health, and this is especially the case in Africa and South East Asia.

Do these profiles show a picture of consistent disregard for mental illness, a form of worldwide stigmatisation?[8] Paradoxically not. Mental health treatment and care facilities are now present at the primary care level in 87% of countries, and centres to train primary care staff in treating mental illness are found in 59%. Over a third of psychiatric beds are now provided outside traditional psychiatric asylums. Non-governmental organisations in the mental health sector are active in almost all parts of the world, including in 86% of low income countries, and are often the pioneers of mental health service reform.[9] Where mental health policies exist, half have been formulated during the past decade and a quarter within the past five years.

These first attempts to map how we respond to the global challenge of mental illness will of necessity be incomplete and inaccurate.[10] Even so they offer an invaluable baseline to track future trends. National inputs, such as policies, laws, and financial investments, are necessary but not sufficient to deliver effective treatments to individuals.[11] Nevertheless the picture that emerges from these country profiles is a rapidly developing global recognition of the magnitude of the response that is needed properly to address the scale of the challenge posed by mental illness.

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Preventing and treating eclamptic seizures

Magnesium sulphate is effective and recommended for use

Ninety nine percent of all maternal deaths occur in developing countries. Pre-eclampsia or eclampsia is responsible for many of these, accounting for 50 000 deaths annually. Large randomised trials in developing countries and systematic reviews have shown the usefulness of magnesium sulphate in treating recurrent eclamptic seizures and in the prophylaxis of eclampsia.[1–3] Despite this evidence magnesium sulphate remains underused.

In 1995 the Eclampsia Trial Collaborative Group did an impressive study in developing countries and showed unequivocally that magnesium sulphate given intramuscularly or intravenously is superior to phenytoin or diazepam in reducing recurrent eclamptic seizures.[1] Seizures were a half or a third less likely to recur after treatment with magnesium. Maternal mortality was also lower in women allocated magnesium rather than phenytoin or diazepam, although this did not achieve statistical significance. Recent Cochrane reviews, however, indicated a significant reduction in maternal mortality with magnesium.[2] Magnesium was also associated with less maternal and neonatal morbidity than phenytoin.

Recently the findings of this study were extended to indicate the value of magnesium as prophylaxis for eclampsia.[3] In the Magpie study, 10 000 women with pre-eclampsia were randomised to receive magnesium sulphate before or during labour, or after giving birth. About two thirds of the women in this study were from developing countries with high or moderate perinatal mortality. The results were again impressive. Magnesium was effective, reducing seizures by more than half. Treatment was also safe in this setting, without any excess of serious maternal morbidity. There was no reduction in deaths due to eclampsia. Total maternal mortality was, however, lower in treated women, although this did not achieve statistical significance (mortality for treated women was 55% of controls (95% confidence intervals 26 to 114)).

It is counterintuitive that magnesium, which is used as an anticonvulsant, should reduce deaths from renal failure, pulmonary embolism, and infection (the causes of mortality that were reduced in the group treated with magnesium). But the significant reduction of placental abruption in treated women suggests alternative mechanisms of action of magnesium.

Is magnesium safe to use in developing countries? Magnesium was used safely in both the eclampsia trial and the Magpie trial. None the less, as indicated in the Magpie study, magnesium is associated with side effects, and some of these (for example, respiratory and cardiac arrest) can be life threatening. For safety in

BMJ 2002;325:609–10

developing countries it is important to assess in which patients the benefit from being given magnesium is sufficient to justify this risk. Treatment is certainly justified in women with eclampsia, in whom evidence from meta-analysis indicates that magnesium reduces mortality. A quarter of the women in the Magpie study had severe pre-eclampsia—very high blood pressure (>170 mm Hg systolic or 110 mm Hg diastolic) with very high proteinuria, or lower blood pressure (150 mm Hg systolic or 100 mm Hg diastolic) with two or more signs of imminent eclampsia such as hyperreflexia, frontal headache, blurred vision, or epigastric tenderness). In this group it was necessary to treat 63 women to prevent one seizure. In women who did not have such severe pre-eclampsia 109 patients had to be treated to prevent a seizure. Even the women without severe pre-eclampsia were probably quite ill in this study, as almost 75% of them were given antihypertensive treatment. Thus, the Magpie study indicates a very favourable ratio of benefit to risk for magnesium, given according to the protocol, in women with severe pre-eclampsia or requiring antihypertensive treatment.

The safety of magnesium in this study was facilitated by limiting the loading dose of magnesium to 4 g and restricting intravenous administration to 1 g/hour, whereas the intramuscular dose was at 10 g, followed by 5 g every 4 hours. For the loading and intravenous doses this is considerable lower than has been recommended by some, and the safety of higher doses is not assured by this study.[4] In addition, some instruction was undoubtedly provided to the participants in the trial. None the less, as carried out in this protocol with simple clinical assessment and without determining magnesium concentration, treatment with magnesium was safe.

Despite the evidence, this effective treatment has not been used widely. We have few examples in obstetric practice of treatments that have been tested in randomised controlled trials to show efficacy and even fewer that address treatment in the field. Why has this treatment not become part of the armamentarium of providers of obstetric care throughout the world? The answer is complex, but at least part of the explanation is that this inexpensive generic treatment has no industrial advocate to facilitate licensing, production, and distribution. Another factor is the reluctance of care providers and administrators to change healthcare practice. On behalf of the World Health Organization, Fédération Internationale de Gynécologie et d'Obstétrique, and the International Society for the Study of Hypertension in Pregnancy we advocate the use of magnesium sulphate in the treatment and prevention of eclampsia. We urge nations in which eclampsia has a major impact on maternal mortality to institute policies to ensure that this inexpensive and life saving treatment is made available and that care providers are trained to use it safely.

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Average length of stay, delayed discharge, and hospital congestion

A combination of medical and managerial skills is needed to solve the problem

The NHS is under sustained pressure to cope with rising numbers of hospital admissions. Public concern over waiting on trolleys and delays in access to care has never been greater. The NHS has responded by using its most expensive resource—inpatient beds—more efficiently. Over the past 20 years the average length of stay for each admission has fallen year on year from 11.7 days in 1980 to 6.8 in 1999-2000. Factors have included increased use of day surgery and the recognition that earlier discharge in many conditions was not dangerous and may often be better for the patient.

After nearly 20 years of consistent reductions, the average length of stay has unexpectedly risen from 6.8 days in 1999-2000 to 6.95 days in 2000-1. The rise shown in the national hospital episode statistics for England may seem small in absolute terms, but a 2.5% rise has huge potential costs at all levels of the service. A recent workshop attended by professionals and department of health officers examined the figures and noted that the rise was apparent for both elective admissions (1.0%) and non elective admissions (2.9%), was present in all major adult specialties, and was present in all regions of the country. The changes were too consistent to be dismissed as chance. The largest change (11.5%, in mental health) may be explained by recent changes in service configuration between community and hospital, but the 6.6% increase for

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