We have documented four patients in our local services who have recently had unplanned pregnancies in association with this change in medication. All four women had their medication changed from older, typical antipsychotics in an effort to improve their symptoms and reduce side-effects. Three were known to have a partner at this time. Two were also known to have hyperprolactinaemia, presumably as a result of taking typical antipsychotics. All four women had an unplanned pregnancy following change in medication and all but one then had their atypical antipsychotic medication stopped. All four of these women decided to proceed with their pregnancies. Two women became acutely ill during their pregnancies and were admitted to psychiatric hospital. All four were admitted postnatally to a mother and baby psychiatric unit, three with acute psychotic symptoms and one with less severe symptoms but with concerns about her ability to parent her child. All four women required very high levels of input from mental health and social services; despite this, only one has been able to continue to provide care for her child.

Unwanted and unplanned pregnancies are clearly undesirable and a doctor could be deemed negligent if a pregnancy results from prescribing without appropriate advice on risk and contraception, for example, in the case of antibiotics given to women on the pill. Unwanted pregnancies are of particular concern in women with chronic psychotic illnesses. Not only does the mother have a substantially increased risk of acute relapse following childbirth, but there is also clear evidence that children of parents with mental illness suffer greater social disadvantage, increased psychological and psychiatric disturbance and higher rates of emotional, sexual and physical abuse (Gregoire, 2000).

There is relatively little information available on the sexuality, contraceptive habits, fertility or beliefs and wishes about reproduction in people with severe mental health problems. It has been suggested that fertility among people with severe mental illness is similar to that of the general population (Lane et al, 1992) and there can be little doubt among clinicians that the changing patterns of care from hospital to living in the community are likely to have altered behaviour and expectations of sexuality and reproduction. Advice to people with severe mental illness about

contraception is likely to be poor and they are more likely to have unplanned and unwanted pregnancies (Miller & Finnerty, 1996). Sexuality is an area of patients' lives that psychiatrists tend to neglect even though they and their patients acknowledge its importance (Pinderhughes *et al*, 1972).

The cases we have been involved with illustrate what we believe to be an increased risk of pregnancy in women changing from conventional to atypical antipsychotics. The potential risks to mother and child associated with such pregnancies are clear and the lack of attention generally paid to sexuality and contraception by those caring for people with mental illnesses must therefore be a cause for concern. On the basis of current knowledge, we should assume that our patients are sexually active and need advice and assistance with contraception. We recommend that the potential effect on fertility be discussed with all patients changing from a traditional to an atypical antipsychotic and that mental health professionals be active in promoting effective contraception.

**Gregoire, A. (2000)** Mentally ill parents. In *Adult Severe Mental Illness* (ed. A. Gregoire). London: GMM.

Lane A., Mulvany, M., Kinsella, A., et al (1992) Evidence for increased fertility in married male schizophrenics. *Schizophrenia Research*, **6**, 94.

Miller, L. J. & Finnerty, M. (1996) Sexuality, pregnancy and childrearing among women with schizophrenia spectrum disorders. *Psychiatric Services*, 47, 502–506.

Pinderhughes, C. A., Barrabee, E. & Rayna, L. J. (1972) Psychiatric disorders and sexual functioning. American Journal of Psychiatry, 128, 96–102.

**A. Gregoire** Perinatal Mental Health Service, West Hampshire NHS Trust, Maples Building, Horseshoe Drive, Tatchbury Mount, Calmore, Southampton SO40 2RZ, UK

**S. Pearson** Dorset Health Care NHS Trust, St Ann's Hospital, Poole, UK

# Hospitalisation in first-episode psychosis

The paper by Sipos et al (2001) was discussed with great enthusiasm in our evidence-based journal club. We learnt that 80% of patients with first-episode psychosis were hospitalised within 3 years of first contact with specialist services. Patients with manic symptoms at presentation were admitted rapidly; those with negative symptoms and longer duration of untreated

illness were admitted later. The paper concluded that community-oriented psychiatric services might only delay, rather than prevent, admission of patients with a first-episode of psychosis.

At the end of the journal club we realised that the findings from this paper cannot be generalised to our patient group without the knowledge of certain other key issues not mentioned in the paper.

- (a) Availability of in-patient beds: studies have shown that the utilisation of inpatient care is determined by the supply of available beds (Saarento et al, 1996).
- (b) Availability of assertive community psychiatric services: an assertive community treatment programme has shown to be effective in reducing hospitalisation compared with clinical case management programmes (Ziguras & Stuart, 2000).
- (c) A study by Lang *et al* (1999) demonstrates that improvement in social support predicted decline in hospitalisation.
- (d) History of suicidal behaviour carries a greater risk of admission in first-episode psychosis and higher readmission rates over 2-year follow-up (Verdoux *et al*, 2001).
- (e) In clinical practice a patient's willingness to accept treatment as an outpatient would be a factor in deciding about in-patient treatment.

In our opinion hospitalisation in first-episode psychosis would be greatly affected by the above issues and without knowledge of these issues, the findings from Sipos *et al*'s study cannot be generalised to patient groups in other areas/services.

Lang, M. A., Davidson, L., Bailey, P., et al (1999) Clinicians' and clients' perspectives on the impact of assertive community treatment. *Psychiatric Services*, **50**, 1331–1340.

#### Saarento, O., Hanson, L., Sandlund, M., et al (1996) The Nordic Comparative Study on Sectorized

Psychiatry. Utilisation of psychiatric hospital care related to amount and allocation of resources to psychiatric services. *Social Psychiatry and Psychiatric Epidemiology*, **31**, 327–335.

### Sipos, A., Harrison, G., Gunnell, D., et al (2001)

Patterns and predictors of hospitalisation in first-episode psychosis: prospective cohort study. *British Journal of Psychiatry*, **178**, 518–523.

#### Verdoux H., Liraud, F., Gonzales, B., et al (2001)

Predictors and outcome characteristics associated with suicidal behaviour in early psychosis: a two-year follow-up of first-admitted subjects. *Acta Psychiatrica Scandinavica*, **103**, 347–354.

**Ziguras, S. J. & Stuart, G.W. (2000)** A meta analysis of the effectiveness of mental health case-management over 20 years. *Psychiatric Services*, **51**, 1410–1421.

**B. Sridharan** Salford Primary Care NHS Trust, Salford, UK

**P. Arshad** Meadowbrook, Department of Psychological Medicine, Stott Lane, Salford M6 8HG, UK

**M. Marcos** Salford Primary Care NHS Trust, Salford, UK

Authors' reply: We were delighted to read that our paper was so enthusiastically discussed by Sridharan et al at their evidencebased journal club. They have spotted the main limitation to the study, which was included in our own list of limitations namely, that our findings were "based upon only one service model and may have limited generalisability" (Sipos et al, 2001). In our paper, we cited previous work from Nottingham (Harrison et al, 1991), showing how the development of multi-disciplinary teams had coincided with a reduction in the proportion of patients with first-episode psychosis requiring hospitalisation at initial contact. In Sipos et al (2001) we went on to show that, although there is clearly a reduction in hospitalisation at first contact, the risk of admission at some point in the first 3 years after first onset has actually remained the same. Indeed, there are striking differences between those patients admitted early in the course of the disorder and those admitted later.

On reflection, we agree that the paper would have benefited from a slightly more detailed specification of service changes in Nottingham, although these have been described elsewhere and we would refer readers to Beck et al (1997). We would caution, however, against attempts to draw causal inferences from the presence, or absence, of particular 'community' services because our paper reported an observational study rather than a controlled one. The research community has barely begun to understand the interplay between different components of 'community-oriented' services and patient outcomes. The parameters mentioned by Sridharan et al are certainly pointers in the right direction but we have some way to go in describing (and measuring) factors such as the amount of 'social support' available, let alone evaluating their impact on outcomes.

**Beck, A., Croudace, T. J., Singh, S., et al (1997)** The Nottingham Acute Bed Study: alternatives to acute psychiatric care. *British Journal of Psychiatry,* **170**, 247–252.

Harrison, G., Cooper, J. E. & Gancarczyk, R. (1991) Changes in the administrative incidence of schizophrenia. *British Journal of Psychiatry*, **159**, 811–816

**Sipos, A., Harrison, G., Gunnell, D., et al (2001)**Patterns and predictors of hospitalisation in first-episode psychosis. Prospective cohort study. *British Journal of Psychiatry*, **178**, 518–523.

**A. Sipos** Division of Psychiatry, University of Bristol, 41 St Michael's Hill, Bristol BS2 8DZ, UK

**G. Harrison** Division of Psychiatry, University of Bristol. Bristol. UK

**D. Gunnell** Department of Social Medicine, University of Bristol, Bristol, UK

S. Amin Trafford General Hospital, Manchester, UKS. P. Singh Queen's Medical Centre, Nottingham, UK

### Antipsychotics and risk of venous thrombosis

The article by Thomassen et al (2001) relates a higher risk of venous thrombosis to the use of antipsychotic drugs. As mentioned by the authors, their data cannot consequentially link the risk of venous thrombosis to antipsychotic use as certain biases cannot be excluded from the autopsy date and case-control studies they analyse. However, their study adds to the numerous reports suggesting a link between this class of medication and venous thrombosis. In this debate, however, it should be noted that there is a lack of controlling for factors such as the dose of antipsychotics and the type of psychosis. Catatonia is typically a form of schizophrenia in which one could expect patients to have a higher risk of venous thrombosis (Morioka et al, 1997). Similarly, according to the dose of antipsychotic, the sedation of patients can be so intense that their movements are limited, creating predisposing conditions for venous thrombosis. It is possible that more cautious administration of antipsychotics at a dose which decreases the psychotic symptoms without inducing toxic sedation (Casey, 1997) could prevent a certain number of thrombosis cases, although low doses of antipsychotic appeared paradoxically associated with higher risk in a recent case-control study (Zornberg & Jick, 2000). Exploring the role of these potential confounding factors, particularly in cohort studies, is important to characterise the safety profile of antipsychotic drugs and to improve guidelines for the treatment of patients with psychosis.

**Casey, D. E. (1997)** The relationship of pharmacology to side effects. *Journal of Clinical Psychiatry*, **58**, 55–62.

Morioka, H., Nagatomo, I., Yamada, K., et al (1997) Deep venous thrombosis of the leg due to psychiatric stupor. Psychiatry and Clinical Neurosciences, **51**, 323– 324

Thomassen, R., Vandenbroucke, J. P. & Rosendaal, F. R. (2001) Antipsychotic medication and venous thrombosis. *British Journal of Psychiatry*, 179, 63–66.

**Zornberg, G. L. & Jick, H. (2000)** Antipsychotic drug use and the risk of first-time idiopathic venous thromboembolism. A case—control study. *Lancet*, **356**, 1219—1223.

**F. Curtin, M. Blum** Intercantonal Office for the Control of Medicines, Erlachstrasse 8, 3000 Bern 9, Switzerland

## Use of antidepressants by nursing mothers

Hendrick et al (2001) state that the findings of their study provide no reason to discourage nursing among women taking paroxetine, fluvoxamine or sertraline at standard therapeutic doses. Comparison with previous studies is difficult, owing to the research literature consisting mainly of single case reports or small samples, difference in methods and lack of key information (as reviewed by Yoshida et al, 1999).

While I applaud the effort of studying 50 nursing mother-infant pairs, I disagree with the inclusion of all of them as study subjects for two main reasons.

First, seven were included whose prescribed doses of antidepressant were below the recommended dose (British Medical Association & Royal Pharmaceutical Society of Great Britain, 2001) for the treatment of depression (paroxetine 5 mg (n=1)), paroxetine 10 mg (n=2), sertraline 25 mg (n=4)). In the case of sertraline, where 30 pairs were included, exclusion of these subjects would increase the percentage of detection of medication, including metabolites, from 24% (8/30) to 34% (8/26).

Second, Hendrick et al came to the same conclusion regarding the safety of fluvoxamine, sertraline and paroxetine, but according to their Table 1 (p. 164) only one serum sample of the five taken from mother–infant pairs where the mother was taking fluvoxamine should be taken into consideration. Of the remainder, no maternal medication concentration was obtained in three cases, and in the fourth maternal medication concentration was below the detectable range of the assays, raising