Summary and implications

A summary of the elements of service the GPs believed necessary to the effective delivery of care comprises: (i) communication; (ii) continuity of care; (iii) coordination; (iv) outreach; (v) ? integration; a list not dissimilar to that of Paumelle. The GPs appear to be arguing in favour of the implementation of practical organizational structures which enhance communication, provide greater continuity of care with their own greater involvement in the management of patients and better coordination of services.

The traditional forms of service as described above certainly did not accord well with these stated GP principles. Examination of the more recent developments is for the most part largely descriptive. Community mental health centres have developed in this country in emulation of the American model. Critics have pointed out that this replication has failed to utilize one of the major resources present in the British system (and almost totally non-existent in the American service), the primary care service[13]. In general, community mental health centres function in parallel to, rather than in tandem with the primary care level. The statistics presented by Bouras[14] reveal that as in the American experience they tend to attract a spectrum of clients who constitute the worried well, rather than the seriously ill. Their ability to provide a coordinated service which offers continuity has yet to be established.

The dissatisfaction of many practitioners with the hospital outpatient system was one of the main reasons given by the growing number of psychiatrists who moved their clinics to the primary care setting[15]. They have expressed the view that they are able to offer an improved standard of care with the development of practical strategies to enhance coordination and continuity of care[16]. Examples include better availability of background information, joint assessment and management of patients and easier exchange of information.

However, as Tansella[17] advocates, the development of these and other new service formats in the present climate of resource limitation should be accompanied by systematic evaluation both of the process and outcome of the service provided and a determination of their ability to deliver appropriate care with the hallmarks identified by both psychiatrists and general practitioners above.

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Integrated family, general practice and mental health care in the management of schizophrenia

I R H Falloon MD MRCPsych **W Shanahan** MRCPsych
M Laporta MD FRCP **H A R Krekorian** MRCPsych
Buckingham Mental Health Service, 22 High Street, Buckingham MK18 1NU

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In 1962 Parkes[1] and his colleagues observed that general practitioners bore the brunt of medical care for persons suffering from schizophrenia in the UK. This burden was small compared to that suffered by the patient's families[2]. The complaints of these professional and non-professional caregivers, as well as those of the patients themselves, have changed little since those early reports, and remain directed toward the lack of provision of effective interventions by the specialist mental health services.

During the past two decades substantial advances in the clinical management of schizophrenic disorders have been demonstrated in a series of extensive clinical trials. These trials have examined the efficacy of neuroleptic drugs and psychosocial intervention strategies. In this paper, we shall highlight the main advances and then describe methods of ensuring that the results of this research are applied in everyday

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clinical practice in such a manner that ensures close collaboration between patient, family, general practitioner and mental health specialist.

Neuroleptic drug therapy

Neuroleptic drugs have proven highly effective at controlling the florid symptoms of schizophrenia. In addition, continued low dosage maintenance has halved the rate of recurrence of episodes[3]. Although the problems of maintaining compliance and of disabling side effects remain, there can be little doubt that neuroleptic drugs are one of the major advances in medical science this century.

Unfortunately, early optimism that these drugs might provide a relatively straightforward cure for schizophrenia has waned. A substantial proportion of patients do not recover from florid symptoms despite excellent drug treatment[4] whilst almost half those cases who do show evidence of remission from acute episodes suffer recurrences within a year[5].

It was hypothesized that the main reasons for the limited efficacy of these drugs were either poor compliance or malabsorption of oral preparations. However, controlled studies that have compared oral with long-acting intramuscular preparations have shown similar results when used to prevent recurrences[5]. Furthermore, depot drugs appear to carry a greater risk for disabling neurological side effects and consequently greater impairment of social functioning[6]. Thus, there appears to be little justification for the extensive reliance on depot drugs employed by many clinics. Strategies to enhance adherence to long-term drug maintenance with depot or oral preparations have been developed to address the specific problem of poor compliance[7].

Efforts to reduce unwanted effects have failed to find effective drugs to counteract side effects on a long-term basis. Recent studies have focused on ways to enhance the benefit/cost ratio of neuroleptic drugs through more specific targeting of dosage. Two significant advances have been the development of plasma assays to refine therapeutic dose ranges[8], and the use of intermittent and low dose strategies that aim to target high doses of drugs to periods when patients show early signs of florid episodes[9,10]. The development of new preparations that have more specific effects on the schizophrenic syndrome, without disabling effects, has been slow. Trials of clozapine in the United States have suggested that it may have a place in the treatment of patients who have serious tardive dyskinesia[11]. However, the risk of severe blood dyscrasias restricts its use on a widespread basis.

Recently developed psychosocial strategies

Early attempts to develop psychosocial interventions for schizophrenia tended to formulate schizophrenia in terms of a pure psychosocial aetiology, and consequently to view the strategies as alternatives to neuroleptic drugs. There is no indication for any treatment programme for schizophrenia that does not have a drug intervention as a basic requirement.

Pathogenic effects of stress

Psychosocial interventions that have been effective in combination with optimal drug regimens have been derived from evidence that environmental stress appears to play a major role in the long-term outcome of schizophrenia. Stressful life events and ambient tension in the social network have been significant predictors of a chronic course in a series of studies[12-15]. It has been apparent that neuroleptic drugs provide only partial protection against the impact of these stressors, thereby accounting for at least some of the limitations of optimal drug therapy.

Because most recent studies of ambient tension have focused on stress in familial households, there has been a tendency to consider that habitat as one that is peculiarly detrimental to the long-term rehabilitation of persons suffering from schizophrenia. However, there is limited data on the comparative merits of social habitats. Brown[16] studied a variety of living arrangements and concluded that chronic patients were less likely to remain out of hospital when they returned to hostels, spouses or parents than to more distant relatives or sheltered lodgings. Subsequent studies have revealed that it is the quality of the caregiving relationships that are the relevant determinants of outcome, not the type of household. Furthermore, it may be the lack of a supportive confiding relationship that is the main factor rather than critical, hostile, intrusive responses that have been the focus of the subsequent expressed emotion research[17].

Stress in the work environment, and presumably in other relationships within a person's social network, has not been studied extensively. However, early research[18] suggested that this may prove an important variable. Thus, rather than focusing exclusively on stress in the household, it may be better to consider all forms of ambient environmental stress that impact upon the vulnerable person on a day-to-day basis. This would also include the stress of enduring environmental problems such as poor housing, lack of financial resources, chronic physical or mental disabilities, unemployment, etc. Such ambient stresses are difficult to quantify in research studies, but are readily recognized in clinical practice.

Ambient stress tends to remain relatively stable, with fluctuations occurring over weeks and months. Superimposed upon this background of everyday stress is the stress associated with major life events. These are discrete events that occur less frequently, and are sometimes independent of the patient's control. Examples include, death of a close family member, loss of a job, breakup of an intimate relationship, physical injury or illness. The stressfulness of each event will depend on each person's perception of the threat the event invokes[19].

It may be assumed that all forms of environmental stress are additive for each individual. It is also assumed that every person has a threshold, that when exceeded, places that person at high risk to succumb to the pathophysiological stress response to which he or she is constitutionally most vulnerable at that time. Genetic, nutritional, current health status, and history of past illnesses may determine the precise nature of the disorder. It is important to recognize that persons with a history of episodes of schizophrenia may develop a range of disorders, including physical illness, depression and anxiety states[20].

Stress reduction interventions

Three psychosocial approaches have been developed to counter the effects of stress. The first, involves efforts to reduce stress, by removing the vulnerable patient from stressful environments, such as a high

stress household, or alternatively, by attempting to encourage household members to adopt a more tolerant and supportive attitude towards the patient[21]. Variants of this approach have shown a short-term reduction in the frequency of florid episodes of schizophrenia[22-26].

Family-centred stress management interventions

The second approach employs behavioural family therapy to engage the entire family unit in efficient problem-solving of all sources of environmental stress, both ambient and life-event stresses. It is assumed that every member of the household is striving to manage the unique stresses that impact upon them, but that their efforts are not always well coordinated and may be overwhelmed from time to time, particularly by the presence of a person with a seemingly unpredictable and confusing disorder such as schizophrenia in the home. The entire family unit is engaged in regular sessions of training in problem solving skills, including the interpersonal communication skills essential to the conduct of an open, constructive problem solving discussion. The therapist encourages self-management throughout, and fades his or her active participation as soon as the family appear capable of conducting regular problem solving discussions themselves. In addition to dealing with problems, this approach assists all household members, including the index patient, to use the approach to achieve personal goals. The benefits of this approach include enhancement of social functioning and reduction of family burden as well as long term reductions in the frequency of florid schizophrenic and affective episodes[27].

Patient-centred stress management interventions

A third approach provides strategies for the patient to enhance his or her own capacity for managing stresses in the community. Education about the nature of his disorder, the value of drug therapy and the recognition of the signs of excessive stress, is combined with training in interpersonal skills that aim to assist the patient to negotiate steps towards his life goals with minimal hassles and few major life crises. Work and vocational training, social and leisure pursuits are major targets for this approach. Some generic problem solving and stress management strategies are included. The patient's household stresses, including family relationships are addressed, but are emphasized less than in the two methods described earlier. In addition to training sessions in which effective responses to stressful situations are roleplayed, practice in real-life settings is essential to achieve generalization. Controlled research suggests that this approach achieves similar benefits to the better known family-based methods, and can be employed where patients live alone or in residential units that are larger than most family households[24,28,29].

Cost-benefit analysis

The economic burden of schizophrenia is substantial. New treatment approaches must be considered within the restraints of limited health care resources. Ideally, for a new approach to be adopted it must demonstrate that the benefits that accrue are achieved with greater efficiency than the approach that it seeks to supplant. On the face of it psychosocial treatments appear more expensive than the drug and supportive casework models over which they have shown consistent clinical superiority. However, an extensive economic analysis of one of these approaches has shown that the overall savings to the community was around 20% when the total cost to the community was considered[30]. Much of this cost savings accrued from a reduction in the need for crisis care and hospital utilization associated with improved clinical stability. Further, when the benefits associated with improved quality of life of the patient and his caregivers was considered in relation to the costs, the family-based approach proved two-and-one-half times better value for money. These figures need further replication, but provide powerful support for investment in the development of these approaches.

Early intervention and the role of primary care

Many recent studies of schizophrenia have equated recurrence of florid psychopathology with treatment failure. However, for sufferers and community caregivers the course of the disorder is usually characterized by repeated periods of exacerbation and remission. Education about the nature of schizophrenia assists patients and their carers to recognize the signs and symptoms of the disorder as well as the patterns that emerge over time[31].

The early detection of the onset of florid episodes and the immediate provision of effective crisis therapy is a key strategy employed in several combined drug and psychosocial management approaches outlined above. Each patient is invited to develop a brief list of the prodromal features of an impending florid episode. These idiosyncratic signs are employed as clinical markers of high vulnerability and patients, carers and case managers, including family practitioners, are instructed to act in a coordinated, efficient manner whenever such signs emerge. Drug dosage is reviewed as well as the effectiveness of current stress management efforts. Intensive care is provided until the early warning signs or emergent symptoms remit. This approach has been applied as a part of the behavioural family therapy approach, and more recently in the targeted drug therapy studies[9].

It has been postulated that where close liaison with family practitioners is established it may prove feasible to detect initial episodes of florid schizophrenia at a much earlier stage than is customary and to treat the disorder before the onset of serious social disability and handicap. A pilot study of this approach has been conducted in Buckingham, where a comprehensive mental health service has been developed that is fully integrated with all the family practitioner teams in the area[32]. An annual incidence rate of 0.75 cases per 100 000 has been detected during a 5-year period. This is a 10-fold reduction when compared to the incidence rate established for the county of Buckinghamshire in a recent epidemiological survey that employed identical case-finding methods[4].

Conclusions

When low rates of incidence are combined with low rates of florid episodes in established cases it is evident that the locus of care for schizophrenia has changed from that of the acute hospital ward to the community. The challenge now becomes one of assisting patients and their carers to lead

unrestricted, productive lives. Integrated drug and psychosocial management is a crucial basis for such rehabilitation approaches. This can only be achieved with a substantial investment in retraining staff to employ integrated treatment programmes. At the present few services have undertaken such training efforts or have developed effective multidisciplinary teams within which this approach can be fully implemented. Training needs to extend not merely to specialist mental health professionals, but also to family practitioners and the families and patients themselves. A national training project has been launched to assist in this development[33]. Within 5 years every person suffering from schizophrenia in Britain may be able to receive targeted drug therapy combined with individualized psychosocial therapy. Research suggests that while this may not result in a cure, that disability and handicap may be reduced and the quality of life enhanced for patients and caregivers alike.

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