British Journal of Psychiatry (1995), **166**(suppl. 27), 7–9

Introduction

MASSIMO MOSCARELLI

Mental illnesses have destructive effects on affected individuals. These people suffer both physically and mentally, and may be disabled both in their work and socially. A patient's family may also suffer, and experience economic losses; the repercussions affect society as a whole. Both employers and employees can be affected directly by mental illness, with a consequent loss to the national economy.

The growing financial resources allocated in many countries to the providers of health care, and the calls for controls on health care expenditure, suggest a need for a consideration of the repercussions across society of mental illnesses, the costs related to health care provision, and the health and economic return due to care and assistance. Also, one cannot ignore the possible shift of costs to other medical and non-medical sources, when provision of prevention, care and rehabilitation is limited by insufficient development or economic constraints.

Few countries have developed structured research programmes that aim to integrate economic evaluations with clinical and health services research, and consider clinical variables in studies on the effects of health care financial resources variations.

The replacement of in-patient care with community care has been undertaken by many countries in recent years. Under this policy, the management of mental disorders has involved two problems in particular: the development of services aimed at caring for new patients in the community, and of services aimed at placing long-stay hospital residents in the community. The latter was rarely supported by a long-term, detailed evaluation of the effects on the patients' and relatives' quality of life, nor ensured that appropriate financial resources followed each discharged resident in the community. The article by Knapp *et al* focuses on the study of variables that, if evaluated when a patient is still in hospital, could predict his support/services use and costs when moved to community-based facilities. For these long-stay residents, variables related to institutionalisation seem to be more useful predictors of cost variations in community services provision than clinical diagnosis.

Although anxiety disorders have the highest prevalence (in the National Institute of Mental Health (NIMH) Epidemiological Catchment Area (ECA) study it was estimated that about 15% of the general population had suffered from at least one DSM–III anxiety disorder in their life time), only few economic studies have been performed on their components (panic disorder, obsessive–compulsive disorder, phobias, generalised anxiety disorder, post-traumatic stress disorder), and on the relevance of their psychiatric, medical and drug/alcohol comorbidities.

The study by Leon *et al* takes into account panic disorder, obsessive–compulsive disorder, and phobia. The effects of help-seeking behaviour related to these illnesses on emergency rooms, general practitioners or speciality services are considered; as are their effects on employment and chronic unemployment, and their comorbidity with drug and alcohol abuse. The frequency of welfare payments is looked at – these are usually considered to be transfers, and are not measured in cost of illness studies. Research is needed on this, since if illnesses do not occur (or are successfully treated) transfer payments could be used for other purposes.

Salvador-Carulla *et al* concentrate on assessing direct and indirect costs before and after the provision of effective treatment for panic disorder. They underline the importance of public education about panic disorder, aimed at the general population, GPs, and the medical specialists who frequently cope with these patients in emergency situations (cardiologists, neurologists, for example). With an average of 10 years between onset and their first psychiatric diagnosis and specific treatment, patients are suffering for long periods, and resources are being wasted on non-specific examinations or treatments that could be more usefully allocated to early psychiatric diagnosis and treatment strategies.

Research into the direct and indirect costs of each different anxiety disorder and their addition to the costs of comorbid conditions is called for. Moreover, the evaluation of the social burden of anxiety, and depression, should also consider the costs of highly prevalent symptoms that do not meet the criteria for DSM or ICD diagnoses, but still have an effect on service use and occupational functioning.

Resources lost and service use in the US due to affective disorders are presented in the cost of illness study by Rice & Miller. The study is part of wider research on the economic costs of alcohol and drug abuse and mental illness, commissioned by

the Alcohol, Drug Abuse, and Mental Health Administration (ADAMHA). The health care reform project in the US has widely used these data that are updated to 1990.

While this study refers to the treated affective disorders, that of Rupp considers the economic consequences of not treating depression: from the NIMH ECA study it was estimated that about two-thirds of the 25 million people suffering from affective disorders were untreated. In this group, the burden on society is not only related to the resources lost: many of these patients use inappropriate medical services, with the possible additional costs of side-effects due to inappropriate examinations or treatments. The analysis provides an estimate of the value of resources needed to provide improved access to treatment, and compares them to the value of resources the improved access to treatment might save.

Rupp cites a cooperative initiative, that was developed in response to the US public health problem of unrecognised and untreated depression, between the NIMH and the Washington Business Group on Health, a non-profit national health policy organisation founded to give major American employers a voice in the formulation of health care policy. The awareness of business and industry in considering individual illnesses (in this case depression) as a major and costly problem, and their interest in evaluating the productivity benefits of increasing health services availability for education, screening and early treatment is very rare. The international development of these collaboration studies should be encouraged.

In the US the majority of health insurance contracts have some form of 'utilisation management' or 'managed care': these are methods used by or on behalf of purchasers of health care benefits to manage health care costs, by influencing patient care decision-making through case-by-case assessment of the appropriateness of care prior to and during its provision. The clinician must present a treatment plan to a review committee (within the Health Maintenance Organization) or to an independent review entity, in order to receive the approval for the financial coverage of the clinicians' proposed treatments. This process can deny the authorisation for coverage and reimbursement of treatment. Some of the phases of the process include prior, concurrent and retrospective reviews, a treatment plan, case management, and discharge planning. The aim of these techniques is the reduction of inappropriate or excessive service use, the control of the 'quality of care', and the evaluation of the health outcome of the patients, based on the improvement registered on the patient's chart.

The cost-containment mechanisms and their effects on the quality of care and health outcomes are considered by Wells. He warns about the worse health outcome in cost-containment strategies for severe mental disorders, in particular for the sick poor patient, and suggests the monitoring of the health outcome and the quality of care given to these vulnerable populations when any cost-containment policies are implemented, irrespective of health system or country.

Such monitoring in the long term could provide the previously unavailable history of the real health and economic course and outcome of all severely mentally ill patients.

Incidentally, we should wonder if the management of these vulnerable populations might require a completely different organisation of health care provision and its association with a 'product' independent evaluation. If the two main goals are the provision of comprehensive, coordinated treatments for each individual patient from the early phases onwards, and routine (i.e. annual) patient health outcome and economic evaluation in order to give the information needed by consumers/purchasers, perhaps the development of a few comprehensive care and management systems focused on individual severe illnesses and acting at national and international level should be encouraged. The collection of large, comparable health and economic outcome results by independent agencies might give reasonably reliable information to consumers/purchasers, and enable them to choose between these systems.

However, such help/interference of 'concurrent reviewers' could result in clinicians being attracted by reimbursement considerations, with possible negative effects on the health and economic outcomes of the patients, particularly when illnesses require a complex coordination of care and when compliance is a major problem. If the care systems were chosen by consumers/purchasers on the basis of the 'product' evaluation data, the 'process' evaluation could be performed by the providers, helping them to choose those treatments and health operators that enable them to remain competitive.

A day-hospital treatment in Holland as an alternative to standard hospitalisation in two groups of patients with depressive and schizophrenic disorders is evaluated in a follow-up study by Wiersma *et al.* They show that small changes that improve flexibility in the provision of care are feasible, not significantly more expensive, and if the severity of the illness is not influenced, they can improve patient and family satisfaction and compliance.

The issue of the optimisation of general practice resources use is developed by Lloyd & Jenkins, with a focus on the UK Ministry of Health initiatives for evaluating the costs and outcomes of patients affected by depression, often greater consumers of general health care. Lloyd also considers a problem that is currently debated in many countries: he claims that the higher prices of the selective serotonin re-uptake inhibitors (SSRIs) are not justified because they have similar efficacy, drop-out and patient satisfaction rates as the cheaper, older antidepressants. While SSRIs are less toxic in overdose (when measured as deaths per thousand years of treatment), there are a number of relatively, 'safe-in-overdose' old tricyclics. Moreover there is no evidence to identify subgroups of major depression for which SSRIs are clearly more effective.

Economic data are going to be required to support requests for reimbursement of drugs. New rules in coming years are expected to encourage the development of new effective drugs for severe mental disorders with high social costs. The establishment of these rules will require the development of research on the integration of health and economic evaluation of drug treatment; the establishment of governmental bodies, comprising clinicians and health economists, which will have the expertise to judge the value of clinical trials and economic evaluation; and the development of this ability by the representatives of consumers/purchasers, drug companies, providers, insurance companies and so forth. The development of this interdisciplinary field could be financed by a percentage of the annual drug expenditure being allocated to methods research in the economics of drug treatment for severe mental disorders.

In the US new legislation sets aside 1% of national health expenditure for evaluation for health services and economic research. This should be encouraged in all countries. It could be also suggested that a sub-percentage is allocated to international research for the development and integration of health outcome and economic evaluation methods, standardisation of systems for economic data collection, and support of multicentre international economic research.

Investments in international mental health economics research seem particularly important in countries involved in ongoing cooperation programmes, such as those in the European Union, with a legacy of differently developed health care systems. The development in Europe of this interdisciplinary field could be improved by the publication of information on mental health services, mental health outcomes and mental health economics research (funded at EU, national and regional level) for severe mental disorders, such as schizophrenia and affective disorders. An example is the list of funded research programmes published in 1993/94 in the *Schizophrenia Bulletin* (**19**, 651–677 and **20**, 787–805), together with the title of the research, the person responsible, the duration, the financing source, and the given funds. It would facilitate the spread of information on such programmes, and on the involved research groups in Europe, and help the administrations and the research groups of the different countries in their research strategy decisions. I hope the *British Journal of Psychiatry*, because of its international prestige, will undertake this relevant activity.

Acknowledgements

The World Health Organization, the World Psychiatric Association, the Ministry of Health of the United Kingdom and the Ministry of Health of the Netherlands are gratefully acknowledged for the support given to this supplement. I would like to thank Professor Hugh Freeman and Professor Greg Wilkinson for their helpful comments and encouragement.