Predictions for psychiatry

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I have tried two ways of predicting the future. The first is to project from existing trends. In 1975, I was asked to predict what psychiatry would be like this year, at the Millennium. I went back to 1875 and collected measurements each twenty-five years on the numbers of people identified as lunatics and psychiatrists, respectively, in England. With four data points, it would surely be a simple matter to predict the fifth. Unfortunately, both my predictions proved to be wrong, as events took an unexpected turn. My only correct forecast was that a new and effective psychological treatment would emerge for depression—this several years before cognitive behavioural therapy was described. However, this was not the projection of a trend but a lucky guess, based upon my optimistic view that clinical psychologists would achieve great things once they cut themselves loose from doing tests at the request of psychiatrists.

The other way to predict the future is to ask what are thought to be the drivers of change and what might prevent change happening. This is what I shall do here. The drivers can be divided into technological, and social and political.

TECHNOLOGICAL DRIVERS

Information technology

Before long, the distinction between television, telephone and personal computer will disappear, and more and more people will have access to the Internet. The advent of the Internet has already caused people to go doctor shopping, and it is to be expected that doctors and other therapists with unusual skills will market these to a wider audience. There is already software capable of making diagnoses, and other software provides information on best therapeutic practice. Soon such resources will be generally available, so that users will be able not only to diagnose themselves but also to obtain information about the best treatments (and the availability of these treatments). As videophones become widespread, many visits by patients to the hospital and by doctors to the patient's home will become unnecessary. These changes will be accompanied by newer and improved versions of computer-assisted treatments, so that the vast numbers of patients with common mental disorders at present without treatment will have access to improved forms of treatment, without the stigma of having to see a mental health specialist. Intelligent systems to assist prescribers will make the supervision of drug treatments both safer and more rational. These advances can be expected over the next five years.

Brain imaging

The greatest changes in our knowledge of mental disorders can be expected from a combination of imaging with other technologies—for example, electrophysiological data or neuropsychological data. Researchers are already beginning to do this, and there is a real prospect of redrawing the boundaries of mental disorders. The most promising area is psychosis, where at present we differentiate between psychoses of short duration and established psychoses, calling only the latter group schizophrenias. I predict, when better data are available, such distinctions will become academic. The label of schizophrenia should then become less stigmatizing. I cannot predict what the new classification will look like—only that it will be different. Psychoses accompanying drug dependence may come to be seen, like puerperal psychoses, as merely a releaser of a schizophrenia-like psychosis. Again, such changes can be expected in the next five years. Similar changes may be expected in the classification of depression: we may be able to distinguish between subtypes which at present are all confounded into a single group. A better understanding of dementia may also lead to earlier diagnosis.

The Human Genome Project

The Human Genome Project seems a less likely route to major breakthroughs than imaging, since even when a gene or set of genes is identified, there is no certainty that a treatment will emerge. DNA testing for susceptibility to alcohol and hard drugs is a more likely advance—possible in ten years, probable in twenty. Moreover, a knowledge of the genetic markers for disease, even if it did not point to new treatment approaches, could greatly help in selection of patients to enter clinical trials. DNA testing might also indicate susceptibility to drug side-effects, though this would be of marginal clinical usefulness. The Human Genome Project might have mixed effects on the stigma of mental illness. On the dark side, those carrying morbid

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genes could have difficulties with insurance and even their marriage prospects might be damaged.

Neuropharmacology

It is particularly difficult to forecast progress in neuropharmacology since most of the discoveries in the past fifty years have been made while drugs were being developed for other purposes. It is a safe bet that side-effects of known psychotropics will continue to be reduced, and this should improve participants' uptake of the drugs. If the basic mechanism of Alzheimer's disease is elucidated, pharmacological treatment should not be far behind.

SOCIAL AND POLITICAL DRIVERS

Cost containment

We can expect that the rich and super-rich will continue to purchase one-to-one treatment from the specialist of their choice, and that the treatments that they receive will depend largely on their choice of expert. The indigent poor in developing countries will often receive no treatment at all, as at present. As services improve, their only access to treatment will be from local medical clinics, probably from attached community workers. That leaves the large majority of the population, who are either receiving state funded or insurance funded care. These will find it progressively harder to obtain expensive items of medical service like the latest operation or the newest drug, or indeed to have long stays in hospital.

Governments of whatever kind are keen to limit health expenditure: in the UK we protest about serial reductions in our mental health budgets, and Americans complain bitterly about managed care. Nobody knows how to cope fairly with the pressures imposed by expensive technology, growing expectations and increased longevity. Whatever the rhetoric about the mentally ill, only public safety sets limits on financial stringency. The main differences between countries are not state-funded versus privately funded care but the amount of gross domestic product devoted to health.

Numbers of hospital beds

The required number of hospital beds is determined by two factors—the inception rate of psychotic illness in the local population, and the availability of residential alternatives in the community for those whose illnesses do not remit within a few weeks. Home-based treatments and 'crisis care' in more domestic settings may well provide suitable alternatives to hospital admission. Hostels with 24-hour nursing care may replace most long-term hospital-based care.

Manpower issues: psychiatrists and psychologists

Although numbers of psychiatrists have been rising progressively since the deinstitutionalization of the mentally ill, there is no reason to suppose that these trends will continue. Indeed, from the standpoint of cost containment, they almost certainly will not. Psychiatrists are expensive and difficult to manage; however, they do accept responsibility when things go wrong. As purchasing power passes from health authorities to primary care groups, resources will inevitably be drawn from the hospital services into primary care. Unless mental illness services adapt themselves to the needs of primary care purchasers they will find themselves confined to a small laager, dealing only with the disruptive and the dangerous. Only the intrinsic fascination of the subject will remain an attraction for doctors. Psychologists are rather less expensive, and have skills which are in great demand. They work in a range of medical settings, and their numbers will probably continue to expand. However, at present they take only a small part of the burden of care of those with severe mental disorders, and they are unlikely to want to increase it.

Nurses

At present we have a national shortage of nurses, while new roles increase the demand for their services. I suspect that nurse practitioners will soon gain restricted prescribing rights in psychiatry, and they will be helped by computer programs that match symptoms to pharmacological agents, counsel against polypharmacy and warn of drug interactions. The likely arrival of such workers provides a direct challenge to the escalating numbers of psychiatrists. There are now more practice nurses than general practitioners, with an ever-increasing range of responsibilities. Part of the task of providing mental health treatments will fall to them, probably assisted by computer based treatments.

Only a minority of community psychiatric nurses—about 10%—have been trained in evidence-based treatments such as family interventions and simple cognitive behavioural therapy. The limitations on the university system are such that about ten years will be needed to remedy this skill deficit. A new class of worker is required.

Community care workers

It would not be difficult to provide a training that contains both social work skills and some modified nursing skills. Such training might be taken up by some of the many graduates who at present cannot find work—for example, psychology graduates. Community care workers are already employed in the voluntary sector, but their training needs to be improved. There should be a clear career ladder for

those wishing to take additional training. The staff establishment needs to come first, with a pay structure.

Pooled funding

The financial burden of many forms of care—for the mentally ill, for learning difficulties, for the elderly—falls partly on the National Health Service and partly on local authorities. If local budgets were pooled and put under common management, the necessary community facilities and trained staff might be attainable. The consequent breaking down of administrative and clinical barriers should produce a more integrated service, avoiding the build-up of patients unnecessarily detained in hospital beds when they could be in the community.

Prevention

In general, primary prevention is more difficult than secondary prevention, as the causal chains producing mental disorders are at best only partly understood. At present, conduct disorder in childhood can be prevented if parents are offered 'parent training'[1]; there is some evidence that educational interventions at primary school level can prevent later drug dependence[2,3]; the excess of cerebrovascular disease causing dementia in males of low social class could be prevented by better control of blood pressure, weight and smoking behaviour in adult life[4,5]; there is accumulating evidence that those with a genotype predisposing them to schizophrenia are less likely to develop it if they avoid cannabis; and there is suggestive evidence that subclinical depression can be prevented by self-help materials, either computerized or in manual form (J Proudfoot, personal communication).

For prevention of relapse, there is good evidence that psychotropic drugs can avert subsequent episodes of depression, bipolar illness and schizophrenia; and also good evidence that cognitive behaviour therapy can prevent future episodes of depression. Many of the social conditions conducive to mental disorders will remain difficult to control. Services in the world today are much more acceptable to patients and their carers than were those available fifty years ago, and technology offers enormous hope for more efficient administration of effective treatment.

CONCLUSION

The world of psychiatry is more exciting today than it was when I started my career journey. The harm done to patients by long stays in mental hospitals has been greatly reduced; and, for patients whose illnesses do not respond to treatment, there is now an admirable tendency to offer care in as normal an environment as possible. In future, patients are likely to receive treatment more quickly, to be given drugs that suppress more of the unpleasant symptoms and to be treated in places that carry less risk of institutionalization. Many thousands of people receive treatments today who would not formerly have had treatment at all: across the world, primary care services are improving, and doctors are becoming more aware of psychiatric disorders.

All this is very good, and we can expect advances not only in drug treatment but also in psychological interventions. We stand on the threshold of advances in both neuroscience and information technology and the promise is that we shall be able to do more, for more people, than ever before.

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