- countries where a majority of people with mental illness consult traditional healers first.
- O If psychiatrists are able to collaborate with traditional healers, the latter could help in the early detection and early management of mental illness, with the prospect of better outcomes.
- O Collaboration between psychiatrists and traditional healers could help to end harmful methods of practice by the traditional healers, such as isolating patients in an unhealthy, non-hygienic environment, depriving patients of nutritional food, beating patients, misdiagnosis and mismanagement.
- O Collaboration could help to improve community awareness and decrease the stigma of mental illness.
- The traditional healer centres could be used as the basis for community rehabilitation facilities for people with mental illness.
- O Improving the education level of traditional healers might enable them to have a better understanding of mental illness and of the benefits of modern medications (see also Table 1). Organising educational seminars and workshops for them might be helpful in this area.

Acknowledgement

The idea for conducting this research came to mind after many visits in 2007–09 to traditional healers' centres in Sudan and seeing the miserable conditions for patients. Also on these visits were: the WHO regional adviser for mental health in the Eastern Mediterranean Region, Dr Mohammed Tagy Yasamy; the director and the former director of the Institute of

Psychiatry at Oslo University, Professors Lars Lien and Edvard Hauff; the director of the SINTIF Research Institute in Norway, Professor Aren Aida; and, from the University of Malaya, Malaysia, Professor Hussian Habil, head of the Department of Psychiatry, and Professor Nor Zuriada.

References

- Ahmed, I. M., Bremer, J. J., Magzoub, M. M. E., *et al* (1999) Characteristics of visitors to traditional healers in central Sudan. *Eastern Mediterranean Health Journal*, **5**, 79–85.
- Baasher T. (1994) Promotion and development of traditional medicine. WHO Magazine, 68.
- Bali W. (1992) Elsarim elbattar fi eltsadi llisahra walashrar. [The Final Word Against Magicians and Witches.] Elsahaba Library Press.
- Elsafi, A. & Baasher, T. A. (1981–94) *Selected Essays of Tigani El Mahi*. University of Khartoum Press.
- Elsorayi, A. (1985) *Ten Years in the South of Sudan*. Kuwait University Press.
- Mohammed, F. (1989) El-zar el-sudani. A Survey of Attitudes, Beliefs and Social Perspective Towards Zar in the Sudan. Khartoum University Press.
- Peltzer, K. & Machleidt, W. (1992) A traditional (African) approach towards the therapy of schizophrenia and its comparison with Western models. *International Journal for Therapeutic and Supportive* Organizations, 13, 203–221.
- Sorketti, E. A. (2009) Sudan's national mental health programme and burden of mental illness. *International Psychiatry*, **6**, 16–18.
- Wad Daifalla, F. Y. T. (1975) Reviews by Wad Daifalla. Khartoum University Press (in Arabic).
- World Health Organization (1992) The Promotion and Development of Traditional Medicine, Technical Report Series No. 622. WHO.
- World Health Organization (2000) *Promoting the Role of Traditional Medicine in Health Systems*. Strategy for the African Region, Resolution AF\RC50\R3. WHO.

SPECIAL PAPER

Reproductive risk: its role in maternal mental health

Carol Henshaw

Consultant in Perinatal Mental Health, Liverpool Women's Hospital, Liverpool, UK, email chenshaw@doctors.org.uk

or many women, pregnancy and childbirth are not without substantial risk in terms of new-onset, recurrent or existing mental disorder. This has consequences not only in terms of poor maternal mental health but also in terms of increased pregnancy- and delivery-related morbidity and can have a significant negative impact on the well-being of the fetus or neonate. New-onset disorders such as postnatal depression and puerperal psychosis have been recognised for some considerable time but it is also becoming apparent that, with the exception of anorexia nervosa, severe intellectual disability and possibly schizophrenia, conception rates among women with all types of mental disorder are the same as those in the general population. In high-income countries, the widespread use of atypical antipsychotics, most of which do not impair reproductive function, may lead to increased conception rates in women with schizophrenia. In addition, pregnancy and childbirth are multifactorial stressors which may render

women with previous mental disorders vulnerable to a recurrence. Hence it is no surprise that studies in urban, low-income and ethnically diverse populations in the USA estimate that around a third of pregnant women are suffering from a mental disorder when substance misuse is included (e.g. Kim et al, 2006).

Mood disorders

Women with mood disorders are those at highest risk of a recurrence in relation to childbirth. Up to two-thirds of women with bipolar disorder experience an episode in the immediate postpartum period. Those with a first-degree relative with a history of puerperal relapse are particularly vulnerable. The risk remains high even if the woman has been well during pregnancy and for the 2 years before she became pregnant and despite her living in good social circumstances with

good social support, factors which can lead clinicians to underestimate the risk. The risk of recurrence appears to be the same in patients with either bipolar I or II disorder but is greater if there has been more than four previous episodes.

Between a third and a half of pregnant women with bipolar disorder experience a worsening of symptoms or a recurrence. Those experiencing symptoms during pregnancy are more likely to have a postpartum episode. Women who are euthymic at conception and stop prophylactic medication are twice as likely to relapse, have a fourfold shorter time to recurrence and a five times greater proportion of weeks during pregnancy spent ill than women who continue with medication (40% of pregnancy versus 9%). Most recurrences are depressive in nature or dysphoric mixed states and almost half occur during the first trimester (Viguera *et al*, 2007). Mood stabilisers should not be stopped therefore without a full risk–benefit analysis. If a decision has been made to discontinue, a rapid discontinuation leads to a higher risk of recurrence than a slow taper.

Women with bipolar disorder are at increased risk of obstetric complications, specifically placenta praevia and antepartum haemorrhage, and, like other women with serious mental illness, are best managed as high-risk cases throughout their pregnancy.

The most common disorders identified in pregnancy are major or minor depression, with similar rates of depression reported during pregnancy as are observed postpartum in high-income countries. Risk factors for depressive symptoms in pregnancy include being single, of low educational status, unemployed, having poor partner and/or social support, and the presence of stressful life events or chronic stressors. Women with histories of childhood sexual abuse or who have experienced violence from their intimate partner or sexual coercion are more likely to report depressive symptoms. Depression in pregnancy is closely associated with smoking during pregnancy and alcohol and drug use, and depressed women who smoke find it harder to give up when they become pregnant than do women who are not depressed.

Halbreich & Karkun (2006) reviewed 146 studies reporting prevalence rates of postnatal depressive symptoms and found they ranged from 0% to 60%. They suggest that this variation may be due to cross-cultural variables, different reporting styles, differences in the perception of mental disorder and stigma, differences in socio-economic environments and biological vulnerability factors. Recent studies have reported higher rates of depression in women who were immigrants to cities in North America; such women are likely to have more risk factors and more barriers to accessing care than the local population. Indigenous populations such as Native Americans also have higher rates.

Women with a history of depression are at increased risk of a postnatal depressive episode, as are those with a family history of psychiatric illness, although the effect size for this risk factor is smaller than that for a personal history of depression. Reported recurrence rates for those with a previous postnatal depressive episode range from 41% to 80% after subsequent pregnancies. Women with premenstrual mood disorders, mood symptoms during past oral contraceptive use and mood symptoms in the first 2–4 days postpartum are also at increased risk of postnatal depression (Bloch *et al.*, 2005).

Depression during pregnancy or postpartum is associated with a number of adverse outcomes, including impaired infant

and childhood cognitive, emotional and behavioural problems and sudden infant death. Maternal depression is an independent risk factor for poor infant growth in the UK, India and Pakistan (Stewart, 2007) and increases the risk of infants suffering from diarrhoea. Infants of mothers with depression have more routine visits to the doctor, more visits to emergency departments and increased rates of hospitalisation.

Anxiety disorders

Pre-existing panic disorder and obsessive—compulsive disorder may worsen, improve or remain stable during pregnancy: studies report conflicting results. Postpartum relapse is common and new onsets can also occur in both pregnancy and the postpartum period and following miscarriage. If panic disorder has first presented in relation to childbirth, it is more likely to recur after subsequent pregnancies than when the first episode is non-puerperal.

Studies in the USA estimate that around 7% of pregnant women suffer from post-traumatic stress disorder (PTSD), with half of those having experienced the traumatic event before the age of 15. Comorbidity with depression or generalised anxiety disorder is common and around a fifth also have a substance misuse diagnosis. Higher incidences of complications such as ectopic pregnancy, miscarriage, hyperemesis, preterm contractions and macrosomia have been observed. Some women develop PTSD as a result of traumatic deliveries and this may lead to secondary tokophobia (fear of childbirth). Groups such as refugees and asylum seekers have often experienced multiple traumas before arriving in the host country and are particularly likely to experience mental health problems.

Eating disorders

Although women with anorexia are much less likely to conceive, many of those who have recovered, have bulimia, partial syndromes or sub-syndromal extreme concerns about weight and excessive exercising will become pregnant. There is some evidence that symptoms may improve during pregnancy but women with eating disorders may have difficulty coping with the bodily changes of pregnancy and are at risk of a postnatal depressive episode. A number of adverse outcomes are associated with pregnancy and delivery in women with eating disorders, particularly if they are not treated, which may be due to restricting intake, excessive exercise and using diuretics or laxatives. Under-nutrition can lead to an undernourished fetus and impaired immunity, which increases the risk of infection. There may also be metabolic disturbances. For a review, see Astrachan-Fletcher et al (2008).

Schizophrenia

Women with serious mental disorders, schizophrenia in particular, are more likely to have experienced coercive sex and are at increased risk of violence during pregnancy, when the focus of assault can shift to the abdomen. They have more lifetime sexual partners, and are more likely to be indulging in risky sexual behaviours, thus increasing their risk of sexually transmitted infections. They are more likely to be

younger (under 19) or older (over 35) mothers (and hence at increased obstetric risk), have more unplanned pregnancies and are more likely to have had a termination of pregnancy. Women with schizophrenia are more socially disadvantaged than women in the general population, more likely to use illicit drugs before pregnancy, and to drink alcohol and/or continue to use drugs during pregnancy, which confers additional risks to the fetus.

Even when smoking and other risk factors such as maternal age, education and pregnancy-induced hypertension are controlled for, the odds of poor outcomes such as low birth weight (LBW), small for gestational age (SGA) infants, preterm delivery and stillbirth are higher in women with schizophrenia. Complications also occur more frequently, such as placental abruption, antepartum haemorrhage, the toxic side-effects of alcohol and illicit drugs and infants with cardiovascular congenital anomalies (most commonly patent ductus arteriosus).

Obesity is increasing in high-income countries and being overweight and folate deficient when pregnant increases the risk of neural tube defects. Women with schizophrenia may become obese through poor diet or the weight gain associated with atypical antipsychotics; it is not known, however, whether the risk of neural tube defects may be further heightened as a direct metabolic consequence of schizophrenia. Patients with schizophrenia are also at increased risk of impaired glucose tolerance and diabetes, particularly if they are taking certain atypical antipsychotics. When pregnant, this renders them at higher risk of gestational diabetes, which confers greater morbidity for both mother and fetus. Obesity in pregnancy also increases obstetric risk and is associated with being less likely to have a spontaneous onset of labour, more blood loss in labour, heavier babies and longer hospital stays. Many of the examinations and investigations which are part of antenatal care are more difficult in an obese woman. For example, it is harder to palpate the uterus and ultrasound penetrates fat very poorly.

Women with tightly defined schizophrenia who remain on medication are less likely to relapse after delivery than women with mood disorders. However, a fifth of those who have had admissions before they became pregnant will relapse after delivery, this relapse being more likely if medication is discontinued.

Self-harm and suicide

Self-harm in pregnancy is most often an overdose of the most accessible medication: over-the-counter analgesics, iron

or vitamins. Issues related to pregnancy and interpersonal difficulties are the most frequently cited reasons for the overdose. Suicidal ideation is more likely to occur in women with a history of physical or sexual abuse.

Self-poisoning during pregnancy increases the risk of preterm labour, the need for Caesarean section and blood transfusion, and increases the likelihood of respiratory distress syndrome and neonatal death. One of the best predictors of self-harm in pregnancy is substance misuse.

Women with psychosis or severe depressive illnesses during pregnancy and the postpartum period who are suicidal tend to use violent methods, most frequently hanging or jumping from a height, drowning, self-immolation or guns in the USA and are hence more likely to succeed in killing themselves. Maternal suicide has become the most common cause of maternal death in the UK in recent years.

Conclusions

Pregnancy and the postpartum period can be a difficult and very risky time for many women with mental disorders. A woman's mental state, associated behaviours or treatment may confer significant risk to her fetus or infant. It is therefore crucial that mental health professionals working with women during their reproductive years are aware of these risks and engage in proactive management with sexual health, family planning and maternity services.

References

Astrachan-Fletcher., E., Veldhuis, C., Lively, N., et al (2008) The reciprocal effects of eating disorders and the postpartum period: a review of the literature and recommendations for clinical care. Journal of Women's Health. 17, 227–239

Bloch, M., Rotenberg, N., Koren, D., et al (2005) Risk factors associated with the development of postpartum mood disorders. *Journal of Affective Disorders*, **88**, 9–18.

Halbreich, U. & Karkun, S. (2006) Cross-cultural and social diversity of prevalence of postpartum depression and depressive symptoms. *Journal of Affective Disorders*, **91**, 97–111.

Kim, H. G., Mandell, M., Crandall, C., et al (2006) Antenatal psychiatric illness and adequacy of prenatal care in an ethnically diverse innercity obstetric population. Archives of Women's Mental Health, 9, 103-107

Stewart, R. C. (2007) Maternal depression and infant growth: a review of recent evidence. *Maternal and Child Nutrition*, **3**, 94–107.

Viguera, A. C., Whitfield, T., Baldessarini, R. J., et al (2007) Risk of recurrence in women with bipolar disorder during pregnancy: prospective study of mood stabilizer discontinuation. American Journal of Psychiatry, 164, 1817–1824.

NEWS AND NOTES

Contributions to the 'News and notes' column should be sent to: Amit Malik MRCPsych, Consultant Psychiatrist, Hampshire Partnership NHS Trust, UK, email ip@rcpsych.ac.uk

Meeting of the Psychiatric Associations of Europe, London

On 27 April 2010 the College hosted a meeting of psychiatric associations from across Europe with the view to exploring common issues and concerns relating to mental health, developing common strands of work and responding

collaboratively to issues affecting psychiatry and psychiatric services across Europe.

The meeting brought together high-ranking representatives of psychiatric associations in Belgium, the Netherlands, Croatia, Czech Republic, Finland, Germany, Ireland, Italy, Norway, Russia, Slovakia and Spain, as well as the World Health Organization (WHO) and the European Parliament.