



Understanding the Evidence Base for Postnatal Depression Services

**Dr. Kirsten A. Asmussen
Evaluation Officer**

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1 EXECUTIVE SUMMARY

1.1 Background

This report summarises the results of an evidence-base review regarding the effective management of postnatal depression (PND). The review was conducted to inform the development of a PND service that could be offered to Sure Start Roundway families living within the White Hart Lane Ward of Haringey, North London. Sure Start is a UK government initiative targeted at improving the lives of young children living in the Nation's most impoverished wards. This initiative is delivered through 524 local programmes across England that include Sure Start Roundway. Targeting PND to improve child outcomes remains a primary objective of Sure Start. However, there is currently no uniform PND referral and intervention strategy operating within Haringey. An evidence-base review was therefore conducted to inform the development of an effective and efficient postnatal depression service to be delivered jointly by Sure Start Roundway family support workers and Haringey health visitors. The report begins with an overview of postnatal depression services in Haringey and the search strategies used for the evidence-base review. It continues with a summary of the review findings and concludes with a proposal for a pilot PND service developed jointly by Sure Start Roundway and HPCT staff.

1.2 Evidence-base review design and methods

Resources were not available to conduct a systematic literature review or meta-review* of the current research. However, the search strategy exhaustively queried the databases available to the evaluation officer via the programme's NHS Athen's account and her membership with the Society for Research in Child Development. Databases searched in this review include: Medline, Cochrane Library (including the Cochrane Database of Systematic Reviews), PsychInfo, BIDS, the BMJ Index and the British Nursing Index. This review also includes results from a Google search that considers feminist, anthropological and sociological interpretations of postnatal depression that are not represented in the medical journals. Over 640 studies were identified via these strategies and 139 are reviewed in this report.

* A **systematic review** is a systematic analysis of all relevant data bases that identifies similar studies to see if findings are replicated across populations. It looks for consistencies across the findings and considers difference between subsets of the population. A **meta-review** or **meta-analysis** statistically merges the findings of all of the studies to make specific conclusions and recommendations.

1.3 Findings

The evidence-base review findings point to the following general conclusions regarding postnatal depression and the efficacy of postnatal depression services:

1. Postnatal depression is a form of depression that develops during the first few months following childbirth. It is more severe than the 'baby blues' experienced by many women in the days after delivery, but not as debilitating as puerperal psychosis, a rare and extreme form of depression that requires intensive intervention.
2. Postnatal depression is relatively common, occurring in approximately 10-18% of the general population. This rate is higher in disadvantaged communities, with some studies placing it between 25 and 30%. Some believe that PND is a natural response to the transition to motherhood. However, the fact that it may be common and natural does not negate the very real distress and discomfort women with postnatal depression experience.
3. Both women and their infants are negatively effected by postnatal depression. Research consistently reports lower cognitive, social and emotional attainment amongst children whose mothers were depressed during their infancy. The risks to child development are particularly high for families living in poverty.
4. Mothers are unlikely to identify themselves as depressed or report themselves as depressed to health practitioners. In addition, postnatal depression is rarely detected through routine care.
5. Screening tools, such as the Edinburgh Postnatal Depression Scale (EPDS) are an effective means of identifying mothers with postnatal depression. The best time to screen for postnatal depression is 4-6 weeks after the birth of a baby.
6. Strategies aimed at preventing postnatal depression have so far been ineffective.
7. Cognitive behavioural counselling and psychodynamic therapy are both proven methods for treating PND.
8. Drug interventions are also an effective and relatively risk-free method for treating postnatal depression. However, most mothers are reluctant to take antidepressants during the postnatal period. It is therefore recommended that health services provide mothers a choice between drug interventions and therapy.
9. Therapy provided by non-medical health practitioners in the form of 'active listening-visits' is an effective means for treating postnatal depression. Active listening visits that include support for the

mother/child relationship also result in positive short-term outcomes for infants.

10. There is some evidence to suggest that highly structured postnatal depression training groups/courses are an effective means of treating PND, when and if the mothers attend. However, research suggests that these courses are not as effective as individual counselling.
11. Interventions proven not to be effective for mothers or their children include support groups, doula care, self-help manuals and debriefing in the hospital after delivery.

1.4 A proposal for a postnatal depression service to be jointly provided by Sure Start Roundway and the Haringey health visitors

The report concludes with a proposal for a pilot postnatal depression service to be delivered jointly by Sure Start Roundway family support workers and Haringey health visitors operating out of the Lordship Lane Clinic. The model for the service was informed by a health visiting intervention pioneered by researchers from the Winnicott Unit at the Department of Psychology at the University of Reading. Two randomly controlled clinical trials and two evaluations have proven that this is an effective method for improving maternal mood. This intervention involves a combination of active listening visits and cognitive behavioural counselling that places an emphasis on the mother-child relationship. Trained health visitors or other, non-medical health workers can provide active listening visit support.

After much review and discussion, HPCT and Sure Start Roundway staff developed the following proposal for an integrated postnatal depression service for families living in the White Hart Lane Ward in North Tottenham:

1. Sure Start Family Support Workers and Lordship Lane Health Visitors will receive joint in-house training in the detection and treatment of PND from professionals affiliated with the Winnicott Unit at the University of Reading. Sure Start Roundway will pay for this training.
2. Lordship Lane health visitors will screen all mothers on their caseload living within the White Hart Lane Ward with the EPDS at the second postnatal health visit within the context of a clinical interview.
3. Mothers identified as depressed will be asked if this information can be passed onto their GP.
4. Depressed mothers will also be offered active listening visits, with the understanding that they will be provided by a Sure Start Roundway family support worker. The family support worker will have also received training in the detection and treatment of PND. The active listening visits will include support for the mother/child relationship.

5. Mothers will be reassessed after three and six visits (depending on need). If depression persists after six weeks, the case will be referred back to the health visitor and further treatment options will be considered.

Sure Start Roundway's Area Manager and Haringey Primary Care Trust (HPCT) managers have agreed that training will begin in January 2006. Once training is completed, Lordship Lane health visitors will screen all new mothers living within the White Hart Lane Ward on their caseloads. The service will be evaluated during a pre-determined pilot phase. During this time, its feasibility for implementation across the Haringey health services will be assessed.

1.5 Conclusions

The literature review consistently shows that PND is a debilitating condition for both mothers and their children, particularly if they are living in poverty. Whilst mothers are unlikely to seek professional support on their own, cost-effective screening and treatment methods are available. Active listening visits, provided by non-medical health professionals, are a proven means of improving maternal mood and reducing the negative effects of PND on child development. HPCT health visitors and Sure Start Family Support Workers could provide an effective listening-visit service by integrating their services. Once this is accomplished, it is highly likely that child cognitive, social and emotional outcomes will improve.

2 INTRODUCTION

2.1 Aim of the report

This report reviews the research literature on postnatal depression (PND) to inform service development in Sure Start Roundway. Postnatal depression is a highly debilitating disorder that negatively impacts upon the mother's confidence in parenting and early child development. The report begins with an overview of the nature of PND and its effects on child development and is followed by a discussion of detection and intervention strategies. Resources were not available to conduct a full systematic review or meta-analysis of all of the literature currently available. Nevertheless, the report provides a comprehensive overview of the validity of key findings and their relevance for local practice. It concludes with a proposal for a collaborative strategy between Sure Start family support workers and Haringey Primary Care Trust (HPCT) health visitors that includes joint training in the detection and treatment of PND.

2.2 Context

Sure Start is a UK initiative targeted at improving the lives of young children living in the Nation's most impoverished wards. This initiative is delivered through 524 local programmes across England. The Sure Start National Unit approved Sure Start Roundway as a local programme in August 2003.

The Roundway is located in a densely populated section of the North London borough of Haringey. Approximately 10,675¹ people live here and the population per square mile is around 23,999 compared to the Haringey average of 19,452. It is estimated that between 25 and 27 percent of these people are between 0 and 16 years old. Roughly 900 of these are under four years--the age group targeted by Sure Start services.

The borough of Haringey is a highly ethnically diverse community. It is approximately 11.5 square miles and was formed in 1965 from the old boroughs of Hornsey, Tottenham and Wood Green. Approximately 216,507 (National Statistics, 2003) people live in the borough and over half of them represent cultures outside of the United Kingdom. These countries include Greece, Turkey, Albania, China, India, Somalia and those from the Caribbean islands. It is estimated that 193 languages are spoken in the borough and Haringey reports one of the highest figures of asylum seekers in England, which ranges between 4,800 and 6,000 annually (London Health Observatory, 2003). These groups include people of Kurdish, Somali, Afghan and Kosovan origins. These individuals do not have entitlement to benefits or work and

¹ Figure extrapolated from information provided by the RICHS system in the Haringey Primary Care Trust.

many live in poverty. The unemployment rate is 7.3 percent, which is currently twice the national average (Haringey Council Fact File 2003). These factors contribute to Haringey's high deprivation ranking of 28 (out of 500, with one being the highest), making it one of the poorest areas in the United Kingdom. Some of the most disadvantaged include families with young children who can directly benefit from Sure Start services.

Since August 2003, the programme has devoted its resources to developing services for families with young children living in the Roundway to meet the following five Sure Start objectives:

- Improving social and emotional development
- Improving health
- Improving the ability to learn
- Strengthening families and communities
- Improve economic well-being

In September 2003, the UK Government announced the need for Children's Centres via the *Every Child Matters* (ECM) Green Paper, whereby children's services are centrally co-ordinated within local authorities to improve child outcomes in five key areas:

- Be Healthy
- Stay Safe
- Enjoy and achieve
- Make a positive contribution
- Achieve economic well-being

Sure Start Roundway is now in the process of integrating their activities into a Children's Centre Network that will provide support to families living within the White Hart Lane of North Tottenham. Each one of these services will strive to improve child outcomes within the context of at least one (if not more) of the five Sure Start and ECM objectives. Given the fact that PND negatively impacts upon early emotional and intellectual development, strategies aimed at treating PND are likely to result in significant improvements in early child development. For this reason, the national Sure Start Unit actively encourages local programmes to develop treatment strategies for PND. This review was conducted to explore the evidence base regarding PND to inform the Roundway's PND service strategy.

2.3 The treatment of postnatal depression in Haringey

The nature, detection and treatment of PND are controversial topics within the Haringey health services. Some practitioners feel strongly that its detection sits too heavily within the medical model and that traditional treatment approaches are stigmatising to mothers. Others share the National Screening Committee's (NSC, 2001) concern that existing screening tools, such as the Edinburgh Postnatal Depression Scale (EPDS), do not accurately detect PND

in culturally diverse populations where English is not the first language. Sure Start practitioners working within the Haringey Primary Care Trust conducted a literature review to inform these debates in 2002 (Alexander and Lanham, 2002), but there is still no uniform PND referral and intervention strategy operating within the HPCT.

Nevertheless, postnatal depression remains a real and pressing issue for families living in Haringey. Current research suggests that between 10 and 18% of all mothers experience some depression after childbirth and the results from Sure Start Roundway's needs assessment suggest that the percentage is as high, if not higher in the North Tottenham district, where there are pockets of extreme deprivation (Asmussen, 2004). For these reasons, Haringey health visitors and Sure Start staff remain keen to develop a strategy that will enhance mother and child interaction in dyads where maternal mood is an issue. All agree that an integrated postnatal service is needed to address the mental health needs within the community. This literature review expands upon the initial review conducted in 2002 to 1) inform the ongoing debates regarding the nature and treatment of PND and 2) provide direction for future service development that is consistent with the existing evidence.

2.4 Key Issues for the Review

Given the fact that there is a considerable amount of debate within the Haringey health community regarding the nature, detection and treatment of postnatal depression, the review seeks to explore the following key issues:

What is postnatal depression?

Postnatal depression presents itself on a continuum from an extremely severe and rare form (puerperal psychosis--occurring in less than one percent of the population), to 'baby blues' that occur in the majority of women (over 70%) within three weeks of the baby's birth. These figures cause some researchers to conclude that PND is a normal reaction to childbirth and some question whether it exists at all. This review seeks to explore the various forms of PND and their frequency within vulnerable populations.

What is the relationship between postnatal depression and child development?

Postnatal depression appears to be a self-limiting disorder for both mothers and their babies. The review considers how PND may negatively impact child development and how child outcomes might be improved by effective treatment interventions.

How is postnatal depression best detected?

A number of validated screening instruments exist that detect the presence of postnatal depression. The most popular is the Edinburgh Postnatal Depression Scale (EPDS), although there is controversy regarding its effectiveness with non-English speaking populations. The review explores the success of diagnostic tools in detecting PND and their use with vulnerable populations.

What are the most effective methods for treating postnatal depression?

Methods for treating PND come in a variety of forms, including drug interventions, psychotherapy with trained therapists, befriending services with trained volunteers and support groups. The review carefully considers the relative success of these interventions with depressed mothers and children.

What treatment strategies are feasible within the context of Sure Start Roundway?

This section links the evidence for the most effective treatment to the resources available for implementing a service within Sure Start Roundway. It suggests that an effective PND service can be implemented in the Roundway, if Sure Start family support workers and Lordship Lane health visitors integrate their resources.

2.5 Structure of the report

The report begins with an outline of the search methods used for the evidence-base review. This section is followed by a summary of the review findings as they pertain to the five key issues identified by the evaluation listed above. The findings support those of McClarey and Stokoe (1995) that suggest that women with postnatal depression do not usually come forward to request help, and that successful treatment requires accurate detection. The report identifies an effective method for both detecting and treating postnatal depression and outlines a proposal for a PND service developed jointly by Haringey health visitors and Sure Start Roundway staff. The report concludes with an action plan for implementing the service.

3 LITERATURE REVIEW: Design and Methods

3.1 Aim of the literature review

The literature review involved a search and assessment of research articles related to the nature, detection and treatment of postnatal depression. The search strategy was designed to:

1. Identify as many relevant research articles as possible within a relatively short period of time from the resources available to Sure Start Roundway. Unfortunately, the Roundway does not have the financial resources to purchase articles and library access is limited. This means that the review only includes articles available to the author via her membership with the Society for Research in Child Development and the programme's midwife's NHS subscription to Athens.
2. Be as inclusive as possible to allow for perspectives that lie outside of the medical community and to enable the programme to explore creative and community-centred approaches to care.

Despite the limitations imposed by the midwife's Athen's subscription, the search approach led to the identification of a large number of papers, which were then limited to those primarily concerned with the prevalence, detection and treatment of PND, as well as its effects on child development.

3.2 Search strategy

The search methods used for the literature review were as follows:

1. Databases searched included: Medline, Cochrane Library (including the Cochrane Database of Systematic Reviews), PsychInfo, BIDS, the BMJ Index and the British Nursing Index.
2. The searches were designed to be as inclusive as possible, utilising the key term "depression" in conjunction with the terms "postnatal," "postpartum," "attachment," "service," "treatment," and "befriending."
3. The searches were limited to articles between 1985 and 2005. However, full text articles were only readily available after 1992.
4. An additional Google search was conducted to explore feminist, anthropological and sociological interpretations of PND.

5. The author also consulted key publications that synthesise and review research, such as the Cochrane Reviews and *Neurons to Neighbourhoods* (Shonkoff and Phillips, 2000).

This search yielded 642 articles. Duplications were omitted from the search, and the author and a parent volunteer identified articles for more detailed perusal if they provided information about the nature, detection or treatment of PND. 139 articles were relevant enough to be included in this review. The author also consulted evidence-based recommendations from Sure Start (2002), Early Head Start (2005), the National Perinatal Epidemiology Unit and The London Health Observatory (2001).

4 FINDINGS: What is Postnatal Depression?

4.1 The medical perspective

4.1.1 Baby blues

The traditional medical/psychological interpretation of postnatal depression describes it as a complex disorder that ranges on a continuum from relatively mild to quite severe (Bick, et. al. 2002). Up to 70% of all mothers experience a period of emotional lability within two weeks of the birth of their child (DSM-IV-TR, 2000). This mood shift is commonly known as the 'baby blues' and it is widely believed that it is triggered by the sudden hormonal changes that occur immediately after a baby's birth (Bewley, 1999). It is likely that dramatic shifts in new mothers' levels of oestrogen and progesterone contribute to increased maternal tearfulness and irritability in the first few days after childbirth. Changes in mood during this time are considered normal in most cultures and many mothers survive this period with additional support from family and friends (Cox, 1986; Holden, 1990). The negative feelings usually disappear within two to three weeks and the majority of mothers report positive feelings towards their child and their role as mother after the baby blues pass.

4.1.2 Puerperal psychosis

In a minority of cases the negative feelings persist beyond the first two weeks following childbirth. In very rare instances, new mothers will experience severe psychotic symptoms, such as hallucinations or delusional beliefs. This condition is known as puerperal psychosis and occurs at a rate of two to three (less than .01 percent) per 1,000 live births (Godfroid and Charlot, 1996). Whilst this condition is rare, it requires urgent referral and treatment, since the mother is often at risk of harming herself or her child. Puerperal psychosis has been linked to increased maternal and infant death rates around the time of childbirth (Pitt, et. al. 2002). It is therefore imperative that medical professionals who have contact with new mothers (GPs, midwives & health visitors) understand how to detect and refer women with puerperal psychotic symptoms.

4.1.3 Postnatal depression

The most common form of postnatal depression has been described as

. . . what lies between the extreme of severe puerperal depression, with the risk of suicide and infanticide, and the trivial weepiness of 'the blues' – something occurring frequently, much less dramatic than the former, yet decidedly more disabling than the latter. (Pitt, 1968, quoted in Bick, et. al. 2002, p. 130).

The symptoms of this form of depression are similar to those of depression in general and include a lack of energy, a sense of hopelessness, anxiety, guilt and disturbed sleep. This form of PND occurs in approximately 10-18% of new mothers (Cox, Murray and Chapman, 1993; Georgiopoulos, Bryan, Yawn, Houston, Rummans and Therneau, 1999; O'Hara and Swain, 1996). This variation in occurrence is due to differences in assessment times and diagnostic criteria (Bick, et. al. 2002). Many believe that it is under-detected (Lumley and Austin, 2001), since mothers are often reluctant to disclose emotional problems to their physician (Brown and Lumley, 2000; Whitton, Warner and Appleby, 1996).

4.2 Risk factors

As mentioned previously, the symptoms of postnatal depression are similar to general depression. However, the depressive symptoms of PND dissipate after six months in half of the cases, bringing the prevalence rate down to 9% (Bick, et al. 2002) -- a rate just slightly above that of depression in the general population, which is approximately 8%. This fact, coupled with the finding that physiological links to postnatal depression have not been established (Romito, 1990; Cooper and Murray, 1998), has caused some to attribute an increase in maternal depression in the months following childbirth to difficulties in adjusting to the new demands brought on by a new baby. Once the mother adjusts to the impact of the new child, the depression improves and in many cases, disappears (Cox, et. al. 1993).

A number of maternal characteristics have been significantly linked to the onset of PND (Beck, 2001):

- Antenatal depression. Mothers reporting depression during their pregnancy are at the greatest risk of developing PND after the baby arrives (Beck, 2001, Holden, 1990).
- Childcare stress. Mothers experiencing difficulty managing their childcare duties and finding time for adequate sleep appear to be at greater risk for PND (Beck, 2001; Catruna and Troutman, 1986).
- Self-esteem. Mothers with lower self-esteem are more likely to report feelings of depression during the postnatal period (Beck, 2001; Catruna and Troutman, 1986; Fontaine and Jones, 1997; Hall, et al., 1996).
- Lack of social support from family and friends. Lack of social support is consistently linked to PND (Beck, 2001; Cooper and Murray, 1998; Webster, et. al. 2000, Webster, Pritchard, Creedy and East, 2003). In addition, some research suggests that rates of PND are lower in cultures where mothers receive intensive social support, such as in China, Fiji and Malaysia (McKenzi, et. al. 2004).

- A poor or non-existent relationship with the new baby's father. This finding is reported consistently throughout the literature (Beck, 2001; Catruna and Troutman, 1986; Romito, 1990). Marital discord, coupled with social isolation, appears to put mothers at particular risk for PND.
- A personal history of depression or other psychological problems. Mothers who have suffered from depression at an earlier point in their life are more likely to become depressed after the birth of their first child (Beck, 2001; Cooper and Murray, 1997a).
- Adverse socio-economic conditions. The prevalence rates for PND are generally twice as high for families living in poverty (Hobfoil, Ritter, Lavin, and Hulsizer, 1995; Seguin, et al. 1999; Shonkoff and Phillips, 2000). Cooper, et al. (1999) found that the rate of PND is as much as three times as high for families with low socio-economic status. The authors believe that a pre-occupation with financial concerns may interfere with a new mother's mood and her ability to engage positively with her infant.
- The baby's temperament. Beck (1996) found a significant relationship between infant temperament and maternal mood through a comprehensive meta-analysis of the research literature. Catrona & Troutman (1986) also observed that a difficult infant temperament significantly contributed to lower maternal mood, but the effects were less negative if the mother had a supportive partner.
- Obstetric variables. Some studies suggest that mothers who experience difficulty with labour or delivery are more likely to experience posttraumatic distress (Murray and Cartwright, 1993; O'Hara, et. al. 1991). Fisher et al. (1997) reported that mothers who had Caesarean deliveries were more likely to report a deterioration in mood and a lack of self-esteem.
- Unrealistic expectations of motherhood. Some research suggests that unrealistic expectations of parenthood cause or exacerbate a depressed mood state (Tammentie, 2004).
- Bereavement. Mothers who are grieving the loss of a significant individual in their life (such as a spouse or a parent) are also likely to display PND symptoms (Beck, 2001).

Beck (2001) argues that any one of these stressors can overwhelm a new mother and bring on depressive symptoms. The likelihood that the mother will experience some form of depression after the birth of her child is further increased in instances where families experience two or more of these risk factors.

4.3 The feminist perspective*

The evidence outlined above describes postnatal depression from the perspective of the medical model. The medical model considers the negative feelings mothers experience after the birth of a new baby as a condition that can be detected and treated. However, feminist theorists (Mauthner, 1999) have rejected the medical model for the following reasons:

- The high numbers of women who report some disruption in mood after the birth of a baby suggest that PND may be a normal response to the birth of a new baby
- There is no biological explanation for the disruption in mood (feminist authors assert that the drop in hormones is not sufficient)
- Research results are mixed in terms of the cause and prevalence of PND.

Rather than perceive postnatal depression as a disease, feminist theorists suggest that a depressed mood is a normal reaction to the inferior position of motherhood imposed by society (Thurtle, 1995; Beck, 2002; Nicolson, 1998). Oakley (1980) originally argued that many women experience a loss of identity (through changes in employment and their relationship with the child's father) and this loss initiates a period of mourning. Subsequent research (Nicolson, 1999) supports this notion and argues that:

. . . if [new mother's] losses were taken seriously and the women were encouraged to grieve, postpartum depression would be seen by the women and their partners, family and friends as a potentially healthy process towards psychological reintegration and personal growth rather than as a pathological response to a 'happy event' (Nicolson, 1999; p. 2, html).

In a similar vein, Romito (1990) argues that feelings of depression are triggered when women discover that the realities of childcare fall short of their original expectations. At this point, women experience a loss of control or 'learned helplessness' that puts them at greater risk for depression (Rogan, et. al., 1997).

A more extreme feminist perspective argues that PND does not exist at all. Some feel that the label of PND is a bi-product of sexism in psychiatry, whereby negative, but normal responses to life events are more likely to be labelled as abnormal for women than they are for men (Jebali, 1993). In a rhetorical review of the feminist perspective, Thurtle (1995) states:

* Please note that only three articles discussed in Sections 4.3 and 4.4 were found in the original literature review – Thurtle, 1995, Thurtle, 2003 and Rogan, et. al. 1997. The rest were found through a Google search with the terms 'postnatal depression,' 'feminist' and 'sociological.' These searches were conducted to include rhetorical arguments that lay outside the traditional medical model.

The inherent sexism identified in psychiatric practice means that many health care workers will have little perception of the stresses that some of their clients coming from different social, ethnic and even financial backgrounds experience and how they as women interpret them. The fact that the client is female and has just delivered a baby may be sufficient to label her with the largely acceptable diagnosis of postnatal depression, thus concealing other stresses that might be seen as valid sources of depression in any individual (p. 422).

However, in a subsequent empirical study, Thurtle (2003) observed that the vast majority of women report feelings of 'intense joy' after the birth of their child, and that feelings of depression are the exception – not the rule. Mauthner (1999) reported similar findings and has cautioned that describing PND as normal does little to alleviate the stress and discomfort of women coping with it:

The notion that postpartum depression is 'normal' is not only of theoretical, but also practical concern. It is not clear that this notion is helpful either for women or for health professionals and other carers. Arguing that depression is 'normal' trivializes and minimizes feelings which mothers themselves experience as terrifying and 'abnormal' (p. 21, html).

Furthermore, Mauthner found that most women did not perceive the label 'postnatal depression' as stigmatising, but found that it was a "source of relief and reassurance . . . because it suggested that they were not going mad" (p. 13, html). Although writing from a feminist perspective, Mauthner does not support the notion that PND is normal and instead argues that ". . . postpartum depression occurs when women are unable to experience, express and validate their feelings and needs within supportive, accepting and non-judgmental interpersonal relationships and cultural contexts" (p. 1, html).

4.4 The sociological perspective

Mauthner is one of many who have argued that cultural attitudes towards motherhood and childbirth may contribute to the onset of postnatal depression. As noted previously, some cultures anticipate that mothers will have difficulties coping after the baby's birth and therefore increase social support during this time (Kruckman and Smith, 1998; McKenzi, et al. 2004). For example, in Chinese cultures, the mother is confined to the home during the first month after childbirth and is attended to by other women (usually family and friends). This time is called 'doing the month' and during this period, mothers engage in ritual practices aimed at bringing them back to their normal state of health (Pillsbury, 1978 – as cited in Huang and Mathers,

2000). Some believe that this sociological practice insulates mothers from experiencing postnatal depression (Lee, Yip and Chiu, 1998), and therefore rates of postnatal depression may be lower in non-Western cultures.

Those adopting a sociological or anthropological perspective (Stern, et al., 1983) propose that Western societies may, in fact, increase the likelihood of postnatal depression for the following reasons:

- a lack of social structuring and social empathy for postpartum events
- ambiguous social recognition of the role transition new mothers experience
- a lack of meaningful social assistance for the new mother.

The sociological perspective thus de-emphasises the need to detect and treat PND and proposes that the 'prevention' or 'cure' involves societal and health practices that recognise and support the needs of women during the postpartum period. It is likely that further research into the ways in which society influences psychological reactions to life events will provide useful insight into the causes of PND. However, it is unlikely that this research will result in societal changes within the short-term, whilst many mothers continue to suffer (Kruckman and Smith, 1998). In addition, a growing body of research evidence negates this theory entirely, suggesting that postnatal depression is as prevalent, if not more prevalent in non-Western societies. A recent study by Huang and Mathers reported a rate of 19% in Taiwan and other studies suggest that it is prevalent in Nigeria (11% -- Uwakwe, 2003), India (11% -- Chandran, Tharyan, Muliyl and Abraham, 2002) and in Black South African communities (29% -- Cooper et al., 1999).

4.5 Conclusions

Postnatal depression is a common condition that afflicts between 10-18% of all mothers in the weeks following childbirth. Whilst the reasons for its occurrence remain debatable, its prevalence rates appear stable across populations regardless of culture or country (Huang and Mathers, 2001). Whether considered from the medical, feminist or sociological perspective, it is clear that PND is a debilitating condition for many women. In addition, an increasing body of evidence suggests that the children of postnatally depressed mothers suffer as well and this interferes with their early development. The relationship between PND and early child development is reviewed in the next section.

5 FINDINGS: What is the relationship between postnatal depression and child development?

5.1 The effects of postnatal depression on child development

Whilst the effects of postnatal depression appear temporary for over half of the mothers who suffer from it, the negative effects on child development appear to be more enduring. A growing body of research evidence suggests that children with postnatally depressed mothers are at greater risk for impaired cognitive, social and emotional development (Cooper and Murray, 1997b; Schore, 2001; Shonkoff and Phillips, 2000). Some speculate that impaired child developmental outcomes may be related to 1) the mother's inability to appropriately respond to her infant during a critical time of the young brain's development (Shonkoff and Phillips, 2000; Schore, 2001) and 2) the mother's inability to consistently manage her child's difficult behaviour (Beck, 1999).

5.1.1 Neurological development

The first two years of life is a critical period for neurological development (Schore, 2001; Shonkoff and Phillips, 2000). This period is marked by a tremendous amount of synaptic activity, especially in the right limbic brain – an area associated with social cognition and self-regulatory behaviour. During this time, the right limbic brain undergoes a period of 'ontogenetic plasticity' that is characterized by an overproduction of synaptic connections. Many of these connections are discarded through a process of competitive interaction, whereby connections reinforced by environmental information grow stronger as others die off (Schore, 2001). This means that right limbic brain development is shaped by early environmental experiences.

Mothers and other primary caregivers regulate or 'scaffold' the infant's environmental experiences in the following three ways (Brazelton, 1979):

- 1) Responding to the infants behaviour and social bids such as cooing and smiling.
- 2) Providing age appropriate stimulation. Appropriate stimulation may include vocalisations, toys and age appropriate play experiences.
- 3) Regulating the child's arousal states by meeting basic needs and soothing emotional distress.

A great deal of this 'scaffolding' takes place during mother and child face-play in the first six months following the baby's birth. During this time, the mother and infant work together to create optimal arousal states in the infant. The mother assists in this process by providing appropriate repetitive vocal, facial and tactile stimulation (Beebe, 2000; Stern, Beebe, Jaffe and Bennett, 1977; Tronick, Ricks and Cohn, 1982). However, inappropriate amounts of stimulation and maternal responses may negatively effect early brain

development. Both over and under stimulation have been linked to neuronal cell death (Perry et al., 1995). For these reasons, Schore (2001) hypothesises that maternal sensitivity, within the context of a secure attachment relationship, is a key factor for optimal early brain development.

The negative effects of PND on child development are further supported by research that compares neuronal activity in children with depressed and non-depressed mothers (Shonkoff and Phillips, 2000). Typically, non-depressed adults show evidence of greater neural activity in the left frontal lobe than the right. Neural activity increases in the right frontal lobe in normal adults when negative emotions are induced via movie clips. However, depressed adults routinely show evidence of increased right frontal lobe neural activity, even when they are not exposed to negative stimuli. Children of depressed mothers exhibit a similar pattern of increased right lobe activity/decreased left lobe activity, even when they are at rest or away from their depressed mother (Dawson et al., 1992, 1999, 2003). It is likely that this reduced neural activity is related to impaired cognitive, social and emotional outcomes.

5.1.2 Cognitive and language development

Impaired cognitive development is a consistent finding amongst children with postnatally depressed mothers. Lyons-Ruth, et al. (1986) observed that maternal depression significantly predicted lower Bayley mental and motor development scores at 12 months. Murray (1992) reconfirmed these findings in a British community sample, demonstrating that children with postnatally depressed mothers more likely fail Stage V of Piaget's object permanence task at 12 months and to attain lower Bayley scores at 18 months (Murray, et al., 1996). The authors observed that the relationship between maternal PND and negative child outcomes was particularly strong for boys. More recently, Hay (2001) reported intellectual difficulties amongst 11-year-olds whose mothers were depressed during their infancy.

Language development also appears to be negatively related to maternal depression. A recent study by Pan, Rowe, Singer and Snow (2005) observed that the vocabulary increases at a slower rate in preschoolers whose mothers are depressed.

5.1.3 Social and emotional development

A variety of studies have linked postnatal depression to impaired child social and emotional development. Research consistently reports that postnatal depression places the attachment relationship at risk (Bifulco, et al. 2004; Lyons-Ruth, et al., 1986; Murray, 1992; Teti, 1995; Tomlinson, Cooper and Murray, 2005). Radke-Yarrow et al. (1985) were among the first to observe that children with depressed mothers are more likely to be rated as insecure during Ainsworth's Strange Situation (Ainsworth and Witting, 1969) at 12 months. More specifically, children with postnatally depressed mothers are more likely to be classified as having an avoidant or disorganised attachment

response (Martins and Gaffin, 2000; Tomlinson, et al., 2005). The risk of an insecure attachment is further increased in cases where the mother does not have a supportive partner (Radke-Yarrow, et al., 1985). Maternal postnatal depression is also related to greater child negativity, difficulties with sharing and problems relating to strangers at 19 months (Stein, et al. 1991). In addition, children whose mothers are depressed are also more likely to experience depression in their adulthood (Shonkoff and Philips 2000).

5.1.4 Child behaviour

Research consistently demonstrates a significant relationship between maternal psychiatric disorders and behavioural problems (Rutter and Quinton, 1984; Shonkoff and Phillips, 2000; Civic and Holt, 2000). This is particularly apparent in cases where the mother is depressed. For example, mothers with postnatal depression are significantly more likely to report sleeping problems, temper tantrums and feeding difficulties with their 18-month toddlers (Murray, et al. 1996). Children with postnatally depressed mothers are also more likely to exhibit obstinate or physically aggressive behaviour in a nursery setting at 36 months of age (Leadbeater, et al., 1996).

Maternal depression is also linked low social competence and aggressive behaviour in school-age children. In a meta-analysis of the evidence regarding maternal depression and child behaviour, Beck (1999) reported that children with depressed mothers were more likely to demonstrate more negative internalising and externalising conduct in school. A subsequent Finnish study suggested that prenatal depression also predicts negative child behaviour in 8 and 9 year olds (Luoma, et al., 2001).

5.2 Mediating variables

5.2.1 Maternal sensitivity

Maternal sensitivity plays a key role throughout child development. Section 5.1.1 describes how maternal sensitivity contributes to early brain development. As the child matures, maternal sensitivity remains associated with additional positive outcomes, such as emotional security, mastery motivation and the ability to delay gratification (Asmussen, 1995; Gunning, et al. 2004; Lamb and Estaerbrooks, 1981; Matas, Arend and Sroufe, 1978). In turn, It is speculated that negative child behaviours are related to a lack of maternal sensitivity (Cooper and Murray, 1997b) and the inability to appropriately respond to a child's social bids (Field, et al., 1990; Leadbeater, et al, 1996; Lyons-Ruth, 1992, Stein, et al. 1991). Postnatally depressed mothers consistently appear more irritable, less active and playful, and less likely to respond to infant behaviour (Cohn, Campbell, Matias and Hopkins, 1990; Field, Healy, Goldstein and Guthertz, 1990). For example, Bette (1988) observed that depressed mothers were less likely to modify their vocalisations and behaviour in response to their infants' cues. This inability to adapt to

infant cues may negatively affect cognitive development. Kaplan, Bachorowski and Zarlengo-Strouse (1999) found that non-responsive patterns of maternal child-directed speech may directly result in delays in associative learning at four to six months.

Postnatally depressed mothers are also more likely to exhibit intrusive, coercive or frightening behaviour during interactions with their infants. Highly negative or frightening maternal behaviour may be particularly deleterious for infant development (Lyons-Ruth, Bronfamn and Parson, 1999). Tomlinson, et al. (2005) observed that mothers who exhibited frightening behaviour or were frightened by their infants at two months were significantly more likely to have an infant who exhibited disorganised behaviour at 18 months.

5.2.2 Parenting skills

Research suggests that depressed mothers have greater difficulty disciplining their children (Beck, 1999). In particular, mothers struggling with depression are less likely to administer consistent and appropriate consequences for negative behaviour (Cunningham, et al.1988; Zahn-Waxler, et al. 1990). Specifically, depressed mothers are more likely to 1) over discipline with intrusive or hostile behaviour or 2) under discipline because they are emotionally withdrawn (Frankel and Harmon, 1996; Zeanah et al., 1997). Depressed mothers also tend to lack confidence in their parenting skills and/or perceive their children as difficult (Teti et al., 1996). It is important to note, however, that not all depressed mothers have difficulty managing their children and that postnatal depression does not always result in negative child outcomes. Shonkoff & Phillips (2000) observed that negative outcomes are often the result of a complex interaction between a number of factors that include the severity of the depression, the presence of a supportive family and the availability of appropriate support systems that may include clinical intervention.

5.2.3 Economic and social adversity

As mentioned in the previous section, mothers who live in economically adverse circumstances are at greater risk for postnatal depression. It may be that 'third factor variables,' such as poverty and/or single parenthood, predict both the likelihood of maternal depression and adverse child outcomes (Cooper and Murray, 1997a). For example, the lack of resources associated with low income may be related to both maternal depression and lower child cognitive attainment. However, research evidence suggests that adverse social factors tend to compound and increase the negative effects of postnatal depression (Petterson and Albers, 2001; Murray, 1992). A number of studies now show that negative child outcomes related to PND are significantly higher in cases where there is also poverty, substance abuse or a lack of supportive relationships (Cooper and Murray, 1997b; Cummings and Davis, 1994; Petterson and Albers, 2001; Seifer et al., 1996; Zeanah, et al., 1997). Mothers suffering from PND who do not speak English, but who live in English

speaking communities, also appear to place their children at greater developmental risk (Foss, et al. 2004).

The risks of postnatal depression are mitigated, however, in situations where the mother receives sufficient social support. For example, Cutrona and Troutman (1986) observed that mothers with difficult infants were significantly less likely to develop postnatal depression if they had a supportive partner. The authors hypothesised that a caring partner increased the mother's sense of self-efficacy, which in turn, reduced the feelings of helplessness associated with depression. Lyons-Ruth, Connell and Grunebaum (1990) found that social support, in the form of weekly home-visits provided by lay or professional home-visitors, also insulated children from the negative effects of postnatal depression. Children of depressed mothers who received home-visiting support were twice as likely to have a secure attachment relationship and scored an average of 10 points higher on the Bayley Mental Scales. Lyons-Ruth, et al. believed that consistent, non-judgemental support from the home-visitor alleviated the mothers' feelings of depression and improved their ability to sensitively care for their children.

5.3 Conclusions

Although postnatal depression is common and may even be considered a 'normal' reaction to childbirth, research suggests that its presence puts the infant at significant risk for a variety of adverse developmental outcomes. Furthermore, the evidence suggests that economically adverse circumstances compound the negative effects of PND. However, the evidence also suggests that a supportive social environment appears to mitigate the effects of postnatal depression. Mothers with a supportive partner or other reliable social networks are more likely to maintain healthy interactions with their infant, despite the fact that they are depressed (Cummings and Davies, 1999; Cutrona and Troutman, 1986; Petterson and Albers, 2001; Teti et al., 1996). These findings suggest a need for interventions that assist both the mother and the child, especially when other support networks are absent. However, successful interventions rely on effective detection and referral practices. The next section considers the evidence base regarding the best methods for accurately detecting postnatal depression in diverse populations.

6 FINDINGS: How is postnatal depression best detected?

6.1 Methods for detecting postnatal depression

As mentioned in Section 3, most mothers are unlikely to report a depressed mood to their physician and less than half are likely to share these feelings with their family (Lumley and Austin, 2001; Brown and Lumley, 2000; Small, Brown, Lumley, and Astbury, 1994; Ramsay, 1993). In fact, mothers themselves often have difficulty recognising or admitting that they are depressed (Whitton, Warner and Appleby, 1996). These findings underpin the need for effective methods for detecting PND so that treatment can be offered in a manner that is timely and effective. Methods for detecting PND include professional clinical judgement, validated assessment tools and antenatal screening.

6.1.1 Routine clinical care

Routine care accurately detects PND in a relatively small percentage of the cases. In fact, rates of detection without screening tools are often below 5%. (Evin, Theofrastus and Galvin, 2001; Fergerson, Jamieson, and Lindsay, 2002; Hearn, et al. 1998; Morris-Rush, Freda and Bernstein, 2003). For example, only 2% of the mothers were identified as having PND through routine care in a Swedish well-baby clinic. These rates improved, however, when a validated screening tool (the Edinburgh Postnatal Depression Scale) was introduced to the practice. Once the screening tool was used, the detection rate increased to 14.5% -- a figure much closer to the documented epidemiological rates (Bagedahl-Strindlund and Borjesson, 1998). Seeley, Murray and Cooper (1996) reported similar findings. Whilst most health visitors were able to recognise the symptoms of depression, over 40% of depressed mothers were missed when screening tools were not used.

6.1.2 The Edinburgh Postnatal Depression Scale

The Edinburgh Postnatal Depression Scale (EPDS) was designed by Cox, Holden and Sagovsky in 1987 to screen for PND in primary care settings. Standard depression scales, such as the SAD and Beck Depression Inventory, had limitations in predicting PND, since part of the scoring included the presence of physiological symptoms that are normal for new mothers, such as a lack of sleep and weight gain. Since the 80's, the EPDS has become widely regarded as the best method for screening for postnatal depression. Sensitivity levels (i.e. the percentage of women correctly identified) range between 68% (Murray and Carothers, 1990) and 80% (Eberhard-Gran, et al. 2001; Lawrie, Hormeyr, de Jager and Berk, 1998), thus significantly increasing clinicians' ability to detect PND (Georgiopoulos, Bryan, Wollan and Yawn, 2001). The scale is easy to administer and most new mothers find it acceptable (Cox, et al., 1987; Davies, Howells and Jenkins,

2003; Seeley, 2001). Whilst a number of instruments are currently being developed to improve the reliable detection of PND, none have reported sensitivity levels higher than the EPDS (Beck and Gable, 2001).

6.1.3 Limitations of the EPDS

A great degree of controversy exists over the use of the EPDS as a universal screening tool for PND, despite its high sensitivity levels (Matthey, 2004). Several limitations led the UK National Screening Committee to conclude that the EPDS did not meet its criteria for routine use (NSC, 2001). The limitations included the fact that many PCTs lack adequate resources for treating PND, so detection is meaningless when treatment is unavailable. Other limitations cited by the NCS included the fact that some items may be misinterpreted by women who do not speak English as their first language or who come from non-western cultures.

However, the NSC ruling against the EPDS resulted in a backlash from British health professionals (Adams, 2002; Coyle and Adams, 2002; Matthey, 2004). As a result, the NSC acknowledged that the EPDS had utility and could be used as a screening tool within the context of a clinical interview conducted by an appropriately trained professional. The Community Practitioners' and Health Visitors' Association (CPHVA, 2001) have subsequently issued the following caveats and guidelines for the EPDS' use:

- The EPDS should never be used in isolation, but as part of a full mood assessment that is carried out by a qualified and trained professional. Ideally, the EPDS should be used in conjunction with a clinical interview that assesses depression within the criterion set forth by the DSM-IV.
- Health professionals need to understand that results will vary based on the cut-off score used. A lower cut-off score of 9 will ensure that fewer cases are missed, but will dramatically increase the numbers of false-positives. A cut-off score of 12 reduces false positives to approximately 30%, but unfortunately increases the false negative rate – thus suggesting that a much higher percentage of mothers with PND will be missed. Therefore, professional training and judgement is necessary to interpret cut-off scores.
- The EPDS is not accurate for detecting puerperal psychosis. Professionals need to be aware of the risk factors associated with this disorder to make an accurate diagnosis.
- Professionals should not use the EPDS if there is a risk that it could be misunderstood because of language or cultural issues.
- The EPDS must be used in settings where there is sufficient time and privacy to explain its purpose, so that data protection principles are upheld and mothers and professionals have enough time to discuss

suitable interventions if they are necessary. The EPDS should never be sent through the post, or be conducted in an open-clinic setting.

One of the reasons the NSC rejected the EPDS as a screening tool in 2001 is because of its potential limited use with women from non-western cultures. Since that time, the CPHVA has developed a series of culturally sensitive booklets to assist practitioners when screening for PND and the initial evaluation results of this project are promising (Hedley, 2003). In addition, the EPDS has now been validated in a number of non-Western populations, albeit with varying cut-off scores (Matthey, 2004). Countries where the EPDS has been validated include Taiwan (Huang and Mathers, 2000), Nigeria (Uwakwe, 2003), Nepal (Regmi, et. al, 2002) and India (Chandra, Tharyan, Muliylil and Abraham, 2002).

A final criticism of the EPDS is that some professionals feel that its use 'medicalises' the natural transition into motherhood. Some authors report that mothers feel its use is intrusive and stigmatising (Shakespeare, Blake, and Garcia, 2003). This finding is not consistently reported, however, since other studies suggest that use of the EPDS actually reduces the anxiety and stigma that some depressed mothers feel (Ciliska, 2004; Coyle and Adams, 2002).

6.1.4 Other psychometric screening instruments

It should be noted that the scores produced by the EPDS do not provide insight into the severity of the depression (Hanna, Jarman and Savage, 2004). In response to this concern, a number of tools are now being developed to differentiate between mild and serious postnatal depression, as well as explore risk factors associated with PND. These include the Postpartum Depression Screening Scale (PDSS, Beck and Gable, 2003), the Mother Generated Index (Syman, MacDonald and Ruta, 2003; Syman, MacKay and Rita, 2003), and the Brisbane Postnatal Depression Index (Webster, Pritchard, Creedy and East, 2003). However, more research is necessary to verify the psychometric properties and clinical usefulness of these instruments.

6.1.5 Antenatal screening

A previous episode of depression is the highest predictor of postnatal depression (Beck, 2001, Holden, 1990). In fact, antenatal depression is just as prevalent as postnatal depression (Evans, 2001). Antenatal detection of PND would allow for preventative treatment that could potentially minimise the effects of PND to both the mother and child. For this reason, the EPDS, as well as a number of other psychometric instruments, have been used to assess depression during the antenatal period (Cooper, Murray, Hooper and West, 1996; Green and Murray, 1994; Stamp, Williams and Crowther, 1996).

However, a growing body of evidence suggests that antenatal screening is not sufficient for the detection and prediction of PND (Austin and Lumley, 2003;

Lumley and Austin, 2001). The reasons for this are twofold: 1) many of the currently available tools are not sensitive enough and 2) a significant percentage of women who were depressed during pregnancy recover shortly after childbirth, whilst many others who were not depressed during pregnancy become depressed once their baby arrives. Postnatal events, such as a traumatic birth, a difficult baby and the absence of social support contribute to the onset of PND, and thus limit the ability to assess for risk before the baby is born. In fact, a recent cross-cultural study of PND reported that 88% of all mothers experiencing PND symptoms said that the onset occurred after delivery (Gorman, et al. 2004). Therefore, antenatal screening may help practitioners understand whether a mother is at risk for PND, but it is not sufficient for predicting PND on the individual level.

Nevertheless, antenatal screening for PND has important implications for service planning and resource allocation. Therefore, several antenatal screening tools are now being validated, including the Antenatal Risk Questionnaire (Austin, 2003) and the Postpartum Depression Predictors Inventory (Beck, 2002). In addition, the Cochrane Collaboration has just issued a protocol to review antenatal screening for postnatal depression (Priest, Austin and Sullivan, 2005). More conclusive knowledge regarding antenatal screening should be available once this review is complete.

6.2 When best to assess?

Whilst antenatal screening may help health practitioners understand the risks associated with PND, the current findings suggest that the best time to assess for PND is after the child is born. Walther (1997) suggests that “the four-to-six-week postpartum visit may be the ideal time to assess women for depression.” However, Davies, et al. (2003) found that four weeks was perhaps a bit too early for accurate detection. These authors proposed that six weeks is the optimal period for the first assessment, with subsequent screenings at three, six and 12 months. Additional screening after six weeks is required because depressive symptoms can arise at any time during the first year. Additional research (McLennan, Kotelchuck and Cho, 2001) suggests that mothers with children between the age of two and three are also more likely to report a depressed mood (24%) when compared to the general population (9%).

6.3 Conclusions

Research evidence suggests that PND is under-detected through routine care. Practitioners often lack the resources or skills to accurately identify PND and new mothers are unlikely to recognise the symptoms on their own. Even when mothers realise that they are depressed, many are unlikely to seek treatment because they are reluctant to admit to depressed feelings, or the depression itself creates a sense of helplessness that inhibits their ability

to seek out the appropriate care (McClarey and Stokoe,1995). However, the Edinburgh Postnatal Depression Scale significantly improves practitioners' ability to accurately detect PND, thus overcoming some of the boundaries imposed by the depressed mothers themselves. Despite several limitations, the EPDS remains the best way of identifying women with PND and the CPHVA believes that the EPDS is highly useful when administered by trained professionals in clinical settings. Given the potential deleterious effects of PND on child development and maternal well-being, routine screening with the EPDS should be considered an effective first step for providing treatment options in health services where the appropriate resources are available. The next section considers the evidence base regarding the most effective interventions for mothers who suffer from PND and their babies.

7 FINDINGS: What methods are effective for preventing & treating postnatal depression?

7.1 Overview

In response to the widespread prevalence of PND, the medical community is now considering whether large-scale screening, prevention and treatment efforts should be implemented to improve child mental health (McLennan, 2002). Whilst this appears to be a reasonable objective, many PND services are costly and the risks associated with some treatments have yet to be determined. Nevertheless, targeting PND to improve child outcomes remains a primary objective of Sure Start. An original delivery target of all local programmes was to offer “in a culturally sensitive way, ways of caring for and supporting mothers with postnatal depression” (Sure Start Unit, 2002). Whilst PND services are no longer a Sure Start requirement, PND support is still central to both the *Every Child Matters* and Children’s Centres’ agendas. Therefore, the aim of this section is to review the efficacy of postnatal depression prevention and treatment options and assess their potential for implementation within Haringey’s Children’s Centres’ networks.

7.2 Preventing PND

A recent Cochrane Review of psychosocial and psychological interventions for preventing PND concluded, “overall, psychosocial interventions do not reduce the numbers of women who develop postpartum depression” (Dennis and Creedy, 2004; p. 1). In a meta-review of 15 trials, the authors observed, “women who received a preventive intervention were overall just as likely to experience postpartum depression as those who received standard care” (p. 8). Examples of interventions that did not work included antenatal classes focussing on PND, psychotherapy provided to women during the antenatal period and in-hospital psychological debriefing (Priest, Henderson, Evans and Hagan, 2003). In fact, one study observed that in-hospital debriefing actually increased the likelihood of postnatal depression (Small, et al., 2000).

Despite the fact that measures for preventing PND were not effective, the Cochrane Review identified two practices that were beneficial for postnatal mothers:

- Flexible, individualised postpartum care delivered by midwives that incorporated the use of postnatal depression screening tools (MacArthur, 2002)
- Home visiting support provided by lay individuals.

The Review also advised that individually focussed interventions were more likely to be effective than group-based services. Furthermore, targeted

services resulted in greater benefits across health practices than did universally offered treatments.

7.3 Treating postnatal depression

7.3.1 Psychopharmacological Treatments

Antidepressants (also known as selective serotonin reuptake inhibitors or SSRIs) have long been used as a successful means of treating depression in the general population. Unfortunately, there is relatively little research that explores their effectiveness with postnatal mothers and their long-term risks to child development (DTB, 2000; Hoffbrand, Howard and Crawley, 2001). The single clinical trial worthy of citation in the Cochrane Review (Hoffbrand, et al. 2001) found that fluoxetine was as effective as six sessions of counselling for improving maternal mood. Furthermore, there was no additional gain from receiving a combination of fluoxetine and counselling (Appleby, Warner, Whitton and Faragher, 1997). This finding, coupled with the fact that SSRI's pose negligible health risks to mothers and infants (Hendrick, et al., 2001; Wisner, et al. 1997; Yoshida, Smith and Kumar, 1999), led Appleby et al. to conclude that fluoxetine may be the simplest intervention for PND in the primary care setting.

However, research suggests that many mothers are reluctant to take antidepressants, despite the fact that they pose few risks, even when the mother is breastfeeding (Hendrick, 2003). Instead, mothers are more likely to take up counselling if it is offered to them. Therefore, many have recommended that health services offer mothers a choice of either antidepressant treatment or therapy to ensure that all mothers are adequately supported (Appleby, et al. 1997; Hendrick, 2003; Seeley, Murray and Cooper, 1996).

Hormonal therapy has also been used as a means of preventing and treating postnatal depression, despite mixed research results (DTB, 2000). Whilst oestrogen therapy has been helpful for some mothers with PND, it poses risks to both the mother and infant that include thromboembolism and hyperplasia of the uterus. (Cochrane Review, Dennis, Ross and Herxheimer; 1999).

7.3.2 Individually-based psychotherapeutic interventions

Individual counselling is a generally effective means of treating PND (Hendrick, 2003). Whilst relatively few women participate in group therapy, a very high rate (90%) accept one-to-one counselling when it is offered to them (Cooper, Murray, Wilson and Romaniuk, 2003; Seeley, et al. 1996; Brugha, et al., 2000). Significant improvements in maternal mood have been reported in studies where women receive cognitive-behavioural therapy (CBT) (Chabrol, et al., 2002), as well as interpersonal psychotherapy from certified psychologists (O'Hara, et al., 2000).

Non-directive counselling, also known as 'active listening visits,' is another form of therapy effective for improving maternal mood (Cooper, et al. 2003; MacArthur, et al. 2002; Seeley, Murray and Cooper, 1996). Holden, Sagovsky and Cox (1989) were among the first to implement to a non-directive form of counselling within health visiting practices that placed an emphasis on the mother's individual concerns and supported her decision-making. The authors reported that recovery rates for mothers receiving listening visits were twice as high as those in the control group and that the service was equally effective when delivered by certified psychologists or trained health visitors and.

Similar results were found in a US study where weekly home-visiting support was provided to depressed mothers for one year (Lyons-Ruth, Connell and Odom, 1987; Lyons-Ruth, Connell and Grunebaum, 1990). In this study, mothers were assigned to home-visits from either a professional home-visitor or a lay home-visitor. During each visit, the home-visitor supported both the mother and the child by forming a trusting relationship with the mother and reinforcing her role as a source of emotional security for her child. The authors found that the results were equally beneficial for mothers who received support from both groups of home-visitors. In addition, the treatment effects were particularly strong for the infants. Infants receiving home-visiting support scored an average 10 points higher on the Bayley Mental scale and were twice as likely to have a secure attachment than infants in the control group.

Positive child-outcomes have also been observed in instances where mothers received active listening support for much shorter periods. In a British study conducted by Seeley, et al. (1996), listening-visits were offered to mothers identified as depressed by their health visitors during their six-week check. These visits included a combination of non-judgemental listening, cognitive behaviour counselling and active engagement in the infant's behaviour. Mothers reported significant improvements in their relationship with their child, as well as improved confidence in their parenting capabilities within eight visits. The effects of these visits were both positive and enduring, since the participating mothers were also more likely to demonstrate sensitive parenting and report improved child behaviour at 18 months (Murray, et al. 2003).

7.3.3 Befriending, voluntary support and doulas

A fair amount of research suggests that befriending services delivered by trained volunteers are an effective way of meeting the needs of individuals suffering from long-term mental illness (Bradshaw and Haddock, 1998; Crumlish, L., 2001; Cox, 1993; Cox, et al. 1991; Harris, Brown and Robinson, 1999). Mothers, in particular, appear to respond well to the informal support provided by community-based volunteers (Paris, 2005; Taggart, Short and Barclay, 2000). However, the success of these services depends upon a positive match between the volunteer and client. In addition, the fact that volunteers deliver the service does not make it cost-free. Volunteers require

training and management, and this can be costly, especially if there is a high attrition rate.

The NEWPIN scheme is one example of a befriending service endorsed by the National Sure Start Unit that provides support for mothers who have PND or who are at risk of abusing their children. Parents can refer themselves, but referrals also come from health agencies and GPs. Families then receive an extended home visit by an area co-ordinator where they discuss whether the mother wants to become involved in the scheme. If so, mothers are assigned a 'befriender' and are invited to join a therapeutic support group. Initial evaluation findings demonstrated positive effects for mothers and infants (Cox, 1993), but a subsequent study showed an unexpectedly low uptake of services (Oakley, et al., 1995).

Surprisingly, support from a doula (a trained caregiver support provided to mothers in the weeks directly before and after childbirth) does not result in improved maternal mood. In a randomised, controlled study, 314 mothers were assigned support from a doula or usual care. Doula support was not related to a decreased likelihood of PND or improved maternal mood (Gordon, Walton, McAdam, et al., 1999).

7.3.4 Support groups

Support groups are a potentially cost-effective intervention for PND. However, support groups require mothers to attend them and research suggests that uptake is generally poor. Wiggins, et al. (2004) found that uptake of community-based postnatal support groups was poor (19%) in comparison with the uptake of home listening visits provided by trained professionals (over 90%). This may be partially due to the fact that women with postnatal depression do not usually come forward to request help (McClarey and Stokoe, 1995), so they are unlikely to voluntarily seek out group-based support. However, examples, such as the NEWPIN scheme, suggest that uptake remains poor even when mothers are referred into services. It may be that the depression itself interferes with mothers' willingness to leave their homes for group support.

However, the benefits of support groups remain limited -- even when mothers attend them on a weekly basis (Fleming, Klein, and Corter, 1992). Reid, Glazener, Murray and Taylor (2002) randomly assigned 834 mothers to postnatal support in the form of a self-help manual or a group that met weekly. Neither one of these interventions resulted in a significant improvement in mood when mothers were assessed at 3 and 6 months postpartum. For this reason, the National Perinatal Epidemiology Unit recommends against offering support groups or self-help manuals as a form of prevention for PND (D'Souza, 2003).

7.3.5 Postnatal depression courses

Cognitive behavioural therapy is a well-established method for improving depression in the general population. With this thinking in mind, an Australian team of practitioners developed a highly structured twelve-week course that provided postnatally depressed mother with training in cognitive-behavioural techniques, as well as strategies for getting in touch with their babies (Milgrom, Martin and Negri, 1999). Evaluations of this course were encouraging, reporting a significant decrease in maternal depression and feelings of anxiety within twelve weeks. However, Highet and Drummon (2004) observed that mothers receiving individual therapy recovered more quickly than did those attending the course. In addition, the effects of the course are limited in terms of child development, as participation did not result in improved perceptions of child temperament (Milgrom and McCloud, 1996).

7.3.6 Additional interventions

Additional promising methods for treating postnatal depression include strategies for improving infant sleep (Hiscock and Wake, 2002) and morning-light therapy (Oren, et. al., 2002). However, neither of these studies utilised a randomised control design. Thus, more research is necessary before either of these treatments can be considered viable.

7.4 Conclusions

There is a considerable amount of evidence to suggest that all mothers benefit from home-visits during the postnatal period (Armstrong, Fraser, Dadds and Morris, 2000; Fraser, Armstrong, Morris and Dadds, 1999; LHO, 2001; Gray, 2001). The evidence suggests that social support mitigates the effects of PND, especially for the child (Cutrona and Troutman, 1986) and many have therefore concluded that PND interventions should target specific deficits in social support (Brugha, et al. 1998).

Social support in the form of therapy sessions is a proven means of improving maternal mood, as well as improving parenting skills. However, traditional psychotherapeutic interventions can be expensive, especially if delivered by certified psychologists. 'Active listening-visits' offered by health visitors, or trained non-medical health workers, are a promising and cost-effective means of treating PND, if properly co-ordinated across health services (McKenzie, et. al. 2004). The next section considers ways in which Sure Start Roundway family support workers and Haringey health visitors can co-ordinate their activities to offer effective postnatal depression support to mothers and their infants.

8 POSTNATAL DEPRESSION SERVICES, THE HPCT AND SURE START ROUNDWAY: A Proposal for Joint Working

8.1 Effective treatment for PND

The evidence-base suggests that effective services for postnatal depression should have the following features:

- Employ accurate methods for detecting PND
- Provide sensitive care options as an alternative to drug treatments
- Ensure high uptake, ideally through home-visiting
- Provide support for the mother/child relationship
- Be cost-effective.

Findings from the literature review suggest that both mothers and their babies benefit from active listening support provided by health visitors or non-medical health professionals. Appendix A provides an example of a care pathway involving listening visits (based on the SIGN (Scottish Intercollegiate Guidelines Network) guidelines, cited in Seeley, et al. 1996). The steps in this care pathway are as follows:

1. The intervention ideally begins during an antenatal visit, when mothers are told about the possibility of PND and given literature to review.
2. The health visitors also discuss the possibility of PND at the first postnatal check.
3. Health visitors universally screen all mothers for PND with the EPDS at the 4-6 week postnatal check within the context of a clinical interview. If depression is likely, mothers are asked if they would like a referral to their GP and treatment options are discussed.
4. Four to eight support visits (that include non-directive counseling, some cognitive/behavioral counselling and support for the mother/child relationship) are provided to the mother. This supported can be provided by appropriately trained health visitors or community mental health nurses.
5. Treatment is reassessed after the eighth visit. If depression persists, further treatment options are discussed that include GP referral and/or further visits.
6. Treatment is terminated if depression is no longer an issue.
7. All mothers are reassessed at 3-4 months and 6-8 months, to verify whether depression is present.

The GP is the professional lead in all instances, although the health visitor is responsible for the intervention. Health visitors providing the intervention require training in both the detection of PND and non-directive, active-listening counselling. In-house training is provided by a team from the Winnicott Research Unit in the Department of Psychology at the University of Reading. This group pioneered the active listening intervention described above (Seeley, et al. 1996). Numerous research studies have demonstrated that this is an effective way of treating PND and it is now common practice in numerous PCTs across the UK (Seeley, et al., 1996; Cooper, et al. 2003).

8.2 A joint proposal

Whilst the treatment developed by Seeley, et al. is an effective method for treating PND, it does require a fair degree of health visiting support. Unfortunately, the Haringey Health Visiting Team is overstretched and currently does not have the capacity to offer more than two postnatal health visits to each new family (Asmussen, 2005; HPCT, 2005). Furthermore, Haringey counseling services are limited and resources are not available to establish a clinically based service for PND.

Resources for Sure Start Roundway are also limited. The programme currently has one family support worker and one midwife who can provide home-visiting support. These staff members are trained to provide child development and counselling support, but do not have the authority to act as a professional lead in mental health cases. However, there is the possibility that effective postnatal depression support can be offered to some mothers, if the HPCT and Sure Start Roundway integrate their services.

With this thinking in mind, the Sure Start staff and HPCT health professionals worked together to develop a proposal for a pilot service. This service retains many of the features outlined in the model provided in Appendix A, where Sure Start Family Support workers provide care to mothers identified as depressed by their health visitors. A draft care pathway of this proposal is included in Appendix B and contains the following features:

1. Health visitors operating out of the Lordship Lane Clinic and Sure Start Family Support workers jointly receive in-house training in the detection and treatment of PND by a representative from the Winnicott Unit.
2. One member from the Sure Start Team and the health visiting service receive additional training at the Winnicott Unit, so they can train new staff when required.
3. Lordship Lane health visitors screen all new mothers on their caseloads living within the Roundway catchment with the EPDS.
4. Those identified as depressed are offered 4 to 8 listening visits to be delivered by a Sure Start family support worker. These listening visits

combine CBT with parenting strategies that help the mother actively support her child's early development.

5. Whilst a Sure Start family support worker would conduct the listening visits, the health visitor and the mother's GP would remain the professional lead.
6. The health visitor and family support worker jointly reassess the mother at the fourth and eighth visit. If the mother remains depressed, the health visitor explores alternative treatment options with the mother that might include further visits.

The service would be offered to Roundway mothers during a pilot phase directly after the joint training. At this time, evaluation will consider both the implementation process and the effectiveness of the service. During this time, the Sure Start and the HPCT will also explore a variety of care options for depressed mothers who do not speak English. If the pilot is successful, additional funding for the service will be sought, to enable implementation across the ward and possibly the borough.

8.3 Agreed action

The above proposal was presented to HPCT managers in April 2005. Sure Start and HPCT discussed this proposal on four occasions and the following actions were agreed:

1. Lordship Lane health visitors and Sure Start family support workers will receive training in the detection and treatment of PND from representatives from the Winnicott Unit. It was originally decided that this training would take place during September 2005, but it has been subsequently postponed until January 2006, because of Haringey-wide changes in the delivery of health visiting services.
2. A representative from the Lordship Lane health visiting team and Sure Start Roundway receive additional training that will allow them to provide ongoing support and instruction to the health visiting team and Sure Start staff. This training has already taken place during three days in September 2005 at the University of Reading.
3. Appendix B provides an initial draft of the care pathways, although it is likely that changes to this plan will take place after the training.
4. A pilot PND service must be implemented by February 2006, to ensure that budgeted funding is appropriately spent. The implementation of the service and potential outcomes will be evaluated during the pilot phase.

5. The results of the evaluation will be used to inform the future development of the service.

8.4 Timeframe

Table 8.1 provides a timeframe for joint training and the implementation of the pilot service.

Table 8.1: Timeframe for Sure Start Roundway postnatal depression service – 2005/2006												
	Sept 2005	Oct	Nov	Dec	Jan 2006	Feb	March	April	May	June	July	Aug
Trainers' Workshop	X											
PND Evidence Base Report		X										
Joint Training Sure Start & Health Visitors					X							
Service Commences						█						
Evaluation Commences for 12 week period						█						
Data Analysis										█		
Evaluation Report											█	
Future Service Planning												→

8.5 Potential barriers for service implementation

Both Sure Start and HPCT staff were highly enthusiastic about the PND service pilot during the initial discussions. However, a number of questions were raised, including the fact that Haringey resources may still not be sufficient to fully address the needs of mothers with PND. Some managers question whether all health visitors would be receptive to using the EPDS as a screening tool, when they had been cautioned not to in 2001 after the NCS ruling. Some are also concerned that mothers will object to listening visits offered by someone who was not their health visitor. Since these discussions, it has become clear that significant changes in the health visiting service could

result in disruptions in the plans for training and implementation of the service. Nevertheless, plans remain in place for the joint training to commence in January or February of 2006.

8.6 Conclusions

The evidence-base consistently shows that PND is a real and disturbing condition for mothers who suffer from it. It has the potential to significantly disrupt the parenting process and impair cognitive and social development in young infants. The negative impact of PND is particularly strong for families living in poverty. For these reasons, PND services should remain a priority for Sure Start and Haringey's Children's Centres Networks. Active listening visits are a proven and established means of improving maternal mood and reducing the effects of PND on child development. Active listening visits are also an affordable means of support, if delivered by non-medical health professionals. It would be possible for Haringey health visitors to offer a listening visit intervention for mothers suffering from PND with the additional support of Sure Start Roundway family support workers. Although significant questions surround the integration and delivery of a PND service, it is likely that many of these questions can be resolved through appropriate implementation and evaluation support once a pilot is underway. Sure Start Roundway and the Lordship Lane health visiting team should therefore make every effort to combine their resources, so that a well-integrated PND service can be offered to the mothers living within the Roundway catchment. Once the needs of postnatal mothers are addressed, it is highly likely that cognitive, social and emotional outcomes for the children living in White Hart Lane will improve.

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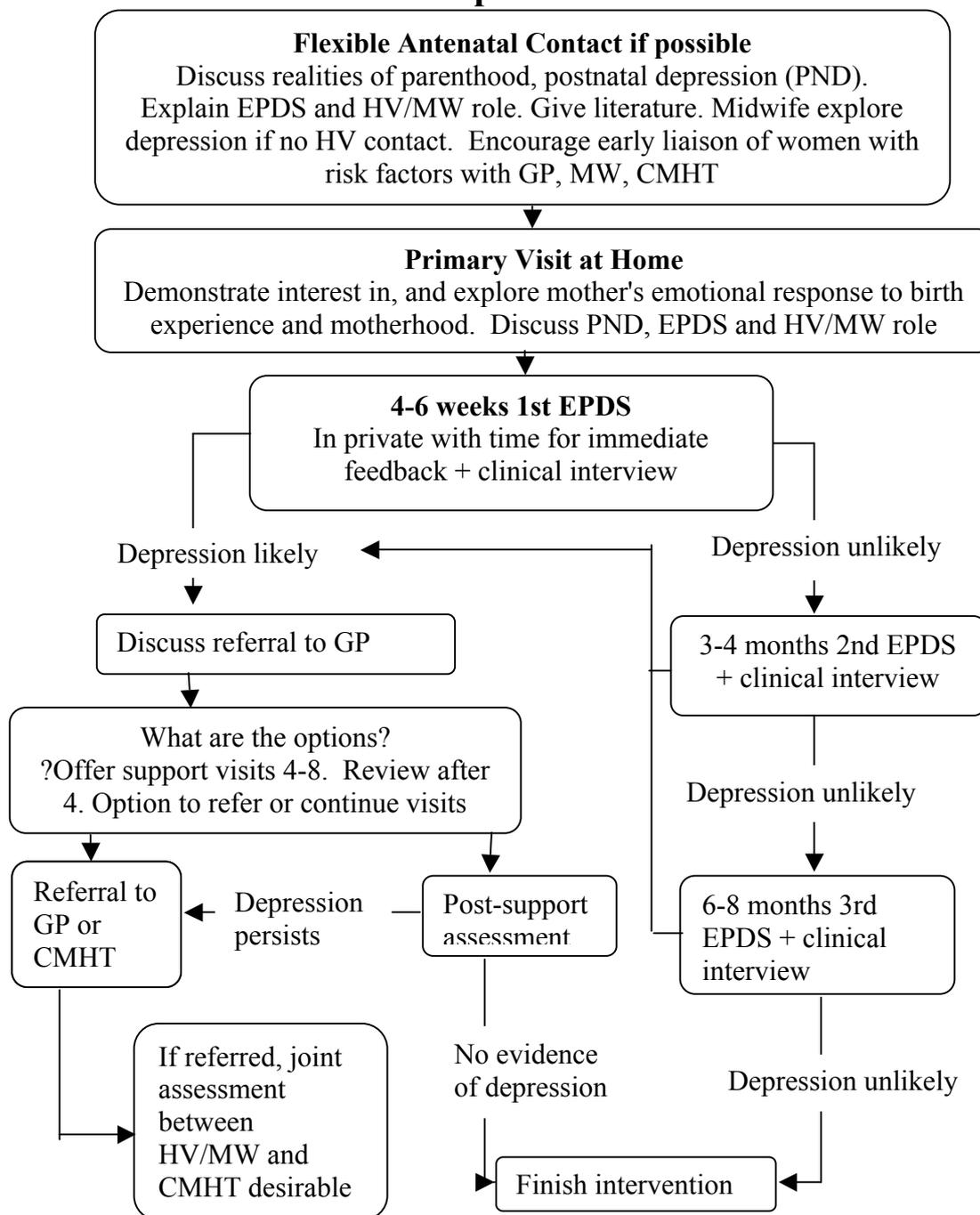
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APPENDIX A: Postnatal Depression Flow Chart

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Postnatal Depression Flowchart



Abbreviations:

PND: Perinatal Depression
 CMHT: Community Mental Health Team
 EPDS: Edinburgh Perinatal Depression Scale

N.B. All interventions undertaken with a partnership approach between health worker and mother with encouragement to self-refer at any time. The above is to assist clinical judgement, not replace it.