

Scottish Intercollegiate Guidelines Network



Postnatal Depression and Puerperal Psychosis

A national clinical guideline

1	Introduction	1
2	Diagnosis, screening and prevention	3
3	Management	7
4	Prescribing issues in pregnancy and lactation	11
5	Implementation and audit	16
6	Information for patients and carers	20
7	Development of the guideline	23
	References	26

June 2002

KEY TO EVIDENCE STATEMENTS AND GRADES OF RECOMMENDATIONS

LEVELS OF EVIDENCE

1 ⁺⁺	High quality meta-analyses, systematic reviews of RCTs, or RCTs with a very low risk of bias
1 ⁺	Well-conducted meta-analyses, systematic reviews, or RCTs with a low risk of bias
1 ⁻	Meta-analyses, systematic reviews, or RCTs with a high risk of bias
2 ⁺⁺	High quality systematic reviews of case control or cohort studies High quality case control or cohort studies with a very low risk of confounding or bias and a high probability that the relationship is causal
2 ⁺	Well-conducted case control or cohort studies with a low risk of confounding or bias and a moderate probability that the relationship is causal
2 ⁻	Case control or cohort studies with a high risk of confounding or bias and a significant risk that the relationship is not causal
3	Non-analytic studies, e.g. case reports, case series
4	Expert opinion

GRADES OF RECOMMENDATION

Note: The grade of recommendation relates to the strength of the evidence on which the recommendation is based. It does not reflect the clinical importance of the recommendation.

A	At least one meta-analysis, systematic review of RCTs, or RCT rated as 1 ⁺⁺ and directly applicable to the target population; <i>or</i> A body of evidence consisting principally of studies rated as 1 ⁺ , directly applicable to the target population, and demonstrating overall consistency of results
B	A body of evidence including studies rated as 2 ⁺⁺ , directly applicable to the target population, and demonstrating overall consistency of results; <i>or</i> Extrapolated evidence from studies rated as 1 ⁺⁺ or 1 ⁺
C	A body of evidence including studies rated as 2 ⁺ , directly applicable to the target population and demonstrating overall consistency of results; <i>or</i> Extrapolated evidence from studies rated as 2 ⁺⁺
D	Evidence level 3 or 4; <i>or</i> Extrapolated evidence from studies rated as 2 ⁺

GOOD PRACTICE POINTS

<input checked="" type="checkbox"/>	Recommended best practice based on the clinical experience of the guideline development group
-------------------------------------	---

© Scottish Intercollegiate Guidelines Network

ISBN 1 899893 18 0

First published 2002

SIGN consents to the photocopying of this guideline for the purpose of implementation in NHS Scotland

SIGN Executive
Royal College of Physicians
9 Queen Street
Edinburgh EH2 1JQ
www.sign.ac.uk

1 Introduction

1.1 THE NEED FOR A GUIDELINE

1.1.1 PREVALENCE

The World Health Organisation (WHO) predicts that depression will be the second greatest cause of premature death and disability worldwide by the year 2020.¹ The suffering caused by depression is profound yet often underestimated. It can affect every aspect of a person's being: their feelings, thoughts and functioning. Postnatal depression is particularly important because it is so common and because it occurs at such a critical time in the lives of the mother, her baby and her family.

For every 1,000 live births, 100-150 women will suffer a depressive illness and one or two women will develop a puerperal psychosis.^{2,3} Failure to treat either disorder may result in a prolonged, deleterious effect on the relationship between the mother and baby and on the child's psychological, social and educational development.⁴ The relationship between the mother and her partner may also deteriorate.

1.1.2 MORBIDITY AND MORTALITY

The morbidity of clinical depression is often prolonged by a delay in diagnosis or an inadequate course of treatment. The stigma and shame felt by the sufferers who may be reluctant to 'confess' their feelings are frequently important factors in delayed diagnosis. Such reticence is particularly common in postnatal depression, when feelings of guilt and failure may be intense. A mother may even fear that she will be thought unfit to care for her child.

Mental illness is also a significant factor in maternal mortality. The UK Confidential Enquiry into Maternal Deaths (CEMD)⁵ reports that psychiatric disorders contributed to 12% of all maternal deaths. Suicide is the second leading cause of maternal death in the UK after cardiovascular disease. The report comments on the inaccurately low measurement of deaths from mental illness and demonstrates that record linkage reveals approximately as many deaths again by suicide or violent means. If included, these make deaths from mental illness the leading cause of maternal mortality.

A small body of evidence points to an association between a mother's depression and the subsequent report of depression in her partner.⁶ Fathers are significantly more likely to suffer from depression and general health problems if their partners are diagnosed with postnatal depression.⁶ This is significant in the context of the detrimental effects which depressed partners may have on each other and the consequences for the infant being cared for by depressed parents. However, research evidence of satisfactory quality indicating possible interventions for members of the family other than the mother is very limited.

Untreated postnatal depression is associated with detrimental effects on infant development. The cognitive, emotional, social and behavioural development of the infant all may be affected both in the long and short term.^{4,7,8} Depressed mothers give more negative and fewer positive responses in their interactions with their infants.⁸ Longer term negative influences of mothers' postnatal depression in the first year of life on infants' language skills, social and emotional development and (particularly in boys) intelligence quotients, have been demonstrated.⁹⁻¹² Cognitive development in the children of postnatally depressed women is not universally impaired. The effect appears limited to those children whose mothers find it difficult to maintain sensitive and active engagement with the infant.¹³

1.1.3 MULTIDISCIPLINARY TREATMENT

Delay in delivering adequate treatment for postnatal depression or puerperal psychosis is particularly unfortunate since the response to treatment is good.¹⁴ Effective detection and adequate management of these disorders requires co-ordination of a wide variety of primary and secondary care services, including midwives, health visitors, clinical psychologists, community psychiatric services, general practitioners, pharmacists, obstetricians and psychiatrists, with other community agencies, such as voluntary organisations and social services, providing further support.

1.1.4 VARIATION IN PRACTICE

The guideline development group obtained information from Primary Care Trusts and Health Boards in Scotland on current and planned developments in their local postnatal mental illness management strategies. Considerable geographical variation in the management of postnatal depression in Scotland was identified (see *section 5.2.1*). Variation was also found in co-ordination between primary care teams, health visitors and midwives with community psychiatric team members; in the degree of specialisation of these services; and in access to suitable facilities to admit mother and baby together, if necessary.

1.2 REMIT OF THE GUIDELINE

This guideline provides recommendations based on current evidence for best practice in the management of postnatal depression and puerperal psychosis. The guideline includes screening, diagnosis, prevention and management involving both primary and secondary care, leading to an integrated and effective multidisciplinary approach. This document is likely to assist in the development of local evidence-based integrated care pathways. The guideline is likely to be of interest to midwives, health visitors, general practitioners, pharmacists, psychiatric nurses, psychiatrists, obstetricians, clinical psychologists, social workers, public health physicians, users of services, and all other professions caring for women and their families.

1.3 DEFINITIONS

1.3.1 POSTNATAL DEPRESSION

Postnatal depression is regarded as any non-psychotic depressive illness of mild to moderate severity occurring during the first postnatal year. However, for a significant proportion of women, the illness may have its onset in the antenatal period.¹⁵ It is important to distinguish postnatal depression from “baby blues”, the brief episode of misery and tearfulness that affects at least half of all women following delivery, especially those having their first baby. It is also important that the term postnatal depression should not be used as a generic term for all mental illness following delivery.

1.3.2 PUERPERAL PSYCHOSIS

Puerperal psychosis, in almost all cases, is a mood disorder accompanied by features such as loss of contact with reality, hallucinations, severe thought disturbance, and abnormal behaviour.

1.4 REVIEW AND UPDATING

This guideline will be issued in June 2002 and will be kept under review as new evidence becomes available. Any updates to the guideline will be noted on the SIGN website: www.sign.ac.uk.

2 Diagnosis, screening and prevention

2.1 DIAGNOSIS

Depression is a common condition, affecting a large proportion of women of childbearing age. Studies are evenly divided in reporting postnatal depression as either more or less severe than depression at other times¹⁶⁻¹⁹ and there is little evidence that the nature of symptoms differs between postnatal and non-postnatal depression.^{20,21} In diagnosing depression in the postnatal period, there is a risk that normal emotional changes may be mistaken for depression or may mask depressive symptoms.⁷

2+

A large number of studies have assessed the prevalence of postnatal depression.^{6,19,23-35} In those where robust methodology was used, prevalence (whether point or period) ranges from 4.5% to 28% of women in the postnatal period. The majority cluster around 10% to 15% with one meta-analysis giving a prevalence of 13%.² Variance between studies can be accounted for in part by the period under evaluation and the method of assessment used. There is some evidence that, while the overall prevalence of postnatal depression is not significantly different from that of depression at other times, there is an increased risk of depression occurring in the early postnatal period (threefold in the first five postnatal weeks).^{35,36}

2++

Although research exists on the prevalence of postnatal depression in other cultures, little work has been published on ethnic minority groups within Scotland. It is important to remember that there are widely varying cultural traditions and rituals surrounding pregnancy and childbirth and a lack of cross-cultural equivalence in concepts of depression. Effective detection and management requires an understanding of these differences.

Puerperal psychosis is a much less common condition, affecting one to two per thousand women.^{3,37} Most studies agree that this rate represents a significantly increased risk for psychotic illness when compared with other times in a woman's life. Puerperal psychosis is largely affective in nature, although several studies comment on atypical features in the presentation such as mixed affective state, confusion and disturbed behaviour.³⁸ It typically presents in the early postpartum period, usually within the first month.

When assessing women in the postnatal period it is important to remember that normal emotional changes may mask depressive symptoms or be misinterpreted as depression.

Primary care teams should be aware that with decreasing duration of stay in postnatal wards, puerperal psychosis is more likely to present following a mother's discharge home.

2.2 RISK FACTORS

2.2.1 RISK FACTORS FOR POSTNATAL DEPRESSION

If risk factors predicting postnatal depression can be identified by screening this would allow optimum targeting of effective interventions.

The evidence suggests that risk factors for postnatal depression are no different to the risk factors for non-postnatal depression. Three systematic reviews identified the following risk factors as having moderate to strong associations with postnatal depression:^{2,39,40}

- past history of psychopathology and psychological disturbance during pregnancy
- low social support
- poor marital relationship
- recent life events
- "baby blues".

1+

Weak associations have been found with obstetric complications, a history of abuse, low family income and lower occupational status.^{2,39-41} An American review found no evidence regarding the effect of early postpartum discharge.⁴²

3

In addition to the above factors, cohort and case control studies have identified the following as risk factors:^{19,43-50}

- parents' perceptions of their own upbringing
- unplanned pregnancy
- unemployment
- not breastfeeding
- antenatal parental stress
- antenatal thyroid dysfunction
- coping style
- longer time to conception
- depression in fathers
- emotional lability in maternity blues
- low quality social support
- having two or more children.

2+

There is no conclusive evidence on hormonal changes as a risk factor for postnatal depression. In a small experimental study, simulating hormone changes after delivery led to a significant change in mood in five of eight women with a previous history of postnatal depression compared with none of eight comparison women, suggesting differential sensitivity to hormone change.⁵¹

1-

Mothers' mental health may also be affected by the health of the baby. In cohort studies depression has been associated with neonatal risk,⁵² stillbirth, neonatal death or Sudden Infant Death Syndrome (SIDS),⁵³ and very low birth weight (less than 1500 g).^{54,55}

2+

2.2.2 RISK FACTORS FOR PUERPERAL PSYCHOSIS

Factors that increase the risk of puerperal psychosis include a past history of puerperal psychosis, pre-existing psychotic illness (especially affective psychosis) of severity requiring admission to hospital, and family history of affective psychosis in first or second degree relatives.⁵⁶⁻⁵⁹ Women who have had a previous puerperal psychosis are at significant risk of future puerperal and non-puerperal episodes.^{56,57,60-63} The risk of a future puerperal episode lies between 25% and 57% and the risk of non-puerperal relapse is even higher.

2+

A Procedures should be in place to ensure that all women are routinely assessed during the antenatal period for a history of depression.

Psychosocial and biological risk factors for postnatal depression and puerperal psychosis should be recorded in the antenatal period in a routine and systematic fashion.

Pregnant women and their partners should be given information during the antenatal period on the nature of postnatal mood disorders and puerperal psychosis.

2.3 SCREENING

Screening for postnatal depression has gained in popularity since the original studies on the effectiveness of screening by health visitors in primary care were published.⁶⁴ Screening can have negative consequences however, particularly so in the field of mental health. It is therefore important that the health professionals administering any aspect of a screening programme are adequately trained to do so.

Many areas throughout Scotland have already instituted screening programmes, often in the context of integrated care pathways for the detection and management of postnatal depression.⁶⁵ To be effective, screening programmes should meet certain criteria, the most important of which include:

- adequate understanding of the condition
- a simple, safe, validated screening test with appropriate cut-off levels
- effective treatment for those screened as positive
- adequate resources to ensure any programme is implemented in an acceptable, expert manner.⁶⁶

4

The issue of screening for postnatal depression is currently being assessed by the Department of Health National Screening Committee. In practice, screening is already taking place, albeit in varying styles and with varying levels of resources. While evidence may not yet be available to meet the strictest criteria for recommending screening programmes, if programmes are instigated they should conform to best available research evidence on effectiveness, be adequately resourced, and include ongoing evaluation as an integral part of the programme. The SIGN guideline development group's recommendations are based on these premises.

2.3.1 ANTENATAL SCREENING – POSTNATAL DEPRESSION

Screening tools have been devised to predict postnatal depression in the antenatal period. These have been based around known risk factors for postnatal depression (see section 2.2.1), but many have not been properly evaluated to determine sensitivity, specificity and predictive value. The Edinburgh Postnatal Depression Scale (EPDS) has also been examined as an antenatal screening tool.⁶⁷ As yet, no antenatal tool has been devised which will accurately predict those who go on to develop postnatal depression.

2+

There is no evidence to support routine screening in the antenatal period to predict the development of postnatal depression.

2.3.2 ANTENATAL SCREENING – PUERPERAL PSYCHOSIS

While no specific screening tools have been devised to identify women at high risk of puerperal psychosis, there is ample evidence that risk factors can be easily identified and are highly predictive (see section 2.2.2). Based on this evidence, enquiry about such risk factors has been recommended by several expert reports.^{5,68}

4

D All women should be screened during pregnancy for previous puerperal psychosis, history of other psychopathology (especially affective psychosis) and family history of affective psychosis.

Women with positive risk factors for puerperal psychosis should receive specialist psychiatric assessment antenatally.

2.3.3 POSTNATAL DEPRESSION SCREENING

The most commonly used screening tool in the postnatal period is the EPDS. There is good evidence for its effectiveness, although its sensitivity, specificity and predictive value are dependent on the cut-off scores chosen. A cut-off of greater than 9 has been suggested for 'possible depression' and greater than 12 for 'probable depression'.^{67,69,70} The lower cut-off will ensure that very few women are missed, but at the expense of a high false positive rate. Taking this into account, the positive predictive value of the EPDS varies from 44% to 73%.⁷¹⁻⁷³

Concerns have been expressed that the EPDS may perform less well in cases where there are psychomotor symptoms (often suggestive of severe depression).⁷⁴ More work is required on the timing and number of administrations, and on appropriate cut-offs to use.

2+

There is some evidence that, in research settings, combining two screening tools (the EPDS and the General Health Questionnaire, GHQ) may be more effective than either tool alone.⁷⁵

C The EPDS should be offered to women in the postnatal period as part of a screening programme for postnatal depression.

4

C The EPDS is not a diagnostic tool. Diagnosis of postnatal depression requires clinical evaluation.

2+

A cut-off on the EPDS of 10 or above is suggested for whole population screening.

The EPDS should be used at approximately six weeks and three months following delivery and should be administered by trained health visitors or other health professionals.

2.4 PREVENTION

2.4.1 PREVENTION OF POSTNATAL DEPRESSION

An effective intervention to prevent postnatal depression in high risk groups would benefit women in reducing depression and its impact on the child and marital relationships. However, the evidence for the effectiveness of interventions to prevent postnatal depression is conflicting. Few good quality randomised controlled trials have been published and those that have give inconclusive findings.

The provision of home support workers,⁷⁶ midwife managed care,⁷⁷ and postnatal check up at six weeks⁷⁸ have all been found in randomised controlled trials to have no significant effect in women with no complications in pregnancy or delivery. No long term effect of a doula (female birthing companion) was found in a study of pre-term babies in South Africa, although the follow-up rate in this study was low (50%).⁷⁹ An antenatal preparation for parenthood intervention (six one-hour antenatal classes) was found to have no effect on depression or psychosocial risk factors at three months, although only 45% of women attended more than two sessions.⁸⁰ A small study found that individualised, family-based interventions resulted in improved maternal psychological well-being.⁸¹

Weekly visits by a child health nurse significantly reduced the scores on the EPDS at six weeks in a group of mothers screened for high risk factors, although only 53% returned questionnaires.⁸² Reduced anxiety and depression has also been found after debriefing by midwives, although the morbidity in the control group in this study was high (55% above threshold for depression on the Hospital Anxiety and Depression (HAD) scale). A large Australian study found no effect of debriefing in women following operative childbirth.^{83,84} In another small study, women with at least one predictor of postnatal depression who were given interpersonal therapy had reduced Beck depression scores compared with the control group, but 33% of the control group had major postnatal depression.⁸⁵

A cohort study in mothers identified antenatally as vulnerable to depression found that first time mothers who had taken part in a parenthood educational programme had significantly lower EPDS scores compared with routine care.⁸⁶

A placebo controlled randomised clinical trial examined the use of nortriptyline to prevent recurrence of depression in 51 postnatal women who had a previous history of postpartum depression. No difference in the rate of recurrence was found between the two groups.⁸⁷

In a small study of eleven women with a history of puerperal psychosis or puerperal major depression but no history of non-puerperal depression, prophylactic oestrogen prevented relapse in all but one.⁸⁸

The current research base for preventive interventions in low risk women is extremely limited.

- In high risk women it may be effective to have postnatal visits, interpersonal therapy and/or antenatal preparation.

2.4.2 PREVENTION OF PUERPERAL PSYCHOSIS

Two cohort studies have examined the use of prophylactic lithium given either in late pregnancy or immediately after delivery for the purpose of preventing the development of puerperal psychosis in high risk women. The first found that fewer than 10% of treated patients developed illness, substantially lower than their estimate of 20%.⁸⁹ The second study examined 27 women with bipolar mood disorder.⁹⁰ Only one of 14 who received mood stabilisers developed puerperal psychosis compared with eight of 13 untreated women.⁹⁰ Both these studies were limited by their open design, but their findings are reinforced by one study showing a high risk of puerperal relapse in bipolar women who discontinue lithium during pregnancy.¹²⁷

The evidence suggests that lithium is an effective treatment when used to prevent puerperal psychosis in high risk groups but it is not of sufficient quality to support a recommendation.

- Women identified at high risk of puerperal psychosis should receive specialist psychiatric review.

3 Management

Untreated postnatal depression may be prolonged and may have a deleterious effect on the relationship between mother and baby and on the child's cognitive and emotional development.^{4,91} However, the response to both pharmacological and psychosocial interventions is good.¹⁴

2+
1+

B Postnatal depression and puerperal psychosis should be treated.

Many women are reluctant to consider the use of psychotropic medicine during pregnancy and the postnatal period. The choice of treatment for postnatal depression should be governed by efficacy, incidence of side effects, likely compliance, patient preference and, in the case of pharmacological therapies, safety of use when pregnant or breast feeding (see section 4).

There are instances where the mother and infant may be at risk because of the mother's mental illness. Although rare, infanticide and suicide do occur. Multidisciplinary risk assessment and risk management protocols and, if necessary, local child protection procedures should always be followed when there is the potential for serious harm to the mother and/or baby.⁹² These should provide a protective framework by ensuring good communication between the family and professionals.

3.1 PHARMACOLOGICAL AND PHYSICAL MANAGEMENT

3.1.1 POSTNATAL DEPRESSION

■ *Hormonal therapies*

Hormonal therapies have been the subject of considerable debate, however little reliable evidence is available. No evidence could be identified for the effectiveness of natural progesterone or synthetic progestogens in the treatment of postnatal depression.⁹³

One double blind randomised controlled trial indicates that transdermal oestrogen (with cyclical progestogen) is more effective than placebo in moderate to severe postnatal depression.^{93,94} However, concern about side effects, particularly endometrial hyperplasia and thrombosis, may limit its use.

1-

■ *Antidepressants*

A randomised controlled trial of the use of antidepressant therapy in postnatal depression carried out in a community setting in Manchester demonstrated a beneficial effect from fluoxetine combined with at least one session of modified cognitive behavioural therapy (CBT) in women with mild postnatal depression.¹⁴

1+

Evidence from a case control study carried out in the United States suggests that both SSRIs and tricyclic antidepressants (TCAs) are effective in postnatal depression.⁹⁵ A small case series suggests that SSRIs are no less effective in patients with postnatal depression than in other patient groups.⁹⁶

2-
3

■ *Physical therapies*

No evidence was identified relating to the use of electroconvulsive (ECT) therapy in postnatal depression.

■ *St John's Wort (hypericum perforatum)*

No evidence was identified relating specifically to the treatment of postnatal depression by St John's Wort or other alternative medicines. The potential for interactions with other prescription medicines and the lack of pharmacoregulation of these products means that caution should always be exercised before recommending their use in pregnancy and lactation.⁹⁷

■ *Physical exercise*

There is good evidence to support the role of exercise in reducing levels of depression in the general population⁹⁸ but little research has been conducted into its role in postnatal depression.⁹⁹

D Postnatal depression should be managed in the same way as depression at any other time, but with the additional considerations regarding the use of antidepressants when breast feeding and in pregnancy (see section 4).

St John’s Wort and other alternative medicines should not be used during pregnancy and lactation until further evidence as to their safety in these situations is available.

The use of hormonal therapies in the routine management of patients with PND is not advised.

3.1.2 PUERPERAL PSYCHOSIS

There is limited evidence for the effectiveness of treatment specifically for puerperal psychosis. As the nature of puerperal psychosis is essentially affective, treatments used for affective psychoses in general are also appropriate for puerperal psychosis. Such treatments would typically involve one or more drugs from the antidepressant, mood stabilising or neuroleptic groups and /or occasionally ECT.

D Puerperal psychosis should be managed in the same way as psychotic disorders at any other time, but with the additional considerations regarding the use of drug treatments when breast feeding and in pregnancy (see section 4).

3.2 PSYCHOSOCIAL MANAGEMENT

The evidence relating to the role of psychosocial interventions in the treatment of postnatal depression focuses mainly on the “talking” therapies, including counselling, psychotherapy, and approaches based upon these techniques. A number of studies have investigated the role of complementary therapies, including massage, infant massage and relaxation therapies in postnatal depression; and a few studies have reviewed the interaction between the depressed mother and her infant. The majority of published studies are descriptive and observational in nature. Methodological weaknesses and small sample sizes limit the conclusions that can be drawn from the few randomised controlled trials identified.

3.2.1 COUNSELLING AND PSYCHOTHERAPY

A number of studies indicate that this type of intervention, when provided by trained practitioners, can significantly reduce depressive symptoms in women diagnosed with postnatal depression.

■ *Counselling*

Counselling is a systematic process which gives individuals an opportunity to explore, discover and clarify ways of living more resourcefully and with a greater sense of wellbeing. It may be concerned with addressing and resolving specific problems, making decisions, coping with crises, working through conflict, or improving relationships with others.¹⁰⁰

Evidence consistently demonstrates that a systematic intervention based on non-directive counselling (supportive listening without giving opinions or advice) of around six to eight sessions, delivered by trained primary health care workers (e.g. health visitors), is effective in reducing mothers’ depression in the postnatal period compared with routine care.^{7,101,102} Although there are some difficulties in defining “routine care” and one of the studies is now over 15 years old, the size of the effects described outweighs the problems of completely controlling confounding variables.

1+

■ *Cognitive behavioural approaches*

Cognitive behaviour therapy (CBT) is a structured therapy combining concepts and techniques from cognitive and behaviour therapies. It seeks to solve problems and reduce symptoms by changing unhelpful thoughts, beliefs and behaviours.¹⁰⁰

Brief interventions using cognitive behavioural and problem-solving approaches are effective in reducing depressive symptoms in women during the postnatal period.^{7,14} Such interventions, which are based around a minimum number of sessions, can be as effective as antidepressants in alleviating the symptoms of mild to moderate depression in new mothers.¹⁴ The use of these techniques can be transferred to telephone counselling with good effect.¹⁰³

1+

- *Interpersonal therapy*

The interpersonal therapy approach focuses on the mother's past and present relationships, including the relationship with her own mother, and helps her to relate problematical aspects of these relationships to her current depression.

Interpersonal therapy has been shown to significantly reduce depressive symptoms in postnatally depressed women.¹⁰⁴ | 1+

3.2.2 SOCIAL SUPPORT

The relationship between postnatal depression and adverse social circumstances is similar to that for depression generally. Both cultural and environmental factors are important when considering social support and little work has been done specifically in Scotland.

There are various local initiatives and responsive services in Scotland offering support to the mother, the baby and family. Many of these have been established by practitioners with an interest in the field of postnatal depression and, like much of current practice, have not been subjected to rigorous evaluation.

Systematic review of a small body of evidence indicates that social support may be helpful in reducing depressive symptoms in the mother.¹⁰⁵ Help must be carefully matched to the mother and family's particular needs to avoid undermining the mother's confidence and place in the family.^{106,107} | 1+

It is clear from a number of studies that a mother's perception of lack of support can be a risk factor in predisposing her to depression. A mother's ability to use social support (e.g. home help and childcare) may be affected by her depression. A confiding relationship and secure adult attachment are protective factors.¹⁰⁸ | 2+

3.2.3 FAMILY FOCUSED INTERVENTIONS

Several studies focusing on interventions involving the mother and partner and mother with baby have described various benefits.¹⁰⁹⁻¹¹²

- *Couple interventions*

One study suggests that couples involved in an individual or group intervention focused on parenting and their reactions to it experience a reduction in their depressive symptoms and a benefit to their general health.¹⁰⁹ | 1+

- *Interaction focused interventions*

The quality of relationship between a mother and her child may be adversely affected by the mother's depressive condition. Several early intervention studies suggest that working with depressed mothers in order to teach different response patterns to their children can positively affect the mother-infant bond.^{110,111} | 4

- *Infant massage*

A small randomised controlled study demonstrated that attending infant massage classes had a significant and positive effect on both mother-infant interaction and depressive symptoms in the mother.^{112,113} | 1+

B Psychosocial interventions should be considered when deciding on treatment options for a mother diagnosed as suffering from postnatal depression.

C Interventions that work with more than one family member at a time should be considered when assessing the treatment options available.

The effects of a mother's postnatal depression on other family members and their subsequent needs should be considered and support offered as appropriate.

The psychosocial treatment option chosen should reflect both clinical judgement and the mother's and family's preferences where possible.

3.3 MOTHER AND BABY UNITS

In severe cases of postnatal depression and puerperal psychosis, there is frequently a difficult question: whether admission to hospital would hasten the recovery of the mother. If the answer is yes, there is an important follow-up question: whether to admit the baby as well. This applies equally to mothers with severe postnatal depression or puerperal psychosis and to mothers with a schizophrenic illness exacerbated by the impact of a new baby.

Several studies have examined whether mother and baby admissions are an effective approach. The papers are descriptive, largely written by the clinicians running the units. The authors have generally found advantages in avoiding separation of mother and infant: establishing positive attachment, enhancing the mother’s confidence in her maternal role, and providing support to the husband and family.¹¹⁴⁻¹¹⁶ A study of a specialist day hospital has also shown benefits for mother and baby.⁶⁸

2+

There are concerns, however, that admission of mothers with their babies to general psychiatric wards may not adequately ensure the safety and security of the baby. Guidelines published by the Royal College of Psychiatrists discourage such *ad hoc* arrangements and recommend the provision of mother and baby units.⁶⁸ In England, the Mental Health Act Code of Practice and other national guidance states that infants should not be admitted to general psychiatric wards.^{117,118} The SIGN guideline development group endorses these recommendations.

4

- D The option to admit mother and baby together to a specialist unit should be available. Mothers and babies should not routinely be admitted to general psychiatric wards.**
- A multiprofessional assessment, including social work, and involving family members, should take place to review the decision to admit mother and baby to a specialist unit either before or shortly after admission.
- Clinical responsibility for the baby whilst the mother is an inpatient needs to be clearly determined.

4 Prescribing issues in pregnancy and lactation

4.1 INTRODUCTION

Clinicians are cautious about prescribing drugs during pregnancy or when a mother is breast feeding due to the possible risks to the fetus and infant. In early pregnancy the risk of teratogenesis is the main concern. The main risks associated with psychotropic drugs in later pregnancy are neonatal toxicity or withdrawal syndrome following delivery and the possibility of a long term impact on the infant's neurodevelopment.¹¹⁹ During breast feeding many drugs taken by the mother are excreted in the milk and ingested by the infant, with consequent concerns about their impact on the infant with regard to both short term toxicity and longer term neurodevelopment.¹²⁰ The level of concern about prescribing during pregnancy and lactation is reflected in the Terms of Marketing Authorisation, with most psychotropic drugs not being licensed for use in pregnancy and lactation. This underlines the need to give very careful consideration to the risks and benefits of prescribing psychotropic medication at this time.

Decisions may have to be made about commencing psychotropic drugs during pregnancy if a woman becomes ill or, more commonly, stopping medication if a woman finds that she is pregnant. As many pregnancies are unplanned, some are exposed inadvertently to psychotropic medication. Advice may then be sought on the need for further investigation and possible therapeutic termination of pregnancy. Studies based on systematic case registers such as the Swedish Medical Birth Registry¹²¹ are contributing to more substantial evidence for such decisions, particularly in relation to teratogenicity.

- Scottish case registers to record outcomes for children exposed to psychotropic medication *in utero* or through breast feeding are required.

Much of the evidence base for risk associated with drug treatments is based on case reports and case series. As new antidepressants are introduced there will continue to be a time-lag in evidence becoming available on which decisions can be made. Evidence is scant for newer agents and for long term developmental risk. It is reasonable to assume that the fetus and newborn are as, if not more, susceptible to the same side effects as adults. The evidence identified demonstrates a relatively low risk with most psychotropic agents, however no treatment is risk-free. Pregnant women and their families have the right to expect that treatments prescribed are clearly indicated and are associated with lowest known risk.

The following general principles governing prescription of new medication or the continuation of established therapy during pregnancy and in breast feeding apply to all recommendations in this guideline:

- **establish a clear indication for drug treatment**
 (i.e. the presence of significant illness in the absence of acceptable or effective alternatives)
- **use treatments in the lowest effective dose for the shortest period necessary**
- **drugs with a better evidence base (generally more established drugs) are preferable**
- **assess the benefit/risk ratio of the illness and treatment for both mother and baby/fetus.**

4.2 DRUG TREATMENT IN THE FIRST TRIMESTER

4.2.1 ANTIDEPRESSANTS

Evidence indicates no increased risk of major malformation in the newborn or spontaneous abortion following exposure to antidepressants in early pregnancy.^{119,121-126} This evidence applies to a variety of tricyclic antidepressants (TCAs) and selective serotonin re-uptake inhibitors (SSRIs);^{119,121,123,124} and more specifically, fluoxetine,^{122,125} citalopram,¹²¹ fluvoxamine,¹²⁶ paroxetine,¹²⁶ and sertraline.¹²⁶

2⁺⁺

B The risks of stopping tricyclic or SSRI antidepressant medication should be carefully assessed in relation to the mother's mental state and previous history. There is no indication to stop tricyclic or SSRI antidepressant medication as a matter of routine in early pregnancy.

If a pregnant woman becomes depressed, antidepressant medication should be prescribed with caution and specialist psychiatric advice sought.

Adequate evidence is not available to make recommendations on the use of other antidepressant medications.

4.2.2 MOOD STABILISERS

■ *Lithium*

Lithium is regularly used on a maintenance basis in the prevention of relapse of bipolar affective disorder. Such a relapse is more likely to occur following childbirth and when lithium is withdrawn.¹²⁷

2⁺

Current practice for women with bipolar disorder who plan to or become pregnant ranges from the discontinuation of lithium treatment accompanied by close monitoring or prescription of antipsychotic medication, through to maintenance of lithium throughout pregnancy in cases where the risk of relapse is significant. Evidence is not available to allow comparison of these strategies, but recent studies have allowed a review of the risks associated with lithium treatment.

Early studies of lithium in pregnancy suggested that the risk of major fetal malformations, in particular Ebstein's anomaly, was increased by exposure to lithium in early pregnancy.¹²⁸ Recent evidence, based on prospective studies, suggests that the risk to the fetus of lithium exposure may have been over-estimated and the risk to the mother and child of lithium withdrawal may have been under-estimated.¹²⁷

2⁺

C Where women with severe bipolar disorder are maintained on lithium, consideration should be given to continuing lithium during pregnancy *if clinically indicated*.

C When a woman is maintained on lithium therapy, serum levels should be carefully monitored. Detailed fetal ultrasound scanning (level III) should be offered.

Women with bipolar disorder maintained on lithium should receive specialist supervision.

The risks of lithium to the fetus and the effects of lithium withdrawal on the mother should be discussed before pregnancy.

■ *Other mood stabilisers*

The antiepileptic drugs (AEDs) carbamazepine, valproate and, more recently, lamotrigine are also used as mood stabilisers. The evidence from studies of women with epilepsy suggests that exposure to AEDs in early pregnancy increases the risk of congenital malformations and this effect is related to the use of antiepileptic drugs, not the epilepsy.¹²⁹ The relative risk is higher with valproate than carbamazepine and, in particular, with doses of valproate over 1000 mg per day.

2⁺

Several AEDs, including carbamazepine, are folate antagonists. Folic acid supplements are recommended for women on AEDs from preconception to the end of the first trimester.¹³⁰ (See the SIGN guideline *Epilepsy in Adults due for publication in late 2002*). 2+

There is as yet no evidence available on the risks of lamotrigine in early pregnancy.

C All women on antiepileptic drugs as mood stabilisers should be prescribed a daily dose of 5 mg folic acid from preconception until the end of the first trimester.

D Valproate should be avoided as a mood stabiliser in pregnancy.

The risks of antiepileptic drugs used as mood stabilisers should be discussed with the mother before pregnancy.

4.2.3 OTHER PSYCHOTROPIC MEDICATION

Evidence suggests that exposure to benzodiazepines in early pregnancy increases the risk of major malformations and oral cleft in the fetus.¹³¹ 1+

B Benzodiazepines should be avoided in the first trimester of pregnancy.

Women inadvertently exposed to benzodiazepines in early pregnancy should be referred for investigation of possible fetal malformation, in particular oral cleft.

Caution should be exercised in the use of any other forms of psychotropic medication in the first trimester of pregnancy.

4.3 DRUG TREATMENT BEYOND THE FIRST TRIMESTER

The evidence base on the risks of perinatal problems and impaired infant development following exposure to psychotropic medication in pregnancy is limited to single case reports covering a wide variety of types of psychotropic medication, and a limited number of cohort and case-control studies. Perinatal toxic syndromes and withdrawal syndromes following delivery by mothers who received psychotropic medication during pregnancy have been identified, and there are understandable concerns regarding the long term effects of such medication on the neurological development of the infant.¹¹⁹ In particular, newborn infants of women treated with lithium in later pregnancy face potential risks of neonatal toxicity, thyroid and renal dysfunction.¹³²

One cohort study found no evidence of impairment of neurological development at two years after delivery following exposure to antidepressants.¹³³ 2+

A case control study found poor neonatal function and withdrawal syndromes in a significant proportion of infants exposed to antipsychotic medication in the last three months of pregnancy.^{119,134} 2++

C Neonates exposed to psychotropic medication during pregnancy should be monitored for withdrawal syndromes following delivery.

Psychotropic medication, if considered necessary for the woman's mental state, should be maintained at the minimum effective dose during pregnancy.

Consideration should be given to dose reduction and/or discontinuation two to four weeks before the expected date of delivery, with recommencement after delivery.

4.4 DRUG TREATMENT AND LACTATION

Women who develop mental illness following childbirth and need psychotropic medication are likely to be discouraged from breast feeding because of the risks to the infant. However, the risk of breast feeding in this situation may be over-estimated and the advantages under-estimated.¹³⁵

The process of excretion of psychotropic medication is complex, with variation in milk/maternal plasma ratios for different drugs and between foremilk and hindmilk. The level of metabolic maturity of the infant will also influence any effect of drugs taken by the mother. The evidence base is limited due to the small number of breast feeding women who have been exposed to any specific drug and the lack of any systematic approach to monitoring and registering information about the use of psychotropic medication in breast feeding women.¹³⁶

- Medications prescribed to breast feeding mothers are best taken as a single dose where possible and should be administered before the baby’s longest sleep period.
- Breast feeding is best done immediately before administering the dose and should be avoided for one to two hours after any dose of medication (the time of highest plasma concentrations).

4.4.1 TRICYCLIC ANTIDEPRESSANTS (TCAs)

The use of TCAs is diminishing with the introduction of the SSRIs and other novel antidepressants. The evidence base consists mainly of case studies, which confirm that TCAs are excreted in breast milk in higher concentrations in hindmilk than foremilk and the milk/maternal plasma ratio exceeds one. The limited evidence available suggests no short term toxic effects for the infant except in the use of doxepin.^{120,134,135,137-141} No long term developmental effects for the infant have been demonstrated.

2+

C There is no clinical indication for women treated with TCAs (other than doxepin) to stop breast feeding, provided the infant is healthy and its progress monitored.

4.4.2 SELECTIVE SEROTONIN RE-UPTAKE INHIBITORS (SSRIs)

SSRIs are being used increasingly in clinical practice. The evidence identified on the use of SSRIs in breast feeding is based on individual case reports and a small case series.

Cumulative evidence on the use of sertraline¹⁴²⁻¹⁴⁶ indicates no significant adverse effects on the breast-fed infant. In one cohort study, 24% of serum samples from infants of nursing mothers taking sertraline had detectable levels of sertraline, particularly where the mother’s daily dose was 100 mg or more.¹⁴⁷ No adverse clinical effects have been reported in breast-fed infants of mothers taking paroxetine.¹⁴⁷⁻¹⁵⁰ Infant serum levels were undetectable in all studies.¹⁴⁷⁻¹⁵⁰ No adverse neurodevelopmental effects were noted in a study of fluoxetine and breast feeding.¹⁵¹ However, fluoxetine and its metabolite nor-fluoxetine have been detected in the serum of a proportion of breast-fed infants whose mothers were taking fluoxetine¹⁵² and nor-fluoxetine has a particularly long metabolic half life.¹⁵³ Paroxetine has the lowest milk/plasma ratio of these three drugs.^{146,148,149}

2+

There is very limited evidence on citalopram but the milk/maternal plasma ratio is relatively high, as is the calculated infant dose.¹⁵⁴⁻¹⁵⁶ There is little evidence on fluvoxamine but it has a low milk/maternal plasma ratio and the calculated dose to the infant is low.^{157, 158}

3

C There is no clinical indication for women treated with paroxetine, sertraline or fluoxetine to stop breast feeding, provided the infant is healthy and his or her progress is monitored.

- Paroxetine may be the preferred drug because of the low milk/plasma ratio.

4.4.3 MOOD STABILISERS

Evidence indicates that lithium is excreted in breast milk at a level of approximately 40% of maternal serum level. Lithium toxicity has been described in a breast-fed infant and lithium is known to impair thyroid and renal function in adults.^{159, 160}

3

D In view of the significant risks to the infant of a breast feeding mother taking lithium, mothers should be encouraged to avoid breast feeding. If a decision is made to proceed, close monitoring of the infant, including serum lithium levels, should be provided.

Sodium valproate is excreted in breast milk in low levels and infant serum levels are between one and two per cent of the maternal serum level. No adverse clinical effects have been noted in breast-fed children when mothers are taking sodium valproate.^{159, 161}

2

The evidence on carbamazepine suggests that it is excreted into breast milk in significant quantities and infant carbamazepine levels in serum range from 6% to 65% of maternal serum levels.

3

Specialist psychiatric supervision should be provided for women with bipolar affective disorder on mood stabilisers who wish to breast feed.

4.4.4 OTHER PSYCHOTROPIC MEDICATION

Benzodiazepines are excreted in breast milk with a low milk/plasma ratio.^{120, 162}

4

D New prescriptions for benzodiazepines should be avoided in mothers who are breast feeding.

Note: this recommendation does not cover drug dependence, where breast feeding may be beneficial if the infant has been exposed to benzodiazepines in utero.

All forms of antipsychotic medication are excreted in breast milk but as yet there is no evidence to suggest that breast-fed infants are at risk of toxicity or impaired development.^{119, 120, 137, 162, 163} There is little evidence on the new atypical antipsychotic drugs.^{120, 164}

The evidence on other antidepressant drugs including moclobemide,^{165, 166} venlafaxine,¹⁶⁷ and nefazodone¹⁶⁸ in breast feeding is very limited, but they are all excreted in breast milk.

3

If a breast feeding mother is taking psychotropic medication, infant development should be monitored and a careful assessment of the risks and benefits of prescribing at this time should be made.

5 Implementation and audit

5.1 INTRODUCTION

Implementation of national clinical guidelines is the responsibility of each NHS Trust and is an essential part of clinical governance. It is acknowledged that every Trust cannot implement every guideline immediately on publication, but mechanisms should be in place to ensure that the care provided is reviewed against the guideline recommendations and the reasons for any differences assessed and, where appropriate, addressed. These discussions should involve both clinical staff and management. Local arrangements may then be made to implement the national guideline in individual hospitals, units and practices, and to monitor compliance. This may be done by a variety of means including patient-specific reminders, continuing education and training, and clinical audit.

Local implementation groups, consisting of representatives from the Health Board, acute and Primary Care Trusts, professionals, partner agencies (e.g. social services), the voluntary sector, and service users should be drawn together to consider the many strands which make up an effective, implementable service.^{65,169,170}

5.2 INTEGRATED CARE PATHWAYS

Integrated care pathways (ICPs) are structured multidisciplinary care plans which detail essential steps in the care of patients with a specific clinical problem.¹⁷¹ ICPs have been in use in NHSScotland since the mid 1990s. Although initially used almost exclusively in hospital settings, they have become increasingly popular across a range of care contexts and for many different conditions, including rehabilitation medicine and mental health. ICPs are based on the premise that, while respect for individuals must dominate the approach to care planning and delivery, there are nonetheless a series of steps that must be followed in relation to every individual with a particular illness or condition if the best possible outcome is to be secured. This includes actions and timetables for assessment, diagnosis, referrals and treatment. Standards for detecting and acting upon symptoms can and must be agreed and adhered to by all professionals involved. The pathway will ideally be held by the patient. ICPs offer service users and the people who care for them a clear idea of what to expect and from whom and they offer an opportunity for audit, in particular, of omissions of care.

There is no evaluative evidence available for the effectiveness of ICPs for perinatal disorders at present. However, ICPs have been demonstrated to increase patient satisfaction, and reduce documentation and duration of care in other conditions.¹⁷¹ ICPs for perinatal disorders have been developed in several Health Board areas throughout Scotland following a recent Health Department letter.⁶⁵

5.2.1 ICP DEVELOPMENTS IN SCOTLAND

The guideline development group contacted all Primary Care Trusts (PCTs) and Health Boards in Scotland for details of current or planned integrated care pathways for postnatal disorders. A 93% response rate was achieved, providing a 'snap shot' view of ICP development in NHSScotland in Spring 2001. Five Health Board/PCT areas had an ICP either already in use or being piloted, two of which were approaching the initial evaluation stage. Three areas were working towards an ICP. Training programmes had been developed either in-house or through modular further education provision (e.g. from Napier and Paisley Universities).

The ICPs currently in use in Scotland all have flowcharts as their core. These have a comprehensive and easy-to-follow format that illustrates the care components, options, roles, lines of consultation and referral for all health professionals involved. They also include specific documentation reflecting the care pathway and, to a greater or lesser extent, have provision to detail variances from this and make comments related to a particular case. The other features identified as common to the ICPs in use in Scotland are outlined overleaf:

Antenatal period

- explanation of the ICP to the expectant mother
- screening of risk factors with timing and methodology detailed
- available options dependent on presence of risk factors
- provision of information and education to expectant mothers (and fathers).

Postnatal period

- details of screening through use of EPDS
- available options related to clinical judgement and the EPDS results
- criteria for consultation within primary care
- criteria for consultation with and / or referral to secondary care and other support services (statutory or voluntary).

Additional features present in some ICPs

- the optional use of the EPDS during the antenatal period
- use of locally developed evidence-based checklists for risk factor assessment
- midwifery interventions during early postnatal stage e.g. labour debriefing
- attempts to provide access to records for all professionals involved, e.g. the use of patient-held records.

ICPs were commonly incorporated within broader information packs which included all or some of the following:

- a list of predisposing factors for PND
- a copy of the EPDS and information on its appropriate use and interpretation
- notes for the prescribing of psychotropic medication to expectant and breast feeding mothers
- ethnic and cultural issues relating to pregnancy, baby care, family and mental health
- recommended references and sources of information for professionals and mothers
- useful contact addresses, statutory and voluntary, local and national
- provision of a locally developed information booklet.

- The development of an integrated care pathway should involve representatives of all health professions engaged in the provision of ante- and postnatal care and service user representatives. The ICP should relate to local needs and circumstances.

The ICP should be presented in a user-friendly and succinct format.

The ICP should include specific documentation reflecting the pathway and facilitate recording of any variance from this to aid evaluation and audit.

Mechanisms should be in place to ensure the orientation of all staff (current and newly appointed) to the ICP. Adequate training and on-going supervision should be available for staff with identified knowledge or skill deficits related to the ICP.

5.3 KEY CRITERIA FOR CLINICAL AUDIT

The following suggested audit criteria are based on consensus within the guideline development group:

Information

- Preparation for parenthood programmes includes information on postnatal depression and puerperal psychosis.

Screening

- EPDS offered as part of screening for women in the postnatal period.
- Intervals at which the EPDS is used and how often it is used should be recorded per patient.
- Results of clinical assessments.

Risk and Prevention

- Mental health status assessed on a regular basis throughout pregnancy.
- Risk factors for postnatal depression and puerperal psychosis identified antenatally.

Management

- All women identified with postnatal depression and puerperal psychosis should be offered treatment and follow-up by appropriate professionals in appropriate settings.
- Requirement for mother and baby co-admissions monitored.

Prescribing

- Appropriate professional staff involved in the prescribing and monitoring of psychotropic medication in pregnant and lactating women.

5.4 RESOURCE IMPLICATIONS**5.4.1 ANTENATAL BOOKING**

The inclusion of additional questions on history of psychopathology during the history taking at antenatal booking is, in itself, unlikely to lead to significant resource implications. Education of midwives, general practitioners and obstetric staff to routinely ask such questions may, however, have implications for education and training. Services for closely monitoring women with such a history would also need to be in place.

5.4.2 SCREENING

The guideline recommends the use of the EPDS as a screening tool in the postnatal period. A survey of EPDS screening practice carried out by the guideline development group found that screening is undertaken routinely in all but one Primary Care Trust area in Scotland, where its use is variable. The EPDS is used, with one exception, more than once in all Health Board areas in Scotland. The routine use of EPDS postnatally carries significant implications associated with ongoing training, health visitor time for screening and intervention, and facilities in general practice and secondary care for treatment.

5.4.3 PSYCHOLOGICAL MANAGEMENT

The guideline recommends that psychological interventions should be considered when deciding on treatment options. It has not been possible to estimate the resource implications associated with this recommendation. These are likely to vary between different areas of Scotland, which have different numbers of healthcare professionals with appropriate training in techniques such as counselling, cognitive behavioural therapy or interpersonal therapy. The resulting resource implications will therefore vary according to the availability of staff and their associated training needs.

5.4.4 MOTHER AND BABY UNITS

The guideline endorses the Royal College of Psychiatrists' recommendation that dedicated mother and baby units be provided and that the current *ad hoc* arrangements for admitting mothers with their babies to general psychiatric wards should stop. The Royal College of Psychiatrists recommends provision of six to nine beds per 1 to 1.5 million population.⁶⁸

This recommendation has significant resource implications for Scotland, with additional resources required across all unified Health Board areas. With the current population of 5.12 million, there would be a requirement for 30 to 45 beds for mothers with their babies in appropriate specialist units with a minimum of four beds per unit. Larger units, which span several Health Board areas are recommended by the Royal College of Psychiatrists' report, and may provide greater cost effectiveness.⁶⁸ Given the current *ad hoc* arrangements, there are unlikely to be cost savings associated with rationalising existing service provision.

5.5 RESEARCH QUESTIONS

- What is the role of antenatal education in the prevention of postnatal depression?
- What is the role of antenatal screening for postnatal depression and puerperal psychosis?
- Do clinicians treat postnatal depression any differently to the way they treat other forms of depression?
- What are the most effective screening and assessment tools for postnatal depression and when should they be administered?
- To what extent do general practitioners prescribe antidepressants in the postnatal period?
- What are the risks and benefits of antidepressants in the management of postnatal depression?
- What is the role of hormonal therapies in postnatal depression?
- What is the role of physical activity in preventing and treating postnatal depression?
- What are the effects of complementary therapies in postnatal depression?
- What are the benefits of psychosocial approaches in the management and prevention of postnatal depression?
- What is the role of counselling in the management of postnatal depression within the primary care team?
- What psychosocial skills are available in the NHS work force of relevance to the management of postnatal depression?
- What are the current management approaches for postnatal depression and puerperal psychoses in the UK?
- What is the impact of using the EPDS as part of a screening programme for postnatal depression in the community?
- What interventions are effective in the management of puerperal psychosis?
- Which interventions for postnatal depression improve outcomes for children and when should they be used?
- What are the specific benefits to the mother and family of Mother and Baby units?
- What are the specific benefits to the mother and family unit of integrated care pathways?
- What is the most effective way of screening for postnatal disorders in ethnic minority groups?
- What are the long term consequences of psychotropic drug therapy in pregnancy and lactation on fetal and child development?
- What are the effects of postnatal mental illness on partners and existing children?

6 Information for patients and carers

6.1 NOTES ON POSTNATAL DEPRESSION FOR DISCUSSION WITH PATIENTS

The following points were drawn up in consultation with patient representatives on the guideline development group to reflect the issues likely to be of most concern to patients following diagnosis of postnatal depression. These points may be of use to health professionals when discussing postnatal depression with patients and in guiding the production of locally produced patient information materials. The advice is divided into sections to highlight the issues that patients might wish to discuss at each stage of their care.

DIAGNOSIS

"Asking for help was the hardest thing to do. Having to admit to not coping made me feel even more inadequate."

"Being told to pull yourself together is no help at all."

"I was petrified they would take my baby away. Then everyone would blame me."

- Is postnatal depression a common illness?
- Is postnatal depression different to other forms of depression?
- What are the causes and common symptoms of postnatal depression?

Key point: PND affects feelings, thoughts and ability to carry out the activities of daily life.

TREATMENT OPTIONS

- Is my illness treatable?
- What care should I expect?

Key point: a package of care should be negotiated with patients. This may involve the practical and family support provided by family, friends, local and national agencies or groups, informal and formal therapies and antidepressant medication.

DEMYSTIFYING ANTIDEPRESSANTS

- How do antidepressants work? Are they addictive? Will they make me sleepy?
- How long will I take antidepressants for?
- Can I use antidepressants if I am pregnant or breastfeeding?
- Will I experience side effects?
- How will my use of antidepressants be monitored?

Key point: patients should normally continue to take antidepressant medication for six months after recovery.

FAMILY AND CARERS

"I knew I felt different and judged myself really harshly and felt so inadequate as a mother."

- Is my postnatal depression likely to affect the other members of my family?
- Who can offer support to my family?

Key point: the overall package of care should encompass the needs of the family. Practical support should be offered to enable the parents to meet the baby's needs e.g. parenting skills, self-help groups.

RECOVERY

- Will I get better?
- Am I going mad?
- Do I need to see a psychiatrist?
- Which health professionals am I likely to see?
- Am I still able to care for my baby?

Key point: the outcome is very good for the majority of women suffering from postnatal depression provided they are managed appropriately.

6.2 SOURCES OF FURTHER INFORMATION FOR PATIENTS AND CARERS

The National Childbirth Trust

Provides information and support on all aspects of pregnancy, childbirth and early parenthood. There is individual and group support offered, and local groups around Scotland.
UK contact: Alexandra House, Oldham Terrace, London W3 1BE.
Enquiry line: 0870 444 8707. Web site: www.nctpregnancyandbabycare.com

The Church of Scotland Postnatal Depression Project

Wallace House, 3 Boswall Road, Edinburgh, EH5 3RJ. Tel: 0131 552 8901.

Meet-A-Mum Association (MAMA)

Self help group for antenatal women and mothers with young children with local groups around Scotland. National Helpline open 7pm to 10pm. Tel: 0208 768 0123.

The Association for Postnatal Illness

Can link mothers with others who have recovered from postnatal depression.
145 Dawes Road, Fulham, London SW6 7EB, Tel: 0207 386 0868.

Action on Puerperal Psychosis

A research oriented project aimed at building up a pool of women who have experienced puerperal psychosis and are interested in helping with research.
Contact: Jackie Benjamin, University of Birmingham, Queen Elizabeth Psychiatric Hospital, Mindelsohn Way, Birmingham B15 2QZ. Tel: 0121 678 2361; www.bham.ac.uk/app

Depression Alliance Scotland

3 Grosvenor Gardens, Edinburgh, EH12 5JU. Tel: 0131 467 3050.

The Scottish Association for Mental Health

Cumrae House, 15 Carlton Court, Glasgow, G5 9JP. Tel: 0141 568 7000
Email: enquire@samh.org.uk; Web site: www.samh.org.uk

Manic Depression Fellowship Scotland

Mile End Mill, Studio 1019, Abbey Mill Business Centre, Seedhill Road, Paisley, PA1 1TJ.
Tel: 0141 560 2050.

The Samaritans

Offers support to those in distress / despair / suicidal who need someone to talk to.
24 hour service. National Helpline Tel: 08457 909090.

Homestart

Offers support and friendship in the family home to families with at least one pre-school child. Local groups in Scotland. Contacts: 1 Watergate, Perth, PH1 5TF Tel: 01738 444020 and Eldon Business Centre, 74 Townhead, Kirkintilloch, G66 1NZ Tel: 0141 776 3042.

Health Education Board for Scotland

Talking about Postnatal Depression patient information leaflet available. Woodburn House, Canaan Lane, Edinburgh EH10 4SG. Tel: 0131 536 5500. www.hebs.scot.nhs.uk

The Royal College of Psychiatrists

Produce a leaflet *Postnatal depression - Help is at hand*. Downloadable from web site.
17 Belgrave Square, London SW1X 8PG. Tel: 020 7235 2351 <http://www.rcpsych.ac.uk/>

CRY-SIS

Offers support for carers of a crying baby. Tel: 020 7404 5011.

NHS Direct (in England and Wales): www.nhsdirect.nhs.uk

NHS24 (in Scotland): www.nhs24.com

NHS Helpline: 0800 22 44 88

Suggested Reading:

- Marshall F. Coping with postnatal depression. London: Sheldon; 1993.
- Nicolson P. Postnatal depression: facing the paradox of loss, happiness and motherhood. Chichester: Wiley; 2001.
- Littlewood J, McHugh N. Maternal distress and postnatal depression: the myth of Madonna. Basingstoke: Macmillan; 1997.

6.3 SOURCES OF FURTHER INFORMATION FOR HEALTH PROFESSIONALS

The Marcé Society

An international society for the understanding, prevention and treatment of mental illness related to childbearing. PO Box 30853, London, W12 OXG; email: info@marcesociety.com

The Royal College of Psychiatrists

17 Belgrave Square, London SW1X 8PG; Tel: 020 7235 2351, Fax: 020 7245 1231
<http://www.rcpsych.ac.uk/>

Society for Reproductive and Infant Psychology

Department of Psychology, University of Hull, Hull, HU6 7RX.

Membership secretary: Ms Sue Weaver, Tel: 01482 465010; email: s.m.weaver@psy.hull.ac.uk

Suggested Reading:

- Community Practitioners' and Health Visitors' Association (CPHVA). Postnatal depression and maternal mental health, a public health priority. Borough Green: McMillan Scott; 2001. £5 for CPHVA members, and £7.50 otherwise.
- Singh D, Newburn M, editors. Access to maternity information and support: the experiences of women before and after giving birth. London: National Childbirth Trust; 2000.
- Clark G. Postnatal depression: in non-English speaking women and those from diverse cultures: a collection of abstracts. London: Community Practitioners' and Health Visitors' Association; 2001.

7 Development of the guideline

7.1 INTRODUCTION

SIGN is a collaborative network of clinicians, other health care professionals and patient organisations, funded by the Clinical Resource and Audit Group (CRAG) of the Scottish Executive Health Department. SIGN guidelines are developed by multidisciplinary groups using a standard methodology based on a systematic review of the evidence. Further details about SIGN and the guideline development methodology are contained in *SIGN 50: A guideline developer's handbook*, available at www.sign.ac.uk.

7.2 THE GUIDELINE DEVELOPMENT GROUP

Mrs Patricia Purton <i>Chairman</i>	<i>Director, Royal College of Midwives Scottish Board, Edinburgh</i>
Dr Roch Cantwell <i>Methodologist</i>	<i>Consultant Psychiatrist and Honorary Senior Lecturer, Gartnavel Royal Hospital, Glasgow</i>
Professor Beth Alder	<i>Director of Research, Faculty of Health and Life Sciences, Napier University</i>
Dr Barbara Ballinger	<i>Consultant Psychiatrist (retired), Dundee</i>
Dr Roddy Campbell	<i>Consultant Obstetrician and Gynaecologist, Borders General Hospital, Melrose</i>
Ms Francesca Chappell	<i>Information Officer, SIGN</i>
Mr Robert Crawford	<i>Community Psychiatric Nurse, Hawick</i>
Ms Vivienne Dickinson	<i>Project Manager, Church of Scotland Postnatal Depression Project, Edinburgh</i>
Ms Tania Dignan	<i>Patient Representative, Edinburgh</i>
Ms Catriona Hendry	<i>Lecturer in Midwifery, Glasgow Caledonian University</i>
Dr Mary Hepburn	<i>Consultant Obstetrician, Royal Maternity Hospital, Glasgow</i>
Ms Liz Kearney	<i>Health Visitor, Coatbridge</i>
Dr Eilis Kennedy	<i>Specialist Registrar, Child Psychiatry, Glasgow</i>
Dr Gerry McPartlin	<i>General Practitioner, Edinburgh</i>
Ms Evelyn McPhail	<i>Chief Pharmacist, Fife Primary Care NHS Trust</i>
Ms Kim Milledge	<i>Health Visitor, Fife Primary Care NHS Trust</i>
Miss Christine Puckering	<i>Senior Research Fellow, Child & Adolescent Psychiatry, Yorkhill Hospital, Glasgow</i>
Mrs Marion Shawcross	<i>Social Work Officer, Mental Welfare Commission for Scotland, Edinburgh</i>
Dr Imogen Stephens	<i>Consultant in Public Health Medicine, Argyll & Clyde NHS Board</i>
Ms Joanne Topalian	<i>Programme Manager, SIGN</i>
Dr Sara Twaddle	<i>Health Economist, Stobhill Hospital, Glasgow</i>
Ms Jenny Williams	<i>Health Visitor, Edinburgh</i>
Mrs Noreen Wright	<i>Patient Representative, Edinburgh</i>

The membership of the guideline development group was confirmed following consultation with the member organisations of SIGN. Declarations of interests were made by all members of the guideline development group. Further details are available from the SIGN Executive.

7.3 SYSTEMATIC LITERATURE REVIEW

Literature searches were initially conducted in Medline, Embase, Cinahl, PsychLit, Healthstar, and the Cochrane Library using the year range 1991-2000. The literature search was updated with new material during the course of the guideline development process. Key websites on the Internet were also used, such as the National Guidelines Clearinghouse and the Marcé Society. The literature search was then extended back to as far as was available in each of the databases and extra searches were supplied in areas such as complementary medicine and health economics. These searches were supplemented by the reference lists of relevant papers and group members' own files. A lack of good evidence was identified by the searches, these results are similar to those of the Cochrane Library. Overall, a total of 3,900 abstracts were identified by the literature searches, over 300 papers were assessed resulting in the final reference list of 171 papers.

7.4 CONSULTATION AND PEER REVIEW

A national open meeting is the main consultative phase of SIGN guideline development, at which the guideline development group present their draft recommendations for the first time. The national open meeting for this guideline was held in June 2001 and was attended by all of the key specialties relevant to the guideline. The draft guideline was also available on the SIGN web site for a limited period at this stage to allow those unable to attend the meeting to contribute to the development of the guideline.

The guideline was reviewed in draft form by a panel of independent expert referees, who were asked to comment primarily on the comprehensiveness and accuracy of interpretation of the evidence base supporting the recommendations in the guideline. SIGN is grateful to all of these experts for their contributions to this guideline.

Ms Cheryll Adams	<i>Professional Officer, Community Practitioners' and Health Visitors Association</i>
Dr Mac Armstrong	<i>Chief Medical Officer, Scottish Executive</i>
Dr James Beattie	<i>General Practitioner, Inverurie</i>
Professor Ian Brockington	<i>Professor of Psychiatry, University of Birmingham</i>
Ms Cynthia Clarkson	<i>UK Trustee, National Childbirth Trust, Edinburgh</i>
Ms Asha Day	<i>Director of Diversity, East Midlands Work Force Confederation</i>
Ms Patricia Dawson	<i>Head of Policy, Royal College of Nursing, Edinburgh</i>
Ms Lesley Edwards	<i>Community Psychiatric Nurse, West Calder Medical Practice</i>
Dr Sandra Elliot	<i>Senior Lecturer in Psychology, University of Greenwich, London</i>
Dr Cathryn Glazener	<i>Senior Clinical Research Fellow, Health Services Research Unit, Aberdeen University</i>
Dr Annie Griffiths	<i>General Practitioner, Inverness</i>
Dr Margaret Hannah	<i>Consultant in Public Health Medicine, Fife Health Board</i>
Professor Dale Hay	<i>Professor of Psychology, Cardiff University</i>
Ms Jennifer Holden	<i>Psychology Lecturer (retired), Edinburgh</i>
Dr Moira Kennedy	<i>General Practitioner, Wallacetown Health Centre, Dundee</i>
Mr Martin Kettle	<i>Area Services Manager, Possilpark Health Centre, Glasgow</i>
Ms Ann Lees	<i>Health Economist, Argyll and Clyde Acute Trust</i>
Ms Joyce Linton	<i>Practice and Policy Development Midwife, Cresswell Maternity Hospital, Dumfries</i>
Dr John MacDonald	<i>General Practitioner, Hawick</i>
Dr Una McFadyen	<i>Consultant Paediatrician, Stirling Royal Infirmary</i>
Dr Patricia McEllarton	<i>Teratologist, National Teratology Information Service, Newcastle</i>
Professor John McLeod	<i>Professor of Psychology, University of Abertay, Dundee</i>
Dr Margaret Oates	<i>Senior Lecturer in Psychiatry, University of Nottingham</i>
Ms Nicola Ring	<i>Nurse Co-ordinator, Scottish Clinical Effectiveness Programme</i>
Ms Karen Robertson	<i>Perinatal Nurse Consultant, Gartnavel Royal Hospital, Glasgow</i>
Professor Debbie Sharp	<i>Professor of Primary Health Care, University of Bristol</i>
Ms Janet Trundle	<i>Prescribing Advisor, Renfrewshire and Inverclyde Primary Care Trust</i>
Dr Hugh Whyte	<i>Primary Care Directorate, Scottish Executive</i>
Dr Agnes Wood	<i>General Practitioner, Penicuik</i>

The guideline was then reviewed by an Editorial Group comprising relevant specialty representatives on SIGN Council, to ensure that the peer reviewers' comments had been addressed adequately and that any risk of bias in the guideline development process as a whole had been minimised. The Editorial Group for this guideline was as follows:

Dr Lesley Macdonald	<i>Faculty of Public Health Medicine</i>
Dr Adrian Lodge	<i>Royal College of Psychiatrists</i>
Professor Gordon Lowe	<i>Chairman of SIGN</i>
Ms Juliet Miller	<i>Director of SIGN</i>
Dr Gillian Penney	<i>Royal College of Obstetricians and Gynaecologists</i>
Dr Bill Reith	<i>Royal College of General Practitioners</i>
Ms Ruth Stark	<i>British Association of Social Workers</i>
Dr Bernice West	<i>National Nursing, Midwifery and Health Visiting Advisory Committee</i>
Dr Peter Wimpenny	<i>Robert Gordon University, School of Nursing & Midwifery</i>

7.5 ACKNOWLEDGEMENTS

SIGN is grateful to the following former members of the guideline development group and others who have contributed to the development of this guideline:

Ms Rhona Hotchkiss	<i>Director, Nursing and Midwifery Practice Development Unit</i>
Dr Iain Mathie	<i>General Practitioner, Cairneyhill, Fife</i>
Dr Alasdair Philp	<i>Improving Mental Health Information Project Manager, NHSScotland Information and Statistics Division</i>
Ms Anne Silcock	<i>Health Visitor, Aboyne</i>

References

- 1 Murray CJ, Lopez AD. Evidence-based health policy—lessons from the Global Burden of Disease Study. *Science* 1996;274:740-3.
- 2 O'Hara MW, Swain AM. Rates and risk of postnatal depression—a meta-analysis. *Int Rev Psychiatry* 1996;8:37-54.
- 3 Kendell RE, Chalmers JC, Platz C. Epidemiology of puerperal psychoses. *Br J Psychiatry* 1987;150:662-73.
- 4 Murray L, Cooper PJ. Effects of post natal depression on infant development. *Arch Dis Child*. 1997;77:99-101.
- 5 Royal College of Obstetricians and Gynaecologists. Why mothers die 1997-1999: the fifth report of the Confidential Enquiries into Maternal Deaths in the United Kingdom. London: RCOG; 2001.
- 6 Ballard CG, Davis R, Cullen PC, Mohan RN, Dean C. Prevalence of postnatal psychiatric morbidity in mothers and fathers. *Br J Psychiatry* 1994;164:782-8.
- 7 Cooper PJ, Murray L. The impact of psychological treatments of postnatal depression on maternal mood and infant development. In: Murray L, Cooper PJ, editors. *Postpartum depression and child development*. New York, London: Guildford Press; 1997. p. 201-220.
- 8 Field T, Healy B, Goldstein S, Perry S, Bendell D, Schanberg S, et al. Infants of depressed mothers show "depressed" behaviour even when with non-depressed adults. *Child Dev* 1988;59:1569-79.
- 9 Cogill SR, Caplan HL, Alexandra H, Robson K, Kumar R. Impact of maternal postnatal depression on cognitive development of young children. *BMJ* 1986;292:1165-7.
- 10 Sharp D, Hay DF, Pawlby S, Schmucker G, Allen H, Kumar R. The impact of postnatal depression on boys' intellectual development. *J Child Psychol Psychiatry* 1995;36:1315-37.
- 11 Murray L, Kempton C, Woolgar M, Hooper R. Depressed mothers' speech to their infants and its relation to infant gender and cognitive development. *J Child Psychol Psychiatry* 1993;34:1083-101.
- 12 Murray L, Sinclair D, Cooper P, Ducourneau P, Turner P, Stein A. The socio-emotional development of 5-year-old children of post-natally depressed mothers. *J Child Psychol Psychiatry* 1999;40:1259-71.
- 13 Murray L, Hipwell A, Hooper R, Stein A, Cooper PJ. The cognitive development of 5-year-old children of postnatally depressed mothers. *J Child Psychol Psychiatry* 1996;37:927-35.
- 14 Appleby L, Warner R, Whittton A, Faragher B. A controlled study of fluoxetine and cognitive-behavioural counselling in the treatment of postnatal depression. *BMJ* 1997;314:932-6.
- 15 Evans J, Heron J, Francomb H, Oke S, Golding J. Cohort study of depressed mood during pregnancy and after childbirth. *BMJ* 2001;323:257-60.
- 16 Cooper PJ, Murray L. Course and recurrence of postnatal depression. Evidence for the specificity of the diagnostic concept. *Br J Psychiatry* 1995;166:191-5.
- 17 Whiffen VE, Gotlib IH. Comparison of postpartum and nonpostpartum depression: clinical presentation, psychiatric history and psychosocial functioning. *J Consult Clin Psychol* 1993;61:485-94.
- 18 Hendrick V, Alshuler L, Strouse T, Grosser S. Postpartum and nonpostpartum depression: differences in presentation and response to pharmacological treatment. *Depress Anxiety* 2000;11:66-72.
- 19 Augusto A, Kumar R, Calheiros JM, Matos E, Figueiredo E. Post-natal depression in an urban area of Portugal: comparison of childbearing women and matched controls. *Psychol Med* 1996;26:135-41.
- 20 Murray D, Cox JL, Chapman G, Jones P. Childbirth: life event or start of a long-term difficulty? Further data from the Stoke-on-Trent controlled study of postnatal depression. *Br J Psychol* 1995;166:595-600.
- 21 Wisner KL, Peindl KS, Gigliotti T, Hanusa BH. Obsessions and compulsions in women with postpartum depression. *J Clin Psychiatry* 1999;60:176-80.
- 22 Affonso DD, Lovett S, Paul SM, Sheptak S. A standardized interview that differentiates pregnancy and postpartum symptoms from perinatal clinical depression. *Birth* 1990;17:121-30.
- 23 Cox JL, Connor Y, Kendell RE. Prospective study of the psychiatric disorders of childbirth. *Br J Psychiatry* 1982;140:111-7.
- 24 Carothers AD, Murray L. Estimating psychiatric morbidity by logistic regression: application to postnatal depression in a community sample. *Psychol Med* 1990;20:695-702.
- 25 O'Hara MW. Social support, life events and depression during pregnancy and the puerperium. *Arch Gen Psychiatry* 1986;43:569-73.
- 26 Pop VJM, Essed GGM, de Geus CA, van Son MM, Komproe IH. Prevalence of postpartum depression: or is it post-puerperium depression? *Acta Obstet Gynecol Scand*. 1993;72:354-8.
- 27 Lane A, Keville R, Morris M, Kinsella A, Turner M, Barry S. Postnatal depression and elation among mothers and their partners: prevalence and predictors. *Br J Psychiatry* 1997;171:550-5.
- 28 Wickberg B, Hwang CP. Screening for postnatal depression in a population-based Swedish sample. *Acta Psychiatrica Scand* 1997;95:62-6.
- 29 Yoshida K, Marks MN, Kibe N, Kumar R, Nakano H, Tashiro N. Postnatal depression in Japanese women who have given birth in England. *J Affect Disord* 1997;43:69-77.
- 30 Glasser S, Barell V, Shoham A, Ziv A, Boyko V, Lusky A, Hart S. Prospective study of postpartum depression in an Israeli cohort: prevalence, incidence and demographic risk factors. *J Psychosom Obstet Gynaecol* 1998;19:155-64.
- 31 Righetti-Veltama M, Conne-Perreard E, Bousquet A, Manzano J. Risk factors and predictive signs of postpartum depression. *J Affect Disord* 1998;49:167-80.
- 32 Matthey S, Barnett B, Ungerer J, Waters B. Paternal and maternal depressed mood during the transition to parenthood. *J Affect Disord* 2000;60:75-85.
- 33 Johanson R, Chapman G, Murray D, Johnson I, Cox J. The North Staffordshire Maternity Hospital prospective study of pregnancy-associated depression. *J Psychosom Obstet Gynaecol* 2000;21:93-7.
- 34 Campbell SB, Cohn JF. Prevalence and correlates of postpartum depression in first-time mothers. *J Abnorm Psychol* 1991;100:594-9.
- 35 Cox JL, Murray D, Chapman G. A controlled study of the onset, duration and prevalence of postnatal depression. *Br J Psychiatry* 1993;163:27-31.
- 36 Fergusson DM, Horwood LJ, Thorpe K. Changes in depression during and following pregnancy. ALSPAC Study Team. *Study of pregnancy and children. Paediatr Perinat Epidemiol*. 1996;10:279-93.
- 37 McNeil TF. A prospective study of postpartum psychoses in a high-risk group. Relationship to demographic and psychiatric history characteristics. *Acta Psychiatr Scand* 1987;75:35-43.
- 38 Wisner KL, Peindl K, Hanusa BH. Symptomatology of affective and psychotic illnesses related to childbearing. *J Affect Disord* 1994;30:77-87.
- 39 Beck CT. A meta-analysis of predictors of postpartum depression. *Nurs Res* 1996;45:297-303.
- 40 Wilson LM, Reid AJ, Midmer DK, Biringer A, Carroll JC, Stewart DE. Antenatal psychosocial risk factors associated with adverse postnatal family outcomes. *Can Med Assoc J* 1996;154:785-99.
- 41 Foman DN, Videbeck P, Hedegaard M, D, Salvig JD, Secher NJ. Postpartum depression: identification of women at risk. *Br J Obstet Gynaecol* 2000;107:1210-7.
- 42 Grullon KE, Grimes DA. The safety of early postpartum discharge: a review and critique. *Obstet Gynecol* 1997;90:860-5.
- 43 Gotlib IH, Whiffen VE, Wallace PM, Mount JH. Prospective investigation of postpartum depression: factors involved in onset and recovery. *J Abnorm Psychology* 1991;100:122-32.
- 44 Warner R, Appleby L, Whittton A, Faragher B. Demographic and obstetric risk factors for postnatal psychiatric morbidity. *Br J Psychiatry* 1996;168:607-11.
- 45 Grazioli R, Terry DJ. The role of cognitive vulnerability and stress in the prediction of postpartum depressive symptomatology. *Br J Clin Psychol* 2000;39:329-47.
- 46 Pedersen CA. Postpartum mood and anxiety disorders: a guide for the nonpsychiatric clinician with an aside on thyroid associations with postpartum mood. *Thyroid* 1999;9:691-7.
- 47 Demyttenaere K, Lenaerts H, Nijss P, Van Assche FA. Individual coping style and psychological attitudes during pregnancy and predict depression levels during pregnancy and during postpartum. *Acta Psychiatr Scand* 1995;91:95-102.
- 48 Areias ME, Kumar R, Barros H, Figueiredo E. Correlates of postnatal depression in mothers and fathers. *Br J Psychiatry* 1996;169:36-41.
- 49 Hapgood CC, Elkind GS, Wright JJ. Maternity blues: phenomena and relationship to later postpartum depression. *Aust NZ J Psychiatry* 1988;22:299-306.
- 50 Collins NC, Dunkel-Schetter C, Lobel M, Scrimshaw SCM. Social support in pregnancy: psychosocial correlates of birth outcomes and postpartum depression. *J Pers Soc Psychol* 1993;65:1243-58.
- 51 Bloch M, Schmidt PJ, Danaceau M, Murphy J, Nieman L, Rubinow DR. Effects of gonadal steroids in women with a history of postpartum depression. *Am J Psychiatry* 2000;157:924-30.
- 52 Bennett DE, Slade P. Infants born at risk: consequences for maternal postpartum adjustment. *Br J Med Psychol* 1991;64:159-72.
- 53 Boyle FM, Vance JC, Najman JM, Thearle MJ. The mental health impact of stillbirth, neonatal death or SIDS: prevalence and patterns of distress among mothers. *Soc Sci Med* 1996;43:1273-82.
- 54 Singer LT, Salvador A, Guo S, Collin M, Lilien L, Baley J. Maternal psychological distress and parenting stress after the birth of a very low-birth-weight infant. *JAMA* 1999;281:799-805.
- 55 O'Brien M, Heron Asay J, McCluskey-Fawcett K. Family functioning and maternal depression following premature birth. *J Reprod Infant Psychol* 1999;17:178-88.
- 56 Schopf J, Rust B. Follow-up and family study of postpartum psychoses. Part 1: Overview. *Eur Arch Psychiatry Clin Neurosci* 1994;244:101-11.
- 57 Benvenuti P, Cabras PL, Servi P, Rossetti S, Marchetti G, Pazzagli A. Puerperal psychoses: a clinical case study with follow-up. *J Affect Disord* 1992;26:25-30.
- 58 Marks MN, Wieck A, Checkley SA, Kumar R. Contribution of psychological and social factors to psychotic and non-psychotic relapse after childbirth in women with previous histories of affective disorder. *J Affect Disord* 1992;24:253-63.

- 59 McNeil TF. A prospective study of postpartum psychoses in a high-risk group. I. Clinical characteristics of the current postpartum episodes. *Acta Psychiatr Scand* 1986;74:205-16.
- 60 Videbech P, Gouliav G. First admission with puerperal psychosis: 7-14 years of follow-up. *Acta Psychiatr Scand* 1995;91:167-73.
- 61 Pfuhlmann B, Franzek E, Beckmann H, Stober G. Long-term course and outcome of severe postpartum psychiatric disorders. *Psychopathology* 1999;32:192-202.
- 62 Robling SA, Paykel ES, Dunn VJ, Abbott R, Katona C. Long-term outcome of severe puerperal psychiatric illness: a 23 year follow-up study. *Psychol Med* 2000;30:1263-71.
- 63 Terp IM, Engholm G, Moller H, Mortensen PB. A follow-up study of postpartum psychoses: prognosis and risk factors for readmission. *Acta Psychiatr Scand* 1999;100:40-6.
- 64 Cox J, Holden J. Perinatal psychiatry: use and misuse of the Edinburgh Postnatal Depression Scale. London: Gaskell; 1994.
- 65 Scottish Executive. NHS MEL 27: services for women with postnatal depression. Edinburgh: The Executive; 1999.
- 66 Wilson JMG, Jungner G. Principles and practice of screening for disease. Geneva: WHO; 1968. (Public health papers no. 34)
- 67 Appleby L, Gregoire A, Platz C, Prince M, Kumar R. Screening women for high risk of postnatal depression. *J Psychosom Res* 1994;38:539-45.
- 68 Oates, M. Perinatal maternal mental health services. Council Report CR88. London: Royal College of Psychiatrists; 2000.
- 69 Beck CT, Gable RK. Further validation of the Postpartum Depression Screening Scale. *Nurs Res* 2001;50:155-64.
- 70 Beck CT, Gable RK. Postpartum Depression Screening Scale: development and psychometric testing. *Nurs Res* 2000;49:272-82.
- 71 Cox JL, Holden JM, Sagovsky R. Detection of postnatal depression: development of the 10-item Edinburgh Postnatal Depression Scale. *Br J Psychiatry* 1987;150:782-6.
- 72 Harris B, Huckle P, Thomas R, Johns S, Fung H. The use of rating scales to identify postnatal depression. *Br J Psychiatry* 1989;154:813-7.
- 73 Muzik M, Klier CM, Rosenblum KL, Holzinger A, Umek W, Katschnig H. Are commonly used self-report inventories suitable for screening postpartum depression and anxiety disorders? *Acta Psychiatr Scand* 2000;102:71-3.
- 74 Guedeney N, Fermanian J, Guelfi JD, Kumar R. The Edinburgh Postnatal Depression Scale (EPDS) and the detection of major depressive disorders in early postpartum: some concerns about false negatives. *J Affect Disord* 2000;61:107-12.
- 75 Lee DT, Yip AS, Chiu HF, Chung TK. Screening for postnatal depression using the double-test strategy. *Psychosom Med* 2000;62:258-63.
- 76 Morrell CJ, Spiby H, Stewart P, Walters S, Morgan A. Costs and benefits of community postnatal support workers: a randomised controlled trial. *Health Technology Assess* 2000;4(6).
- 77 Shields N, Reid M, Cheyne H, Holmes A, McGinley M, Turnbull D, Smith LN. Impact of midwife-managed care in the postnatal period: an exploration of psychosocial outcomes. *J Reprod Infant Psychol* 1997;15:91-108.
- 78 Gunn J, Lumley J, Chondros P, Young D. Does an early postnatal check-up improve maternal health: results from a randomised trial in Australian general practice. *Br J Obstet Gynaecol* 1998;105:991-7.
- 79 Nikodem VC, Nolte AG, Wolman W, Gulmezoglu AM, Hofmeyr GJ. Companionship by a lay labour supporter to modify the clinical birth environment: long-term effects on mother and child. *Curatonia* 1998;21:8-12.
- 80 Brugha TS, Wheatly S, Taub NA, Culverwell A, Friedman T, Kirwan P, et al. Pragmatic randomized trial of antenatal intervention to prevent postnatal depression by reducing psychosocial risk factors. *Psychol Med* 2000; 30:1273-81.
- 81 Meyer EC, Coll CT, Lester BM, Boukydis CF, McDonough SM, Oh W. Family-based intervention improves maternal psychological well-being and feeding interaction of preterm infants. *Pediatrics* 1994;93:241-6.
- 82 Armstrong KL, Fraser JA, Dadds MR, Morris J. A randomized, controlled trial of nurse home visiting to vulnerable families with newborns. *J Paediatr Child Health* 1999;35:237-44.
- 83 Lavender T, Walkinshaw SA. Can midwives reduce postpartum psychological morbidity? A randomized trial. *Birth* 1998;25:215-9.
- 84 Small R, Lumley J, Donohue L, Potter A, Waldenstrom U. Randomised controlled trial of midwife led debriefing to reduce maternal depression after operative childbirth. *BMJ* 2000;321:1043-7.
- 85 Zlotnik C, Johnson SL, Miller IW, Pearlstein T, Howard M. Postpartum depression in women receiving public assistance: pilot study of an interpersonal-therapy-oriented group intervention. *Am J Psychiatry* 2001;158:638-40.
- 86 Elliott SA, Leverton TJ, Sanjack M, Turner H, Cowmeadow P, Hopkins J, Bushnell D. Promoting mental health after childbirth: a controlled trial of primary prevention of postnatal depression. *Br J Clin Psychol* 2000;39:223-41.
- 87 Wisner KL, Perel JM, Peindl KS, Hanusa BH, Findling RL, Rappaport D. Prevention of recurrent postpartum depression: a randomized clinical trial. *J Clin Psychiatry* 2001;62:82-6.
- 88 Sichel DA, Cohen LS, Robertson LM, Rutenberg A, Rosenbaum JF. Prophylactic estrogen in recurrent postpartum affective disorder. *Biol Psychiatry* 1995;38:814-8.
- 89 Stewart DE, Klompenhouwer JL, Kendell RE, van Hulst AM. Prophylactic lithium in puerperal psychosis. *Br J Psychiatry* 1991;158:393-7.
- 90 Cohen LS, Sichel DA, Robertson LM, Heckscher E, Rosenbaum JF. Postpartum prophylaxis for women with bipolar disorder. *Am J Psychiatry* 1995;152:1641-5.
- 91 Murray L, Cooper P. The impact of postnatal depression on child development. *Int Rev Psychiatry* 1996;8:55-63.
- 92 Children (Scotland) Act 1995. c36. London: Stationery Office.
- 93 Lawrie TA, Herxheimer A, Dalton K. Oestrogens and progestogens for preventing and treating postnatal depression (Cochrane Review). In: The Cochrane Library, Issue 1, 2001. Oxford: Update Software.
- 94 Gregoire AJ, Kumar R, Everitt B, Henderson AF, Studd JW. Transdermal oestrogen for treatment of severe postnatal depression. *Lancet* 1996;347:930-3.
- 95 Wisner KL, Gelenberg AJ, Leonard H, Zarin D, Frank E. Pharmacologic treatment of depression during pregnancy. *JAMA* 1999;282:1264-9.
- 96 Stowe Z, Casarella J, Landry J, Nemeroff C. Sertraline in the treatment of women with postpartum major depression. *Depression* 1995;3:49-55.
- 97 Briggs CJ, Briggs GL. Herbal products in depression therapy. *Can Pharm J* 1998;131:40-4.
- 98 Morgan WP, Goldston SE. Exercise and mental health. Washington: Hemisphere Publishing; 1987.
- 99 Walker LO, Wilging S. Rediscovering the "M" in "MCH": maternal health promotion after childbirth. *J Obstet Gynecol Neonatal Nurs* 2000;29:229-36.
- 100 Department of Health. Treatment choice in psychological therapies and counselling: evidence based clinical practice guideline. The Department: London; 2001.
- 101 Holden JM, Sagovsky R, Cox JL. Counselling in a general practice setting: a controlled study of health visitor intervention in treatment of postnatal depression. *BMJ* 1989;298:223-6.
- 102 Wickberg B, Hwang CP. Counselling of postnatal depression: controlled study on a population based Swedish sample. *J Affect Disord* 1996;39:209-16.
- 103 Thome M, Alder B. A telephone intervention to reduce fatigue and symptom distress in mothers with difficult infants in the community. *J Adv Nurs* 1999;29:128-37.
- 104 O'Hara M, Stuart S, Gorman L, Wenzel A. Efficacy of interpersonal psychotherapy for postnatal depression. *Arch Gen Psychiatry* 2000;57:1039-45.
- 105 Sheppard M. Childcare, social support and maternal depression: a review and application of findings. *Br J Soc Work* 1994;24:287-310.
- 106 Sheppard M. Postnatal depression, child care and social support: a Review of findings and their implications for practice. *Soc Work Soc Sci Rev* 1994;5:24-46.
- 107 Gottlieb N, Mendelson MJ. Mothers' moods and social support when a second child is born. *Matern Child Nurs J* 1995;23:3-14.
- 108 Brugha TS, Sharp HM, Cooper SA, Wisender C, Britto D, Shinkwin R, et al. The Leicester 500 Project. Social support systems and the development of postnatal depressive symptoms, a prospective cohort study. *Psychol Med* 1998;28:63-79.
- 109 Misri S, Kostaras X, Fox D, Kostaras D. Impact of partner support in the treatment of postpartum depression. *Can J Psychiatry* 2000;45:554-8.
- 110 Field T. Maternal depression: effects on infants and early interventions. *Prev Med* 1998;27:200-3.
- 111 Malphurs JE, Field T, Larraine C, Pickens J, Pelaez-Nogueras M, Yando R, et al. Altering withdrawn and intrusive interaction behaviors of depressed mothers. *Infant Mental Health J* 1996;17:152-60.
- 112 Field T, Grizzle N, Scafidi F, Abrams SM, Richardson S. Massage therapy for infants of depressed mothers. *Infant Behav Dev* 1996;19:107-12.
- 113 Onzawa K, Glover V, Adams D, Modi N, Kumar RC. Infant massage improves mother-infant interaction for mothers with postnatal depression. *J Affect Disord* 2001;63:201-7.
- 114 Baker D, Taylor H. The relationship between condition-specific morbidity, social support and material deprivation in pregnancy and early motherhood. *Soc Sci Med* 1997;45:1325-36.
- 115 Bardou D, Glaser YI, Prothero D, Weston DH. Mother and baby unit: psychiatric survey of 115 Cases. *BMJ* 1968;2:755-8.
- 116 Stewart DE. Psychiatric admission of mentally ill mothers with their infants. *Can J Psychiatry* 1989;34:34-8.
- 117 Department of Health. Code of practice Mental Health Act 1983. London: The Department; 1999.
- 118 Department of Health. NHS Executive. Safety, privacy and dignity in mental health units. Guidance on mixed sex accommodation for mental health services. London: The Department; 1999. [cited 10 May 2002]. Available from url: <http://www.doh.gov.uk/mhmixedsexaccom.htm>
- 119 Althuler LL, Cohen L, Szuba MP, Burt VK, Gitlin M, Mintz J. Pharmacologic management of psychiatric illness during pregnancy: dilemmas and guidelines. *Am J Psychiatry* 1996;153:592-606.
- 120 Yoshida K, Smith B, Kumar R. Psychotropic drugs in mother's milk: a comprehensive review of assay methods, pharmacokinetics and of safety of breast feeding. *J Psychopharmacol* 1999;13:64-80.
- 121 Ericson A, Källén B, Wiholm B. Delivery outcome after the use of antidepressants in early pregnancy. *Eur J Clin Pharmacol* 1999;55:503-8.

- 122 Addis A, Koren G. Safety of fluoxetine during the first trimester of pregnancy: a meta-analytical review of epidemiological studies. *Psychol Med* 2000;30:89-94.
- 123 Wisner KL, Gelenberg AJ, Leonard H, Zarin D, Frank E. Pharmacologic treatment of depression during pregnancy. *JAMA* 1999;282:1264-9.
- 124 Goldstein DJ, Sundell K. A review of the safety of selective serotonin reuptake inhibitors during pregnancy. *Hum Psychopharmacol* 1999;14:319-24.
- 125 Goldstein DJ, Corbin L, Sundell KL. Effects of first-trimester fluoxetine exposure on the newborn. *Obstet Gynecol* 1997;89:713-8.
- 126 Kulin N, Pastuszak A, Sage SR, Schick-Boschetto B, Spivey G, Feldkamp M, et al. Pregnancy outcome following maternal use of the new selective serotonin reuptake inhibitors: a prospective controlled multicenter study. *JAMA* 1998;279:609-10.
- 127 Viguera AC, Nonacs R, Cohen LS, Tondon L, Murray A, Baldessarini RJ. Risk of recurrence of bipolar disorder in pregnant and nonpregnant women after discontinuing lithium maintenance. *Am J Psychiatry* 2000;157:179-84.
- 128 Yonkers KA, Little BB, March D. Lithium during pregnancy. *CNS Drugs* 1998;9:261-9.
- 129 Kaneko S, Battino D, Andermann E, Wada K, Kan R, Takeda A, et al. Congenital malformation due to antiepileptic drugs. *Epilepsy Res* 1999;33:145-58.
- 130 Dansky LV, Andermann E, Rosenblatt D, Sherwin AL, Andermann F. Anticonvulsants, folate levels and pregnancy outcome: a prospective study. *Ann Neurol* 1987;21:176-82.
- 131 Dolovich LR, Addis A, Vaillancourt J, Power J, Koren G, Einarsen T. Benzodiazepine use in pregnancy and major malformations or oral cleft: meta-analysis of cohort and case-control studies. *BMJ* 1998;317:839-43.
- 132 Nicholls K. Psychotropics. In: Rubin P, editor. *Prescribing in Pregnancy*. 3rd ed. London: BMJ Books; 2000. p. 101-111.
- 133 Koren G, Nulman I, Addis A. Outcome of children exposed in utero to fluoxetine: a critical review. *Depression Anxiety* 1998;8:27-31.
- 134 Auerbach JG, Hans SL, Marcus J, Maier S. Maternal psychotropic medication and neonatal behaviour. *Neurotoxicol Teratol* 1992;14:399-401.
- 135 Wisner KL, Perel JM, Findling RL. Antidepressant treatment during breastfeeding. *Am J Psychiatry* 1996;153:1132-7.
- 136 Dunitz M, editor. *Prescribing guidelines*. 5th ed. London: Bethlam & Maudsley NHS Trust; 1999.
- 137 Yoshida K, Kumar R, Smith B, Craggs M. Psychotropic drugs in breast milk: no evidence for adverse effects preclude modulation of startle reflex or on cognitive level in infants. *Develop Psychobiol* 1998;32:249-56.
- 138 Yoshida K, Smith B, Craggs M, Kumar RC. Investigation of pharmacokinetics and of possible adverse effects in infants exposed to tricyclic antidepressants in breast-milk. *J Affect Disord* 1997;43:225-37.
- 139 Buist A, Norman TR, Dennerstein L. Plasma and breast milk concentrations of dothiepin and Northiaden in lactating women. *Hum Psychopharmacol* 1993;8:29-33.
- 140 Wisner KL, Perel JM. Serum nortriptyline levels in nursing mothers and their infants. *Am J Psychiatry* 1991;148:1234-6.
- 141 Wisner KL, Perel JM, Findling RL, Hinnes, RL. Nortriptyline and its hydroxymetabolites in breastfeeding mothers and newborns. *Psychopharmacol Bull* 1997;33:249-51.
- 142 Stowe ZN, Owens MJ, Landry JC, Kilts CD, Ely T, Llewellyn A, et al. Sertraline and desmethylsertraline in human breast milk and nursing infants. *Am J Psychiatry* 1997;154:1255-60.
- 143 Altshuler LL, Burt VK, McMullen M, Hendrick V. Breastfeeding and sertraline: a 24 hour analysis. *J Clin Psychiatry* 1995;56:243-5.
- 144 Dodd S, Stocky A, Buist A, Burrows GD, Maguire K, Norman TR. Sertraline in paired blood plasma and breast-milk samples from nursing mothers. *Hum Psychopharmacol* 2000;15:261-4.
- 145 Mammen OK, Perel JM, Rudolph G, Foglia JP, Wheeler PH, Wheeler SB. Sertraline and norsesertraline levels in three breastfed infants. *J Clin Psychiatry* 1997;58:100-3.
- 146 Epperson CN, Anderson GM, McDougle CJ. Sertraline and breastfeeding. *N Engl J Med* 1997;336:1189-90.
- 147 Hendrick V, Fukuchi A, Altshuler L, Widawski M, Wertheimer A, Brunhuber MV. Use of sertraline, paroxetine and fluvoxamine by nursing women. *Br J Psychiatry* 2001;179:163-6.
- 148 Misri S, Kim J, Riggs KW, Kostaras X. Paroxetine levels in postpartum depressed women, breast milk and infant serum. *J Clin Psychiatry* 2000;61:828-32.
- 149 Ohman R, Hagg S, Carleborg L, Spigset O. Excretion of paroxetine into breast milk. *J Clin Psychiatry* 1999;60:519-23.
- 150 Stowe ZN, Cohen LS, Hostetter A, Ritchie JC, Owens MJ, Nemeroff CB. Paroxetine in human breast milk and nursing infants. *Am J Psychiatry* 2000;157:185-9.
- 151 Yoshida K, Smith B, Craggs M, Kumar RC. Fluoxetine in breast-milk and developmental outcome of breast-fed infants. *Br J Psychiatry* 1998;172:175-8.
- 152 Kristensen JH, Ilett KF, Hackett LP, Yapp P, Paech M, Begg EJ. Distribution and excretion of fluoxetine and norfluoxetine in human milk. *Br J Clin Pharmacol* 1999;48:521-7.
- 153 Goodnick PJ. Pharmacokinetic optimisation of therapy with newer antidepressants. *Clin Pharmacokinet* 1994;27:307-30.
- 154 Schmidt K, Olesen OV, Jensen PN. Citalopram and breast-feeding: serum concentration and side effects in the infant. *Biol Psychiatry* 2000;47:164-5.
- 155 Jensen PN, Olesen OV, Bertelsen A, Linnet K. Citalopram and desmethylcitalopram concentrations in breast milk and in serum of mother and infant. *Ther Drug Monit* 1997;19:236-9.
- 156 Spigset O, Carieborg L, Ohman R, Norstrom A. Excretion of citalopram in breast milk. *Br J Clin Pharmacol* 1997;44:295-8.
- 157 Wright S, Dawling S, Ashford JJ. Excretion of fluvoxamine in breast milk [letter]. *Br J Clin Pharmacol* 1991;31:209.
- 158 Yoshida K, Smith B, Kumar RC. Fluvoxamine in breast milk and infant development. *Br J Clin Pharmacol* 1997;44:210-1.
- 159 Chaudron LH, Jefferson JW. Mood stabilizers during breastfeeding: a review. *J Clin Psychiatry* 2000;61:79-90.
- 160 Llewellyn A, Stowe ZN, Strader JR Jr. The use of lithium and management of women with bipolar disorder during pregnancy and lactation. *J Clin Psychiatry* 1998;59:57-64.
- 161 Piontek C, Baab S, Peindel KS, Wisner KL. Serum valproate levels in 6 breastfeeding mother-infant pairs. *J Clin Psychiatry* 2000;61:170-2.
- 162 Pons G, Rey E, Matheson I. Excretion of psychoactive drugs into breast milk. Pharmacokinetic principles and recommendations. *Clin Pharmacokinet* 1994;27:270-89.
- 163 Llewellyn A, Stowe ZN. Psychotropic medications in lactation. *J Clin Psychiatry* 1998;59:41-52.
- 164 Hill R, McIvor R, Wojnar-Horton RE, Hackett LP, Ilett KF. Risperidone distribution and excretion into human milk: case report and estimated infant exposure during breast feeding. *J Clin Psychopharmacol* 2000;20:285-6.
- 165 Pons G, Schoerlin M, Tam Y, Moran C, Pfenf J, Francoual CH, et al. Moclobemide excretion in human breast milk. *Br J Clin Pharmacol* 1990;29:27-31.
- 166 Buist A, Dennerstein L, Maguire K, Norman T. Plasma and human milk concentrations of Moclobemide in nursing mothers. *Hum Psychopharmacol* 1998;13:579-82.
- 167 Ilett KF, Hackett LP, Dusci LJ, Roberts MJ, Kristensen JH, Paech M, et al. Distribution and excretion of venlafaxine and O-desmethylvenlafaxine in human milk. *Br J Clin Pharmacol* 1998;45:459-62.
- 168 Yapp P, Ilett KF, Kristensen JH, Hackett LP, Paech MJ, Rampono J. Drowsiness and poor feeding in a breast-fed infant: association with nefazodone and its metabolites. *Ann Pharmacother* 2000;34:1269-72.
- 169 Scottish Executive Department of Health. A framework for maternity services in Scotland. Edinburgh: The Executive; 2001. [cited 9 April 2002]. Available from url: <http://www.scotland.gov.uk/library3/health/ffms-00.asp>
- 170 Department of Health. National service framework for mental health. Modern standards & service models. London: The Department; 1999. [cited on 10 May 2002]. Available from url: <http://www.doh.gov.uk/nsf/mentalhealth.htm>
- 171 Campbell H, Hotchkiss R, Bradshaw N, Porteous M. Integrated care pathways. *BMJ* 1998;316:133-7.

DEFINITIONS

Postnatal depression (PND) is regarded as any non-psychotic depressive illness of mild to moderate severity occurring during the first postnatal year. It is important to distinguish PND from “baby blues”, the brief episode of misery and tearfulness that affects at least half of all women following delivery, especially those having their first baby. Puerperal psychosis, is a mood disorder accompanied by features such as loss of contact with reality, hallucinations, severe thought disturbance, and abnormal behaviour.

DIAGNOSIS, SCREENING AND PREVENTION

A Procedures should be in place to ensure that all women are routinely assessed during the antenatal period for a history of depression.

There is no evidence to support routine screening in the antenatal period to predict development of PND.

D All women should be screened during pregnancy for previous puerperal psychosis, history of other psychopathology (especially affective psychosis) and family history of affective psychosis.

When assessing women in the postnatal period it is important to remember that normal emotional changes may mask depressive symptoms or be misinterpreted as depression.

Primary care teams should be aware that with decreasing duration of stay in postnatal wards, puerperal psychosis is more likely to present following a mother's discharge home.

C The EPDS should be offered to women in the postnatal period as part of a screening programme for PND.

C The EPDS is not a diagnostic tool. Diagnosis of PND requires clinical evaluation.

A cut-off on the EPDS of 10 or above is suggested for whole population screening.

The EPDS should be used at approximately six weeks and three months following delivery and should be administered by trained Health Visitors or other health professionals.

In high risk women it may be effective to have postnatal visits, interpersonal therapy and / or antenatal preparation.

Women identified at high risk of puerperal psychosis should receive specialist psychiatric review.

MANAGEMENT

B PND and puerperal psychosis should be treated.

D PND should be managed in the same way as depression at any other time, but with the additional considerations regarding the use of antidepressants when breast feeding and in pregnancy.

St John's Wort and other alternative medicines should not be used during pregnancy and lactation until further evidence as to their safety in these situations is available.

The use of hormonal therapies in the routine management of patients with PND is not advised.

B Psychosocial interventions should be considered when deciding on treatment options for a mother diagnosed as suffering from PND.

C The effects of a mother's PND on other family members and their subsequent needs should be considered and treatment offered to them as appropriate.

C Interventions that work with more than one family member at a time should be considered when assessing the treatment options available.

The psychosocial treatment option chosen should reflect both clinical judgement and the mother's and family's preferences where possible.

D Puerperal psychosis should be managed in the same way as psychotic disorders at any other time, but with the additional considerations regarding the use of drug treatments when breast feeding and in pregnancy.

MOTHER AND BABY UNITS

D The option to admit mother and baby together to a specialist unit should be available. Mothers and babies should not be admitted to general psychiatric wards routinely.

A multiprofessional assessment, including social work, and involving family members, should take place to review the decision to admit mother and baby to a specialist unit either before or shortly after admission.

Clinical responsibility for the baby whilst the mother is an inpatient needs to be clearly determined.

PRESCRIBING

The following general principles governing prescription of new medication or the continuation of established therapy during pregnancy and in breast feeding apply to all recommendations in this guideline.

- establish a clear indication for drug treatment (i.e., the presence of significant illness in the absence of acceptable or effective alternatives)
- use treatments in the lowest effective dose for the shortest period necessary
- drugs with a better evidence base (generally more established drugs) are preferable
- assess the benefit/risk ratio of the illness and treatment for both mother and baby/fetus.

B The risks of stopping tricyclic or SSRI antidepressant medication should be carefully assessed in relation to the mother's mental state and previous history. There is no indication to stop tricyclic or SSRI antidepressant medication as a matter of routine in early pregnancy.

C There is no clinical indication for women treated with TCAs (other than doxepin) paroxetine, sertraline, or fluoxetine to stop breast feeding, provided the infant is healthy and its progress monitored.

FURTHER INFORMATION

The National Childbirth Trust, Alexandra House, Oldham Terrace, London W3 1BE. Enquiry line: 0870 444 8707. Web site: www.nctpregnancyandbaby.com

Depression Alliance Scotland, 3 Grosvenor Gardens, Edinburgh, EH12 5JU. Tel: 0131 467 3050.

Manic Depression Fellowship Scotland, Mile End Mill, Studio 1019, Abbey Mill Business Centre, Seedhill Road, Paisley, PA1 1TJ. Tel/fax: 0141 560 2050.

Action on Puerperal Psychosis, Jackie Benjamin, Queen Elizabeth Psychiatric Hospital, Birmingham B15 2QZ. Tel: 0121 678 2361; Web site: www.bham.ac.uk/app

The Scottish Association for Mental Health, Cumbrae House, 15 Carlton Court, Glasgow, G5 9JP. Tel: 0141 568 7000; Email: enquire@samh.org.uk; Web site: www.samh.org.uk