

health issues must extend their perspective beyond the bounds of policies and programmes if they are to help make a meaningful difference in the lives of those they serve.

This does not mean that policies and programmes are not needed – they clearly are. But the tendency to implement ready-made models could easily miss the needs of the target groups. Community care programmes have to be tied to broader social and economic policies and programmes. Mental health professionals can contribute their expertise to this process and work in conjunction with these people and their families to strengthen their voices in the arena of human rights.

**Brett, E. (1993)** Voluntary agencies as developmental organisations: theorizing the problem of efficiency and accountability. *Development and Change*, **24**, 269–303.

**Jacob, K. S. (2001)** Community care for mental disorders in developing countries. Problems and possible solutions. *British Journal of Psychiatry*, **178**, 296–298.

**Nyoni, S. (1987)** Indigenous NGOs: liberation, self-reliance, and development. *World Development*, **15** (suppl.), 51–56.

**B. Saravanan** Department of Psychiatry, Christian Medical College, Vellore – 632 002, India

### Mental health literacy in developing countries

The article on mental health literacy by Jorm (2000) was interesting and stimulating and we were encouraged to see reference to the mental health literature in developing countries. However, it portrayed a rather incomplete and negative view of the situation. It has rightly been pointed out that the beliefs in supernatural causes of mental disorders are more widely held and traditional sources of help, such as spiritual healers, are preferred over medical advice for a range of mental health problems in these countries. It was not mentioned, however, that mental health literacy is perhaps part of general literacy. In some developing countries where more than half of the population may be illiterate the dimensions of mental health literacy are totally different from those in Western countries. One corollary of this is that mental health professionals will have to adopt innovative approaches to mental health literacy.

The community mental health programme in Pakistan is an example. With a literacy rate of about 40%, it was not conceivable to adopt the approaches discussed

by Jorm (2000). The innovative approaches adopted instead ranged from creating awareness at all levels of health personnel, including primary health care physicians, schoolchildren and teachers in the community, and collaborating with other sectors like traditional faith healers. One interesting attempt in this direction was to create awareness among schoolchildren and their teachers. We believe that the schoolchildren in rural areas are the eyes and ears of the community. In a study evaluating the effect of the school mental health programme it was shown that knowledge, attitudes and superstitions about mental health problems significantly improved in a group of schoolchildren, their friends and neighbours after implementation of the programme, compared with a control group (Rehman *et al*, 1998). More recently, the work has been extended to the detection of disabilities by children (Gater *et al*, 1999). This article, which gained the Barker Memorial Award, clearly showed the impact of improved mental health literacy through the strong messenger force of children in the rural community. An interesting impact of improved mental health literacy was its effect on general health indicators such as maternal mortality, infant mortality and the immunisation of children, which were significantly improved following integration of the mental health awareness campaign within primary health care (Maqsood *et al*, 2001). Similarly, educating the traditional faith healers assisted tremendously in identification and referral of people with mental illnesses for proper psychiatric treatment (Saeed *et al*, 2000). These are just a few examples of indigenous projects undertaken in the community, which highlight innovative approaches to mental health literacy in a developing country.

Recently, the issue of the role of the World Health Organization in improving mental health literacy in developing countries has been debated (Mubbashar & Saeed, 2000) and directions for developing cost-effective and sustainable mental health programmes have been outlined.

**Gater, R., Saeed, K., Mubbashar, M. H., et al (1999)** Detection of disabilities by school children in rural Pakistan. *Tropical Doctor*, **29**, 151–155.

**Jorm, A. F. (2000)** Mental health literacy. Public knowledge and beliefs about mental disorders. *British Journal of Psychiatry*, **177**, 396–401.

**Maqsood, N., Saeed, K., Mubbashar, M. H., et al (2001)** Impact of community based mental health programme on general health care. *Lancet*, in press.

**Mubbashar, M. H. & Saeed, K. (2000)** Round table: setting the WHO agenda for mental health – WHO can help to combat mental health illiteracy. *Bulletin of the World Health Organization*, **78**, 507–508.

**Rehman, A., Mubbashar, M. H., Gater, R., et al (1998)** Randomized trial of impact of school mental health programme in rural Rawalpindi, Pakistan. *Lancet*, **352**, 1022–1025.

**Saeed, K., Gater, R., Hussain, A., et al (2000)** The prevalence, classification and treatment of mental disorders among attendees of native faith healers in Rural Pakistan. *Social Psychiatry and Psychiatric Epidemiology*, **35**, 480–485.

**M. H. Mubbashar** Rawalpindi General Hospital, Rawalpindi, Pakistan

**S. Farooq** Postgraduate Medical Institute, Lady Reading Hospital, Peshawar, Pakistan

### Handedness and schizophrenia: genetic and environmental factors

I would like to comment on the conclusions reached by Sommer *et al* (2001) in their meta-analysis of the literature on cerebral lateralisation and anatomical asymmetry in schizophrenia.

The article opens with the claim that: “Right-handedness, left cerebral dominance for language and normal cerebral asymmetry are considered to be secondary to a dominant allele, the ‘right-shift factor’”. It must be kept in mind that this is only a hypothesis and has yet to be proven. Even if the centrality of this gene were demonstrated, the influence of environmental factors would still have to be accounted for. Otherwise, it would be impossible to explain the relatively common discordance for handedness in monozygotic twins: this discordance can only be due to disruption of the intrauterine neurodevelopment in one of the twins caused by the action of environmental factors. This is supported by Steinmetz *et al* (1995) in which magnetic resonance imaging of twins discordant for handedness showed that this discordance is mirrored by differences in brain lateralisation. Further confirmation of the importance of environmental factors in handedness comes from a Norwegian study by Salvesen *et al* (1993), in which a cohort of pregnant women were divided in two groups. Half of the mothers had real ultrasound scanning during pregnancy while the others had a sham investigation. When the children were examined after birth there was significant excess of left-handedness only in the group exposed to real ultrasonography.

An interesting study by Davis & Phelps (1995) showed that the concordance for schizophrenia in monozygotic twins discordant for handedness is much higher than in twins concordant for handedness (60 *v.* 32%). Again, this difference can be explained only by the presence of an environmental factor acting *in utero*, which disrupts the neurodevelopment causing schizophrenia and altering handedness. No genetic factor can explain it.

The evidence from the literature therefore directs towards an environmental factor, which acts during neurodevelopment disrupting handedness and predisposing for schizophrenia. This hypothesis is briefly considered in the article, but then dismissed because of the results of a meta-analysis. The authors compared patients suffering from schizophrenia with patients suffering from other neuropsychiatric disorders. Both groups showed an excess of left-handedness, but in the schizophrenia population the excess was significantly higher.

The authors reached the conclusion that this shows the involvement of a genetic mechanism, but this is only one of the possible explanations. Another possibility is that there are neuropsychiatric disorders that are not neurodevelopmental in origin. Another explanation is that in certain disorders the neurodevelopmental damage acts before or after the time when handedness is established.

It is therefore my opinion that the literature on handedness and schizophrenia, comprehensively reviewed by the authors, confirms that both genetic and environmental factors have to be accounted for in the aetiology of schizophrenia. The 'right shift' is still only a hypothesis and the meta-analysis by Sommer *et al* does not corroborate or refute it.

**Davis, J. O. & Phelps, J. A. (1995)** Twins with schizophrenia: genes or germs? *Schizophrenia Bulletin*, **21**, 13–18.

**Salvesen, K. A., Vatten, L. J., Eik-Nes, S. H., et al (1993)** Routine ultrasonography *in utero* and subsequent handedness and neurological development. *British Medical Journal*, **307**, 159–164.

**Sommer, L., Aleman, A., Ramsey, N., et al (2001)** Handedness, language lateralisation and anatomical asymmetry in schizophrenia. Meta-analysis. *British Journal of Psychiatry*, **178**, 344–351.

**Steinmetz, H., Herzog, A., Schlaug, G., et al (1995)** Brain (a)symmetry in monozygotic twins. *Cerebral Cortex*, **5**, 296–300.

**M. Procopio** Linwood Community Mental Health Centre, Butlers Green Road, Haywards Heath, West Sussex RH16 4BE, UK

## Stress management and schizophrenia

Bellack *et al* (2000) have addressed the important question of delineating the core therapeutic components of carer-based stress management that account for the improved course of schizophrenic disorders found consistently when these methods have been integrated with optimal pharmacotherapy. Their conclusions deserve close scrutiny, particularly when they make strong statements about the relative cost-effectiveness of different approaches, without the benefits of any economic analysis. Their conclusion that cognitive-behavioural strategies aimed at enhancing the problem-solving of patients and their key caregivers do not contribute to the clinical benefits cannot be drawn definitively from the study they report.

This study is extremely complex and was not designed to evaluate the comparative effectiveness of the key components of cognitive-behavioural family interventions. All cases were offered 25 sessions of structured education in multi-family groups over 24 months. These educational groups aimed to assist patients and their caregivers in the management of their disorders and the stresses in their lives. However, half the sample was assigned at random to an additional 29 sessions of home-based education that employed active learning methods to enable the patient and carers to conduct weekly self-help sessions in the home. During these sessions they were expected to work on the personal problems and goals that they considered important. They were taught to use a problem-solving approach, with guide sheets to structure their discussions and to provide records of their plans. This home-based training ceased after 12 months, but the multi-family educational groups continued to 24 months.

From the outcome measures reported, there was no significant difference between the two stress management conditions in forestalling hospital admissions over the 24 months. Thus, the addition of the problem-solving training, which seldom requires more than 5 hours of teaching, was considered redundant. The method attributed to Falloon *et al* (1984) does not include the additional monthly educational groups used in this project, and it is probable that the combination of two approaches that emphasised somewhat different objectives may have proved confusing to some participants and excessive to others. We certainly

observed that at times of crisis the therapists confused the two approaches. A definitive study that aimed to compare the benefits of the educational and problem-solving strategies would need to ensure that each approach was more clearly defined, and would have to control for the time participants were exposed to the contrasting methods and the therapist's competence and enthusiasm for both methods. It may also be important to consider that maximum benefits might be reached with a lower-than-standard course of education for many cases, and that too much of a good thing may not produce the best results. It is important to note that similar multi-family group education approaches have not always proved successful (McCreadie *et al*, 1991) except where problem-solving training has been a core component (McFarlane *et al*, 1995).

Furthermore, it is interesting to refer to the earlier publication of this important study of combinations of various maintenance medication dosage strategies (Schooler *et al*, 1997). For those cases receiving the care-based stress management approaches who were also maintained on optimal doses of medication throughout the 24 months, 19% of those offered the additional problem-solving training in the first 12 months were admitted to hospital in contrast to 31% of those receiving only the education group sessions. Although this difference does not quite achieve statistical significance, the trend is clear, and this is in accord with the consistent observation of somewhat greater efficacy of the problem-solving approach when it is more clearly integrated with mental health education (Falloon *et al*, 1999).

**Bellack, A. S., Haas, G. L., Schooler, N. R., et al (2000)** Effects of behavioural family management on family communication and patient outcomes in schizophrenia. *British Journal of Psychiatry*, **177**, 434–439.

**Falloon, I. R. H., Boyd, J. L. & McGill, C. W. (1984)** *Family Care of Schizophrenia: A Problem-Solving Approach to the Treatment of Mental Illness*. New York: Guilford Press.

—, **Held, T., Coverdale, J., et al (1999)** Family interventions for schizophrenia: a review of long-term benefits of international studies. *Psychiatric Rehabilitation Skills*, **3**, 268–290.

**McCreadie, R. G., Phillips, K., Harvey, J. A., et al (1991)** The Nithsdale schizophrenia surveys. VIII: Do relatives want family intervention – and does it help? *British Journal of Psychiatry*, **158**, 110–113.

**McFarlane, W. R., Lukens, E., Link, B., et al (1995)** Multiple-family groups and psychoeducation in the treatment of schizophrenia. *Archives of General Psychiatry*, **52**, 679–687.