



CHAPTER THREE

Solving Mental Health Problems

Over the past half century, the model for mental health care has changed from the institutionalization of individuals suffering from mental disorders to a community care approach backed by the availability of beds in general hospitals for acute cases. This change is based both on respect for the human rights of individuals with mental disorders, and on the use of updated interventions and techniques. A correct objective diagnosis is fundamental for planning individual care and choice of appropriate treatment. The earlier a proper course of treatment starts, the better the prognosis. Appropriate treatment of mental and behavioural disorders implies the rational use of pharmacological, psychological and psychosocial interventions in a clinically meaningful and integrated way. The management of specific conditions consists of interventions in the areas of prevention, treatment and rehabilitation.

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SOLVING MENTAL HEALTH PROBLEMS

THE SHIFTING PARADIGM

The care of people with mental and behavioural disorders has always reflected prevailing social values related to the social perception of mental illness. Through the ages, people with mental and behavioural disorders have been treated in different ways (see Box 3.1). They have been given a high status in societies which believe them to intermediate with gods and the dead. In medieval Europe and elsewhere they were beaten and burnt at the stake. They have been locked up in large institutions. They have been explored as scientific objects. And they have been cared for and integrated into the communities to which they belong.

In Europe, the 19th century witnessed diverging trends. On one hand, mental illness was seen as a legitimate topic for scientific enquiry; psychiatry burgeoned as a medical discipline, and people with mental disorders were considered medical patients. On the other hand, people with mental disorders, like those with many other diseases and undesirable social behaviour, were isolated from society in large custodial institutions, the state mental hospitals, formerly known as lunatic asylums. These trends were later exported to Africa, the Americas and Asia.

During the second half of the 20th century, a shift in the mental health care paradigm took place, largely owing to three independent factors.

- Psychopharmacology made significant progress, with the discovery of new classes of drugs, particularly neuroleptics and antidepressants, as well as the development of new forms of psychosocial interventions.
- The human rights movement became a truly international phenomenon under the sponsorship of the newly created United Nations, and democracy advanced on a global basis, albeit at different speeds in different places (Merkl 1993).
- Social and mental components were firmly incorporated in the definition of health (see Chapter 1) of the newly established WHO in 1948.

These technical and sociopolitical events contributed to a change in emphasis: from care in large custodial institutions, which over time had become repressive and regressive, to more open and flexible care in the community.

The failures of asylums are evidenced by repeated cases of ill-treatment to patients, geographical and professional isolation of the institutions and their staff, weak reporting and accounting procedures, bad management, ineffective administration, poorly targeted financial resources, lack of staff training, and inadequate inspection and quality assurance

Box 3.1 Mental care: then or now?

The following three statements give vivid insights into how attitudes and policies towards the treatment of the mentally ill have changed, or been called into question, over the last 150 years.

"It is now sixteen years since the use of all mechanical restraint [of mental patients] – strait-waistcoat, muff, leg-lock, handcuff, coercion-chair or other – was abolished. Wherever the attempt has been resolutely made it has succeeded. [...] no fallacy can be greater than that of imagining what is called a moderate use of restraint to be consistent with a general plan of treatment in all other respects complete, and unobjectionable, and humane. [Its] abolition must be absolute, or it cannot be efficient."

1856. John Conolly (1794–1866), English physician, director of Asylum for the Insane at Hanwell. In: *The treatment of the insane without mechanical restraints*. London, Smith, Elder & Co.

"When the National Committee was organized, its chief concern was to humanize the care of the insane: to eradicate the abuses, brutalities and neglect from which the mentally sick have traditionally suffered; to focus public attention on the need for reform; to hospitalize "asylums", extend treatment facilities, and raise standards of care; in short, to secure for the mentally ill the same high standards of medical attention as that generally accorded to the physically ill."

1908. Clifford Beers (1876–1943), US founder of the international movement of mental hygiene, himself admitted several times to mental hospitals. In: *A mind that found itself: an autobiography*. New York, Longmans Green.

"We stand against the right given to some men, narrow-minded or not, of concluding their investigations in the realm of the mind by a life imprisonment sentence. And what imprisonment! We know – in fact, we don't – that asylums, far from being a place of *asylum*, are frightening gaols, where inmates are a cheap and convenient workforce, where abuse is the rule, all tolerated by you. The mental hospital, under the cover of science and justice, is comparable to a barracks, a penitentiary, a penal colony."

1935. Antonin Artaud (1896–1948), French poet, actor and playwright, who spent many years in mental hospitals. In: *Open letter to medical directors of madhouses*. Paris, *La Révolution Surréaliste*, No. 3.

procedures. Also, the living conditions in psychiatric hospitals throughout the world are poor, leading to human rights violations and chronicity. In terms of absolute standards, it could be argued that conditions in hospitals in developed countries are better than living standards in many developing countries. However, in terms of relative standards – comparing hospital standards with general community standards in a particular country – it is fair to say that the conditions in all psychiatric hospitals are poor. Some examples have been documented of human rights abuse in psychiatric hospitals (Box 3.2).

In contrast, community care is about the empowerment of people with mental and behavioural disorders. In practice, community care implies the development of a wide range of services within local settings. This process, which has not yet begun in many regions and countries, aims to ensure that some of the protective functions of the asylum are fully provided in the community, and the negative aspects of the institutions are not perpetuated. Care in the community, as an approach, means:

- services which are close to home, including general hospital care for acute admissions, and long-term residential facilities in the community;
- interventions related to disabilities as well as symptoms;
- treatment and care specific to the diagnosis and needs of each individual;
- a wide range of services which address the needs of people with mental and behavioural disorders;
- services which are coordinated between mental health professionals and community agencies;
- ambulatory rather than static services, including those which can offer home treatment;
- partnership with carers and meeting their needs;
- legislation to support the above aspects of care.

The accumulating evidence of the inadequacies of the psychiatric hospital, coupled with the appearance of "institutionalism" – the development of disabilities as a consequence of social isolation and institutional care in remote asylums – led to the de-institutionalization

movement. While de-institutionalization is an important part of mental health care reform, it is not synonymous with de-hospitalization. De-institutionalization is a complex process leading to the implementation of a solid network of community alternatives. Closing mental hospitals without community alternatives is as dangerous as creating community alternatives without closing mental hospitals. Both have to occur at the same time, in a well-coordinated incremental way. A sound de-institutionalization process has three essential components:

- prevention of inappropriate mental hospital admissions through the provision of community facilities;
- discharge to the community of long-term institutional patients who have received adequate preparation;
- establishment and maintenance of community support systems for non-institutionalized patients.

De-institutionalization has not been an unqualified success, and community care still faces some operational problems. Among the reasons for the lack of better results are that governments have not allocated resources saved by closing hospitals to community care; professionals have not been adequately prepared to accept their changing roles; and the stigma attached to mental disorders remains strong, resulting in negative public attitudes towards people with mental disorders. In some countries, many people with severe mental disorders are shifted to prisons or become homeless.

Reflecting the paradigm shift from hospital to community, far-reaching policy changes have been introduced in a number of countries. For example, Law 180, enacted in Italy in 1978, closing down all mental hospitals, formalized and accelerated a pre-existing trend in the care of the mentally ill. The major provisions of the Italian law state that no new patients are to be admitted to the large state hospitals nor should there be any readmissions. No new psychiatric hospitals are to be built. Psychiatric wards in general hospitals are not to exceed 15 beds and must be affiliated to community mental health centres. Community-based facilities, staffed by existing mental health personnel, are responsible for a specified catchment area. Law 180 has had an impact far beyond Italian jurisdiction.

Box 3.2 Human rights abuse in psychiatric hospitals

Human Rights Commissions found “appalling and unacceptable” conditions when they visited several psychiatric hospitals in Central America¹ and India² during the last five years. Similar conditions exist in many other psychiatric hospitals in other regions, in both industrialized and developing countries. They include filthy living conditions, leaking roofs, overflowing toilets, eroded floors, and broken doors and windows. Most of the patients visited were kept in pyjamas or naked.

Some were penned into small areas of residential wards where they were left to sit, pace, or lie on the concrete floor all day. Children were left lying on mats on the floor, some covered with urine and faeces. Physical restraint was commonly misused: many patients were observed tied to beds.

At least one-third of the individuals were people with epilepsy or mental retardation, for whom psychiatric institutionalization is unnecessary and confers no benefit. They could well return to live in the com-

munity if they could be provided with appropriate medication and a full range of community-based services and support systems.

Many hospitals retained the jail-like structure of their construction in colonial times. Patients were referred to as *inmates* and were for most of the day in the care of *warders*, whose supervisors were called *overseers*, while the wards were referred to as *enclosures*. Seclusion rooms were used in the majority of the hospitals.

In over 80% of the hospitals vis-

ited, routine blood and urine tests were unavailable. At least one-third of the individuals did not have a psychiatric diagnosis to justify their presence there. In most hospitals, case file recording was extremely inadequate. Trained psychiatric nurses were present in less than 25% of the hospitals, and less than half the hospitals had clinical psychologists and psychiatric social workers.

¹Levav I, Gonzalez VR (2000). Rights of persons with mental illness in Central America. *Acta Psychiatrica Scandinavica*, 101: 83–86.

²National Human Rights Commission (1999). *Quality assurance in mental health*. New Delhi, National Human Rights Commission of India.

The dominant model in the organization of comprehensive psychiatric care in many European countries has been the creation of geographically defined areas, known as *sectors*. This concept was developed in France in the mid-20th century and, from the 1960s on, the organizing principle of sectorization has been widely applied in almost all countries in Western Europe, with sector size ranging from populations of 25 000 to 30 000. The concept of the health district in the primary health care strategy has many points in common with this sector approach.

In many developing countries, care programmes for the individuals with mental and behavioural problems have a low priority. Provision of care is limited to a small number of institutions – usually overcrowded, understaffed and inefficient – and services reflect little understanding of the needs of the ill individuals or the range of approaches available for treatment and care.

In most developing countries, there is no psychiatric care for the majority of the population; the only services available are in mental hospitals. These mental hospitals are usually centralized and not easily accessible, so people often seek help there only as a last resort. The hospitals are large in size, built for economy of function rather than treatment. In a way, the asylum becomes a community of its own with very little contact with society at large. The hospitals operate under legislation which is more penal than therapeutic. In many countries, laws that are more than 40 years old place barriers to admission and discharge. Furthermore, most developing countries do not have adequate training programmes at national level to train psychiatrists, psychiatric nurses, clinical psychologists, psychiatric social workers and occupational therapists. Since there are few specialized professionals, the community turns to the available traditional healers (Saeed et al. 2000).

A result of these factors is a negative institutional image of the people with mental disorders, which adds to the stigma of suffering from a mental or behavioural disorder. Even now, these institutions are not in step with the developments concerning the human rights of people with mental disorders.

Box 3.3 The Declaration of Caracas¹

The legislators, associations, health authorities, mental health professionals and jurists assembled at the Regional Conference on the Restructuring of Psychiatric Care in Latin America within the Local Health Systems Model, . . .

DECLARE

1. That the restructuring of psychiatric care on the basis of Primary Health Care and within the framework of the Local Health Systems Model will permit the promotion of alternative service models that are community-based and integrated into social and health care networks.
2. That the restructuring of psychiatric care in the Region implies a critical review of the dominant and centralizing role played by the mental hospital in mental health service delivery.
3. That the resources, care and treatment that are made available must:
 - (a) safeguard personal dignity and human and civil rights;
 - (b) be based on criteria that are rational and technically appropriate; and
 - (c) strive to ensure that patients remain in their communities.
4. That national legislation must be redrafted if necessary so that:
 - (a) the human and civil rights of mental patients are safeguarded; and
 - (b) the organization of [community mental health] services guarantees the enforcement of these rights.
5. That training in mental health and psychiatry should use a service model that is based on the community health center and encourages psychiatric admission in general hospitals, in accordance with the principles that underlie the restructuring movement.
6. That the organizations, associations, and other participants in this Conference hereby undertake to advocate and develop programs at the country level that will promote the restructuring desired, and at the same time that they commit themselves to monitoring and defending the human rights of mental patients in accordance with national legislation and international agreements.

To this end, they call upon the Ministries of Health and Justice, the Parliaments, Social Security and other care-providing institutions, professional organizations, consumer associations, universities and other training facilities, and the media to support the restructuring of psychiatric care, thus assuring its successful development for the benefit of the population in the Region.

¹ Extract from the text adopted on 14 November 1990 by the Regional Conference on the Restructuring of Psychiatric Care in Latin America, convened in Caracas, Venezuela, by the Pan American Health Organization/WHO Regional Office for the Americas. *International Digest of Health Legislation*, 1991, 42(2): 336–338.

Some developing countries, particularly in the Eastern Mediterranean Region, have attempted to formulate national plans for mental health services, develop human resources and integrate mental health with general health care, in accordance with the recommendations of a 1974 WHO expert committee (WHO 1975; Mohit 1999).

In 1991, the United Nations General Assembly adopted the principles for the protection of persons with mental illness and the improvement of mental health care, emphasizing care in the community and the rights of individuals with mental disorders (United Nations 1991). It is now recognized that violation of human rights can be perpetrated both by neglecting the patient through discrimination, carelessness and lack of access to services, as well as by intrusive, restrictive and regressive interventions.

In 1990, WHO/PAHO launched an initiative for the restructuring of psychiatric care in the Region of the Americas, which resulted in the Declaration of Caracas (Box 3.3). The declaration called for the development of psychiatric care closely linked with primary health care and within the framework of the local health system. The above developments helped stimulate the organization of mental health care in developing countries.

Where organized mental health services have been initiated in developing countries in recent times, such services are usually part of primary health care. At one level, this can be seen as necessity in the face of the lack of trained professionals and resources to provide specialized services. At another level, it is a reflection of the opportunity to organize mental health services in a manner that avoids isolation, stigma and discrimination. The approach of utilizing all the available community resources has the attraction of empowering individuals, families and communities to make mental health an agenda of people rather than of professionals. Currently, however, in developing countries mental health care is not receiving the attention that is needed. Even in countries where pilot programmes have shown the value of integrating mental health care into primary health care (for example, in Brazil, China, Colombia, India, the Islamic Republic of Iran, Pakistan, Philippines, Senegal, South Africa and Sudan), that approach has not been expanded to cover the whole country.

Table 3.1 Utilization of professional services for mental problems, Australia, 1997

Consultations for mental problems	No disorder %	Any disorder %	> 3 disorders %
General practitioner only ^a	2.2	13.2	18.1
Mental health professional only ^b	0.5	2.4	3.9
Other health professional only ^c	1.0	4.0	5.7
Combination of health professionals	1.0	15.0	36.4
Any health professional ^d	4.6	34.6	64.0

^a Refers to persons who had at least one consultation with a general practitioner in the previous 12 months but did not consult any other type of health professional.

^b Refers to persons who had at least one consultation with a mental health professional (psychiatrist/psychologist/mental health team) in the previous 12 months but did not consult any other type of health professional.

^c Refers to persons who had at least one consultation with another health professional (nurse/non-psychiatric medical specialist/pharmacist/ambulance officer/welfare worker or counsellor) in the previous 12 months but did not consult any other type of health professional.

^d Refers to persons who had at least one consultation with any health professional in the previous 12 months.

Source: Andrews G et al. (2001). Prevalence, comorbidity, disability and service utilisation: overview of the Australian National Mental Health Survey. *British Journal of Psychiatry*, 178: 145–153.

Despite the major differences between mental health care in developing and developed countries, they share a common problem: the poor utilization of available psychiatric services. Even in countries with well-established services, fewer than half of those individuals needing care make use of available services. This is related both to the stigma attached to individuals with mental and behavioural disorders and to the inadequacy of the services provided (see Table 3.1).

This stigma issue was highlighted in the US Surgeon General's Report of 1999 (DHHS 1999). The report noted that: "Despite the efficacy of treatment options and the many possible ways of obtaining a treatment of choice, nearly half of all Americans who have a severe mental illness do not seek treatment. Most often, reluctance to seek care is an unfortunate outcome of very real barriers. Foremost among these is the stigma that many in our society attach to mental illness and to people who have a mental illness."

In summary, the past half century witnessed an evolution of care towards a community care paradigm. This is based on two main pillars: first, respect of the human rights of individuals with mental disorders; and second, the use of updated interventions and techniques. In the best cases, this has been translated into a responsible process of de-institutionalization, supported by health workers, consumers, family members and other progressive community groups.

PRINCIPLES OF CARE

The idea of community-based mental health care is a global approach rather than an organizational solution. Community-based care means that the large majority of patients requiring mental health care should have the possibility of being treated at community level. Mental health care should not only be local and accessible, but should also be able to address the multiple needs of individuals. It should ultimately aim at empowerment and use efficient treatment techniques which enable people with mental disorders to enhance their self-help skills, incorporating the informal family social environment as well as formal support mechanisms. Community-based care (unlike hospital-based care) is able to identify resources and create healthy alliances that would otherwise remain hidden and inactivated.

Use of those hidden resources can prevent situations in which discharged patients are abandoned by health services to the care of their unequipped families (with the well-known negative psychosocial consequences and burden for both). It allows for quite effective management of the social and family burden, traditionally alleviated by institutional care. This kind of service is spreading in some European countries, in some states of the United States, in Australia, Canada and China. Some countries in Latin America, Africa, the Eastern Mediterranean, South-East Asia and the Western Pacific have introduced innovative services (WHO 1997b).

Good care, however and wherever it is applied, flows from basic guiding principles, some of which are particularly relevant to mental health care. These are: diagnosis; early intervention; rational use of treatment techniques; continuity of care; wide range of services; consumer involvement; partnership with families; involvement of the local community; and integration into primary health care.

DIAGNOSIS AND INTERVENTION

A correct objective diagnosis is fundamental for the planning of individual care, and for the choice of an appropriate treatment. Mental and behavioural disorders can be diag-

nosed with a high level of reliability. Since different treatments are indicated for different diseases, diagnosis is an important starting point of any intervention.

A diagnosis can be made in nosological terms (that is, according to an international classification and nomenclature of diseases and disorders), in terms of the type and level of disability experienced by an individual, or preferably in terms of both.

Early intervention is fundamental in preventing progress towards a full-blown disease, in controlling symptoms and improving outcomes. The earlier the institution of a proper course of treatment, the better the prognosis. The importance of early intervention is highlighted by the following examples.

- In schizophrenia, the duration of untreated psychosis is proving to be important. Delays in treatment are likely to result in poorer outcomes (McGorry 2000; Thara et al. 1994).
- Screening and brief interventions for those at high risk of developing alcohol-related problems are effective in reducing alcohol consumption and related harm (Wilk et al. 1997).

The appropriate treatment of mental disorders implies the rational use of pharmacological, psychological and psychosocial interventions in a clinically meaningful, balanced, and well-integrated way. In view of the extreme importance of the ingredients of care, they are dealt with at length later in this chapter.

CONTINUITY OF CARE

Some mental and behavioural disorders follow a chronic course, albeit with periods of remission and relapses which may mimic acute disorders. Nevertheless, as far as management is concerned, they are similar to chronic physical illnesses. The chronic care paradigm is therefore more appropriate to them than the one generally used for acute, communicable disease. This has particular implications concerning access to services, staff availability, and costs to patients and families.

The needs of patients and their families are complex and changing, and continuity of care is important. This calls for changes in the way care is currently organized. Some of the measures to ensure continuity of care include:

- special clinics for groups of patients with the same diagnosis or problems;
- imparting caring skills to carers;
- the same treatment team providing care to patients and their families;
- group education of patients and their families;
- decentralization of services;
- integration of care into primary health care.

WIDE RANGE OF SERVICES

The needs of people with mental illness and their families are multiple and varied and differ at different stages of illness. A wide variety of services are required to provide comprehensive care for some of the people with mental illness. Those recovering from illness need help to regain their skills and resume their roles in society. Those who recover only partially need assistance to compete in an open society. Some patients, especially in developing countries, who have had sub-optimum care can nevertheless benefit from rehabilitation programmes. These services may dispense medication or provide special rehabilitation programmes, housing, judicial assistance or other forms of socioeconomic support. Specialized personnel, such as nurses, clinical psychologists, social workers, occupational

therapists and volunteers, have demonstrated their value as intrinsic elements of flexible care teams. Multidisciplinary teams are especially relevant in the management of mental disorders, owing to the complex needs of patients and their families at different points during the illness.

PARTNERSHIPS WITH PATIENTS AND FAMILIES

The emergence of consumer movements in a number of countries has changed the way stakeholders' views are seen. These consumer groups are generally composed of people with mental disorders and their families. In many countries, consumer movements have grown in parallel with traditional mental health advocacy, such as that of family movements. The consumer movement is based on a belief in individual patient choice regarding treatment and other decisions (see Box 3.4).

Probably the best example of a consumer movement is Alcoholics Anonymous, which has become popular around the world and has achieved recovery rates comparable to those obtained by formal psychiatric care. The availability of computer-assisted treatment and online support from ex-patients have opened up new ways of getting care. Patients with mental disorders can be very successful in helping themselves, and peer support has been important in a number of conditions for recovery and reintegration into society.

The consumer movement has substantially influenced mental health policy in a number of countries. In particular, it has increased the employment of people with disorders in the traditional mental health system as well as in other social service agencies. For example, in the Ministry of Health of the Province of British Columbia, Canada, the position of Director of Alternative Care was recently assigned to a person with a mental disorder, who is thus in a strong position to influence mental health policy and services.

Consumer advocacy has targeted involuntary treatment, self-managed care, the role of consumers in research, service delivery and access to care. Programmes run by the consumers include drop-in centres, case management programmes, outreach programmes and crisis services.

The positive role of families in mental health care programmes has been recognized relatively recently. The earlier view of the family as a causative factor is not valid. The role of

Box 3.4 The role of consumers in mental health care

People using mental health services have traditionally been viewed within the system as passive recipients, unable to articulate their own needs and wishes, and subjected to forms of care or treatment decided on and designed by others. However, over the past 30 years, as consumers they have begun to articulate their own visions of what services they need and want.

Among the strongest themes that have emerged are: the right to self-determination; the need for information about medication and

other treatment; the need for services to facilitate active community participation; an end to stigma and discrimination; improved laws and public attitudes, removing barriers to community integration; the need for alternative, consumer-run services; better legal rights and legal protection of existing rights; and an end to keeping people in large institutions, often for life.

Opinions vary among consumers and their organizations about how best to achieve their goals. Some groups want active cooperation and collaboration with mental health

professionals, while others want complete separation from them. There are also major differences as to how closely to cooperate, if at all, with organizations representing family members of patients.

It is clear that consumer organizations around the world want their voices to be heard and considered as decisions are made about their lives. People diagnosed with mental illness are entitled to be heard in the discussions on mental health policy and practice that involve professionals, family members, legislators, and opinion leaders. Behind the

labels and diagnoses are real people, who, no matter what others may think, have ideas, thoughts, opinions, and ambitions. Those who have been diagnosed with mental illness are no different from other people, and want the same basic things out of life: adequate incomes; decent places to live; educational opportunities; job training leading to real, meaningful jobs; participation in the lives of their communities; friends and social relationships; and loving personal relationships.

families now extends beyond day-to-day care to organized advocacy on behalf of the mentally ill. Such advocacy has been pivotal in changing mental health legislation in some countries, and improving services and developing support networks in others.

Substantial evidence demonstrates the benefits of involving families in the treatment and management of schizophrenia, mental retardation, depression, alcohol dependence and childhood behaviour disorders. The role of the family in the treatment of other conditions remains to be more firmly established by further controlled trials. There are indications that the outcome for patients living with their families is better than for those in institutions. However, many international studies have established a strong relationship between high “expressed emotion” attitudes in relatives and an increased relapse rate for patients living with them. By changing the emotional atmosphere in the home, the relapse rate can be reduced (Leff & Gamble 1995; Dixon et al. 2000).

Work with families to reduce relapses was always seen as an adjunct to maintenance medication and not as a substitute for it. Indeed, family therapy, when added to antipsychotic medication, has been shown to be more efficacious than medication alone in preventing relapse in schizophrenia. A meta-analysis by the Cochrane Collaboration (Pharaoh et al. 2000) showed relapse rates being reduced on average by half over both one year and two years. The question remains, however, whether ordinary clinical teams can reproduce the striking results of the pioneering research groups which have conducted their work mostly in developed countries. In developing countries, the family is usually involved in the treatment of the individual psychiatric patient, both by traditional healers and biomedical services.

Family networking locally and nationally has brought carers into partnership with professionals (Box 3.5). In addition to providing mutual support, many networks have become

Box 3.5 Partnerships with families

Mental health care workers, the families of individuals with mental illness, and family support organizations have a great deal to learn from each other. Through regular contact, health staff are able to learn from families what knowledge, attitudes and skills are needed to enable them to work together effectively. They also learn about problems such as limited resources, huge caseloads, and inadequate training, which prevent clinicians and clinical services from delivering effective services. In such cases, advocacy by a family organization may be seen to have a greater value than the “vested interest” of the professional worker.

When mental illness occurs, professional workers benefit from developing an early partnership with the family. Through such a joint en-

agement, information on a wide range of issues related to the illness can be discussed, family reactions explored, and a treatment plan formulated. Families, in turn, benefit from learning a process of problem-solving in order to manage the illness most effectively.

Two family support associations which have been very successful in meeting the needs of their respective constituencies, and in connecting with professionals, are briefly described below.

Alzheimer's Disease International (ADI) is an umbrella organization of 57 national Alzheimer's associations worldwide. Its purpose is to support the development and increased effectiveness of new and existing national Alzheimer's associations through such activities as World Alzheimer's Day, an annual conference, and the Alzheimer's University

(a series of workshops addressing basic organizational issues). It also provides information through its web site (<http://www.alz.co.uk>), fact sheets, booklets and newsletters.

National Alzheimer's associations are dedicated to supporting people with dementia and their families. They provide information as well as practical and emotional help such as help lines, support groups and respite care. They also provide training for carers and professionals and advocacy to governments.

The *World Fellowship for Schizophrenia and Allied Disorders (WSF)* stresses that the mutual sharing of knowledge – the professional knowledge of mental health workers, and the knowledge gained by families and consumers through their lived experiences – is vital for the development of trust. Without trust, an effective therapeutic alli-

ance is often not possible and clinicians, families and consumers can find themselves at odds with each other.

This continuing partnership aims at developing assertiveness in family carers so that they are able to resolve the many complicated challenges with which they are confronted, rather than having to rely always on professional support. This process is known as “moving from passive minding to active caring”. It is reinforced by referral to family support organizations, which professionals should strongly recommend to family members as an important part of the long-term treatment and care plan. More information about this association can be obtained by email from info@world-schizophrenia.org.

advocates, educating the general public, increasing support by policy-makers, and fighting stigma and discrimination.

INVOLVEMENT OF THE LOCAL COMMUNITY

Societal beliefs, attitudes and responses decide many aspects of mental health care. People with mental illness are members of society, and the social environment is an important determinant of outcome. If the social environment is favourable, it contributes to recovery and reintegration; if negative, it can reinforce stigma and discrimination. Efforts to enhance the involvement of local communities include disseminating accurate information about mental disorders and using community resources for specific initiatives, such as volunteers in suicide prevention and collaboration with traditional healers. Shifting care from institutions to the community itself can alter community attitudes and responses, and help people with mental illness lead a better life.

Studies in many African and Asian countries show that about 40% of the clients of traditional healers suffer from mental illnesses (Saeed et al. 2000). This is not much different from the picture revealed by many studies conducted in general health care settings. Working with traditional healers is thus an important mental health initiative. Professionals give healers accurate information about mental and behavioural disorders, encourage them to function as referral agents, and discourage practices such as starvation and punishment. For their part, professionals come to understand the healers' skills in dealing with psychosocial disorders.

Nongovernmental organizations have been important in mental health movements throughout history. It was a consumer, Clifford Beers, who in 1906 created the first successful nongovernmental organization dealing with mental health, the forerunner of the World Federation for Mental Health. The contributions of these organizations are unquestionable.

There are a number of avenues for bringing about changes in the community. The most important of these is the use of mass media for educational campaigns directed to the general public. "Defeat depression", "Changing minds – every family in the land", and the World Health Day 2001 slogan "Stop exclusion – Dare to care" are examples. Massive public awareness programmes in countries such as Australia, Canada, India, the Islamic Republic of Iran, Malaysia, the United Kingdom and the United States have changed the attitudes of the population to mental disorders. The World Psychiatric Association (WPA) has launched a programme in a number of countries to fight stigma and discrimination against persons suffering from schizophrenia (see Box 4.9). The programme uses the mass media, schools and family members as change agents.

Although in many developing countries the community does not necessarily discriminate against people with mental illness, beliefs in witchcraft, supernatural forces, fate, ill will of gods and so forth can interfere with seeking help and adherence to treatment. One of the best examples of how communities can become carers of the mentally ill is to be found in the Belgian town of Geel, the site of what is undoubtedly the oldest community mental health programme in the western world. Since the 13th century, and originating perhaps as early as the 8th century, severely mentally ill people have been welcomed by the Church of St Dymphna or by foster families in the town, with whom they have lived, often for several decades. Today, such families in Geel care for some 550 patients, about half of whom have jobs in sheltered workshops.

INTEGRATION INTO PRIMARY HEALTH CARE

Another important principle which plays a crucial role in the organization of mental health care is integration into primary health care. The fundamental role of primary care for the entire health system in any country was clearly stated in the Alma-Ata Declaration. This basic level of care acts as a filter between the general population and specialized health care.

Mental disorders are common and most patients are only seen in primary care; but their disorders are often not detected (Üstün & Sartorius 1995). Also, psychological morbidity is a common feature of physical disease, and emotional distress is often seen (but not always recognized) by the primary health care professionals. Training primary care and general health care staff in the detection and treatment of common mental and behavioural disorders is an important public health measure. This training can be facilitated by liaison with local community-based mental health staff, who are almost always keen to share their expertise.

The quality and quantity of specialist mental health services needed depend upon the services that are provided at the primary health care level. In other words, the provision of services needs to be balanced between community care and hospital care.

Patients discharged from psychiatric wards (in either general or specialized hospitals) can be effectively followed up by primary health care doctors. It is clear that primary health care plays a major role in countries where community-based mental health services do not exist. In many developing countries, well-trained primary health care workers provide adequate treatment for the mentally ill. It is interesting to note that the poverty of a country does not necessarily mean that mentally ill people will receive poor care. Experiences in some African, Asian and Latin American countries show that adequate training of primary health care workers in the early recognition and management of mental disorders can reduce institutionalization and improve clients' mental health.

INGREDIENTS OF CARE

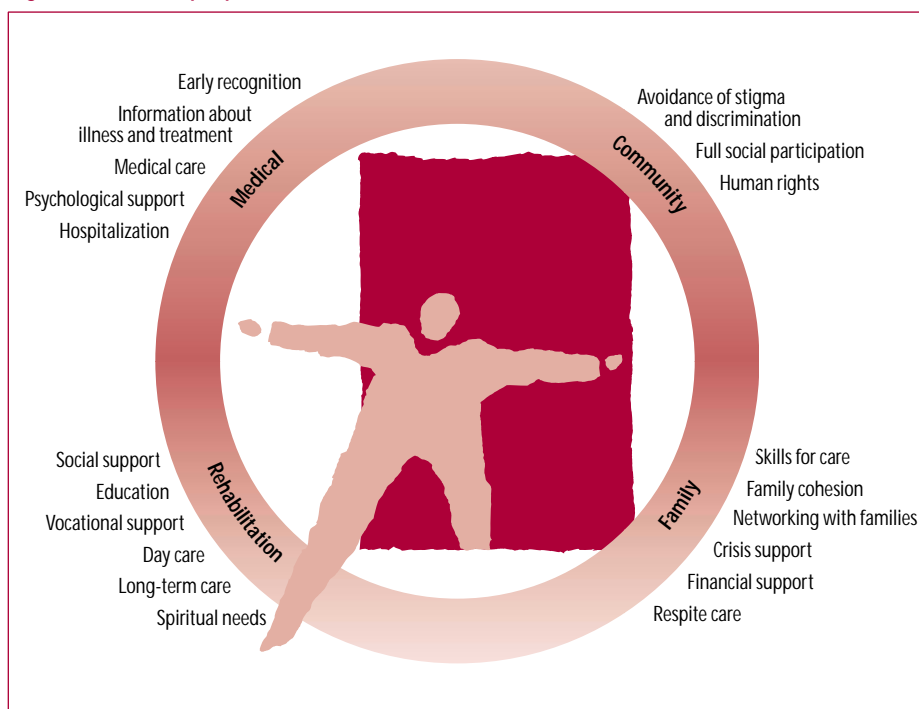
The management of mental and behavioural disorders – perhaps more particularly than that of other medical conditions – calls for the balanced combination of three fundamental ingredients: medication (or pharmacotherapy); psychotherapy; and psychosocial rehabilitation.

The rational management of mental and behavioural disorders needs a skilful titration of each of these ingredients. The amounts needed will vary as a function not only of the main diagnosis, but also of any physical and mental comorbidity, the age of the patient and the current stage of the disease. In other words, treatment should be tailored to individual needs; but these change as the disease evolves and as the patient's living conditions change (see Figure 3.1).

A balanced combination of interventions implies adherence to the following guiding principles:

- each intervention has a specific indication according to the diagnosis, that is, should be used in specific clinical conditions;
- each intervention should be used in a given amount, that is, the level of the intervention should be proportional to the severity of the condition;
- each intervention should have a determined duration, that is, it should last for the time required by the nature and severity of the condition, and should be discontinued as soon as possible;

Figure 3.1 Needs of people with mental disorders



- each intervention should be periodically monitored for adherence and expected results, as well as for adverse effects, and the recipient of the intervention should always be an active partner in this monitoring.

Effective management of mental and behavioural disorders includes paying careful attention to treatment adherence. Mental disorders are, at times, chronic conditions and thus often require treatment regimes that span the period of adulthood. Compliance with longer-term treatment is harder to achieve than compliance with short-term treatment. A further complication is that the existence of a mental or behavioural disorder has been shown to be associated with poor compliance to treatment regimes.

There has been considerable research on factors that improve compliance with treatment. These include:

- a trusting physician–patient relationship;
- time and energy spent on educating the patient regarding the goals of therapy and the consequences of good or poor adherence;
- a negotiated treatment plan;
- recruitment of family and friends to support the therapeutic plan and its implementation;
- simplification of the treatment regimen;
- reduction of the adverse consequences of the treatment regimen.

Over the years, a consensus has arisen among clinicians about the effectiveness of some interventions for the management of mental disorders; these interventions are described below. The information available on cost-effectiveness is disappointingly limited. The main

limitations are: first, the chronic nature of some mental disorders, which calls for very long term follow-up for the information to be meaningful; second, the different clinical and methodological criteria employed in the few studies conducted on the cost-effectiveness of these interventions; and third, the fact that most studies available have compared advanced approaches to the management of a given disorder, few of which are feasible in developing countries. The interventions described below were therefore selected on the basis of evidence of their effectiveness – despite the fact that many people do not have access to them – rather than on the criterion of cost-effectiveness. Up-to-date information on the cost-effectiveness of interventions is, however, included where available.

PHARMACOTHERAPY

The discovery and improvement of medicines useful for the management of mental disorders, which occurred in the second half of the 20th century, have been widely acknowledged as a revolution in the history of psychiatry.

There are basically three classes of psychotropic drugs that target specific symptoms of mental disorders: antipsychotics for psychotic symptoms; antidepressants for depression; anti-epileptics for epilepsy, and anxiolytics or tranquillizers for anxiety. Different types are used for drug-related and alcohol-related problems. It is important to remember that these medicinal drugs address the symptoms of diseases, not the diseases themselves or their causes. The drugs are therefore not meant to cure the diseases, but rather to reduce or control their symptoms or to prevent relapse.

In view of the effectiveness of most of these drugs, which was evident before the widespread use of controlled clinical trials, most recent economic studies have focused not on the cost-effectiveness of active pharmacotherapy over placebo or no care at all, but on the relative cost-effectiveness of newer classes of medication over their older counterparts. This is particularly true for the newer antidepressants and antipsychotics with regard, respectively, to tricyclic antidepressants and conventional neuroleptics.

A synthesis of the available evidence indicates that, while these newer psychotropic drugs have fewer adverse side-effects, they are not significantly more efficacious, and they are usually more expensive. The considerably higher acquisition costs of the newer drugs are, however, offset by a reduced need for other care and treatment. Drugs in the newer class of antidepressants, for example, may represent a more attractive and affordable prescribing option in lower-income countries as their patents expire or where they are already available at a cost similar to that of older drugs.

The WHO Essential Drugs List currently includes those drugs necessary, at a minimum level, for the satisfactory management of mental and neurological disorders of public health importance. Nevertheless, patients in poor or developing countries should not be deprived, on economic grounds only, of the benefits of advances in psychopharmacology. It is necessary to work towards making available to all the best drugs for the treatment of the condition. This requires a flexible approach to the essential drugs list.

PSYCHOTHERAPY

Psychotherapy refers to planned and structured interventions aimed at influencing behaviour, mood and emotional patterns of reaction to different stimuli through verbal and non-verbal psychological means. Psychotherapy does not comprise the use of any biochemical or biological means.

Several techniques and approaches – derived from different theoretical foundations – have shown their effectiveness in relation to various mental and behavioural disorders. Among these are behaviour therapy, cognitive therapy, interpersonal therapy, relaxation techniques and supportive therapy (counselling) techniques (WHO 1993b).

Behaviour therapy consists of the application of scientifically based psychological principles to the solution of clinical problems (Cottraux 1993). It is based on the principles of learning.

Cognitive behavioural interventions are aimed at changing thought patterns and behaviour through the practice of new ways of thinking and acting, whereas interpersonal therapy stems from a different conceptual model that centres around four common problem areas: role disputes, role transitions, unresolved grief, and social deficits.

Relaxation aims at a reduction of the arousal state – hence, of anxiety – to acceptable levels through a variety of techniques of muscular relaxation, derived from such methods as yoga, transcendental meditation, autogenic training and biofeedback. It can be an important adjunct to other forms of treatment, is easily accepted by patients, and can be self-learned (WHO 1988).

Supportive therapy, probably the simplest form of psychotherapy, is based on the doctor–patient relationship. Other important components of this technique include reassurance, clarification, abreaction, advice, suggestion and teaching. Some see this modality of treatment as the very foundation of good clinical care and suggest its inclusion as an intrinsic component of training programmes for all those involved with clinical duties.

Various types of psychotherapies – particularly cognitive behavioural interventions and interpersonal therapy – are effective in the treatment of phobias, drug and alcohol dependence, and psychotic symptoms such as delusions and hallucinations. They also help depressed patients to learn how to improve coping strategies and lessen symptom distress.

Encouraging evidence has recently emerged in relation to the cost-effectiveness of psychotherapeutic approaches to the management of psychosis and a range of mood and stress-related disorders, in combination with or as an alternative to pharmacotherapy. A consistent research finding is that psychological interventions lead to improved satisfaction and treatment concordance, which can contribute significantly to reduced rates of relapse, less hospitalization and decreased unemployment. The additional costs of psychological treatments are countered by decreased levels of other health service support or contact (Schulberg et al. 1998; Rosenbaum & Hylan 1999).

PSYCHOSOCIAL REHABILITATION

Psychosocial rehabilitation is a process that offers the opportunity for individuals who are impaired, disabled or handicapped by a mental disorder to reach their optimal level of independent functioning in the community. It involves both improving individual competencies and introducing environmental changes (WHO 1995). Psychosocial rehabilitation is a comprehensive process not just a technique.

The strategies of psychosocial rehabilitation vary according to consumers' needs, the setting where the rehabilitation is provided (hospital or community), and the cultural and socioeconomic conditions of the country in which it is undertaken. Housing, vocational rehabilitation, employment, and social support networks are all aspects of psychosocial rehabilitation. The main objectives are consumers' empowerment, the reduction of discrimination and stigma, the improvement of individual social competence, and the creation of a long-term system of social support. Psychosocial rehabilitation is one of the components of comprehensive community-based mental health care. For example, in

Shanghai, China, psychosocial rehabilitation models have been developed using primary care, family support, back-up psychiatric support, community supervisors and factory rehabilitation intervention.

Psychosocial rehabilitation enables many individuals to acquire or regain the practical skills needed to live and socialize in the community, and teaches them how to cope with their disabilities. It includes assistance in developing the social skills, interests and leisure activities that provide a sense of participation and personal worth. It also teaches living skills, such as diet, personal hygiene, cooking, shopping, budgeting, housekeeping and using various means of transport.

VOCATIONAL REHABILITATION AND EMPLOYMENT

Labour cooperatives have been organized by psychiatric patients, health and social workers and, sometimes, other disabled non-psychiatric patients in such countries as Argentina, Brazil, China, Côte d'Ivoire, Germany, Italy, the Netherlands and Spain. These vocational opportunities do not seek to create an artificially protected environment, but provide psychiatric patients with professional training in order to allow them to be engaged in economically efficient activities. Some of these examples are described in Box 3.6.

Activating the hidden resources of the community creates a new model with profound public health implications. This model, known as the "social enterprise", has reached a sophisticated level of development in some Mediterranean countries (de Leonardis et al. 1994). Cooperation between the public and private sectors in a social enterprise is promising from a public health point of view. It also offsets a lack of resources and creates an alternative solution to conventional psychosocial rehabilitation. People with disorders can be more actively involved in a healthy process of cooperative work and consequently in the generation of resources.

Box 3.6 Work opportunities in the community

Many thousands of good examples can be found around the world of people with mental disorders not merely integrated into their own communities but actually playing a productive and economically important role. In Europe alone, some 10 000 such individuals are working in businesses and enterprises that were established to provide them with employment. Several examples of opportunities in the community are given here.¹

Starting with a handful of people with mental illness, some of whom had been chained up for years, a chicken farm was established in Bouaké, Côte d'Ivoire. Initially regarded with suspicion by the local community, it has grown

to become an important enterprise on which the local community now depends. The early resistance to it was gradually transformed into wholehearted support, particularly when the farm was short of workers and started to hire people from the local community, becoming the most important employer in the area.

In Spain, a major nongovernmental organization has created 12 service centres employing more than 800 people with mental disorders. One such centre, in Cabra, Andalusia, is a commercially run furniture factory employing 212 persons, the vast majority of whom have had long stays in psychiatric hospitals. The factory is very modern and has several different assem-

bly lines, where the needs and capabilities of individual workers are taken into account. Only a few years ago these workers were locked up in hospitals, like many others with mental disorders continue to be elsewhere. Today, their products are being sold throughout Europe and the United States.

An employment cooperative for people with mental disorders that was founded in Italy in 1981 with just nine people now has more than 500 members who have returned to a productive life and are integrated into mainstream society. One of hundreds like it in Italy, the cooperative provides cleaning services; social services for elderly people and handicapped adults and children; work training programmes; upkeep

of parks and gardens; and general maintenance activities.

In Beijing, China, one of the country's largest cotton factories has several hundred apartments for its employees as well as a 140-bed hospital and two schools. Recently, a young employee was diagnosed with schizophrenia and hospitalized for one year. Upon discharge, she returned to her apartment and her former job with full pay. However, after a month, she found she could not keep up with the pace of her co-workers and was transferred to an office job. This solution is the result of her employer fulfilling a legal obligation to take the woman back following her illness.

¹Harnois G, Gabriel P (2000). *Mental health and work: impact, issues and good practices*. Geneva, World Health Organization and International Labour Office (WHO/MSD/MPS/00.2).

HOUSING

Housing, in addition to being a basic right, is in many places the crucial limiting factor in the process of de-institutionalization and psychiatric reform. Everybody needs decent housing. The need for psychiatric beds for people with mental disorders is beyond question.

Specific mental disorders make the use of beds unavoidable in two circumstances: first, in the acute phase; and second, during convalescence or the chronic irreversible stage that some patients present. Experience from many countries in the Americas, Asia and Europe has demonstrated that, in the first case, a bed located in a general hospital is the most adequate resource. In the second case, community residential facilities have successfully replaced the old asylums. There will always be a need, in some situations, for short hospitalizations in general hospitals. A smaller group of patients will need other residential settings. These are non-contradictory components of total care, and are fully in accordance with the strategy of primary health care.

In addition to the examples mentioned above, interesting experiments in the field of psychosocial rehabilitation are taking place in Botswana, Brazil, China, Greece, India, the Islamic Republic of Iran, Malaysia, Mali, Mexico, Pakistan, Senegal, South Africa, Spain, Sri Lanka and Tunisia (Mohit 1999; Mubbashar 1999; WHO 1997b). In these countries, the approach is mostly oriented towards vocational activities and community social support. It is a matter of fact that psychosocial rehabilitation very often does not deal with housing simply because no housing is available. Thus patients with severe disorders who need a shelter have no alternative to institutionalization. Current housing strategies are too expensive for many developing countries, so innovative solutions must be found.

EXAMPLES OF EFFECTIVENESS

Interventions for the management of mental and behavioural disorders can be classified in three major categories: prevention, treatment and rehabilitation. These correspond approximately to the concepts of primary, secondary and tertiary prevention (Leavell & Clark 1965).

- *Prevention* (primary prevention or specific protection) comprises measures applicable to a particular disease or group of diseases in order to intercept their causes before they involve the individual; in other words, to avoid the occurrence of the condition.
- *Treatment* (secondary prevention) refers to measures to arrest a disease process already initiated, in order to prevent further complications and sequelae, limit disability, and prevent death.
- *Rehabilitation* (tertiary prevention) involves measures aimed at disabled individuals, restoring their previous situation or maximizing the use of their remaining capacities. It comprises both interventions at the level of the individual and modifications of the environment.

The following examples present a range of effective interventions of public health importance. For some of these disorders, the most effective intervention is preventive action, whereas for others treatment or rehabilitation is the most efficient approach.

DEPRESSION

Currently, there is no evidence that interventions proposed for primary prevention of depression are effective except in a few isolated studies. There is, however, evidence of the

effectiveness of certain interventions, such as setting up supportive network systems for vulnerable groups, specific event-centred interventions, and interventions that target vulnerable families and individuals, as well as adequate screening and treatment facilities for mental disorders as part of primary care for physical disability (Paykel 1994). A number of screening, education and treatment programmes for mothers have been shown to reduce depression in mothers and prevent adverse health outcomes for their children. These programmes can be delivered in the primary health care setting by, for example, health visitors or community health workers. However, they have not been widely disseminated in primary care, even in industrialized countries (Cooper & Murray 1998).

The goals of therapy are reduction of symptoms, prevention of relapses and, ultimately, complete remission. The first-line treatment for most people with depression today consists of antidepressant medication, psychotherapy, or a combination of the two.

Antidepressant drugs are effective across the full range of severity of major depressive episodes. With mild depressive episodes, the overall response rate is about 70%. With severe depressive episodes, the overall response rate is lower, and medication is more effective than the placebo. Studies have shown that the older antidepressants (tricyclics), known as ADTs, are as effective as the newer drugs and less expensive: the cost of ADTs is about US\$ 2–3 per month in many developing countries. New antidepressant drugs are effective treatments for severe depressive episodes, with fewer unwanted effects and greater patient acceptance, but their availability remains limited in many developing countries. These drugs may have advantages in older age groups.

The acute phase requires 6 to 8 weeks of medication during which patients are seen every one or two weeks – and more frequently in the initial stages – for the monitoring of symptoms and side-effects, dosage adjustments, and support.

The successful acute phase of antidepressant drug treatment or psychotherapy should almost always be followed by at least 6 months of continued treatment. Patients are seen once or twice a month. The primary goal of this continuation phase is to prevent relapse; it can cut the relapse rate from 40–60% to 10–20%. The ultimate goal is complete remission and subsequent recovery. There is some evidence, albeit weak, that relapse is less common following successful treatment with cognitive behavioural therapy than with antidepressants (see Table 3.2).

The phase known as maintenance pharmacotherapy is intended to prevent future recurrences of mood disorders, and is typically recommended for individuals with a history of three or more depressive episodes, chronic depression, or persistent depressive symptoms. This phase may extend for years, and typically requires monthly or quarterly visits.

Some people prefer psychotherapy or counselling to medication for the treatment of depression. Twenty years of research have found several forms of time-limited psychotherapy as effective as drugs in mild-to-moderate depressions. These depression-specific therapies include cognitive behavioural therapy and interpersonal psychotherapy, and emphasize active collaboration and patient education. A number of studies from Afghanistan, India, Pakistan, the Netherlands, Sri Lanka, Sweden, the United Kingdom and the United States show the feasibility of training general practitioners to provide this care and its cost-effectiveness (Sriram et al. 1990; Mubbashar 1999; Mohit et al. 1999; Tansella & Thornicroft 1999; Ward et al. 2000; Bower et al. 2000).

Table 3.2 Effectiveness of interventions for depression

Intervention	% remission after 3–8 months
Placebo	27
Tricyclics	48–52
Psychotherapy (cognitive or interpersonal)	48–60

Sources:

Mynors-Wallis L et al. (1996). Problem-solving treatment: evidence for effectiveness and feasibility in primary care. *International Journal of Psychiatric Medicine*, 26: 249–262.

Schulberg HC et al. (1996). Treating major depression in primary care practice: eight-month clinical outcomes. *Archives of General Psychiatry*, 58: 112–118.

Even in industrialized countries, only a minority of people suffering from depression seek or receive treatment. Part of the explanation lies in the symptoms themselves. Feelings of worthlessness, excessive guilt and lack of motivation deter individuals from seeking help. In addition, such individuals are unlikely to appreciate the potential benefits of treatment. Financial difficulties and the fear of stigmatization are also deterrents. Beyond the individuals themselves, health care providers may fail to recognize symptoms and to follow best practice recommendations, because they may not have the time or the resources to provide evidence-based treatment in primary care settings.

ALCOHOL DEPENDENCE

The prevention of alcohol dependence needs to be seen within the context of the broader goal of preventing and reducing alcohol-related problems at the population level (alcohol-related accidents, injuries, suicide, violence, etc). This comprehensive approach is discussed in Chapter 4. Cultural and religious values are associated with low levels of alcohol use.

The goals of therapy are the reduction of alcohol-related morbidity and mortality, and the reduction of other social and economic problems related to chronic and excessive alcohol consumption.

Early recognition of problem drinking, early intervention for problem drinking, psychological interventions, treatment of the harmful effects of alcohol (including withdrawal and other medical consequences), teaching new coping skills in situations associated with a risk of drinking and relapse, family education and rehabilitation are the main strategies proven to be effective for the treatment of alcohol-related problems and dependence.

Epidemiological research has shown that most problems arise among those who are not significantly dependent, such as individuals who get intoxicated and drive or engage in risky behaviours, or those who are drinking at risk levels but continue to have jobs or go to school, and maintain relationships and relatively stable lifestyles. Among patients attending primary health care clinics and drinking at hazardous levels, only 25% are alcohol dependent.

Brief interventions comprise a variety of activities directed at persons who engage in hazardous drinking, but who are not alcohol dependent. These interventions are of low intensity and short duration, typically consisting of 5–60 minutes of counselling and education, usually with no more than three to five sessions. They are intended to prevent the onset of alcohol-related problems. The content of such brief interventions varies, but most are instructional and motivational, designed to address the specific behaviour of drinking, with feedback from screening, education, skill-building, encouragement and practical advice, rather than intensive psychological analysis or extended treatment techniques (Gomel et al. 1995).

For early drinking problems, the effectiveness of brief interventions by primary care professionals has been demonstrated in numerous studies (WHO 1996; Wilk et al. 1997). Such interventions have reduced up to 30% of alcohol consumption and heavy drinking, over periods of 6–12 months or longer. Studies have also demonstrated that these interventions are cost-effective (Gomel et al. 1995).

For patients with more severe alcohol dependence, both outpatient and inpatient treatment options are available and have been shown to be effective, although outpatient treatment is substantially less costly. Several psychological treatments have proved to be equally effective: these include cognitive behavioural treatment, motivational interviewing, and “Twelve Steps” approaches associated with professional treatment. Community reinforce-

ment approaches, such as that of Alcoholics Anonymous, during and following professional treatment are consistently associated with better outcomes than treatment alone. Therapy for spouses and family members, or simply their involvement, have benefits for both initiation and maintenance of alcohol treatment.

Detoxification (treatment of alcohol withdrawal) within the community is preferable, except for those with severe dependence, a history of delirium tremens or withdrawal seizures, an unsupportive home environment, or previous failed attempts at detoxification (Edwards et al. 1997). Inpatient care remains a choice for patients with serious comorbid medical or psychiatric conditions. Psychosocial ancillary and family interventions are also important elements in the recovery process, particularly when other problems occur along with alcohol dependence.

No evidence indicates that coercive treatment is effective. It is unlikely that such treatment (whether it follows civil commitment, a decision of the criminal justice system, or any other intervention) will be beneficial (Heather 1995).

Medication cannot replace psychological treatment for people with alcohol dependence, but a few drugs have shown to be effective as a complementary treatment to reduce relapse rates (NIDA 2000).

DRUG DEPENDENCE

The prevention of drug dependence needs to be seen within the context of the broader goal of preventing and reducing drug-related problems at the population level. This broad approach is discussed in Chapter 4.

The goals of therapy are to reduce morbidity and mortality caused by or associated with the use of psychoactive substances, until patients can achieve a drug-free life. Strategies include early diagnosis, identification and management of risk of infectious diseases as well as other medical and social problems, stabilization and maintenance with pharmacotherapy (for opioid dependence), counselling, access to services, and opportunities to achieve social integration.

Persons with drug dependence often have complex needs. They are at risk of HIV and other bloodborne pathogens, comorbid physical and mental disorders, problems with multiple psychoactive substances, involvement in criminal activities, and problems with personal relationships, employment and housing. Their needs demand links between health professionals, social services, the voluntary sector and the criminal justice system.

Shared care and integration of services are examples of good practice in caring for substance dependents. General practitioners can identify and treat acute episodes of intoxication and withdrawal, and provide brief counselling as well as immunization, HIV testing, cervical screening, family planning advice and referral.

Counselling and other behavioural therapies are critical components of effective treatment of dependence, as they can deal with motivation, coping skills, problem-solving abilities, and difficulties in interpersonal relationship. Particularly for opioid dependents, substitution pharmacotherapies are effective adjuncts to counselling. As the majority of drug dependents smoke, tobacco cessation counselling and nicotine replacement therapies must be provided. Self-help groups can also complement and extend the effectiveness of treatment by health professionals.

Medical detoxification is only the first stage of treatment for dependence, and by itself does not change long-term drug use. Long-term care needs to be provided, and comorbid psychiatric disorders treated as well, in order to decrease rates of relapse. Most patients require a minimum of three months of treatment to obtain significant improvement.

Injection of illicit drugs poses a particular threat to public health. Sharing of injection equipment is associated with transmission of bloodborne pathogens (especially HIV and hepatitis B and C) and has been responsible for the spread of HIV in many countries, wherever injecting drug use is widespread.

People who inject drugs and who do not enter treatment are up to six times more likely to become infected with HIV than those who enter and remain in treatment. Treatment services should therefore provide assessment for HIV/AIDS, hepatitis B and C, tuberculosis and other infectious diseases and, whenever possible, treatment for these conditions and counselling to help patients stop unsafe injecting practices.

Drug dependence treatment is cost-effective in reducing drug use (40–60%), and the associated health and social consequences, such as HIV infection and criminal activity. The effectiveness of drug dependence treatment is comparable to the success rates for the treatment of other chronic diseases such as diabetes, hypertension and asthma (NIDA 2000). Treatment has been shown to be less expensive than other alternatives, such as not treating dependents or simply incarcerating them. For example, in the United States, the average cost for one full year of methadone maintenance treatment is approximately US\$ 4700 per patient, whereas one full year of imprisonment costs approximately US\$18 400 per person.

SCHIZOPHRENIA

Currently, primary prevention of schizophrenia is not possible. Recently, however, research efforts have focused on developing ways of detecting people at risk of schizophrenia in the very early stages or even before the onset of the illness. Early detection would increase the chances of early interventions, possibly diminishing the risk for a chronic course or serious residua. The effectiveness of programmes for early detection or early intervention must be evaluated through long-term follow-up (McGorry 2000).

The treatment of schizophrenia has three main components. First, there are medications to relieve symptoms and prevent relapse. Second, education and psychosocial interventions help patients and families cope with the illness and its complications, and help prevent relapse. Third, rehabilitation helps patients reintegrate into the community and regain educational or occupational functioning. The real challenge in the care of people suffering from schizophrenia is the need to organize services that lead seamlessly from early identification to regular treatment and rehabilitation.

The goals of care are to identify the illness as early as possible, treat the symptoms, provide skills to patients and their families, maintain the improvement over a period of time, prevent relapses and reintegrate the ill persons in the community so that they can lead a normal life. There is conclusive evidence to show that treatment decreases the duration of illness and chronicity, along with the control of relapses.

Two groups of drugs are currently used to treat schizophrenia: standard antipsychotics (previously referred to as neuroleptics), and novel antipsychotics (also referred to as second generation or “atypical” antipsychotics). The first standard antipsychotic medicines were introduced 50 years ago and have proved useful in reducing, and sometimes eliminating, such symptoms of schizophrenia as thought disorder, hallucinations and delusions. They can also decrease associated symptoms such as agitation, impulsiveness and aggressiveness. This can be achieved in a matter of days or weeks in about 70% of patients. If taken consistently, these

Table 3.3 Effectiveness of interventions for schizophrenia

Intervention	% relapses after 1 year
Placebo	55
Chlorpromazine	20-25
Chlorpromazine + Family intervention	2-23

Sources:

Dixon LB, Lehman AF (1995). Family interventions for schizophrenia. *Schizophrenia Bulletin*, 21(4): 631–643.

Dixon LB et al. (1995). Conventional antipsychotic medications for schizophrenia. *Schizophrenia Bulletin*, 21(4): 567–577.

medicines can also reduce the risk of relapses by half. Currently available drugs appear to be less effective in reducing such symptoms as apathy, social withdrawal and poverty of ideas. First generation drugs are inexpensive and do not cost more than US\$ 5 per month of treatment in developing countries. Some of them can be given in long-acting injections at 1–4 week intervals.

Antipsychotic drugs can help sufferers to benefit from psychosocial forms of treatment. The latest antipsychotic drugs are less likely to induce some side effects while improving certain symptoms. There is no clear evidence that the newer antipsychotic medications differ appreciably from the older drugs in their effectiveness, although there are differences in their most common side-effects.

The average duration of treatment is 3–6 months. Maintenance treatment continues for at least one year after the first episode of illness, for 2–5 years after the second episode, and for longer periods in patients with multiple episodes. In developing countries, response to treatment is more positive, medicine dosages are lower, and duration of treatment is shorter. In the total care of the patients, the support of the families is important. Some studies have shown that a combination of regular medication, family education and support can reduce relapses from 50% to less than 10% (see Table 3.3) (Leff & Gamble 1995; Dixon et al. 2000; Pharaoh et al. 2000).

Psychosocial rehabilitation for people with schizophrenia encompasses a variety of measures that range from improving social competence and social support networking to family support. Central to this are consumer empowerment and the reduction of stigma and discrimination, through the enlightenment of public opinion and by introducing pertinent legislation. Respect for human rights is a guiding principle of this strategy.

Currently, few patients with schizophrenia need long-term hospitalization; when they do, the average duration of stay is only 2–4 weeks, compared with a period of years before the introduction of modern therapies. Rehabilitation in day care centres, sheltered workshops and halfway homes improves recovery for patients with long-standing illnesses or residual disabilities of slowness, lack of motivation and social withdrawal.

EPILEPSY

Effective actions for the prevention of epilepsy are adequate prenatal and postnatal care, safe delivery, control of fever in children, control of parasitic and infectious diseases, and prevention of brain injury (for example, control of blood pressure and the use of safety belts and helmets).

The goals of therapy are to control fits by preventing them for at least two years, and to reintegrate people with epilepsy into educational and community life. Early diagnosis and the steady provision of maintenance drugs are fundamental for a positive outcome.

Epilepsy is almost always treated using anti-epileptic drugs (AEDs). Recent studies in both developed and developing countries have shown that up to 70% of newly diagnosed cases of children and adults with epilepsy can be successfully treated with AEDs, so that the people concerned will be seizure free, provided they take their medicines regularly (see Table 3.4). After 2–5 years of such successful treatment (cessation of epileptic fits), the treatment can be withdrawn in 60–70% of cases. The remainder have to continue on medication for the rest of their lives, but providing

Table 3.4 Effectiveness of interventions for epilepsy

Intervention	% seizure free after 1 year
Placebo	Not available
Carbamazepine	52
Phenobarbitone	54-73
Phenytoin	56

Sources:

Feksi AT et al. (1991). Comprehensive primary health care antiepileptic drug treatment programme in rural and semi-urban Kenya. *The Lancet*, 337(8738): 406–409.

Pal DK et al. (1998). Randomised controlled trial to assess acceptability of phenobarbital for epilepsy in rural India. *The Lancet*, 351(9095): 19–23.

they take the medication regularly, many are likely to remain free of seizures, while in others the frequency or severity of seizures can be much reduced. For some patients with intractable epilepsy, neurosurgical treatment may be successful. Psychological and social support are also valuable (ILAE/IBE/WHO 2000).

Phenobarbitone has become the front-line anti-epileptic drug in developing countries, perhaps because other drugs cost 5–20 times as much. A study in rural India found that 65% of those who received phenobarbitone were successfully treated, with the same proportion responding to phenytoin; adverse events were similar in both groups (Mani et al. 2001). A study in Indonesia concluded that, despite some disadvantages, phenobarbitone should still be used as the first-line drug in epilepsy treatment in developing countries. Studies in Ecuador and Kenya compared phenobarbitone to carbamazepine and found that there were no significant differences between them in terms of efficacy and safety (Scott et al. 2001). In most countries, the cost of treatment with phenobarbitone can be as low as US\$ 5 per patient per year.

ALZHEIMER'S DISEASE

Primary prevention of Alzheimer's disease is not possible at present. The goals of care are to maintain the functioning of the individual; reduce disability due to lost mental functions; reorganize routines so as to maximize use of the retained functions; minimize disturbing functions, such as psychotic symptoms (for example, suspiciousness), agitation and depression; and provide support to families.

A central goal in research into treatment for Alzheimer's disease is the identification of agents that defer the onset, slow the progression, or improve the symptoms of the disease. Cholinergic receptor agonists (AChEs) have generally been beneficial in ameliorating global cognitive dysfunction and are most effective in improving attention. Amelioration of learning and memory impairments, the most prominent cognitive deficits in Alzheimer's disease, has been found less consistently. Treatment with these AChE inhibitors also appears to benefit non-cognitive symptoms in Alzheimer's disease, such as delusions and behavioural symptoms.

Treatment of depression in Alzheimer's disease patients has the potential to improve

Box 3.7 Caring for tomorrow's grandparents

The significant worldwide increase in the elderly population that is now being witnessed is the result not only of sociodemographic changes but also of an extended life span achieved during the 20th century, largely through improvements in sanitation and public health. This achievement, however, also poses one of the greatest challenges in the coming decades: managing the well-being of elderly people who, by the year 2025, will make up more than 20% of the total world population.

The greying of the population is likely to be accompanied by ma-

major changes in the frequency and distribution of somatic and mental disorders, and the inter-relationship between these two types of disorder.

Mental health problems among elderly people are frequent, and can be severe and diverse. In addition to Alzheimer's disease, seen almost exclusively in this age group, many other problems such as depression, anxiety and psychotic disorders also have a high prevalence. Suicide rates reach their peaks particularly among elderly men. Substance misuse, including alcohol and medication, is also highly prevalent, though

largely ignored.

These problems create a high level of suffering not only to the elderly people themselves, but also to their relatives. In many instances family members have to sacrifice much of their personal life to dedicate themselves fully to the ill relative. The burden this creates for families and communities is high, and more often than not, inadequate health care resources leave patients and their families without the necessary support.

Many of these problems could be dealt with efficiently, but most countries have no policies, pro-

grammes or services prepared to meet these needs. A prevailing double stigma – attached to mental disorders in general and to the end of life in particular – does not help in facilitating access to necessary assistance.

The right to life and the right to quality of life calls for profound modifications in how societies see their elders, and for breaking associated taboos. The way societies organize themselves to care for the elderly is a good indicator of the importance they give to the dignity of the human being.

functional ability. Of the behavioural symptoms experienced by patients with Alzheimer's disease, depression and anxiety occur most frequently during the early stages, with psychotic symptoms and aggressive behaviour occurring later. In view of the increasing numbers of elderly people, managing their well-being is a challenge for the future (Box 3.7).

Psychosocial interventions are extremely important in Alzheimer's disease, both for patients and family caregivers, who themselves are at risk of depression, anxiety and somatic problems. These include psycho-education, support, cognitive behavioural techniques, self-help, and respite care. One psychosocial intervention – individual and family counselling plus support group participation – aimed at carer spouses has been shown in a study to delay institutionalization of patients with dementia by almost a year (Mittleman et al. 1996).

MENTAL RETARDATION

Because of the severity of mental retardation, and the heavy burden that it imposes on affected individuals, their families and the health services, prevention is extremely important. In view of the variety of different etiologies of mental retardation, preventive action must be targeted to specific causative factors. Examples include the iodization of water or salt to prevent iodine-deficiency mental retardation (cretinism) (Mubbashar 1999), abstinence from alcohol by pregnant women to avoid fetal alcohol syndrome, dietary control to prevent mental retardation in people with phenylketonuria, genetic counselling to prevent certain forms of mental retardation (such as Down's syndrome), adequate prenatal and postnatal care, and environmental control to prevent mental retardation due to intoxication from heavy metals, such as lead.

The goals of treatment are early recognition and optimal utilization of the intellectual capacities of the individual by training, behaviour modification, family education and support, vocational training and opportunities for work in protected settings.

Early intervention comprises planned efforts to promote development through a series of manipulations of environmental or experimental factors, and is initiated during the first five years of life. The objectives are to accelerate the rate of acquisition and development of new behaviours and skills, to enhance independent functioning, and to minimize the impact of impairment. Typically, a child is given sensory motor training within an infant stimulation programme, along with supportive psychosocial interventions.

The training of parents to act as trainers in the skills of daily living has become central to the care of persons with mental retardation, especially in developing countries. This means that parents have to be aware of learning principles and to be educated in behaviour modification and vocational training techniques. In addition, parents can support each other through self-help groups.

The majority of children with mental retardation experience difficulties in regular school curricula. They need additional help, and some need to attend special schools where the emphasis is on daily activities such as feeding, dressing, social skills, and the concept of numbers and letters. Behaviour modification techniques play an important role in developing many of these skills, as well as in increasing desirable behaviours while reducing undesirable behaviours.

Vocational training in sheltered settings and using behavioural skills has led to a large number of people with mental retardation leading active lives.

HYPERKINETIC DISORDERS

The precise etiology of the hyperkinetic disorders – hyperactivity in children, often with involuntary muscular spasms – is unknown, thus primary prevention is currently not pos-

sible. It is possible, however, to prevent the onset of symptoms that are often misdiagnosed as hyperkinetic disorders through preventive interventions with families and schools.

The treatment of hyperkinetic disorders cannot be considered without first addressing the adequacy and appropriateness of diagnosis. All too often, hyperkinetic disorders are diagnosed even though the patient does not meet the objective diagnostic criteria. Failure to make an appropriate diagnosis leads to difficulties in establishing the patient's response to therapeutic interventions. Hyperkinetic symptoms can be seen in a range of disorders for which there are specific treatments that are more appropriate than the treatment for hyperkinetic disorder. For instance, some children and adolescents with symptoms of hyperkinetic disorder are suffering from psychosis, or may be manifesting obsessive-compulsive disorder. Others may have specific learning disorders. Still others may be within the normal range of behaviour but are seen in environments with a reduced tolerance for the behaviours that are reported. Some children manifest hyperkinetic symptoms as a response to acute stress in the school or home. A thorough diagnostic process is thus essential, for which specialist help is often needed.

While treatment with amphetamine-like stimulants is now common, there is support for the use of behavioural therapy and environmental manipulation to reduce hyperkinetic symptoms. Therapies should be evaluated for their appropriateness as first-line treatments, especially where the diagnosis of hyperkinetic disorder is subject to question. In the absence of universally accepted guidelines for the use of psychostimulants in children and adolescents, it is important to start with low dosages and only gradually increase to an appropriate dose of psychostimulants, under continuous observation. Sustained-action medications are now available, but the same caution regarding appropriate dosage applies. Tricyclic antidepressants and other medications have been reported to be of use, but are not currently seen as first-line medications.

The diagnosis of hyperkinetic disorder is often not made until children reach school age, when they may benefit from an increase in structure in the school environment, or more

Box 3.8 Two national approaches to suicide prevention

Finland. Between 1950 and 1980 suicide rates in Finland increased by almost 50% among men, to 41.6 per 100 000, and doubled among women to 10.8 per 100 000. The Finnish Government responded by launching, in 1986, an innovative and comprehensive suicide prevention campaign. By 1996, an overall reduction in suicide rates of 17.5% had been achieved in relation to the peak year of 1990.

The internal process evaluation and the field survey¹ showed that running the programme from the very beginning as a common enterprise was decisive for its good progress. According to an evalua-

tion survey, around 100 000 professionals had participated in prevention. This involved some 2000 working units, or 43% of all "human service units".

Although there is no definitive analysis available to explain the decrease, the set of interventions organized as part of the national project is believed to have played a major role. Specific factors probably related to the decrease are a reduction in alcohol consumption (due to the economic recession), and an increase in the consumption of antidepressant medication.

India. Over 95 000 Indians killed themselves in 1997, equal to one suicide every six minutes. One in

every three was in the 15–29-year age group. Between 1987 and 1997, the suicide rate rose from 7.5 to 10.03 per 100 000 population. Of India's four major cities, Chennai's suicide rate of 17.23 is the highest. India has no national policy or programme for suicide prevention, and for a population of a billion there are only 3500 psychiatrists. The enormity of the problem combined with the paucity of services led to the formation of Sneha, a voluntary charitable organization for suicide prevention, affiliated to Befrienders International, an organization which provides "listening therapy" with human contact and emotional support.²

Sneha functions from early morning to late evening every day of the year, and is entirely staffed by carefully selected and trained volunteers who are skilled in empathetic listening and effective intervention. So far, Sneha has received over 100 000 calls of distress. An estimated 40% of callers are regarded as at medium to high risk of suicide.

Sneha has helped establish 10 similar centres in various parts of India, providing them with training and support. Together these centres function as Befrienders India. Sneha is now helping to set up the first survivor support groups in India.

¹ Upanne M et al. (1999). *Can suicide be prevented? The suicide project in Finland 1992–1996: goals, implementation and evaluation*. Saarijavi, Stakes.

² Vijayakumar L (2001). Personal communication.

individualized instruction. In the home environment, parental support and the amelioration of unrealistic expectations or conflicts can facilitate a reduction in hyperkinetic symptoms. Once thought to be a disorder that children outgrew, it is now known that, for some people, hyperkinetic disorder persists into adulthood. Recognition of this by the patient can help him (rarely her) to find life situations that are better adapted to limiting the debilitating effects of the untreated disorder.

SUICIDE PREVENTION

There is compelling evidence indicating that adequate prevention and treatment of some mental and behavioural disorders can reduce suicide rates, whether such interventions are directed towards individuals, families, schools or other sections of the general community (Box 3.8). The early recognition and treatment of depression, alcohol dependence and schizophrenia are important strategies in the primary prevention of suicide. Educational programmes to train practitioners and primary care personnel in the diagnosis and treatment of depressed patients are particularly important. In one study of such a programme on the island of Gotland, Sweden (Rutz et al. 1995), the suicide rate, particularly of women, dropped significantly in the year after an educational programme for general practitioners was introduced, but increased once the programme was discontinued.

The ingestion of toxic substances, such as pesticides, herbicides or medication, is the preferred method for committing suicide in many places, particularly in rural areas of developing countries. For example, in Western Samoa in 1982, the ingestion of paraquat, a herbicide, had become the predominant method of suicide. Reducing the availability of paraquat to the general population achieved significant reductions in total suicide, without a corresponding increase in suicide by other methods (Bowles 1995). Similar successful examples relate to the control of other toxic substances and the detoxification of domestic gas and of car exhausts. In many places, the lack of easily accessible emergency care makes the ingestion of toxic substances – which in most industrialized countries would be a suicide attempt – another fatality.

In the Russian Federation, as well as in other neighbouring countries, alcohol consumption has increased precipitously in recent years, and has been linked to an increase in rates of suicide and alcohol poisoning (Vroublevsky & Harwin 1998), and to a decline in male life expectancy (Notzon et al. 1998; Leon & Shkolnikov 1998).

Several studies have shown an association between the possession of handguns at home and suicide rates (Kellerman et al. 1992; Lester & Murrell 1980). Legislation restricting access to handguns may have a beneficial effect. This is suggested by studies in the United States, where the restriction of the selling and purchasing of handguns was associated with lower firearm suicide rates. States with the strictest handgun control laws had the lowest firearm suicide rates, and there was no switching to an alternative method of suicide (Lester 1995).

As well as interventions that involve restricting access to common methods of suicide, school-based interventions involving crisis management, enhancement of self-esteem, and the development of coping skills and healthy decision-making have been shown to lower the risk of suicide among young people (Mishara & Ystgaard 2000).

The media can assist in prevention by limiting graphic and unnecessary depictions of suicide and by deglamorizing news reports of suicides. In a number of countries, a decrease in suicide rates coincided with the media's consent to minimize the reporting of suicides and to follow proposed guidelines. Glamorizing suicide may lead to imitation.