

International Psychiatry

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The journal is intended primarily as a platform for authors from low- and middle-income countries, sometimes writing in partnership with colleagues elsewhere. Submissions from authors from International Divisions of the Royal College of Psychiatrists are particularly encouraged.

The future of academic psychiatry in Europe

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Academic psychiatry is going through a difficult period in Europe. Models of mental healthcare have changed dramatically in the last few decades and academic centres are often conforming reluctantly to this change or even trying to withstand it rather than being proactive and leading the process. Furthermore, only a minority of big or well organised university psychiatric departments are currently able to compete successfully with other academic centres for the meagre funds available for research, and at the same time to respond effectively to the persistent demand to be as 'productive' as non-academic hospitals or mental health services in terms of numbers of patients seen and treated in ordinary clinical practice. In several European countries, psychiatry has become less attractive to medical students and junior doctors than it was in the past, and recruitment of smart young researchers in academic departments has become increasingly difficult. In addition, the current confusion about the identity of psychiatry is generating uncertainty and controversies about the content of psychiatric education and training, which in some countries is being regarded as obsolete. Finally, the need to interact with an increasingly broad range of counterparts – including other mental health professionals, administrators at a variety of levels, families and their organisations, magistrates and journalists – has caught some academics unprepared. These new challenges in clinical practice, teaching and research need to be approached in a thoughtful and comprehensive way. The role and aims of academic psychiatry need to be re-defined so that it can resume the initiative and lead further developments in the field rather than being overwhelmed by them.

Concerning clinical practice, the move from hospital-based to community-based mental healthcare is now occurring, although at a different pace, throughout Europe. However, the call for 'balanced' mental healthcare, that is, the provision of modern hospital care as well as a range of services in the community, is to some extent redefining the target (Thorncroft & Tansella, 2002). On the other hand, the experience of those European countries in which the development of community psychiatry has been most rapid is emphasising the need to reaffirm that the main mandate of mental health services remains the timely and proper diagnosis and management of the whole range of mental disorders. Promotion of mental health in the community is a complex task, which has to be approached by concrete, evidence-based programmes, and cannot be the pretext for an aimless and disorganised political activism, distracting psychiatrists from their clinical duties. Academic centres can contribute decisively to the development of balanced mental healthcare and mental health promotion programmes in their countries,

upholding those models and interventions that have been proved to be effective by systematic research.

The organisation of psychiatric education and training very much depends on the range of mental health services available to an individual academic centre. It is clear that psychiatry cannot be taught only in hospital wards, and that the most severe mental disorders cannot be the only or the predominant subject of psychiatric teaching. Medical students and especially residents should rotate in hospital wards as well as in out-patient clinics, special units (e.g. substance use or eating disorder clinics) and community services (e.g. early-intervention centres, rehabilitation units, day care centres, hostels and residential homes). They should be exposed to the whole range of mental disorders, with a special focus on those that are most prevalent in the community. The role of psychiatrists as partners of colleagues in other medical and surgical disciplines in managing the emotional problems of patients with severe or chronic physical illness should be at the forefront of teaching (as well as of clinical practice). The emphasis on psychiatry as a medical discipline, which has much to offer to other medical and surgical specialties, as well as to the general population, can do much to improve the image of our profession among medical students and make it more attractive.

On the other hand, the attitudes required of community psychiatry should be a special focus of postgraduate training: residents should learn to recognise in themselves and their colleagues any stigmatising tendencies towards patients and families; they should be trained to work effectively in multi-disciplinary teams and to manage group dynamics; they should become familiar with the legal aspects of psychiatric practice in the community (Martindale, 2005). They should be alerted to the risk of professional isolation run by psychiatrists working in mental health centres, which may contribute to the neglect of physical health in patients with severe mental disorders, now emerging as a major public health and ethical problem (Maj, 2007).

On the research side, the increasing shortage of funds should encourage the development of networks of academic centres, joining their forces in applying to national and European funding bodies for studies of clear public health relevance. Crucial for the success of an application are the way the objectives of a proposed study are formulated and the way the needs that the study is going to address are specified. We psychiatrists are probably not fully aware that our research projects often appear to funding bodies as abstract, redundant and inconsequential. In the current competitive environment, there is no place any more for projects proposed only because a research group has to publish something from time to time. Drug companies have been very successful in recent years in putting together national

and international networks of academic centres and in keeping them active, although the outcome of these endeavours has not always been worthwhile. A similar effort should be made in all those research fields which are consistently regarded as promising by academic centres at the national or international level. These networks could also be used for exchange programmes involving residents and researchers.

Finally, the specific skills needed to interact effectively with families, administrators, journalists and the legal system should become a formal component of postgraduate training and continuing medical education. Academic psychiatrists tend to be seen by such counterparts as a competent and reliable source of information, but their performance when they are asked to provide an expert opinion or advice is not

always brilliant, which contributes to the deterioration of the image of our profession. We should learn from our own mistakes and train ourselves and our young colleagues in the art of being convincing and effective partners and communicators.

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THEMATIC PAPERS – INTRODUCTION

Ethno-psychopharmacology

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How we judge in what way, with what potential side-effects, our patients respond to medications designed to help them recover from their psychiatric disorders is informed by experience, scientific knowledge and guesswork. The rapid movement of populations around the world, usually voluntary but sometimes driven by other motives or exigencies, means that many psychiatrists are increasingly frequently faced with providing treatment for individuals who come from cultures about which they know little. Determining the characteristics of the illness itself can prove challenging in such circumstances, as this can be influenced by cultural differences in, for example, the degree of somatisation of symptoms. In this issue, we link three papers, each of which provides a different viewpoint on the way in which the effectiveness of pharmacological treatment for psychiatric problems could be influenced by the ethnic background of the patient.

There are several factors that must be taken into consideration in making decisions about medication that depend on the ethnic origins of the patient. Perhaps the one that is attracting most attention at present concerns their genotype. We have known for decades that certain enzymes involved in drug metabolism vary in their efficiency, systematically by ethnic origin. Every medical student knows that a high proportion of people from the Far East cannot metabolise alcohol efficiently and that they have unpleasant side-effects from the consumption of alcohol – a reaction that greatly reduces the risk of alcoholism. In recent years we have discovered not only the genetic basis of the difference in enzymatic activity with respect to alcohol metabolism but also critical enzymatic systems that play a role in the metabolism of lipophilic drugs, which cannot be easily eliminated

from the body by means of excretion. They are usually biotransformed to more hydrophilic compounds, which are easily removed by the renal system.

Many drugs we use in psychiatric practice are metabolised by the cytochrome P450 (CYP) system. The CYP system consists of a number of different enzymes and the classification of these involves the following nomenclature: the CYP{number}{letter}{number}*{number} groups. The first number refers to a group of compounds that have high (> 40%) protein sequence homology. There is then a letter which refers to subfamilies that have greater than 55% homology. The second number refers to members of subfamilies that are encoded by a particular gene. Finally, there is a number following the * which represents specific alleles of that gene. The cytochrome P450 system differs in its genetic profile by ethnic group, and hence the efficiency of its component enzymes in terms of drug metabolism.

The P450 system is involved in the metabolism of many lipophilic drugs, but from the perspective of psychiatrists the most intensively studied have been the selective serotonin reuptake inhibitors (SSRIs), which serve both as substrates and as inhibitors of these enzymes. For example, both paroxetine and fluoxetine are potent inhibitors of CYP2D6 and therefore they have the potential to increase the plasma concentrations of antipsychotic medications metabolised by this enzyme. Polymorphisms of CYP2D6 can either greatly increase the rate of drug elimination or decrease drug metabolism, and the proportions of populations that fall into one or other of these categories varies considerably with ethnicity. Do we need to genotype our patients before prescribing medications, such as the SSRIs, that interact with this enzymatic system? Should we be purchasing the

Roche Amplichip CYP450, now approved for use in both the USA and the European Union? An editorial in the *BMJ* (17 April 2007) provides a critical review of the evidence and concludes that the relationship between P450 genotype and antidepressant action is tenuous: there are just so many other metabolic and other factors that also influence drug concentrations.

In our thematic section in this issue, Pedro Ruiz summarises the variable response of broadly defined ethnic groups to psychopharmacological agents. Although he

defines the role of the cytochrome P450 system as potentially relevant, we do not yet know exactly how important it is in relation to these well established differences. Edmond Pi and Weiguo Zhu discuss the relevance of genetic variants and their associated enzymes to the treatment of Far Eastern and Asian patients. Finally, Tarek Okasha emphasises the importance of other cultural influences which may interact with genetic vulnerability, such as support from families and the community, and the faith the patient places in the psychiatrist and in God.

THEMATIC PAPERS – ETHNO-PSYCHOPHARMACOLOGY

The role of ethnicity in psychopharmacology

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The association between ethnicity and pharmacology has been reported in the medical literature for several decades. However, the relationship between ethnicity and psychopharmacology has become widely recognised only in the last two or three decades. The large-scale migration which started after the Second World War, at first to the USA and more recently to other higher-income countries, as a result of globalisation, has greatly contributed to the attention and focus given to these migrant groups. In this context, these migrant groups primarily comprise ethnic and racial minority groups. This article briefly reviews the relationship between ethnicity and psychopharmacological agents.

The foundation

The foundation of the relationship between ethnicity and psychopharmacology is based on three major principles (Ruiz, 2005):

- *Pharmacogenetics*. This mechanism focuses on the genetic and environmental factors that influence the functions of enzymes in the organism. Some of these enzymes act on psychopharmacological agents. Some persons are poor metabolisers and others are extensive metabolisers.
- *Pharmacokinetics*. This mechanism addresses the fate and distribution of pharmacological agents in the organism. It consists of four basic processes: absorption, distribution, biotransformation and excretion.
- *Pharmacodynamics*. This mechanism pertains to the interaction between receptors and pharmacological agents. The substances that bind with these receptors can be exogenous or endogenous.

Besides these three biological principles, we must also take into consideration non-biological factors, which can

also influence the relationship between ethnicity and psychopharmacology (Pi & Gray, 1998). These factors are all related to culture and include: diet, placebo effect, prescription patterns, stress, compliance factors, consumption of herbs, climatic effects, and so on.

Additionally, we must acknowledge the role of the cytochrome P450 enzymatic system in this regard (Ruiz, 2002). These enzymes are under genetic control, but certain isozymes can be induced by specific substrates, such as phenobarbital, ethanol and steroids. They can also be inhibited by certain drugs which are potent competitive inhibitors of these enzymes, such as cimetidine and ketoconazole (Pi & Gray, 1998). The genetic polymorphism demonstrated by the CYP enzyme system leads to individuals being classified as extensive metabolisers or poor metabolisers. Table 1 shows which CYP subsystems primarily affect what types of psychopharmacological agent.

Asian populations

Of the different ethnic groups, the Asian populations are among the most studied with respect to ethno-psychopharmacological differences (Pi & Gray, 1998). Studies have shown that Asian patients require lesser amounts of the following psychopharmacological agents than do the Caucasian population to achieve similar results: neuroleptics (haloperidol, clozapine), lithium and tricyclic antidepressants (clomipramine, desipramine).

Similarly, Asian populations have been shown to be more sensitive to psychopharmacological agents and, thus, to have more severe side-effects than Caucasian populations. This is another confirmation that Asian populations need lower dosages of psychopharmacological agents than the Caucasian population.

Table 1 Effects of four main CYP subsystems on psychopharmacological agents

Cytochrome subsystem	Psychopharmacological agents primarily affected
P450 2D6	Antipsychotics (both typical and atypical) Tricyclic antidepressants Selective serotonin reuptake inhibitor antidepressants Agents such as amphetamines, propranolol and venlafaxine
P450 2C19	Benzodiazepines The tricyclic antidepressants clomipramine and imipramine The selective serotonin reuptake inhibitor citalopram Agents such as propranolol
P450 3A4	Some antidepressants such as nefazodone, sertraline and venlafaxine Sedative hypnotics such as clonazepam, clonazepam, diazepam, midazolam, triazolam and zolpidem Agents such as carbamazepine and codeine
P450 1A2	The antipsychotic clozapine Tricyclic antidepressants such as amitriptyline, imipramine and maprotiline Agents such as caffeine, propranolol and tacine

African/Black populations

Contrary to general beliefs that African/Black populations require higher doses of psychopharmacological agents than the Caucasian population for the treatment of most psychiatric disorders, recent studies have shown that this is not the case. These studies (Varner *et al*, 1998, 2000; Ruiz *et al*, 1999) have shown that African/Black populations require smaller doses of tricyclic antidepressants (desipramine, imipramine and nortriptyline) than the Caucasian population for the treatment of major depression and, similarly, smaller doses of selective serotonin reuptake inhibitors (fluoxetine and sertraline).

African/Black populations do require equal amounts of typical neuroleptic agents to the Caucasian population for the treatment of schizophrenia. With respect to atypical neuroleptics, African/Black patients require higher doses of clozapine than Caucasian patients for the treatment of schizophrenia. They also require larger amounts of olanzapine but equal doses of risperidone (again in comparison with Caucasian patients).

Hispanic populations

With respect to Hispanic populations, recent studies have shown that they need smaller amounts of typical neuroleptics than the Caucasian population for the treatment of schizophrenia. Likewise, they require smaller amounts of certain atypical neuroleptics (e.g. risperidone) than Caucasian populations.

It is also well accepted that Hispanic people require smaller doses of tricyclic antidepressants and that they complain more about the side-effects of tricyclic antidepressants than the Caucasian population. There is also evidence that they somatise more than the Caucasian population (Pi & Gray, 1998).

Conclusion

During the last two or three decades, much attention has been given to the field of cross-cultural psychiatry. Similarly, much attention has been focused on the clinical needs of ethnic minority populations, given the current high rates of migration to higher-income countries. Additionally, globalisation has led to research priorities being given to the psychiatric needs of multi-ethnic groups. All this has led to research advances in the area of ethno-psychopharmacology. These efforts should result in treatment benefits to ethnic and racial groups who were ignored or not given enough attention in the past. Obviously, additional research efforts are needed in this line of investigation.

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New research advances in ethno-psychopharmacology: an Asian perspective

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Asians represent more than half the world's population but themselves consist of very diverse genetic, ethnic, cultural and linguistic groups. Understanding the role of ethnicity in an individual's response to psychotropic medications is of importance in treating psychiatric disorders among Asians. Recent research has supported the notion that Asians carry distinct genetic profiles that can influence both the pharmacokinetics and the pharmacodynamics of a given medication (Lin & Smith, 2000; Pi & Simpson, 2005). In this brief review, we summarise the research findings in the field, focusing on pharmacogenetic variations between Asians and other ethnic groups.

The ability of an individual to respond to a particular pharmacological compound is mainly determined by his or her genetic composition. Genetic variations influence the way in which the body handles drugs through absorption, distribution, metabolism and excretion. The enzyme aldehyde dehydrogenase (ALDH), which is involved in ethanol metabolism, is the best illustration (Agarwal & Goedde, 1990). Approximately 50% of East Asians have a deficient form of the enzyme, which results in accumulation of acetaldehyde and the 'flushing' response to alcohol consumption. This 'deficient' phenotype is inherited through a dominant mutation in the ALDH2*2 allele. The ALDH2*2 allelic mutation disrupts the function of an ALDH subunit polypeptide and reduces the enzyme's activity (Wall *et al*, 2001). Because the mutation is dominant negative, individuals with either one (heterozygote) or two (homozygote) ALDH 2*2 alleles are slower to oxidise acetaldehyde during alcohol metabolism, resulting in facial flushing, nausea, dizziness and tachycardia. These individuals drink less alcohol and have lower rates of alcohol dependence than do wild-type ALDH2*1 homozygotes. In addition, 85–90% of Chinese and other East Asians carry a functional polymorphism of the alcohol dehydrogenase (ADH2) gene, which leads to a greater capacity to convert alcohol into acetaldehyde than the gene form found in most Caucasians. This ADH2 polymorphism has been shown to have a protective effect against heavy alcohol drinking and alcoholism.

Genetic variations also affect drug distribution. The plasma level of alpha-1-acid glycoprotein, for example, a plasma protein that provides binding sites in blood for many psychotropic drugs, is significantly lower in Asian than in Caucasian populations (Zhou *et al*, 1990).

The cytochrome system

The cytochrome P450 (CYP) system is a group of enzymes of great interest to psychiatrists because they metabolise a large

number of psychotropic medications. These enzymes show considerable genetic variation and their activities can be induced or inhibited by specific substrates. Extensive genetic polymorphism of CYP enzymes results in individuals with a wide range of enzymatic activities, classified as extensive metabolisers (EMs), poor metabolisers (PMs) or slow metabolisers (SMs). The proportions of EMs, PMs and SMs vary among different ethnic groups. For example, in relation to the CYP2D6 enzyme, 1–6% of Asians are PMs whereas 5–10% Caucasians are PMs. On the other hand, with the CYP2C19 enzyme, 15–25% of Asians are PMs while 2–10% of Caucasians have little or no activity.

Drug response

Genetic profiles of Asian people also determine the effects of a drug on its target, such as receptors, transporters or neurotransmitters, and molecules involved in signal transduction pathways. Genetic variations are found in genes that encode the biosynthesis and catabolism of neurotransmitters, such as tryptophan hydroxylase (TPH), tyrosine hydroxylase (TH), catechol-O-methyltransferase (COMT) and monoamine oxidase (MAO). COMT is an enzyme that catalyses biodegradation of catecholamines, including dopamine. A transition from guanine (G) to adenine (A) at codon 158 of the COMT gene results in the substitution of methionine for valine (Val158Met), which is linked to low COMT enzymatic activity. The COMT polymorphism is reportedly associated with neuropsychiatric disorders, including schizophrenia and Parkinson's disease. Approximately 80% of Chinese, Japanese and Korean people carry the valine genotype, with high enzymatic activity as the phenotype, whereas 50% of Caucasians carry the phenotype with low enzymatic activity (Glatt *et al*, 2003).

Another example is the serotonin transporter gene (SLC6A4) polymorphism. The serotonin transporter is a target for tricyclic antidepressants and selective serotonin reuptake inhibitor (SSRI) antidepressants. The promoter region of the serotonin transporter is polymorphic; a short promoter leads to a low level of gene expression while a long promoter increases gene transcription of the transporter. It has been reported (Gelernter *et al*, 1997) that approximately 80% of Japanese, 40% of European-American and 30% of African-American people have the short-form genotype. Theoretically, such a difference may lead to a differential response to SSRI antidepressant treatment. Such an effect has been demonstrated in a genetically manipulated mouse model. However, a study with a small sample size

comparing the clinical response to sertraline of Chinese and Caucasian patients showed no significant association of SLC6A4 polymorphism with drug response (Ng *et al*, 2006). Future studies are essential to determine whether genetic variations between Asian and non-Asian ethnic groups are associated with effective drug responses and side-effects of psychotropic medications.

The issues related to the pharmacokinetics and pharmacodynamics of specific psychotropic medications in Asians have been extensively reviewed elsewhere (Lin & Smith, 2000; Pi & Gray, 2000). It has been generally accepted that Asian patients require lower doses of antipsychotic medications than do Caucasian patients. It was reported that the plasma levels of haloperidol were 52% higher in Chinese than in Caucasian patients treated with equal weight-adjusted doses of medication (Potkin *et al*, 1984). In a different study, Caucasian patients had lower serum haloperidol and prolactin levels than Asian patients did (Lin *et al*, 1988b).

It has also been shown that Asian people are more vulnerable to the development of extrapyramidal side-effects, such as dystonia and Parkinsonism, from treatment with typical antipsychotics (Pi & Simpson, 2000). The rates of tardive dyskinesia differed among ethnic subgroups in Asia, varying from 8% in Beijing, China, to over 20% in Japan. Interestingly, different rates of movement disorders among Chinese in-patients in different regions of China suggest that not only genetic factors but also environmental factors contribute to the variations.

Researchers believe that there is no significant difference in pharmacokinetics of lithium among ethnic groups. However, surveys and case report series suggested that Asian people might respond to lower doses of lithium than non-Asian people. Optimal therapeutic lithium levels of 0.71 mmol/l and 0.73 mmol/l were recommended for Asians with bipolar disorder (Yang *et al*, 1991). Similar studies were carried out for antidepressant treatment in Asian patients (Pi & Gray, 2000). In general, Asian patients had higher mean peak plasma levels and greater areas under the curve (AUCs) than Caucasian patients did with a number of antidepressant treatments, including desipramine, clomipramine and nortriptyline. The possibility of ethnic variations in response to SSRIs has not yet been systematically studied. Further research into the ethnic variations of SSRI pharmacokinetics and pharmacodynamics is needed.

Studies of the pharmacokinetics of diazepam have indicated that Asian people have a lower volume of distribution, and serum levels of diazepam and its metabolite, desmethyl-diazepam, were higher than in Caucasian people. Similar pharmacokinetic differences between Asian and Caucasian patients were also observed with alprazolam (Lin *et al*, 1988a).

Conclusion

Our society has become more ethnically and culturally diverse. An understanding of cross-cultural perspectives in psychopharmacology has become essential for clinicians. Many questions regarding the cross-cultural aspects of psychotropic medications remain unanswered. Research in pharmacogenetics will continue to provide more information regarding the genetic factors that influence pharmacokinetic and pharmacodynamic characteristics in Asian groups and non-Asian groups.

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Books wanted for review in *International Psychiatry*

It is intended that *International Psychiatry* will feature reviews of books published in low- and middle-income countries. Authors of books broadly on the topic of mental healthcare are invited to contact the Editor, Hamid Ghodse, email hghodse@sgul.ac.uk.

Social aspects of ethno-psychopharmacology: an Arab perspective

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Some 7000 years ago Egyptians believed in one God, the after-world and that our worldly deeds would be balanced in the day of judgement. This led James Breasted to consider that the emergence of Egyptian culture marked the dawn of conscience (Breasted, 1934; Okasha & Okasha, 2000).

As societies have become more diverse and the world evolves into a global village, the need to integrate culture into medicine and psychiatry becomes more critically important. Worldwide, increasing ease of international travel and migration and advances in information technology have enhanced the interaction and intermingling of people from different cultural and social systems. As a result, practitioners of health and mental health professionals are increasingly being called on to treat patients from backgrounds very different from their own.

In traditional cultures such as the Egyptian, the humanitarian interaction with a doctor is valued as much, if not more, than his or her technical ability or scientific knowledge. The humanitarian nature of this interaction depends on the way the doctor deals with the patient and his or her family, and the extent to which the doctor expresses respect for and acceptance of local cultural and spiritual norms.

In traditional cultures, social integration is emphasised more than autonomy; that is, the family, not the individual, is the unit of society. Dependence is more natural and infirmity is less alien in these cultures. When affiliation is more important than achievement, how one appears to others becomes vital, and shame, rather than guilt, becomes a driving force. In the same manner, physical illness and somatic manifestations of psychological distress become more understood and acceptable and evoke a caring response; in contrast, a vague complaint of psychological symptoms may be disregarded or be considered to indicate that the patient is 'soft' or, worse, 'insane'.

In some cultures, such as the Arab culture, the collectivity of the community is valued rather than the individuality of its members. Decisions are made not at an individual level, but at a familial, tribal or communal level, in the best perceived collective interest. How can we adhere to our ethical guidelines and at the same time not disregard the local values and norms of our target population? How can we practise without showing disrespect or disregard for local values? On the other hand, how can we ensure that respect for the local culture does not become a pretext for bypassing ethical guidelines to the detriment of our patients' rights (Okasha, 2000)?

Whether we like it or not, encounters between psychiatry and the law keep bringing us back to our conflicting

conceptions of the value of health, on the one hand, and the value of liberty, integrity and autonomy, on the other. Culture, ethnicity and sometimes sociodemographic factors such as level of education, age and gender suggest different attitudes between cultures regarding the importance of patient autonomy and informed consent. What is the perceived harm when members of the medical community violate cultural conventions and insist on telling the truth to patients? In what ways and to what extent are the coping mechanisms of individuals and families disrupted? In what way does acculturation change the beliefs of patients of various ethnicities?

Cross-cultural variation in attitudes to medical treatment

To answer these questions, it may be helpful to consider how individuals interact in traditional societies, such as Arab culture. We may then be able to understand the challenges and difficulties involved in implementing guidelines such as the Declaration of Madrid on ethical standards for psychiatric practice (World Psychiatric Association, 1996).

One must first be familiar with the main characteristics that differentiate the position of the individual within his or her community in a traditional society from that in a Western society. Although societies should not be considered in a stereotypical framework, general common attitudes within societies can be assumed (Leff, 1988, p. 79).

Differences between two types of societies are listed in Table 1. It is not intended to imply that these characteristics are invariably true of such societies, nor that they are inflexible or stereotypical features.

When we look at expressed emotions and compare studies from traditional societies and from non-traditional societies, we find that the overall relapse rate in the study group in an Egyptian sample (a 'traditional' society) is 56%, which is similar to the rates in studies from the UK and USA (considered 'non-traditional'), at 53% and 58%, respectively. The more a family is critical of the patient, the higher is the risk of relapse. The difference, however, lies in the determination of the best cut-off point separating high from low expressed emotion. In the English study (Vaughn & Leff, 1976) two critical comments were enough for relapse, while in the US study (Hooly *et al*, 1986) three critical comments were necessary. However, in the Los Angeles study (Montero *et al*, 1992) six critical comments were needed and in the Egyptian study (Okasha *et al*, 1994) seven critical comments were needed. We notice from these studies that non-traditional societies

Table 1 Differences between traditional and non-traditional societies regarding personal and professional relationships and their relevance to medical treatment

Traditional societies	Non-traditional societies
Family and group oriented	Individually oriented
Extended family	Nuclear family
Status determined by age, position in family and care of elderly	Status achieved by own efforts
Relationship between kin obligatory	Relationship between kin is a matter of individual choice
Arranged marriage, with an element of choice dependent on inter-familial relationship	Choice of marital partner, determined by interpersonal relationship
Extensive knowledge of distant relatives' lives	Knowledge of close relatives' lives only
Family decision-making	Individual autonomy
External locus of control	Internal locus of control
Physician's decision respected and revered; healthy doctor-patient relationship	Doubt and mistrust in doctor-patient relationship
Rare suing for malpractice	Common suing for malpractice
Deference to God's will	Self-determination
Individual can be replaced; family should continue and pride is in family ties	Individual is irreplaceable; pride is in self
Pride in family care of patient who is mentally ill	Community care of patients who are mentally ill
Dependence on God regarding health and disease; illness and recovery attributed to God	Self-determined recovery

After Okasha (2000).

like the USA and UK had similar results while Los Angeles, which has a very high Hispanic population, was similar to the Egyptian study, both considered traditional societies. It seems a disadvantage that little is known about the influence on patients' outcome of warmth and positive remarks or rather warmth versus critical comments in family life, especially in traditional societies.

Criticism may sometimes be taken as a sign of care, interest and love in an Egyptian enmeshed family (Okasha, 2000). High expressed emotion can be viewed as a kind of social trait in many Egyptian families and in many other traditional societies around the world.

Cross-cultural variation due to genetic and other influences on drug metabolism

Many factors affect response to medication, mainly genetic ones – for example, those determining the cytochrome P450 enzymes in the liver, which in turn affect drug metabolism – but also cultural ones. For example, 45% of Egyptians are smokers, with an average cigarette consumption rate per adult of 1201 per year; by way of comparison, in Greece it is 3230 and in Norway it is 739 (United National Development Programme, 2003). By way of a further example, most Arab populations consume large amounts of tea, whereas coffee is often drunk in European countries and the USA. Tea has a high content of tannic acid, which hinders the absorption of iron from the stomach and causes mild anaemia, which in turn may lead to problems such as dizziness, fatigue and exhaustion, which may be wrongly attributed as side-effects from medications.

Helminthic infections must also be taken into consideration. These include schistosomiasis (bilharziasis), which affects the function of the liver and can lead to cirrhosis, splenomegaly and portal hypertension. These disorders affect liver metabolism (Haslett *et al*, 2002).

Another important factor is the use, or rather misuse, of herbal medications with psychotropic drugs, which carries the potential of drug–drug interactions. These herbal medications are unfortunately available over the counter or are sold by street vendors in the markets in several Arab countries.

Other factors such as personality, locus of control, diet, lifestyle and family social support also play a role (Okasha, 1988; Ruiz, 2000).

Conclusion

The practice of psychiatry is at a crucial stage. None of the famous theories about the origins of psychiatric disorder which have appeared in the past century, from pure behavioural reflexology to elaborate psychodynamic formulations, has proved sufficient to describe in full the development and function of the human mind in health and disease. Our new hope seems to be in the synapse as the biological answer to the complexities of the mind. Pragmatic and convenient as they can be, such ideas are too simplistic to provide all the answers and solutions. It is time for reflection and perhaps our cultural heritage can help.

There is another reason to look more carefully at the contributions of different cultures: the creation of conditions for a better understanding among professionals. All of us need to know the realities of other cultures. Each culture has the potential to contribute to the advancement of our complex and multidimensional discipline. Knowing the contributions of another culture can also decrease some of the misunderstandings we have regarding other cultures (Mohit, 1999).

For those in charge of providing models of services, knowledge of cultural contributions is of great importance. It provides opportunities for designing services that are more acceptable to their users. It helps to decrease the stigma of psychiatric illness and potentially enhances the provision of more humane services. Finally, the interaction between culture, environment, biology and brain plasticity provides an anchor for aetiology, diagnosis and management of mental disorders.

Will our increasing knowledge about the genome and proteome clarify the ethnic, cultural and racial differences in response to psychiatric treatment, and help us to choose the most efficacious drug with the least side-effect profile, instead of our current trial and error approach? Will there come a day when any patient coming to the psychiatric clinic can undergo a simple blood test and, on the basis of the analysis, we can choose directly the most effective medication for the patient with the most advantageous trade-off between side-effects and clinical response?

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COUNTRY PROFILE

The country profiles section of *International Psychiatry* aims to inform readers of mental health experiences and experiments from around the world. We welcome potential contributors. Please contact Shekhar Saxena (email saxenas@who.int).

Psychiatry in Germany

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Germany has an approximate area of 357 000 km². Its population is 82.526 million. The life expectancy at birth is 75.6 years for men and 81.6 years for women (World Health Organization, 2005). The proportion of gross domestic product allocated to the health budget is 10.8%. The per capita total expenditure on health is \$2820 (international dollars here and below) and the per capita government expenditure on health is \$2113 (World Health Organization, 2005). A major factor in recent German history was reunification, which had a pronounced effect on the German healthcare system.

History

The term 'psychiatry' was coined by Johann Christian Reil in 1808. In the 19th century, German psychiatry began to develop into a scientific discipline under the influence of Wilhelm Griesinger (1817–68), who focused on a holistic but differentiated approach, covering biological and psychological methods. At the beginning of the 20th century, psychiatrists like Emil Kraepelin, Alois Alzheimer, Kurt Schneider and Carl Wernicke founded the basis of current psychiatric classification systems.

In the period of the National Socialists (1933–45), German psychiatry was partially instrumentalised for political purposes, especially for the programme of 'euthanasia'. This terrible period has been intensively analysed. The review by Seeman (2005) is a useful English introduction to this topic.

In the late 18th and early 19th century, large psychiatric institutions were founded, mainly outside the metropolitan areas. In the last part of the 20th century, the advent of psychopharmacotherapy and social psychiatry changed the picture of German psychiatry. Following the *Psychiatrie Enquête* report of 1975 (see under 'Mental health policy', below), many smaller psychiatric departments were set up in community hospitals but the total number of psychiatric hospital beds declined.

Epidemiology

The lifetime prevalence for any psychiatric disorder in Germany is 42% and the 12-month prevalence rate is 31% for the adult population, not much different from the prevalence rate in the European Union (EU) as a whole, of 27% (Wittchen & Jacobi, 2005). In Germany, only about 25% of the population with a mental illness are in contact with mental health services, compared with 26% in the EU. Mental disorders are responsible for about 40% of all sick leave from work and 28% of all early retirements (Roth-Sackenheim, 2005). Mental disorders comprise the only growing group of disorders among all cases and days of sick leave in Germany, with an increase of approximately 70% from 1994 to 2004 (DAK Gesundheitsreport, 2006).

There are about 55 000 general practitioners in Germany. Given the 12-month prevalence rate of mental disorders in Germany of 31%, there should be, annually, some 24 million

people presenting with mental disorders, but general practitioners treat only about 10 million patients with mental disorders per year.

Mental health policy

In 1975 a Federal Commission of the Bundestag submitted a report (*Psychiatrie Enquête*) about the situation of psychiatry in Germany. The Commission defined the targets of a reform of psychiatry. The number of psychiatric hospital beds was reduced from 118000 in 1970 to 56392 in 1998. The number of psychiatric hospitals decreased from 216 in 1994 to 195 in 1998 (Fritze *et al*, 2005). There was a considerable increase in the provision of community-based care as part of the psychiatric reforms. The involvement of family members and former patients gained more importance.

Several laws and regulations govern psychiatric medicine in Germany, with the most important being the state laws concerning forensic psychiatry and the federal ordinance determining the staffing of psychiatric hospitals. Furthermore, there is federal support for the prevention of addiction, and the German Health Ministry has issued an agenda regarding addiction research and management, with an emphasis on prevention.

In 1996, the World Psychiatric Association (WPA) started the Global Programme against Stigma and Discrimination because of Schizophrenia – ‘Open the Doors’ (Sartorius & Schulze, 2005). In 1999, this public education programme was established in Germany and is now being implemented successfully in six project centres nationally. The National Programme to Reduce Stigma of Mental Disorders (chaired by Professor W. Gaebel) is an initiative of the German Society for Psychiatry, Psychotherapy and Nervous Diseases (DGPPN) and a non-governmental organisation, ‘Open the Doors’ (Baumann & Gaebel, 2006).

There is no federal mental health act.

Organisation of mental health services

Mental health services in Germany are mainly community based. In-patient services are provided by university hospitals, state or local hospitals. Out-patient psychiatric services are mainly provided by private practitioners and hospital out-patient departments. In addition, specialised psychiatric out-patient services are arranged by local welfare organisations.

Medical education

Undergraduate medical education in Germany includes a 4-month course in psychiatry and psychotherapy. Although it is a separate medical specialty in Germany, child and adolescent psychiatry is often taught within the general psychiatry course. For historical reasons, psychosomatic medicine is a separate clinical specialty. However, the topics which are found under the heading ‘psychosomatic medicine’ in Anglo-American countries are found within the general psychiatry curriculum in Germany. Medical students in their final (sixth)

year of undergraduate medical school may choose a 4-month elective in psychiatry as one of three clinical specialties in which they receive specialist training.

Postgraduate medical education, to become a board-certified psychiatrist, comprises 5 years of full-time employment in a psychiatric hospital, including 1 year in neurology.

Clinical psychiatrists need to participate in continuing medical education (CME) to achieve a minimum of 250 CME credit points within each 5-year term.

Forensic medicine has been established since 2004 as the only psychiatric clinical subspecialty in Germany.

Psychotherapy is part of the compulsory clinical training in the specialty fields of ‘psychiatry and psychotherapy’, ‘psychosomatic medicine and psychotherapy’ and ‘child and adolescent psychiatry’. Board certification requires knowledge in psychotherapy in all these specialties. Medical doctors who have obtained one of these specialty certifications may additionally acquire a further specialisation in psychoanalysis. Additional board certifications may be obtained by any medical doctor in Germany in the field of addiction disorders, and by any already specialised medical doctor (in any field) or psychologist in the field of psychotherapy.

Psychiatric workforce

Care for psychiatric patients in Germany is mainly centred on in- and out-patient settings in hospitals and private practices. In addition, rehabilitation programmes, sheltered workplaces and day-care facilities play a large role. Psychosocial counselling is also provided by the states, municipalities, churches and private facilities.

There are about 13800 specialists in the fields of ‘psychiatry and psychotherapy’, including the former specialisation in *nervenheilkunde* (nervous disorders). About 4500 psychiatrists in private practice are treating approximately 2.5 million patients per year. Thus, a large proportion of Germans may not have the necessary contact with the mental health system. The results of some surveys indicate that many patients with psychiatric diagnoses are not treated by psychiatrists, but by general practitioners or psychologists.

There are 7.5 psychiatric beds per 10000 population (4.5 in mental hospitals and 3.0 in general hospitals). The number of psychiatrists per 100000 population is 2.9 (World Health Organization, 2005).

Research

In Germany, each of the 36 university hospitals of psychiatry supports research activities. Additionally, the Max-Planck-Society has a research institute for psychiatry in Munich.

The Ministry of Education and Research established a number of ‘networks of competence in medicine’ in 1999, among which were research networks for schizophrenia, depression and suicide, and dementia. In addition, the German Research Council and the Federal Ministry of Research and Education fund mental health research. In the major current research funding lines of the German Research Council, few psychiatric topics are included. A complete list would be beyond the scope of this report.

The Ministry of Education and Research supports three psychiatric Networks of Excellence and Brain-Net (total funding approximately €66 million for a 5-year period; Brain-Net is a collection of clinical data and brain autopsy tissues). It also supports addiction research (€33 million over 1991–2004; the current emphasis is on the transfer of research results into clinical practice with an additional funding of €9 million for 2004–07). Smaller-scale research funding is currently being initiated in special research programmes for cognitive science and clinical research.

The German Health Ministry has identified both major depression and nicotine addiction as targets for health intervention, besides type 2 diabetes and breast cancer, among others (Weber, 2006).

Professional organisations

The DGPPN is the scientific organisation of psychiatrists in Germany (<http://www.dgppn.de>). Its objectives are to provide CME, to support legislation, administration concerning all aspects of mental disorders, and the development of international relations. Currently, it has more than 3500 members. The DGPPN has developed treatment guidelines for clinical practice. For example, the guidelines for schizophrenia were developed as evidence-based consensus guidelines (S3 level) (Gaebel & Falkai, 2006).

There are also professional societies for psychiatrists in private practice (Bundesverband Deutscher Nervenärzte, Bundesverband Deutscher Psychiater), senior psychiatrists in hospitals (Bundesdirektorenkonferenz), for practitioners of psychosomatic medicine (Deutsche Gesellschaft für Psychosomatische Medizin und Ärztliche Psychotherapie), and for child and adolescent psychiatry, psychosomatics and psychotherapy (Deutsche Gesellschaft für Kinder- und Jugendpsychiatrie, Psychosomatik und Psychotherapie). In addition, there are many regional and local associations of psychiatrists, plus approximately 30 societies governing special aspects of psychiatry or psychotherapy.

Outlook

A more extensive report on the current state and trend of mental healthcare in Germany was recently published by Salize *et al* (2007). Some topics have an international background; these include the development of ICD–11 and DSM–V. Furthermore, the new insights from genetic and neurobiological studies will increasingly be transferred to clinical practice. The integration of neurobiology, social sciences and psychology with psychopathology will clearly become a major issue.

German clinical psychiatry is facing tremendous challenges because of the demographic changes resulting in an increased proportion of older patients and an increasing demand from patients from immigrant families. Clinically, topics like somatic comorbidity (among others, the metabolic syndrome in patients treated with atypical antipsychotics), evidence-based assessment of psychotherapeutic practices (including novel approaches to relate clinical effects of psychotherapy to functional magnetic resonance imaging) and the development of evidence-based therapy guidelines are gaining importance, to name just a few.

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Mental healthcare services in Mauritius

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The Republic of Mauritius is a group of islands in the south-west of the Indian Ocean, consisting of the main island of Mauritius, Rodrigues and several outer islands, situated 900 km to the east of Madagascar. It has a total land area of 2040 km² and a population of around 1.2 million. Mauritius has a multiracial population whose origins can be traced mainly to Asia, Africa and Europe. English is the official language but French remains the most widely spoken, along with the local dialect, Creole, which is derived from French. Mauritius is classified as an upper middle income country in sub-Saharan Africa by the World Bank. It has a per capita gross domestic product (GDP) of US\$13 200.

Health resources and statistics

Mauritius spends 2.8% of its GDP on health, 1.9% in the public sector and 0.9% in the private sector.

In 2005, the crude birth rate was 15.2 births per 1000 per year, the death rate was 6.8 per 1000 per year and the infant mortality rate was 14.14 deaths per 1000 live births (Central Statistics Office, Mauritius).

Mauritius provides state health services throughout the country free at the point of use to all its 1.2 million people. It also has a well established private sector. The state health services employ over 650 doctors and the private sector employs over 400 doctors.

Mental health services

Initially, mental health services were centred at the main psychiatric hospital, named after the renowned Mauritius-born neurologist Charles-Édouard Brown-Séquard. It was renamed the Brown Sequard Mental Health Care Centre (BSMHCC) in 1998. Psychiatric services were decentralised in 1997. Essentially, decentralisation meant opening psychiatric units in each regional hospital, combined with the provision of out-patient services and liaison psychiatry. One or two psychiatrists were attached to each unit, along with medical officers and health officers who had work experience in this field.

There are now 15 psychiatrists nationally, 12 in the public sector. In-patient care was started initially in three hospitals to treat patients with alcohol-related problems, but it had to be discontinued in two centres owing to management problems. Out-patient clinics are also held at a few area health centres. Community care is mostly provided by social workers attached to these hospitals and community rehabilitation workers.

In 2005, a new 250-bed psychiatric hospital was built next to the old hospital. Daily out-patient clinics are held and in-patient care is provided for acutely ill psychiatric patients from

all over Mauritius. In addition, a secure unit in the premises caters for patients from courts. Another ward opened in 2006 for in-patient detoxification of intravenous drug users.

The BSMHCC is staffed by six psychiatrists, six medical and health officers, a medical superintendent, three social workers, a psychologist and about 40 psychiatric nurses, general nurses, healthcare assistants, welfare assistants (who are mostly in the old hospital) and other ancillary staff.

Many of the 471 long-stay patients still cared for in the old hospital are institutionalised, having spent over 20 years in the hospital. Vigorous efforts are being made to get alternative care for those who can be relocated.

Patients are treated at the regional hospitals or area health centres as out-patients, but if they need admission or electroconvulsive therapy they are referred to the BSMHCC. After recovery they are referred back to the regions for follow-up. This arrangement will have to continue until the regional units are fully functional. Most psychotropic drugs are available in all centres.

Mental health statistics

The total number of out-patient attendances (new cases and follow-up cases) at the BSMHCC rose from 1998 to 2003 but thereafter decreased to 2005 (Fig. 1a). At the outstations the numbers increased from 1998 to 2005. These statistics indicate that the total number of patients seeking psychiatric help considerably increased over the period. It is interesting to note that the attendance at the main hospital is still high, despite decentralisation, probably because of the lack of in-patient facilities in the regional units. Many of the patients at the main centre suffer from serious mental illnesses.

However, the number of new cases at the outstations are gradually increasing (Fig. 1b). Attending the main psychiatric hospital is still a taboo. Often people do not come forward to seek help because of the stigma attached to mental illness. The rising number of cases in the outstations is the true indicator of psychiatric morbidity in the island.

The number of in-patients increased slightly from 1998 to 2003 followed by a decline to 2005. In 2004 about 35% of admissions at the BSMHCC were for schizophrenia and other psychotic states. About 51% were due to alcohol-related problems.

Suicide rates

Suicide was on the rise until it reached a peak in 1999 and later declined to 8.1 per 100 000 in 2004.

Substance misuse

Overall, 41.5% of substances misused were alcohol and 52.9% 'brown sugar' (an adulterated form of heroin).

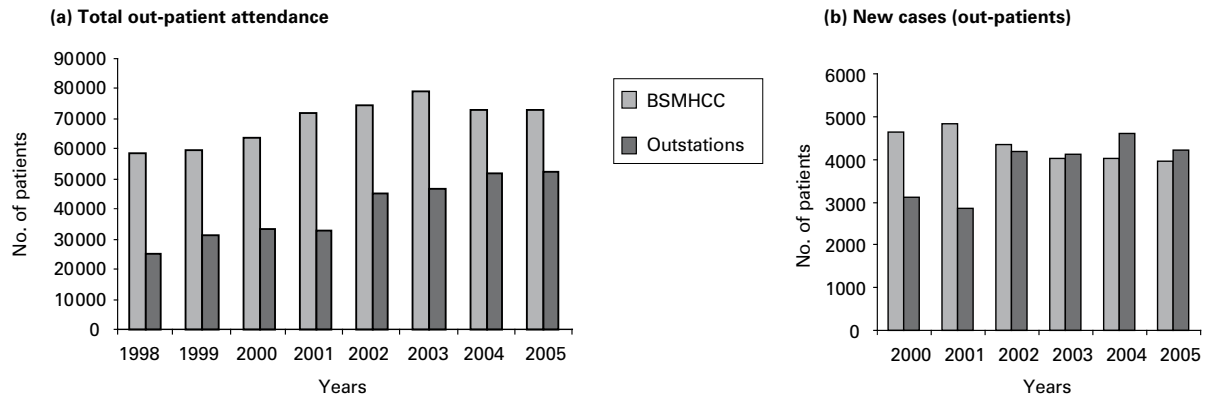


Fig. 1 (a) Total number of out-patient attendances and (b) numbers of new cases at the Brown-Sequard Mental Health Care Centre (BSMHCC) and regional hospital outstations, 1998–2005.

The National Agency for the Treatment and Rehabilitation of Substance Abusers (NATReSA) is responsible for all demand reduction activities in Mauritius. The National Drug Control Master Plan was formulated in the year 2004 and the Mauritius Epidemiology Network on Drug Use (MENDU) was set up in 2001.

Legislation and policy

The Mental Health Act was proclaimed in 1998. It deals mainly with involuntary in-patients, although it did make provision for voluntary admission for patients with mental illness. The Act is being amended at present to involve all mental healthcare users and to make provision for community care.

In 2005, a National Strategic Plan for Mental Health was developed and submitted; implementation is awaited. This Plan was developed following a government white paper on health sector development and reform, of December 2002, and in keeping with guidelines from the World Health Organization (WHO). The white paper proposed a National Plan for Mental Health, which was developed in consultation with local specialists and other groups with advice from WHO experts. The National Strategic Plan for Mental Health includes the setting up of fully fledged regional hospitals, community care, rehabilitation services, specialised units (e.g. a child and adolescent unit) and mental health promotion, among other things.

Health promotion

Health promotion activities have been carried out widely to create awareness regarding mental health in the population, following the National Plan for Mental Health through WHO-funded programmes. A 'focal person' for mental health was appointed who acted as a coordinator for all mental health activities, including health promotion at all levels.

Training

Training is carried out at different levels:

- Postgraduate training in psychiatry is being given to six doctors with the collaboration of the University of

Bordeaux, France. The programme comprises 3 years in Mauritius with regular teaching by visiting French professors and clinical supervision by local psychiatrists followed by 1 year in Bordeaux. After regular assessments and examinations a degree will be awarded. Another batch of six may be trained at a later stage.

- Community physicians and senior medical officers and health officers in the public sector are being given a crash course in psychiatry (under a WHO programme) in order to provide psychiatric services at the primary care level.
- Courses for a diploma in psychiatric nursing are being carried out by the school of nursing.
- House officers are posted for 4 weeks in psychiatric units so as to acquire experience and to try to kindle their interest in this branch of medicine.
- Medical students from the local private medical college are posted for 2 weeks in the psychiatric hospital.
- Community-based rehabilitation workers are given training in psychiatry with the collaboration of the Mauritius Institute of Health.
- A module on psychiatry has been introduced in the training scheme of Non-Communicable Disease (NCD) Staff and Community Nurses, with the ultimate aim of incorporating community psychiatric services in the well established NCD network.
- Occupational therapists and social workers are being trained by the University of Mauritius with psychiatrists also as resource persons.

Research

Epidemiological study

An epidemiological study was carried out in the year 2000 by l'Association Septentrionale d'Epidémiologie Psychiatrique (ASEP), the Département d'Information Médicale (DIRM) and l'EPSM Lille Métropole et le Centre Collaborateur de l'Organisation Mondiale de la Santé pour la recherche et la formation en santé mentale de Paris (CCOMS). The Mauritius Institute of Health and the Ministry of Health and Quality of Life were responsible for carrying out the study locally. The following statistics were presented:

- 22.2% of people interviewed in the study had a mental disorder
- 15% had signs of depression and related disorders

- 10% had signs of neurotic disorders
- 3% had alcohol-related problems
- 3.4% had psychotic states.

Study on disabilities

A cross-sectional study to detect the number of children with disabilities was carried out in 2003. Of the 2834 children with disability examined, 63.8% had intellectual impairment.

Joint Child Health Project

A longitudinal study has been carried out in Mauritius from 1972 onwards. Initially it was designed to identify people at risk for schizophrenia and to take preventive measures. Several papers have been published (e.g. Raine *et al*, 2003).

Study on suicide

In a study on suicide carried out in 1995, the annual suicide rate was reported to be 8 per 100 000 population in the 12- to 20-year age group, 10 per 100 000 for all age groups and 14 per 100 000 in the elderly age group.

Private sector

Psychiatric services in the private sector are provided by the government psychiatrists on a part-time basis and by three full-time private psychiatrists. There is no provision for involuntary admission in the private sector.

Non-governmental organisations

There are non-governmental organisations (NGOs) active in the private sector. For example, the only rehabilitation centre

for people with serious mental illness is run by an NGO. There are few centres run for people with intellectual disabilities. 'Befrienders' are active and give support to people in distress.

The way ahead

Psychiatric services have seen tremendous changes in the past 8 years. The Lunacy Act of 1906 was repealed and replaced by the Mental Health Act 1998, which introduced voluntary care for psychiatric patients. With the implementation of the proposed amendments to the law and the dynamic National Strategic Plan for Mental Health, clear targets have been set. Encouraging public-private partnership is an area to be explored, mainly for rehabilitation and the relocation of long-stay patients. Recruiting the services of relatives as carers with financial incentives is another promising aspect to be looked at, as it will be cost-effective, the state having to spend more to keep the patient in the hospital than in the community. With increased personnel we hope to establish adequate community care and provide comprehensive psychiatric services to the population.

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COUNTRY PROFILE

Mental health services in Tajikistan

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Tajikistan, in Central Asia, gained its independence in 1991, with the break-up of the Soviet Union. There followed a period of civil war, 1992-97. In 2003, 64% of Tajikistan's population was poor, which was defined as living on less than US\$2.15 per day at purchasing power parity by the UN Appeal for Tajikistan (2006). The Tajik healthcare budget appropriations decreased from 4.5% of gross domestic product in 1991 to 1.3% in 2005. The average annual rate of population growth is 2.19%. The

estimated 7320815 population of the country is mainly rural (73.5%) and about 38% of the country's population is under the age of 14. Life expectancy at birth is 62 years for males and 68 years for females. The infant mortality rate is 106.49 deaths per 1000 live births.

Tajikistan has a state-regulated system of healthcare which increasingly depends on unofficial private payments for medical services (70% of total spending in recent years). In 2005, Tajikistan presented its draft National Development

Strategy with three fundamental priorities: public administration reform, private sector development, and development of human potential. The main priorities for development of the healthcare system in Tajikistan are:

- reform of the healthcare system, including development of the private sector and attraction of investment
- improvement of maternal and child health
- a significant slow-down in the spread of HIV/AIDS, a reduction in infectious diseases and the eradication of certain infections that can be controlled by vaccination
- improved availability, quality and effectiveness of medical services (National Development Strategy, 2006).

Mental health policy and legislation

The legal framework for public health-related activities is the Law of the Republic of Tajikistan 'On Protection of Health of the Population', of 15 May 1997. It contains, *inter alia*, some provisions dealing with mental health. According to article 53 of this law, people with mental illnesses are categorised as those who 'pose a threat to surrounding people', along with people with tuberculosis, sexually transmitted diseases, leprosy, AIDS and other infections.

Activities in the field of mental healthcare provision have not been specifically regulated up to 2002 from the legal point of view. At present, these are governed by the Law of the Republic of Tajikistan 'On Psychiatric Care', adopted on 2 December 2002. Furthermore, there is a Decree of the Ministry of Health of Tajikistan, 'On Measures for Further Improvement of Psychiatric Care', of 9 February 2001, which approved 17 regulations on the provision of psychiatric care.

The only document which has an element of strategy on mental health in Tajikistan is the Strategy of the Republic of Tajikistan on Protection of Health of the Population for the Period to 2010. Task 6 of this strategy is entitled 'Improvement of Mental Health' and is aimed at improving significantly, by 2010, psychosocial support for the general population and people with mental disorders and ensuring improvement in the psychosocial status of people. This envisages:

- implementation of comprehensive measures on reduction of prevalence of mental disorders, and improvement of people's capacities to cope with life stressors
- establishment of comprehensive care services for people with mental disorders.

In 2005, at the Ministerial Conference in Helsinki, the Tajik Minister of Health signed the European Declaration and Action Plan on Mental Health.

History of psychiatry in Tajikistan

By the 1990s, a network of psychiatric institutions, including dispensaries, hospitals and mental health offices, had been established in Tajikistan. In-patient care was by far the predominant form of psychiatric service available, and hospital stay tended to be long. In the process of treatment of mental disorders, preference was given to biomedical interventions, such as psychopharmacotherapy or shock therapy.

The condition of post-Soviet mental health services in Tajikistan can be defined as critical, based on many indicators: availability of the qualified staff; provision of food; the state of the wards, facilities and utilities at the mental health institutions; and the availability of effective therapies. In 1996, in psychiatric hospitals of Lakkon and Leninsky districts, 311 of about 700 patients died mainly because of lack of food. The physical infrastructure of the mental health services was dilapidated. In many psychiatric care facilities there were no decent windows or doors; in-patients slept on beds with no mattresses, while dressed. There was little regard for basic hygiene (Médecins Sans Frontières, 2003).

Since 2005, first in-patient and then out-patient psychosocial rehabilitation programmes have been introduced by the Global Initiative on Psychiatry.

Incidence and prevalence of mental disorders

The Tajik Ministry of Health has provided the quantitative data on mental disorder shown in Table 1.

Table 1 Prevalence and incidence of mental and behavioural disorders in the Republic of Tajikistan as registered by the psychiatric services, 2001–05

Mental and behavioural disorders	ICD-10 block	2001	2002	2003	2004	2005
<i>Prevalence</i>						
Total	F00–F09, F20–F99	39 634	41 300	40 998	40 951	41 177
Schizophrenia, schizotypal and delusional disorders	F20–F29	10 654	10 805	10 938	11 069	11 219
Mood disorders	F30–F39	656	685	673	673	688
Neurotic, stress-related and somatoform disorders	F40–F48	1 681	1 668	1 688	1 782	1 699
Behavioural syndromes associated with physiological disturbances and physical factors; and disorders of adult personality and behaviour	F50–F69	1 192	1 198	1 202	1 210	1 227
Mental retardation	F70–F79	19 390	20 341	20 015	20 230	20 408
<i>Incidence</i>						
Total	F00–F09, F20–F99	1 402	1 388	1 370	1 338	1 406
Schizophrenia, schizotypal and delusional disorders	F20–F29	351	386	418	450	491
Mood disorders	F30–F39	37	23	16	26	28
Neurotic, stress-related and somatoform disorders	F40–F48	38	43	49	48	36
Behavioural syndromes associated with physiological disturbances and physical factors; and disorders of adult personality and behaviour	F50–F69	24	25	25	35	46
Mental retardation	F70–F79	629	691	569	543	563

Source: Tajik Ministry of Health.

Table 2 Total number of psychiatrists and narcologists in Tajikistan in 2003 and 2004, by region

Region	2003	2004
Dushanbe City	72	70
Regions of Republican Subordinations	29	25
Sogd Region	58	54
Khatlon Region	26	25
Gorno-Badakhshan Autonomous Region	5	5
Total	190	179

Source: Tajik Ministry of Health.

Mental health service delivery

According to the Pharmaciens Sans Frontieres Comite International (PSFCI) report on the assessment of psychiatric institutions in the Republic of Tajikistan released in 2006:

there were 17 psychiatric institutions in the Republic of Tajikistan, divided in four groups of medical institutions with bed capacity i.e. psychiatric hospitals, psychoneurological dispensaries, psychoneurological centres and psychoneurological departments. Psychiatric departments within central district hospitals substitute for psychoneurological hospitals in districts with small populations. Therefore, there are in total 2 hospitals, 2 departments, 2 psychoneurological centres and 11 psychoneurological dispensaries in Tajikistan. PSFCI found that 69% of the hospitals' budget needs were not covered. Allocated State budget resources (1,561,166.00 Somoni or about 520,390.00 USD in 2005) were mainly intended to cover wages, food and medicines expenses. (PSFCI, 2006)

Mental health workforce

Institutionally, mental healthcare services in Tajikistan are provided within the public health and social sectors. According to the most recent (end of 2005) assessment of psychiatric institutions in Tajikistan, the evaluated structures were employing 102 doctors. Of those, 75 were psychiatrists and 27 were experts in narcology.

Table 2 provides Ministry of Health statistics on mental health professionals, including drug treatment specialists, by region in 2003 and 2004.

Education and training

Undergraduate and graduate medical and pharmaceutical education and training in Tajikistan are provided by the Tajik State Medical University named after Avicenna. The overall duration of education and training of a medical doctor is between 7 and 8 years: basic medical education (bachelor's level) takes 5 years, and graduate (master's level) education is another 2–3 years.

Graduate training in psychiatry lasts 2 years. According to the syllabus, psychiatry-related courses take 882 hours per year or 1764 hours altogether over the 2 years of postgraduate training. The educational programme of other medical students also devotes some hours to psychiatry. This includes 1764 hours for drug treatment specialists, 60 hours for neurologists and 36 hours for general practitioners.

Medical education is multidisciplinary and the curriculum is developed in compliance with the state standard for

graduate education in Tajikistan, approved by Resolution No. 95 of the Government of Tajikistan of 23 February 1996.

Postgraduate training of medical and pharmaceutical professionals is conducted by the Tajik Institute for Postgraduate Training of Medical Professionals, which was established in 1993. Such postgraduate 'upgrade' courses are to be undertaken by medical professionals every 5 years on a mandatory basis.

Training and education of nurses are provided by medical colleges and vocational schools.

Substance misuse

In 2002 the United Nations Office on Drugs and Crime (UNODC) estimated the number of drug users in Tajikistan at 45 000–55 000 (UNODC, 2002).

Specialised medical drug treatment in Tajikistan is provided exclusively by the narcological centres established in Soviet times. In 2005, 1040 individuals received in-patient treatment at such centres, of whom 96.4% were diagnosed with heroin addiction (F11.2 according to ICD-10). In 2001–05, the narcological facilities treated 4818 in-patients in total.

Mental health and human rights

According to a report from the Tajikistan Bureau on Human Rights, on access to psychiatric care in Tajikistan (Sanginov & Romanov, 2006), violations of fundamental human rights are common in psychiatric institutions. In particular, the following are often not met: the right to information, notably regarding patients' rights; the right to equal reward for equal labour; the right to an adequate environment; the right to the best available treatment; economic and social rights.

Patient's participation in discussion of the treatment plan and the giving of informed consent for treatment are not in place, and patients play only a passive role. They are almost never informed of their diagnosis and their health condition (they are often told simply that they have developed a psychiatric illness).

Drinking water is often unavailable. There is a shortage of electricity, especially in winter. Daily schedules are repetitious; most patients have nothing to do but to sit and stare at the walls around them. Wards lack furniture except for metal beds. The freedom of movement of patients is very limited, even within the institutions.

Psychiatric patients do not have an opportunity to ask for alternative psychiatric examination. There is no institute of independent psychiatric expertise in Tajikistan (Sanginov & Romanov, 2006).

Conclusion

Tajik psychiatry 'flourished' during Soviet times, when the biomedical approach to treatment was paramount. The collapse of that system and the subsequent civil war in Tajikistan led to a major emergency in psychiatry in terms of migration of qualified staff, dilapidation of buildings and disintegration of services. As Tajik society recovered from deep social and economic crisis, the provision of mental

health services gradually stabilised. While the financial capacity of the government is still very limited, the Central Asian region as a whole, and Tajikistan in particular, are the focus of many international donors and non-governmental agencies. As some of them prioritise the social sector and in a few cases mental health, new psychosocial rehabilitation services are being developed and opportunities exist for further improvement of mental healthcare in Tajikistan.

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SPECIAL PAPER

Mental health legislation in contemporary India: a critical review

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After 20 years of experience with the legislation, it is now a good time to assess the Mental Health Act 1987 of India. How useful has it been to consumers, carers and the mental health profession? It has been perceived as isolationist because it deals only with psychiatric hospitals and excludes a large number of general hospital psychiatric units from its purview. It is also un-implementable in some parts of the country because of the shortage of resources. From a human rights perspective, it is deficient in two important ways: it failed to establish independent review bodies for involuntary admissions; and it lacks provision for research with people who have a mental illness.

Historical background

When Britain granted independence to India in 1947, it left behind a plethora of antiquated laws, including the Indian Lunacy Act of 1912, which used terms originating from that era, such as 'lunatic asylums', 'lunatics' and 'idiot'. Every involuntary admission had to be ordered by a magistrate and every discharge by a board of visitors, which met monthly. After independence, the law was found to be so unworkable that everybody cheerfully bypassed it for the next 40 years while work continued on and off on a new law, until the Mental Health Act 1987 replaced it.

However, implementation of that Act was impeded, both by administrative apathy and by resistance from mental health professionals, who perceived it as having or indeed

promoting an isolationist approach to psychiatric patients, who had only recently started receiving the benefits of a re-surgent general hospital psychiatry movement in the country (Kala, 1997).

Judicial response to the Erwady tragedy, 2001

On 7 August 2001, 25 people with a mental illness were burned to death in an accidental fire at night, while chained to pillars in a religious shrine in the Erwady district of Tamil Nadu in South India. These patients had been left by poor families in the care of the shrine management. The Supreme Court of India took 'suo moto' cognisance of the event and started a civil writ petition (no. 334 of 2001), which is still ongoing. The Supreme Court discovered that the regulatory provisions of the Mental Health Act were not being implemented in the country. The Court ordered country-wide implementation of the licensing and other provisions of the Mental Health Act and asked for compliance reports from each of the 34 states. The government complained that the number of mental health professionals in the country was so small that the norms required for licensing a psychiatric hospital, for example one psychiatrist per ten admitted patients, simply could not be met.

The Court then ordered uniform norms of care across both the public and the private sector and asked for a country-wide, state-wise survey to find out the exact number

of psychiatrists, clinical psychologists, psychiatric social workers, psychiatric nurses and psychiatric beds. There are an estimated 4000 psychiatrists in India, which represents a ratio of approximately one psychiatrist for 250 000 people (World Health Organization, 2001). However, this rate varies hugely between urban and rural areas, and between more developed and less developed states. Thus, in some states the ratio falls to one psychiatrist for more than one million people. The majority of psychiatrists work in urban areas and in the private sector. The number of other mental health professionals, such as psychologists and psychiatric nurses, is even lower: there is one nurse for every 10 psychiatrists and one psychologist for every 20. There are an estimated 25 000 psychiatric beds in the country, or one bed for every 40 000 people (Patel & Saxena, 2003). About 80% of these beds are situated in mental hospitals, where the quality of care has been found to violate even basic human rights (National Human Rights Commission, 1999).

The government of India has now unfortunately reduced the minimum standards of care and the norms required by the rules under the Mental Health Act. This 2003 revision submitted by the government to the Supreme Court requires only one psychiatrist and one clinical psychologist or psychiatric social worker for 100 beds and one nurse for 10 beds.

Involuntary admissions

The 1987 Mental Health Act regulates involuntary admissions mainly through its sections 19 and 20. These stipulate that involuntary admissions can occur only in designated psychiatric hospitals (and not in most general hospital psychiatric units). In addition, involuntary admission requires the recommendation of a psychiatrist and two medical practitioners.

In reality this statutorily required combination of a psychiatric hospital and a psychiatrist and two general practitioners does not exist in vast tracts of India. Thus, the remote hilly state of Arunachal has only one psychiatrist (and no psychiatric hospital). One of the biggest states of India, Madhya Pradesh, has only 30 psychiatrists (for 60 million people). This misfit between the statutory requirement and what is actually possible within the available resources makes the Mental Health Act unimplementable in many parts of the country. As a result, in some areas, treatment and restraint of acutely disturbed unwilling patients are being done in a way which is full of good intentions but which is not technically legal and which is fraught with possibilities of human rights violations.

While the Mental Health Act 1987 lays down that involuntary patients can be admitted only in designated psychiatric hospitals, section 2q of the Act, which lays down definitions, specifically excludes all psychiatric wards in about 100 government-run general hospitals (most of which are teaching hospitals) from the definition of a 'psychiatric hospital'. This has resulted in a very difficult situation. By virtue of being almost free of cost, these cater to a very large number of patients from middle- and low-income sections of society, who have nowhere else to go for treatment. (A national health payment system by a third party like an insurance company or the government exists only for a small proportion of the population.) The treating clinicians, with the best of intentions but in contravention of the Act,

admit the patient on the basis of a 'proxy' consent by a family member. Providing compulsory care thus circumvents the law, reminiscent of the times of the Indian Lunacy Act, when an 'unreasonable' law was similarly bypassed, with everybody keeping quiet because the intention is to provide much-needed care. However, Parliament can easily solve the problem, if it wishes, by deleting a single line from section 2q in a simple amendment.

Tribunal review

The Mental Health Act 1987 does not provide for a system of review similar to the UK mental health review tribunals. Thus, in cases of perceived wrongful restraint, patients have nowhere to appeal except the mainstream judicial system, which is not sensitive to mental health problems and is anyway clogged with civil and criminal cases. Patients sometimes file a report to the police for wrongful confinement. However, the police similarly are not equipped to understand the nature of psychiatric disorders and can be a cause of considerable harassment to the admitting psychiatrist. This problem could be easily corrected by an add-on amendment to the existing Act, putting in place a review body which 'involuntary' patients can access.

Research

Section 81(2) of the Act stipulates that research can be done on persons who are mentally ill and unable to give consent, on the basis of consent by a guardian. It is generally accepted that, in India, families play an important and supportive role in the treatment of people with mental illness, and a family member is the right choice for consent for the admission and treatment of patients unwilling to give consent. However, for the purpose of patients participating in research, human rights experts generally favour an independent review body. This is in line with the 'Principles for the Protection of Persons with Mental Illness and for Improvement of Mental Health-care' laid down by the General Assembly of the United Nations in 1991. An activist organisation in India has already gone to the Supreme Court with a plea to delete section 81(2) on this ground (writ petition 562 of 2001).

Other legislation pertaining to mental health

Section 309 of Indian Penal Code makes attempted suicide a punishable offence and the person liable to be arrested, prosecuted and imprisoned for 1 year. This leads to a situation where all hospitals are legally bound to inform the police whenever a survivor of attempted suicide is brought in, leading to harassment of the patient and the family. Psychiatric help is often not sought because of this. It also results in gross under-reporting of cases of attempted suicide, thus making the available figures unreliable.

Section 377 of Indian Penal Code lays down that homosexual acts, even between consenting adults, are punishable with imprisonment for up to 10 years. This again results in harassment and prevents individuals from 'coming out of

the closet'. Recently, a High Court rejected a plea to abolish section 377.

On the positive side, the Parliament of India has passed a number of enabling pieces of legislation that have had a direct or indirect effect on the health of its people. These include: the Narcotic Drugs and Psychotropic Substances Act 1985; the Persons with Disabilities Act 1995; the Consumer Protection Act 1986; the Protection of Human Rights Act 1993; the Children Act 1960; and the Juvenile Justice Act 2001 (Khandelwal *et al*, 2004).

Conclusion

While in recent years India has enacted many modern, progressive pieces of legislation which have had an indirect effect on the mental health of its people, the main one, the Mental Health Act 1987, has many shortcomings. There have been suggestions from the profession and interested groups on how this can be rectified (Kala, 2004; Sarkar, 2004). The government can invite more suggestions and then submit

these to Parliament. However, the problems arising directly out of a shortage of staff will have to wait until the situation improves.

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SPECIAL PAPER

Attention-deficit hyperactivity disorder and use of psychostimulants among children in Turkey

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Recently, the use of psychostimulant medication in children with symptoms of attention-deficit hyperactivity disorder (ADHD) has been subject to extensive debate. The problems faced while assessing and diagnosing ADHD, unnecessary prescribing of psychostimulants, the possible side-effects of psychostimulants on the developing brain, the risk of drug dependency, and the risk of stigmatising children through medicalisation of normal life events are considered among the principal objections to the use of psychostimulant medications. On the other hand, what also need to be taken into account are the increasing evidence on the genetic, biochemical and diagnostic validity of the disorder, the data showing the therapeutic effects of psychostimulants and the rarity of the above-mentioned side-effects, as well as the ethical problems created by insufficient treatment of children because of the concerns of parents. A critical evaluation of these conflicting opinions by mental health professionals might contribute to the application of ethical principles. While making this kind of evaluation, it is important to pay

regard to the specific sociocultural features of the country, as well as the prevailing worldwide discussion.

Sociocultural overview of Turkey

Turkey, a secular state which wants to be a member of the European Union, is at the crossroads of two continents. Two-thirds of its population of 70 million live in urban areas and about a quarter live below the poverty limit. According to the 2005 'world indicators' of the World Bank, Turkey is 55th among 124 countries with respect to unfair distribution of income (Radikal, 2005).

One-third of the population in Turkey is 15 years of age or younger and the number of students in primary education is 10.5 million. The average class size is about 35–40, whereas the appropriate number of students in a class is generally considered to be 15–20. Since 1998, the duration of compulsory education has increased from 5 years to 8 years. Nevertheless, 10% of children (13% for

girls and 7% for boys) of primary education age cannot attend school.

There are problems in directing students towards vocational education. In most higher-income countries, two-thirds of students are in vocational education, but in Turkey the proportion is only one-third. As a result, in the year 2005, 1 730 850 students took the Student Selection Examination for university, but only 23.5% of these found the opportunity to attend any college or university (CNN TURK, 2005). Also, higher education does not simply equate with job opportunity, as approximately one-third of high-school graduates are unemployed. This competitive economic and educational environment means that a great deal of importance is attached to academic performance. Families think that academic success is essential to social status, which in turn increases the anxiety of families and teachers about children who might have educational difficulties. Meanwhile, ordinary schools have no facility for children who have intellectual disability or other special needs. There are examples of labelling and exclusion of those children who have special needs.

The prevalence of illiteracy among women in Turkey is one in five of the adult population, while it is one in eight of the total adult population (State Institute of Statistics, 2004). Turkey is one of the foremost countries in television viewing: the average time spent watching is about 4 hours per day per person. About one-fifth of all television news broadcasts include homicide, suicide or violence.

Migration from rural to urban areas and from eastern to western cities, breaking the traditional family structure, and violence in family or in school, high rates of unemployment and poverty as well as unsatisfactory conditions of education may be counted among factors which increase the risk of psychiatric problems among children and young people in Turkey. Visits from doctors to attend children with reported inattention and hyperactivity increase with these sociocultural circumstances. There is considerable discussion in the media about ADHD and the scientific studies of it.

Prevalence studies of ADHD in Turkey

There are relatively few studies of the clinical features of ADHD in Turkey. In a community-based study carried out in the city centre of Sivas, 8.1% of 1425 students aged 5–15 years were found to fulfil the DSM-IV criteria for ADHD, according to the ratings of their teachers and parents (Ersan *et al*, 2004). In the child and adolescent psychiatry clinic of Ankara University, 8.6% of the 1556 cases seen in the out-patient unit in 22 months were diagnosed with ADHD, making it the third most common diagnosis, after anxiety and affective disorders (Senol & Sener, 1998). In a university child psychiatry out-patient unit in Trabzon, 37.3% of 43 adolescents with attention deficit symptoms at admission were diagnosed with ADHD (Oner *et al*, 2002).

In a study by the first author (Aras *et al*, 2004) carried out with 822 new patients presenting to the child psychiatry out-patient clinic at Dokuz Eylul University Hospital, it was found that presentations with 'distractibility and overactivity' accounted for 27.7% of the total, the rate of ADHD was 12.5% and the rate of psychostimulant use was 3%. The

rate of psychostimulant use and ADHD diagnosis had shown a 7- to 10-fold increase in the same department over the course of 10 years. Symptoms of ADHD were the most common presenting complaints and ADHD was the most common disorder. Boys were predominantly affected: 87.4% of children with ADHD and 84.0% of children using psychostimulants were males. In children with ADHD, the rate of medication use was 38.8% and the rate of psychostimulant treatment was 24.3%.

The role of psychostimulant medication

Recently, the Ministry of Education considered screening all the country's school students for ADHD. Such community-based programmes are regarded as effective methods for the advertisement of drug products and as a consequence drug use may become widespread. This plan in Turkey was widely discussed and criticised because of the risk of labelling children with ADHD and increasing psychostimulant use.

Up to 2005, methylphenidate was the only psychostimulant available within Turkey. Psychostimulants in Turkey can be obtained only with special receipts used for 'narcotic substances and medication under state control' since 1985 and their distribution is controlled by the state. The amount of methylphenidate imported was 2 kg in 1998, but this had increased to 23 kg by 2002 (International Narcotics Control Board, 2004).

It was reported that approximately 10 000 children were using methylphenidate in 2002 (Aktas, 2003). When 20 mg/day doses are used, the monthly cost of methylphenidate (Ritalin) is approximately US\$12. If pharmacotherapy becomes more widespread, psychostimulants could become a profitable group of drugs in Turkey, with its predominantly young population. This fact could accelerate the importation of a wider range of psychostimulants; at the beginning of 2005, a longer-acting and more expensive form of methylphenidate came on the market.

In Turkey, psychostimulants can be prescribed only by specialists in child and adolescent psychiatry, psychiatry, neurology and child neurology. The total number of child psychiatrists and residents is about 200, and most of them are in the bigger cities and university clinics. Especially in state hospitals, a child psychiatrist has to see 30–40 patients a day, limiting the length of a visit to 10–15 minutes. Meanwhile, other doctors who are able to prescribe psychostimulant medication have limited education regarding ADHD. Taking the patient history and the administration of teacher or parent rating scales are the main procedures used to diagnose ADHD. In Turkey, many children have received a 'diagnosis' of 'possible ADHD' from their parents and teachers before they are even seen by a doctor. Visiting a doctor with this label may result in a rapid diagnosis and treatment plan, without detailed evaluation of psychosocial and developmental factors.

As psychostimulants can improve cognitive and motor functioning in normal people, there are worries about their use in the general population to increase performance (Searight & McLaren, 1998). In Turkey's socio-economic circumstances, for some children with symptoms of ADHD, medication can be prescribed inappropriately, to increase

school performance according to the expectations of parents and teachers. Such prescriptions for children with academic or behavioural difficulties may serve to hide the responsibilities of parents, schools and the public for the child's problems. Besides inadequate educational conditions, having a small number of child psychiatrists can make it harder to plan rational medication use in ADHD. On the other hand, many children whose symptoms are severe enough for a diagnosis of ADHD have difficulties in obtaining psychiatric care.

Conclusion

There are limited data regarding the prevalence, comorbidity, effects of treatment modalities, useful diagnostic procedures or diagnostic criteria for ADHD in Turkey. In order to receive the correct diagnosis and to find appropriate treatment, these data are very important in a country like Turkey, whose population is culturally different from those of most higher-income countries (Rohde, 2002). The evaluation and the treatment phase should take account of cultural and socio-economic variables. Unlike in some higher-income countries with better measures of education and health, it is not realistic to expect the psychosocial and behavioural problems of Turkish children to be resolved by prescribing pills. Education and health policies that take into account current debates in the world on ADHD also need to be implemented in Turkey.

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SPECIAL PAPER

Intellectual disability: an Italian perspective

Giampaolo La Malfa and Pierluigi Cabras

Psychiatrists, Neurologists, Department of Neurological and Psychiatric Science AOU Careggi, University of Florence, Italy, email gplamalfa@videosoft.it

Italy is a country that has a very long tradition, dating back to the Middle Ages, of offering assistance to people with all kinds of disabilities. The approach taken to intellectual disability in recent times can be divided into two periods: before and after the enactment of Law 180 in 1978. That law set in train a profound reform of Italy's public sector psychiatric care, which principally involved the closure of the psychiatric hospitals and the establishment of a system of community care.

Before this law, people with intellectual disabilities were generally admitted to psychiatric hospitals, not only because of their pathology but also because they were considered 'deviant'. After the closure of the psychiatric hospitals, Italian psychiatry seemed to lose any interest in the care adults with intellectual disabilities and that still seems to be true of the discipline today.

Definitions of disability

Under Law 104 of 1992, 'disability' is defined as a loss of the ability of the person to perform basic daily activities unaided. However, this is just a legal definition and differs in its parameters from the eligibility criteria that are used to determine whether an individual is able to receive state assistance in the form of services and benefits. For the latter purpose, 'invalidity' gives the right to receive financial benefits when an intellectual disability is a consequence of biological damage. That is, there is no reference to general self-sufficiency. In fact, an individual's 'disability' is rarely used as a criterion for the receipt of social care or benefit; indeed, the individual's social insurance status is much more often the determining factor, as opposed to any functional limitation (such as intellectual disability, psychiatric disorder or dementia).

The lack of national indicators

There are no official data regarding the prevalence of intellectual disabilities, for either children or adults. There are several reasons for this:

- as indicated above, there is no universal definition of intellectual disability
- the recognition of intellectual disability depends on the type of assessment
- assessment is required for both people with intellectual disability living in institutions and those living with their families
- there is no certification system for intellectual disability and no computerised network (ISTAT, 2001).

There is similarly a lack of national indicators of mental health problems among the population with intellectual disability (La Malfa *et al*, 2005).

Policy framework and legislation

In Italy there is no policy guidance from government that relates specifically to people with intellectual disability, although general proposals relating to health and welfare may have direct effects on that population. There is some policy support for the integration of children with intellectual disability in mainstream schools but for adults, especially those with severe degrees of intellectual disability, resort is often made to segregation.

Because the national political climate emphasises devolution and deregulation, policy is developing unevenly in the different regions. An online survey has been carried out on the health plans adopted by Italy's regional governments. This used the key words 'psychiatric disability', 'mental retardation' and 'intellectual disability'. Only four regional health plans (those of Toscana, Lazio, Umbria and Basilicata) included at least one of these key words. This confirms that specific attention to intellectual disability is rare. Moreover, there was nearly a total absence of interest in the coexistence of intellectual disability and mental health problems.

Residential service provision

Despite the deinstitutionalisation seen from the late 1970s onwards, the emphasis of policy for people with severe intellectual disability is very much on institutional provision. In fact, there is still a strong tradition of non-state institutional provision in Italy, run by religious and other organisations. Alternative solutions to care (family houses, small community-based residential placements, etc.) are often restricted to those with mild or moderate disability.

Funding is a mixture of individual entitlement and discretionary awards. Central government usually funds pension systems, while residential care and newer forms of care are funded at a regional or local level. Funding structures are

offered mainly on the basis of politically decided subsidies. The ideal of care packages being tailored to the individual is rarely seen.

The non-state institutional provision mentioned above is run through corporate arrangements with the regional governments. Residential homes and similar facilities are run by the private sector and public sector. In both cases, however, the autonomy of service providers is low.

There is a trend of increasing qualitative and quantitative demand while, paradoxically, available funds are reduced. Individual and family support schemes and more efficient service delivery could help to bridge the existing gaps but there is little sign of such developments. There has, though, been an increase in the provision of community-based social care services (e.g. group homes, professional training).

The involvement of the families of people with intellectual disability in the planning and provision of services is low, although there are a few family associations involved in local policy-making.

Emerging trends

There are some pilot schemes for individuals with intellectual disability and mental health problems, including training for mental health professionals in a number of Italian universities. The Società Italiana per lo studio del Ritardo Mentale (SIRM; the Italian Society for the study of Mental Retardation) is currently undertaking a survey to 'map' the different types of provision and training activities.

Conclusions

Despite the shift from institutional care to community care started with Law 180 in 1978, the care of adults with intellectual disability, and especially of those with severe disability or with mental health problems, has been largely institutional and marked by indifference at a political and administrative level. On the other hand, the education of children with intellectual disabilities does prioritise individual care, although families are still not really involved in service planning.

Acknowledgements

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Correspondence regarding articles published in *International Psychiatry* is always welcome. Letters of no more than 500 words should be sent to the Editor, Hamid Ghodse, email hghodse@sgul.ac.uk

For contributions to the 'News and notes' column, please contact Dr James G. Strachan, Consultant Psychiatrist and Honorary Senior Lecturer, University of Edinburgh, Royal Edinburgh Hospital, Edinburgh EH10 5HF, UK, email james.strachan@lpct.scot.nhs.uk

2006 annual reports of the International Divisions

African Division

Discussions in the past year have centred on development and training projects and assistance to the region. The annual general meeting (AGM) in Glasgow of African-based psychiatrists was an opportunity for interchange of ideas. Discussion included the overseas volunteer scheme of the College and its potential benefits to the host communities. Processes to increase the momentum of research in Africa were explored. The Division is seeking to network internationally as well as to continue building bridges within Africa and to contact African psychiatrists presently practising in the UK. The first newsletter was distributed in January.

An important meeting for psychiatry in Africa was the Regional Congress of the World Psychiatric Association in March 2007 in Nairobi. Plans for 2007 include an Edinburgh meeting session on 'Innovation in the management of mental health: social-cultural and economic realities in Africa', as well as an annual general meeting of the Division. The focus this year will be on recruitment to membership. The Division is a particularly small one, with only 50 members. The introduction of 'friend of the International Division' category allows inclusion of psychiatrists from Africa now resident in the UK. Their involvement would strengthen and support the Division and is to be encouraged.

Professor Tuviah Zabow

European Division

The Division organised a symposium at the 19th Pan-Hellenic Congress of Psychiatry in Athens, Greece, 4–8 May 2006 ('The European Division of the Royal College of Psychiatrists. Activities and Perspectives') and the session at the College annual meeting in Glasgow on 10 July 2006 ('Psychiatric Education in Europe').

Plans for 2007 include:

- a workshop within the framework of the Association of European Psychiatrists Congress, Madrid, Spain, 17–21 March 2007 ('Problems in the Provision of Psychiatric Services in Europe')
- a symposium on 'Competency-Based Assessments', organised jointly by the European Division and the Psychiatric Trainees' Committee at the College annual meeting, Edinburgh, 19–22 June 2007
- a symposium in the framework of the First East European Congress of Psychiatry, Thessaloniki, Greece, 21–23 September 2007.

The Division will continue its involvement in educational activities and its participation in international conferences, with emphasis on activities concerning the area of Eastern Europe and the Balkans. Close collaboration has been

established with the Psychiatric Association for Eastern Europe and the Balkans, which holds its first Congress in September 2007, which will feature such topics as the organisation of community services and ethics.

Professor George Christodoulou

Middle Eastern Division

The Division's activities in 2006 included:

- facilitation of the accreditation visit by the College to the Cairo scheme
 - organisation of a session at the College's annual meeting in Glasgow
 - facilitating and encouraging the attendance of trainees from the Middle East at the annual meeting of the College in Glasgow
 - participation in the session organised by the College Pan-American Division at the meeting of the American Psychiatric Association held in Toronto in May ('Sudanese Refugees: Sufferings and Suggested Management')
 - cooperation with the Overseas Doctors Training Committee of the College in the training of Palestinian doctors in the diagnosis and management of addiction, Cairo, September 2006
 - organising training for psychiatrists from Iraq on the management of addictions, Cairo, July 2006.
- Activities planned for 2007 include:
- the session at the College annual meeting in Edinburgh
 - the Middle East regional meeting of the College in Beirut in March, rescheduled from November 2006 because of the armed conflict in the area at the time, with the theme of cross-cultural psychiatry
 - sponsoring of one or two trainees from the Middle East to attend the College annual meeting in Edinburgh
 - implementation of the recommendations of the accreditation committee of the College for the three hospitals that were visited in Cairo in 2006.

Dr Nasser Loza

South Asian Division

The Division's focus in 2006 was on preparations for the international conference in Lahore, Pakistan, on 15–19 February 2007. Delegates came from Sri Lanka, Bangladesh, Nepal, the Philippines, Bhutan, Malaysia, Brunei and Japan. The conference included a session with senior officers of the College, including the President and the Director of International Affairs.

The first South Asian Division meeting will be held in Dhaka, Bangladesh. This will be the first meeting of its kind and there are plans to hold such annual meetings in each member country of the South Asian Division.

The Division hopes to develop programmes in continuing medical education, refresher courses for general practitioners and collaborative research and scholar exchange programmes.

Professor S. Haroon Ahmed

Western Pacific Division

The Division organised a symposium in collaboration with the South East Asian Division at the College annual meeting in Glasgow in July 2006, entitled 'Improving the Capacity of Primary Health Care Workers to Identify Mental Health Problems'. The Division intends to hold meetings in collaboration with the Royal Australian and New Zealand College of Psychiatrists (RANZCP) and the Hong Kong College of Psychiatrists in coming years.

The Division carried out a survey using a questionnaire mailed to all members of the College in the Western Pacific Division. Those who responded were supportive of suggestions relating to training and research.

The Division is preparing a symposium at the College annual meeting in Edinburgh in collaboration with the South Asian Division, entitled 'Psychosocial Rehabilitation'. There are also plans to collaborate with the RANZCP to prepare a symposium on 'Training Opportunities to Improve Mental Health in the Western Pacific Region – Win-Win Prospects'.

Professor Scott Henderson

WPA's Section on Psychiatry in Developing Countries

The World Psychiatric Association's Section on Psychiatry in Developing Countries organised an international meeting in Lahore, 15–19 February 2007, that attracted more than 450 delegates (200 from overseas and 250 from Pakistan). The Royal College of Psychiatrists was represented by its President, Director of International Affairs and the chairs of the South Asian, European and Eastern Mediterranean International Divisions, as well as the Secretary of the Western Pacific Division and a representative of the African International Division. This was the first time that the Board of International Affairs had organised a joint session of its five Divisions at an international meeting outside the UK. The South Asian Division was actively involved in the scientific programme.

The College President's visit to earthquake-affected areas was a particularly important event. Meetings were held with a number of officials from the Pakistan Ministry of Health and representatives from several medical universities to discuss the College's support, collaboration and assistance. Interest was shown by the officials of Ministry of Health in the College Volunteers Programme and it was agreed that the College should have close liaison with the Ministry of Health and local psychiatric institutions to initiate further plans.

Dr Afzal Javed

Report on current themes in child and adolescent psychiatry

A one-day seminar held on 22 January 2007 at the Paediatric Department of Ram Krishna Mission Seva Prathisthan, Vivekananda Institute of Medical Sciences, Kolkata, India, was the third in a series of workshops on child and adolescent psychiatry. Attention-deficit hyperactivity disorder, intellectual disabilities and the developmental disorders were addressed, with an overarching theme of the links between child psychiatry, paediatrics and psychology. The aim was to increase

awareness of the advances in child and adolescent psychiatry among a multidisciplinary audience. Feedback was positive, and there was a request for a repeat event with emphasis on local services.

The Asian Federation of Psychiatric Associations

The Asian Federation of Psychiatric Associations (AFPA) was inaugurated during the WPA's Section on Psychiatry in Developing Countries on 17 February 2007. The President is Professor N. Shinfuku, Japan; the Secretary General is Dr A. Javed; and assisting them are Dr R. I. D'Souza, Australia, and Professor Yang, Taiwan. The AFPA is made up of psychiatric associations from Asia, the South Asian Forum on Mental Health and Psychiatry, the SAARC Psychiatric Federation, the ASEAN Federation on Psychiatry and Mental Health, and the East Asian Group of Psychiatric Associations. Together they represent over 30 psychiatric associations determined to improve psychiatry in the world's largest continent. There are over 30 000 psychiatrists in Asia serving over 3 billion people (half the world's population).

All psychiatrists of Asian origin are welcome to contact the AFPA to find out how they can be involved in the adventure of advancing Asian psychiatry. Please contact Professor Shinfuku (email shinfuku@seinan-gu.ac.jp), Dr Afzal Javed (email afzal@afzaljaved.co.uk), Dr Russell D'Souza (email rsouza1@bigpond.net.au) or Professor Yang (email m750141@ksts.seed.net.tw) for further information. I wish to thank all those who contributed to the birth of the AFPA and wish its new officers all success.

Professor M. P. Deva

Medical student bursaries 2008

The Psychiatric Trainees Committee and the Board of International Affairs are pleased to offer bursaries for medical students looking for financial support with their electives in psychiatry or to undertake research in the UK or overseas.

The bursaries are offered for:

- an elective in psychiatry (five bursaries a year of up to £1200 each)
- a period of research on a psychiatry-related topic (three bursaries a year of up to £1200 each)
- a research presentation (three bursaries a year of £100 each for UK submissions or £150 each for submissions from abroad).

The bursaries are open to undergraduate medical students enrolled on a full-time course of studies in medicine at a medical school in the UK or Ireland. The bursaries are intended to cover costs (travel, accommodation, etc.) to further study or to widen academic research skills. Applicants should submit an essay or a written proposal of the elective or research project (no more than 1500 words), their CV, the names of two referees, confirmation of enrolment at a medical school and an approval of their elective or research project. Applications for 2008 should be submitted to the Dean before the end of February 2008. For further information please contact Lee Jordan on ljordan@rcpsych.ac.uk.

Dr Amit Malik, Chair of Psychiatric Trainees Committee
Prof Hamid Ghodse, Director of International Affairs

Correspondence

Smoking and mental health

Sir: Hamid Ghodse's excellent editorial in the January 2007 issue of *International Psychiatry* omitted one aspect of the smoking disease in mental health services – the political. On a global scale, it is clear that the tobacco multinationals must recruit very large numbers of new smokers each year. This they do increasingly by targeting low- and middle-income countries, and, within these countries, especially the young and the poor.

In the West, smoking is now a marker for poverty and most psychiatric patients are poor. So also are their care staff, particularly untrained nurses, who are some of the lowest-paid workers in Western society.

Smoking has become not only a class identifier of the dispossessed, but, however much we hate to admit it, a valued habit of poor workers, whose threatened loss causes alarm and resentment. None the less, it is an ethical imperative to stamp out smoking. To fail in this is to collude with the exploitation of poor patients and staff, as well as to fail our medical duty. To cite 'human rights' as a reason for retaining the truly squalid 'smoking rooms' in hospitals is legally incorrect. Article 2 of the European Convention prohibits the taking of human life and consequently the promotion of any activity that risks it. Article 3, which relates to inhuman or degrading treatment, may also be invoked. These are both absolute directives, and both they and our own Hippocratic command from antiquity to do no harm outweigh Article 8, the right to private and family life, which is broadly defined and not absolute, but conditional upon, among others, measures for 'public health'.

The political aspects must therefore be understood. The fight against smoking has to be on a global as well as on a local front. The multinationals must be confronted. The exploitation of health workers must be addressed and fair wages paid. Closing the smoking rooms is another step in normalising psychiatric patients and reducing stigma as well as improving health. The sensibilities of the staff who interact most directly with patients, and whose input is grossly underestimated, namely untrained nurses, must be understood. Smoking is a means by which we are all potentially exploited by large capitalist enterprises.

Incidentally, a physician colleague used to confess his wonderment to me that psychiatrists continued to treat schizophrenia by the use of 'kippering rooms'.

Dr R. L. Symonds MB ChB FRCPSych LLM

Consultant Psychiatrist, Medical Member, Mental Health Review Tribunals; 'Wynstow', 12 North Foreland Road, Broadstairs, Kent CT10 3NN, UK, email r.l.symonds@dsl.pipex.com

Psychological trauma training in Lebanon

Sir: Ten days after the 33-day war between Lebanon and Israel, in July 2006, I was able to arrange a psychological trauma training (PTT) visit to Lebanon with the

Qatar Red Crescent. (I have done similar work in the past in the West Bank, Gaza, and Kashmir after the earthquake of October 2005.)

We trained two groups, in Saida and in Sour (Tyre), each over 2 days. Trainees included medical, nursing, paramedical and ambulance staff, as well as social workers, psychologists and Lebanese Red Cross staff.

There were 31 people in the first group. The first day focused on the nature of disasters, human psychological reaction to trauma, defence mechanisms, post-traumatic stress disorder (PTSD) and means of support, both medical and non-medical. There was great interest from the group in the non-medical techniques, especially drawing and painting. Drama was popular with everyone. In groups of ten, they created a drama on the Lebanese family before and during the war, and in the future. It was both fun and educational. There was excellent interaction between trainees, and the feedback was very positive from the group.

On the second day, the morning sessions focused on PTSD in children. The afternoon session was allocated to 'helping the helper', and burn-out syndrome, the hidden trauma for those involved in relief work, and how to take care of ourselves. Again there was very encouraging feedback from all trainees. All were grateful for the PTT and requested further training. At the end we distributed certificates of PTT to participants, acknowledging their effort. I was very much touched by the trainees' enthusiasm and commitment considering that they are just coming out of a war.

The second group was in the city of Sour. Trainees were more traumatised than the group in Saida, possibly because Sour was hit very badly by Israeli jets. All trainees except two had some symptoms of psychological trauma, including anxiety to noise, sleep difficulties, nightmares, indifference and loss of interest.

I did an interview with a local Lebanese television station, on the psychological effects of the war. On such PTT visits I normally give great importance to any television or radio interview in order to send the message out to the wider community on the psychological effect of trauma, how to cope and how to help children in particular. My two main messages on the interview were:

- Don't ignore the 'elephant in the room' (the war in the case of Lebanon) – talk about it.
- Whatever you are feeling as a reaction to the war, this is a *normal* human reaction to an *abnormal* situation, which is the war, and not the other way round, as most affected people think.

I hope this brief account will be of interest to readers of this journal and would welcome any comments and feedback.

Dr Mamoun Mobayed MD DPM MSc

Honorary Lecturer, Queen's University of Belfast; Associate Specialist Psychiatrist, Muckamore Abbey Hospital, Antrim BT41 4SH, Northern Ireland

A full five-page report is available from the author via email: Mamoun.mobayed@nwb.n-i.nhs.uk

Forthcoming international events

25–28 July 2007

Remembering, Repeating and Working Through in Psychoanalysis and Culture Today
International Psychoanalytical Association Congress
Berlin, Germany
Website: <http://www.ipa.org.uk>

2–5 August 2007

First World Congress of Asian Psychiatry: Enhancing Mental Health, Psychiatry and Well-being in Asia
Goa, India
Organiser: South Asian Forum on Mental Health and Psychiatry International
Contact: Dr P. R. Pai Kakode
Email: prpkakode@gmail.com

19–23 August 2007

2007 World Mental Health Congress of the World Federation for Mental Health
Hong Kong, China
Contact: Congress Secretariat
Email: info@wmhc2007.com
Website: <http://www.wmhc2007.com>

25–29 August 2007

Bridging the Gaps, Integrating Perspectives in Child and Adolescent Mental Health
European Society for Child and Adolescent Psychiatry
Florence, Italy
Email: escap2007@newtours.it
Website: <http://www.escap-net.org>

26–30 August 2007

Hypothesis, Neuroscience and Real People
Organised by the International Network for Philosophy and Psychiatry in collaboration with the WPA Section on Philosophy and Humanities
Sun City, South Africa
Contact: Dr Kenneth W. M. Fulford
Email: pwwf@norcam.demon.co.uk

27–29 August 2007

2nd National Conference on Spirituality and Health: Lifestyle, Culture and the Workplace
Adelaide, Australia
Contact: Dr Russell D'Souza, Organising Committee
Email: rdsouza1@bigpond.net.au
Website: <http://www.spiritualityhealth.org.au>

3–8 September 2007

International Mental Health Short Course: Methods and Applications
Institute of Psychiatry, London, UK
The Institute of Psychiatry and London School of Hygiene and Tropical Medicine are offering an introduction to key issues in international mental health, with a focus on policy-driven research in developing countries. Topics will include research sensitivity to culture and health systems and the need to consider the application of its outcome in policy implementation.
Website: <http://www.iop.kcl.ac.uk/international/shortcourse>
Email: imh@iop.kcl.ac.uk

13–15 September 2007

European Conference on Mental Health: Joining Forces Across Europe for Prevention and Promotion in Mental Health
Barcelona, Spain
Email: imhpa.conference@gencat.net
Website: <http://www.gencat.net/salut/imhpa/Du32/html/en/dir1662/doc13013.html>

14–16 September 2007

Touching the Stars: Towards a Better Quality of Life
4th EUFAMI Conference
Torun, Poland
Contact: Kevin Jones
Email: secr.general.office@eufami.org
Website: <http://www.eufami.org>

20–23 September 2007

WPA Regional Meeting
Shanghai Mental Health Center, China
Contact: Dr Zeping Xiao
Email: xzpdgj@online.sh.cn

21–23 September 2007

First Congress of the Psychiatric Association for Eastern Europe and the Balkans
Organised by the Psychiatric Association for Eastern Europe and the Balkans
Thessaloniki, Greece
Contact: Dr George Christodoulou
Email: gchristodoulou@ath.forthnet.gr
Website: <http://www.paeeb.com>

11–14 October 2007

US Psychiatric and Mental Health Congress
Gaylord Palms Resort and Convention Center, Orlando, Florida
Website: <http://www.cmellc.com>

13–15 October 2007

Universal Mental Health Screening and Drug-Use of Our Children: Risks versus Benefits
Arlington, Virginia, United States
Website: <http://www.icspp.org>

21–25 October 2007

XIX World Association for Social Psychiatry Congress
WPA co-sponsored conference (Zone 9) with the World Association for Social Psychiatry
Prague, Czech Republic
Contact: Dr Shridhar Sharma
Email: wasp@nda.vsnl.net.in

23–28 October 2007

Annual Meeting of the International Society of Addiction Medicine (ISAM)
WPA co-sponsored conference with the International Society of Addiction Medicine (ISAM) with the WPA Section on Addiction Psychiatry
Cairo, Egypt
Contact: Dr Nady El-Guebaly
Email: nady.el-guebaly@calgaryhealthregion.ca

24–26 October 2007

XIV Congress of the Argentinean Association of Psychiatrists
WPA co-sponsored conference (Zone 5) organised by the Argentinean Association of Psychiatrists (AAP)
Buenos Aires, Argentina
Contact: Dr Nestor F. Marchant
Email: aap@aap.org.ar
Website: <http://www.aap.org.ar>

25–27 October 2007

Best Evidence-Based Practice: Prevention, Treatment and Management of Violence at the Individual, Institutional and Governmental Level
5th European Congress on Violence in Clinical Psychiatry
Congress Centre 'De Meervaart', Amsterdam, The Netherlands
Contact: Prof. Dr Tom Palmstierna or Prof. Dr Henk Nijman

Email: nico@oudconsultancy.nl

Website: <http://www.oudconsultancy.nl/violenceadam/violence/5theuropeancongc>

29–31 October 2007

Transcultural Mental Health in a Changing World: Building a Global Response
World Federation for Mental Health Conference
Minneapolis, Minnesota, USA
Contact: Ellen Mercer, Director of the WFMH Center for Transcultural Mental Health
Email: emercer@wfmh.com
Website: <http://www.wfmh.com>

14–17 November 2007

International Society for Traumatic Stress Studies (ISTSS) 23rd Annual Meeting
Baltimore, Maryland, USA
Email: conference@istss.org
Website: <http://www.istss.org/meetings/index.cfm>

22–24 November 2007

XII Annual Course on Schizophrenia
Madrid, Spain
Website: <http://www.cursoesquizofreniamadrid.com>

28 November–2 December 2007

Working Together for Mental Health: Partnerships for Policy and Practice
WPA international congress
Email: wpa2007melbourne@meetingplanners.com.au
Website: <http://www.wpa2007melbourne.com>

5–8 February 2008

WPA European Congress and Regional Meeting
Organised by the Association of the French Societies' Members of the WPA
Paris, France
Contact: Dr Michel Botbol
Email: mbotbol@wanadoo.fr

14–17 March 2008

IV Biennial Conference: Integrative Approaches to Affective Disorders
Organised by the International Society for Affective Disorders in collaboration with the WPA Section on Affective Disorders
Cape Town, South Africa
Contact: Caroline Holebrook
Email: caroline.holebrook@iop.klc.ac.uk
Website: <http://www.isad.org.uk>

16–20 March 2008

Third World Congress on Women's Mental Health
Organised by the WPA Section on Women's Mental Health
Melbourne, Australia
Contact: Dr Donna Stewart
Email: Donna.Stewart@uhn.on.ca
Website: <http://www.IAWMHCongress2008.com.au>

19–21 June 2008

WPA Thematic Conference on Depression and Relevant Psychiatric Condition in Primary Care
Organised by Wonca-Europe, the Spanish Psychiatric Association and the Spanish Society of Family and Community Medicine (SEMFYC)
Granada, Spain
Contact: Dr Francisco Torres-Gonzalez
Email: ftorres@ugr.es; patricia@fase20.com
Website: <http://www.WPA2008granada.org>