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EDITORIAL

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The World Psychiatric Association (WPA)

The WPA is an association of psychiatric societies aimed to increase knowledge and skills necessary for work in the field of mental health and the care for the mentally ill. Its member societies are presently 122, spanning 105 different countries and representing more than 150,000 psychiatrists. The WPA organizes the World Congress of Psychiatry every three years. It also organizes international and regional congresses and meetings, and thematic conferences. It has 55 scientific sections, aimed to disseminate information and promote collaborative work in specific domains of psychiatry. It has produced recently several educational programmes and series of books. It has developed ethical guidelines for psychiatric practice, including the Madrid Declaration (1996). Further information on the WPA can be found in the website www.wpanet.org.

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World Psychiatry

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WPA proposal regarding the escalation of violence in the Middle East

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As psychiatrists and mental health professionals we live in a world where the challenges to our profession extend beyond our clinics and hospitals. For some time now psychiatrists have realized that they cannot close their eyes to the world context around them. External factors such as violence, poverty, deprivation etc. have been largely incriminated in the precipitation of mental disorders, have constituted an obstacle to their prevention and a challenge to rehabilitation processes, foremost those which entail major social components. War is such a major challenge and the WPA has not been blind to the spreading violence in the world and the consequences it has on the population at large and the most vulnerable groups, foremost women and children, in particular. One such major conflict has been the Middle East. Although the Middle East conflict has been going on for decades now (more than half a century), yet the last few months have witnessed an escalation of violence that threatens with unpredictable psychological and social consequences in the near and far future. Almost daily, women and children are facing such major traumas as house demolitions, deaths, humiliations, transfers and siege.

In response to that situation, the WPA issued the following statement, which was endorsed by the General Assembly in August 2002 in Yokohama, during the 12th World Congress of Psychiatry.

WPA STATEMENT REGARDING THE ESCALATION OF VIOLENCE IN THE MIDDLE EAST

The World Psychiatric Association has been following with great concern the escalation of violence in Occupied Territories, in Israel and in the refugee camps in the West bank and Gaza, which represents a new and serious threat to the mental and general health of affected people, as recently recognized by the World Health Organization. As psychiatric professionals we cannot ignore the psychological trauma being experienced and the psychological consequences to be expected from chronic exposure to violence against civilians both in the Occupied Territories and Israel.

An increase in the prevalence of post-traumatic stress disorders and emotional disorders of childhood, in addition to a wide spectrum of stress reactions, both acute and chronic, especially among the most vulnerable groups such as children, women, the elderly and the disabled, are but a few of the mental health consequences to be anticipated. One can speculate how desperate people can get when they lose hope in achieving the basic minimum requirements of a human life, freedom from danger and humiliation.

A whole generation of Palestinian children will grow up with their memories imprinted with the death of their families, demolition of their homes and debasement of their communities. A whole generation of Isreali children will grow up hosting a sense of insecurity and foreboding. And children of both populations will grow up with deep distrust against each other.

The World Psychiatric Association also expresses its concern regarding the difficulties for people in the area to reach and receive health services they need and the safety of psychiatrists and other health professionals in carrying out their vital work.

Therefore, the World Psychiatric Association:

- *Appeals to all sides in the conflict to consider the short and long-term psychological consequences of violence and war and to bear their respective responsibility concerning the mental well being of future generations in the region.*
- *Calls on its member societies to raise public awareness in their respective countries regarding the psychological hazards of war, trauma and mass killings and to lobby their governments to play an active role to break the cycle of violence in the Occupied Territories and Israel.*
- *Urgently requests the Israeli Psychiatric Association, the community of Palestinian psychiatrists, and other psychiatric associations in the region to prepare reports on the mental health situation in their areas and specific recommendations for dealing with this situation.*
- *Urgently requests that relevant WPA sections and task forces collaborate with local psychiatric societies to evaluate the current situation and design pertinent intervention strategies.*
- *Will organize a forum and a network of international mental health and humanitarian organizations to review mental health reports from the region and to find helpful solutions in collaboration with local societies.*
- *Requests its member societies to be on the alert and report to the WPA on similar situations in other parts of the world.*

The appeal of the WPA was positively received by all WPA components. Of special significance was the response of the Israeli and Palestinian psychiatrists.

Dr. Eyad El Sarraj, Director of the Gaza Community Mental Health Program in Gaza, welcomed the statement and any endeavors organized by the WPA to join together Palestinian and Israeli psychiatrists and others concerned with the conflict into an initiative to address the matter.

Dr. Schneidman, President of the Israeli Psychiatric Association, announced the adoption by his Association of the declaration concerning the WPA position on the Middle East conflict. He further elaborated that the Israeli Psychiatric Association condemns all kinds of aggression and violence towards civilians occurring during war, terrorist attacks, or any other violent acts. He considered that it is our and our neighbors' role, as psychiatrists, to try and explain to our leaders the negative consequences of hate and violence in the present and for future generations. He further invited all psychiatrists in the Middle East to overcome personal and national feelings as well as identification with their governments and meet together, in order to elaborate a common social policy, and exchange knowledge on preventive and therapeutic issues in the present situation.

The WPA calls on the international psychiatric community to facilitate such meetings aiming at putting all our efforts together in order to stop the violent acts and resolve the present vicious circle we have entered in.

The WPA should use this opportunity of having psychiatrists of goodwill available on both sides to create a specific task force on the Middle East, whose main objective would be to bring psychiatrists and mental health workers from both sides together to counter the psychological impact of diverse and repetitive traumas on inhabitants of this region, especially the children.

The task force on the Middle East has been established and its membership is currently being recruited from among Palestinian and Israeli psychiatrists and from other colleagues from the region, Europe and USA. The World Health Organization, the American Psychiatric Association and the Royal College of Psychiatrists have also been contacted to contribute to the task force.

It would be a great asset for the WPA if this task force achieved its objectives, succeeding in what politicians have failed to achieve over decades now.

The future of antidepressant pharmacotherapy

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Although there are many drugs and psychotherapies available for the treatment of depression, the overall care of depressed patients is usually far from optimal. This review examines how care might be improved in the future, by considering a number of alternative approaches: enhanced use of existing treatments, modifications to existing antidepressant drugs, new targets for antidepressant pharmacotherapy, and non-pharmacological physical treatments. It examines how advances in genetics and neuroscience may lead towards individualised drug treatment, but concludes cautiously, emphasising that theoretical treatment advances can only improve clinical outcomes if used rationally, in collaboration with the patient.

When considering the future of antidepressant treatment, the properties of the notional 'ideal antidepressant' need to be examined (Table 1). Clearly, no such drug exists at present. Furthermore, advances in neuroscience may lead to the development of more efficacious antidepressants, but if these are not readily acceptable to depressed patients the impact of new technologies is likely to be limited.

Table 1 The ideal antidepressant

Efficacy

- Effective across full range of depressive disorders
- Effective in mild, moderate and severe depression
- Effective in achieving remission in acute treatment
- Effective across range of age groups
- Rapid onset of action
- Cost-effective

Acceptability

- Once-daily dosage
- Minimal adverse effects
- Minimal interference with everyday life
- Suitable in physically ill
- Free from interactions with food or drugs
- Safe in overdose

ENHANCED USE OF EXISTING TREATMENTS

Clinical outcomes in depression might be improved simply by the better use of existing treatment approaches, for example by prescribing antidepressants according to evidence-based guidelines, with or without supplementary algorithms; or through judicious combination of antidepressants with structured psychotherapies.

One component of evidence-based practice is the use of clinical guidelines that are based upon current best research evidence, and designed to help practitioners and patients make appropriate decisions in specific clinical circumstances. Many sets of guidelines for the treatment of depression are available, but their quality is often poor; few demonstrate their origin in research evidence and most do not present their recommendations in a concise and accessible format (1). Two prominent recent evidence-based guidelines of high quality are those produced by the British Association for Psychopharmacology (2) and the World Federation of Societies of Biological Psychiatry (3).

Despite their widespread availability, guidelines are not used extensively. A recent review (4) of clinical outcomes in depression stated that "there are no observational studies of routine care for patients with major depression in the United Kingdom or United States that have found most patients to be receiving care consistent with evidence-based guidelines". Outcomes will not necessarily be improved by the arrival of more effective or better tolerated treatments; the whole process of care for depressed patients needs to be enhanced, which requires considerable change in the organisation and function of health care teams.

Randomised controlled trials of the treatment of depressed patients in primary care show that clinical outcomes can be improved, with greater symptom reduction and improved social function: when examined, the costs of individual care may be increased, but overall cost-effectiveness is greater (5-11). The interventions that result in improved outcomes share certain characteristics: namely 'case management' and some involvement of specialist mental health services. Case management includes a number of activities, such as assuming responsibility for patient follow-up, assessing whether depressive symptoms are resolving, monitoring adherence to treatment, and taking action when patients depart from guideline-based treatment. This more assertive approach to care usually requires some sort of active case register of patients with depression who have not yet recovered.

In theory, the impact of treatment guidelines may be enhanced with the use of supplementary algorithms - i.e., rule-based deductive systems that operate with inputs, sequences and outputs, that help health professionals select information that is relevant to clinical decision-making, particularly when these reflect local circumstances (12). Recent findings from the Texas Medication Algorithm Project (13) show that clinical outcomes in depressed patients can be improved significantly through adherence to computerised treatment algorithms and decision support systems (14).

Few treatment guidelines have addressed the question of when to combine antidepressant drugs with psychological treatments in the management of depression, partly because the effects of this combination have not been examined extensively. The British Association for Psychopharmacology guidelines recommend that adjunctive cognitive therapy is considered for residual depressive symptoms in antidepressant-treated patients, and notes that adjunctive cognitive or interpersonal psychotherapy may improve outcome in treatment-resistant depressed patients in secondary care settings (2). A recent large randomised controlled trial of nefazodone, the cognitive-behavioural analysis system of psychotherapy, and their combination, in patients with chronic depression found that 48% of patients responded to nefazodone or psychotherapy, as compared to 73% in the combined-treatment group (15).

MODIFICATIONS TO EXISTING ANTIDEPRESSANTS

Clinical outcomes might also be enhanced by modifications to some of the antidepressants that are already available. These modifications include the production of single enantiomeric drugs, when the ‘parent’ compound is a racemic mixture; changes to the mode of delivery or pharmacokinetic properties of an existing drug; and the combination of two psychotropic drugs within a single tablet, the components being in different formulations to those that are presently available.

Many pharmacological compounds have a chiral centre (usually a carbon atom) and therefore exist as pairs of enantiomers (non-superimposable mirror images), differing solely in their three-dimensional characteristics. When a compound includes a pair of enantiomers it is known as a ‘racemic mixture’. Although enantiomers have identical physicochemical properties, they can show major differences in their interaction with chiral drug targets in the body, leading to differences in pharmacodynamic and pharmacokinetic properties.

Single enantiomeric drugs can have certain advantages over racemic compounds, by allowing reduced variability in metabolism and response, simpler dose-response relationships, reduction in dosage and reduced toxicity (16). This is the case with the local anaesthetic levobupivacaine, where safety has been improved, without compromising efficacy. However, not all ‘enantiomeric switches’ have been successful: dexfenfluramine, the active enantiomer of fenfluramine, was withdrawn from use because of cardiac toxicity. The antidepressants citalopram and bupropion both exist as racemic mixtures, and single enantiomers of both compounds have undergone development: the properties of the more active (+) isomer of bupropion (GW353162) are still being evaluated, but escitalopram is now available for clinical use.

The antidepressant escitalopram is a single enantiomeric drug that is both more potent and selective than the parent compound, racemic citalopram (17). In randomised double-blind placebo-controlled trials, and pooled analysis of trial data, escitalopram appears to have advantages over citalopram, in terms of onset of action and greater overall efficacy, and is similarly tolerated (18).

An alternative modification to existing antidepressants is to alter their mode of delivery: this has been attempted with the existing antidepressant mirtazapine, which appears to be more efficacious than certain selective serotonin reuptake inhibitors (SSRIs) in the treatment of major depression, having either greater overall efficacy or an earlier onset of action (19). A new formulation of mirtazapine (an orally disintegrating tablet) has similar bioequivalence (20) to the existing preparation. The preliminary results of an open-label prospective onset-of-action study suggest that up to 45% of patients are substantially improved within two weeks (21), and a randomised controlled treatment study showed significant advantages for mirtazapine over sertraline after four days of treatment (22). It seems unlikely that the new formulation itself is responsible for this rapid onset of action but there has been no direct comparison between it and the standard tablet.

A further approach is to combine two licensed psychotropic drugs into a new preparation, in which both drugs are present but in different doses to those available as the single compound. This approach has been adopted in the development of the olanzapine-fluoxetine combination tablet, currently being evaluated in the treatment of patients with resistant depression. In animal models, the combination of olanzapine with fluoxetine produces robust and sustained increases in extracellular levels of both dopamine and noradrenaline, greater than those with either drug when given alone. However, combining olanzapine with sertraline, or fluoxetine with risperidone or clozapine, does not result in similar changes (23). The olanzapine-fluoxetine combination has now been investigated in a randomised double-blind placebo-controlled study, and found significantly more efficacious than either drug given alone, in patients with resistant depression (24).

NEW TARGETS FOR ANTIDEPRESSANT PHARMACOTHERAPY

Potential new antidepressant drugs include antagonists at the substance P (NK-1) receptor; corticotropin-releasing factor (CRF) receptor antagonists; glucocorticoid receptor antagonists; vasopressin receptor antagonists; and melatonin receptor agonists.

Selective non-peptide antagonists for tachykinin receptors have been available for ten years, but drug development has focused on the substance-P-preferring receptor known as neurokinin-1 (NK1). Originally developed as potential analgesics, NK1 receptor antagonists have been found to have antidepressant and anxiolytic properties in animal models (25). These effects are independent of direct actions on monoamine reuptake sites, transporter proteins or receptors, nor are they due to effects on monoamine oxidase. However, chronic treatment with the substance P receptor antagonist L-760735 results in burst firing of the locus coeruleus, without causing functional desensitisation of somatic alpha-2 adrenoceptors (in contrast to imipramine), suggesting that L-760735 has a local site of action at the locus coeruleus (26). Experiments with 'knock-out' mice lacking NK1 receptors show that lack of NK1 receptors appears to be associated with down-regulation or functional desensitisation of 5-HT_{1A} receptors resembling that induced by chronic treatment with SSRIs (27). A randomised controlled trial with the substance P antagonist MK 869 found that it had similar efficacy to paroxetine in patients with major depression (28). However, the antidepressant effect of MK 869 was not confirmed in a subsequent treatment study. Many further compounds are currently under development (29).

An alternative approach to antidepressant drug development targets the CRF receptor. Two CRF subtypes are known to exist, differing in their localisation and receptor pharmacology. The CRF1 receptor is abundant within cerebral cortex, cerebellum and pituitary, whereas CRF2 receptors are found mainly in the septum, ventromedial hypothalamus and dorsal raphe nucleus (30). Administration of CRF in animal models results in decreased appetite, disrupted sleep, decreased sexual activity and reduced exploratory behaviour; as depressed patients are often hypercortisolaemic, it has been suggested that CRF may be hypersecreted in depressed patients. A number of selective CRF1 receptor antagonists are being developed, preliminary evidence indicating that they are likely to be efficacious in the treatment of depression and anxiety disorders (31, 32).

A similar approach may be possible in developing psychotropic drugs that are effective in the treatment of psychotic depression, a condition that is associated with a higher rate of dexamethasone non-suppression than is seen in non-psychotic major depression (33). High cortisol levels can be reduced by blocking the synthesis of cortisol - for example by treatment with metyrapone, aminoglutethamide or ketoconazole - but these compounds are all troublesome to use, with major adverse effects and untoward drug interactions (34). An alternative approach is to antagonise central glucocorticoid receptors: as cortisol has a similar structure to progesterone, the progesterone antagonist mifepristone (RU486) has been evaluated as a potential treatment for psychotic depression. A recent preliminary double-blind placebo-controlled crossover study with mifepristone (35) suggests that it is efficacious, and more extensive trials are being conducted.

Another potential approach to the development of new antidepressant and anxiolytic compounds might arise from research into the role of vasopressin receptors in stress responses. Arginine vasopressin (AVP) is produced in the hypothalamus and is involved in the regulation of secretion of corticotropin by the pituitary gland; AVP-containing neurones project to the limbic system, and vasopressin receptors (V_{1A} and V_{2A}) are located in the septum and hippocampus. Recent results show that an antagonist at vasopressin V_{1B} receptors (SSR149415) is effective in rodent models of both anxiety and depression, these effects probably occurring through receptors in limbic structures (36).

An alternative approach to antidepressant drug development is to focus on the effects of melatonin receptor agonists. Normal circadian rhythms can be disturbed in certain groups of depressed patients: for example, seasonal depression may be associated with phase-advance of the circadian rhythm of melatonin relative to the sleep temperature rhythm (37). Melatonin agonists may possess both chronobiotic and antidepressant activity. For example, one such compound (agomelatine, which also has 5-HT_{2C} antagonist properties), previously demonstrated to exert chronobiotic effects (38, 39), has shown antidepressant-like activity in five behavioural models of depression in the rat, and is currently being investigated as a treatment for major depression.

NOVEL NON-PHARMACOLOGICAL PHYSICAL TREATMENTS

The last decade has seen advances in the management of resistant depression by non-pharmacological physical treatments, including vagus nerve stimulation (VNS) and transcranial magnetic stimulation (TMS). Treatments such as these are likely to be adopted only infrequently, in patients who have not responded to more conventional approaches, but they may offer some additional insight into the pathophysiology of depression and the mechanism of the antidepressant response.

Following the observation that intermittent electrical stimulation of the vagus nerve can alter electrical activity and reduce seizures in dogs, over 6000 people have received this procedure for treatment-resistant epilepsy: it is now being investigated as a potential treatment for refractory depression (40). In an open pilot study of VNS in resistant depression, a ten-week course was found efficacious in 30.5% of patients, the most common adverse event being hoarseness (41). A further nine-months open-label treatment increased response and remission rates (42). Neuropsychological testing indicates that VNS does not affect cognitive functions adversely: rather, improvement from depression is accompanied by improvements in motor speed, psychomotor function and executive functions (43).

Repetitive TMS may be efficacious as an alternative to electroconvulsive therapy in the treatment of selected patients with depression, bipolar affective disorder or schizophrenia. An early parallel-design double-masked sham-controlled treatment study in 30 patients found that daily left prefrontal cortex TMS was significantly more efficacious than sham treatment (44). A subsequent study, in patients who had not responded to a median of four previous antidepressant treatments, found statistically significant but clinically modest reductions in depressive symptoms (45). However, the early findings of a recent comparative treatment study show that TMS and electroconvulsive therapy have similar overall efficacy (46). Two recent systematic reviews of the efficacy of TMS have produced conflicting results (47, 48). The mechanism underlying the antidepressant effects of TMS is unclear, but the behavioural and neuroendocrine effects in animal models are similar to those seen with antidepressant drugs (49).

TREATMENT ADVANCES BASED ON PHARMACOGENOMIC RESEARCH

Variations in the human genome account for the genetic component of individuality, susceptibility to disease and response to drug treatment. Much of the variation in the genome is due to single nucleotide polymorphisms (SNPs) where two alternate bases occur at one position (50). Many thousands of polymorphisms have been identified and ordered in high-density SNP maps (51), that are useful in identifying genes associated with polygenic diseases, where each gene variant contributes only a small increase in relative risk. Such is the case with depression, where no single major candidate gene has been identified; furthermore the phenotype of 'major depression' is rather ill-defined - two depressed patients can fulfil the same set of diagnostic criteria, without sharing a single symptom.

Pharmacogenomics uses high-density SNP maps to correlate a patient's genetic profile with his response to a certain drug. The goal of pharmacogenomic research is to match an individual patient phenotype with an individual drug treatment, targeted against proteins containing functionally relevant SNPs (52). For this approach to be successful, patients have to be characterised in great detail: for example, the Munich Antidepressant Response Signature (MARS) project collects data on current psychopathology, early experience, life events, previous treatment response, drug levels, and functional measures, including neuropsychological performance, sleep electroencephalography and neuroendocrine parameters (53).

If successful, depressed patients could then be separated into clinical sub-groups, within what used to be considered a single disorder. A patient genotype would determine the likelihood of response to a particular antidepressant; conceivably, this should result in treatment that has an earlier onset of action and greater overall efficacy, and which is better tolerated with fewer side effects. However, great effort would be required, in terms of detailed patient characterisation and expensive genetic analyses, before such an approach become a clinical reality.

A somewhat different genetic approach has recently been successful in another complex phenotype - asthma. Here, a standard linkage approach in a large, well-characterised cohort demonstrated a gene that accounted for a moderate (40%) proportion of the variance in asthma. The protein (ADAM 33) that it coded for was identified and its mechanism of action elucidated. This new knowledge may well facilitate the discovery of new pathophysiologies and treatments for asthma in the future and there is no theoretical or technological reason why the same process cannot succeed in depression.

CONCLUSIONS

The existing antidepressant drugs are far from ideal. Typically, patients derive little benefit during the first four weeks of treatment, and many patients do not achieve the goal of remission of symptoms. There is a need for both faster-acting and more effective antidepressants, but the methodology for assessing onset of antidepressant effects is complex (19) and symptom-based definitions of remission may not take into account other aspects of recovery from depression, such as social functioning (54). More efforts are required to better define the efficacy of treatment. Furthermore, the assessment of the tolerability of treatment needs to move from simple counts of treatment-emergent adverse effects towards a more detailed assessment of any unacceptable effects on everyday life.

There are many approaches towards the development of potential new antidepressant treatments, but the likely impact of new health technologies is hard to predict. But there is much room for optimism, with current advances in genetic research and neuroscience. The development of treatments that are more efficacious or earlier to act remains a goal of drug discovery, but if new treatments are complex for doctors to conduct, hard for patients to tolerate, or too expensive for healthcare providers to offer, they will have a rather limited impact. Ground-breaking treatments can only alter the burden of illness when they are adopted widely by clinicians, and accepted readily by patients.

References

1. Peveler R, Kendrick T. Treatment delivery and guidelines in primary care. Br Med Bull 2001;57:193-206.
2. Anderson I, Nutt DJ, Deakin JFW. Evidence-based guidelines for treating depressive disorders with antidepressants. A revision of the 1993 British Association for Psychopharmacology guidelines. J Psychopharmacol 2000;14:3-20.
3. Bauer M, Whybrow P, Angst J et al. World Federation of Societies

of Biological Psychiatry guidelines for biological treatment of unipolar depressive disorders. Part 1: Acute and continuation treatment of major depressive disorder. World J Biol Psychiatry 2002;3:5-43.

4. von Korff M, Goldberg D. Improving outcomes in depression. Br Med J 2001;323:948-9.
5. Katon W, von Korff M, Lin E et al. Collaborative management to achieve treatment guidelines: impact on depression in primary care. JAMA 1995;273:1026-31.
6. Katon W, Robinson P, von Korff M et al. A multifaceted intervention to improve treatment of depression in primary care. Arch Gen Psychiatry 1996;53:924-32.
7. Katon W, von Korff M, Lin E et al. Stepped collaborative care for primary care patients with persistent symptoms of depression. Arch Gen Psychiatry 1999;56:1109-15.
8. Rost K, Nutting P, Smith J et al. Improving depression outcomes in community primary care practice. A randomized trial of the QuEST intervention. J Gen Intern Med 2001;16:143-9.
9. Wells K, Sherbourne C, Schoenbaum M et al. Impact of disseminating quality improvement programs for depression in managed primary care. A randomized controlled trial. JAMA 2000;283: 212-20.
10. Simon G, von Korff K, Rutter C et al. Randomised trial of monitoring, feedback, and management of care by telephone to improve treatment of depression in primary care. Br Med J 2000;320:550-4.
11. Peveler R, George C, Kinmonth A-L et al. Effect of antidepressant drug counselling and information leaflets on adherence to drug treatment in primary care: randomised controlled trial. Br Med J 1999;319:612-5.
12. Stein D, Xin Y, Osser D et al. Clinical psychopharmacology guidelines: different strokes for different folks. World J Biol Psychiatry 2002;3:64-7.
13. Rush AJ, Crimson M, Toprac M et al. Implementing guidelines and systems of care: experiences with the Texas Medication Algorithm Project (TMAP). J Pract Psychiatr Behav Health 1999;5:75-86.
14. Trivedi M. Lessons from the Texas Medication Algorithm Project. Int J Neuropsychopharmacol 2002;5(Suppl.1):S11.
15. Keller M, McCullough J, Klein D et al. A comparison of nefazodone, the cognitive-behavioural analysis system of psychotherapy, and their combination for the treatment of chronic depression. N Engl J Med 2000;342:1462-70.
16. Wainer IW. The therapeutic promise of single enantiomers: introduction. Hum Psychopharmacol Clin Exp 2001;16(Suppl.2):S73-S77.
17. Owens MJ, Knight DL, Nemeroff CB. Second-generation SSRIs: human transporter binding profile of escitalopram and R-fluoxetine. Biol Psychiatry 2001;50:345-50.
18. Gorman JM, Korotzer A, Su G. Efficacy comparison of escitalopram and citalopram in the treatment of major depressive disorder: pooled analysis of placebo-controlled trials. CNS Spectrums 2002;7(Suppl.1):40-4.
19. Thompson C. Onset of action of antidepressants: results of different analyses. Hum Psychopharmacol Clin Exp 2002;17(Suppl.1): S27-S32.
20. van den Houvel MW, Kleijn HJ, Peeters PAM. Bioequivalence trial of orally disintegrating mirtazapine tablets and conventional oral mirtazapine tablets in healthy volunteers. Clin Pharmacokinet 2001;21:437-42.
21. Roose SP, Holland PJ, Hassman HA et al. Multi-site, open-label, observational study of the effectiveness and safety of Remeron SolTab (mirtazapine orally disintegrating tablets) in depressed patients who are at least 50 years of age. Data on file, N.V. Organon.
22. Kennedy S, Vester-Blokland ED and the RAPID study group. Mirtazapine (Remeron SolTab) vs. sertraline: a prospective onset-of-action trial. Data on file, N.V. Organon.
23. Zhang W, Perry KW, Wong DT et al. Synergistic effects of olanzapine and other antipsychotic agents in combination with fluoxetine on norepinephrine and dopamine release in rat prefrontal cortex. Neuropsychopharmacology 2000;23:250-62.
24. Shelton RC, Tollefson GD, Tohen M et al. A novel augmentation strategy for treating resistant major depression. Am J Psychiatry 2001;158:131-4.
25. Stout S, Owens M, Nemeroff C. Neurokinin (1) receptor antagonists as potential antidepressants. Annu Rev Pharmacol Toxicol 2001;41:877-906.
26. Maubach K, Martin K, Chicchi G et al. Chronic substance P (NK1) receptor antagonist and conventional antidepressant treatment increases burst firing of monoamine neurones in the locus coeruleus. Neuroscience 2002;109:609-17.
27. Froger N, Gardier A, Moratalla R et al. 5-hydroxytryptamine (5-HT) 1a autoreceptor adaptive changes in substance P (neurokinin 1) receptor knock-out mice mimic antidepressant-induced desensitization. J Neurosci 2001;21:8188-97.
28. Kramer M, Cutler N, Feighner J et al. Distinct mechanism for antidepressant activity by blockade of central substance P receptors. Science 1998;281:1640-5.
29. Argyropoulos S, Nutt D. Substance P antagonists: novel agents in the treatment of depression. Exp Opin Invest Drugs 2000;9:1871-5.
30. Chalmers D, Lovenberg T, Grigoriadis D et al. Corticotropin-releasing factor receptors: from molecular biology to drug design. Trends Pharmacol Sci 1996;17:166-72.
31. Zobel A, Nickel T, Kunzel H et al. Effects of the high-affinity corticotropin-releasing hormone receptor 1 antagonist R121919 in major depression: the first 20 patients treated. J Psychiatr Res 2000;34:171-81.
32. Nemeroff C. New directions in the development of antidepressants: the interface of neurobiology and psychiatry. Hum Psychopharmacol Clin Exp 2002;17:S13-S16.
33. Nelson J, Davis J. DST studies in psychotic depression: a meta-analysis. Am J Psychiatry 1997;154:1497-503.
34. McQuade R, Young AH. Future therapeutic targets in mood disorders: the glucocorticoid receptor. Br J Psychiatry 2000;177:390-5.
35. Belanoff JK, Flores BH, Kalezhan M et al. Rapid reversal of psychotic depression using mifepristone. J Clin Psychopharmacol 2001;21:516-21.
36. Griebel G. Anxiolytic- and antidepressant-like effects of the non-peptide vasopressin V1b receptor antagonist, SSR149415, suggest an innovative approach for the treatment of stress-related disorders. Proc Natl Acad Sci USA 2002;99:6370-5.
37. Dahl K, Avery DH, Lewy AJ et al. Dim light melatonin onset and circadian temperature during a constant routine in hypersomnic winter depression. Acta Psychiatr Scand 1993;88:60-6.
38. Redman JR, Guardiola-Lemaitre B, Brown M et al. Dose-dependent effects of S-20098, a melatonin agonist on direction of reentrainment of rat circadian rhythms. Psychopharmacology 1995; 118:385-90.
39. Ying SW, Rusak B, Delagrange P et al. Melatonin analogues as agonists and antagonists in the circadian system and other brain areas. Eur J Pharmacol 1996;296:33-42.
40. George MS, Sackheim HA, Rush AJ et al. Vagus nerve stimulation: a new tool for brain research and therapy. Biol Psychiatry 2000;47:273-5.
41. Sackheim HA, Rush AJ, George MS et al. Vagus nerve stimulation (VNS) for treatment-resistant depression: efficacy, side effects and predictors of outcome. Neuropsychopharmacology 2001;25:713-28.
42. Marangell LB, Rush AJ, George MS et al. Vagus nerve stimulation for major depressive episodes: one year outcomes. Biol Psychiatry 2002;51:280-7.
43. Sackheim HA, Keilp JG, Rush AJ et al. The effects of vagus nerve stimulation on cognitive performance in patients with treatment-resistant depression. Neuropsychiatr Neuropsychol Behav Neurol 2001;14:53-62.

44. George MS, Nahas Z, Molloy M et al. A controlled trial of daily prefrontal cortex TMS for treating depression. Biol Psychiatry 2000;48:959-61.
45. Berman RM, Narasimhan M, Sanacora G et al. A randomized clinical trial of repetitive transcranial magnetic stimulation in the treatment of major depression. Biol Psychiatry 2000;47:332-7.
46. Janicak PG, Dowd SM, Martis B et al. Repetitive transcranial magnetic stimulation versus electroconvulsive therapy for major depression: preliminary results of a randomized trial. Biol Psychiatry 2002;51:659-67.
47. Martin J, Barbanoj MJ, Sclaepfer TE et al. Transcranial magnetic stimulation for treating depression. Cochrane Database Syst Rev 2002; 2: CD003493.
48. McNamara B, Ray JL, Arthurs OJ et al. Transcranial magnetic stimulation for depression and other psychiatric disorders. Psychol Med 2001;31:1141-6.
49. Keck ME, Welt T, Post A et al. Neuroendocrine and behavioural effects of repetitive transcranial magnetic stimulation in a psychopathological animal model are suggestive of antidepressant-like effects. Neuropsychopharmacology 2001;24:337-49.
50. Taillon-Miller P, Gu Z, Li Q et al. Overlapping genomic sequences: a treasure-trove of single-nucleotide polymorphisms. Genome Res 1998;8:748-54.
51. Roses A. Pharmacogenetics and the practice of medicine. Nature 2000;405:857-65.
52. Roses A. Genome-based pharmacogenetics and the pharmaceutical industry. Nature Drug Discov 2002;1:541-9.
53. Holsboer F. Antidepressant drug discovery in the postgenomic era. World J Biol Psychiatry 2001;2:165-77.
54. Hirschfeld R, Montgomery S, Keller M et al. Social functioning in depression: a review. J Clin Psychiatry 2000;61:268-75.
55. Van Eerdewegh P, Little RD, Dupuis J et al. Association of the ADAM33 gene with asthma and bronchial hyperresponsiveness. Nature 2002;418:426-30.

The future of psychotherapies for mood disorders

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As developers of a psychotherapy for depression, we bring a point of view to the topic of the future of antidepressant psychotherapies. Let us state this view up front and emphasize it reflects that most of our experience has been in the United States. Our guiding principles are:

- Psychotherapies, like any treatments, should be evidenced based. Evidence is best derived from randomized controlled clinical trials like those used in testing medications.
- The effects of psychotherapies need assessment using a broad range of outcome variables, including symptoms, social functioning, costs, etc., since psychotherapy may have targets and consequences that differ from psychotropic medications.
- Psychotherapies need to be specified in manuals that describe procedures and their sequences with case illustrations. These manuals form the basis for training therapists and allow standardization of treatment.
- Effectiveness studies, which have broad diagnostic entry criteria and test treatments in real practice outside research settings, are useful, but few actually exist for psychotherapies. Although the virtues of these studies have been detailed, problems in their conduct and interpretation have not.
- Once the efficacy of a psychotherapy has been established, research on the active ingredients in the treatment process and factors mediating outcome deserve exploration.

Any discussion of the future is a wish list based on problems and gaps in past and present research. As a context for forecasting the future, we must first describe where we now stand in the psychotherapy of mood disorders. We shall describe trends in psychotherapy use over the past decade; the status of evidence-based psychotherapy (EBP); the expansion of psychotherapy to developing countries; the gap between research and training in EBPs; the need for more psychotherapy development and testing and for new methods of delivery; and finally, what we see as the future.

TRENDS IN THE UNITED STATES

Olfson et al (1) recently reported trends in American psychotherapy, comparing 1987 and 1997 surveys of medical expenditure, based on nationally representative adult samples. We could find no comparable international data and realize these findings reflect the unique and imperfect American health care system.

Between 1987 and 1997, total psychotherapy use in the US showed no statistically significant change. Slightly over 3% of adults reported receiving psychotherapy in each year. Older (55 to 64 years old), unemployed, and poor adults reported significant increases in psychotherapy use. Over the decade, psychotherapy visits for the primary diagnosis of mood disorders became more common (39.1% in 1997 vs. 19.5% in 1987). Psychotherapy patients reported markedly greater use of antidepressant medications (48.6% vs. 14.4%), mood stabilizers (14.5% vs. 5.3%), stimulants (6.4% vs. 1.9%), and psychotherapy provided by physicians (64.7% vs. 48.1%; data did not distinguish psychiatrists from other physicians). Psychotherapy by social workers doubled (12.5% vs. 6.8%), whereas psychologists remained stable (35.2% vs. 31.8%). Duration of treatment decreased: fewer patients attended more than 20 psychotherapy visits in 1997 (10.3%) than 1987 (15.7%). In both years a third of psychotherapy patients made only one or two visits (33.5% to 35.3%).

We conclude that American psychotherapy practice has changed substantially, with increased use by socioeconomically disadvantaged and older people; a rise in psychotherapy for mood disorders and in combination with psychotropic medications; declines in psychotherapy for non-specific conditions and in long-term psychotherapy; greater involvement of physicians (not necessarily psychiatrists), and increased treatment by social workers. These data say nothing about type of psychotherapy. Most was probably not EBP, since defining clinical EBP trials have been relatively recent. Incorporation of EBPs into training programs has been nearly non-existent. The reported trends will likely continue, suggesting the need for training a range of mental health professionals in time-limited, cost-efficient, efficacy-proven psychotherapies for mood disorders.

OVERVIEW OF EVIDENCE-BASED PSYCHOTHERAPY FOR MOOD DISORDERS

Comprehensive reviews have identified EBPs: psychotherapies defined by manuals, having specific criteria for training and competence evaluations, and supporting data from controlled clinical trials (2-4). Recent reviews have addressed mood disorders for adults (5,6) and for children and adolescents (7,8). Chambless and Ollendick (9) extensively reviewed EBPs of several disorders, integrating the efforts of eight workgroups from the US, UK, and Canada. Although criteria used to define EBPs differed among workgroups, at least one rigorous, randomized clinical trial was required to define empirically supported treatments.

Major depression

Both interpersonal psychotherapy (IPT) (4) and cognitive behavioral therapy (CBT) (10,11) have demonstrated efficacy in reducing symptoms comparable to psychotropic medication as acute treatments of major depressive disorder (MDD) in adult outpatients (12). Psychotherapies have a slower onset of action, however. An amalgam of CBT and IPT (cognitive behavioral analysis system of psychotherapy [CBASP]) (13) has been shown to reduce symptoms of chronic depression; combining CBASP with medication increased the response rate from 48% to 73% (14).

Major depression has a high relapse rate. When administered at the low dosage of once monthly following an acute phase of weekly treatment, both IPT and CBT decrease rates of relapse and recurrence (15). Even without continuation therapy, acute CBT may have an enduring protective effect (6). Combining antidepressant medication with IPT or CBT modestly increases efficacy over either treatment alone. Psychotherapies have also shown efficacy for depression secondary to other problems. For example, IPT reduced depressive symptoms of depressed patients with human immunodeficiency virus (HIV) infection relative to CBT and a supportive psychotherapy control (16), and both IPT and CBT reduced depression in patients with marital dysfunction (17,18).

Promising adaptations of EBPs are underway. Markowitz (19) tested an adaptation of IPT for patients with dysthymic disorder. CBT has been adapted for patients with treatment refractory depression. Several other variants of CBT, reviewed by Hollon et al (5), are being tested, including behavioral activation and mindfulness-based cognitive therapy (MBCT). An important clinical trial is comparing supportive/expressive psychodynamic psychotherapy to medication and placebo for major depression.

Depression in children and adolescents

Although fewer trials exist for adolescent depression, controlled trials also support the use of IPT and CBT (20-23). Mufson and Velting (7) found thirteen randomized controlled clinical trials of CBT with depressed youth. None treated clinically referred prepubertal depressed children. Studies of prepubertal children have been conducted in schools and treated children with depressive symptoms, not mood disorders. This likely reflects the low rate of full blown MDD prior to adolescence.

Bipolar disorder

The efficacy of acute and maintenance pharmacotherapy for patients with bipolar disorder has been established in clinical trials. Yet many patients have residual symptoms, relapses, and associated social and interpersonal problems during or following illness episodes. There is renewed interest in psychotherapy to help manage medicated bipolar patients. Family focused therapy (FFT), CBT and IPT have been modified to address the problems of bipolar patients. These treatments focus on medication adherence; patient and family education about the illness and signs of relapse; monitoring of early signs of relapse; and social and interpersonal consequences of the illness. CBT has been modified to focus on recognizing and treating early depressive or manic symptoms (24), addressing mediating mechanisms such as distorted cognitions and disrupted circadian rhythm. IPT has been modified by Frank et al (25) to include adding a behavioral focus to stabilize patients' social rhythms, particularly to ensure regular sleeping hours (interpersonal social rhythms therapy, IPSRT). FFT (26) aims to reduce family criticism and expressed emotion that may trigger or prolong symptoms, and to enhance frequency of positive family or marital interaction. Clinical trials are now underway.

The National Institute of Mental Health (NIMH) has awarded two large contracts for nationwide, loosely randomized clinical effectiveness trials of treatment algorithms for both treatment-resistant depression (STAR-D) and bipolar disorder (STEP-BD). Treatment choices in these trials include EBPs as well as pharmacotherapy.

POOR AND DEVELOPING COUNTRIES

Psychotherapy began as an expensive treatment for the well-to-do. Its cost and length have gradually decreased, making it more democratically available, as the recent US survey shows (1). Outcome studies in the US, which frequently involve poorer patients, have shown psychotherapeutic efficacy in a variety of ethnic and social groups (7,21).

Interest in psychotherapy to treat depression in developing countries is a recent trend. One exciting development is a clinical trial in Uganda, which was based on high local rates of both HIV infection and MDD and the observations that depression worsens attention to health and risky behavior (27). Pharmacotherapy was an unrealistic alternative because of physician shortage and cost. IPT was selected because its focus on relationships appeared culturally compatible. The IPT manual was simplified and modified as a group treatment led by non-clinician, college educated therapists with two weeks of training (28). A clinical trial, randomizing by village and comparing group IPT to treatment as usual in 114 depressed men and women, showed positive results for group IPT in reducing depressive symptoms (29).

The Ugandan trial demonstrated the feasibility of conducting clinical trials in developing countries. Depression was definable and assessable in a different culture (27), as previous World Health Organization studies had shown. IPT proved transplantable to a very different culture from its origins, highlighting the universality of human experience with depression. The death of a loved one, disputes and disrupted attachment with family, and serious life changes are associated with depression everywhere. If social context and content differ - e.g., role disputes may concern a husband's taking a second wife in Uganda versus a mistress in the US - the emotional experience and symptoms are similar. Researchers adapting psychotherapy manuals to bring EBPs to other cultures must be sensitive to cultural differences but should not view such differences as insuperable obstacles.

FILLING THE GAP BETWEEN RESEARCH AND TRAINING

The availability of EBPs, indications for their use in official practice guidelines, and clinical interest in their use are all increasing. Unfortunately, the three mental health specialties - psychiatrists, psychologists and social workers - who provide most psychotherapy in the US receive little training in EBPs in their professional training programs. Nor is continuing education (CE) mandated for practicing professionals. Although psychotherapy workshops are held at professional meetings, their quality and content are not monitored, and there are no procedures for credentialing participants or for follow-up. Let us review the current status of training in EBPs in the US.

Psychiatrists

New accreditation criteria for US psychiatry residency programs set forth by the Accreditation Council for Graduate Medical Education (2000) do not stress training in EBPs but have emphasized again psychotherapy and exceed rival professions in requiring 'competency' in CBT. Residency programs are moving toward defining and standardizing general 'competency' criteria rather than emphasizing training in specific psychotherapies.

Psychologists

The American Psychological Association Committee on Accreditation Guidelines (1996) states that training should reflect 'the science of psychology' but allow each program to define its own 'philosophy of training'. The guidelines do not prioritize training in manualized EBPs, which are mentioned only parenthetically. Although psychologist researchers initiated much of the development and testing of EBPs, a survey of clinical psychology doctoral and internship programs revealed little training in them. In internship programs, where clinical psychologists receive the bulk of supervised clinical experience, only 59% of programs provided CBT supervision for depression; a mere 8% provided IPT supervision. University doctoral programs were somewhat better. Availability of supervision, however, does not require students to receive it.

Social workers

The Educational Policy of the Council on Social Work Education (1999) does not prescribe curricula for psychotherapy or counseling (30). No training guidelines exist for EBPs. Since most clinical training occurs through fieldwork, it is unlikely that students receive training in EBPs. We found no data on actual training or use of guidelines in social work graduate programs.

Continuing education

No formal process exists to disseminate EBPs to established practitioners (31). Clinicians trained ten years ago are unlikely to know the newer psychotherapies. CE programs could potentially fill this void. Workshops are given on EBPs at annual national and international meetings of psychiatrists and psychologists. CE workshops outside professional organizations are offered in increasing numbers in Canada, the UK, the Netherlands, and New Zealand. However, none of the mental health professions require updated training. There is no way to ensure the transfer of EBPs to established practitioners, to set standards or monitor quality. Already overworked by changes in healthcare delivery, experienced clinicians may resent additional requirements, time burdens, or possible practice restrictions. The gap in transfer of EBPs from research to clinical practitioners could compromise the viability of these psychotherapies. The increasing US penetration of managed care, and the proliferation of clinical practice guidelines in several countries, have raised the stakes for accountability. Failure to train clinicians in EBPs and thus make them available to the general public might reduce support for EBPs despite their efficacy data.

In response to this professional credentialing program, psychotherapy organizations are arising. Following the model of psychoanalysis, groups such as the Academy of Cognitive Therapy (http://www.academyofct.org/) and the International Society of Interpersonal Psychotherapy (http://www.interpersonalpsychotherapy.org/index.html) are attempting to impose some cohesion and treatment standards for EBPs.

THE NEED FOR MORE PSYCHOTHERAPY DEVELOPMENT AND TESTING

Two psychotherapies now dominate the evidence-based categories for mood disorders. This is insufficient in comparison to the numerous antidepressant medications available with differing chemical profiles and effects. More efficacy, effectiveness, and dose-finding trials are needed for both CBT and IPT as well as for older, widely used but little tested treatments, and for new ones yet to be developed. The high rate of first onset of MDD in adolescents demands more trials in this age group. Rates of MDD are low in prepubertal children, but depressive symptoms and specific phobias are not, especially in children with depressed parents and grandparents. We need psychotherapies adapted, developed and tested for children at high risk for depression. We need a better understanding of the active components of efficacious therapies to tailor them to particular patients. For example, MBCT combines strategies from dialectical behavioral therapy for borderline personality disorder and CBT (32). The trend has been to combine components of different therapies. Further work on dismantling to understand the active components of EBPs may focus treatment for specific subtypes of mood disorders. Dose finding of the optimal length and intensity of EBPs is also important.

METHODS OF DELIVERY

We need flexible methods to deliver treatment for women with children, a high risk group for depression. Lacking resources of child care, family support, and transportation, many women have difficulty attending weekly psychotherapy. So do women during and following pregnancy (33). To ease their burden, we have experimented with psychotherapy by telephone, following an initial in-person diagnostic assessment (34). This method has also been used for depressed patients immobilized by cancer.

The weekly 40-50 minute psychotherapy 'hour' may become less normative. Flexibility in length, frequency, and duration of sessions may more realistically match the course of mood disorders, which are chronic and/or relapsing, often with long periods of remission. The efficacy of monthly maintenance IPT for patients with serious recurrent depression offers a model for long-term management of mood disorders (35,36), although the optimal dosage of such maintenance treatment remains unclear. There has also been renewed interest in group psychotherapy (37). This format may not only be economical but preferred by some patients.

THE FUTURE OF PSYCHOTHERAPY FOR MOOD DISORDERS

The future of psychotherapy for mood disorders is robust, but treatment forms and populations will evolve. Psychotherapy will remain a strong component of the clinical treatment armamentarium for several reasons. The population at highest risk for MDD are women of child-bearing age. Alternatives to medication during pregnancy and lactation are important, and many depressed women demand them. Onset of depression often occurs in adolescence, when risky behavior and suicide attempts are high, and when mood episodes can be devastating to personal and occupational choices. Psychotherapy, alone or with medication, can help guide adolescents through the acute episode and beyond. Suicide remains a serious complication of bipolar disorder, and medication adherence is an important component of prevention both of suicide and symptom relapse. Psychotherapies currently developed for bipolar disorder strongly emphasize psychoeducation and monitoring symptoms and social functioning. Preliminary evidence suggests that these are helpful to the patient and/or family in monitoring risk for relapse in medicated bipolar patients. Several psychotherapies developed for medicated bipolar patients are being tested. The future will see more testing of psychotherapy for depressed adolescents and, hopefully, prepubertal children with mood disorders, particularly those at high risk. More information is needed on the effect of maintenance treatment and the addition of medication for depressed youth.

We hope that the increasing democratization of psychotherapy, in the US and elsewhere, is a trend that will continue. This would likely mean a shift in psychotherapy to less expensive, less well trained therapists, however, making the balancing of cost and quality of treatment delivery a dilemma. Finally, without a radical change of training of mental health professionals in EBPs, a gap between research and practice will remain.

References

1. Olfson M, Marcus SC, Druss B et al. National trends in the use of outpatient psychotherapy. Am J Psychiatry 2002;159:1412-9.
2. Chambless DL, Baker MJ, Baucom D et al. Update on empirically validated therapies: II. Clin Psychol 1998;51:3-16.
3. Nathan PE, Gorman JM (eds). A guide to treatments that work. New York: Oxford University Press, 1998.
4. Weissman MM, Markowitz JC, Klerman GL. Comprehensive guide to interpersonal therapy. New York: Basic Books, 2000.
5. Hollon SD, Muñoz RF, Barlow DH et al. Psychosocial intervention development for the prevention and treatment of depression: promoting innovation and increasing access. Biol Psychiatry 2002;52:610-30.
6. Hollon SD, Thase ME, Markowitz JC. Treatment and prevention of depression. Psychological Science in the Public Interest 2002;3:39-77.
7. Mufson L, Velting DM. Psychotherapy for depression and suicidal behavior in children and adolescents. In: Riba M, Oldham J (eds). 21st annual review of psychiatry: the many faces of depression in childhood and adolescence. Washington: American Psychiatric Association, 2002:37-73.
8. Costello EJ, Pine DS, Hammen C et al. Development and natural history of mood disorders. Biol Psychiatry 2002;52:529-42.
9. Chambless DL, Ollendick TH. Empirically supported psychological interventions: controversies and evidence. Ann Rev Psychol 2001;52:685-716.

10. Glaoguen V, Cottraux J, Cucherat M. A meta-analysis of the effects of cognitive therapy in depressed patients. J Affect Disord 1998;49:59-72.
11. Elkin I, Shea MT, Watkins JT et al. National Institute of Mental Health treatment of depression collaborative research program. Arch Gen Psychiatry 1989;46:971-82.
12. Depression Guideline Panel. Depression in Primary Care: Volume 2. Treatment of Major Depression. Washington: US Government Printing Office, 1993.
13. McCullough JP. Treatment for chronic depression: cognitive behavioral analysis system of psychotherapy. New York: Guilford, 2000.
14. Keller MB, McCullough JP, Klein DN et al. A comparison of nefazodone, the cognitive behavioral-analysis system of psychotherapy, and their combination in the treatment of chronic depression. N Engl J Med 2000;20:342.
15. Frank E, Kupfer DJ, Perel JM et al. Three-year outcomes for maintenance therapies in recurrent depression. Arch Gen Psychiatry 1990;47:1093-9.
16. Markowitz JC. Interpersonal psychotherapy for dysthymic disorder. Washington: American Psychiatric Press, 1998.
17. O'Leary KD, Beach S. Marital therapy: a viable treatment for depression and marital discord. Am J Psychiatry 1990;147:183-6.
18. Foley SH, Rounsaville BJ, Weissman MM et al. Individual versus conjoint interpersonal therapy for depressed patients with marital disputes. Int J Fam Psychiatry 1989;10:29-42.
19. Markowitz JC, Kocsis JH, Fishman B et al. Treatment of HIV-positive patients with depressive symptoms. Arch Gen Psychiatry 1998;55:452-7.
20. Brent DA, Holder D, Kolko D et al. A clinical psychotherapy trial for adolescent depression comparing cognitive, family, and supportive treatments. Arch Gen Psychiatry 1997;54:877-85.
21. Rosello J, Bernal G. Adopting cognitive behavioral and interpersonal treatment for depressed Puerto Rican adolescents. In: Hebbs EP, Jensen PS (eds). Psychosocial treatment for child and adolescent disorders. Washington: American Psychiatric Association Press, 1996:233-40.
22. Mufson L, Moreau D, Weissman MM et al. Modifications of interpersonal psychotherapy with depressed adolescents: phase I and II studies. J Am Acad Child Adolesc Psychiatry 1994;33:695-705.
23. Mufson L, Weissman MM, Moreau D. The efficacy of interpersonal psychotherapy for depressed adolescents. Arch Gen Psychiatry 1999;56:573-9.
24. Basco MR, Rush AJ. Compliance with pharmacotherapy in mood disorders. Psychiatr Ann 1996;25:269-79.
25. Frank E, Kupfer DJ, Ehlers CL. Interpersonal and social rhythm therapy for bipolar disorder: integrating interpersonal and behavior approaches. Behav Ther 1994;17:143-9.
26. Craighead WE, Miklowitz DJ. Psychosocial interventions for bipolar disorder. J Clin Psychiatry 2000;61(Suppl. 13):58-64.
27. Wilk CM, Bolton P. Local perceptions of the mental health effects of the Uganda acquired immunodeficiency syndrome epidemic. J Nerv Ment Dis 2002;190:394-7.
28. Clougherty K, Verdeli H, Weissman MM. Interpersonal psychotherapy adapted for a group in Uganda (IPT-G-U). Unpublished manual. New York, 2002.
29. Verdeli H, Clougherty K, Bolton P et al. Adapting group interpersonal psychotherapy for a developing country: experience in rural Uganda. World Psychiatry (in press).
30. Mullen EJ, Bacon WF. Practitioner adoption and implementation of evidence-based effective treatments and issues of quality control. In: Rosen A, Proctor EK (eds). Developing practice guidelines for social work interventions: issues, methods, and a research agenda. New York: Columbia University (in press).
31. Calhoun KS, Moras K, Pilkonis PA et al. Empirically supported treatments: implications for training. J Consult Clin Psychol 1998; 66:151-62.
32. Teasdale JD, Moore RG, Hayhurst H et al. Metacognitive awareness and prevention of relapse in depression: empirical evidence. J Consult Clin Psychol 2002;70:275-87.
33. Neugebauer R, Baxi L, Markowitz J et al. Randomized controlled trial of time-limited, telephone administered bereavement counseling following miscarriage. Presented at the First International Conference on Women's Mental Health, Berlin, March 2001.
34. Miller L, Weissman MM. Interpersonal psychotherapy delivered over the telephone for depression: a pilot study. Depress Anxiety 2002;16:114-7.
35. Frank E, Kupfer DJ, Perel JM et al. Three-year outcomes for maintenance therapies in recurrent depression. Arch Gen Psychiatry 1990;47:1093-9.
36. Reynolds CF III, Frank E, Perel JM et al. Nortriptyline and interpersonal psychotherapy as maintenance therapies for recurrent major depression: a randomized controlled trial in patients older than 59 years. JAMA 1999;281:39-45.
37. Wilfley DE, Mackenzie KR, Welch R et al (eds). Interpersonal psychotherapy for group. New York: Basic Books, 2000.

Supporting governments to adopt mental health policies

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It is important to support governments to adopt mental health policies and to integrate mental health policy into public health policy and general social policy (1), because mental disorder causes a heavy burden for societies (2), impedes the development of other health and development targets, contributes to poverty and differentially affects the poor (3,4) and, last but not least, because mental health itself is of intrinsic value as is physical health.

In developing mental health policy, it is important to include consideration of stigma about mental health issues and mental illness. In a previous issue of this journal, the impact of stigma on people with mental illness was discussed (5). Stigma results in a lack of attention from ministers and the public, which then results in a lack of resource and morale, decaying institutions, lack of leadership, inadequate information systems, and inadequate legislation. By resulting in social exclusion of people with mental illness, stigma is detrimental not just to people with mental illness, but also to the health of society as a whole. All too often our services are departure points for exclusion when they should be stepping stones for social inclusion.

In 2001, the World Health Organization (WHO) devoted both its annual health day and its annual health report to mental health, which called on countries to develop mental health policies (6-8). In the same year, the Institute of Medicine in Washington launched a scientific report on neurological, psychiatric and developmental disorders in low income countries, which called for immediate strategic action to reduce the burden of brain disorders (3). The European Commission plays an important role both in Europe and elsewhere and has recently produced a public health framework for mental health (9). At national level, various governments, national non-governmental organizations (NGOs), professional bodies and the media have played important roles in prioritising mental health in their countries (10-12).

THE NEED FOR LOCALLY TAILORED SOLUTIONS

Epidemiology is fundamental to the overall goals of mental health policy (13). Mental health policy will need to take account of contextual factors, the epidemiology (range, severity, frequency and duration) of disorders, their accompanying social disability, their mortality and relationship to sociodemographic variables, including geographic variation. A few countries are embarking on a specific rolling programme of detailed national mental health surveys (14) and the WHO is coordinating a world mental health survey programme in a variety of participating countries.

Cultural and religious issues are very important. They influence the value placed by society on mental health, the presentation of symptoms, illness behaviour, access to services, pathways through care, the way individuals and families manage illness, the way the community responds to illness, the degree of acceptance and support experienced on the one hand, and the degree of stigma and discrimination on the other hand experienced by the person with mental illness. Thus, each country is very different, with different context, culture, resources and type of existing service structures, and each will require its own mental health strategy, containing locally tailored solutions for addressing both the general and specific challenges and issues (15-17).

THE POLICY PROCESS

Health policy at national level will identify the range of health, morbidity, disability and mortality issues it intends to tackle, the relevant settings covered by the policy, the overall framework for implementing policy in the relevant settings, including, for example, health services, social services, the education sector, the workplace and the criminal justice sector. The policy may set out desired goals and will set a framework for planning at local level.

In order to get mental health into national policy, it is important firstly to identify and engage key agencies and stakeholders in the overall process so that there is shared ownership of the vision and its implementation; secondly to obtain a good understanding of the current situation (the context, needs, demands, current policy, service inputs, processes and outcomes); thirdly to develop an overall mission statement, set goals and targets to aim for; fourthly to identify and engage key agencies, and develop strategic plans and implementation frameworks with those agencies which take the local situation into account, and which specifically tackle local issues, constraints and disincentives; fifthly to regularly review progress using a variety of outcome measures, and to fine tune the strategy accordingly (15).

The views of service users and carers will be particularly important, as they will be directly affected by the strategy and will have personal experience of the problems in the current system. They will also be able to comment on those aspects of the current mental health system that are working well.

SOME COMMON POLICY AIMS

Some common aims for mental health policy include the promotion of mental health, reduction of incidence and prevalence of mental disorder (prevention and treatment), reduction of the extent and severity of associated disability (rehabilitation), development of services for people with mental illness and reduction of stigma, the promotion of human rights and dignity of people with mental illness, the promotion of psychological aspects of general health care, and reduction of mortality associated with mental illness, both from suicide (18-20) and from premature physical mortality (21).

SOME COMMON POLICY COMPONENTS

Some of the components within mental health policy, which need to be addressed, include the following. Firstly, *the national components* include the construction of a national strategy to promote mental health, reduce morbidity and reduce mortality; the establishment of policy links with other government departments, including home affairs, criminal justice, education, housing, finance, etc.; the enaction of specific mental health legislation (to set the overall philosophy of approach to the care of people with mental disorders together with precise provision for assessment and treatment without consent under certain defined conditions, in the interests of the individual and the public and with regard to safeguarding human rights); financing (to remove perverse incentives, to ensure sustainable local financing, and develop funding streams for disseminating good practice models); implementation plans and overall system of accountability and governance. Secondly, *the supportive infrastructure components* include a human resources strategy, a consumer involvement strategy, a research and development strategy, and a mental health information strategy (which should include context, needs, inputs, processes and outcomes). Thirdly, *the service components* include primary care, specialist care, the links between the two, good practice guidelines, liaison with NGOs, police, prisons, social sector, dialogue with traditional healers, mental health promotion in schools, workplaces and the community.

IMPORTANT POLICY PARTNERSHIPS WITHIN THE HEALTH ARENA

The mental health policy needs to be linked in with *generic health policy*. It is particularly important that any general public health strategy addresses mental as well as physical health, so that national mortality indicators include death from suicide - with attention to enhancing the accuracy of recording of suicides (22); so that national morbidity indicators plan to include relevant measures of morbidity due to mental illness; and so that any health impact assessments (23) explicitly include mental health. Some of the generic health policy issues that will impact on mental health include primary care funding, training and incentive arrangements, and government generic health targets.

It can be helpful to ensure mental health is included in *generic health reforms* that are occurring, such as development of health information systems, hospital optimisation programmes, quality standards, basic training standards, accreditation procedures.

Governments need to ensure that all *relevant agencies* are aware of the importance of mental health for the population; that they are aware of the influence that their activities can have on mental health; and that appropriate co-ordination between relevant agencies takes place. This coordination is often in place for action on alcohol and drugs, and for AIDS programmes, but is as yet rarely in place for mental health programmes, despite mental illness forming the greatest burden across the population.

There is a need for a partnership rather than a competition for resources between those working on non-communicable diseases and infectious diseases. For example, mental health promotion is essential in schools if we are to reduce the risk of AIDS from unprotected sex and drugs, support girls to be assertive and confident in ensuring their sexual health and safety, if we are to address lack of acceptance of condoms in the male culture, and if we are to encourage abstention from drugs and concomitant harm reduction, treating maternal depression, improving compliance with vaccination, nutrition, oral rehydration and hygiene regimes to reduce infection diseases in children.

PRIMARY CARE - A KEY SERVICE COMPONENT FOR POLICY CONSIDERATION

Out of the several issues identified above, primary care is selected here for more detailed consideration because it is a particularly important service issue (24). Logistical consideration is required of the availability of primary care services, and of the specialist services relative to the population epidemiology of disorders. Specialist capacity is important. The precise framework for primary-secondary care integration depends on a country's specialist capacity. In low income countries there is often only one psychiatrist per million population, and in a few countries there is just one psychiatrist per 5 or 6 million. By comparison, in the UK there is one adult psychiatrist per 50,000, and in much of the former Soviet Union there is one psychiatrist per 10-20,000.

Taking severe disorders first, including the psychoses, in richer countries, people with severe mental illness may be cared for by specialist services, with some collaboration with primary care for long-term support. In poorer countries, on the other hand, there may often only be capacity for a small number of people with psychosis to be cared for in specialist care, and most will need to be assessed, diagnosed and treated in primary care, with support from specialist services where available. Thus in poor countries, where there is often much less than one psychiatrist per million population, most people with psychosis will need to be cared for much of the time in primary care.

Considering the common mental disorders second, we know from epidemiological studies that there is a high prevalence of mental disorders in the general population and in primary care (3). Contrary to popular view, the common disorders seen in the general population and in primary care are not only frequent, but may also be severe, disabling and of high duration (25-30). This high prevalence in all countries of the world means that not even rich countries can afford sufficient specialists to look after everyone with a mental disorder.

Because of their high socio-economic costs, it is not tenable to argue that the burden of common mental disorders should be ignored. These costs arise from the repeated primary care consultations if they remain untreated, sickness absence, labour turnover, reduced productivity, impact on families and children, and the difficult to quantify but nonetheless important concept of the emotional well-being of a country and nation. Primary care, therefore, needs to play a central role in overall mental health care in rich countries as well as in poor countries.

Besides these logistical reasons why primary care is crucial, it also has particular advantages in that it allows attention to physical health care needs and accompanying social needs, it allows continuity of care, it is often preferred by consumers, it is often more accessible than specialist care, and studies have shown that it is able to achieve good clinical and social outcomes.

The importance of primary care for mental health has a number of implications for the training of the primary care team. In developing policy on training, it is helpful to understand the current situation in relation to the basic training for each tier of primary care and for each of the professional cadres. How much mental health, if any, is included? For example, in Iran and Pakistan, the village health workers receive a few months training in selected priority topics so that they can screen, assess, diagnose and treat (31,32). In Zanzibar, there is a four-year basic training for all nurses and the fourth year is devoted to mental health. Since primary care in Zanzibar, as in a number of other countries, is largely run by nurses, this results in the systematic availability of mental health expertise in primary care.

What continuing training is available in primary care? It is important that mental health policy pays appropriate attention to the continuing professional development of primary care nurses (33,34). In Zanzibar, the education coordinators organise and deliver continuing training for all staff in primary health care units, which is regular (on several weekends a year), is accompanied by transport allowances and incentive payments, and affords an opportunity for mental health to be included in the programme. In low-income countries, it is important to give mental health education to midwives and traditional birth attendants who have the opportunity to detect and refer postnatal psychosis and severe depression. The physical, cognitive and emotional development of children is influenced by parental mental health, and so ensuring prompt treatment of maternal depression is one of the most important preventive activities we can do.

In low-income countries where there are few medical practitioners in primary or even in secondary care, nurses are likely to be given responsibility for prescribing and managing medicines, and it is important that their basic training and continuing education programme support them in this role.

What quality monitoring exists in primary care? In Iran, health psychologists perform a quality monitoring role for the village health workers, and visit every month to support, supervise and check on the quality of the work. Who is in the front line? Are the primary care doctor and nurse in the front line for initial assessment or are there other tiers? For example, health workers with a few months training in Iran are responsible for 2000 population, and primary care doctors are in the second tier responsible for 10,000 population. In Tanzania, first aid workers are responsible for 50 people, dispensaries for 2000 and primary health care units (nurses and medical assistants) for 10,000 or more.

Systems for information collection in primary care are needed for adequate planning. This can be effective without involving expensive technology. For example, in Iran, health workers routinely collect and display annual data on prevalence and outcome of priority disorders: infectious diseases, epilepsy, schizophrenia, depression and anxiety.

Policy should address how proactive primary care should be. Should it mostly concentrate on active consulters or should it take a more population perspective and seek to find and treat common disabling conditions?

Primary care capacity for outreach is important. Transport is necessary for outreach from secondary care to primary care, and from primary care to the community. It may need to be subsidised, be appropriate to the terrain and preferably not shared with other specialties with different working patterns.

Integration of mental health into primary care is enhanced by training, by strengthening basic training, and by continuing education in assessment, diagnosis, management and criteria for referral (criteria for referral of course need to be locally agreed in the light of specialist capacity); and by use of guidelines such as the WHO primary care guidelines (35,36).

It is important to train specialists for the job they will need to do (i.e., not just individual patient care but also delivering a service to the whole catchment area population). If that population is around 1 million, as is often the case, it is easy to see that the specialist must work to support primary care in assessment and management of all but the most severe cases, and to support what is often a largely nurse run hospital, outpatient and community outreach specialist service for the most severe cases. Thus, the specialist needs to spend a major proportion of his or her time as a supportive consultant advisor (e.g., supervision, teaching, local planning, service development, researching key local issues) for the service as a whole, if he or she is to be able to have maximum impact on the population for which he or she is responsible, and if the specialist nurses and primary care teams are to be adequately supported for the tasks they have to do.

Integration is assisted by communication, including regular meetings between primary and secondary care, to discuss criteria for referral, discharge letters, shared care procedures, need for medicines, information transfer, training, good practice guidelines and research, by agreeing prescribing policies and by ensuring supply of essential medicines.

Traditional healers are very common across the world (1 per 50 population in sub-Saharan Africa) and will remain a key deliverer of health care for large proportions of the population for many decades if not centuries. Their practice is variable, and there is no doubt that some traditional practice is very harmful; but it is also likely that some of the herbal medicines used have helpful psychoactive properties and than some of the interventions give important psychosocial support to individuals, families and communities. Rather than seek to destroy all traditional healing, it would be more productive to research their provision and outcomes (37), seek dialogue with the aim of eliminating frankly harmful practices, and engage in joint training using diagnostic algorithms to encourage referral of difficult or chronic cases, including psychosis (38).

IMPORTANT POLICY PARTNERSHIPS OUTSIDE THE HEALTH ARENA

Some of the generic *social policy* issues which impact on mental health are policies on education, employment, housing, prisons, police, social welfare, environment and urban regeneration, rural issues, and transport. Effective interagency working at national, local and individual level is fundamental to the delivery of good mental health care, and needs to be firmly addressed at policy level. There may need to be a pan-government working group on mental health, as well as regional and local groups to monitor and facilitate joint working. There may need to be policy action to address co-terminosity of geographic boundaries, synchronisation and communication of planning cycles, lines of accountability for joint working, joint financial and information systems, shared good practice guidelines and removal of perverse incentives against cooperation between agencies.

Children are a nation's most precious resource, and yet receive too little policy attention. Specific learning difficulties, including dyslexia, in schools lead to educational failure, school drop out, and unemployment and over-representation in prisons. It is therefore important for policy to address specific learning difficulties in schools. The WHO clear vision project has had a dramatic effect on reducing educational failure in poor countries.

Large numbers of children across the world are looked after in orphanages and children's homes, which often contain children who have been abused and neglected, children whose home life has broken down, children with developmental delay and retardation, speech delay, fits, severe over-activity and aggression, chronic physical illness, disability and handicap. It should be an important policy imperative to ensure adequate mental and physical health promotion and care to 'looked after' children and to prevent their subsequent over-representation in the prisons.

Prisons are another key setting of concern for mental health policy. Mental illness is very common in the prisons, and in some countries suicide is very high in prisoners. Guidelines for health care staff in prisons may be useful (39). We need systems to prevent and treat anxiety and depression in prison, ensure that people with psychosis are treated in hospital rather than prison, prevent suicide and suicidal attempts, and tackle dyslexia and educational failure in prisoners.

No country can afford to ignore the possibility of *disasters*, whether man made or natural. More than 50 countries have experienced conflict in the last 20 years. Conflicts are much more common in poor countries, and 15 of the 20 poorest countries of the world have had a major conflict in the last 15 years. Nearly all low-income countries are next to a country that has experienced war and are therefore frequently carrying burden of caring for refugees. Women and children are particularly vulnerable to war, frequently being witness or forced participants in murder, victims of rape, infection with AIDS, rejection, abduction of child soldiers, and the subsequent difficulty, rehabilitating child soldiers. Psychosocial issues are often neglected in post-conflict situations, despite the fact that the presence of psychosocial disorders contributes to low compliance with vaccination, nutrition, oral rehydration, antibiotics, and to risky sexual behaviour; and hence to the high morbidity and mortality from preventable and treatable infectious diseases. Sometimes the sheer volume of refugees and their movements make practical arrangements very difficult. For example, in Macedonia during the Kosovo crisis, there were over 250,000 refugees and large transfers at short notice between camps as new refugees arrived, making psychosocial work very difficult during the initial phase (40). In Georgia, with a population of around 5 million, and an economic crisis which has reduced government health expenditure per capita from 200 USD to 7 USD per year, there are more than a quarter of a million internally displaced people with largely unmet needs for psychological support, and a further 7,000 refugees from Chechenya for whom the government does not accept responsibility, so they have no access to medical care other than that supplied by the Red Cross (41). The central importance of involving primary care teams in the management of the medium- and long-term psychological consequences of a disaster has long been argued (42).

SOME IMPLEMENTATION ISSUES

Implementation is even more challenging than strategy formulation, and particular attention needs to be paid to *communications* (public relations about the strategy, cascading information within organisations, organising feedback, alliance building between key partners); *resources* (accessing key budgets, securing capital, ensuring revenue flows, maximising the use of generic budgets, sponsorship and aid); *staff* (planning the development of the human resource, re-skilling for changing service configurations, basic and continuing education for mental health staff, skilling generic staff such as primary care and teachers, communicating with staff, engaging professional bodies and educational institutions); and *embedding the strategy* (engaging generic organisations, managers, politicians). There is a need to address high level stigma within government surrounding mental health, so that mental health policy is well integrated with general health policy, and so that de-institutionalisation is seen as an important step towards achieving better health and social outcomes for people with mental illness, but not as an opportunity to save money on the costs of health care.

An important component of the way forward includes building capacity for policy development, health monitoring, research architecture, for innovation, development and for empowering leadership. This means creative use of attachments and secondments during training and career development. We also need to know much more about national and local epidemiology, and so need to build capacity in local epidemiology.

The research funding agencies have a key role to play in adopting a multi-country approach, investing in young researchers, in research centres, and in acknowledging the complexity of health services research and evaluating preventive interventions. Long-term commitment from governments, international bodies, donors and ourselves is needed. It is important to monitor research funding (43). Access to the Internet, the Cochrane Collaboration, and international journals are all essential if countries are to avail themselves of the international evidence base. There is a pressing need for cost-effectiveness studies in low-income countries (44).

POLITICAL WILL

We need political will at national level, to support mental health in public policy (including a high profile for mental health within the Ministry of Health, liaison with other ministries and a cabinet committee for mental health as in Iran); political will at international level (including mental health on the agenda of key international political meetings, e.g., the European Union Presidencies), debate in the international media and international cooperation (6).

CONCLUSIONS

All countries are a mixture of developed and developing, and we can learn from each other. Large-scale applications are dangerous and we need locally tailored solutions. We need to build capacity for strategic policy work, tackle stigma, enhance human rights, consumer involvement, individual assessment of needs and individually tailored care plans, evidence of interventions, public relations and evaluation of outcomes. Psychiatrists have a key role to play in influencing their governments to increase the priority afforded to mental health, to develop well tailored mental health policies and to support their implementation and fine tuning.

References

1. Jenkins R, McCulloch A, Parker C. Supporting governments and policy makers on mental health policy. Geneva: World Health Organization, 1998.
2. Murray C, Lopez AD. The global burden of disease - A comprehensive assessment of mortality and disability from diseases, injuries and risk factors in 1990 and projected to 2020. Boston: Harvard University Press, 1996.
3. Institute of Medicine. Neurological, psychiatric and developmental disorders. Meeting the challenge in the developing world. Washington: National Academy Press, 2001.
4. Fryers T, Melzer D, Shah A. Inequalities in mental health. London: Maudsley Monograph, 2002.
5. Corrigan PW, Watson AW. Understanding the impact of stigma on people with mental illness. World Psychiatry 2002;1:6-19.
6. Jenkins R. World Health Day 2001 - Minding the world's mental health. Soc Psychiatry Psychiatr Epidemiol 2001;36:165-8.
7. World Health Organization. The World Health Report 2001. Mental health: new understanding, new hope. Geneva: World Health Organization, 2001.
8. World Health Organization. Mental Health Policy project - Policy and service guidance package - Executive summary. Geneva: World Health Organization, 2001.
9. Lavikainen J, Lahtinen E, Lehtinen V. Public health approach on mental health in Europe. Helsinki: Stakes, 2001.

10. Department of Health. Health of the nation: key area handbook, 2nd ed. London: Stationery Office, 1994.
11. Department of Health. Saving lives: our healthier nation: a contract for health. London: Stationery Office, 1999.
12. Commonwealth of Australia. Better health outcomes for Australians: national goals, targets and strategies for better health outcomes into the next century. Canberra: Commonwealth of Australia, 1994.
13. Jenkins R. Making psychiatric epidemiology useful: the contribution of epidemiology to mental health policy. Acta Psychiatr Scand 2001;103:2-14.
14. Melzer H, Jenkins R. The British psychiatric morbidity survey programme 1993-2003. Int Rev Psychiatry (in press).
15. Jenkins R, McCulloch A, Friedli L et al. Development of a national mental health policy. London: Maudsley Monograph, 2002.
16. Jenkins R, Tomov T, Puras D et al. Mental health reform in Eastern Europe. Eurohealth 2001;7:15-21.
17. World Health Organization. Atlas. Mental health resources in the world. Geneva: World Health Organization, 2001.
18. United Nations. Prevention of suicide: guidelines for the formulation and implementation of national strategies. New York: United Nations, 1996.
19. Jenkins R, Singh B. General population strategies of suicide prevention. In: Hawton K, van Heeringen K (eds). Handbook of suicide prevention. Chichester: Wiley, 2000:597-615.
20. Taylor SJ, Kingdon D, Jenkins R. How are nations trying to prevent suicide? An analysis of national suicide prevention strategies. Acta Psychiatr Scand 1997;95:457-63.
21. Harris EC, Barraclough B. Excess mortality of mental disorder. Br J Psychiatry 1998;173:11-53.
22. Jenkins R. Addressing suicide as a public health problem. Lancet 2002;359:813-4.
23. Scott Samuel A, Ardern K, Birley M. Assessing health impacts on a population. In: Pencheon D, Guest C, Melzer D et al (eds). Oxford handbook of public health practice. Oxford: Oxford University Press, 2001:48-58.
24. Jenkins R, Strathdee G. The integration of mental health care with primary care. Int J Law Ment Health 2000;238:77-91.
25. Shepherd M, Cooper B, Brown AC et al. Psychiatric illness in general practice. London: Oxford University Press, 1996.
26. Harding TW, de Arango MV, Baltazar J et al. Mental disorders in primary health care: a study of their frequency in four developing countries. Psychol Med 1980;10:231-41.
27. Goldberg D, Huxley PJ. Common mental disorders - a biopsychosocial model. London: Routledge and Kegan Paul, 1992.
28. Ustun TB, Sartorius N. Mental illness in general health care: an international study. Chichester: Wiley, 1995.
29. Mann AH, Jenkins R, Belsey E. The twelve month outcome of patients with neurotic illness in general practice. Psychol Med 1981;11:535-50.
30. Jenkins R, Bebbington P, Brugha T et al. British psychiatric morbidity survey. Br J Psychiatry 1998;173:4-7.
31. Mohit A. Training packages in developing countries. In: Jenkins R, Ustun TB (eds). Preventing mental illness - Mental health promotion in primary care. Chichester: Wiley, 1998:253-9.
32. Mubbashar MH. Developments in mental health services in Pakistan. In: Murthy RS (ed). Mental health in India. Bangalore: Ganesha, 2001:251-9.
33. Abiodun OA. Knowledge and attitudes concerning mental health of primary care workers in Nigeria. Int J Soc Psychiatry 1991;37:113-20.
34. Jenkins R. Mental health and primary care - Implications for policy. Int Rev Psychiatry 1998;10:158-60.
35. WHO Collaborating Centre. WHO guide to mental health in primary care (adapted for the UK from Diagnostic and management guidelines for mental disorders in primary care). Chapter V, Primary care version. London: Royal Society of Medicine, 2000.
36. Andrews G, Jenkins R (eds). Management of mental disorders. Aldershot: Datapress, 2000.
37. Bodeker G, Jenkins R, Burford G. International Conference on Health Research for Development (COHRED), Bangkok, Thailand, October 9-13, 2000: Report on the Symposium on Traditional Medicine. J Alternative Complementary Medicine 2001;7:101-8.
38. Saaed K, Gater R, Mubbashar MH et al. The prevalence, classification and treatment of mental disorders among attenders of native healers in rural Pakistan. Soc Psychiatry Psychiatr Epidemiol 2000;35:480-5.
39. Paton J, Jenkins R. Guide to mental health in prisons (adapted for the UK from Diagnostic and management guidelines for mental disorders in primary care). London: Royal Society of Medicine, 2002.
40. World Health Organization. Health in emergencies: the experience in the former Yugoslav Republic of Macedonia in 1999. Skopje: WHO Regional Office for Europe, Humanitarian Assistance Office, 2000.
41. Jenkins R, Sugurladze S, Lucas J. Situation appraisal of mental health in Georgia. Unpublished manuscript, 2001.
42. Luzano J, Lima J. Planning for health/mental health integration in emergencies. In: Lystad M (ed). Mental health response to mass emergencies - Theory and practice. New York: Brunner/Mazel, 1988:371-92.
43. Global Forum for Health Research. Monitoring financial flows for health research. Geneva: Global Forum for Health Research, 2001.
44. Shah A, Jenkins R. Mental health economic studies from developing countries reviewed in the context of those from developed countries. Acta Psychiatr Scand 1999;100:1-18.

Family interventions for mental disorders: efficacy and effectiveness

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The physician Henry Richardson described the role of family care in the recovery from physical and mental health problems in 1948 (1). His landmark book entitled "Patients have families" was read by a group of psychiatrists and social anthropologists at the Palo Alto Research Institute in California and became the basis of the systemic approach to family interventions (see 2 for details of this historical perspective). Unlike Richardson, these psychoanalytically trained professionals postulated that family influence was an etiological factor in serious mental disorders, rather than a key factor on the road to recovery. For many years the family system was thought to be the root of all evil and families were accused of inadvertently abusing their offspring through a variety of subtle communication strategies, such as the double-bind or communication deviance. However, these pioneers of family treatment spent considerable time with families and attempted to help them correct these defects. A special unit was opened at National Institutes of Health (NIH) in Bethesda where entire families lived for up to two years, with regular meetings to study their communication styles when faced with day to day life problems. The mere fact of convening family meetings on a regular basis, where families were encouraged to speak openly about their stresses and to attempt to find solutions to their most pressing problems, often appeared to have substantial therapeutic impact.

Around the same time, a team of British sociologists and social psychiatrists began to study the outcome of relocating long-term mental hospital residents into community settings (3). Led by George Brown and John Wing, they noted that one of the predictors of successful resettlement was the interpersonal environment of the households where patients resided (4,5). The worst outcomes were in hostels where little warmth and support was provided. But the next worst situation was households where patients lived with close relatives, such as parents or spouses. This unexpected finding was explored in a series of studies using more and more sophisticated interviewing techniques to try to flesh out the specific features associated with success or failure of community care (6). The 1976 doctoral dissertation of Christine Vaughn compared the effects of family attitudes on the short-term rates of recurrence of major episodes of depression or psychosis in outpatients who had shown good recovery after acute hospital treatment. This study was summarised in a classic paper that established family factors as a key variable in achieving stable recovery from severe mental disorders. In her classic paper (7), co-authored by Julian Leff, Vaughn emphasised the value of the negative attitudes of emotive criticism and intrusiveness as predictors of a relapsing clinical course. However, in her unpublished thesis, greater emphasis was placed on the better clinical outcome associated with supportive comments and emotional warmth expressed by relatives towards the patient (8). Unfortunately the term 'expressed emotion' became synonymous with negative aspects of family care. Alternative hostels and residences were developed, despite the fact that the earlier studies had shown that they were associated with the highest rate of failure of community care.

Fortunately not all those who studied this literature concluded that the best way forward was to seek alternatives to family care for people with serious mental disorders. A small group led by Robert Liberman set out on a different direction that aimed to help those families who were so burdened and stressed by the care of their relatives, that they were unable to demonstrate the positive caring behaviours that appeared to enhance the prognosis of patients. Detailed education about the nature of mental disorders and their optimal treatment was followed by practical problem solving about how to manage the everyday difficulties they encountered with patients' residual symptoms and interpersonal difficulties (9). Relatives and patients were encouraged to use effective communication skills to express their emotions in a manner not dissimilar to the methods developed by earlier family systems therapists. The focus was on increasing the expression of positive comments for efforts patients made, no matter how trivial they might seem, and on reducing nagging and hostile criticism, replacing this with attempts to clarify key problem issues in a way that would enhance patients' efforts to solve them. In simplistic terms, this psychoeducational approach aimed to convert harmful high expressed emotion to helpful low expressed emotion, or to teach family members some of the core skills of effective nursing and rehabilitation strategies. From these early beginnings in the mid 1970s, a series of random controlled trials was instigated, initially with schizophrenic disorders, but later with an increasing range of mental health problems. In the remainder of this paper we will review the results of this body of work in terms of evidence for the efficacy and the effectiveness of family interventions in adult mental health.

FAMILY INTERVENTIONS FOR SCHIZOPHRENIC DISORDERS

Optimal drug therapy remains the cornerstone of the clinical management of psychotic disorders, at least in the periods after major psychotic episodes. However, substantial additional benefits have been reported when optimal pharmacotherapy has been integrated with family-based treatments (10-15). The educational family strategies attempt to reduce the impact of environmental stresses on the biologically vulnerable individual whilst promoting social functioning. Two major strategies have been developed. The first, carer-based stress management, derived from cognitive behavioural therapy, seeks to enhance the problem solving efficiency of the patient and his or her social support system and to actively promote the achievement of personal life goals (2). The second educates caregivers in stress reduction strategies and to increase acceptance of behaviour associated with both positive and negative symptoms (6,16).

Fifty controlled studies with adequate research methodology have been published since 1980. Fifteen were of brief duration and could not be considered an adequate trial of integrated biomedical and psychosocial treatment for serious mental disorders. Most of these studies were mental health education only (17-23). Two early pioneering studies of brief family intervention were also excluded (24,25). Eight other studies had serious methodological flaws and were excluded from the detailed analysis. They were mainly studies of the benefits of applying family approaches in clinical practice (26-33). One excellent study was excluded on the basis that the experimental 'relapse prevention program' investigated consisted of a complex blend of individual, group and family strategies (34), while another compared brief and long-term family education (35).

The remaining 25 studies were generally of a high quality. One major deficit, common to all psychosocial research, is the inability to deliver psychosocial treatments in a manner that was 'blind' to the patients and associates, including the clinicians and independent assessors. Relatively few studies controlled for non-specific variables, such as therapist contact, skills and enthusiasm, or the ancillary treatment strategies used in the case management.

The studies varied considerably in the specific intervention strategies examined. The most basic merely provided several sessions giving information about drug treatments (36,37). Others extended for several years, with continued education, stress management strategies, social skills training, vocational training, specific cognitive behavioural strategies and home-based crisis management when necessary (38-46). It is important to realise that not all family interventions are the same, and for that reason the benefits may be expected to differ.

Almost all studies involved patients with a diagnosis of schizophreniform, schizophrenic or schizoaffective psychoses. Treatment was usually initiated after crisis management had produced a remission of the acute symptoms of a major psychotic episode. The methods of outcome assessment varied substantially. Most studies focused on prevention of major exacerbations of psychotic symptoms, using clinical judgments of 'relapse' that were not always well standardized (47). Some studies also used standardized rating scales to measure clinical, social, family and economic benefits, so it is possible to examine a broader range of relevant outcomes. Differential dropouts from the treatment approaches were rarely evaluated. However, we have endeavored to use the 'intention-to-treat' approach to analyzing the benefits. Furthermore, in our consideration of clinical efficacy, we have devised an index of outcome that combines not merely major psychotic episodes, but major episodes of any psychiatric symptoms, such as suicidal ideation/attempts or affective disturbances, hospital admissions for any reason, and withdrawal from the allocated treatment for clinical reasons. This provides a highly conservative portrayal of the benefits that might be expected in clinical practice.

Clinical benefits

Eighteen trials compared individualized case management and maintenance medication with or without the addition of a family-based stress management strategy. Of these, 14 showed a significant advantage for the stress management approaches (36-38,40, 41,44,46,48-54), two no significant differences (55,56), and two showed greater advantages for individual case management (39,40).

The proportion of cases maintained in treatment for one year without any major exacerbations of any form of psychopathology showed a 25% advantage for the stress management strategies: 62% had a successful outcome during the 12-month period, compared to 37% of those not receiving carer-based stress management. These results are highly significant both from a statistical as well as a clinical viewpoint (58).

Remission of residual symptoms

The absence of major episodes is not the only goal of long-term treatment. Most patients experience continuing psychotic and deficit symptoms for some time after a major psychotic episode (59). The benefits of family strategies in reducing this residual psychopathology, and thereby enhancing the trend towards full remission of schizophrenia, was assessed in 13 studies (39,40,44-46, 48,49,51,52,54,55,60, 61). These studies compared ratings of psychopathology at the beginning of the study with those obtained up to a year later. In 9 of these studies an overall trend towards recovery was observed, both with experimental and control treatments. Zhang et al (54) noted this trend only for those patients receiving the stress management who did not have any symptom exacerbations. One study that used a blind assessor to conduct standardised interviews of psychopathology before treatment, and again at 9 and 24 months, showed that 65% of cases receiving the family-based approach achieved full remissions of both psychotic and deficit schizophrenic symptoms at two years, in contrast to 15% associated with individual assertive case management (40).

Social outcome

Full social recovery from mental disorders may be more difficult to achieve than clinical remission. Thirteen studies employed standardized assessments of social functioning, although three employed methods that lacked adequate scientific rigor, and one proved too complex to include (39). Five of the 9 remaining studies showed significantly greater benefits for stress management strategies (26,37,40,46,52,53), one a clear trend (44) and three showed no significant benefits when compared with drug treatment and case management (36,51,55). Despite the difficulties of measuring gains on inventories that include a broad range of social goals, many of which are not personally relevant to every patient, advantages for the family-based approaches were evident. One study that examined this issue carefully with blind ratings showed that 40% of patients in the family treated group had no signs of social disability after two years of comprehensive treatment that also integrated social skills training and individualized vocational rehabilitation within the treatment program (40). This contrasted with 6% of cases that had received individual assertive case management of similar intensity.

Family benefits

An important goal of family stress management strategies is to enhance family functioning and reduce stresses, particularly those associated with caring for the patient. A mean reduction in the stress of caregiving of 34% was reported in four studies that examined this outcome (40,44,45,53). This was contrasted with a reduction of 9% in the drugs and case management conditions. Five of the six studies that compared standardized family stress ratings associated with stress management vs. drugs and case management showed significant advantages for the stress management approach (37,40,46,52, 53). The self-help multiple-family group approach of Buchkremer et al (55) showed no change in a measure of family problems associated with the patients' illness, but was associated with increased warmth and reduced hostility towards the patients.

Economic benefits

Improvements in clinical, social and family functioning would be expected to reduce the need for intensive medical and social care and thereby produce economic benefits for service providers. Six studies reported such benefits, albeit in relatively unsophisticated assessments of costs (29,40,42, 45,52,62). It is important to note that no study showed that the addition of family approaches costs more to the services. In most instances the cost savings to the services of integrating family assistance in this way were substantial. Further, the additional cost to the family was usually minimal, particularly as most treatment sessions were arranged flexibly to minimize loss of earnings or the cost of transport.

Enduring benefits

The duration over which programmes were applied varied from 6 months to four years, with most providing this treatment for 9-12 months. It was apparent that benefits endured, and trends towards clinical and social recovery continued, when the treatment approach was continued without major modifications throughout the study period (38,40, 42-44,63). Where treatment ceased at the end of the study period, it was noted that the stress of impending termination of a successful treatment program may have contributed to an excess of episodes at this period (38). However, withdrawal of intensive training in stress management was not usually associated with an immediate cessation of apparent clinical benefits. The studies that examined clinical benefits over at least two years showed a 23% advantage for stress management in minimizing major clinical episodes (36,38,40,42-44,63-65).

All four studies that followed up cases for at least 4 years have shown long-term evidence of clinical benefits (42,66-68). However, the methodology of long-term follow-up studies is less than optimal, and it is clear that for individual cases the benefits tend to diminish once active treatment is stopped. As with all major health problems, comprehensive treatment needs to be continued until all residual impairments, disabilities and handicaps have been resolved, and then followed by monitoring of early signs of recurrences and the provision of booster treatment when this is indicated (39,67). Studies of long-term optimal programmes of this nature are essential (69).

Effectiveness of family treatment in routine clinical practice

One major concern raised by many observers has been the ability to replicate the benefits of controlled trials in clinical practice. In this field there has been a tendency to dilute the methods, using merely part of the intervention program, usually only the mental health education component (17,23, 35,70-92). Some of these studies have shown limited benefits, particularly improved adherence to medication (12). However, substantial clinical and social benefits are generally less than those associated with more comprehensive programmes applied over longer periods.

A series of comprehensive field trials have been completed, with almost all reporting successful replication of the controlled trial results (26-34, 93-101).

Comparative benefits of stress management approaches

The strategies used in stress management approaches include:

- comprehensive assessment of biomedical and psychosocial needs
- case management
- optimal drug treatment
- education of patients and key carers about mental disorders and the treatment
- training in effective problem solving of current and anticipated stresses
- specific strategies to manage problems of compliance
- social and work skills training
- specific strategies for residual psychotic and deficit symptoms
- specific strategies for residual affective and anxiety symptoms
- early detection of exacerbations
- assertive crisis intervention.

At present there have been few studies that have attempted to compare different combinations of strategies. Whereas it is clear that health education alone has limited overall benefits (12), it is not clear which combination of ingredients or setting of treatment is most effective and efficient (34). The effect sizes of clinical benefits of the key combinations of interventions suggest that long-term educational or systemic approaches may be less efficacious than those using problem solving and cognitive behavioural methods (58). Although a carer-based approach has been strongly advocated, there is also strong support for long-term individual approaches that use similar stress management methods. In one study that compared individual and family-based approaches, 38% of patients receiving family treatment had a major episode of psychosis or affective disorder, or had withdrawn from treatment by 24 months, compared to 28% of those allocated to supportive case management, and only 13% of those receiving intensive individual stress management training (39). These advantages continued to the end of the third year. Reduction of residual symptoms was greatest with the family approach, but social functioning benefits occurred mainly in the first year, whereas those associated with the more intensive individual approach continued to increase throughout the 3 years (39). In this study, patients expressed low satisfaction with the family treatment, and were highly satisfied with the individual approach, which had 73% more sessions (2.4 per month over the 36 months vs. 1.4). Unlike earlier studies, Hogarty's Pittsburgh group did not find any added benefits from combining family and individual strategies.

A less complex study of a cohort of patients who were receiving assertive community treatment found that, although the addition of crisis family treatment could prevent major episodes as effectively as continuous multifamily treatment, it was less successful in achieving social benefits, particularly in the field of employment (44). Further complex studies that compare the ingredients of comprehensive treatment programmes are essential to refine these approaches.

Single family versus multi-family groups

A series of 8 studies that compared stress management conducted predominantly in multi-family groups with that conducted mainly in individual sessions showed a mean advantage of only 3% greater clinical success for the single family approach (37% vs. 34%) in the first year of treatment (36,42-44,63,102-105). Two further studies have compared a multiple family group with a medication and case management control (48,55). The first study of self-help relatives' groups did not involve the patients and showed a higher rate of hospital admissions than the control condition (55), while the second showed reduction in service use, including hospital admissions, associated with multi-family treatment (48). McFarlane et al (42) have shown that there may be advantages for the multi-family approach when it is used as a long-term maintenance strategy, but this work has not yet been replicated fully, although two other studies used multi-family approaches in the second year of the programs with good maintenance of clinical benefits (40,106). The complex methodology of these comparative studies prevents any clear conclusions about the relative merits of these approaches, particularly when the psychosocial strategies used have differed in the single and multiple family settings. A current multi-centered study nearing completion in Italy has contrasted identical methods in single and multi-family settings. The early results seem to support the findings that similar clinical benefits are achieved in both settings (104). However, this study has again highlighted a somewhat greater rate of withdrawal from the multi-family groups (42-44,101,102). Although multi-family settings may appear more cost-effective, it is important that all costs are considered, not merely the time spent conducting the treatment itself, before concluding that this strategy should be the method of choice for services. It is unlikely that any one training format will meet the needs of all cases, and a comprehensive service will include a range of efficacious family and individual approaches, tailored to the needs of individual cases at different stages in their clinical and social recovery.

Integration with social and work skills training strategies

The addition of social skills training strategies to assist patients to cope more effectively with stresses in community settings outside the family appears to confer an added benefit to those methods that focus more on stresses within the patient's immediate social network. Six studies that combined social skills training strategies with carer-based stress management appear to have achieved the best clinical outcomes (38,40,41,46, 106). Only 19% of patients receiving this integrated approach had poor outcomes during the first year of treatment. The precise manner in which these strategies are integrated has not been studied. In some programs the social and work skills training has been an integral part of the family problem solving sessions (40, 41,46), in others the two approaches are conducted in separate sessions (38,39,105). It is noted that the benefits of conducting social skills training without the collaborative support of key caregivers appears to have limited long-term benefits in the well-controlled studies that have been completed (38).

Integration of other psychosocial strategies for residual symptoms

Several groups have used a cognitive behavioural approach that includes specific strategies for residual psychotic, deficit, affective and anxiety symptoms, all of which are common in functional psychotic disorders (40,41). These strategies have been demonstrated as highly efficacious when studied in non-schizophrenic populations (107). To date there have been no controlled studies that have compared family programs that include such strategies when indicated, with those that use only the generic problem solving methods. One study that employed a wide range of cognitive behavioural strategies showed an improvement in the rates of affective and anxiety episodes in the second year of treatment (40).

Does family-based stress management reduce the level of medication needed to prevent recurrences?

Attempts to substantially lower dosages of drugs below those deemed clinically optimal have proven relatively unsuccessful (45,105). However, in these studies the dose of drugs was rapidly and substantially lowered, rather than gradually reduced in the manner recommended in clinical practice. Hahlweg et al (45) showed a relatively low rate of major episodes with a targeted dose strategy throughout the period that regular stress management sessions were conducted. Schooler's collaborative study did not replicate this finding, but did support the hypothesis that family-based strategies may enable lower doses of medication to be used without increasing the risk of major episodes (105).

FAMILY INTERVENTIONS FOR AFFECTIVE DISORDERS

Family education and stress management is frequently used in treatment programmes for major affective disorders, but relatively few studies have been conducted to assess the benefits of these approaches. Controlled studies of bipolar disorders that have involved families in the treatment process have shown added benefits, similar to those obtained in the studies on schizophrenic disorders (108-113). Such benefits in a condition where pharmacotherapy is often unsatisfactory suggests that carer-based approaches should be more widely available (114).

Despite substantial evidence for the association between family and marital factors and the onset and course of major depressive disorders (115), most psychosocial strategies have focused on stress and vulnerability from the individual perspective. There is limited evidence that family or marital strategies achieve somewhat greater benefits than the individual cognitive behavioural or interpersonal approaches, particularly where marital conflict is an ongoing major stressor (116-124).

Early intervention using a family-oriented approach when depressive or manic symptoms first emerge may prove highly efficacious in preventing major affective episodes, associated social morbidity and potential suicide risk (125,126). While offering considerable promise, further carefully controlled studies are essential to enable carer-based approaches to be targeted with greater precision to the specific problems associated with affective disorders.

FAMILY INTERVENTIONS FOR ANXIETY AND OBSESSIVE-COMPULSIVE DISORDERS

The education and assistance of family members and friends in the application of specific cognitive behavioural strategies for anxiety and obsessive-compulsive disorders is common practice (127-133). However, we are not aware of any controlled studies of the specific benefits associated with carer involvement.

One controlled study of chronic post-traumatic stress disorder showed no benefits from adding cognitive behavioural family strategies to a programme of graduated exposure (134).

FAMILY INTERVENTIONS FOR EATING DISORDERS

Family involvement in the treatment of anorexia nervosa is common to most programmes (135). However, few controlled studies have been conducted (136-138). The results do not show any consistent benefits for family therapies when they have been compared to various individual psychotherapeutic approaches. The family treatment strategies have varied considerably and there is no evidence to support the superiority of any one approach (139,140).

FAMILY INTERVENTIONS FOR ALCOHOL AND SUBSTANCE ABUSE

Evidence for the benefits of family strategies is accumulating in the treatment of alcohol and substance abuse. This includes the engagement of unmotivated subjects (141), and the treatment of substance use in patients with schizophrenic disorders (142).

CONCLUSIONS

There is sufficient scientific evidence to conclude that strategies that enhance the caregiving capacity of family members and other people involved in the day to day care for people with mental disorders have a clinically significant impact on the course of major mental disorders. This evidence is strongest for schizophrenic and bipolar affective disorders. The best results appear to be associated with comprehensive methods that integrate carers into the therapeutic team through education and training in stress management strategies, with continued professional support and supervision over a period of at least two years. Although education about mental disorders and their biomedical and psychosocial treatment is a valuable component of these approaches, and may improve engagement and adherence to treatment programmes, it does not seem sufficient to reduce the risk of major episodes or to promote clinical and social recovery.

There is growing evidence for the benefits of carer-based methods for depressive and eating disorders. However, it is not clear which cases benefit more from family or individual approaches, or how best to combine the two formats of treatment. Finally, although family members are almost always involved in programmes for anxiety disorders and substance abuse, research is needed to clarify the merits of this involvement.

In addition to the benefits in terms of improved prognosis, there is evidence that social morbidity is reduced, particularly when treatment continues for at least two years and integrates personal goal setting and aspects of social and work skills training. Despite evidence that the benefits of family work are not well sustained once the intensive training phases have been completed, there is a lack of research into how improvements can be maintained. Multi-family group formats offer promise as a long-term strategy for parental families. But carers who are spouses, partners, siblings, children and close friends may prefer other formats.

Benefits from family approaches are also evident for the carers themselves, with reduced stress associated with their caregiving roles. However, even when evidence-based family programmes are applied, the stress associated with continued family care of chronic cases remains considerable and alternative supportive caregiving arrangements are essential (143). Efforts to develop and evaluate similar therapeutic programmes in residential services must be given a high priority.

Despite the clear evidence of efficacy and efficiency, few services have incorporated these carer-based strategies into their routine practice (144). This problem is shared with most noncommercial advances in clinical practice. In addition to adequate training in educational and psychological strategies, assertive management of services is needed to ensure that the efforts of key caregivers of all patients are fully integrated into clinical programmes at all times. Almost all patients have somebody who cares for them, or at least somebody who cares about them. With improved understanding and straightforward training in problem solving approaches caregivers can provide a substantial additional resource to the therapeutic team, a resource that promises to contribute to long-term clinical and social recovery from major disorders.

References

1. Richardson HB. Patients have families. New York: Commonwealth Fund, 1948.
2. Falloon IRH, Boyd JL, McGill CW. Family care of schizophrenia. New York: Guilford Press, 1984.
3. Brown GW, Bone M, Dalison B et al. Schizophrenia and social care. London: Oxford University Press, 1966.
4. Brown GW, Carstairs GM, Topping GG. Post-hospital adjustment of chronic mental patients. Lancet 1958;i:685-9.
5. Brown GW, Birley JLT, Wing JK. Influence of family life on the course of schizophrenic disorders. A replication. Br J Psychiatry 1972;121:241-58.
6. Leff J, Vaughn C. Expressed emotion in families. New York: Guilford Press, 1985.
7. Vaughn C, Leff J. The influence of family and social factors on the course of psychiatric illness. A comparison of schizophrenic and depressed neurotic patients. Br J Psychiatry 1976;129:125-37.
8. Falloon IRH. Expressed emotion: current status. Psychol Med 1988;18:269-74.
9. Falloon IRH, Liberman RP, Lillie FJ et al. Family therapy for schizophrenics with a high risk of relapse. Fam Proc 1981; 20:211-21.
10. Dixon LB, Lehman AF. Family interventions for schizophrenia. Schizophr Bull 1995;21:631-43.
11. Huxley NA, Rendall M, Sederer L. Psychosocial treatments in schizophrenia: a review of the past 20 years. J Nerv Ment Dis 2000;88:187-201.
12. Pekkala E, Merinder L. Psychoeducation for schizophrenia (Cochrane Review). In: The Cochrane Library, Issue 3. Oxford: Update Software, 2001.
13. Penn DL, Mueser KT. Research update on the psychosocial treatment of schizophrenia. Am J Psychiatry 1996;153: 607-17.
14. Pharoah FM, Mari JJ, Streiner D. Family intervention for schizophrenia. In: The Cochrane Library, Issue 2. Oxford: Update Software, 2000.
15. Falloon IRH, Roncone R, Held T et al. An international overview of family interventions: developing effective treatment strategies and measuring their benefits to patients, carers, and communities. In: Lefley HP, Johnson DL (eds). Family interventions in mental illness: international perspectives. Westport: Greenwood, 2001:3-23.
16. Anderson CM, Reiss DJ, Hogarty GE. Schizophrenia and the family. New York: Guilford Press, 1986.
17. Atkinson JM, Coia DA, Gilmour WH et al. The impact of education groups for people with schizophrenia on social functioning and quality of life. Br J Psychiatry 1996;168:199-204.
18. Bäuml J, Kissling W, Pitschel-Walz G. Psychoedukative Gruppen für schizophrene Patienten: Einfluss auf Wissenstand und Compliance. Nervenheilkunde 1996;15:145-50.
19. Ehlert U. Psychologische Intervention bei den Angehórigen schizophrener Patienten. Frankfurt: Peter Lang, 1989.
20. MacCarthy B, Kuipers L, Hurry J et al. Counselling relatives of the long-term adult mentally ill. I. Evaluation of the impact on relatives and patients. Br J Psychiatry 1989;154:768-75.
21. Macpherson R, Jerrom B, Hughes A. A controlled study of education about drug treatment of schizophrenia. Br J Psychiatry 1996;168:709-17.
22. Posner CM, Wilson KG, Krai MJ et al. Family psychoeducational support groups in schizophrenia. Am J Orthopsychiatry 1992;62:206-18.

23. Vaughan K, Doyle M, McConaghy N et al. The Sydney intervention trial: a controlled trial of relatives' couselling to reduce schizophrenic relapse. Soc Psychiatry Psychiatr Epidemiol 1992;27:16-21.
24. Goldstein MJ, Rodnick EH, Evans JE et al. Drug and family therapy in the aftercare of acute schizophrenics. Arch Gen Psychiatry 1978;35:1169-77.
25. Glick ID, Clarkin JF, Haas GL et al. Clinical significance of inpatient family intervention: conclusions from a clinical trial. Hosp Commun Psychiatry 1993;44:869-73.
26. Barrowclough C, Tarrier N, Lewis S et al. Randomised controlled effectiveness trial of a needs-based psychosocial intervention service for carers of people with schizophrenia. Br J Psychiatry 1999;174:505-11.
27. Berglund N. How early intervention in psychiatric long-term illness patients and their families influences relapse, medication and family burden. Unpublished manuscript, 1996.
28. Bertrando P, Bressi C, Clerici M et al. Terapia familiare sistemica ed emotività espressa nella schizofrenia cronica. Uno studio preliminare. Attraverso lo Specchio 1989;25:511-62.
29. Held T. Schizophreniebehandlung in der Familie. Frankfurt: Peter Lang, 1995.
30. Levene JE, Newman F, Jeffries JJ. Focal family therapy outcome study I: patient and family functioning. Can J Psychiatry 1989;34:641-7.
31. Kottgen C, Sonnichsen I, Mollenhauer K et al. Group therapy with families of schizophrenia patients: results of the Hamburg Camberwell Family Interview Study. III. Int J Fam Psychiatry 1984;5:84-94.
32. Xiang M, Ran M, Li S. A controlled evaluation of psychoeducational family intervention in a rural Chinese community. Br J Psychiatry 1994;165:544-8.
33. Rund BR, Moe L, Sollien T et al. The Psychosis Project: outcome and cost-effectiveness of a psychoeducational programme for schizophrenic adolescents. Acta Psychiatr Scand 1994;89:211-8.
34. Herz MI, Lamberti JS, Minz J et al. A program for relapse prevention in schizophrenia: a controlled study. Arch Gen Psychiatry 2000;57:277-83.
35. Shimodera S, Inoue S, Mino Y et al. Expressed emotion and psychoeducational intervention for relatives of patients with schizophrenia: a randomized controlled study in Japan. Psychiatry Res 2000;96:141-8.
36. Hornung WP, Holle R, Schulze-Mönking H et al. Psychoedukativ-psychotherapeutische Behandlung von schizophrenen Patienten und ihren Bezugspersonen. Ergebnisse einer 1-jahres-Katamnese. Nervenartz 1995;66:828-34.
37. Zhang M, He Y, Gittelman M et al. Group psychoeducation of relatives of schizophrenic patients: two-year experiences. Psychiatry Clin Neurosci 1998;52(Suppl.):S344-7.
38. Hogarty GE, Anderson CM, Reiss DJ et al. Family psycho-education, social skills training and maintenance chemotherapy in the aftercare treatment of schizophrenia. Arch Gen Psychiatry 1986;43:633-42.
39. Hogarty GE, Kornblith JJ, Greenwald D et al. Three-year trials of personal therapy among schizophrenic patients living with or independent of family, II: Effects on adjustment of patients. Am J Psychiatry 1997;154:1514-24.
40. Falloon IRH and Associates. Family management of schizophrenia: a study of clinical, social and economic benefits. Baltimore: Johns Hopkins University Press, 1985.
41. Tarrier N, Barrowclough C, Vaughn C et al. The community management of schizophrenia: a controlled trial of a behavioural intervention with families to reduce relapse. Br J Psychiatry 1988;153:532-42.
42. McFarlane WR, Link B, Dushay R et al. Psychoeducational multiple family groups: four-year relapse outcome in schizophrenia. Fam Proc 1995;34:127-44.
43. McFarlane WR, Lukens E, Link B et al. Multiple-family groups and psychoeducation in the treatment of schizophrenia. Arch Gen Psychiatry 1995;52:679-87.
44. McFarlane WR, Dushay RA, Stastny P et al. A comparison of two levels of family-aided assertive community treatment. Psychiatr Serv 1996;47:744-50.
45. Hahlweg K, Durr H, Müller U. Familienbetreuung schizophrener Patienten. Weinheim: Psychologie Verlags Union, 1995.
46. Veltro F, Magliano L, Falloon IRH et al. Behavioural family therapy for patients with schizophrenia: a randomised controlled trial. Presented at the Congress of the World Association for Psychosocial Rehabilitation, Rotterdam, May 1996.
47. Falloon IRH, Marshall GN, Boyd JL et al. Relapse in schizophrenia: a review of the concept and its definitions. Psychol Med 1983;13:469-77.
48. Dyck DG, Hendryx MS, Short RA et al. Service use among patients with schizophrenia in psychoeducational multiple-family group treatment. Psychiatr Serv 2002;53:749-54.
49. Grawe RW, Widen JH, Falloon IRH. Early intervention for schizophrenic disorders: implementing optimal treatment strategies in clinical services. In: Kashima H, Falloon IRH, Mizuno M et al (eds.). Comprehensive treatment of schizophrenia. Tokyo: Springer-Verlag, 2002:290-7.
50. Leff J, Kuipers L, Berkowitz R et al. A controlled trial of social intervention in the families of schizophrenic patients. Br J Psychiatry 1982;141:121-34.
51. Randolph ET, Eth S, Glynn SM et al. Behavioural family management in schizophrenia: outcome of a clinic-based intervention. Br J Psychiatry 1994;164:501-6.
52. Xiong W, Phillips MR, Hu X et al. Family-based intervention for schizophrenic patients in China. A randomised controlled trial. Br J Psychiatry 1994;165:239-47.
53. Zhang M, Yan H and Co-authors. Effectiveness of psychoeducation of schizophrenic patients: a prospective cohort study in five cities of China. Int J Ment Health 1993;22:47-59.
54. Zhang M, Wang M, Li J et al. Randomised-control trial of family intervention for 78 first-episode male schizophrenic patients: an 18-month study in Suzhou, Jiangsu. Br J Psychiatry 1994;165(Suppl. 24):96-102.
55. Buchkremer G, Scultze-Moenking H, Holle R et al. The impact of therapeutic relatives' groups on the course of illness of schizophrenic patients. Eur Psychiatry 1995;10:17-27.
56. Linszen D, Dingemans P, van der Does JW et al. Treatment, expressed emotion and relapse in recent onset schizophrenic disorders. Psychol Med 1996;26:333-42.
57. Telles C, Karno M, Mintz J et al. Immigrant families coping with schizophrenia: behavioural family intervention v. case management with a low-income Spanish-speaking population. Br J Psychiatry 1995;167:473-9.
58. Falloon IRH, Held T, Coverdale JH et al. Family interventions of schizophrenia: a review of long-term benefits of international studies. Psychiatr Rehab Skills 1999;3:268-90.
59. Shepherd M, Watt D, Falloon I et al. The natural history of schizophrenia. Psychol Med Monograph n.16. Cambridge: Cambridge University Press, 1989.
60. Montero I, Asencio A, Hernandez I et al. Two strategies for family intervention in schizophrenia: a randomised trial in a Mediterranean environment. Schizophr Bull 2001;27:661-70.
61. Zastowny TR, Lehman AF, Cole RE et al. Family management of schizophrenia: a comparison of behavioral and supportive family treatment. Psychiatr Quarterly 1992;63:159-86.
62. Tarrier N, Lowson K, Barrowclough C. Some aspects of family interventions in schizophrenia. II: Financial considerations. Br J Psychiatry 1991;159:481-4.

63. Falloon IRH, McGill CW, Matthews SM et al. Family treatment for schizophrenia: the design and research application of therapist training models. J Psychother Pract Res 1996;5:45-56.
64. Leff J, Kuipers L, Berkowitz R et al. A controlled study of social intervention in the families of schizophrenic patients: two-year follow-up. Br J Psychiatry 1985;146:594-600.
65. Tarrier N, Barrowclough C, Vaughn C et al. Community management of schizophrenia. A two-year follow-up of a behavioural intervention with families. Br J Psychiatry 1989;154:625-8.
66. Hornung WP, Feldman R, Klingberg S et al. Long-term effects of a psychoeducational psychotherapeutic intervention for schizophrenic outpatients and their key-persons - results of a five-year follow-up. Eur Arch Psychiatry Clin Neurosci 1999;249:162-7.
67. Linszen D, Dingemans P, Lenior M. Early intervention and a five-year follow up in young adults with a short duration of untreated psychosis: ethical implications. Schizophr Res 2001;51:55-61.
68. Tarrier N, Barrowclough C, Porceddu K et al. The Salford family intervention project: relapse rates of schizophrenia at five and eight years. Br J Psychiatry 1994;165:829-32.
69. Falloon IRH and The Optimal Treatment Project Collaborators. Optimal treatment for psychosis in an International Multisite Demonstration Project. Psychiatr Serv 1999;50:615-8.
70. Abramowitz IA, Coursey RD. Impact of an educational support group of family participants who take care of their schizophrenic relatives. J Consult Clin Psychol 1989;57:232-6.
71. Birchwood M, Smith J, Cochrane R. Specific and non-specific effects of educational intervention for families living with schizophrenia: a comparison of three methods. Br J Psychiatry 1992; 160:806-14.
72. Cazzullo CL, Bertrando P, Clerici C et al. The efficacy of an information group intervention on relatives of schizophrenics. Int J Soc Psychiatry 1989;35:313-23.
73. Cozolino LJ, Goldstein MJ. Family education as a component of extended family-orientated treatment programmes for schizophrenia. In: Goldstein MJ, Hand I, Hahlweg K (eds). Treatment of schizophrenia: family assessment and intervention. Berlin: Springer Verlag, 1986.
74. Dixon L, Stewart B, Burland J et al. Pilot study of the effectiveness of the Family-To-Family education program. Psychiatr Serv 2001;52:965-7.
75. Goldman CR, Quinn FL. Effects of a patient education programme in the treatment of schizophrenia. Hosp Commun Psychiatry 1988;39:282-6.
76. Greenberg L, Fine SB, Cohen C et al. An interdisciplinary psychoeducation program for schizophrenia patients and their families in an acute care setting. Hosp Commun Psychiatry 1988;39:277-81.
77. Hill D, Balk D. The effect of an education program for the families of the chronically mentally ill on stress and anxiety. Psychosoc Rehabil J 1987;10: 25-40.
78. Ito J, Oshima I, Tsukada K et al. Family psychoeducation with schizophrenic patients and their families from the viewpoint of empowerment. In: Kashima H, Falloon IRH, Mizuno M et al (eds). Comprehensive treatment of schizophrenia. Tokyo: Springer-Verlag, 2002:100-6.
79. Kelly GR, Scott JE. Medication compliance and health education among outpatients with chronic mental disorders. Med Care 1990;28:1181-97.
80. Lebrun LJ, Lelander-Singh M, Luke A. Schizophrenia outpatient education. Can Nurse 1991;87:25-7.
81. Leung GM, Rastogi SC, Woods J. Relative support group of long-stay psychiatric patients. Psychiatr Bull 1989; 13:417-9.
82. McCreadie RG, Phillips K, Harvey JA. et al. The Nithsdale schizophrenia surveys VIII. Do relatives want family intervention - and does it help? Br J Psychiatry 1991;158:110-3.
83. Merinder LB, Viuff AG, Laugesen HD et al. Patient and relative education in community psychiatry: a randomised controlled trial regarding its effectiveness. Social Psychiatry Psychiatr Epidemiol 1999;34:287-94.
84. Michielin P, Leoni S. Educazione all'uso dei farmaci e compliance: uno studio preliminare. Riv Riabil Psichiatr Psicosoc 1992;1:43-6.
85. Pilsecker C. Hospital classes educate schizophrenics about their illness. Hosp Commun Psychiatry 1981;32:60-1.
86. Roncone R, Bolino F. Valutazione dell'intervento psicoeducazionale nelle famiglie di pazienti schizofrenici. Riv Sper Fren 1988;57:1214-38.
87. Seltzer A, Roncari I, Garfinkel P. Effect of patient education on medication compliance. Can J Psychiatry 1980;25: 638-45.
88. Spiegel D, Wissler T. Using family consultation as psychiatric aftercare for schizophrenic patients. Hosp Commun Psychiatry 1987;38:1096-9.
89. Williams CA. Patient education for people with schizophrenia. Perspect Psychiatr Care 1989;25:14-21.
90. Pereira Miragal J. Aplicación de la terapia familiar y del modelo psicoeducativo en una unidad de internamiento breve. Psiquis 1994;15:33-7.
91. Szmukler GI, Herrman H, Colusa S et al. A controlled trial of a counselling intervention for relatives with schizophrenia. Soc Psychiatry Psychiatr Epidemiol 1996;31:149-55.
92. Solomon P, Draine J, Mannion E et al. Impact of brief family psychoeducation on self-efficacy. Schizophr Bull 1996;22:41-50.
93. Brooker C, Falloon I, Butterworth A et al. The outcome of training community psychiatric nurses to deliver psychosocial intervention. Br J Psychiatry 1994; 165:222-30.
94. Brooker C, Tarrier N, Barrowclough C et al. Training community psychiatric nurses to undertake psychosocial intervention: report of a pilot study. Br J Psychiatry 1992;160:836-44.
95. Curran J. Social skills training and behavioural family therapy for schizophrenia: a field trial. Presented at the World Congress of Behaviour Therapy, Edinburgh, September 1988.
96. Falloon IRH, Fadden G. Integrated mental health care. Cambridge: Cambridge University Press, 1993.
97. Kavanagh DJ, Piatkowska O, Clark D et al. Application of a cognitive-behavioural family intervention for schizophrenia in multi-disciplinary teams: What can the matter be? Aust Psychol 1993;28: 181-8.
98. McGorry PD, Edwards J, Mihalopoulos C et al. EPPIC: an evolving system of early detection and optimal management. Schizophr Bull 1996;22:305-26.
99. Whitfield W, Taylor C, Virgo N. Family care of schizophrenia. J Roy Soc Health 1988;1:1-4.
100. Mak KY, Wong MC, Ma LK et al. A cost-effectiveness study of a community-based family management rehabilitation programme for schizophrenic outpatients in Hong Kong: a six-month report. Hong Kong J Psychiatry 1997; 7:26-35.
101. Amenson CS, Liberman RP. Dissemination of educational classes for families of adults with schizophrenia. Psychiatr Serv 2001;52:589-92.
102. Leff J, Berkowitz R, Shavit N et al. A trial of family therapy v. a relatives group for schizophrenia. Br J Psychiatry 1989; 154:58-66.
103. Montero I, Asencio AP, Ruiz I et al. Family interventions in schizophrenia: an analysis of non-adherence. Acta Psychiatr Scand 1999;100:136-41.
104. Roncone R, Morosini PL, Falloon IRH et al. Family interventions in schizophrenia in Italian mental health services. In: Kashima H, Falloon IRH, Mizuno M et al (eds). Comprehensive treatment of schizophrenia. Tokyo: Springer-Verlag, 2002:284-9.
105. Schooler NR, Keith SJ, Severe JB et al. Relapse and rehospitalisation during

maintenance treatment of schizophrenia. Arch Gen Psychiatry 1997;54:453-63.

106. Wallace CJ, Liberman RP. Social skills training for patients with schizophrenia: a controlled clinical trial. Psychiatry Res 1985;15:239-47.
107. Andrews G. Talk that works: the rise of cognitive behaviour therapy. Br Med J 1996;313:1501-2.
108. Clarkin JF, Carpenter D, Hull J et al. Effects of psychoeducational intervention for married patients with bipolar disorder and their spouses. Psychiatr Serv 1998;49:531-3.
109. Glick ID, Clarkin JF, Haas GL et al. Clinical significance of inpatient family intervention: conclusions from a clinical trial. Hosp Commun Psychiatry 1993; 44:869-73.
110. Miklowitz DJ, Goldstein MJ. Behavioral family treatment for patients with bipolar affective disorder. Behav Modif 1990;14:457-89.
111. Honig A, Hofman A, Rozendaal N et al. Psycho-education in bipolar disorder: effect on expressed emotion. Psychiatry Res 1997;72:17-22.
112. Miklowitz DJ, Simoneau TL, George EA et al. Family-focused treatment of bipolar disorder: one-year effects of a psychoeducational program in conjunction with pharmacotherapy. Biol Psychiatry 2000;48:582-92.
113. Wang X, Wang F, Ma A et al. A controlled study of family education for bipolar disorders. Chinese Ment Health J 2000;14:399-401.
114. Huxley NA, Parikh SV, Baldessarini RJ. Effectiveness of psychosocial treatments for bipolar disorder: state of the evidence. Harv Rev Psychiatry 2000;8: 126-40.
115. Keitner GI, Miller IW. Family functioning and major depression: an overview. Am J Psychiatry 1990;147:1128-37.
116. Beach SR, O'Leary KD. Treating depression in the context of marital discord: outcome and predictors of response of marital therapy versus cognitive therapy. Behav Ther 1992;23:507-28.
117. Emanuels-Zuurveen L, Emmelkamp PM. Spouse-aided therapy with depressed patients. Behav Modif 1997;21:62-77.
118. Friedman AS. Interaction of drug therapy with marital therapy in depressive patients. Arch Gen Psychiatry 1975; 32:619-37.
119. Jacobson NS, Dobson K, Fruzzetti AE et al. Marital therapy as treatment for depression. J Consult Clin Psychol 1991; 51:547-57.
120. Jacobson NS, Fruzzetti AE, Dobson K et al. Couple therapy as a treatment for depression: II. The effects of relationship quality and therapy on depressive relapse. J Consult Clin Psychol 1993; 61:516-9.
121. Leff J, Vearnals S, Brewin CR et al. The London Depression Intervention Trial. Randomised controlled trial of antidepressants v. couple therapy in the treatment and maintenance of people with depression living with a partner: clinical outcome and costs. Br J Psychiatry 2000;177:95-100.
122. Teichman Y, Bar-El Z, Shor H et al. A comparison of two modalities of cognitive therapy (individual and marital) in treating depression. Psychiatry Interpers Biol Proc 1995; 58:136-48.
123. Waring EM, Chamberlaine CH, McCrank EW et al. Dysthymia: a randomised study of cognitive marital therapy and antidepressants. Can J Psychiatry 1988; 33:96-8.
124. Waring EM, Chamberlaine CH, Carver CM et al. A pilot study of marital therapy as a treatment for depression. Am J Fam Ther 1995;23:3-10.
125. Falloon IRH, Shanahan W, Laporta M. Prevention of major depressive episodes: early intervention with family-based stress management. J Ment Health 1992;1:53-60.
126. Perry A, Tarrier N, Morriss R et al. Randomised controlled trial of efficacy of teaching patients with bipolar disorder to identify early symptoms of relapse and obtain treatment. Br Med J 1999; 318:149-53.
127. Craske MG, Burton T, Barlow DH. Relationships among measures of communication, marital satisfaction and exposure during couples treatment of agoraphobia. Behav Res Ther 1989;27: 131-40.
128. Daiuto AD, Baucom DH, Epstein N et al. The application of behavioral couples therapy to the assessment and treatment of agoraphobia: implications of empirical research. Clin Psychol Rev 1998;18:663-87.
129. Falloon IRH, Lloyd GG, Harpin RE. The treatment of social phobia: real-life rehearsal and non-professional therapists. J Nerv Ment Dis 1981;169:180-4.
130. Hafner RJ. Marriage and mental illness. New York: Guilford Press, 1986.
131. Laidlaw TM, Falloon IRH, Barnfather D et al. The stress of caring for people with obsessive compulsive disorders. Commun Ment Health J 1999;35:443-50.
132. Mathews AM, Gelder MG, Johnson DW. Agoraphobia: nature and treatment. New York: Guilford Press, 1981.
133. Van Noppen B, Steketee G, McCorkle BH et al. Group and multifamily behavioral treatment for obsessive compulsive disorder: a pilot study. J Anxiety Disord 1997;11:431-6.
134. Glynn SM, Eth S, Randolph ET et al. A test of behavioral family therapy to augment exposure for combat-related posttraumatic stress disorder. J Consult Clin Psychol 1999;67:243-51.
135. Crisp AH, Norton K, Gowers S et al. A controlled study of the effect of therapies aimed at adolescent and family psychopathology in anorexia nervosa. Br J Psychiatry 1991;159:325-33.
136. Dare C, Eisler I, Russell G et al. Psychological therapies for adults with anorexia nervosa: randomized controlled trial of out-patient treatments. Br J Psychiatry 2001;178:216-21.
137. Robin AL, Siegel PT, Moye AW et al. A controlled comparison of family versus individual therapy for adolescents with anorexia nervosa. J Am Acad Child Adolesc Psychiatry 1999;38:1482-9.
138. Russell GF, Szmukler GI, Dare C et al. An evaluation of family therapy in anorexia nervosa and bulimia nervosa. Arch Gen Psychiatry 1987;44:1047-56.
139. Eisler I, Dare C, Hodes M et al. Family therapy for adolescent anorexia nervosa: the results of a controlled comparison of two family interventions. J Child Psychol Psychiatry 2000;41:727-36.
140. Geist R, Heinmaa M, Stephens D et al. Comparison of family therapy and family group psychoeducation in adolescents with anorexia nervosa. Can J Psychiatry 2000;45:173-8.
141. Miller WR, Meyers RJ, Tonigan JS. Engaging the unmotivated in treatment for alcohol problems: a comparison of three strategies for intervention through family members. J Consult Clin Psychol 1999;67:688-97.
142. Barrowclough C, Haddock G, Tarrier N et al. Randomized controlled trial of motivational interviewing, cognitive behavior therapy, and family intervention for patients with comorbid schizophrenia and substance use disorders. Am J Psychiatry 2001;158:1706-13.
143. Falloon IRH, Graham-Hole V, Woodroffe R. Stress and health of informal carers of people with chronic mental disorders. J Ment Health 1993;2:165-73.
144. Dixon L, McFarlane WR, Lefley H et al. Evidence-based practices for services to families of people with psychiatric disabilities. Psychiatr Serv 2001;52:903-10.

Does family psychoeducation have a future?

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When Carol Anderson and I sat down in 1977 to construct what we called "family psychoeducation" (1), three recent and compelling publications had convinced us that an alternative to traditional family therapy was an idea whose time had come. Hirsch and Leff had failed to find convincing evidence that parental behavior contributed to the etiology of schizophrenia (2). Shortly thereafter, Vaughn and Leff (3) offered a striking confirmation of the observation that the attitudes of close relatives could drive the course of already affected individuals in a positive or negative direction, a construct that has subsequently been extended to other disorders and non-familial relationships. At the same time, we were aware of the new Goldstein study which convincingly showed that a brief, 4 session, untraditional problem solving approach to the family's management of illness could, in the context of appropriate medication, dramatically lower short-term relapse rates (4). We were thus encouraged to develop a theoretically driven approach that hypothesized a long-term reduction in the traditional high relapse rate for schizophrenia, if only the 'emotional temperature' of the home environment could be lowered, thereby decreasing the demands on patients who might have a limited information processing capacity (5). Beyond its 'stress management' components, the approach required a then unfamiliar 'alliance' with the family, the teaching of day to day survival skills, and a collaborative stepwise plan for reintegrating the patient into family and community life. The family's common emotional responses to schizophrenia were addressed (denial, fear, guilt, frustration, anger and hopelessness) along with attempts to improve communication and problem solving skills. Coping strategies that could counter the family's unhelpful attempts to normalize or ignore psychotic behavior (and the needs of other family members) were introduced. Research support was received from the National Institute of Mental Health (NIMH) in 1978 and ultimately the results among 103 patients and families, treated for 2 years, exceeded our expectations (6,7). We never envisioned the worldwide research effort that developed. In an impressive attempt to summarize the results of these diverse investigations, Falloon has clearly shown that family psychoeducation, when combined with antipsychotic medication, possesses a prophylactic efficacy against relapse that is at least twice that of medication and support.

So why is it (in North America at least) that few families of the severely mentally ill have ever been offered family psychoeducation (8), despite a quarter century of replications? Even among the rare families that are engaged, most appear to receive an occasional lecture or 'bibliotherapy', but not one of the evidence based family approaches. Dixon et al (8) have identified a myriad of policy and organizational obstacles to implementation, including staff burdens, cost, skepticism, philosophical differences and lack of leadership. Obtuse, post-modernist formulae now proclaim the need for a multi-disciplinary industry comprised of organizational, systems and learning theorists, decision making analysts, and information scientists in order to implement novel behavioral interventions (9). However, the facts speak to a more narrowly drawn reality: the absence of a dedicated funding source.

I have long felt that many mental health leaders, who in some parts of the world have abrogated treatment policy to the 'managers' of care, have been adversely influenced by a tradition of therapeutic nihilism regarding the psychosocial treatment of schizophrenia. Even the least costly treatments, such as Goldstein's approach (4), are rarely if ever implemented. In the hands of managed care administrators, however, mental health expenditures as a percent of all health care costs have fallen dramatically in recent years (10). The criterion of 'medical necessity' (a culturally defined value judgment) has limited patient access to the more efficacious albeit costly treatments. Only 10% of the severely mentally ill patients, for example, have access to psychosocial rehabilitation programs in the US. Insurance reimbursement, the most feasible funding source for psychosocial treatment in the US, is uniformly biased against the severely mentally ill (11). Mechanic and McAlpine warn the purchasers of these low cost products that the severely mentally ill will be the least likely to enjoy technological advances in treatment (11). In brief, there seems little hope for the implementation of efficacious psychosocial treatments, including family psychoeducation, without a dedicated funding source at the national and/or local levels. (Once funds are available, even the most nihilistic mental health leader will likely become an enthusiastic advocate of family psychoeducation.)

What we do not need at the moment are more efficacy studies designed to silence the skeptics. A colleague once remarked (quoting his mother's developmental advise) that 'maturity is knowing when enough is enough'. Most remaining questions about family psychoeducation are the artifacts of poorly designed studies.

Family psychoeducation is a stabilization phase intervention, and the psychosocial treatment studies of schizophrenia (12) [or affective disorder (13)] that rule-out symptomatically unstable patients from maintenance treatment have not and will likely never be able to demonstrate an effect on relapse (or on adjustment, since poor functioning is often the mirror-image of relapse). Research replications have had little effect on implementation. The most widely implemented, but least replicated, psychosocial treatment for schizophrenia is 'supportive psychotherapy' (14). In the absence of demonstrated efficacy, 'support' is nevertheless the least expensive intervention to provide because managed care systems rarely require the provider credentials that increase cost. (New medications become quickly implemented, not because of replications among more representative users, but because of an enormous, dedicated marketing resource).

Other efficacious, patient oriented, stabilization phase interventions now complement family psychoeducation (15-17). More importantly, the field is moving to develop cognitive rehabilitation strategies that target the social and vocational disability of otherwise symptomatically stable patients who are in the recovery phase (18). We have recently suggested a cost effective treatment algorithm that attempts to integrate these evidence-based practices, both family and patient centered, as well as individual and group approaches (19). Most patients and families have clear treatment requirements and preferences that can be flexibly accommodated.

What world psychiatry does need is a vocal and influential advocacy for the public and/or private funding of evidence-based psychosocial treatments that have demonstrably lowered morbidity and increased functioning and quality of life for the severely mentally ill. The future of family psychoeducation, and other phase-relevant interventions, is entirely dependent on it.

References

1. Anderson CM, Hogarty GE, Reiss D. Family treatment of adult schizophrenic patients: a psychoeducational approach. Schirophr Bull 1980;6:490-505.
2. Hirsch SR, Leff JP. Abnormalities in the parents of schizophrenics. London: Oxford University Press, 1975.
3. Vaughn CE, Leff JP. The influence of family and social factors on the course of psychiatric illness. Br J Psychiatry 1976;129:125-37.
4. Goldstein MJ, Rodnick EH, Evans JR et al. Drug and family therapy in the aftercare of acute schizophrenia. Arch Gen Psychiatry 1978;35:1169-77.
5. Anderson CM, Reiss DJ, Hogarty GE. Schizophrenia and the family: a practitioner's guide to psychoeducation and management. New York: Guilford Press, 1986.
6. Hogarty GE, Anderson CM, Reiss DJ et al. Family psychoeducation, social skills training and maintenance chemotherapy in the aftercare treatment of schizophrenia: I. One-year effects of a controlled study on relapse and adjustment. Arch Gen Psychiatry 1986;43:633-42.
7. Hogarty GE, Anderson CM, Reiss DJ et al. Family psychoeducation, social skills training, and maintenance chemotherapy in the aftercare treatment of schizophrenia, II: Two-year effects of a controlled study on relapse and adjustment. Arch Gen Psychiatry 1991;48:340-7.
8. Dixon L, Lyles A, Scott J et al. Services to families of adults with schizophrenia: from treatment recommendations to dissemination. Psychiatr Serv 1999; 50:233-8.
9. NIMH. Dissemination and implementation research in mental health: Program announcement 02-131, 2002.
10. Buck JA, Umland B. Covering mental health and substance abuse services. Health Affairs 1997;16:120-6.
11. Mechanic D, McAlpine DD. Mission unfulfilled: potholes on the road to mental health parity. Health Affairs 1999;18:7-21.
12. Schooler NR, Keith SJ, Severe JB et al. Relapse and rehospitalization during maintenance treatment of schizophrenia-The effects of dose reduction and family treatment. Arch Gen Psychiatry 1997;54: 453-63.
13. Frank E, Kupfer DJ, Perel JH et al. Three-year outcomes for maintenance therapies in recurrent depression. Arch Gen Psychiatry 1990;47:1093-9.
14. Fenton WS. Evolving perspectives on individual psychotherapy for schizophrenia. Schizophr Bull 2000;26:47-72.
15. Garety PA, Fowler D, Kuipers E. Cognitive-behavioral therapy for medication-resistant symptoms. Schizophr Bull 2000; 26:73-86.
16. Heinssen RK, Liberman RP, Kopelowicz A. Psychosocial skills training for schizophrenia: lessons from the laboratory. Schizophr Bull 2000;26:21-46.
17. Hogarty GE, Kornblith SJ, Greenwald D et al. Three-year trials of personal therapy among schizophrenia patients living with or independent of family, II: Effects on adjustment of patients. Am J Psychiatry 1997;154:1514-24.
18. Hogarty GE, Flesher S. Practice principles of cognitive enhancement therapy. Schizophr Bull 1999;25:693-708.
19. Hogarty GE. Personal therapy for schizophrenia and related disorders: a guide to individualized treatment. New York: Guilford Press, 2002.

The cup is both half empty and half full

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Ian Falloon's summary of the efficacy and effectiveness of family treatment for mental disorders underscores both the strength and rigor of the evidentiary base for these interventions as well as the substantive gaps in our knowledge. Prevention of major episodes of psychopathology is the most consistent finding of studies of family interventions in schizophrenia. Remission of residual symptoms, enhanced social outcomes, family benefits and reduced cost have all been reported in high quality studies, though the results are not always consistent.

One issue that remains somewhat under debate is precisely how to characterize the family interventions that achieve improved outcomes. Ian Falloon's review emphasizes the importance of 'stress management' and 'stress reduction' strategies. The article correctly points out that it is not entirely clear which combination of ingredients are 'active' in promoting the success of these programs. This lack of clarity increases the challenge of combining family interventions with other types of programs to optimize outcomes. An important challenge for future research is to close this knowledge gap so that the program can be delivered to the most people at the least cost.

Ian Falloon's review underscores another issue: the relative dearth of controlled studies of family interventions for mental disorders other than schizophrenia. Every mental disorder affects the family, and it is likely that the converse is true. It makes sense that some level of family involvement is just part of good psychiatric practice, and that controlled trials of providing education and support should not be necessary. However, the paucity of well-articulated and well-conceptualized intervention programs that utilize family strengths and recognize family stresses with the range of different mental illness is no doubt a lost opportunity for our field.

A final gap in our knowledge left unmentioned by Falloon's review is the proliferation of peer-based programs led by family members. These programs have the overt goal of helping families, and are not client-based. An example in the US of a very widespread peer-based family program is the National Alliance for the Mentally Ill's Family to Family Education Program (FFEP). This is a 12-week structured program that is provided within the community (not within the mental health system). It is based on a trauma recovery model. The FFEP provides education about mental illnesses, support, help in problem solving, and help negotiating the treatment system of the local community. The existence of these programs raises two important concerns: the lack of dissemination of clinic-based family intervention programs and the lack of efficacy data for peer-based programs.

Programs such as the FFEP, like many peer-based programs, grew up in a tradition that excluded research. Research has been viewed with suspicion. Fortunately, this is changing as recovery-focused models have become more mainstream. Two recent studies of the FFEP, one uncontrolled (1) and one controlled (2), demonstrate that the program reduces the family's subjective illness burden and increases empowerment. Results were sustained six months after program completion. Clearly, more research is needed on the impact of peer-based programs.

This leads to the final disappointing reality of the lack of widespread availability of professionally based effective family treatments for mental disorders. The barriers to dissemination of family interventions occur at the system, clinician, patient and even family levels. Perhaps the most important research agenda to be tackled is how to overcome these barriers and make these programs available to the patients and families who need them.

References

1. Dixon L, Stewart B, Burland J et al. Pilot study of the effectiveness of the Family-to-Family Education Program. Psychiatr Serv 2001;52:965-7.
2. Dixon L, Lucksted A, Stewart B et al. Outcomes of the NAMI Family to Family Education Program. Submitted for publication.

Issues in the dissemination of family intervention for psychosis

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Families play an essential role in supporting people with long-term mental illness in the community. In the UK, over 60% of those with a first episode of a major mental illness return to live with relatives, and this would seem to reduce only by 10-20% when those with subsequent admissions are included (1). However, the carer role is often not an easy one and may be associated with considerable personal costs. In schizophrenia, estimates from different studies suggest that up to two thirds of family members experience significant stress and subjective burden as a consequence of their caregiver role (2). Not only is such stress likely to affect the well being of the relatives and compromise their long-term ability to support the patient, but it may also have an impact on the course of the illness itself and on outcomes for the client. Hence, one of the most important advances in the treatment of schizophrenia in the last twenty years has been the development of family based intervention programmes.

As detailed in Ian Falloon's paper, there is now robust evidence for the efficacy of this form of treatment, with many randomised controlled trials having demonstrated the superiority of family intervention over routine care in terms of patient relapse, hospitalisation and other outcomes. However, the dissemination of the interventions has not been without problems. From recent meta-analytic reviews, it is now clear that the short education or counselling programmes offered as family interventions are insufficient to have an impact on patient outcomes and do not affect relapse rates: "A few lessons on schizophrenia… was simply not sufficient to substantially influence the relapse rate" (3). For the future, the quality of interventions needs to be enhanced and monitored to ensure that families are offered the intensity of help likely to give them substantial benefits. Successful family interventions require considerable investment in time, skill and commitment. Since for many patients the effect is to delay rather than to prevent relapse, many patients and families will need long-term and continuing intervention. Work with relatives of recently diagnosed schizophrenia patients indicates that this help needs to begin from the first onset of the psychosis (4).

As Ian Falloon also notes, in recent years one of the biggest challenges has been to disseminate the benefits of family intervention in schizophrenia into routine service delivery. In the UK this has been largely through training programmes designed to provide clinicians, mainly community psychiatric nurses, with the knowledge and skills required to implement the family work (see 5 for a review of dissemination programmes). Despite the solid evidence base for the efficacy of family based psychological treatment programmes in schizophrenia, and the efforts of the training programmes, the implementation of family work in routine mental health services in the UK has been at best patchy. The consensus view in the literature is that family intervention implementation faces complex organisational and attitudinal difficulties (see, for example, 6), and insufficient attention has been paid to these in dissemination programmes. In discussing the factors which might make the transference from research to practice difficult, Mari and Streiner (7) suggested that the requirements of durable service oriented interventions may differ from those based on time limited research models.

In an attempt to demonstrate the effectiveness of family interventions in standard psychiatric settings which take account of these differences, a randomised controlled pragmatic trial was carried out (8). The family intervention was based on the formal assessment of carer needs, and the programme was carried out by a clinical psychologist in conjunction with the patient's key worker - thus training was in situ. The fact that the intervention was found to be effective in reducing carer needs and in reducing patient relapse at 12 months post treatment (9) suggests that there are advantages in developing dissemination models based within services. The need for changing the clinical practice of the whole service rather than training individuals is underlined in the work of Corrigan and colleagues (10-12). However, difficulties arise not only from staff but also from carer reluctance to engage in family work. Several studies of community samples (e.g., 8,13) have shown that carer participation in family intervention is relatively low, with only 50% or so of carers taking up the offer of either a support service or family intervention (8), with possibly higher rates when help is offered at a time of crisis.

Looking to the future, dissemination and engagement issues need to continue to be addressed and the implementation of family programmes within services presents many challenges. Further work needs to be done to identify optimum techniques for changing family attitudes where problems are particularly complex, for example in schizophrenia and co-morbid substance misuse. To date only one recent trial has evaluated a family based component for this client group (14).

References

1. Gibbons JS, Horn SH, Powell JM et al. Schizophrenia patients and their families. A survey in a psychiatric service based on a district general hospital. Br J Psychiatry 1984;144:70-7.
2. Barrowclough C, Tarrier N, Johnston M. Distress, expressed emotion and attributions in relatives of schizophrenic patients. Schizophr Bull 1996;22:691-701.
3. Pitschel-Waltz G, Leucht S, Bauml J et al. The effect of family interventions on relapse and rehospitalisation in schizophrenia - a meta-analysis. Schizophr Bull 2001;27:73-92.
4. Kuipers E, Raune D. The early development of expressed emotion and burden in the families of first-onset psychosis. In: Birchwood M, Fowler D, Jackson C (eds). Early intervention in psychosis: a guide to concepts, evidence and interventions. Chichester: Wiley, 2000:128-40.
5. Tarrier N, Barrowclough C, Haddock G et al. The dissemination of innovative cognitive-behavioural psychosocial treatments for schizophrenia. J Ment Health 1999;8:569-82.
6. Hughes I, Hailwood R, Abbati-Yeoman J et al. Developing a family intervention service for serious mental illness: clinical observations and experiences. J Ment Health 1996;5:145-59.
7. Mari JJ, Streiner DL. An overview of family interventions and relapse in schizophrenia: meta-analysis of research findings. Psychol Med 1994;24:565-78.
8. Barrowclough C, Tarrier N, Lewis S et al. Randomised controlled effectiveness trial of a needs-based psychosocial intervention service for carers of people with schizophrenia. Br J Psychiatry 1999; 174:505-11.
9. Sellwood W, Barrowclough C, Tarrier N et al. Needs based cognitive behavioural family intervention for carers of patients suffering from schizophrenia: 12 month follow up. Acta Psychiatr Scand 2001; 104:346-55.
10. Corrigan VA, McCracken SG. Psychiatric rehabilitation and staff development: educational and organisational models. Clin Psychol Rev 1995;15:699-719.
11. Corrigan VA, McCracken SG. Refocussing the training of psychiatric rehabilitation staff. Psychiatr Serv 1995; 46:1172-7.
12. Corrigan VA, McCracken SG, Edwards M et al. Collegial support and barriers to behavioural programs for severely mentally ill. J Behav Ther Exper Psychiatry 1997;28:193-202.
13. Barrowclough C, Haddock G, Tarrier N et al. Randomised controlled trial of cognitive behavioral therapy plus motivational intervention for schizophrenia and substance use. Am J Psychiatry 2001; 158:1706-13.
14. McCreadie RG, Phillips K, Harvey JA et al. The Nithscale schizophrenia surveys. VIII. Do relatives want family intervention - and does it help? Br J Psychiatry 1991;158:110-3.

Issues for further refinement of family interventions in schizophrenia

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While medication is vital for people with schizophrenia, it is only one part of the treatment regimen. Treatment of individuals with schizophrenia requires a co-ordinated multidisciplinary approach. With the patient's consent, families and carers should be involved from the outset. In the acute phase, an experienced health professional should provide information to patients, families and carers on the illness, aetiology, course, treatment, and service options. After assessment and during the transition to the stabilisation phase, family intervention should be implemented in most cases. These interventions include psychoeducation, analysis of family relationships and functioning, and special sessions to address problems of the family. Of the psychosocial treatments, family interventions have proven the most promising in affecting patient outcome in schizophrenia. Family interventions clearly augment pharmacotherapy, resulting in reduced relapse rates, improved symptomatology, and better social and vocational functioning. The typical reduction of risk of relapse or rehospitalization is about 20 to 30% over 2 years. Research also suggests that family interventions improve quality of family relationships.

Despite these achievements, there are a variety of critical issues which are currently a topic of intense discussion in Germany. I will present a few of them.

Which are the active ingredients of family interventions?

Family therapy may work by reducing criticism and hostility (expressed emotion, EE) in the relatives of people with schizophrenia [1]. But is a reduction of high-EE behaviour really the crucial process which has to be achieved? Does a reduction of high-EE behaviour really lead to lower relapse rates in schizophrenia? Or is solely the improved knowledge about the illness and the treatments sufficient for a better course of the disorder? Or does a certain amount of relieve from the burden of care of the relatives improve outcome?

Although there is a clear correlation between high-EE behaviour and relapse, this correlation has no bearing on possible causal relationships. High-EE behaviour did not result in psychopathological symptoms of the patient, for instance, in the study of King et al [2] during 18 months. In the Treatment Strategies in Schizophrenia study (TSS) [3], the additional communication and problem solving training (applied family treatment) did not result in lower relapse rates compared to supportive family treatment, which comprised only psychoeducational workshops and regular multiple family meetings. Thus, this study has cast doubt on the relationship between familial communication skills and relapse. Bellack et al [4] addressed more specifically the issue whether applied family treatment had a better effect on familial communication than supportive family treatment. They assessed familial communication skills directly via videotaped problem solving tasks. They found comparable communication skills in both family treatment groups. Thus, familial communication skills did not influence the course of the disorder. According to these puzzling results, family treatment effects do not seem to be delivered by reduced EE-behaviours. This challenges one of the basic assumptions of the family treatment literature.

Thus, research combining outcome and process is still necessary in the future.

Do family interventions help to reduce the level of medication needed to prevent relapses?

Falloon mentions our German study on this issue [5]. In this study, we compared two alternative pharmacological maintenance approaches (standard-dose vs. targeted neuroleptic treatment), each of them combined with family intervention. In targeted treatment, medication is gradually discontinued; if clinical deterioration is noted, e.g., prodromal signs occur, medication is promptly reinstated. A significantly higher relapse rate was observed at 18 months in patients randomised to targeted treatment compared to those randomised to standard-dose treatment (35% vs. 4%). This study was not designed to assess the impact of family treatment on relapse rate; therefore, this aspect is exclusively descriptive. However, the 4% relapse rate after 18 months for family intervention in combination with standard dose neuroleptic treatment points to the cross-cultural efficacy of this psychosocial approach and is in line with the results reported by Falloon et al. [6,7]: 6% after 9 months; 17% after 24 months. These results also compare favourably with those obtained by other studies with family intervention, e.g. by Hogarty et al [8,9]: 19% after one year; 29% after 24 months.

The relapse rates for family intervention with targeted treatment were lower than those for usual care and other treatment groups (for instance, the comparison groups in family treatment studies that did not receive family intervention). Nevertheless, the family intervention in this study did not compensate for the risks given by the intermittent treatment. Thus, apparently, continuous low-dose maintenance pharmacotherapy represents the most favourable neuroleptic treatment for relapse prevention even under continuous psychoeducational family intervention.

Do family interventions help to prevent schizophrenia in the initial prodromal phase?

Diagnosing schizophrenia in the initial prodromal phase before the first psychotic episode would give the chance of treatment options preventing schizophrenia altogether. Such a treatment would represent the treatment of choice, given the suffering and burden of patients and relatives. In Germany, the first study has been conducted which gives evidence that an early detection strategy is possible by identifying disturbances such as thought interference, visual distortions, receptive language difficulties [10]. Early detection networks have been initiated in several countries, such as Australia, Norway, United States, England, Finland and Germany. Family interventions are one of the treatment options of choice especially in such early stages when people often do not regard themselves as patients, let alone schizophrenia patients. It is still to be seen if family interventions will help to prevent the illness and diminish problems that arise during the initial prodromal phase.

References

1. Wiedemann G, Rayki O, Feinstein E et al. The Family Questionnaire: development and validation of a new self-report scale for assessing expressed emotion. Psychiatry Res 2002;109:265-79.
2. King S. Is expressed emotion cause or effect in the mothers of schizophrenic young adults? Schizophr Res 2000;45:65-78.
3. Schooler NR, Keith SJ, Severe JB et al. Relapse and rehospitalization during maintenance treatment of schizophrenia: the effects of dose reduction and family treatment. Arch Gen Psychiatry 1997;54:453-63.
4. Bellack AS, Haas GL, Schooler NR et al. Effects of behavioural family management on family communication and patient outcomes in schizophrenia. Br J Psychiatry 2000;177:434-9.
5. Wiedemann G, Hahlweg K, Müller U et al. Effectiveness of targeted intervention and maintenance pharmacotherapy in conjunction with family intervention in schizophrenia. Eur Arch Psychiatry Clin Neurosci 2001;251:72-84.
6. Falloon IRH, Boyd JL, McGill CW et al. Family management in the prevention of exacerbations of schizophrenia: a controlled study. N Engl J Med 1982;306:1437-40.
7. Falloon IRH, Boyd JL, McGill CW et al. Family management in the prevention of morbidity of schizophrenia: clinical outcome of a two-year longitudinal study. Arch Gen Psychiatry 1985;42:887-96.
8. Hogarty GE, Anderson CM. Medication, family psychoeducation, and social skills training: first year relapse results of a controlled study. Psychopharmacol Bull 1986;22:860-2.
9. Hogarty GE, Anderson CM, Reiss DJ et al. Family psychoeducation, social skills training, and maintenance chemotherapy in the aftercare treatment of schizophrenia. II. Two-year effects of a controlled study on relapse and adjustment. Arch Gen Psychiatry 1991;48:340-7.
10. Klosterkötter J, Hellmich M, Steinmeyer EM et al. Diagnosing schizophrenia in the initial prodromal phase. Arch Gen Psychiatry 2001;58:158-64.

Family interventions for serious mental illness: translating research to practice

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In his paper, Ian Falloon reviews the research literature and concludes that family psychoeducation is an evidence-based practice that reduces relapse rates and facilitates the recovery of persons who have serious mental illness. A core set of characteristics of effective family psychoeducation programs has been developed, including the provision of emotional support, education, resources during periods of crisis and problem solving skills. However, Falloon and others (1,2) have pointed out that, despite its efficacy, the use of evidence-based family interventions in routine practice is extremely limited. The obvious next step is to determine how to integrate such interventions in existing systems of care.

Much of the literature on barriers to dissemination of evidence-based treatments has focused on the existence of attitudinal, knowledge-based, practical and systemic obstacles to implementation (3). The implicit assumption of this perspective is that decision makers at mental health programs do not recognize the value of evidence-based treatments and must be shown the error of their ways through the provision of training, technical assistance and ongoing supervision of clinical staff. While such dissemination efforts are clearly necessary, evidence and training alone generally do not lead to changes within service delivery systems (4). In our view, the critical missing component in many dissemination efforts is the failure to give voice to administrators, service providers, patients, families, and policy makers who can help identify the steps needed to translate research into clinical practice in particular settings. Giving voice to others means establishing a dialogue with a wide range of stakeholders on how best to implement research-based strategies. Such a dialogue requires attention to parameters of the local setting as much as to the treatment protocol itself. Long-term partnerships between service providers and researchers can lead to trust that then fosters an openness to examine system-wide changes in service settings (5). Documenting and clarifying the steps in developing relationships with key stakeholders that lead to the implementation of empirically validated treatment would be useful to others embarking on this journey.

An important part of the local setting is the social and cultural context of the families seeking treatment. Indeed, the available evidence suggests that family interventions have been successful in a wide range of cultural contexts around the world. However, little attention has been given to how the given intervention is adapted to the specific cultural context, if at all. Lefley and Johnson (6) address this limitation with their recent compilation of how family interventions have been used across the world. This effort points out the manner in which clinical researchers and practitioners have given voice to their own sociocultural context in adapting existing interventions as well as the sociocultural context of the families with whom they work. Efforts to integrate systematically the social and cultural worlds and to assess the effectiveness of such efforts are vitally needed. In particular, documenting how the intervention was modified for the particular context and whether that modification was related to specific clinical, social or familial outcomes would make a significant contribution (7). Systematic efforts to integrate the sociocultural context can improve the effectiveness of existing treatments for families from diverse sociocultural backgrounds as well as contribute to their acceptance and implementation.

One example of the importance of the sociocultural context is the finding that high family warmth in primarily immigrant, Mexican American families is related to a lower rate of relapse (8; see also references 9 and 10 for similar findings in other populations). What is curious about these findings is that most studies of families' expressed emotion failed to report results with regard to warmth or positive remarks, two indices of expressed emotion. As noted by Falloon, early on in this line of inquiry, investigators chose to examine predictors of relapse rather than protective factors against relapse. As a result, we learned little about what families do that is associated with a better course for individuals with a mental disorder. Giving voice to culturally diverse patient samples and being open to alternative factors (such as warmth) associated with the course of illness suggest that the predominant research paradigm with its focus on family negativity should be broadened. The implication of these findings for treatment is that attention to enhancing prosocial family functioning could help balance the current treatment emphasis on stress management and stress reduction.

As we consider how to bring effective family interventions to routine clinical practice, it is critical that clinical scientists be open to the perspectives of other stakeholders. The risk of engaging in a dialogue with stakeholders from differing perspectives is that the family interventions that result from these dialogues may differ from those studied under controlled settings. On the other hand, the risk of not doing so is that evidence-based interventions are not used in clinical practice.

References

1. Dixon L, Lyles A, Scott J et al. Services to families of adults with schizophrenia: from treatment recommendations to dissemination. Psychiatr Serv 1999;50:233-8.
2. Dixon L, McFarlane WR, Lefley H et al. Evidence-based practices for services to families of people with psychiatric disabilities. Psychiatr Serv 2001;52:903-10.
3. Goldman HH, Ganju V, Drake RE et al. Policy implications for implementing evidence-based practices. Psychiatr Serv 2001;52:1591-7.
4. Torrey WC, Drake RE, Dixon L et al. Implementing evidence-based practices for persons with severe mental illnesses. Psychiatr Serv 2001;52:45-50.
5. Drake RE, Goldman HH, Leff HS et al. Implementing evidence-based practices in routine mental health service settings. Psychiatr Serv 2001;52:179-82.
6. Lefley HP, Johnson DL (eds). Family interventions in mental illness: international perspectives. London: Praeger, 2002.
7. Lopez SR, Kopelowicz A, Cañive J. Strategies in developing culturally congruent family interventions for schizophrenia: the case of Hispanics. In: Lefley HP, Johnson DL (eds). Family interventions in mental illness: international perspectives. London: Praeger, 2002: 61-92.
8. Lopez SR, Nelson KA, Polo AJ et al. Ethnicity, expressed emotion, attributions and course of schizophrenia: family warmth matters. Submitted for publication.
9. Bertrando P, Beltz J, Bressi C et al.. Expressed emotion and schizophrenia in Italy: a study of an urban population. Br J Psychiatry 1992;161:223-9.
10. Ivanovic M, Vuletic Z, Bebbington P. Expressed emotion in the families of patients with schizophrenia and its influence on the course of illness. Soc Psychiatry Psychiatr Epidemiol 1994; 29:61-5.

Family interventions and empowerment as an approach to enhance mental health resources in developing countries

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In many developing countries, families have been partners in the care of persons with mental disorders for over five decades. This was so even when the rest of the world looked at families as a cause of mental disorders (1-4).

One of the first community studies in a developing country was carried out at Chandigarh, India, under the leadership of N. Wig (5). This study focussed on 'attempts to meet the needs of a group of chronic schizophrenics in the community'. The setting was the Modecate Clinic and the team consisted of a psychiatric nurse, one psychiatric social worker, and two psychiatrists. In this study, 30 of the persons suffering from chronic schizophrenia attending the special clinic were evaluated in detail for their symptoms and social functioning. Further efforts were made to provide required help to the ill individuals and the families. Interventions consisted of regular home visits, family counselling, marital counselling, contact with social welfare agencies and providing an understanding about the illness. All the families were visited at home periodically. These home visits became a source of support to the family. The visits were utilised to share the caring skills with the family members.

Another important study of this period was initiated at the National Institute of Mental Health and Neurosciences (NIMHANS), Bangalore by Pai and Kapur (6-10). In this study, two similar groups of schizophrenic patients (27 each), undergoing two treatment modalities, namely hospital admission and home treatment through a nurse, were compared for the outcome in terms of symptoms, social dysfunction, burden on the family, cost of treatment and outcome at the end of 6 months. The hospital group patients were admitted to the psychiatric wards and treated in a routine manner (average hospital stay was 6 weeks). The home care group remained in their homes. A nurse trained in patient follow-up and counselling visited the home regularly for the purpose of patient assessment and treatment. The frequency of the visits were determined by the severity of the illness and the level of anxiety expressed by the family. The two groups "were comparable and the differences in outcome could be safely attributed to the differences in the two systems of delivery of care". The home treatment through a visiting nurse gave a better clinical outcome and social functioning of the patient and greatly reduced the burden on the families. This treatment modality was also more economical.

A follow-up study was made of this group of patients after two years. 37 of the 54 patients could be contacted. It was observed that the home care group of patients had maintained significantly better clinical status than the controls and had been admitted less often (9). However, in terms of social dysfunction and burden on the family, the benefits of initial home care disappeared.

In a subsequent study, the focus of family care by visiting nurses was patients with a diagnosis of chronic schizophrenia (11). Two groups received the routine out-patient care and home care respectively. Each group had 32 patients and the duration of follow-up was two years. The two-year follow-up assessment showed that the home care group maintained better clinical status, as well as a better level of social functioning, but the differences were not statistically significant. Only two of the home care group were admitted to hospital over two years in comparison to 8 patients in routine care. The authors concluded that a home care service seems to offer a viable alternative mode of follow-up care for the chronically mentally ill population. Moreover, it may be possible to prevent repeated hospitalisations for these patients and offer them a better chance of long-term community adjustment.

During the latter part of 1980s, as part of the World Health Organization (WHO) collaborative study on 'Determinants of outcome of severe mental disorders', a substudy focussed on the specific cross-cultural aspects of expressed emotions (EE). The Chandigarh centre was under the leadership of N. Wig. In this comparison, two samples of relatives of first-contact patients with schizophrenia from Aarhus (Denmark) and Chandigarh (India) were assessed for the EE and their relationship with outcome. The training of the investigators from different cultures was satisfactory and it was found that the rating of critical comments could be transferred satisfactorily from English to Hindi (12,13). The Danish sample consisted of 28 patients, while the Indian sample consisted of 78 patients from the urban and rural areas.

56% of Chandigarh relatives made no critical comments at all, compared with 29% of Aarhus relatives and 28% of British relatives. While 16% of the British relatives scored 15 or more, no Chandigarh relative made more than 14 critical comments. The mean number of critical comments made by Indian urban relatives was 2.42, compared with only 0.58 for Indian rural relatives, and 8.4 for the British sample. In the Indian sample, warmth was likely to be associated with high criticism as well as low criticism, whereas in the English and Danish samples warmth was much more likely to accompany low criticism. The proportion of families categorised as high-EE was 54% in English and Danish samples as compared to 30% in the urban and 8% in the rural Indian samples. The author concluded: "The starting point for further studies could well be the major difference in distribution of EE components between the urban and rural relatives. The possible insights afforded by this line of enquiry could contribute to therapeutic endeavours to alter the emotional environment in high-EE homes".

In a subsequent report, Leff et al (14,15) followed up 86% of the above group of patients at the end of two years. In contrast to the one year findings, the global EE index at initial interview did not predict relapse of schizophrenia over the next two years. However, there was a significant association between initial hostility and subsequent relapse.

In view of the association of high EE and family attitude with the course and outcome of schizophrenia, and the known better outcome of schizophrenia in India (as well as other developing countries), the failure to follow up the above leads is unfortunate. This is an area for urgent attention by professionals.

During the recent years a number of investigators have studied in more details the family life of the persons with schizophrenic illness and factors associated with family care. These studies offer new understanding as well as potential avenues for further work.

Sharma et al (16) compared 78 patients living in the community with a diagnosis of schizophrenia in Liverpool, UK and 60 patients from the rural areas near Bangalore, India. In Liverpool only 20% were ever married as compared to 90% in Bangalore sample. Less than half of the patients were living with the family in Liverpool, while all but one patient in Bangalore were living with the family. Very few patients in Liverpool were employed. Inpatient treatment was common in Liverpool while it was rare in Bangalore. Illicit drug use was seen in 22% of Liverpool patients as compared to 2% in Bangalore. The authors conclude that "Bangalore patients were more socially integrated than Liverpool patients, who appeared socially marginalised".

During the 1990s, the movement to develop programmes for family members has been initiated in India. These include family education, family intervention, formation of self-help groups and greater support to families to become partners in care (17).

The focus of family interventions, to date, has been to build a relationship with caregivers based on understanding and empathy, focussing on the strengths of caregivers and assisting them to identify community resources, interventions to promote medication compliance, interventions to promote early identification of relapse and swift resolution of the crises, guiding families to reduce social and personal disability, guiding families to reframe expectations and moderate the affect in the home environment, guiding families to improve vocational functioning of the patient, emotional support to caregivers and development of self-help groups for mutual support and networking among families.

The need of the families to take up this important role is at three levels. Firstly, families need support from the professionals to acquire the skills of care, respite care and crisis support in emergencies, as well as emotional support to meet their own needs and to maintain the cohesion of the families. Secondly, the state should support families financially to offset the caring responsibility of the families and help them to form self-help groups. Thirdly, professionals have to change their attitudes and practices to develop a true partnership with the families and make the experiences of the family an essential part of the programme and policy development. Developing countries have an unique opportunity to build mental health programmes on the strengths of families.

The issues relating to the families empowerment are: growing urbanisation of India; breaking down of the traditional joint and extended families; increasing numbers of nuclear families; single parent families; families with working parents; families in distress due to economic deprivation, social marginalisation, alcohol dependence, chronic illnesses; growing numbers of elderly persons and families of mentally ill with elderly caregivers; increasing influence of mass media in shaping the aspirations of young people and family life.

References

1. Chacko R. Family participation in the treatment and rehabilitation of the mentally ill. Indian J Psychiatry 1967;9:328-33.
2. Kohmeyler WA, Fernandes X. Psychiatry in India: family approach in the treatment of mental disorders. Am J Psychiatry 1963;119:1033-8.
3. Bhatti RS, Janakiramiah N, Channabasavanna SM et al. Descriptive and manifestation of multiple family group interaction. Indian J Psychiatry 1980;22:51.
4. Bhatti RS, Janakiramiah N, Channabasavanna SM. Group interaction as a method of family therapy. Int J Group Ther 1982;32:103-14.
5. Suman C, Baldev S, Srinivasa Murthy R et al. Helping chronic schizophrenics and their families in the community - Initial observations. Indian J Psychiatry 1980;22:97-102.
6. Pai S, Kapur RL. The burden on the family of a psychiatric patient; development of an interview schedule. Br J Psychiatry 1981;138:332-5.
7. Pai S, Nagarajaiah. Treatment of schizophrenic patients in their homes through a visiting nurse: some issues in nurses training. J Nurs Studies 1982;19:167-72.
8. Pai S, Kapur RL. Impact of treatment intervention on the relationship between the dimensions of clinical psychopathology, social dysfunction and burden on families of schizophrenic patients. Psychol Med 1982;12:651-8.
9. Pai S, Kapur RL, Roberts EJ. Follow up study of schizophrenic patients initially treated with home care. Br J Psychiatry 1983;143:447-50.
10. Pai S, Kapur RL. Evaluation of home care treatment for schizophrenic patients. Acta Psychiatr Scand 1983;67:80-8.
11. Wig NN, Menon DK, Bedi H et al. Expressed emotion and schizophrenia in North India. I. Cross-cultural transfer of ratings of relatives expressed emotion. Br J Psychiatry 1987;151:156-60.
12. Wig NN, Menon DK, Bedi H et al. Expressed emotion and schizophrenia in north India. II. Distribution of expressed emotions components among relatives of schizophrenic patients in Aarhus and Chandigarh. Br J Psychiatry 1987;151: 160-5.
13. Pai S, Channabasavanna SM, Nagarajiah et al. Home care for chronic mental illness in Bangalore: an experiment in the prevention of repeated hospitalisation. Br J Psychiatry 1985;147:175-9.
14. Leff J, Wig NN, Ghosh A et al. Expressed emotion and schizophrenia in north India. III. Influences of relatives expressed emotion on the course of schizophrenia in Chandigarh. Br J Psychiatry 1987;151:166-73.
15. Leff J, Wig NN, Bedi H et al. Relatives expressed emotion and the course of schizophrenia in Chandigarh. A two year follow-up of a first contact sample. Br J Psychiatry 1990;156:351-6.
16. Sharma V, Srinivasa Murthy R, Kishore Kumar KV et al. Comparison of people with schizophrenia from Liverpool, England and Sakalawara-Bangalore, India. Int J Soc Psychiatry 1998;44:225-30.
17. Shankar R, Menon S. Family intervention programme in schizophrenia: the SCARF experience. In: Research on families with problems in India. Vol.1. Bombay: Tata Institute of Social Sciences, 1991:128-44.

Broadening the international base for the development of an integrated diagnostic system in psychiatry

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One of the long-cherished aspirations in international psychiatry has been the development of a common language to allow clinicians and researchers from the four corners of the world to be able to truly communicate with each other (1,2). This should allow the development of universal concepts of causation and the standardization of strategies and techniques in diagnosis and treatment of mental disorders, while avoiding the influence of confounding variables that might cloud their true nature. This aspiration has been the source of tremendous advances for psychiatry. It moved forward the field in the understanding of genetic and other biological factors of mental illness, and increased the reliability of psychiatric diagnosis in clinical practice and research across the world.

Taken to extremes, however, this aspiration can be the source of serious drawbacks. First, it may promote the generalization of reductionistic views of disease based on culturally biased cognitive schemas, which, if adapted to other cultures without consideration to local realities, may reach the level of ineffective myths without appropriate explanatory usefulness (3). In addition, this position may create the risky assumption that practitioners in developing areas of the world must accept and use uncritically theories and concepts about disease originated in the scientific centers of the developed world, with only marginal consideration to what is idiosyncratic to the particular patient who presents for diagnosis and care.

Although great differences remain in the amount and quality of resources (human, financial and otherwise) devoted to the study of mental illness between the developed and the undeveloped world, in recent years the increase in international communications and the direct influence of projects such as the WPA's International Guidelines for Psychiatric Diagnosis have provided an opportunity for a more assertive incorporation of the views of practitioners from the developed and the developing world to the process of production of knowledge concerning the multidimensional nature of mental illness. Their participation has brought to the fore the discussion of issues such as the effect of culture in the generation and shaping of mental illnesses and effective ways of treating and preventing them, especially in individuals from 'disparate cultures' living in developed countries (4).

This scenario has confronted mental health workers with new challenges. For those living in the undeveloped world, the main challenge remains the diligent incorporation of scientific methods and technology to gain in credibility concerning their views and the data coming from their local studies. They also must pay attention to ways in which advances in developed areas of the world can be incorporated locally in order to benefit the patients under their care while keeping connected to mainstream international psychiatry. For those practicing in the developed world, the main challenges remain taming ethnocentrism (5), and reviewing their self-fulfilling prophecies about the scientific production from the developing world. The goal should be to avoid the presumption that scientific contributions from developing countries are non-serious and flawed. An additional challenge is to commit scientists from developed areas to support such a production through collaborative participation and the effective transmission of scientific technology and methods to increase the quality of research in diagnosis and classification in those areas.

THE MEANING OF DIAGNOSIS IN PSYCHIATRY

Psychiatry and medicine at large are both sciences and arts, and as such, practicing them requires both skills and personal qualities that go beyond the mere application of standard reliable concepts to the definition of the patient's problems. Lee (6) has pointed out that psychiatric diseases are social constructs that have social uses for the specific social groups in which they are created and legitimized. For instance securing reimbursement seems an important factor behind the organization of the DSM diagnostic schema in the USA, a particular social use irrelevant to other societies with different ways of financing health services. In fact, Regier (2) has admitted that “complex issues of reimbursement to health care providers and implementation costs continue to delay the adoption of ICD-10 codes in the United States”. Fabrega (7) for his part has emphasized that while major and minor psychiatric disturbances are found in all societies, how they are labeled and understood as well as their social identity, need not conform to that of Western society, where these disturbances are accorded special social and medical status.

Diagnosis and classification in psychiatry inform treatment. Diagnosis, being one of the most central aspects of clinical practice in psychiatry, implies, as Lain-Entralgo (8) has argued, much more than assigning the patient a nosological diagnosis or reaching a differential diagnosis; it is actually understanding thoroughly what goes on in the mind and the body of the person who presents for care (4). In this line, since culture influences the way thoughts, feelings and behaviors are shaped and interpreted, the effective treatment of mental illness requires in fact the optimal contextualization of the clinical condition, in order to be effective in helping the patient and his/her family find appropriate solutions, as well as in the promotion of an optimal quality of living. Frank (9) has emphasized the importance for the psychotherapeutic process of the meanings the patient attributes to particular events in his/her own reality; and Korn (4) has pointed out the critical way in which this value system, obviously influenced by culture, can be critical in the patient/therapist relationship in dyads from disparate cultural backgrounds. As Regier (2) has recently admitted, “although DSM-IV tends to reflect a Western model of mental disorders, it does not fully address the different meanings of illness, treatment, and idioms of distress across the diverse array of ethnic, racial, and cultural groups in the United States”. The need is obvious for psychiatrists and other mental health workers in non-”Western” cultures to be critical and careful about how the diagnostic criteria of formidable systems such as DSM are applied to their local patient populations.

The WPA Section on Classification and Diagnostic Assessment approached this challenge through its project of the International Guidelines for Diagnostic Assessment (10) and came up with a comprehensive diagnostic plan that included both a systematic and an idiographic component. Such a system was also incorporated in the Latin American Guide for Psychiatric Diagnosis (GLDP) being developed by the Section on Diagnosis and Classification of the Latin American Psychiatric Association (11). Under this model a fair solution has been advanced not only to improve both validity and reliability, but also cultural sensitivity in psychiatric diagnosis.

A PERSPECTIVE FROM DEVELOPING COUNTRIES

Although experts from developing countries have made important contributions to the development of ‘official’ international diagnostic systems in the past (11,12), it was customary in a good number of textbooks of psychiatry from developed areas to view their contributions as basically marginal. Until recently, some in the Anglo-Saxon literature would refer to the ICD system as ‘the European’ approach to diagnosis in contrast with the ‘American’ DSM system. When addressing conceptual models of illness in the developing areas, the emphasis tended to be on the magical-religious traditions that dominated the cultural thinking in those areas in the past, rather than on the most current efforts of the official health system to develop more integrated and culturally sensitive models of disease and intervention. Traditional medicine is still practiced in many parts of the developed and undeveloped world with significant success. Murthy and Wig (12) have proposed, for instance, that unlike modern medicine, traditional models do not maintain a strict division between body and mind as it happens in Western tradition; as a result, the traditional healer tends to have a more holistic approach toward the patient, which may function better for a good number of patients in any cultural setting. But developing countries have also made significant advances in incorporating modern Western concepts of diagnosis and treatment of health problems. In mental health, of course, the application of models and concepts of disease deserves a more critical and careful consideration.

With the publication of ICD-10 in the early 1990s, there was a more intensive effort on the part of the World Health Organization (WHO) and the WPA to disseminate the international system as well as to offer training to clinicians from all corners of the world in the use of the new diagnostic system. This stimulated a renewed interest in the use of systematic diagnosis in psychiatry across the developing world. In Latin America, for instance, a survey carried out in 1994 among over 500 psychiatrists from seven countries showed that over 90% of those surveyed indicated to use a criterion-based system to diagnose patients in their practices (11). With its more general use, advantages and drawbacks of the system became evident among clinicians, researchers and academicians, and the need to pay attention to the more local aspects of the diagnostic process began to emerge. Clinicians were aware that the field had gained in reliability, but the usefulness of the diagnostic process to truly inform the treatment of the clinical condition had been undermined. As indicated by a participant in one of the numerous seminars which gave origin to the GLDP, “the comprehensive diagnostic model has allowed us to actually recoup the patient from the mere diagnostic label that became customary since the early 1980s”.

The end result of this healthy ‘tension’ between the need to take advantage of what is universal of the clinical condition of the patient, and to attend to more local sources of distress and particular expressions of mental ailments colored by cultural variables, has been a more active participation of experts in classification in the review of the international schema. An example of this has been the London Conference on Classification which took place in July 2001, during the Congress of the Royal College of Psychiatrists, whose proceedings have appeared as a supplement to Psychopathology (13). This seminal event brought to the front of the international arena the prestigious centers of expertise in classification, such as the WHO and the American Psychiatric Association. But also, presenters from several other developed and developing countries, who had the opportunity to offer their particular perspectives to diagnosis and classification in psychiatry, such as France, Japan, China, Latin America, and Cuba. It is through this more generalized participation of experts from developed and developing countries that a true "bottom-up" international system can be developed that represent the vision of those who, in direct contact with the patient, are more painfully aware of the strengths and weaknesses of any diagnostic model in use.

A LOOK AT THE FUTURE

The search for a common international language in psychiatric diagnosis must go on. Efforts to develop a truly international system of diagnosis and classification of psychiatric disorders are a valid and justified enterprise. However, it must be understood that a banner does not make a system truly international and that, in order for the system to be fairly and validly applicable in different cultures, it must be born out of the fair understanding of how the particular population of such a culture conceives, deals with and reacts to its own reality. In order to gain such understanding, a wide international discussion is necessary to develop databases to inform nosologic and taxonomic decisions in psychiatry. The opportunities are now more open than ever. We can only hope that all those interested in the advancement of psychiatry as a medical discipline can make the best out of them.

References

1. Sartorius N, Kaelber CT, Cooper JE et al. Progress toward achieving a common language in psychiatry. Results from the field trial of the clinical guidelines accompanying the WHO classification of mental and behavioral disorders in ICD-10. Arch Gen Psychiatry 1993;50:115-24.
2. Regier DA, Narrow W, First M et al. The APA classification of mental disorders: future perspectives. Psychopathology 2002;35: 166-70.
3. Lee S. Fat phobic and non-fat phobic anorexia nervosa: a comparative study of 70 Chinese patients in Hong Kong. Psychol Med 1993;23:999-1017.
4. Korn ML. Cultural aspects of the psychotherapeutic process. Presented at the 53rd Institute of Psychiatric Services of the American Psychiatric Association, Orlando, October 2001.
5. Alarcón RD. Culture and psychiatric diagnosis. Impact on DSM-IV and ICD-10. Psychiatr Clin North Am 1995;18:449-65.
6. Lee S. From diversity to unity: the classification of mental disorders in 21st-century China. Psychiatr Clin North Am 2001;24: 421-31.
7. Fabrega H Jr. Culture and history in psychiatric diagnosis and practice. Psychiatr Clin North Am 2001;24:391-405.
8. Lain-Entralgo P. El diagnóstico médico. Barcelona: Salvat, 1982.
9. Frank JD. Therapeutic components shared by all psychotherapies. In: Harvey JH, Parks MM (eds). Psychotherapy research and behavior change. Washington: American Psychological Association, 1982:9-37.
10. World Psychiatric Association. Essentials of the WPA International Guidelines for Diagnostic Assessment. Submitted for publication.
11. Berganza CE, Mezzich JE, Otero-Ojeda AA et al. The Latin American Guide for Psychiatric Diagnosis: a cultural overview. Psychiatr Clin North Am 2001;24:433-46.
12. Murthy RS, Wig NN. Psychiatric diagnosis and classification in developing countries. In: Maj M, Gaebel W, López-Ibor JJ et al (eds). Psychiatric diagnosis and classification. Chichester: Wiley, 2002:249-79.
13. Mezzich JE, Ustun TB (eds). International classification and diagnosis in psychiatry: critical experience and future directions. Psychopathology 2002;35:59-201.

Personality disorder in psychiatric practice

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This short article marks the inauguration of a new section, Personality Disorders, in the WPA. Everyone involved in psychiatry will be aware of this subject, which for many years was on the fringes and which some felt should be excluded altogether. In the past twenty years its importance has been recognised at all levels of psychiatric practice and improved understanding has helped to define many areas that formerly were uncertain and confused.

Personality disorder is manifest at all levels of the clinical practice of psychiatry. When discussing the aetiology, diagnosis, assessment, management and outcome of any psychiatric disorder, the influence of personality status needs to be considered. This is because a sufferer from mental disorder, whatever its nature, also has a personality, and the influence of this may be critical to understanding and treatment. However, the subject remains a young one and there are still many arguments and uncertainties that are currently being examined using several different approaches. It is useful to examine each of the areas of psychiatric practice to see what advances have been made in the last twenty years and also describe the areas of debate at the forefront of current thinking.

CLASSIFICATION

Summary of advances

Since the first classification by Schneider of 'psychopathic personalities' in 1923 (1) there has been a great deal of argument over the best way of defining and describing abnormal personalities. In the DSM-III, the American Psychiatric Association made the bold step of giving a separate Axis (Axis II) to personality disorder (2). This forced the diagnosis of personality disorder into psychiatric consciousness and this was stimulated further by the adoption of operational criteria for diagnosing each personality disorder, a procedure that was subsequently followed by the ICD-10 (3). There are now clear criteria for each of the main personality disorders - anti-social (dissocial), paranoid, schizoid, dependent, anankastic (obsessive-compulsive), emotionally unstable and anxious (avoidant). There continues to be some argument between ICD and DSM classifications over the position of borderline personality disorder - regarded as the main category in DSM and as a sub-category of emotionally unstable personality disorders in ICD - and over the status of narcissistic and schizotypal personality disorders. These are included in the DSM classification but not in the ICD one; schizotypal disorder is listed amongst the schizophrenias in ICD.

Areas of debate

The main categories of personality disorder, although hallowed by long use, are not particularly satisfactory. There is a great deal of overlap between them and it is rare to have a 'pure' personality disorder with no others co-occurring. A number of investigators, notably John Livesley in Canada (4,5), have demonstrated that the core elements of personality disorder are distributed amongst many individual categories and so it is hardly surprising that co-morbidity of personality disorder is so common.

It is difficult to know what should be done to solve this problem. There is a great deal of interest in the dimensional classification of personality disorder (a debate which is occurring within many parts of psychiatry) and there are arguments for a trait-based classification to replace the current Axis II in forthcoming DSM classifications. There is also evidence that those with more severe personality disturbance tend to have many more personality disorders than those with lower levels of disturbance. There has been some support for the cluster model of personality disorder. In this system all personality disorders are examined with regard to the odd and eccentric cluster (schizoid, paranoid, and schizotypal), the flamboyant or dramatic dissocial (anti-social, borderline, histrionic, narcissistic) and the anxious or fearful one (anxious or avoidant, dependent and anankastic or obsessive compulsive). There have been attempts to use the cluster model in a dimensional way to record personality abnormality at four levels of severity (6).

There is also continued argument over the status of 'psychopathy' as a personality dimension. Although there has been much concern expressed about the pejorative implications of the term 'psychopath', the notion of a glib, unfeeling, gratuitously violent, remorseless personality, first described well by Cleckley in 1941 (7), this concept has been promoted by Robert Hare in particular, and is particularly valuable in predicting criminal offending behaviour and violence (8).

ASSESSMENT

Summary of advances

The main advance in the assessment of personality disorders in the last twenty years has been the introduction of many structured interview schedules, particularly tailored to DSM and ICD classifications but also including some others. A better definition of the characteristics of personality disorder has enabled these features to be formally assessed using these schedules, which most commonly address the whole field of personality disorder but sometimes diagnose an individual category (e.g. borderline) only.

Areas of debate

Unfortunately, structured interview schedules, despite their many advantages, particularly in terms of improving reliability, do not agree with each other to the extent that is desirable. There is also a great deal of variation between clinicians' diagnosis of personality disorder and those derived from structured interview schedules (9). This means that clinicians who continue to state that the diagnosis of personality disorder is unreliable have some justification for these comments. It is probably fair to say that our assessment of personality disorder has improved to the extent that it is now in the same arena as other psychiatric diagnoses with regard to reliability but is still in the second division.

AETIOLOGY

Summary of advances

Only little research has been carried out with regard to the aetiology of personality disorders. Current models and theories of personality and personality disorders are mostly based on academic speculations. They bear very little, if any, empirical support. Treatment of personality disorder has for long time been taking place from the standpoint 'There is nothing as practical as a good theory' (10). Some studies though support the notion of genetic markers and dispositions to certain temperaments and to specific personality categories. Most notable are findings of the heritability of personality dimensions, like novelty seeking behaviour or impulsivity, linked to particular chromosomal loci and neurotransmitter systems (11). The schizotypal, paranoid and possibly the schizoid personality disorder also may belong to the same 'spectrum' as schizophrenia, as they share the same genetic vulnerability and environmental factors.

Impulsive aggressiveness is an important factor in some personality disorders and it has been reported as linked to specific receptor sites and to the serotonergic neurotransmitter system (12). Shyness and avoidance also seem to be a very stable, persistent factor from early childhood to adolescence and later stages in adulthood (13). Finally, there seems to be a link between conduct disorder and learning disabilities and later dissocial behaviour (14).

Areas of debate

Psychoanalytic theories have through many decades played an important role in description, understanding and treatment of personality disorders. Disturbed early relationship between the child and the parents, like separation issues, lack of support, harsh parental hostility, emotional neglect, are regarded as determinants of personality pathology. Many unstable personalities, like the borderlines, claim or are regarded to be victims of childhood sexual abuse or neglect (15). It is open for debate whether the abuse and its destructive impact on the victim, at least partly, is due to certain personality traits of the victimized or a real trauma. But the trauma seems not to be specific for personality disorders. Nevertheless, longitudinal high-risk studies to identify environmental and social predictors of personality pathology have yet to be conducted.

MANAGEMENT AND TREATMENT

Summary of advances

Personality disorder used in many countries to be regarded as untreatable. We now realise that it can be treated, probably successfully, and a small number of randomised controlled trials have been carried out in recent years that confirm the value of certain treatment approaches. The paucity of evidence of successful treatment is mainly related to the lack of research. Traditionally dynamic psychotherapy and milieu treatment were regarded as the most important treatment of personality disorder, but in recent years drug treatment has become more in focus in empirical research. The number of studies are insufficient for clear evidence-based guidelines, although these are beginning to be developed for borderline personality disorder (16). Antipsychotics seem in case reports to have some benefits in treatment of personality disorders in the schizophrenia spectrum (besides the schizoid) and sustained symptoms of obsessive ruminations or dissociative experiences. A limited number of studies support the use of selective serotonin reuptake inhibitors for the impulsive, moody and anxious personality disorders and of carbamazepine as an anti-aggressive agent (16). There has only been limited interest in outcome research of psychotherapy, but one randomised study showing the benefits of psychodynamic therapy and partial hospitalisation (day hospital care) has attracted great interest because of its very positive results (17,18). Various psychotherapeutic techniques have also been shown to have benefit in reducing parasuicidal acts and other symptoms (19,20).

Areas of debate

In order to have a successful treatment for personality disorder one needs a long period of treatment and intervals between assessments. This has not yet been carried out and there is always a suspicion that improvement in the short term may be a consequence of mental state changes rather than fundamental personality change.

Most patients are treated both by medication and psychosocial interventions. It has been found to be hard in the design to take into account and control for all the intervening variables. But treatment studies are important, because distinct and well-defined interventions may probe for the nature of personality disorder itself by careful analyses of potential mechanisms involved in the change.

OUTCOME

Summary of advances

The better assessment of personality disorders has also had its impact on outcome studies. Outcome is mainly studied with regard to two areas: a) the outcome of other mental disorders (Axis I) when they occur with or without co-morbid personality disorders, or b) the outcome of personality disorders per se. The results have generally shown (although there are exceptions) that the presence of a personality disorder impairs the outcome of Axis I disorders and this negative effect is greater in the longer than the shorter term. The study of personality disorder alone also suggests some important findings that need to be replicated. The flamboyant and dramatic cluster of personality disorders (Cluster B) tends to show improvement over the course of time (provided the sufferer remains alive), whereas Cluster A and Cluster C personality disorders remain the same or become more pronounced, particularly when a long time scale of many years is considered (21,22), but there is tremendous variation in outcome, not least because early mortality by suicide is not uncommon (23) and patterns of improvement vary greatly from one study to another (24,25).

A rare, but serious outcome of personality disorder is serious violence or homicide, and this is currently a topic of much debate. The collective evidence suggests that personality factors, but most notably the presence of psychopathy, are important statistical predictors of aggressive violent acts, but not sufficiently strong to advise the clinician in individual cases (8).

Areas of debate

"The current wave of psychological and sociological interest in delinquency has created a false impression, amongst technical workers as well as the lay public, that we already know about the causes of crime. All of this points to the necessity of producing at frequent intervals 'special numbers' on psychopathy, preferably devoted to those many matters concerning which we know next to nothing". These words of Glover and his colleagues, written in 1951 (26), could just have easily been written today. How much of the change that occurs in personality disorder is a consequence of the natural history of the disorder, an artefact of change in mental state, or a result of treatment? Until we know the first two of these, we will have difficulty in interpreting treatment studies, and unwise conclusions about the effectiveness of interventions will continue to be made.

CONCLUSION

Personality disorder research is up and running but the distance covered is short and there is no indication yet how far there is to go. This new section of the WPA is a useful milestone on the route and we hope to chronicle the progress we have made in future WPA publications.

References

1. Schneider K. Die Psychopathischen Persönlichkeiten. Berlin: Springer, 1923.
2. American Psychiatric Association. Diagnostic and statistical manual of mental disorders, 3rd revision. Washington: American Psychiatric Association, 1980.
3. World Health Organisation. ICD-10: classification of mental and behavioural disorders. Geneva: World Health Organisation, 1992.
4. Livesley WJ. Trait and behavioural prototypes of personality disorder. Am J Psychiatry 1986;143:728-32.
5. Livesley WJ. Classifying personality disorders: ideal types, prototypes, or dimensions? J Pers Disord 1991;5:52-9.
6. Tyrer P, Johnson T. Establishing the severity of personality disorder. Am J Psychiatry 1996;153:1593-7.
7. Cleckley H. The mask of sanity. London: Kimpton, 1941.
8. Monahan J, Steadman HJ, Silver E et al. Rethinking risk assessment: the MacArthur study of mental disorder and violence. Oxford: Oxford University Press, 2001.
9. Westen D. Divergences between clinical and research methods for assessing personality disorders: implications for research and the evolution of Axis II. Am J Psychiatry 1997;154:895-903.
10. Lewin K. Principles of topographical psychology. New York: McGraw-Hill, 1936.
11. Benjamin J, Li L, Greenberg BD et al. Population and familial association between the D4 dopamine receptor gene and measures of novelty seeking. Nature Genet 1996;12:81-84.
12. Coccaro EF, Kavoussi RJ, Sheline YL et al. Impulsive aggression

in personality disorder: correlates with 125I-LSD binding in the platelet. Neuropsychopharmacology 1997;16:211-6.

13. Kagan J, Reznick JS, Snidman N. Biological bases of childhood shyness. Science 1988;240:167-71.
14. Robins L. Deviant children grown up. Baltimore: Williams & Wilkins, 1966.
15. Zanarini MC, Williams AA, Lewis RE et al. Reported pathological childhood experiences associated with the development of borderline personality disorder. Am J Psychiatry 1997;154:1101-6.
16. American Psychiatric Association. Practice guideline for the treatment of patients with borderline personality disorder. Am J Psychiatry 2001;158 (Suppl.).
17. Bateman A, Fonagy P. Effectiveness of partial hospitalization in the treatment of borderline personality disorder: a randomized controlled trial. Am J Psychiatry 1999;156:1563-9.
18. Bateman AW, Fonagy P. Treatment of borderline personality disorder with psychoanalytically oriented partial hospitalisation: an 18-month follow-up. Am J Psychiatry 2001;158:36-42.
19. Evans K, Tyrer P, Catalan J et al. Manual-assisted cognitive-behaviour therapy (MACT): a randomised controlled trial of a brief intervention with bibliotherapy in the treatment of recurrent deliberate self-harm. Psychol Med 1999;29:19-25.
20. Guthrie E, Kapur N, Mackway-Jones K et al. Randomised controlled trial of brief psychological intervention after deliberate self poisoning. Br Med J 2001;323:135-8.
21. Black DW, Baumgard CH, Bell SE. The long-term outcome of antisocial personality disorder compared with depression, schizophrenia, and surgical conditions. Bull Am Acad Psychiatry Law 1995;23:43-52.
22. Seivewright H, Tyrer P, Johnson T. Change in personality status in neurotic disorders. Lancet 2002;359:2253-4.
23. McGlashan TH. The Chestnut Lodge Follow-up Study III: long-term outcome of borderline personalities. Arch Gen Psychiatry 1984;41:573-85.
24. Stone MH. Long-term outcome in personality disorders. Br J Psychiatry 1993;162:299-313.
25. Sanislow CA, McGlashan TH. Treatment outcome of personality disorders. Can J Psychiatry 1998;43:237-50.
26. Glover E, Mannheim H, Miller E. Papers on psychopathy. Br J Delinquency 1951;2:77-83.

RESEARCH REPORT

The Edinburgh High Risk Study: current status and future prospects

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Schizophrenia is a relatively common disorder with a lifetime risk of eight per thousand (1) and for the last 30 years extensive investigations have been conducted to try to understand the underlying mechanisms which give rise to the disease. It is known that genetic factors are important and it has widely been hypothesised for the last 15 years that schizophrenia is a disorder of neurodevelopment which is largely compensated until early adult life (2). Direct evidence for this is not yet available and could only be obtained if it were possible to examine people who are at risk to develop schizophrenia, at some stage before they become ill, comparing them with normal controls, and follow them through the period of risk of schizophrenia until they do or do not develop the psychosis.

Schizophrenia is not sufficiently common a disorder for such a design to be practicable in the general population. Prospective studies concerning people of enhanced risk (high risk studies) have been conducted for many years, for example the Copenhagen high risk project (3), the Israeli high risk study (4) and the New York high risk project (5). These studies have identified high risk individuals in infancy as the children of schizophrenic mothers. Such a design has many practical difficulties, largely because of the 20 year gap between the identification of the subjects and their entry to their period of maximum risk of the onset of schizophrenia.

The Edinburgh High Risk Study seeks to address these issues by investigating individuals who are at enhanced risk because they have two or more affected relatives, but who are identified in their later teens, just before they enter the period of maximum risk for the condition, and the question of whether they will develop schizophrenia is likely to be resolved one way or another within 10 years. This means that the whole study can be conducted within a 10 year framework, so that attrition of the sample is likely to be less than has been the case with the high risk studies concerning people identified as infants. A further advantage of the relatively short timeframe of the study is that the instruments and methods used to investigate the population from the point of their ascertainment will not be seriously out of date by the time the study is completed. The investigation is wide-ranging, involving psychopathological, psychological, social, imaging and other assessments. The study began in 1994 and will run until 2004, so that it is not yet complete and the final comparison of the baseline variables between control subjects, those high risk subjects who do develop schizophrenia and those who do not, cannot yet be carried out. Significant differences between the subject groups have, however, already been established for many of the comparisons made and detailed findings of the individual areas of work have been presented. This paper reviews the method of the study and the main findings obtained so far.

METHODS

Derivation of the sample

High risk individuals were defined as young people aged between 16-25, who did not have a history of serious psychiatric problems and had never been considered as psychotic, who had at least two first or second degree relatives affected with schizophrenia. This was done by examining casenotes of all patients with schizophrenia known to individual hospitals where there appeared to be two related cases. Consent was sought from one of the affected subjects to speak to a healthy relative, from whom a full family history was obtained, particular emphasis being given to the possibility of their being family members, aged 16-25, who were first or second degree relatives of the affected subjects. This was a labour-intensive process involving the scrutiny of over 2000 sets of casenotes and home visits to more than 500 potential subjects. When the investigation was planned, we were able to calculate the likelihood of individuals, from some specific families known to us, of developing schizophrenia by the age of 30, which was between 10 and 15%. We, therefore, determined that we should seek to obtain 200 high risk subjects with a view to 20-30 of them developing schizophrenia. There are two con-

Table 1 Baseline characteristics of the study groups

	High risk	Well controls	First episode schizophrenics
No. of cases	76M; 86F	17M; 19F	25M; 12F
Age (years, mean ± SD)	21.19 ± 2.97	21.17 ± 2.37	21.63 ± 3.69
Social class (%, based on paternal occupation)			
1 or 2	18.5	30.6	27.0
3 or 4	53.7	47.2	35.0
5 or 6	24.7	16.7	8.1
Unclassifiable	3.1	5.6	29.7

trol groups, each planned to be of about 30 subjects, to compare with those who will develop schizophrenia, one of age-matched individuals with no family history of psychotic disorder and one of age-matched cases of first episode schizophrenia who were not known to have a family history.

Two hundred and twenty nine suitable high risk individuals who were prepared to consider inclusion in the study were identified and, in the first five years of the study, 162 of these provided useful data. In order to achieve these numbers we included mental health services over much of Scotland, so that, in addition to having substantial numbers of subjects from the city of Edinburgh, we have included people from families living in the rural areas of Argyll, Clyde, Borders, Forth Valley, Lothian, Highlands & Islands and the towns and cities of Inverness, Dumfries, Perth and Greenock. These are areas of stable population where traditional patterns of family life largely persist, providing the extended family networks necessary for the study. As subjects are from such diverse environments, we have recruited the well controls from the social networks of the subjects themselves. The first episode cases were recruited from local hospitals and were balanced group-wise for age (and sex as far as possible) with the high risk subjects. The demographics and baseline social characteristics of the three groups studied are shown in Table 1.

Plan of study and assessments used

The study has been conducted in two phases. The first took place from 1994 to 1999 and the second will run from 1999 until 2004. The plan of the first phase was to assess all of the high risk subjects and both groups of controls at the point of ascertainment in terms of psychopathology, neuropsychology and brain structure as determined by structural magnetic resonance imaging (MRI). The first episode cases were assessed only on ascertainment while in the high risk subjects and in the well controls the assessments were repeated every 18 months. In addition to these measures, we also assessed childhood behavioural traits, schizotypal features, minor physical anomalies, dermatoglyphics, life events and substance use. Our main psychopathological instrument was the Present State Examination, ninth edition (PSE-9) (6) and, for simplicity, psychopathology was graded in terms of the following scale:

4 - definite schizophrenia
3 - any fully-rated psychotic feature from the specific categories of delusions, hallucinations and passivity experiences
2 - partially-rated symptoms as described in 3 and fully-rated other perceptual disorders
1 - no psychotic or possibly psychotic features but definitely recorded features in other categories such as depression and anxiety
0 - none of the above.

An extensive battery of neuropsychological tests was conducted, which has been described in detail elsewhere, but essentially consisted of tests of general intelligence, attention, motor speed, executive function, verbal learning and memory. Brain structure was assessed using structural MRI. Scans were initially assessed volumetrically, but have subsequently been re-assessed using voxel-based methods. Elements of childhood personality and behaviour, life events, minor physical anomalies, and other variables were assessed using standardised methods. We were also able to assess the degree of genetic liability that the high risk subjects had. This was done by two methods. The first was a categorical one, considering the numbers of relatives of first or second degree known to be affected, so that the categories were:

0 - no relatives affected, i.e. control subjects
1 - second degree relatives only
2 - one first degree and one or more second degree relatives
3 - two or more first degree relatives.

This method does not take account of the entire numbers of relatives that the subjects had and so we also developed a continuous method of genetic liability (described in Lawrie et al. [7]).

In the second phase (1999-2004) of the study, psychopathological assessments have continued and increasing numbers of subjects are gradually developing symptoms and becoming floridly unwell. We have been able to keep contact with a high proportion of the sample and serial functional MRI scans are being successfully conducted, but full results are not yet available.

Table 2 Highest Present State Examination (PSE) rating ever obtained in high risk subjects and well controls

Highest score ever obtained on PSE	High risk (valid %) (n=162)	Well controls (valid %) (n=39)*
0	40 (25.8%)	26 (68.4%)
1	36 (23.2%)	8 (21.1%)
2	51 (32.9%)	1 (2.6%)
3	10 (6.5%)	3 (7.9%)
4	18 (11.6%)	0

* Three extra control cases were recruited in the second 5-year phase of study, as it initially appeared that we might not be able to keep contact with control subjects. Contact was achieved in the end (see Table 3)

Table 3 Current status of all subjects recruited for the study

Current status	High risk (n=162)	Controls (n=39)
PSE data complete	101	26
General practitioner says well	16	2
Withdrawn	9	1
Relative/individual reports well	(8)	
Status unknown	(1)	
Current and future appointments	15	3
Travelling/unavailable	1	-
Lost contact	20*	7*

* These numbers are still being reduced with active tracing methods

RESULTS

It is evident from Table 1 that the three groups of subjects are well matched, apart from the fact that there were fewer females in the first episode group. This would be expected in a sample of this age, as females have a slightly later age of onset than males (8). The unclassifiable social class of some of the schizophrenic control group is due to the fact that we were less well informed about the families of those subjects than of the other two groups. The difference in social class is not significant, but the finding that high risk subjects appear to be of somewhat lower occupational class is likely to be due to the fact that in a number of cases the fathers had schizophrenia and had suffered occupational decline.

It is evident from Table 2 that symptoms of all kinds, including psychotic symptoms, have occurred in both the control and the high risk group, but that they have been more frequent in the high risk sample. Schizophrenia itself has only been diagnosed in the high risk subjects (9). Eighteen of the high risk subjects have now developed schizophrenia and none of the controls has, although three control subjects did show a Category 3 PSE rating (i.e., they had isolated psychotic symptoms). Such symptomatology has not been sustained in the control subjects, who are all free of psychotic symptoms now. We are successfully maintaining contact with most subjects, both high risk and control, even though the study has now been in progress for more than seven years (Table 3).

We plan to see all subjects for a final assessment in 2003. In terms of the assessments carried out so far, Table 4 shows that, in addition to the differences in psychopathological findings described above, relatively poor neuropsychological performance is widespread in the high risk subjects. In some tests, this impaired performance is related to the degree of genetic liability, those with greatest genetic liability showing worse performance. This impairment of neuropsychological performance occurs in more subjects than are ever expected to develop schizophrenia (10,11). Those who do go on to develop psychotic symptoms show impairments within the range of the other high risk subjects at the beginning, but they deteriorate further as psychosis approaches (12). In terms of brain structure, high risk subjects have reduced amygdalo-hippocampal and thalamic volumes in comparison with controls from the outset of the study. Some of the structural changes relate to the degree of genetic liability, such that there is a greater deviation from control findings in those whose genetic liability is greater (7,13). In those subjects who go on to develop psychotic symptoms there are reductions in temporal lobe volumes (14). Thus, as far as both neuropsychology and brain structure are concerned, deviations from the normal are seen in more subjects than are predicted to develop schizophrenia and, to some degree, these deviations relate to genetic liability. As psychosis approaches, further deteriorations occur.

From Table 5 it is evident that measures of personality and behaviour, whether assessed with the patient at interview, on the basis of a maternal account, or on the basis of the subject's self-rating, are predictive of the development of psychotic symptoms and of schizophrenia (15-17). High risk subjects show more frequent abnormalities of neurodevelopment, including hypertelorism, than the control group, but these measures have no association with genetic liability (18,19). Genetic liability is clearly important, but within this sample, which has been selected on the basis of exceptionally high genetic liability, other non-genetic factors, namely illicit drug use and life events, are relevant to the devel-

Table 4 Principal findings so far

Psychopathology	All areas of psychopathology more frequent in high risk subjects than controls; schizophrenia only developing in high risk subjects
Neuropsychology	High risk subjects performed less well than controls in all tests of intellectual function and on aspects of executive function and memory, some of the latter being related to genetic liability. Further decline in function in those with psychotic symptoms
Brain structure as determined by magnetic resonance imaging	High risk subjects have reduced amygdalo-hippocampal and thalamic volumes compared to controls and larger amygdalo-hippocampi than schizophrenics Prefrontal and thalamic volumes relate to degree of genetic liability. High risk subjects with psychotic symptoms show reduction in temporal lobe volumes

Table 5 Additional findings

Childhood behavioural traits (maternal rating)	Various behaviours, particularly withdrawn, aggressive behaviour, aged 13-16, are significant predictors of the later development of psychotic symptoms and schizophrenic illness
Schizotypal features (assessed by interviews with psychiatrist)	A combination of schizotypal features, including social withdrawal, psychotic symptoms, socio-emotional dysfunction and odd behaviour, is predictive of schizophrenia. On an individual basis, these features are not predictive
Self-rated schizotypal cognitions	Total scores highly associated with the presence of psychotic symptoms and high scorers at increased risk of schizophrenia
Neurodevelopmental indices	Minor physical anomalies more frequent in high risk subjects than controls. No relationship with psychotic symptoms or genetic liability
Hypertelorism	Interlens and interorbital distance greater in first episode schizophrenics and high risk subjects than controls, but not associated with psychotic symptoms or genetic liability
Illicit drug use and life events	Cannabis and other illicit drugs associated with psychotic symptoms in high risk subjects and controls. Major life events associated with psychotic symptoms

opment of psychotic symptoms (20). Genes, therefore, are not everything even in a sample such as this.

DISCUSSION

This is a brief summary of the findings of a long and complex study. At present our interpretation is that what is inherited in these individuals of enhanced genetic liability is a state of vulnerability to schizophrenia which does not necessary translate into psychotic illness. The results are not yet complete, as the study has not reached its end point, but it appears likely that it will be possible to accurately predict, from a sample such as this, those individuals who are and are not at particularly enhanced risk of developing schizophrenia. It is important to note that some individuals of high genetic liability are entirely well (21). It is also important to note that, at least to some extent, modifiable environmental variables such as illicit drug use and major life events are relevant to the development of illness. From the imaging results described here, and indeed from functional imaging results which are only now becoming available, it is clear that this study is going to reveal important information about the pathophysiology of schizophrenia. In addition, it is demonstrating that before psychosis develops, changes in neuropsychological performance and indeed in psychopathology occur. Some of these changes are potentially modifiable, and it may be that the study will lead us to new effective interventions. Certainly, it is suggesting new possibilities for management.

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References

1. Jablensky A. Schizophrenia: recent epidemiologic issues. Epidemiol Rev 1995;17:10-20.
2. Weinberger DR. From neuropathology to neurodevelopment. Lancet 1995;346:552-7.
3. Cannon TD, Mednick SA. The schizophrenia high-risk project in Copenhagen: three decades of progress. Acta Psychiatr Scand 1993;370(Suppl.):33-47.
4. Mirsky AF, Kugelmass S, Ingraham LJ et al. Overview and summary: twenty-five-year followup of high-risk children. Schizophr Bull 1995;21:227-39.
5. Erlenmeyer-Kimling L, Rock D, Squires-Wheeler E et al. Early life precursors of psychiatric outcomes in adulthood in subjects at risk for schizophrenia or affective disorders. Psychiatry Res 1991;39:239-56.
6. Wing JK, Cooper JE, Sartorius N. The description and classification of psychiatric symptoms. An instruction manual for the PSE and Catego systems. Cambridge: Cambridge University Press, 1974.
7. Lawrie SM, Whalley HC, Abukmeil SS et al. Brain structure, genetic liability and psychotic symptoms in subjects at high risk of developing schizophrenia. Biol Psychiatry 2001;49:811-23.

8. Hafner H, Maurer K, Löffler W et al. The influence of age and sex on the onset and early course of schizophrenia. Br J Psychiatry 1993;162:80-6.
9. Johnstone EC, Abukmeil SS, Byrne M et al. Edinburgh high risk study - Findings after four years. Demographic, attainment and psychopathological issues. Schizophr Res 2000;46:1-15.
10. Byrne M, Hodges A, Grant E et al. Neuropsychological assessment of young people at high genetic risk for developing schizophrenia compared with controls: preliminary findings of the Edinburgh High Risk Study (EHRS). Psychol Med 1999;29:1161-73.
11. Byrne M, Clafferty BA, Cosway R et al. Neuropsychological function and schizophrenia risk. J Abnorm Psychol (in press).
12. Cosway R, Byrne M, Clafferty R et al. Neuropsychological change in young people at high risk for schizophrenia: results from the first two neuropsychological assessments of the Edinburgh High Risk Study. Psychol Med 2000;30:1111-21.
13. Lawrie SM, Whalley H, Kestelman JN et al. Magnetic resonance imaging of brain in people at high risk of developing schizophrenia. Lancet 1999;353:30-3.
14. Lawrie SM, Whalley HC, Abukmeil SS et al. Temporal lobe volume changes in subjects at high risk of schizophrenia with psychotic symptoms. Br J Psychiatry 2002;181:138-43.
15. Miller PM, Byrne M, Hodges A et al. Childhood behaviour, psychotic symptoms and psychosis onset in young people at high risk of schizophrenia: early findings from the Edinburgh high risk study. Psychol Med 2002;32:173-9.
16. Miller P, Byrne M, Hodges A et al. Schizotypal components in people at high risk of developing schizophrenia: early findings from the Edinburgh High-Risk Study. Br J Psychiatry 2002;180: 179-84.
17. Miller PM, Lawrie SM, Byrne M et al. Self-rated schizotypal cognitions, psychotic symptoms and the onset of schizophrenia in young people at high risk of schizophrenia. Acta Psychiatr Scand 2002;105:341-5.
18. Lawrie SM, Byrne M, Miller P et al. Neurodevelopmental indices and the development of psychotic symptoms in subjects at high risk of schizophrenia. Br J Psychiatry 2001;178:524-30.
19. Boyes J, Whalley HC, Lawrie SM et al. A MRI study of ocular hypertelorism in individuals at high risk of developing schizophrenia. Schizophr Res 2001;50:1-2.
20. Miller P, Lawrie SM, Hodges A et al. Genetic liability, illicit drug use, life stress and psychotic symptoms: preliminary findings from the Edinburgh study of people at high risk for schizophrenia. Soc Psychiatry Psychiatr Epidemiol 2001;36:338-42.
21. Johnstone EC, Cosway R, Lawrie SM. Distinguishing characteristics of subjects with good and poor early outcome in the Edinburgh High Risk Study. Br J Psychiatry 2002;181(Suppl. 43): 526-9.

RESEARCH REPORT

Acute stress reaction among victims of the 1999 Athens earthquake: help seekers' profile

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Natural disasters adversely affect the lives of large populations, disrupt their social network, and result in an enormous economic damage; consequently, they constitute a major traumatic experience with ensuing psychopathology (1-5). In the case of earthquakes, this has been repeatedly documented by various groups of investigators (6-18). However, research has dealt primarily with the long-term psychosocial consequences of earthquakes (6-18), while their immediate psychological effects have not been systematically investigated. Yet, early psychological reactions to stressful life events might be a herald for the eventual development of post-traumatic stress disorder (PTSD) (19,20), a frequently disabling and long-lasting condition.

Earthquakes constitute a common type of natural disaster in Greece. This is because Greece is in an area of high seismic activity. The earthquake which struck the Athens metropolitan area on September 7, 1999 had a magnitude of 5.9 on the Richter scale and was the second strongest over the last twenty years; actually, in certain residential areas, it caused large material and considerable human casualties. The main earthquake was followed by many after-shocks of a smaller magnitude that lasted for about a couple of weeks. The death toll rose to 152; in addition, more than 25,000 individuals were evacuated, mainly in tents close to their place of residence, and a few more thousands moved permanently elsewhere.

The main purpose of the present study was to assess the diagnosis of acute stress reaction according to the ICD-10 (21) criteria among individuals seeking help at a psychological support service for earthquake victims. An additional objective was to evaluate the effect of certain risk factors which may predispose to the development of acute stress reaction in disaster victims.

METHODS

Almost immediately following the 1999 Athens earthquake, the special service for the psychological support of earthquake victims of the Department of Psychiatry of the University of Athens was mobilized. Members of this service formed three psychosocial support units (PSU), two of them posted at the periphery of the Athens metropolitan area and one located at the Eginition Hospital (main facility of the Department of Psychiatry in the downtown Athens area). The primary aim was to provide relief from the traumatic experience and/or crisis intervention to the victims upon their request. Another major aim, however, was to investigate the acute psychological impact of the catastrophic event on these individuals.

During the six weeks of operation of the above three units, 159 subjects contacted their staff. The mean interval between the catastrophic event and the time of each subject's assessment was 8.2 ± 4.4 days (range: 2-22 days). For logistic or other reasons, 57 subjects had a rather brief contact with the PSU personnel, not allowing an assessment thorough enough for the needs of this study. Thus, only 102 subjects were clinically investigated. A team of psychiatrists conducted the assessments, after obtaining the subjects' consent.

Sociodemographic variables (sex, age, socioeconomic status, education, family status, property status, and housing conditions) were recorded. Also, data were collected on the type/extent of any personal and family material or physical damage, previous exposure to a highly stressful catastrophic event, the degree of exposure to the recent stressful event, and the preexistence of a mental disorder.

The diagnosis of acute stress reaction was made through a semi-structured clinical interview based on ICD-10 diagnostic criteria. 35 items were ascertained dichotomously as either present or absent. They were grouped into eight clusters: autonomic arousal symptoms (tachycardia, palpitations, pounding heart, sweating, trembling or shaking, dry mouth), symptoms involving chest and abdomen (difficulty in breathing, feeling of chocking, chest pain or discomfort, nausea or abdominal distress), symptoms involving mental state (feeling dizzy, unsteady, faint or light-headed, derealization or/and depersonalisation, fear of losing control, fear of dying), general physical symptoms (hot flushes or cold chills, numbness or tingling sensations), symptoms of tension (muscle tension or aches and pains, restlessness and inability to relax, feeling keyed up or mentally tense, difficulty in swallowing), dissociative symptoms (dissociative sensory or motor phenomena, dramatic behavior), 'other psychic' symptoms (withdrawal from expected social interactions, narrowing of attention, apparent disorientation, anger or verbal aggression, despair or hopelessness, inappropriate overactivity, uncontrolled and excessive grief), and other non-specific symptoms (startling, difficulty in concentrating, persistent irritability, difficulty in falling asleep). Furthermore, acute stress reaction was assessed as mild, moderate, or severe, according to the ICD-10 criteria of severity.

For the statistical handling of data, parametric (t-test) and non-parametric (chi-square or Kruskal-Wallis test) comparisons between groups were implemented.

RESULTS

Sociodemographic characteristics

Of the 102 subjects included in the study, 18.5% were males and 81.5% were females. Their mean age was 41.9 ± 13.9 years (range 18-75). In their majority, subjects were married (88%) and had children (80%); also, most of them (76.3%) had previously experienced a catastrophic event. Although 97% of the interviewees reported being indoors during the earthquake, only two had been slightly injured. 90% of the interviewees' houses had suffered repairable damages and 10% had been seriously damaged to the extent that they should be eventually rebuilt. At the time of the interview, all subjects were identified as evacuees temporarily settled in tents.

Diagnosis of acute stress reaction and prevalence of its symptoms

Of the 102 subjects included in the analysis, 87 (85.3%) fulfilled the ICD-10 criteria for acute stress reaction (30 for a mild, 29 for a moderate and 28 for a severe reaction). The remaining 15 subjects (14.7%), although presenting some symptoms of autonomic hyperarousal, did not fulfil the criteria. In the total sample, the most prevalent symptoms were either 'non-specific symptoms of stress response' (i.e., exaggerated startle response, 77.5%; difficulty getting to sleep because of worrying, 75.5%; difficulty in concentrating, 58.2%) or 'autonomic arousal symptoms' (i.e., pounding heart, 69.0%; trembling, 68.0%; dry mouth, 62.2%), while 'dissociative symptoms' (i.e., loss of ability to perform movements, 10.3%; loss of speech, 6.2%; loss of vision or hearing, 0%) were the least prevalent.

Factors related to the occurrence of acute stress reaction and its symptoms

No statistically significant difference was found between males and females in terms of the presence of the diagnosis of acute stress reaction (89.5% of males vs. 84.3% of females) or of any of its individual symptoms. Similarly, the subjects' age was not a significant factor for the presence of the diagnosis of acute stress reaction (41.4 ± 14.0 years in subjects with the diagnosis vs. 43.8 ± 13.0 years in those without the diagnosis) or of any of its individual symptoms.

Sociodemographic variables, factors related to the recent earthquake, or the preexistence of a mental disorder did not distinguish significantly subjects with vs. without the diagnosis of acute stress reaction. The only statistically significant difference between the two groups concerned previous exposure to a stressful catastrophic event (81% in those with vs. 50% in those without the diagnosis, $p<0.05$).

Factors related to the severity of acute stress reaction

Analysis using the Kruskal-Wallis test showed that within the group with the diagnosis of acute stress reaction (N=87) there were no significant differences among the three subgroups based on severity (mild, moderate, severe reaction), with respect to sociodemographic variables, factors related to the recent earthquake, and preexistence of a mental disorder. However, subjects who had previously experienced a stressful catastrophic event were significantly more prone to develop a severe acute stress reaction ($p<0.05$).

DISCUSSION

This is a study assessing the development of acute stress reaction among earthquake victims seeking help at a special psychosocial support facility. Consequently, its results cannot be compared to those of community-based epidemiological studies. However, useful observations pertaining to the psychological profile of help-seekers can be made. Defining this profile is expected to be crucial for early detection of acute stress reaction and assessment of its severity by care providers. This may facilitate adequate case management, a prerequisite for the prevention of disabling chronic stress-related disorders.

In our sample, the majority of subjects (85%) who sought assistance at the PSU after the earthquake fulfilled the ICD-10 criteria for acute stress reaction. Even the remaining 15% had some symptoms of acute stress, particularly symptoms of autonomic hyperarousal. Among those who had an acute stress reaction diagnosis, the most frequently encountered symptoms were 'non-specific' symptoms of stress response and autonomic hyperarousal. These symptoms essentially constitute an immediate, potentially transient reaction to any traumatic experience and considerably overlap with the normally expected emotional and behavioral response to stress. The prevalence of dissociative symptoms, which according to DSM-IV are required for the diagnosis of acute stress disorder, was rather low in our sample. This is in keeping with the findings of various studies which questioned the diagnostic significance of acute dissociative symptoms after trauma for the diagnosis of acute stress disorder, thus challenging the DSM-IV diagnostic requirements (22-24).

In contrast to the findings of previous studies, no significant differences were detected between those who developed acute stress reaction and those who did not, regarding the vast majority of variables that have been reported to influence post-disaster adjustment. Such variables include gender, age, marital and family status, occupation, education, life events (including past disaster experience), history of psychiatric disorder, personality characteristics and factors related to the traumatic event (intensity, duration, degree of exposure) (25-27). In the present study, among the variables evaluated, prior experience of a similar catastrophic event was the only one that differentiated those who developed acute stress reaction from those who did not, and distinguished between subjects with various severities of the reaction. This is in agreement with the findings of some other studies (28,29) and a recent large-scale epidemiological survey (30), which showed that cumulative stress and previous exposure to stressful life events, rather than any single recent traumatic experience, are the significant risk factors for the development of post-traumatic syndromes. The lack of significant effects of other sociodemographic factors is presumably due to the nature of the sample of this study: since subjects were help seekers, almost all of them were expected to score high in psychopathology, thus creating a 'ceiling effect' for any separate factor.

The main finding of the present study is that early reactions to a major traumatic event, such as a catastrophic earthquake, consist primarily of 'non-specific' symptoms of stress response and autonomic hyperarousal symptoms. The high prevalence of these symptoms and the relatively low frequency of other more specific acute manifestations of stress in response to trauma, particularly dissociative symptoms, are more in keeping with the ICD-10 conceptualization of acute stress reaction, which captures a broader range of peritraumatic responses than DSM-IV, wherein dissociative and PTSD-related symptoms dominate the symptom pattern of acute stress disorder. The aforementioned early post-traumatic symptoms, coupled with a previous experience of stressful events, characterize most individuals that develop an acute stress rection. Therefore, identifying highly symptomatic individuals with a history of previous trauma should be a priority for health care providers and psychological support personnel, in order to undertake the appropriate intervention/prevention measures.

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References

1. Horowitz M. Disasters and psychological responses to stress. Psychiatr Ann 1985;15:161-7.
2. McFarlane AC. Relationships between psychiatric impairment and a natural disaster: the role of distress. Psychol Med 1988;18:129-39.
3. Green BL. Evaluating the effects of disasters. J Consult Clin Psychol 1991;3:538-46.
4. Green BL, Lindy J. Post-traumatic stress disorder in victims of disasters. Psychiatr Clin North Am 1994;1:301-9.
5. Ursano RJ, McCaughey BG, Fullerton CS. Individual and community responses to trauma and disaster. Cambridge: Cambridge University Press, 1994.
6. Bland SH, O'Leary ES, Farinaro E et al. Social network disturbances and psychological distress following earthquake evacuation. J Nerv Ment Dis 1997;185:188-94.
7. Lima BR, Pai S, Santacruz H et al. Screening for the psychological consequences of a major disaster in a developing country: Armero, Colombia. Acta Psychiatr Scand 1987;76:561-7.
8. Papadatos Y, Nikou K, Potamianos G. Evaluation of psychiatric morbidity following an earthquake. Int J Soc Psychiatry 1990; 36:131-6.
9. Pynoos RS, Goenjian A, Tashjian M et al. (1993) Post-traumatic stress reactions in children after the 1988 Armenian earthquake. Br J Psychiatry 1993;163:239-47.
10. Karanci AN, Rustemli A. Psychological consequences of the 1992 Erzincan (Turkey) earthquake. Disasters 1995;19:8-18.
11. Kato H, Asukai N, Miyake Y et al. Post-traumatic symptoms among younger and elderly evacuees in the early stages following the 1995 Hanshin-Awaji earthquake in Japan. Acta Psychiatr Scand 1996;93:477-81.
12. Sharan P, Chaudhary G, Kavathekar S et al. Preliminary report of psychiatric disorders in survivors of a severe earthquake. Am J Psychiatry 1996;153:556-8.
13. Carr VJ, Lewin TJ, Webster RA et al. A synthesis of the findings from the Quake Impact Study: a two-year investigation of the psychosocial sequelae of the 1989 Newcastle earthquake. Soc Psychiatry Psychiatr Epidemiol 1997;32:123-36.
14. Lewin TJ, Carr VJ, Webster RA. Recovery from post-earthquake psychological morbidity: who suffers and who recovers? Aust N Zeal J Psychiatry 1998;32:15-20.
15. Fukuda S, Morimoto K., Mure K et al. Effect of the Hanshin-Awaji earthquake on posttraumatic stress, lifestyle changes, and cortisol levels of victims. Arch Environ Health 2000;55:121-5.
16. Goenjian AK, Steinberg AM, Najarian LM et al. Prospective study of posttraumatic stress, anxiety, and depressive reactions after earthquake and political violence. Am J Psychiatry 2000;157:911-6.
17. Knight BG, Gatz M, Heller K et al. Age and emotional response to the Northridge earthquake: a longitudinal analysis. Psychol Aging 2000;15:627-34.
18. Wang X, Gao L, Shinfuku N et al. Longitudinal study of earthquake-related PTSD in a randomly selected community sample in north China. Am J Psychiatry 2000;157:1260-6.
19. American Psychiatric Association. Diagnostic and statistical manual of mental disorders, 4th ed. Washington: American Psychiatric Press, 1994.
20. Classen C, Koopman C, Hales R et al. Acute stress disorder as a predictor of posttraumatic stress symptoms. Am J Psychiatry 1998;155:620-4.
21. World Health Organization. The ICD-10 classification of mental

and behavioural disorders. Diagnostic criteria for research. Geneva: World Health Organization, 1993.

22. Dancu CV, Riggs D, Hearst-Ikeda D et al. Dissociative experiences and posttraumatic stress disorder among female victims of criminal assault and rape. J Traumatic Stress 1996;9:253-67.
23. Shalev AY, Freedman S, Peri T et al. Predicting PTSD in trauma survivors: prospective evaluation of self-report and clinician-administered instruments. Br J Psychiatry 1997;170:558-64.
24. Marshall R, Spitzer R, Liebowitz M. Review and critique of the new DSM-IV diagnosis of acute stress disorder. Am J Psychiatry 1999;156:1677-85.
25. McFarlane AC. The aetiology of post-traumatic morbidity: predisposing, precipitating and perpetuating factors. Br J Psychiatry 1989;154:221-8.
26. Green BL. Psychosocial research in traumatic stress: an update. J Traumatic Stress 1994;7:341-62.
27. Paris J. Predispositions, personality traits, and posttraumatic stress disorder. Harv Rev Psychiatry 2000;8:175-83.
28. McFarlane AC. The prevalence and longitudinal course of PTSD: implications for the neurobiological models of PTSD. Ann NY Acad Sci 1997;821:10-23.
29. Breslau N, Chilcoat HD, Kessler RC et al. Previous exposure to trauma and PTSD effects of subsequent trauma: results from the Detroit Area Survey of Trauma. Am J Psychiatry 1999;156:902-7.
30. Kessler RC, Sonnega A, Bromet E et al. Epidemiological risk factors for trauma and PTSD. In: Yehuda R (ed). Risk factors for posttraumatic stress disorder. Washington: American Psychiatric Press, 1999:25-39.

MENTAL HEALTH POLICY PAPER

Mental health and mental health care in Latin America

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Latin America includes in geo-political terms thirteen countries in South America, six in Central America, Mexico, and thirteen located in the Caribbean Basin. Its total population reaches 513 million people, 60% of whom (almost 346 million) live in South America (with Brazil, Argentina and Colombia the most populated), and 20% (almost 99 million) in Mexico; Guatemala has the highest numbers in Central America (11 million), and Cuba (11 million), Dominican Republic and Haiti (8 million each) surpass the rest of the Caribbean countries. Spanish is the official language in seventeen countries of the region, Portuguese in Brazil (with almost 30% of the total population), and French, English, Flemish and a variety of dialects are spoken in the remainder thirteen countries, particularly the Caribbeans. It is said that more than 90% of the population is Catholic, but in recent decades Protestant churches seem to be making significant inroads, while folk religions and cults are still practiced by an estimated 15 million people in rural and isolated areas of the subcontinent.

More than 40% of the Latin American population was 15 years or younger in the year 2000, while individuals 60 years or older constituted up to 10% of the total. Women have almost six more years of life expectancy than men (74.1 vs. 68.7). It is estimated that both men and women in the region have already lost at least 10 years of life by the time of birth, compared to their counterparts in Europe and North America. This demographic picture, published by the World Health Organization (1), occurs against a background of approximately 36% of the Latin American population living below poverty levels in urban areas, and 10% in rural areas. Some countries, like Honduras, reach 74% in this parameter, in contrast to Chile or Costa Rica that show 20% or less. This all dramatizes the extraordinary disparities of wealth and income across the subcontinent: the greatest majority of people face significant economic deprivation, closely related to languishing job markets, low educational levels (only 15 to 20% of the total population obtain college degrees), deficient social infrastructure, and weak political stability.

More than half (54.9%) of health expenditures originate from the public sector. The social security sector is strong in Mexico (70.4%) and almost non-existent in the Caribbean subregion (3%). The majority of Latin American countries, however, devote less than 2% of their total health budget to mental health, thus compounding a dismal picture already affected by everyday stresses of all kinds (from massive internal migrations to a 'hidden epidemic' of domestic violence or from socio-political unrest to the ever-present risk of natural disasters). Even worse, the precarious budget allocations are primarily devoted to long-term cases, leaving meager resources for ambulatory care. This is aggravated by deeply rooted cultural characteristics, particularly those related to shame and guilt in the perception of cases of mental illness among families, distorted help-seeking patterns, religious and folk beliefs about causes and treatment, and the sheer unavailability of appropriate mental health services (2). The latter leads to ostensible violations of human rights of patients and families, even more evident if issues such as blatant deficiencies in the physical plants of psychiatric facilities where patients are housed, or an assortment of insults to their human dignity (quality of food or cover, anonymity, overt or covert mistreatment, social neglect, lack of organized activity) are taken into account.

Several epidemiological studies in the region have shown a consistent prevalence of 18-25% of mental disorders in communities, up to a 27-48% range in clinical settings (3). Between 12 and 29% of diagnosed or diagnosable conditions are detected in children and adolescents. For the year 2010, 35 million new cases per year are predicted; this will result in a glut of mental health facilities, and will be even worse if current levels of attention (only 1 out of 5 patients in need of treatment, actually receive it) are maintained. Depression and anxiety in all their clinical variants, plus somatoform and alcohol and drug abuse disorders (the latter, more than 20% of the estimated prevalence), in addition to the so-called "major" psychiatric disorders, are the most frequent risks.

Applying the Burden of Disease (BD) criteria to Latin American populations (4,5), the rubric of intentional injuries has 12% of its world total in this subcontinent, moving up to 29.2% when the injuries are explicitly related to acts of violence. Furthermore, Latin America shows 10.5% of the world total BD due to neuropsychiatric disorders: unipolar depression represents 35.7% among psychiatric entities, and alcoholism 18.2%, followed by schizophrenia (7.8%), bipolar affective disorder (6.6%), and substance abuse (5.6%). In the year 2000, 18 million people in the region suffered financially serious setbacks (unemployment, job dismissals, eviction, homelessness) as a result of clinically significant mental disorders.

In response to several pronouncements by international organizations, particularly the Pan American Health Organization (PAHO), that in 1990 reformulated - through a document called the Declaration of Caracas - the philosophy and orientation of mental health services in the region (6,7), 64.5% of Latin American countries have specific mental health policies, 80.6% have plans and programs, 67.9% have specific mental health legislation, and 87.1% provide disability benefits for psychiatric patients. What is not well documented is whether such instruments are effectively implemented and utilized. Countries such as Mexico, Chile, Costa Rica and Brazil have made clear advances in this area.

Recently, the same organizations have emphasized the necessity of decentralized policies, the involvement of community and primary care as crucial vehicles in the provision of mental health, a multidisciplinary approach to the care of the mental patients and their families, strong educational efforts, and consistent defense of human rights (8).

Human mental health resources in Latin America are very scarce. The estimated figures of 1.6 psychiatrists, 2.7 psychiatric nurses, 2.8 psychologists, and 1.9 social workers per 100,000 are far below those of Europe or the US (1,9,10). The greater concentration of these professionals in metropolitan areas leave unattended at least 45% of the total population in need. On the other hand, patients are seen first by non-professionals, second by non-psychiatric professionals, and only last by mental health professionals. Needless to say, insurance coverage is minimal, and mental health professionals are among the lowest paid in most countries. Their training takes place in insufficient facilities with limited teaching staffs, scarce equipment, and loose monitorization by academic centers or governmental agencies (11). In spite of a slight growth in absolute numbers of psychiatric vocations, for instance, the risk of emigration by future trainees is still present. Some countries - like Argentina, Chile, Brazil and Venezuela - are attempting to create international training consortia in the region, taking advantage of their respective strengths and making better use of technological innovations (12).

In Latin America there are approximately 3.3 psychiatric beds per 10,000 inhabitants. 47.6% of these beds are in psychiatric hospitals, 16.8% in general hospitals, and 35.6% in other community settings (13). Only three countries have more than 50% of their beds in general hospitals and residential settings. On the other hand, 86.7% of the countries have policies related to supply and provision of psychotropic agents, but more than 1/3 experience significant problems in the actual implementation of such policies.

In the last three or four decades, there have been significant efforts of mental health promotion and prevention in several Latin American countries. In Mexico, for instance, patients, families and communities have participated in interactive educational activities with assistance from non-governmental organizations. The literature has also documented successful experiences in countries such as Brazil, Honduras, Colombia, Venezuela, Argentina, Cuba, Chile and Bolivia (14).

Mental health research in Latin America has made some progress, but much remains to be done. Brazil, Argentina, Mexico and Chile are ahead in resources and productivity (15), but Mexican authors publish more consistently, in spite of a proportionately lower budget than the other three countries (US$ 20 per capita vs. 60 in Brazil; in the U.S. the assignment is US$ 827 per capita) (16). Eight countries have institutes theoretically devoted to mental health research, but only one (Mexico) works consistently towards such goal. The others may have the infrastructure but lack in policies, rules, operational systems and qualified personnel. The absence of solid financial support by the government seems to be at the root of this discouraging reality.

The above notwithstanding, Latin American psychiatry has produced significant research contributions, particularly in the areas of epidemiology, clinical studies, cultural issues, and psychopharmacology. There is an intense debate on the fate of basic research in the subcontinent, with slight dominance of those who advocate a social and clinical orientation more closely related to the actual plight of the majorities (17,18).

Among the most urgent needs of mental health operations in Latin America, the following are included: a) more support of provision of care, training and research through inter-sectorial alliances and initiatives; b) integration of mental health and primary care services and fostering of promotion and prevention activities; c) increase of the mental health workforce with multidisciplinary bases and appropriate geographic distribution; d) sharing and dissemination of applied research findings from collaborative centers of excellence in the region; e) implementation and improvement of effective mental health policies aimed at an adequate distribution of resources, establishment of priorities, and increased public sophistication on mental health matters; f) financial collaboration and technical support from international agencies and organizations.

References

1. World Health Organization. The World Health Report 2001. Mental health: new understanding, new hope. Geneva: World Health Organization, 2001.
2. Kirmayer L, Minas H. The future of cultural psychiatry: an international perspective. Can J Psychiatry 2000;45:438-46.
3. De Almeida Filho N, Canino G. Epidemiología psiquiátrica. In: Vidal G, Alarcón RD, Lolas F (eds). Enciclopedia iberoamericana de psiquiatría, Vol. 2. Buenos Aires: Editorial Médica Panamericana, 1995:487-501.
4. Murray CJL, Lopez AD. The global burden of disease. Cambridge: Harvard University Press, 1996.
5. Üstün TB. The global burden of mental disorders. Am J Publ Health 1999;89:1315-8.
6. Organización Panamericana de la Salud. Salud para todos en el año 2000. Plan de acción para la instrumentación de las estrategias regionales. Washington: Organización Panamericana de la Salud, 1982.
7. Levav I, Lima BR, Somoza-Lennon M et al. Salud mental para todos en América Latina y el Caribe. Bases epidemiológicas para la acción. Bol Sanit Panam 1989;107:196-219.
8. Vasquez J. Promoción y protección de los derechos humanos básicos de las personas con discapacidades mentales y sus familiares. Presented at the Conference on Mental Health in the Americas: Partnering for Progress, Washington, November 2001.
9. Alarcón RD. Hispanic psychiatry: from margin to mainstream. Transcult Psychiatry 2001;38:5-25.
10. Saraceno B, Saxena S. Mental health resources in the world: results from Project ATLAS of the WHO. World Psychiatry 2002;1:40-4.
11. Gonzalez R. Salud mental en la comunidad en América Latina. Ejemplo de programas. In: Levav I (ed). Temas de salud mental en la comunidad. Washington: Organización Panamericana de la Salud, 1992:291-312.
12. Academia Nacional de Medicina de Buenos Aires. Seminario-Taller sobre la formación del psiquiatra y su certificación. Buenos Aires: Prensa Médica Argentina, 2000.
13. Alarcón RD. Mental health in Latin America, circa 2001-2002. In: Sepúlveda J (ed). Salud panamericana. Mexico: Instituto Nacional de Salud Pública, 2002:114-26.
14. Vergara C. El contexto de las reformas del sector de la salud. Rev Panam Salud Pública 2000;8:7-12.
15. Pucheu C, Torres J, de la Fuente JR. Marcos de referencia para la investigacion socio-médica psiquiátrica. Salud Mental 1985;8:8-15.
16. Mari JJ. Mental health research in Latin America. Presented at the Conference on Mental Health in the Americas: Partnering for Progress, Washington, November 2001.
17. Alarcón RD. Perspectivas de la investigación psiquiátrica en América Latina. Acta Psiq Psicol Am Latina 1993;39:19-31.
18. Murray CJL, Gakidou EE, Frenk J. Health inequalities and social group differences: what should we measure? WHO Bull 1999;77:537-43.

Recent advances in graduate psychiatric training

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The graduate psychiatric training is currently undergoing a major reconceptualization and restructuring (1). This new and advanced educational initiative originated primarily in the United Kingdom, Canada, the United States and a few other countries from Western Europe. What is unique in this new graduate psychiatric training model is the fact that it is rapidly and effectively spreading in most regions of the world. Even among developing nations, interest and curiosity in this regard is strongly manifested.

In the past, the focus of graduate psychiatric training in most Western countries was directed to three basic areas - knowledge, skills and attitudes - and all graduate psychiatric training curriculums reflected quite well these three basic areas of training (2-5). Besides, much attention was also given to the appropriate evaluation of the outcome of the curriculum implementation in graduate psychiatric training (6-8). Currently, however, the curriculum emphasis has radically changed, and new curriculum models are nowadays being tried in several industrialized nations from the Western hemisphere, especially in England, Canada and the United States (1,9). These graduate psychiatric training curriculum changes and these educational reconceptualization models are not unique to psychiatry. Actually, they are currently reflected in all graduate subspecialty areas as well. It is within this context that in this article this new graduate psychiatric training approaches are addressed and discussed for the benefit of all psychiatric graduate training programs across the world.

THE CORE COMPETENCY MODEL

Although several countries are now using the core competency model in graduate psychiatric training, focus will be made to the model approach currently used in the United States since it is this one that I am more familiar with. However, in no way can a claim be made about the superiority of any particular model. Most models being currently utilized share the basic educational principles of graduate psychiatric training and also use similar techniques and approaches.

The core competency model is based in the training and assessment of six basic areas: a) medical knowledge, b) patient care, c) practice-based learning and improvement, d) interpersonal and communication skills, e) professionalism, and f) system-based practice. Let's discuss each of them in detail for the benefit of the readers.

Medical knowledge

The focus of this core competency is to train psychiatric residents on the knowledge areas related to the biomedical, clinical and social sciences aspects of psychiatry and, of course, about all knowledge related to the entire classification of psychiatric disorders or conditions. These areas of knowledge will be taught during the psychiatric residency period. It is also expected that this areas of knowledge will be learned and applied in an open-model basis, as well as applying analytical approaches as this knowledge is acquired. This knowledge needs to be critically evaluated in accordance with the most up-to-date scientifically, evidence-based approaches. A good balance between the basic and clinical sciences should be pursued, with attention given to the role of the behavioral, psychological, and sociocultural aspects of all psychiatric disorders or conditions. Clinical problem-solving, clinical-decision making, and critical scientific thinking should be deeply integrated in the foundation of the learning and application of this psychiatric knowledge.

Patient care

The emphasis of this core competency is to teach and to help graduate psychiatric residents to provide patient care in an appropriate, compassionate and effective manner, and directed to the promotion of health/mental health, prevention of psychiatric illness, appropriate treatment of psychiatric disorders and conditions, and appropriate assistance during the death and dying period. In this regard, it is expected that learning and its application will include the gathering of accurate and needed clinical information from all appropriate sources, such as patients, patients' families, etc., as well as throughout clinical interviews, physical examinations when needed, medical records, and diagnostic and/or therapeutic procedures. The clinical recommendations made should have a strong evidence-based medicine approach, a good clinical judgment, and take into account patients' preferences. Clinical recommendations should also include diagnostic, therapeutic and preventive options as needed. Effective psychiatric care should take place with full involvement of the patient and when appropriate of the patient's family as well.

Practice-based learning and improvement

The essence of this core competency is the appropriate learning and application of the use of scientific-based evidence, appropriate methods of investigation of psychiatric illnesses, appropriate patient care evaluation, and appropriate methods of improving psychiatric care practices. Thus, strategies directed to improve and/or enhance psychiatric knowledge, skills and attitudes should take place on an ongoing basis. Psychiatric practice outcomes should also be analyzed and evaluated on an ongoing basis. Additionally, mechanisms to continuously improve the quality of psychiatric care must be given priority. Learning from clinical mistakes and errors should take place in order to improve the system of psychiatric care. Access to appropriate information technology and techniques directed to the management of information as it relates to psychiatric care should be given high priority and fully utilized. This emphasis should certainly have beneficial effects for psychiatric education as well.

Interpersonal and communication skills

The objective of this core competency is the learning and application of effective interpersonal and communication skills directed to establish and to maintain effective professional relationships with psychiatric patients, their families, and members of the mental health teams, as well as other professionals from within and outside the psychiatry field. For instance, for the effective provision of psychiatric consultations and psychiatric liaisons with professionals other than psychiatrists. In this respect, it is expected that sound ethical principles will be used. Likewise, effective observation and listening to verbal and non-verbal communications, as well as questioning and narrative skills, need to be learned and applied. Finally, comprehensive, timely, and legible medical records should be maintained at all times.

Professionalism

The goal of this core competency is the development and maintenance of behavior that reflects ethical values, responsible attitude vis-à-vis psychiatric patients, the profession, and society at large, manifestation of sensitivity and understanding towards patients' ethnic, racial, sociocultural and gender differences, and commitment to continuous professional development. In this context, demonstration of integrity, compassion, empathy, respect and altruism vis-à-vis patients should be of high priority. Likewise, principles such as confidentiality, scientific/academic integrity, and informed consent must receive high priority. Similarly, the identification and recognition of deficiencies in the performance of peers must not only be given high priority but be addressed as well.

Systems-based practice

The aim of this core competency is the learning of the context and the systems in which psychiatric care is provided, as well as the ability to effectively apply this learning to improve and to optimize psychiatric care. For instance, to learn about available psychiatric resources (hospitals, day hospitals, halfway houses, advocacy agencies, etc.) in the community, knowledge about the existence of psychiatric providers, and how to access and utilize these resources and these professionals to achieve optimal psychiatric care. Also, learn and understand the limitations of these resources and the gaps in the existing mental health system in the local community, in order to develop the most appropriate strategies to optimize psychiatric care. Additionally, learn how to develop and apply cost-effective approaches directed to diagnose, treat and prevent psychiatric disorders and conditions. Be fully cognizant of the need to use evidence-base psychiatric treatments. Be ready to collaborate with other members of the health and mental health care teams, as well as agencies, in order to help psychiatric patients to effectively deal with complex systems of care. Also, help to improve the process of psychiatric care in these systems.

An integral component of this new 'core competency model of graduate psychiatric training' is the ongoing evaluation of these six core competencies throughout the entire period of graduate psychiatric training. Additionally, different levels of emphasis for each of these six basic core competencies need to be applied in each year of graduate psychiatric training. By the end of the graduate psychiatric training period, however, it is expected that these six core competencies will be fully addressed and learned. Similarly, psychiatric residents should be able to effectively apply each of these six core competencies by the end of the graduate psychiatric residency period.

THE ROLE OF THE CORE COMPETENCY MODEL BEYOND GRADUATE PSYCHIATRIC TRAINING

In some Western countries, and in the United States in particular, the role of these six basic core competencies is also having an impact beyond graduate psychiatric training. In the United States, for instance, these six core competencies are projected to very soon be utilized in the certification and recertification process in a new approach called ‘maintenance of certification’. Under the concept of ‘maintenance of certification’ four basic components need to be taken into consideration. They are:

a) Evidence of professional standing
b) Evidence of a commitment to lifelong learning and involvement in periodic self-assessments
c) Evidence of cognitive expertise
d) Evidence of evaluation of performance in practice

These four components will certainly impact on the different stages of a physician/psychiatric career. That is, during psychiatric training, prior to certification, during certification and recertification, and prior and during the recertification process. In other words, as a manifestation of a lifelong professional learning process. In this context, some of the above-mentioned six core competencies or different levels of each of them will be used during the certification exams as well as during the recertification exams or assessments. The American Board of Medical Specialties (ABMS), and within this umbrella Board the American Board of Psychiatry and Neurology, Inc. (ABPN), is already embarked in this process (9). Without question, the ‘maintenance of certification’ clearly depicts a ‘lifelong learning process’.

The impact of the above six basic core competencies is also strongly felt in the United States within the boundaries of the Accreditation Council for Graduate Medical Education (ACGME). This non-for-profit agency’s mission is to review and accredite all graduate and postgraduate residency training programs in the United States. Currently, the ACGME is changing all of its program requirements along the lines of the core competency model. This means that all residency training programs in this country will need to change their graduate training clinical and didactic curriculums into the core competency model in order to comply with the accreditation process of ACGME.

Likewise, all in-service training examinations being conducted in the USA are in the process of changing their curriculums to reflect the core competency model as well. For instance, the American College of Psychiatrists (ACP), which conducts annually the ‘psychiatric residency in-service training examination’ (PRITE), is rapidly changing its curriculum to reflect the core competency model. As the growth of specialization in graduate medical education continues to take place in industrialized nations, like the United States, this core competency model will become even more significant (10). Similarly, I expect sooner rather than later that the US medical schools will incorporate into their ‘problem-based learning’ curriculum approaches the concept of the core competency model (11). Without question, the role of the core competency model will have a long lasting effect in graduate psychiatric training in the United States, Canada, the United Kingdom, and some other industrialized nations from Western Europe. It additionally looks as if this effect on graduate psychiatric training will also soon have an educational impact in most graduate psychiatric training programs across the world.

THE ROLE OF EVALUATION WITHIN THE CORE COMPETENCY MODEL

Intrinsic to the design and implementation of the core competency model in graduate psychiatric training is its evaluation and assessment. Thus, much attention has recently been given to the appropriate methodology direct to assess and evaluate the outcome of the implementation of the core competency model (12). In this regard, different methodologies are being used for the appropriate evaluation/assessment of each of the six core competencies. Some evaluation methodologies, however, can be used with more than one of the six core competencies. Among the most common methods being currently used, the ones recommended by ACGME are depicted in Table 1. In this table, the core competencies are coded as follows: 1: medical knowledge, 2: patient care, 3: practice-based learning and improvement, 4 interpersonal and communication skills, 5: professionalism, and 6: system-based practice.

Hopefully, this table will help the reader to better understand and assess the methods of evaluation of the core competency model currently in use in the United States.

Table 1 Evaluation of the outcome of the implementation of the core competency model

Methods of evaluation	**Core competencies**					
	1	2	3	4	5	6
Record review		X	X			X
Chart stimulation recall	X	X	X		X	X
Check list		X	X	X	X	X
Global rating		X	X			
Standardized patient		X	X	X		
Objective structured clinical evaluation (OSCE)		X	X	X	X	X
Simulations and models	X	X	X		X	
360° global rating	X	X	X	X	X	X
Portfolios		X	X		X	X
Multiple choice questions exam (MCQ exam)	X		X			X
Oral exam	X	X	X		X	
Procedures or case logs		X	X		X	
Patient survey	X	X	X	X	X	X

CONCLUSIONS

In recent years, the conceptualization, design, implementation and evaluation of the curriculum used in graduate psychiatric training in some industrialized nations have undergone major changes. Among these nations, the United Kingdom, Canada and the United States have taken the lead and the initiative vis-à-vis these changes.

At the core of these changes, three factors have significant relevance. They are: a) the development and implementation of the core competency model, b) the creation of the concept of 'maintenance of certification' and the impact of the core competency model in this lifelong learning process, and c) the selection of appropriate methods to evaluate and assess the outcome of the implementation of the core competency model in graduate psychiatric training and postgraduate psychiatric education.

In this article, these recent advances in graduate psychiatric training are addressed, discussed, and appropriately put within the context of graduate and post graduate psychiatric education. Hopefully, this article will further stimulate research, learning, and clinical applications about a topic of such significance for the future of psychiatric education, and thus for the quality of psychiatric care. Additionally, it is desirable that the educationally-relevant issues discussed in this article will promote and improve graduate psychiatric training programs in all regions of the world.

References

1. Bienenfeld D, Klykylo W, Knapp V. Development of competency-based measures for psychiatric training. Acad Psychiatry 2000; 24:68-76.
2. Garza-Treviño ES, Ruiz P, Venegas-Samuels K. A psychiatric curriculum directed to the care of the Hispanic patient. Acad Psychiatry 1997;21:1-10.
3. Stein TS. A curriculum for learning in psychiatric residencies about homosexuality, gay men, and lesbians. Acad Psychiatry 1994;18:59-70.
4. Matorin AA, Ruiz P. Training family practice residents in psychiatry: an ambulatory care training model. Int J Psychiatry Med 1999;29:327-36.
5. Ruiz P. La docencia de postgrado en psiquiatria en los Estados Unidos: una perspectiva contemporanea. In: Melendez de Nucette L (ed). Los postgrados de psiquiatria en Venezuela. Maracaibo: Edicione Astro Data, 1998:104-12.
6. Mohl PC, Sadler JZ, Miller DA. What components should be evaluated in a psychiatry residency. Acad Psychiatry 1994;18:22-9.
7. Webb LC, Juul D, Reynolds CF et al. How well does the psychiatry residency in-training examination predict performance on the American Board of Psychiatry and Neurology, part I- examination? Am J Psychiatry 1996;153:831-2.
8. AADPRT Task Force on the Quality of Residency Programs. The quality of psychiatric residency. Acad Psychiatry 1999;23:61-70.
9. American Board of Psychiatry and Neurology. Core competencies for psychiatric practitioners: what clinicians need to know. Washington: American Psychiatric Press (in press).
10. Donini-Lenhoff FG, Hendrick HL. Growth of specialization in graduate medical education. JAMA 2000;284:1284-9.
11. Schnapp WB, Stone S, Van Norman J et al. Teaching ethics in psychiatry: a problem-based learning approach. Acad Psychiatry 1996;20:144-9.
12. Epstein RM, Hundert EM. Defining and assessing professional competence. JAMA 2002;287:226-35.

The 12th World Congress of Psychiatry

JOHN COX
WPA Secretary General

The 12th World Congress of Psychiatry was held for the first time in Asia and celebrated the Centenary of the Japanese Society of Psychiatry and Neurology. They were memorable days in Yokohama. The Congress theme 'Partnership for Mental Health' was ambitious, and yet there was success in bringing closer together patients and psychiatrists; the WPA, the World Health Organisation and non-governmental organisations; mentors and young Fellows from over 70 different countries; representatives from 88 of the 120 WPA member societies; scientists and clinicians to review key advances; and the various WPA institutional structures. We enjoyed the hospitality of our Japanese colleagues, whose language skills exceeded those of their visitors and whose country is so rich in beauty and history.

The Congress was opened in the presence of the Crown Prince of Japan and to the sound of large drums and softer tones of the bamboo flute. The 4000 delegates were then able to choose from a large number of symposia and workshops, and special lectures which ranged from those of the outgoing President J.J. López-Ibor, on the psychology of disasters, the Jean Delay prize winner H.S. Akiskal ('From dysthymia to the bipolar spectrum') and the incoming President A. Okasha ('The role of WPA in implementing world ethics') to that of Master Sen Soshitsu, who showed delegates the healing world of the Tea ceremony.

The vigour of many WPA sections was evident throughout the Congress as was the extent of common problems for member societies, such as the shortage of trained mental health professionals, the need to delineate and agree the core tasks for psychiatrists, and establishing mental health laws that protect human rights and reduce, not enhance, stigma.

The General Assembly, attended by 89 of member societies, a record number, endorsed almost unanimously the Executive Committee's strategy for working with the Chinese Society of Psychiatry to investigate alleged abuse of psychiatry. This strategy included educational initiatives, as well as completing as soon as possible the Review Committee's work, and determining the optimum strategy for proposed site visits.

The following new member societies were admitted: Bangladesh Association of Psychiatrists, Costa Rican Psychiatric Association, Ghana Psychiatric Association, Kenya Psychiatric Association, Myanmar Medico-Psychological Society, Sudanese Association of Psychiatrists, Syrian Arab Association of Psychiatrists, and the Uganda Psychiatric Association.

Consensus statements were approved on globalisation and mental health, and the health consequences of violence in the Middle East. New specific ethical additions to the Madrid Declaration were also approved.

Of the utmost importance was the publication of the Core Curriculum for Postgraduate Training in Psychiatry. Member Societies are urged to read this carefully and to debate its contents with those national bodies responsible for the standards of education.

The Assembly expressed its profound appreciation to J.J. López-Ibor for his work as President and previously as Secretary General and the distinction that he brought to those offices. The inspiration of the retiring Secretary for Meetings (D. Moussaoui), the commitment and diligence of the Secretary General (J. Mezzich), the assiduity of the Secretary for Finances (M. Kastrup) and the hard work of E. Sukhanova and the Secretariat were applauded.

The WPA has been likened to a family; certainly its members are of different sizes, sometimes speak different languages, and like in all families, agreement is not always evident. Yet apparent at Yokohama was a growing consensus that we need to work in partnership with each other and also with the Service Users and Carers if the association is to flourish, patient care improve, and governments to listen.

The Executive Committee and Board agreed to establish more robust procedures to evaluate future World Congresses and to provide greater continuity of experience between these colossal global undertakings. The need to meet each other face to face as well as on the Internet for scientific exchange remains paramount. The need also to advocate for fairer distribution of psychiatric expertise was a theme detectable at the formal sessions and in the corridors.

The Planning Committee for the 2005 World Congress in Cairo met in Japan and will benefit from the feedback on the Yokohama Congress and the WPA procedures.

The Congress, in addition to including the first continuing medical education (CME) validated courses, had another 'first': the production of a beautiful commemorative postage stamp. Did any delegate post it? I have kept mine to enjoy the personified butterfly, symbol of the spirit of the psyche, and the rose to remind me of Japan in full bloom.

These stamps may also, paradoxically, have reminded delegates that although the world seems more dangerous, and psychiatrists must make a specific contribution for peace, there are reasons for hope as we search for more sustained partnerships across our disciplines, languages, religions and contrasting cultures. The need to learn from disasters and to reduce the levels of violence and wanton destruction which threaten our security and generate mental disorder was a theme in Yokohama which will surely remain prominent on the WPA agenda.

'How was the Congress?' I asked a young Fellow from Britain on the way home. 'Great', was the reply, 'I met colleagues from very isolated countries and we stayed in Japanese homes'.

So thank you Yokohama, and thanks also to the Scientific Committee and their leaders (N. Sartorius, A. Okasha and Y. Nakane). It is not only the young Fellows who will remember the Congress with affection, but many older Fellows as well!

More detailed reports from the 12th World Congress are on the WPA website.

WPA publications: recent developments and future plans

Mario Maj
WPA Secretary for Publications

The main goals of the WPA Publications Programme are: 1) to disseminate information on recent significant clinical, service and research developments, making it available to as many psychiatrists as possible in the various countries of the world, and assimilable by the vast majority of them; 2) to encourage contributions from psychiatrists of all regions of the world, in the form of research papers, commentaries, or reports on mental health issues or significant service innovations; 3) to contribute to improve the image of the WPA.

The above-mentioned goals are being and will be pursued by two main tools: 1) the new WPA official journal, *World Psychiatry*; 2) several series of books.

The journal *World Psychiatry*

World Psychiatry includes editorials, special articles, forums, reports by WPA Sections, research reports, mental health policy papers, and information on WPA activities. Priority is given to contributions dealing with the organization of mental health services throughout the world, to international collaborative research on new models of mental health care, and to reports on innovative experiences in this field. A second priority is psychopathological and biological research which appears solid and relevant to clinical practice. A specific request is made to all contributors to use a very clear and simple language, avoiding concepts and terms which would not be understood by the majority of psychiatrists worldwide.

World Psychiatry is sent free of charge to 25,000 psychiatrists of 114 countries, whose names and addresses have been provided by WPA Member Societies and Sections. We plan to increase significantly this number in the near future, and to upgrade the pattern of distribution of the journal. In addition to the original English edition, a Chinese edition of the journal is already being produced. Contacts are ongoing for the production of a Spanish, a Portuguese and a Japanese edition.

The journal is also produced in an electronic version, which is sent by e-mail to the Presidents of all WPA Member Societies and the Chairpersons of all WPA Sections. This version is already included in the website of the WPA and of several of its Member Societies and Sections.

The series *Evidence and Experience in Psychiatry*

This book series aims to provide a critical overview of the research evidence concerning the diagnosis and management of the most prevalent mental disorders and a survey of the relevant clinical experience in the various regions of the world.

The first five volumes of this series - dealing respectively with Depressive Disorders, Schizophrenia, Dementia, Obsessive-Compulsive Disorder and Bipolar Disorder - have sold out (the last one after only four months). A second edition of the first four volumes (completely updated, with several chapters totally re-written) has just been published in paperback. The volume on Bipolar Disorder has been reprinted and is now again on the market.

The sixth volume of the series, dealing with Eating Disorders and including contributions by all the most renowned experts in the field and by many clinicians from developed and developing countries, will appear in April 2003. The preparation of the seventh volume, dealing with Phobias, has started in June 2002. The preparation of the eighth volume, dealing with Personality Disorders, has just started.

Italian, Russian and Lithuanian editions of some of the above-mentioned volumes have been already published or are now being produced. Japanese and Spanish editions of some of the volumes are planned.

Volumes originating from World Congresses

The three thematic volumes originating from the 11th World Congress - entitled respectively *Psychiatric Diagnosis and Classification*, *Psychiatry in Society* and *Psychiatry as a Neuroscience* - are on the market.

We are starting now the preparation of some thematic volumes originating from the 12th World Congress. Among the topics which are being considered for these volumes are the early detection and management of mental disorders; disasters and mental health; and the role of the family in mental health care.

Other book series

The volume on Italian classic texts of the series *Anthologies in Psychiatry* (collecting papers never published up to now in English) has just appeared. The preparation of the volumes on German and Japanese texts is ongoing.

The volumes on Arab countries and on Poland of the series *Images of Psychiatry* (providing a picture of the past and present of psychiatry in individual countries or groups of countries) have been published recently. The volumes on Latin America, Spain and German-speaking countries should appear in the course of the year 2003. A volume on Greece is also in preparation.

WPA strives to disseminate relevant psychiatric knowledge via scientific meetings

PEDRO RUIZ

WPA Secretary for Meetings

As part of its mission and most important goals, the WPA is striving to promote the dissemination of scientific information via its involvement and collaboration on scientific meetings. As a parallel goal, the WPA via its scientific meetings also strives to promote the exchanges of communication among psychiatrists in training, psychiatrists, other mental health professionals, mental health advocates, representatives from patients and patients' relatives groups, as well as policy makers from different countries and regions of the world. In this context, a series of WPA scientific meetings should be noted and addressed.

First of all, it should be mentioned that plans are already underway for the 13th World Congress of Psychiatry. This Congress will take place in Cairo, Egypt, on September 10-15, 2005 (website: www.wpa-cairo2005.com). The preliminary plans for this Congress have been so promising that it looks that this Congress will be the best ever World Congress of Psychiatry. Pencil the date in your calendar and be sure that you will attend and participate in this very important WPA scientific meeting.

Additionally, in 2003 and 2004, two major WPA scientific meetings are taking place and thus should be individually highlighted. The first one is the WPA International Congress (also, APAL Regional Symposium, 19th Sociedad Venezolana de Psiquiatria National Congress and RSCMV International Meeting) under the theme "Alliances for Mental Health", which will take place on October 1-4, 2003, in Caracas, Venezuela (website: www.wpa2003.org). The second one is the WPA International Congress on "Treatments in Psychiatry: An Update", which will take place on November 10-13, 2004, in Florence, Italy (contact person: Prof. Mario Maj at majmario@tin.it).

Other forthcoming WPA scientific meetings include the WPA International Thematic Conference on "Diagnosis in Psychiatry: Integrating the Sciences", which will take place in Vienna, Austria, on June 19-22, 2003 (website: www.2003vienna.at), and the WPA Regional Congress that will take place in Athens, Greece, in March 2005 (date not finalized as yet).

During the 2003 year, several WPA co-sponsored conferences will take place as follows: 1) on March 10-13, 2003, the First Qatar International Conference, also co-sponsored with the Arab Federation of Psychiatrists, taking place in Doha, Qatar (website: www.hmc.org.qa/qip); 2) on March 28-30, 2003, the 6th Workshop on "Cost Assessment in Psychiatry", organized by the WPA Section on Mental Health Economics in Venice, Italy (website: www.veneziacongressi.com); 3) on April 10-13, 2003, the 19th APSA Congress in Mar del Plata, Argentina (website: www.apsa.org.ar); 4) on June 9-11, 2003, the First International Conference on "The Role of Health and Culture in Conflict Resolution", in the Republic of Malta (contact person: Dr. N.D. Minton at nd.minton@btinternet.com); 5) on July 5-7, 2003, the 9th South Brazilian Psychiatric Regional Meeting, in Porto Alegre, Brazil (contact person: Dr. Jair Escobar at sprs@sprsorg.bs); 6) on July 9-11, 2003, the Meeting on "Theory, Evidence and Psychiatric Epidemiology" organized by the WPA Section on Epidemiology and Public Health in Paris, France (website: www.wpaepidemio-paris.org); 7) on August 3-5, 2003, the 8th World Congress of the World Association for Psychosocial Rehabilitation, focusing on the theme "A Better Future for Those With Mental Illness: Rehabilitation for Those Without Access" (website: www.wapr.net); 8) on August 23-28, 2003, the 17th World Congress on Psychosomatic Medicine, in Waikoloa, Hawaii (website: www.hawaiiresidency.org/icpm2003); 9) on September 20–23, 2003, the Satellite Conference on "Ethnicity and Mental Health in Europe", Essen, Germany (contact person: Dr. Christian Haasen at haasen@uk.uni-hamburg.de); 10) on September 25-27, 2003, the "5th Congress on Depressive Disorders and International Symposium on Cognitive Disorders", in Mendoza, Argentina (website www.mendoza2003.com) (contact person: Dr. Jorge Nazar at jorge_nazar@hotmail.com); 11) from September 9 to October 1, 2003, the 12th International Congress of the European Society of Child and Adolescent Psychiatry, in Paris, France (website: www.escap2003.com); and 12) on October 2003, the Conference on "Religion, Spirituality and Mental Health", organized by the Egyptian Psychiatric Association in collaboration with the World Health Organization (WHO) in Sinai, Egypt (the final date has not been notified to the WPA as yet; attendance is by WHO invitation only; contact person: Dr. Tarek Okasha at tokasha@internetegypt.com).

The WPA co-sponsored conferences for years 2004 and 2005 will be addressed in future issues of World Psychiatry.

As can be easily detected by this update about the forthcoming WPA scientific events, the WPA is fully committed to fulfill its objectives vis-à-vis the fostering of regional as well worldwide scientific meetings. Hopefully, the readers of World Psychiatry will read this update and select and attend those scientific events of interest to them.

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