Components of a modern mental health service: a pragmatic balance of community and hospital care

Overview of systematic evidence

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Background There is controversy about whether mental health services should be provided in community or hospital settings. There is no worldwide consensus on which mental health service models are appropriate in low-, medium- and high-resource areas.

Aims To provide an evidence base for this debate, and present a stepped care model.

Method Cochrane systematic reviews and other reviews were summarised.

Results The evidence supports a balanced approach, including both community and hospital services. Areas with low levels of resources may focus on improving primary care, with specialist back-up. Areas with medium resources may additionally provide out-patient clinics, community mental health teams (CMHTs), acute in-patient care, community residential care and forms of employment and occupation. High-resource areas may provide all the above, together with more specialised services such as specialised out-patient clinics and CMHTs, assertive community treatment teams, early intervention teams, alternatives to acute in-patient care, alternative types of community residential care and alternative occupation and rehabilitation.

Conclusions Both community and hospital services are necessary in all areas regardless of their level of resources, according to the additive and sequential stepped care model described here.

Declaration of interest None.

The public health impact of mental disorders is profound (Murray & Lopez, 1996; World Health Organization, 2001*a*). The estimated disability-adjusted life-years in 2000 attributable to mental disorders represents 11.6% of total disability in the world – more than double the level of disability caused by all forms of cancer (5.3%) and higher than the level of disability due to cardiovascular disease (10.3%).

Historically, the response of the mental health services can be seen in three periods: the rise of the asylum, the decline of the asylum and the reform of mental health services (Wing & Brown, 1970; Grob, 1991; Desjarlais *et al*, 1995; Thornicroft & Tansella, 1999). In the third period, community-based and hospital-based services commonly aim to provide treatment and care that are close to home, including acute hospital-care and long-term residential facilities in the community; respond to disabilities as well as to symptoms; are able to offer treatment and care specific to the diagnosis and needs of each individual; are consistent with international conventions on human rights; are related to the priorities of service users themselves; are coordinated between mental health professions and agencies; and are mobile rather than static. We have described this as the 'balanced care' approach (Thornicroft & Tansella, 2002).

This paper summarises and extends a review prepared for the Health Evidence Network of the World Health Organization European Regional Office (WHO–EURO) (Thornicroft & Tansella, 2003). The Health Evidence Network is an information service initiated and coordinated by WHO–EURO which provides the best evidence available in the field of public health (http://www.who.dk/hen). Working with over 30 partner organisations, it aims to deliver timely information to health care decision-makers in the WHO European Region by providing summaries from a wide range of existing sources, including websites, databases, documents, national and international organisations and institutions. It comprises two services: answers to questions to support the decision-making process, and ready access to sources of evidence such as databases, documents and networks of experts.

METHOD

This paper focuses upon the following key questions: (a) How far should mental health services be provided in community and/or hospital settings? (b) What service components are necessary and which are optional? (c) What are the differing service development priorities for areas (countries and regions) with low, medium and high levels of resources?

The recent growth of mental health services research has provided substantial evidence in relation to these questions, but few attempts have been made to review these results as a whole and to put them in a resource context so that they are usable for the planning and provision of services at national and regional levels. The aim of this review is therefore to summarise such evidence, and to propose a stepped care model that contextualises the relevance of this evidence to areas at different stages of economic development. It refers to mental health services for adults of working age, and does not directly address other important groups, such as children, older people or those whose primary problem is drug or alcohol misuse. We appreciate, however, that for regions with fewer resources, where the majority of service provision is at the primary care level, these distinctions may be less relevant.

The procedure used was that first we searched Medline for the period 1980 to April 2003, using the search terms MENTAL *and* COMMUNITY *and* HOSPITAL (3177 records were extracted). Only English-language articles were examined to include those relevant journals with higher impact factors (1810 records); of these 141 were review articles, which were considered in preparing this paper. In addition, the authors searched the Cochrane Library and included other relevant systematic reviews. This procedure allowed us to summarise the evidence for distinct service components, and to recommend three particular blends of these components as suitable for areas with low, medium and high level of resources, as a contribution to the debate about resource-appropriate models of care.

RESULTS

The results of this review are organised in relation to the level of resources available, as proposed by the WHO World Health Report (World Health Organization, 2001*a*: pp. 112–115). Table 1 indicates that areas with a low level of resources are likely to need to provide most or all of their mental health care in primary health care settings, delivered by primary care staff, with specialist back-up to provide training, consultation for complex cases, and in-patient assessment and treatment of cases that cannot be managed in primary care (Mubbashar, 1999; Saxena & Maulik, 2003). Some low-resource countries may in fact be in a pre-asylum stage (Njenga, 2002) in which apparent community care in fact represents widespread neglect of mentally ill people. Where asylums do exist, policy makers face choices about whether to upgrade the quality of care offered (Njenga, 2002) or to use the resources of the larger hospitals to establish decentralised services instead (Alem, 2002).

Differences in mental health services between low-resource and high-resource countries are vast. In Europe, for example, there are 5.5–20.0 psychiatrists per 100 000 population, whereas the figure is 0.05 per 100 000 in African countries (Njenga, 2002); the average number of psychiatric beds is 8.70 in the European region and 0.34 in Africa (Alem, 2002). About 5–10% of the total health budget is spent on mental health in Europe (Becker & Vázquez-Barquero, 2001), whereas in the African continent 80% of countries spend less than 1% of their limited total health budget on mental health. These and other relevant comparative data are available from the WHO Project Atlas website (World Health Organization, 2001*b*) and from the World Bank (2002). For example, although health spending represents some 7.9% of global gross domestic product, with an average expenditure expressed in international dollars (based on purchasing power parities) of I$523 on health services, this average varies significantly across countries and regions, ranging from I$82 per person in Africa to I$2078 in the Organization for Economic Cooperation and Development (OECD) countries (Poullier *et al*, 2002). Further, for both

Table 1 Mental health service components relevant for countries and regions with low, medium and high levels of resources

Low level of resources	Medium level of resources	High level of resources
Step A	**Step A + step B**	**Step A + step B + step C**
Step A: Primary care with specialist back-up	*Step B: Mainstream mental health care*	*Step C: Specialised/differentiated mental health services*
Screening and assessment by primary care staff	Out-patient/ambulatory clinics	Specialised clinics for specific disorders or patient groups, including: • eating disorders • dual diagnosis • treatment-resistant affective disorders • adolescent services
Talking treatments, including counselling and advice Pharmacological treatment Liaison and training with mental health specialist staff, when available Limited specialist back-up available for: • training • consultation for complex cases	Community mental health teams	Specialised community mental health teams, including: • early intervention teams • assertive community treatment
• in-patient assessment and treatment for cases that cannot be managed in primary care, for example in general hospitals	Acute in-patient care	Alternatives to acute hospital admission, including: • home treatment/crisis resolution teams • crisis/respite houses • acute day hospital
	Long-term community-based residential care	Alternative types of long-stay community residential care, including: • intensive 24 h staffed residential provision • less intensively staffed accommodation • independent accommodation
	Employment and occupation	Alternative forms of occupation and vocational rehabilitation: • sheltered workshops • supervised work placements • cooperative work schemes • self-help and user groups • club houses/transitional employment programmes • vocational rehabilitation • individual placement and support service

Europe and Africa there are also considerable and often growing variations both between countries and between regions within countries, not only in health expenditure but also in social care. As a consequence the forms of service provision relevant to low-resource areas will be very different from those relevant to medium- and high-resource areas.

Areas (countries or regions) with a medium level of resources may first establish the service components shown in column 2 of Table 1, and later, as resources allow, choose to add some of the wider range of more differentiated services indicated in column 3. The choice of which of these more specialised services to develop first depends upon local factors, including service traditions and specific circumstances; consumer, carer and staff preferences; existing service strengths and weaknesses; and the way in which evidence is interpreted and used. This stepped care model also indicates that the forms of care relevant and affordable in areas with a high level of resources will include elements from column 3, in addition to the components in columns 1 and 2 which will usually already be present. The model is therefore both additive and sequential, in that new resources allow extra levels of service to be provided over time, in terms of mixtures of the components within each step, when the provision of the components in the previous step is complete.

Decisions on the planning and investment of funds to improve mental health will need to include a wide range of stakeholders, often bringing divergent or even conflicting perspectives to this task. It is now increasingly common in many countries for service users and family members or carers to participate routinely in such decision-making.

Step A: Primary care mental health with specialist back-up

Well-defined psychological problems are common in general health care and primary health care settings in every country, and cause disability which is usually in proportion to the number of symptoms present (Ormel *et al*, 1994). In areas with a low level of resources (Table 1, column 1), the large majority of cases of mental disorder should be recognised and treated within primary health care (Desjarlais *et al*, 1995). The WHO has shown that the integration of essential mental health treatments within primary health care in these countries is feasible (World Health Organization, 2001*a*).

Step B: Mainstream mental health care

Mainstream mental health care refers to a range of service components, which may be necessary in areas that can afford more than a primary care-based system with specialist back-up. However, the recognition and treatment of the majority of people with mental illnesses, especially depression and anxiety-related disorders, remains a task that falls mostly to primary care. Von Korff & Goldberg (2001) reviewed 12 different randomised controlled trials of enhanced care for major depression in primary care settings. They found that interventions directed solely towards training and supporting general practitioners have not been shown to be effective. They argued that interventions should focus on low-cost case management, coupled with flexible and accessible working relationships between the case manager, the primary care doctor and the mental health specialist. In other words, the whole process of care needs to be enhanced and reorganised to include the following key elements: active follow-up by the case manager, monitoring treatment adherence and patient outcomes, adjustment of treatment plan if patients do not improve, and referral to a specialist when necessary (Von Korff & Goldberg, 2001). This could be seen as a major reversal of what is considered by many to be the conventional approach: enhancing the training of family doctors. Rather, the evidence now strongly suggests that improving outcomes of chronic diseases such as depression does appear to require more than changing the skills of one profession alone: namely, the combination of several concurrent active ingredients.

Mainstream mental health care can be considered to be an amalgam of the core components described below.

Out-patient and ambulatory clinics

Out-patient and ambulatory clinics vary according to:

(a) whether patients can self-refer, or need to be referred by other agencies such as primary care;
(b) there are fixed appointment times or open access assessments;
(c) doctors alone or other disciplines also provide clinical contact;
(d) whether direct or indirect payment is made;
(e) methods used to enhance attendance rates;
(f) how the clinic responds to non-attenders;
(g) the frequency and duration of clinical contacts.

There is surprisingly little evidence on any of these key characteristics of out-patient care (Becker, 2001), but there is a strong clinical consensus in many countries that such clinics are a relatively efficient way of organising the provision of assessment and treatment, provided that the clinic sites are accessible to local populations. Nevertheless, these clinics are simply methods of arranging clinical contact between staff and patients, and so the key issue is the content of the clinical interventions: namely, to deliver treatments that are known to be evidence-based (Roth & Fonagy, 1996; Nathan & Gorman, 2002; BMJ Publishing Group, 2003).

Community mental health teams (CMHTs)

Community mental health teams are the basic building block for community mental health services. The simplest model of provision of community care is for generic (non-specialised) teams to provide the full range of interventions (including the contributions of psychiatrists, community psychiatric nurses, social workers, psychologists and occupational therapists), prioritising adults with severe mental illness, for a local defined geographical catchment area (Thornicroft *et al*, 1999; Department of Health, 2002). A series of studies and systematic reviews, comparing community mental health teams with a variety of local usual services, suggests that there are clear benefits to the introduction of generic, community-based multidisciplinary teams: they can improve engagement with services, increase user satisfaction, increase met needs and improve adherence to treatment, although they do not improve symptoms or social function (Tyrer *et al*, 1995, 1998, 2003; Thornicroft *et al*, 1998; Burns, 2001; Simmonds *et al*, 2001). In addition, continuity of care and service flexibility have been shown to be more developed where a community mental health team model is in place (Sytema *et al*, 1997).

Case management. Within community mental health teams, case management is

a method of delivering care, rather than being a clinical intervention in its own right, and at this stage the evidence suggests that it can most usefully be implemented within the context of the community mental health team (Holloway & Carson, 2001). It is a style of working that has been described as the 'coordination, integration and allocation of individualised care within limited resources' (Thornicroft, 1991). There is now a considerable literature to show that this style of working can be moderately effective in improving continuity of care, quality of life and patient satisfaction, but there is conflicting evidence as to whether it has any impact on the use of in-patient services (Saarento *et al*, 1996; Hansson *et al*, 1998; Mueser *et al*, 1998; Ziguras & Stuart, 2000; Ziguras *et al*, 2002). Case management needs to be carefully distinguished from the much more specific and more intensive assertive community treatment (see below).

Acute in-patient care

There is no evidence that a balanced system of mental health care can be provided without acute beds. Some services (such as home treatment teams, crisis houses and acute day hospital care, see below) may be able to offer realistic alternative care for some voluntary patients. Nevertheless, people who need urgent medical assessment, or those with severe and comorbid medical and psychiatric conditions, or those experiencing severe psychiatric relapse and behavioural disturbance, or those with high levels of suicidality or assaultativeness, or with an acute neuropsychiatric condition, or elderly patients with concomitant severe physical disorders, will usually require high-intensity immediate support in acute in-patient hospital units.

There is a relatively weak evidence base on many aspects of in-patient care, and most studies are descriptive accounts (Szmukler & Holloway, 2001). There are few systematic reviews in this field, one of which found no difference in outcomes between routine admissions and planned short hospital stays (Johnstone & Zolese, 1999). More generally, although there is a consensus that acute in-patient services are necessary, the number of beds required is highly contingent upon what other services exist locally and upon local social and cultural characteristics (Thornicroft & Tansella, 1999). Acute in-patient care commonly absorbs most of the mental health budget (Knapp *et al*, 1997). Therefore, minimising the number of bed-days used, for example by reducing the average length of stay, may be an important goal, if the resources released in this way can be used for other service components. A related policy issue concerns how to provide acute beds in a humane and less institutionalised way that is acceptable to patients, for example in general hospital units (Quirk & Lelliott, 2001; Tomov, 2001).

Long-term community-based residential care

It is important to know whether patients with severe and long-term disabilities should be cared for in larger, traditional institutions, or be transferred to long-term community-based residential care. The evidence here, for areas with medium and high resource levels, is clear. When deinstitutionalisation is done carefully for those who had previously received long-term in-patient care for many years, the outcomes are more favourable for most patients who are discharged to community care (Tansella, 1986; Thornicroft & Bebbington, 1989; Shepherd & Murray, 2001). The Team for the Assessment of Psychiatric Services study in London (Leff, 1997), for example, completed a 5-year follow-up of over 95% of 670 people without dementia discharged from long-stay residential care and found that:

(a) two-thirds of the patients were still living in their new residence;

(b) there was no increase in the death rate or the suicide rate;

(c) very few patients became homeless, and none was lost to follow-up from a staffed home;

(d) over a third were briefly readmitted, and at follow-up 10% of the sample were in hospital;

(e) patients' quality of life was greatly improved by the move to the community;

(f) there was little difference between total hospital and community costs, and overall community care was more cost-effective than long-stay hospital care.

However, there is less evidence available on the treatment and care needs of the never-institutionalised group of long-term patients (Holloway *et al*, 1999), and so careful local assessment of the needs of this population will be especially important. The range and capacity of community residential long-term care that will be needed in any particular area is also highly dependent upon which other services are available locally, and upon social and cultural factors, such as the amount of family care that is provided (van Wijngaarden *et al*, 2003).

Employment and occupation

Rates of unemployment among people with mental disorders are usually much higher than in the general population (Warr, 1987; Warner, 1994). Traditional methods of occupation and day care have been provided by day centres or a variety of psychiatric rehabilitation centres (Shepherd, 1990; Rosen & Barfoot, 2001). There has been little scientific research into these traditional forms of day care, and a review of over 300 papers found no relevant randomised controlled trial (Marshall *et al*, 2001). Non-randomised studies have given conflicting results, and for areas with medium levels of resources it is reasonable at this stage to make pragmatic decisions about the provision of rehabilitation and day care services if the more differentiated and evidence-based options discussed below are not affordable (Marshall *et al*, 2001; Catty *et al*, 2003).

Step C: Specialised and differentiated mental health services

The stepped care model suggests that areas with a high level of resources may already provide all or most of the service components in steps A and B, and are then able to offer additional components from the following options (step C; Table 1).

Specialised out-patient and ambulatory clinics

Specialised out-patient facilities for specific disorders or patient groups are common in many high-resource areas and may include services dedicated, for example, to those with eating disorders; patients with dual diagnosis (psychotic disorder and substance misuse); people with treatment-resistant affective or psychotic disorders; those requiring specialised forms of psychotherapy; mentally disordered offenders; mentally ill women with babies; and those with other specific disorder groups (such as post-traumatic stress disorder). Local decisions about whether to establish such specialist clinics will depend upon several factors, including their relative priority in relation

to the other specialist services described below, identified services gaps and the financial opportunities available.

Specialised community mental health teams

Specialised community mental health teams are by far the most researched of all the components of balanced care, and most recent randomised controlled trials and systematic reviews in this field refer to such teams (Mueser *et al*, 1998). Two types of specialised community mental health team have been particularly well developed as adjuncts to generic teams: assertive community treatment teams and early intervention teams.

Assertive community treatment teams. Assertive community treatment teams provide a form of specialised mobile outreach treatment for people with more disabling mental disorders, and have been clearly characterised (Deci *et al*, 1995; Teague *et al*, 1998; Scott & Lehman, 2001). There is now strong evidence that assertive community treatment can produce the following advantages in areas with high levels of resources:

(a) reduced admissions to hospital and use of acute beds;

(b) improved accommodation status and occupation;

(c) increased service user satisfaction.

Assertive community treatment has not been shown to produce improvements in mental state or social behaviour. It can reduce the cost of in-patient services, but does not change the overall costs of care (Latimer, 1999; Phillips *et al*, 2001; Marshall & Lockwood, 2003). Nevertheless, it is not known how far this approach is cross-culturally relevant and indeed there is evidence that it may be less effective where usual services already offer high levels of continuity of care, for example in the UK, than in settings where the 'treatment as usual' control condition may offer little to patients with severe mental illness (Burns *et al*, 1999, 2001; Fiander *et al*, 2003).

Early intervention teams. There has been considerable interest in recent years in the prompt identification and treatment of first- or early-episode cases of psychosis. Much of this research has focused upon the time between the first clear onset of symptoms and the beginning of treatment, referred to as the 'duration of untreated psychosis'; other studies have placed more emphasis upon providing family interventions when a young person's psychosis is first identified (Addington *et al*, 2003; Raune *et al*, 2004). There is now emerging evidence that longer duration of untreated psychosis is a predictor of worse outcome for the disorder; in other words, if patients wait a long time after developing a psychotic condition before they receive treatment, then they may take longer to recover and have a less favourable long-term prognosis. Few controlled trials of such interventions have been published, and a recent Cochrane systematic review (Marshall & Lockwood, 2004) has concluded that there are 'insufficient trials to draw any definitive conclusions, ... the substantial international interest in early intervention offers an opportunity to make major positive changes in psychiatric practice, but this opportunity may be missed without a concerted international programme of research to address key unanswered questions'. It is therefore currently premature to judge whether specialised early intervention teams should be seen as a priority (Larsen *et al*, 2001; McGorry & Killackey, 2002; McGorry *et al*, 2002; Warner & McGorry, 2002; Friis *et al*, 2003; Harrigan *et al*, 2003).

Alternatives to acute in-patient care

In recent years three main alternatives to acute in-patient care have been developed: acute day hospitals, crisis houses and home treatment/crisis resolution teams.

Acute day hospitals. Acute day hospitals offer programmes of day treatment for those with acute and severe psychiatric problems, as an alternative to admission to in-patient units. A recent systematic review of nine randomised controlled trials has established that acute day hospital care is suitable for about 30% of people who would otherwise be admitted to hospital, and offers advantages in terms of faster improvement and lower cost. It is reasonable to conclude that acute day hospital care is an effective option when demand for in-patient beds is high (Wiersma *et al*, 1995; Marshall *et al*, 2001).

Crisis houses. Crisis houses are houses in community settings which are staffed by trained mental health professionals and offer admission for some patients who would otherwise be admitted to hospital. A wide variety of respite houses, havens and refuges have been developed, but the term 'crisis house' is used here to mean facilities that are alternatives to non-compulsory hospital admission. The little available research evidence suggests that they are very acceptable to their residents (Davies *et al*, 1994; Sledge *et al*, 1996*a*,*b*; Szmukler & Holloway, 2001), may be able to offer an alternative to hospital admission for about a quarter of those who would otherwise be admitted, and may be more cost-effective than hospital admission (Sledge *et al*, 1996*a*,*b*; Mosher, 1999). Nevertheless, there is emerging evidence that female patients in particular prefer non-hospital alternatives (such as crisis houses) to acute in-patient treatment, and this may reflect the lack of perceived safety in hospital (Killaspy *et al*, 2000).

Home treatment and crisis resolution teams. Home treatment and crisis resolution teams are mobile community mental health teams offering assessment for patients in psychiatric crises and providing intensive treatment and care at home. A Cochrane systematic review (Catty *et al*, 2002) found that most of the research evidence comes from the USA and the UK, and concluded that home treatment teams reduce days spent in hospital, especially if the teams make regular home visits and have responsibility for both health and social care (Joy *et al*, 2002).

Alternative types of long-stay community residential care

These are usually replacements for long-stay wards in psychiatric institutions (Shepherd *et al*, 1996; Trieman *et al*, 1998; Shepherd & Murray, 2001). Three categories of such residential care can be identified:

(a) 24 h staffed residential care (high-staffed hostels, residential care homes or nursing homes, depending on whether the staff have professional qualifications);

(b) day-staffed residential places (hostels or residential homes which are staffed during the day);

(c) lower supported accommodation (minimally supported hostels or residential homes with visiting staff).

There is limited evidence as to the cost-effectiveness of these types of residential care, and no completed systematic review (Chilvers *et al*, 2003). It is therefore reasonable for policy makers to decide upon the

need for such services with local stakeholders (Hafner, 1987; Nordentoft *et al*, 1992; Rosen & Barfoot, 2001; Thornicroft, 2001).

Alternative forms of employment and occupation

Although vocational rehabilitation has been offered in various forms to people with severe mental illness for over a century, its role has weakened because of discouraging results, financial disincentives to work and pessimism about outcomes for these patients (Lehman *et al*, 1995; Polak & Warner, 1996; Wiersma *et al*, 1997). However, recent alternative forms of occupation and vocational rehabilitation have again raised employment as an outcome priority. Consumer and carer advocacy groups have set work and occupation as one of their highest priorities, to enhance both functional status and quality of life (Becker *et al*, 1996; Thornicroft *et al*, 2002). There are recent indications that it is possible to improve vocational and psychosocial outcomes with supported employment models, which emphasise rapid placement in competitive jobs and support from employment specialists (Drake *et al*, 1999). This individual placement and support model emphasises competitive employment in integrated work settings with follow-up support (Priebe *et al*, 1998); studies of such programmes have been encouraging in terms of increased rates of competitive employment (Marshall *et al*, 2001; Lehman *et al*, 2002).

DISCUSSION

This review makes clear that there is no compelling argument and no scientific evidence favouring the use of hospital services alone. On the other hand, there is also no evidence that community services alone can provide satisfactory and comprehensive care. Both the evidence available so far, and accumulated clinical experience, therefore support a balanced approach, incorporating elements of both hospital and community care (Thornicroft & Tansella, 2002).

The material resources available will severely constrain how this approach is applied in practice. In low-resource areas it may be unrealistic to invest in any of the components described here as mainstream mental health care (step B), and the focus will need to be upon primary mental health care, where the main role for the relatively few specialist mental health staff is to support primary care staff (step A, column 1, Table 1). Areas that can afford a more differentiated model of care may first consolidate their mainstream mental health care (step B), with the capacity of each service component decided as a balance between the known local needs (Thornicroft, 2001), the resources available and the priorities of local stakeholders. In general, as mental health systems develop away from an asylum-based model, the proportion of the total budget spent on the large asylums gradually decreases. In other words, new services outside hospital can only be provided by using extra resources (which is uncommon) or by using the resources that are transferred from the hospital sites and staff (which is the more usual case). Interestingly, the evidence from cost-effectiveness studies of deinstitutionalisation and the provision of community mental health teams is that the quality of care is closely related to the expenditure upon services, and overall community-based models of care are largely equivalent in cost to the services that they replace.

Over time, and as resources allow, each of the components of the mainstream model can be complemented by additional and differentiated options, described here as specialised differentiated mental health services (step C). Notably, the evidence base for these more recent and innovative forms of care is stronger than for any of the service components in steps A or B, described above in relation to lower resource countries. Indeed, few high-quality scientific studies have been carried out in low-income countries (Patel & Sumathipala, 2001; Isaakidis *et al*, 2002). Consequently, the relevance of most published research in this field to less economically developed countries may be low. This schema therefore places the evidence of effective services within the appropriate resource context; 'resource' here refers not only to the monetary investments made, but also to the available numbers of staff, their levels of experience and expertise, their therapeutic orientation and the contributions available from the wider social and family networks (Desjarlais *et al*, 1995).

Two important implications arise from this approach. First, the stepped care model suggests that there should be a degree of co-ordination between service components, in particular between the provision of primary and specialist care. We recognise that such planning mechanisms may be weak in some areas. Second, this model implies that the training of mental health staff should be fit for purpose according to the service stage reached (A, B or C) and the level of resources in the area of practice (high, medium or low). In practice it is likely that in any particular area some but not all of the service components described here will be present, and that such identified gaps may inform local planning for service developments.

In recent years there has been a debate between those who are in favour of the provision of mental health treatment and care in hospitals, and those who prefer to use primarily or even exclusively community settings, in which the two forms of care are often seen as incompatible. This false dichotomy can now be replaced by an approach that balances both community services and modern hospital care. However, since this framework cannot be applied in the same way in settings with different resources, the stepped care model presented in this paper suggests a sequential view of how to develop a balance of services in any specific context, moving over time from the left column to the right column in Table 1. In this way, implementing the components of a modern mental health service can be seen as a pragmatic exercise undertaken by all those with an interest in improving care.

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CLINICAL IMPLICATIONS

- Countries with low levels of resources should focus on (a) establishing and improving services in primary care settings, along with (b) the provision of specialist back-up.
- Medium-resource countries, in addition to (a) and (b), may then develop 'mainstream' mental health care with the following components: (i) out-patient/ambulatory clinics; (ii) community mental health teams; (iii) acute in-patient care; (iv) long-term community-based residential care; and (v) employment and occupation.
- High-resource countries may include (a) and (b), and then develop evidence-based specialised/differentiated care for each of (i)–(v).

LIMITATIONS

- Within countries there may be wide variations between regions, so that different resource levels apply when planning services.
- The model proposed is most directly applicable to health systems that have a high degree of coordinated planning and commissioning of services.
- There remain many areas of mental health services, most notably in-patient care and out-patient/ambulatory services, where relatively little research on effectiveness or cost-effectiveness has been conducted.

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