is a belief that is not as yet based on sound evidence.⁹ The report points out that the government has not established a programme of research to evaluate the reforms, although various research projects have been undertaken.¹⁰ Information remains partial in many areas—for example, comparisons of performance between trusts are inconclusive, and there is little information on the purchasing function of district health authorities, which remains underdeveloped. Indicators of "efficiency" released by the Department of Health invariably concentrate on activity. To what extent increases in activity are the product of the reforms or of recent increases in funding is unknown.¹¹ And there is little evidence about improvements in the effectiveness or cost effectiveness of this clinical activity.

The NHS reforms were an ideological experiment, introduced without information on the impact of markets or on their costs (the then secretary of state for health, Kenneth Clarke, in 1989 freely admitted that he had "no idea" how much the reforms would cost¹²). The OECD's economists, with a similar ideological background, are enthusiastic about the principles of the market but fail to produce convincing evidence of their beneficial effects in the NHS. To inform policy and practice in the NHS we need thorough research and evaluation. Assessments through rose tinted glasses are not enough.

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Psychosocial factors and relapse of schizophrenia

Interventions with the families of schizophrenics can reduce relapse rates

Schizophrenia follows a relapsing course for life in most sufferers. In one study almost 80% of patients relapsed repeatedly, and at five years half showed persistent handicap.¹ Relapse takes a toll on patients and their families and imposes a financial burden on hospital and community services.²

Some patients relapse while taking maintenance medication,^{3,4} and this stimulated a search for other contributory factors which has now led to an emerging consensus.⁵⁻¹⁰

What are the psychosocial factors, how do they operate, and what interventions are effective?

The chance of relapse in patients with schizophrenia living at home depends heavily on the emotional environment provided by the family.¹¹ The concept of expressed emotion has evolved as an index of the quality of this environment.¹¹⁻¹³ Expressed emotion covers many of the emotional responses by a key relative, usually the spouse or parent, towards the patient. The key relative's level of

expressed emotion is classed as high or low on the basis of the frequency of critical comments and the intensity of hostility and emotional overinvolvement elicited during a structured interview (the Camberwell family interview).^{12,14}

Patients with schizophrenia in families with high expressed emotion are more likely to relapse despite receiving maintenance neuroleptic medication, and to relapse more often, than those whose key relatives show low expressed emotion.^{13,15,16} Spending much of the week in close contact with a relative with high expressed emotion greatly increases the risk of relapse.¹³ This general relation between expressed emotion and relapse seems true in most cultures but with some variations. The proportion of families showing high expressed emotion is smaller in developing countries and rural communities than in Western urban samples;^{6,17} the expressed emotion component with the greatest predictive value varies from hostility in Chandigarh¹⁷ to critical comments in Geneva.¹⁸ Moreover, the stability of expressed emotion over time may differ between settings.^{16,17}

Despite its success in predicting relapse the concept of expressed emotion has not escaped criticism. For instance, it has been suggested that a high expressed emotion is a consequence of living with someone with schizophrenia rather than a cause of their relapse.⁵ No clear relation has emerged, however, between severity of symptoms and level of expressed emotion.⁶ Another possibility is that expressed emotion is secondary to relatives' beliefs about schizophrenia. Relatives with low expressed emotion tend to attribute features of the illness to causes beyond the patient's control, while relatives with high expressed emotion are more likely to believe the patient is responsible. These causal attributions are, in fact, better than expressed emotion level at predicting relapse.¹⁹ Other criticisms are that the concentration by psychiatrists on families with high expressed emotion may lead to the problems of families with low expressed emotion being ignored,⁸ and that the concept emphasises the attitudes of key relatives at the expense of the patient's own perceptions.²⁰

The relation of expressed emotion to relapse raises questions about how psychosocial factors affect illness. Research on the effects of relatives' expressed emotion on the patient's autonomic arousal has produced some answers.⁷ Changes occur in the electrical properties of the skin (called electrodermal activity) secondary to fluctuations in autonomic nervous control, and this, in turn, is assumed to reflect the patient's autonomic arousal.²¹ Broadly, the results show higher background levels and more frequent fluctuations of electrodermal activity when the patient is exposed to a relative with high expressed emotion than to one with low expressed emotion. These studies have limitations: the conditions prevailing in the patient's home cannot easily be reproduced in the laboratory, and taking recordings in the home may distort family behaviour. Moreover, whether autonomic changes bear a causal relation to disturbances of mental state in relapsing schizophrenia remains unknown. Nonetheless, these studies give empirical support for a model in which autonomic reactivity is seen as mediating relapse in vulnerable individuals,^{4,9,22} perhaps by exaggerating or distorting their responses to stress.

The concept of expressed emotion has generated effective intervention techniques with the families of schizophrenics.^{9,10} These interventions share several elements: a positive approach to the family, in which the needs of the relatives are acknowledged and respected; education about the disorder, emphasising that the family

is not its cause; support for firm structure and boundaries within the family; practical help with coping strategies and clear communication; a behavioural approach to setting boundaries and attaining goals; and "cognitive restructuring" to enable the relatives to make sense of the patient's behaviour in terms of the illness.^{6,8} These interventions need to be used in conjunction with, and not in place of, maintenance medication.¹⁰ They are usually performed in the patient's home by two therapists working together, for a period of six to 12 months.^{9,10}

Randomised trials have shown that patients in control groups (receiving only medication or family education) showed the highest relapse rates, with 50-80% of patients from families with high expressed emotion relapsing within two years. Patients allocated to receive full family intervention packages showed relapse rates around 33% at two years, with some groups achieving rates below 20%.^{6,8,9}

Community psychiatric nurses and others with a mental health background can be trained in family intervention skills at little cost, so these skills should be widely available.^{10,23} By delaying relapse of patients with high expressed emotion, savings of up to 37% may be achieved in comparison with conventional management.⁹ Clearly, there is still scope for development, and this might focus on the interaction with maintenance medication⁴ or on interventions in hospitals, hostels and other settings where patients live away from their families.⁶

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