CHAPTER 1

# Postnatal depression: an overview

> 'My husband wants another baby. The idea is quite nice, but it really frightens me to think that after having the baby I would be like this again. I wouldn't mind the morning sickness or the actual birth. It is the postnatal depression that really frightens me. I don't think I could face that again. It was horrific.' (Holden, 1988)

## Introduction

Postnatal depression affects not only the quality of a woman's own life and her experience of mothering but also her infant, her other children, her partner and everyone around her, including those involved in her care. On an individual level, the experience can be devastating. Pitt (1968) noted that many of the women in his early study felt quite changed from their normal self, and most 'had never been depressed like this before'. Without help or treatment, the consequences may be long term and expensive for the women, for their families and in the demands made on healthcare resources. In severe depression, especially with psychotic symptoms, there is a risk of suicide and infanticide. *The Confidential Enquiries into Maternal Deaths in the United Kingdom* (Oates, 2001), which covered the triennium 1996–1999, first reported psychiatric causes as the leading cause of maternal deaths in the UK and this has remained the case in subsequent reports.

The term 'postnatal depression' is commonly used to describe a sustained depressive disorder in women following childbirth, characterised by:

- a low, sad mood
- lack of interest
- anxiety
- sleep difficulties
- reduced self-esteem
- somatic symptoms such as poor appetite and weight loss
- difficulty coping with day-to-day tasks.

The term was used by Vivienne Welburn (1980) as the title of her book and by Ann Oakley (1980) to describe a sustained depressive disorder

occurring in women in the first year after childbirth. It was also used in the Edinburgh study (Cox *et al*, 1982) to describe women experiencing depression within 3 months of childbirth. Cox *et al* offered the conservative estimate of 13% for the prevalence of depression at that time and report that half of these women were not identified by the local primary care service. In the USA, the term 'postpartum depression' is more commonly used to describe mothers with a non-psychotic mood disorder.

Participants at a workshop in Sweden (organised by Birgitta Wickberg, Philip Hwang and John Cox) concluded that the term postnatal depression is useful to describe any depressive disorder without psychotic features present within the first year following childbirth; the limitation of the 4-week onset specifier in DSM-IV (American Psychiatric Association, 1994) and 6 weeks in ICD-10 (World Health Organization, 1992) was recognised. DSM-5 published in May 2013 (American Psychiatric Association, 2013) has extended the onset-specifier period to 6 months, but ICD-11 is not due for publication until 2015.

In the late 1970s and throughout the 1980s postnatal depression was largely considered to be a Western phenomenon, with infrequent documentation in the cross-cultural literature. This suggested that it might be a 'culture-bound' phenomenon. Possible contributing factors were thought to be the lack of social structuring of the event of childbirth, combined with a lack of accompanying ritual and support for the mother (Stern & Kruckman, 1983; Cox, 1996). Research has increasingly revealed that depression is a negative outcome of childbirth for women in diverse countries and cultures (Halbreich & Karkun, 2006).

The public health importance of postnatal depression is now more widely acknowledged in mental health policy guidance both in the UK and in other countries than formerly because of the suffering and disability of the woman and the disruption of the family at a time of maximum vulnerability. The evidence of depression having an adverse effect on the mother–infant relationship and on child development is also more widely recognised.

It is well established that postnatal depression affects at least 10% of women within the first postpartum year and that even higher rates occur in urban areas of deprivation. Cooper *et al* (1999), for example, found that a third of women in an African township in Cape Town had a serious major depressive disorder. Similarly, Cryan *et al* (2001) found that 28.6% of 944 women in a socially deprived urban area in Dublin, Ireland, had depression postnatally. The frequency of depression is much lower in cohesive island communities such as Malta (Felice *et al*, 2004) and in affluent societies with generous maternity benefits such as Sweden (Wickberg & Hwang, 1997). It is also less common in cultures with more clearly defined parental roles such as Japan (Tamaki *et al*, 1997) and Malaysia, where the majority of women still retain traditional postnatal beliefs and practices (Kit *et al*, 1997) and in countries where childbirth gives high status to the married mother (Cox, 1983).

Postnatal depression is not, however, a specific discrete disorder fundamentally different from depression occurring at other times, and our use of the term does not indicate that such depression always develops after delivery or is necessarily caused by the specific stress of childbirth. Pitt (1968) considered depression after childbirth to be 'atypical', although we ourselves did not find the symptoms different from depression at other times, for example in mothers with older children (Cox *et al*, 1996). Nor was there evidence in a Stoke-on-Trent study (Murray *et al*, 1995) that the range of depressive symptoms distinguished between early-onset (i.e. within the first 6 weeks) and later-onset depression. However, one case-record study reported that women with postnatal depression had more anxiety features and took longer to recover than women with major depression unrelated to childbearing (Hendrick *et al*, 2000).

A study by Henshaw *et al* (2004) – and subsequently by others (Adewuya, 2006; Watanabe *et al*, 2008; Reck *et al* 2009) – has confirmed, however, that severe 'postnatal blues' (see pp. 4–5) is a powerful predictor of subsequent depression: 40% of women with severe postnatal blues subsequently developed a depressive disorder. These findings suggest that the birth event can be an important neuroendocrine trigger for a more sustained depressive disorder, an idea supported by the work of Bloch *et al* (2000). They administered a gonadotrpohin-releasing hormone agonist, which suppresses the hypothalamic–pituitary–ovarian axis, to women who did and did not have histories of postnatal depression. They then gave the women supraphysiological doses of oestradiol and progesterone, mimicking the hormonal state of late pregnancy. The hormones were then withdrawn under double-blind conditions and women with histories of postnatal depression were more likely to develop mood symptoms in the withdrawal period. Cooper & Murray (1995) studied two groups of primiparous women for 5 years and found that women for whom the index postnatal episode was a recurrence of depression were at increased risk of further non-postpartum episodes but not of postpartum episodes. Women for whom the index postnatal episode was the first experience of depression were at greater risk for further episodes of postnatal depression but not for non-postpartum episodes. They concluded that their findings supported the use of postnatal depression as a specific diagnostic entity.

In about 15% of cases, postnatal depression has an antenatal onset and depression in pregnancy is as common as it is postpartum. Gavin *et al* (2005) reported that incidence of new-onset depression in pregnancy (14.5%) was the same as the incidence in the first 3 months postpartum, and Bennett *et al* (2004) observed prevalence rates of 7.4%, 12.8% and 12.0% for the first, second and third trimesters respectively. Depression during pregnancy is associated with a number of adverse fetal outcomes including increased activity, delayed growth, preterm birth and low birth weight (Field *et al*, 2006).

There have to date been several Cochrane reviews published on the treatment of antenatal depression and the prevention of postnatal

depression. The review of psychosocial and psychological interventions for the treatment of antenatal depression concluded that as the only trial (of interpersonal psychotherapy) reviewed was so small, the authors could not make any recommendations (Dennis *et al*, 2007). The review of non-biological treatments found insufficient evidence of their efficacy to support the use of massage therapy or acupuncture (Dennis & Allen, 2008).

Progestogens do not prevent postnatal depression and are associated with depressive symptoms in some women. Progesterone has not been formally tested in a randomised trial (Dennis *et al*, 2008). Nortriptyline showed no benefit over placebo, and although sertraline did seem to prevent a recurrence or extend the time to recurrence in some women who had previously had a postpartum depressive episode, the numbers in the trial were very small (Howard *et al*, 2005). Dennis & Creedy (2004) reviewed 15 trials of psychological or psychosocial interventions for the prevention of postnatal depression, concluding that there was no benefit over usual care. A Health Technology Assessment systematic review of psychological and psychosocial interventions for the prevention of postnatal depression which will update this is currently underway and due to report in 2014.

## Other postnatal psychiatric disorders

Postnatal depression is generally distinguished from puerperal psychosis by its later onset following childbirth (4–6 weeks) and by the absence of florid delusions, hallucinations and gross behavioural disturbance that can characterise puerperal psychosis. Research findings suggest that puerperal psychoses are linked in their aetiology and prognosis to bipolar mood disorders (Chaudron & Pies, 2003). The risk of recurrence of puerperal psychosis following subsequent pregnancies and bipolar disorder after childbirth is at between 1 in 2 or 1 in 3 (Kendell *et al*, 1981*a*; Wieck *et al*, 1991). Although rare (2 per 1000 deliveries), puerperal psychoses can have devastating consequences for the mother (suicide) (Oates, 2003) and the infant (infanticide) (Oates, 2003; Spinelli, 2003). Their optimal management usually requires the full resources of a perinatal mental health team with access to a purpose-built mother and baby unit, as recommended by the Joint Commissioning Panel for Mental Health (2012) in England and Wales, Scottish Intercollegiate Guidelines Network (SIGN) in Scotland (Scottish Intercollegiate Guidelines Network, 2012) and in other national guidelines. With comprehensive treatment, however, the prognosis is usually good, although there is a high risk of recurrence. Women affected should therefore be closely monitored in all subsequent pregnancies and after delivery, when appropriate prevention strategies should be in place and a clear management plan provided by specialist perinatal mental health teams, communicated to all involved in their care.

Postnatal blues describes the transitory mood disturbances (emotional lability and crying) found in at least two-thirds of women in the first week

postpartum and particularly on day 5 (Cox *et al*, 1982; Henshaw, 2003). An understanding of postnatal blues is important for a number of reasons, including the following:

1 They are distressing and perplexing for the mother and her family, and there is therefore a need for an explanation of their causes and for support and reassurance.
2 Severe blues can be difficult to distinguish from the premonitory signs of puerperal psychosis and from the early onset of non-psychotic postnatal depression.
3 Increased understanding of the neuroendocrine causes of postnatal blues will contribute to knowledge about the effect of gender steroids on central neurotransmitter systems and provide a window for further understanding of postnatal mood disorder.

The relationship between postnatal disorders is shown in Fig. 1.1, which illustrates the maintaining factors ('vicious circles') of postnatal depression and how the lack of culturally sanctioned family support can both cause and be a consequence of a prolonged depressive disorder at this time.

Other important psychiatric disorders found in the puerperium include anxiety disorders: panic disorder, obsessive–compulsive disorder, post-traumatic stress disorder and generalised anxiety disorder. The EPDS is sensitive to anxiety (Matthey *et al*, 2013*a*), as is the subscale EPDS-3A (Swalm *et al*, 2010). However, there have been no comparison studies with standard anxiety measures. The EPDS may not detect the less common disorders such as schizophrenia, alcoholism, substance misuse or an organic confusional state. However, some of the depressive episodes indentified by the EPDS may be bipolar depression (Wisner *et al*, 2013).

## Women's narratives

Mothers themselves often describe their depression and its effects graphically. In tape-recorded interviews conducted after a randomised

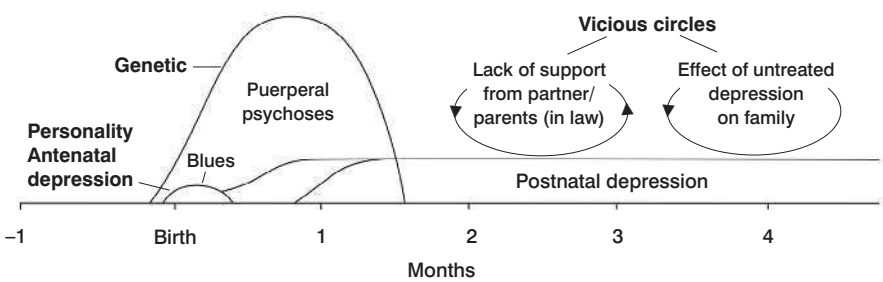


**Fig. 1.1** Causal and maintaining factors of postnatal depression (after Cox, 1998).

controlled trial of counselling by health visitors (Holden, 1988), women expressed their feelings in the following way:

> 'I have never felt like that in my life before. Nobody could speak to me because I would burst into tears at the least thing. I took an extreme dislike to everybody in this world except my baby. I wanted everybody to go away, I was interested in nothing.'
>
> 'It was terrible. It was like someone else taking over. I wasn't the same person any more. I didn't recognise myself. It wasn't me, that was what I kept saying. It wasn't me.'
>
> 'It was absolutely ghastly. It felt as if there was a physical weight inside that was dragging me down. I was pulling it around all the time; everything was an effort.'

Another mother told us that something had 'got a hold of her' which she knew was serious and required medical help. In an earlier study, in at least a half of the women who developed depression, the disorder lasted for a year and sometimes merged into a second postnatal depression that followed a subsequent pregnancy (Cox *et al*, 1984). Many women clearly recalled postnatal depression several years later.

## Effects on interactions with infants

Postnatal depression occurs when heavy demands are placed on women's resources and when infant learning and development are taking place.

> 'Mothers of young infants, especially when it is their first child, must adjust to their baby and learn to understand the infant's communications and needs. This task is more difficult if the mothers are feeling despondent, fatigued and overwhelmed by the responsibilities attendant upon transition to parenthood… [T]he sadness, irritability and social withdrawal that characterise depressed women compromise their ability to provide a sensitive, nurturing environment for their babies.' (Campbell & Cohn, 1997: p. 166)

After completing our counselling intervention study, many woman told us of the effect that depression had had on their relationship with their infant. One woman had seriously feared harming her baby, and constantly fantasised while bathing him about how easy it would be to push his head under the water. Others said:

> 'It was lonely and I felt as if I was inside this box, just all by myself, with nobody to talk to and nobody to help me. I started taking my anger out on [my baby]. I never hit him, but I grabbed him. Or I used to ignore him, let him scream, shut him away. I wasn't loving him like a mother should.'
>
> 'It really bothered me to be depressed when I had such a lovely baby, it didn't seem fair to her. I never stopped loving her, but I couldn't express it. I was withdrawn into myself. I liked the baby but I wasn't interested in her. I just did things automatically and I wouldn't remember doing them. It was as if I wasn't really there. I felt I was a failure as a mother.' (Holden, 1988)

One health visitor became concerned that another mother showed little interest in her baby, leaving him entirely to her sister to look after. This

woman told me that she had felt she was not a good enough mother, and that the baby would know this and reject her.

The accounts cited earlier were retrospective (between 9 and 12 months postpartum), describing how the women had felt in the early months. In a controlled study, Jennings and colleagues (1999) found that more than half of mothers with depression had a fear of being alone with their infant and felt an inability to care for the infant. Indeed, 41% of mothers with depression compared with 7% of control mothers admitted to thoughts of harming their infant. A later study reported universal intrusive thoughts of the infant coming to accidental harm and almost half of the sample of mothers with depression experienced intrusive thoughts of harming their infants. This was predicted by high parenting stress and low social support, and there was no association between these thoughts and aggressive parenting (Fairbrother & Woody, 2008).

Adverse effects on the mother–infant relationship and the feelings of both mother and baby are well documented. Murray *et al* (1996) found, in a comparison with well women, that at 2 months postpartum, mothers with depression were less sensitively attuned to their infants and were less affirming and more negating of infant experience. Murray *et al* suggested that persistent patterns of withdrawn behaviour may in this way be set up in the baby which could limit subsequent experience and development, even after the mother has recovered and is responding more affectionately.

Research groups have looked at the ways in which these mother–infant interactions are disturbed. A preliminary study by Kaplan *et al* (1999) of the long-term impact of postnatal depression on mother–child interaction demonstrated for the first time that 4-month-old babies react with far less interest to the speech of mothers with depression. The tape-recorded voices of mothers without depression were more likely to stimulate their infants' interest and the time they spent focusing on an abstract pattern. Edhborg *et al* (2001) suggested that the young children of women with high EPDS scores develop 'representations' of their mother and of their interactions with her as being less joyful than do the children of mothers without depression, and that these representations may remain beyond the period of the mother's depressed mood. Depressive symptoms in both mothers and fathers is negatively associated with positive enrichment activity with the child such as reading, singing songs and telling stories (Paulson *et al*, 2006).

## Persistence of effects on children of mothers with depression

There is considerable evidence of a sustained adverse affect of maternal depression on the infant's later cognitive development and behaviour (reviewed by Grace *et al* 2003). Disturbances in early mother–infant interactions were found to be predictive of poorer infant cognitive outcome at 18 months of age (Cooper & Murray, 1997). In children 3.5 years of age

and at school entry both postnatal and more recent maternal depression were associated with significantly raised levels of child disturbance, particularly among boys and those from lower social class families (Sharp *et al*, 1995; Sinclair & Murray, 1998). These unwanted effects may persist even longer and may be mediated by chronic or recurrent maternal depression. In a study of long-term sequelae in the children of mothers who had depression at 3 months postpartum, for example, Hay *et al* (2001) found that 11-year-old children, especially boys, had significantly lower IQ scores, more attentional and reading problems, greater difficulties in mathematical reasoning and were more likely to have special educational needs than children of mothers who had not had postpartum depression. Although several studies have found boys to be particularly vulnerable, chronic maternal depression persisting into the second postnatal year in one study was associated with lower psychomotor and cognitive development, but this study found no infant gender differences (Cornish *et al*, 2005). There is some evidence, however, that such effects can be changed by an intervention to help the mother during depression (Murray *et al*, 2003; Poobalan *et al*, 2007).

Postnatal depression has also been associated with poor infant growth in both high- and low-income countries (reviewed by Stewart, 2007), but a more recent large multicentre study in Europe found no relationship between infant growth measurements and maternal postnatal depression in high-income countries (Grote *et al*, 2010). Field's review noted that postnatal depression is associated with compromised feeding practices (especially breastfeeding), sleep routines, attendance at well-child visits, immunisation rates and safety practices (Field, 2010).

## Fathers and postnatal depression

In the past most research into perinatal distress has concentrated on the mother: surprisingly little attention has been paid to fathers around the time of childbirth.

Postnatal depression in the mother commonly has a profound effect on her partner and on their relationship. Fathers may themselves develop depression. In Birmingham, UK, Ballard *et al* (1994) studied 200 couples postpartum and found that the prevalence of depression (ascertained by the earlier 13-item EPDS) in fathers was 9.0% at 6 weeks after the birth and 5.4% at 6 months. As expected, mothers had a significantly higher prevalence of caseness at both 6 weeks and 6 months postpartum than fathers had, but fathers were significantly more likely to be cases if their partners had depression. In a longitudinal study in Portugal, Areias *et al* (1996*a*) found that in the first 3 months postpartum, nearly a quarter of the women shown to be at risk in pregnancy developed depression, in contrast with less than 5% of their partners. In the next 9 months, however, men were more prone to developing depression than previously and their

depression tended to follow the earlier onset of depression in their partner. Condon (2006) has reviewed the psychological adjustment of expectant fathers, their response to a partner with a mental health problem and the impact of the relationship with the partner and the father's mental health on father–infant interaction.

Matthey *et al* (2001), who validated the EPDS for use with fathers, found a relatively low level of depression in men compared with the level in their postnatal partners and this has been confirmed by other studies (e.g. Escribà-Agüir & Artazcos, 2011). However, distress was more likely in the father when the mother was also distressed, and depression in fathers is associated with an increased risk of disharmony in the partner relationship even when maternal depression is controlled for (Ramchandani *et al*, 2011). New fathers' depression rates have been found to be twice the rate in healthy controls in Denmark (Madsen, 2006) and in the USA (Paulson *et al*, 2006). One meta-analysis notes substantial heterogeneity among rates in the 43 studies included and reports a meta-estimate of 10% (Paulson & Bazemore, 2010).

Fathers scoring above threshold on the EPDS in the antenatal and postnatal period in the Avon Longitudinal Study of Parents and Children were more likely to have children with psychopathology, and those fathers with depressive symptoms postpartum only had sons with higher rates of conduct problems (Ramchandani *et al*, 2008).

The important role of fathers in supporting their partners through pregnancy and beyond is increasingly recognised. According to Holopainen (2002), the father's functioning is central, as new mothers with depression receive more support from their partner than from any other individual, including medical staff. Field (1998) found that fathers' support may also shield the infants of mothers with chronic depression from negative outcomes. Edhborg *et al*'s small observational study in 2003 showed that in families where mothers had persistent depressive mood, their infants had established joyful relationships with their fathers, and infant–father attachments were secure.

The mother's relationship with her partner may, of course, contribute to rather than ameliorate her low mood. In a review in 2006, Fisher *et al* identified factors related to maternal depression, including a poor relationship with the father, his being unavailable at the time of the baby's birth and his provision of what is perceived by the mother to be insufficient emotional or practical support including low participation in infant care. Other risk factors identified include the father holding rigid gender-role expectations or being controlling or violent. Imaginative interventions may help the couple to understand and perhaps change unhelpful behaviours.

After our counselling study, fathers were asked about their experiences during their partners' depression:

> 'It was terrible. No matter what you do you are wrong. She was awfully quick tempered; things she would normally laugh about just make her mad.'

> 'She had changed a lot. Before, if we had a lovers' tiff, in the finish we would start laughing at how stupid we were. But now, the least little thing and she starts to cry. I've been kicked out of the house hundreds of times, but I never went.'
>
> 'I could see there was something wrong with her, and she was telling me it was the depression, but I used to say to myself "Is this just an excuse she is using, is she really tired of me, does she really want me to go?"' (Holden, 1988)

Although in this study we had not set out to look at depression in fathers, several of the partners of women in the study themselves spoke of feeling depressed, and it was clear that the wife's depression caused considerable disruption to the relationship of the majority of couples. In tape-recorded interviews, both men and women spoke of a loss of affectionate closeness:

> 'If he puts his arms around me I absolutely shudder. I say "Oh, Dave don't come near me!" And it is pretty frightening because I have never been that way. All the time that I've known Dave we used to sit and cuddle each other, we were always very close, but now he sits over there and I sit over here.' (Holden, 1988)

Many couples who had been in the group that received counselling reported that this support had sustained or even improved their relationship. Without help, however, depression can lead to relationship breakdown. In the control group, one husband left his wife completely because he could not cope with the unpredictability of her moods. Another left for 3 months but came back after his wife had recovered from her depression. Almost a year after his first baby was born, another husband said that he had often thought of leaving:

> 'It was great before the baby came. But now … I'd be as well being a monk. What matters in a marriage, well, it's nine-tenths of a marriage, is sex and, well … and love. And if you can't get even a cuddle, nobody's going to stay around.' (Holden, 1988)

Couples told us that they were totally unprepared for the possibility of depression and claimed that it had not been explained or even mentioned in antenatal preparation classes. It is hoped that the increasing awareness of health professionals will improve both prenatal and postnatal information given to new parents.

## Clinical perspectives

The presentation of postnatal depression was usefully summarised by Brice Pitt (1968) in his pioneer study of London women. He emphasised the way in which depressive symptoms were often coloured by the mother's relationship with her baby and the need to understand additional stressors caused by mothering. Pitt described postnatal depression as follows:

> '[The women experience] tearfulness, despondency, feelings of inadequacy and inability to cope – particularly with the baby … Guilt was mainly confined

> to self-reproach over not loving or caring enough for the baby… Many felt quite changed from their usual selves, and most had never been depressed like this before.
>
> Depression was almost invariably accompanied, and sometimes overshadowed, by… anxiety over the baby [which] was not justified by the babies' health…
>
> Unusual irritability was common, sometimes adding to feelings of guilt. A few patients complained of impaired concentration and memory. Undue fatigue and ready exhaustion were frequent, so that mothers could barely deal with their babies, let alone look after the rest of the family and cope with housework and shopping.
>
> Anorexia… was present with remarkable consistence. Sleep disturbance, over and above that inevitable with a new baby, was reported by a third of the patients.' (Pitt, 1968)

## Identifying postnatal depression

This manual describes how the EPDS can improve the detection of postnatal depression in the community, sometimes as an additional component of a clinical interview. In an earlier publication (Cox, 1989) it was suggested that one or all of the following could alert the obstetrician, midwife, health visitor or general practitioner (GP) that a mother has possible clinical depression:

- a complaint of feeling low, worried, fatigued or having severe sleep difficulties
- constant complaints of somatic symptoms such as headaches, abdominal pain or breast tenderness, without an adequate physical cause
- an expressed fear that the doctor or health visitor will be excessively critical of her mothering ability, and may even be considering taking away her baby
- excessive concern about the baby's health and preoccupation with minimal feeding difficulties
- continuous over-solicitousness and immediate response to the baby's demands
- unexpected failure to attend a postnatal clinic or child health clinic
- a baby who is failing to thrive and crying excessively.

O'Hara (1995) has described the clinical presentation in the USA in the following way:

> 'About day 3 postpartum, Mrs Jones's mood began to sink. She said that her low mood felt almost like physical pain. She also reported feeling anxious and irritable at this time. During the period of her depression, which lasted at least 2 months, she completely lost her appetite. She woke up during the night and could not get back to sleep. She commented that it was almost like not falling asleep. She had no energy and lost interest in most things. Mrs Jones reported feeling guilty; in particular, she believed that she wasn't a good mother, and she blamed herself for her son's colic. She also had extreme difficulty in

concentrating. Finally, she found that her work and family relationships were "impaired by her depression". Despite both her mother and husband urging her to seek help for her depression, she did not. At 6 months postpartum, she was still reporting a moderate level of depressive symptomatology.' (p. 9)

## Confirmation of the diagnosis

If a mother is assessed by a health worker as being 'possibly depressed' or if she has a high score on the EPDS, then specific enquiry should be made about the presence or absence of the following depressive symptoms or complaints:

- *Depressed mood* Most women recognise when they are down, sad, depressed, low-spirited or 'blue'. Asking the question 'How do you feel in your spirits these days?' will usually elicit this crucial information. The health professional can then determine the extent to which this depressed mood is a break from the usual mood state, and establish how long the mood has lasted and how distressed the mother is. A depressed mood that has lasted for at least 4 weeks and is accompanied by other symptoms of depression would strongly suggest that the mother has clinical depression.
- *Excessive anxiety* Although being anxious (fearful, worried) can occur in the absence of depressed mood, if anxiety is present it should be regarded as coexisting with depression unless shown not to be so. It is wise to assume that any mother who is anxious is also likely to have depression.
- *Lack of interest and pleasure in doing things* Anhedonia is a hallmark of depression. The lack of interest may show itself through an unusual disinterest in usual activities or social interaction or in resuming sexual relations – libido is often non-existent.
- *Early morning wakening* Early morning wakening when not caused by a noisy baby or a restless partner is characteristic of depression; when consistently present and prolonged it is especially typical of the depressed phase of bipolar disorder. Initial insomnia, when the mother is kept awake by rounds of worrying thoughts or by an exaggerated need to listen to any sound from her baby, may be another sign of a depressive illness.
- *Ideas of not coping, self-blame and guilt*.

The clinical skills required to determine the presence or absence of these symptoms of depression can usually be acquired during supervised undergraduate or postgraduate training or from a post-qualifying refresher course for primary care health professionals.

Women with depression who have fixed delusional ideas of guilt or self-blame congruent with their depressed mood are best described as having severe depression. It is very important to identify this group of women in primary care because they may have an increased risk of self-harm and

may require treatment with antidepressants and immediate referral to a specialist team.

The ICD-10 primary care criteria for a depressive disorder (F32) (World Health Organization, 1992) can be recommended for use by GPs. These criteria specifically identify women who have given birth as being at high risk.

## Causes

The possible causes of postnatal depression can usually be ascertained only after a full clinical history has been obtained from the mother and her family. A biopsychosocial approach should be used when establishing causes, and this includes understanding the way that the social environment may influence the expression of genes and the likelihood of adverse life events. The causal domains involved are illustrated in Fig. 1.2.

Present preoccupations of society with postnatal depression and the popularity of the label may reflect a greater concern about women's health issues in general, the status of childbearing in society and the increased vulnerability of modern families. In almost all societies depression can be identified postpartum, but the meaning of this condition for the mother and her family will vary. Local popular explanations may include biological (hormonal), social (lack of support) and psychological factors (e.g. 'my baby is making me depressed') (Fig. 1.3).

In low- and middle-income countries or in societies riven by warfare, a mother's inability to obtain basic essentials (food, clothes and warmth) for herself or her children may provoke additional hardship, exclusion, hopelessness and eventually clinical depression.

There is no simple, single cause for postnatal depression.

Robertson *et al* (2004) reviewed the literature and calculated effect sizes:

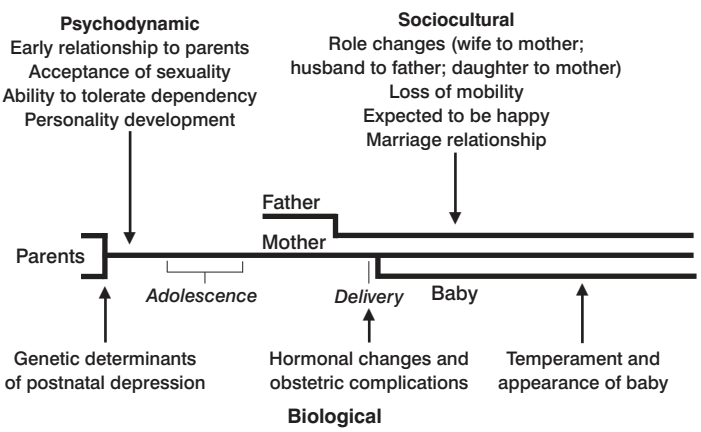


**Fig. 1.2** Possible causal factors in postnatal depression (after Cox, 1986: p. 39).

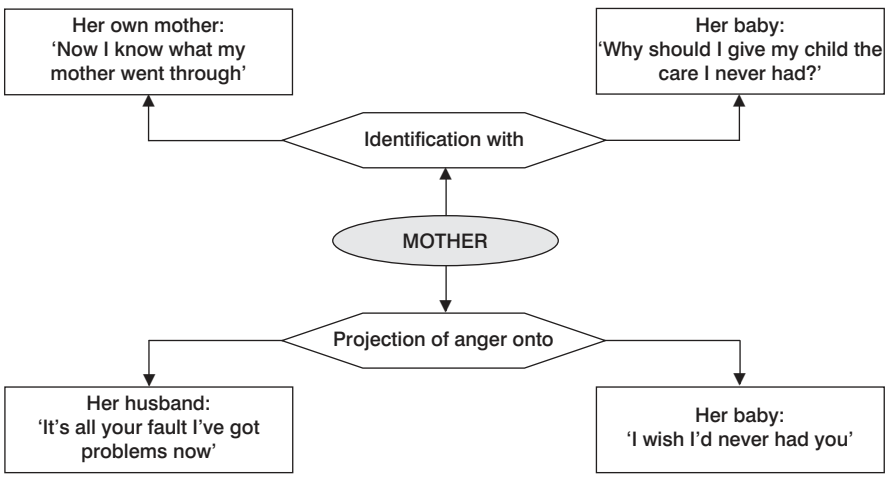


**Fig. 1.3** Identification and projection: common psychological defence mechanisms in the puerperium (after Cox, 1986: p. 35).

- strong/moderate risk factors:
  - depression or anxiety during pregnancy
  - life events
  - social support
  - history of depression
- moderate risk factors:
  - neuroticism
  - marital relationship
- small risk factors:
  - socioeconomic status
  - obstetric factors.

Findings from our own studies suggest that the following are associated with postnatal depression in mothers: the previous personality of the mother (always being a 'worrier'); a history of mental disorder; earlier loss of the mother's own mother; severe postnatal blues; giving up work reluctantly; and a poor relationship with the mother's mother (see also Holden, 1991).

There is now greater understanding of the way that oestrogen receptors influence central neurotransmitter systems. Genetic studies (Coyle *et al*, 2000) have found an increase in the 12 allele of the serotonin (5-HT) transporter gene in women with a susceptibility to bipolar disorder who develop puerperal psychosis. More recent work has shown linkage with chromosomes 16p13 and 8q24 (Jones *et al*, 2007).

Future studies of brain function might show the way in which a crying baby, fractious husband or intrusive mother-in-law could modify brain functions in the postpartum period, and how these difficulties in a

susceptible mother might provoke mental disorder. The evidence for such a specific neurobiological trigger for postpartum mood disorder is at present circumstantial, but the finding (Henshaw *et al*, 2004) that women with severe blues have a 1 in 4 risk of developing subsequent major depression is a strong pointer to pursuing this line of research enquiry.

However, the results of the International Transcultural Study of Postnatal Depression show that when women themselves are asked to describe the cause of unhappiness before and after childbirth, they give explanations almost entirely in the social domain (Oates *et al*, 2004). Indeed, it is popularly assumed that the primary cause of postnatal mood disorder is the meaning that women attach to events and to the lack of instrumental and psychological support. Interestingly, today only rarely do women attribute postnatal mood disturbances to a disorder of brain function caused by hormonal changes.

Gender of the infant may be an important factor to consider in some cultures (e.g. Chandran *et al* 2002; Abiodun, 2006).

It is nevertheless possible that physiological changes in the mother in the immediate postpartum months do increase the likelihood of emotional disturbances, but that the emotions experienced are contingent on the memories laid down in earlier formative relationships, on the nature and availability of social support and, in particular, on the meaning for the mother of giving birth to a dependent infant.

## Caring for women with postnatal depression

The main use of the EPDS in routine clinical work is to assist in the secondary prevention of postnatal depression by identifying the disorder as early as possible so that therapy can be initiated. Supportive counselling by a primary care worker such as a health visitor, midwife or practice nurse can be particularly effective for women with mild depression (Holden *et al*, 1989; Morrell *et al*, 2009; see also other studies reported in Chapter 5). Assistance from a mental health worker with a special interest in perinatal mental disorder is necessary for women who continue to have depression despite counselling, for those at risk of suicide and in situations in which the baby is at risk of neglect or physical abuse by the mother. Women who have developed depressive disorder with psychotic features (delusions of guilt, self-blame or persecution) will also need care from a specialist perinatal team. If other members of the family also have mental health problems or the stress has affected older children, then the skills of a family-oriented psychiatric team are very important. In this context, the use of the care programme approach and the development of a care plan to coordinate multiprofessional working that includes the mother and her family are useful. For women with severe mental disorder or those recovering from psychosis, multiprofessional management strategies, including child protection and the identification of a keyworker, are recommended.

The present book does not describe in detail the treatment options for women with severe postnatal depression who require specialist help from secondary services. Other sources (e.g. National Institute for Health and Clinical Excellence, 2007; Henshaw *et al*, 2009; Scottish Intercollegiate Guidelines Network, 2012) must therefore be consulted for this information. The principles of the treatment approach, however, do not differ substantially from the treatment of depression at other times, although the social context of new parenting, the presence of a dependent infant and the specific features of a risk assessment in the puerperium need always to be considered.

In Chapter 5 we give particular emphasis to the benefit of counselling by primary care workers. It is important to stress, however, that this approach alone is likely to benefit only women with mild to moderate depression and that the combination of counselling with antidepressant medication is necessary for women with severe depression as recommended by the National Institute for Health and Care Excellence (NICE) (National Institute for Health and Clinical Excellence, 2009).