

# Screening and Prevention of Postnatal Depression

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## 1. Introduction

Pregnancy and the period following delivery represent a major transition in life with changes and challenges. The distinction between a natural response to this transition and a disorder requiring treatment can be difficult to detect, both for a new mother and for people in her surroundings. For many women, this is a period of increased psychological vulnerability and distress, which is detectable across a broad spectrum of reactions with consequences for the woman's well-being, for bonding between the mother and child, and for the whole family (Cox & Holden, 2003; Kendall-Tackett, 2005).

The literature commonly describes three types of distress: postnatal blues, postnatal depression, and postnatal psychosis. Postnatal blues (mood instability and mild depression) is a relatively normal reaction to a central experience in life that can be regarded as a release of tension after a birth. It is experienced by 50–80% of all women. This is a passing emotional instability during the first days after birth. Sleep problems, concentration problems, crying easily and reduced appetite are common signs of postnatal blues (Kendall-Tackett, 2005; Wheatley, 2005). This reaction is normal and needs only information to the parents as well as understanding from staff at the maternity ward (Wheatley, 2005). It is a warning sign if this condition does not disappear within a short time; an extended period of blues may be a sign of emerging postnatal depression. As the stay in the maternity ward after birth is often very short, health practitioners in primary care play an important role in recognizing a possibly severe and prolonged 'blues' reaction (Wickberg & Hwang, 2003).

The most serious form of psychological reaction after birth is postnatal psychosis, which occurs in about one or two per 1000 births (Brockington, 2004a; O'Hara, 1987; Wickberg & Hwang, 2003). This is an acute psychotic reaction, normally occurring soon after the first week following birth (Brockington, 2004a; Wickberg & Hwang, 2003). Postnatal psychosis has high and specific heritability. The risk of postnatal psychosis is higher for women who have bipolar disorder (Brockington, 2004a). Warning signs of birth psychosis are deep depression, mania, obsessions and disorientation. The condition needs special treatment, but the prognosis is good if the condition is detected in time (Brockington, 2004a; Wickberg & Hwang, 2003).

Postnatal depression is the focus of this chapter. Prevalence studies of postnatal depression have used different screening tools and different points of time for screening. The

prevalence of postnatal depression in these studies ranges from zero to almost 60% (Halbreich & Karkun, 2006). In some countries, there are few reports of postnatal depression, whereas in other countries reported postpartum depressive symptoms are very prevalent. It is well documented that postnatal depression affects at least 10% of all mothers within the first postpartum year (Cox & Holden, 2003; Gordon et al., 2006; Halbreich & Karkun, 2006; Kendall-Tackett, 2005).

The term 'postnatal depression' is useful to describe any depressive disorder without psychotic features present within the first year following childbirth (Cox & Holden, 2003). An indication of postnatal depression is a low mood that causes every day to be experienced as heavy and grey. Forgetfulness, concentration problems, reduced self-esteem and feelings of failing as a mother are the dominant symptoms. Other common reactions are sleeping problems, appetite loss, extreme tiredness, anxiety, guilt, loss of energy, and indecisiveness. Some women experience loss of control over their existence, which can lead to an increasing feeling of unease, irritability and outbreaks of anger, inability to cope, and thoughts of suicide (Cox & Holden, 2003; Dennis & Creedy, 2004; Kendall-Tackett, 2005; Wickberg & Hwang, 2003). Depression ranges in severity from mild, temporary episodes of sadness to severe, persistent depression. The term "clinical depression" is used to describe the more severe, persistent form of depression also known as "major depression" or "major depressive disorder" (Snoek & Engedal, 2000). As regards the symptoms or frequency of occurrence, postnatal depression does not differ from depressions in other life periods (Brockington, 2004a; Cooper & Murray, 1998; O'Hara et al., 1990; Wickberg & Hwang, 2003).

However, a mother's depression may affect her relationship with her child, as well as the quality of care she provides. Due to disturbed maternal sensitivity, the child may develop an insecure attachment to its mother, which may affect the child's later emotional and cognitive development (Campbell et al., 2004; Dennis, 2004; McLearn et al., 2006). Maternal depressive symptoms might also contribute to unfavourable parenting practices (McLearn et al., 2006), and depressed mothers report higher parenting stress than non-depressed mothers (Abidin, 1995; Glavin et al., 2010b; Morrell et al., 2009a). Early intervention through primary health services within the existing system has been shown to prevent long-term postnatal depression (Brugha et al., 2011; Dennis & Creedy, 2004; Elliott et al., 2001; Glavin et al., 2009, 2010b). Thus, identifying and treating postnatal depression as early as possible may be essential. The aim of this chapter is to describe identification of postnatal depression, various screening instruments, appropriate points of time for screening, follow-up of screening, and potential for prevention of postnatal depression.

## 2. Identification of postnatal depression

In spite of growing evidence that postnatal depression can be effectively treated and possibly prevented (Brugha et al., 2011; Glavin et al., 2010a, 2010b; Morrell et al., 2009a), this disturbance is still undetected or untreated in many women (Dennis, 2009). Several barriers to detection and treatment are described: women lack knowledge about postnatal depression, they deny or minimize their symptoms, they assume their problems are common after giving birth, or they are not aware of the treatment options. Barriers among clinicians and in the healthcare system, as well as economic and personal factors, caused low treatment rates among a sample of at-risk women (Horowitz & Cousins, 2006). Health

professionals can trivialize the symptoms or offer treatment that is not suitable for the women (Dennis, 2009; Dennis & Chung-Lee, 2006).

As many women do not report physical or emotional disorders after childbirth, the primary health care service does not adequately address these women's needs (Cox & Holden, 2003; MacArthur et al., 2003). Universal screening for postnatal depression during well-child care visits has been shown to increase detection (Morrell et al., 2009a; McLearn et al., 2006; Glavin et al., 2010c). There is a need for comprehensive screening programmes and better organization of care for preventing and treating postnatal depression (Dennis, 2009). According to McLearn et al. (2006), identification, guidance and referral related to women's mental health are a professional responsibility. However, according to Cox & Holden (2003), there is a need for training for all health professionals in managing postnatal depression. The training should include the nature, detection and treatment of postnatal depression. Recent studies provide evidence that health professionals can be trained to identify, prevent and treat postnatal depression in women (Brugha et al., 2011; Glavin et al., 2010a, 2010b, 2010c; Morrell et al., 2009a, 2009b). Nurses are well positioned to counsel depressed mothers about treatment options, to make recommendations and to provide referrals (Horowitz & Goodman, 2005; Wickberg & Hwang, 2003; Glavin et al., 2010b).

Brockington (2004b) states that the merit of a broad concept of postnatal depression is the public recognition that postpartum disorders are common, promoting the development of remedial services. The use of clinical criteria and diagnosis is independent of when the diseases arise. The International Classification of Diseases (ICD-10) recommends that depression in the postpartum period is categorized in one of the established categories (WHO, 1992), whereas the Diagnostic and Statistical Manual of Mental Disorder revision IV (DSM-IV) accepts an extra coding that specifies when the disease arose (American Psychiatric Association, 1994). According to Cox (2004), however, these diagnostic manuals are not well suited for use in the postpartum period as the ICD-10 permits the classification of mental and behavioural disorders associated with the puerperium only if they onset within six weeks and if they cannot be classified elsewhere, and the DSM-IV with an even shorter onset of four weeks.

## 2.1 Screening instruments

A valid method of screening for postnatal depression implies that health care workers have a tool available to help them in identifying women with thoughts related to postnatal depression. Health practitioners such as public health nurses (PHNs), midwives and nurses have an important task in identifying and treating women with postnatal depression. The aim is early establishment of offers of help, and referrals when necessary. The development of screening instruments gives the primary health services an opportunity for early identification of postnatal depression. Many studies have shown that screening can increase detection rates (Georgiopoulos et al., 2001; Glavin et al., 2010c; Wickberg & Hwang, 2003). In a study by Georgiopoulos et al. (2001), the rate of postnatal depression diagnosis increased from 3.7% before the routine use of EPDS screening to 10.7% when universal screening with EPDS was implemented.

Questionnaires in common use are the General Health Questionnaire (GHQ), the Beck Depression Inventory (BDI), the Postpartum Depression Screening Scale (PDSS) and the

Edinburgh Postnatal Depression Scale (EPDS) (Brockington, 2004a; Cox et al., 1987; Cox & Holden, 2003). In a recent review by Zubaran et al. (2010), four screening tools were reviewed and compared. The Edinburgh Postnatal Depression Scale (EPDS) and the Postpartum Depression Screening Scale (PDSS) showed substantial sensitivity and specificity as screening tools. However, when applied to different cultural contexts, none of the instruments could be rated as flawless. The most commonly used screening tool for postnatal depression is the EPDS (Fitelson et al., 2010). In this chapter, the focus will be on the EPDS as a screening instrument for the primary health care service.

### **2.1.1 The General Health Questionnaire (GHQ)**

The GHQ has been developed as a screening tool to detect those likely to have or to be at risk of developing psychiatric disorders, and is available in a variety of versions using 12, 28, 30 or 60 items; the 28-item version is used most widely (Jackson, 2007).

### **2.1.2 Beck's Depression Inventory (BDI)**

The BDI is a 21-question multiple-choice self-report inventory, and is an instrument for measuring the severity of depression (Lee et al., 2000; Kendall-Tackett, 2005).

### **2.1.3 The Postpartum Depression Screening Scale (PDSS)**

Like the EPDS, and in contrast to the GHQ and the BDI, the PDSS is a screening tool designed specifically for new mothers, and is a 35-item self-report instrument (Kendall-Tackett, 2005). The PDSS is considered effective for identifying minor and major depression (Zubaran et al., 2010). Studies have demonstrated the reliability, construct validity, and sound psychometric properties of the PDSS (Beck & Gable, 2000; Zubaran et al., 2010). PDSS-SF is the short version of PDSS and consists of seven items. According to Zubaran et al. (2010), the PDSS-SF is useful as it provides a "quick, but accurate, overall level of postpartum depression symptomatology".

### **2.1.4 The Edinburgh Postnatal Depression Scale**

Cox et al. (1987) developed this 10-item self-report instrument to detect depressive symptoms among women who have just given birth. The questionnaire has been translated into several languages. The EPDS was developed and validated against the Research Diagnostic Criteria for depression to identify and screen for depression postpartum (Cox, 2004). It is a general screening tool for the whole range of postpartum psychiatric disorders. A positive score needs to be followed by an interview clarifying the symptoms of depression (Brockington, 2004b; Cox & Holden, 2003). The EPDS focuses on the cognitive and affective features of depression rather than somatic symptoms. The scale alone can not confirm a diagnosis of depression, but it is widely used to indicate probable depressive disorder. The EPDS does not screen for those at risk for becoming depressed in the future, but it will identify mild depression and prevent a severe prolonged disorder (Cox & Holden, 2003).

The screening form consists of ten questions, each offering four response alternatives. It takes about five minutes to complete the form. The EPDS is easy to score; each item is rated on a 4-point scale (from 0 to 3), yielding a summary score of 0-30. A higher score indicates

more severe symptoms. A score of 0-9 indicates no risk of experiencing symptoms of postnatal depression; a score of 10-12 indicates a minor/major risk of experiencing symptoms of postnatal depression; and a score of 13 or greater indicates a major risk of experiencing symptoms of postnatal depression (Cox & Holden, 2003; Lanes et al., 2011). Independently of the score, a special note should be made of any positive responses to item 10 assessing suicidal ideation. A positive score on item 10 should be taken seriously and action taken (Cox & Holden, 2003).

The scale assesses the intensity of depressive symptoms present within the previous seven days. The instrument has been used both in clinical settings and in epidemiological studies, and is generally well accepted by women (Cox et al. 1996; Segre et al., 2010). Even if variability in sensitivity and specificity occurs across languages and cultures, the sensitivity and specificity of the EPDS has been found to be satisfactory in several studies (Cox & Holden, 2003; Berle et al., 2003; Wickberg & Hwang, 2003; Lanes et al., 2011). The instrument is described as a valid, reliable and economical screening tool (Buist et al., 2002), and has been recommended for postpartum screening (Georgiopoulos et al., 2001; Wickberg & Hwang, 2003).

According to Glavin et al. (2010c), public health nurses regarded the EPDS as very valuable, and they were convinced that they had identified more mothers with postnatal depression than they had done previously. Georgiopoulos et al. (2001) also found that EPDS screening at 6 weeks postpartum increased the rate of diagnosed postnatal depression. The public health nurses in the study by Glavin et al. (2010c) described the EPDS as being easy for the mothers to complete and for the nurses to score. Other studies using the EPDS as a screening instrument postpartum also found that EPDS is simple and easy to use for health care workers and mothers (Freeman et al., 2005; Georgiopoulos et al., 1999; Seeley et al., 1996).

Krantz et al. (2008) argued that routine EPDS screening of postpartum women would lead to considerable ethical problems due to the weak scientific foundation of the screening instrument. They argue that the side effects in terms of misclassifications have not been considered carefully and that the EPDS does not function well as a routine screening instrument. However, the public health nurses in the study by Glavin et al. (2010c) perceived the EPDS as a suitable, well accepted and useful screening tool that led to better identification of women with postnatal depression than had been the case previously. Other researchers also report that EPDS is well accepted by women, and health staff confirm that they identify more women with postnatal depression using the tool (Mason & Poole, 2008; Vik et al., 2009). According to Buist et al. (2002), there is also a concern that women who yield a "false positive" result may become anxious after the screening. The public health nurses in the study by Glavin et al. (2010c) did not report such problems. The reason may be the feedback the women received following completion of the EPDS at 6 weeks postpartum. The public health nurses talked with the mother about her mental health and her feelings after she had completed the EPDS. The author of the EPDS (Cox & Holden, 2003) and the guidelines for its use (Coyle & Adams, 2002) confirm the importance of this feedback to the mother. According to Glavin et al. (2010c), the EPDS increased the focus on postnatal depression, and it functioned as a door opener for the public health nurses. Other studies also show that the EPDS can be used as a starting point for conversations about the mother's psychological condition (Buist et al., 2002; Cooper & Murray, 1998; Cox et al., 1987). Public health nurses reported that the parents provided positive reports about the screening

procedure (Glavin et al., 2010c). Several studies support the acceptability of the EPDS for mothers when it is used appropriately (Freeman et al., 2005; Georgiopoulos et al., 1999; Milgrom et al., 2005; Poole et al., 2006; Segre et al., 2010).

A question raised in the literature is whether the EPDS measures only depression, or both depression and anxiety. In a validation study by Vivilaki et al. (2009), a factor analysis confirmed the multidimensionality of the EPDS, demonstrating a two-factor structure that contained subscales reflecting depressive symptoms and anxiety. In another study, Montazeri et al. (2007) also found that the EPDS not only measures postnatal depression but may also be measuring anxiety. Navarro et al. (2007) concluded that the EPDS is a valid instrument to detect postnatal depression as well as postnatal anxiety and adjustment disorders; thus, it has to be considered whether the instrument measures more than depression. According to Montazeri et al. (2007), one may argue that the EPDS is a general measure of psychological distress rather than a one-dimensional measure of depression. Brockington (2004b) states that the trinity classification of maternity blues, postpartum depression and postnatal psychosis is an oversimplification. He states that the concept of postpartum depression is broad and that mothers with postpartum depression constitute a heterogeneous group with a broad spectrum of postpartum psychiatric disorders. According to Brockington (2004b), a four-part classification may be more appropriate: psychoses, mother-infant relationship disorders, depression, and a miscellaneous group of anxiety and stress-related disorders. Brockington (2004b) is of the opinion that postnatal anxiety disorders may be more common than depression and that they represent an underemphasized entity. The EPDS is widely used for screening of postnatal depression and is judged valuable (Chabrol et al., 2002; Georgiopoulos et al., 2001; Wickberg & Hwang, 2003). However, several researchers argue that the EPDS captures elements of both anxiety and depression (Montazeri et al., 2007; Navarro et al., 2007; Vivilaki et al., 2009). According to Montazeri et al. (2007), this could be regarded as a strength of the EPDS, and an assessment of both anxiety and depression should be done both in the antenatal and postpartum periods. In the study by Glavin et al. (2010b), the increased focus on maternal mental health and supportive counselling sessions yielded a significant decrease in the depression score between the municipalities, and the public health nurses seemed to have prevented and treated cases of postnatal depression. However, it is possible that some of the high scores on the EPDS were caused by anxiety disorders and that the supportive counselling sessions were helpful for anxious women as well. Irrespective of the classification and name of the disorder, it is important to help the women suffering from a postpartum psychiatric disorder and to be aware of both postnatal depression and other possible disorders such as anxiety and stress-related disorders, as mentioned by Brockington (2004b). In any case, the EPDS seems to be a helpful tool to identify women in need of help. Further research is needed on comorbid disorders in the postpartum period, and the possibility to identify and help women suffering from all these conditions.

The EPDS is a screening device and not a diagnostic tool; use of the instrument requires a clinical assessment and a counselling session by a health care worker after the completion of the EPDS (Cox & Holden, 2003). According to Seeley (2001), the EPDS is only as good as the person using it. Depression screening must also be combined with systemic paths for referral of cases and well-defined implemented care plans to achieve outcome benefits (Cox & Holden, 2003; Stewart et al., 2004).

## 2.2 Time for screening

The risk of developing postnatal depression is greatest in the first three months postpartum, decreasing slightly in the fourth through the seventh month after delivery (Beck, 2006). Some residual depressive symptoms are common up to a year after delivery (Beck, 2006; Dennis & Creedy, 2004). Though most of these depressions are of a milder type that disappears after a few months, there is a risk that women will have a longer-term and more difficult depression if they do not receive help. It is therefore important not to trivialize signs of postnatal depression, but to discover the situation early and give the women help and follow-up (Wickberg & Hwang, 2003). Screening for postnatal depression is recommended 6–8 weeks after delivery (Cox & Holden, 2003). Good results have been reported with the use of a screening instrument 6 weeks postpartum (Glavin et al., 2009, 2010b; Morrell et al., 2009a).

## 2.3 Follow-up

New cases of postnatal depression have been found during the whole first year after delivery. In a study by Glavin et al. (2010b), the prevalence rate was 14.4% at 6 weeks, 10.4% at 3 months, 8.8% at 6 months and 5.6% at 12 months, which indicates that health practitioners need to be aware of postnatal depression among women during the whole first postpartum year. Davies et al. (2003) found new cases of depression at 3, 6 and 12 months postpartum and recommended that health visitors should screen for postnatal depression for a longer period, not only in the immediate postpartum period. In a Swedish study, Rubertsson et al. (2005) also found new cases up to 12 months postpartum and recommended strategies to evaluate maternal emotional wellbeing during the entire postpartum period. Postnatal depression often goes undiagnosed and untreated even in women who have had multiple visits to healthcare providers (Driscoll, 2006). These studies suggest that it is important to be aware of new cases and continue to use a screening tool on indication later in the postpartum period in order to prevent and treat new cases of depression.

## 2.4 Implementing a screening procedure

The introduction of a screening instrument entails requirements that are important to take into account. The disease, the screening test and referral system are some of these. The disease should represent an important health problem, appear reasonably often, have a known pattern, and have a latent (asymptomatic) stage of a certain duration, so that early discovery and treatment have a positive influence upon ending the disease (Holland et al., 2006). It is still presupposed that not all of these requirements need to be fulfilled. For postnatal depression, many of these requirements are satisfied; it represents an important health problem that affects the mother, child and family. It appears fairly regularly: 8–15 % of all women who have given birth develop postnatal depression (Buist et al., 2002; Gale & Harlow, 2003; Glavin et al., 2009; Wickberg & Hwang, 2003). Early diagnosis and treatment have a positive effect on the trajectory of the disease (Chabrol et al., 2002; Dennis, 2003; Glavin et al., 2010b; Morrell et al., 2009a; Ray & Hodnett, 2004).

The requirements for a screening test are that it should be simple, acceptable, valid and economical in relation to the results (Holland et al., 2006). The EPDS is a simple test that is

easy to administer to all newly fledged mothers. The test has been validated in several countries and its sensitivity and specificity were satisfactory (Berle et al., 2003; Cox & Holden 2003; Wickberg & Hwang, 2003). Sensitivity and specificity are somehow different depending on how high the score for depression is set. However, studies confirm that the EPDS is a valid clinical screening instrument to diagnose postnatal depression (Berle et al., 2003; Cox & Holden, 2003; Wickberg & Hwang, 2003). It should be emphasized that all instruments are screening tools that will generate a certain number of false positives, and a diagnosis of depression must always be confirmed by clinical interview (Fitelson et al., 2010).

### **3. Preventing postnatal depression**

Transition to motherhood involves a period of increased psychological vulnerability, and for some women it may be complicated and cause a great deal of stress (Brockington, 2004b; Chick & Meleis, 1986; Kendall-Tackett, 2005). One response to the transition to parenthood may be depression (Chick & Meleis, 1986). Preventing postnatal depression ought to be started during the pregnancy.

#### **3.1 Pregnancy**

Dreams and plans are important components for mothers who are in the transition to motherhood (Stern & Bruschweiler-Stern, 2000). The mother's mental well-being in pregnancy is of importance for the mother's bonding to the unborn child and for the child after birth (Brodén, 2004). Depression affects approximately 10% of all women during pregnancy (O'Hara, 1986). According to Evans et al. (2001), symptoms of depression are not more common or severe after childbirth than during pregnancy. In a Swedish sample, 37% of the women who had scores above the threshold for probable depression in pregnancy also had a high score postpartum (Rubertsson et al., 2005).

Postnatal depression can develop in primiparous and multiparous women. Risk factors are a previous history of depression, either during pregnancy or at other times, postnatal depression following a previous pregnancy, stressful events during the past year, including illness, job loss or pregnancy complications, marital conflict, a weak support system, and unplanned or unwanted pregnancy (Beck, 2006; Brockington, 2004a; Dennis et al., 2004; Kendall-Tackett, 2005; O'Hara & Swain, 1996). Lanes et al. (2011) found an association between total household income and postpartum depressive symptoms, which were found to decrease as household income increased. Other factors positively associated with postpartum depressive symptoms were immigration status, delivery at a young age, and a prior diagnosis of depression. In this study, the highest direct association with postpartum depressive symptoms was the amount of stress during pregnancy and the lack of availability of support postpartum (Lanes et al., 2011).

According to Beck (2006), there is insufficient evidence that interventions in the pregnancy may prevent postnatal depression. However, in spite of limited evidence, it may be important to inform women about possible mental health problems in the postpartum period, as information to women postpartum has been shown to prevent cases of depressive symptoms among women (Brugha et al., 2011; Glavin et al., 2009, 2010 b, 2010c; Heh & Fu,

2003). Prenatal visits provide an opportunity to inform the parents about possible postpartum mental health disorders and obtain information about a mother's risk factors.

### **3.2 Early discharge from hospital after delivery**

According to Brown et al. (2002), early discharge from hospital after delivery may have negative consequences for mothers and babies because decreased maternal confidence is common, due to lack of professional support and higher prevalence of postpartum depression. In a preventive programme, it is important to strengthen the resources of the municipalities to provide support to newly fledged mothers' early discharge from the hospital. More emotional and informational support to parents both in pregnancy and during the postpartum period has been a recommendation made in studies (Deave et al., 2008; Wilkins, 2006), and should be considered important to the primary health care services. Information given to parents during the hospital stay describing mental health conditions that can occur post partum may prevent cases of postnatal depression. In a study by Ho et al. (2009), women who received information about postnatal depression, and an educational programme at the hospital 2 days postpartum experienced less depression 3 months postpartum than the control group.

### **3.3 Peer support**

In a randomized controlled trial, Dennis et al. (2009) evaluated the effectiveness of telephone-based peer support on prevention of postnatal depression. They conclude that telephone-based peer support can be effective in preventing postnatal depression among woman at high risk. The women who received peer support had half the risk of developing postnatal depression at 12 weeks postpartum than those in the control group. For some women, there is a need for information and support from others than the nearest family (Brown et al., 2002) and peer support can be an alternative.

### **3.4 Emotional and informational support to parents**

Research from the US shows that regular home visits by public health nurses to the family during the child's first two years contribute to preventing emotional, language and mental health problems of children (Olds et al., 2002) as well as child abuse and neglect (Olds et al., 1997). There is also evidence from the UK that home visiting and the detection and management of postnatal depression can produce positive effects on parenting and mother-child interaction (Bull et al., 2004).

Home visits to families with newborn babies are traditional services in many countries and provide the basis for future collaboration between the family and the nurse (Hjälmhult, 2009; Jansson et al., 2001). In Norway, all families with newborn babies must be offered a home visit by a public health nurse about two weeks postpartum. In the public health nurses' work, the home visit to the newborn is given high priority. This is often the first contact between the family and the public health nurses, if they have not met each other during the pregnancy (Norwegian Directorate of Health, 2004). The home visit after birth has a long tradition in Norway, and is a well-rehearsed routine. A key task at the home visit is to support the parents' mastery of the parenting role (Hjälmhult, 2009; Norwegian

Directorate of Health, 2004). Early contact is even more important at present, when newly fledged mothers are discharged from the hospital after a very short time.

At the home visit, the public health nurse has the opportunity to get to know the parents and any siblings in their own home (Hjälmhult, 2009; Jansson et al., 2001). The aim of the home visit is to evaluate the child's condition, get to know the family, create contact and trust, and evaluate what kind of help and support the family might need. The public health nurse listens to the family's questions and their need for guidance with the child. There might be questions concerning the birth, breastfeeding, infant care, or the family situation. Breastfeeding guidance and support are central concerns at any home visit to families with a newborn child (Norwegian Directorate of Health, 2004). In addition, the public health nurse receives important information about the parents' living conditions, and observes the interaction between the child and the family (Hjälmhult, 2009; Jansson et al., 1998, 2001; Norwegian Directorate of Health, 2004). The mothers are more satisfied when the first meeting with public health nurses is at a home visit than at a well-baby clinic (Hjälmhult, 2009). As all the services connected to the well-baby clinic and the home visits occur on a voluntary basis, it is important to establish a relationship of trust with the parents (Hjälmhult, 2009; Norwegian Directorate of Health, 2004). To ask the mother how *she* feels at the first postnatal visit may be essential. At this time when most of the focus is on the new baby, most mothers will welcome the concern about how they are doing.

In the study by Glavin et al. (2009, 2010b), as part of the municipality's screening procedure the public health nurses paid extra attention to mental health among postpartum mothers at the home visit and provided general information about mental health problems that may occur in the postpartum period. Each family also received an information brochure at the first home visit about 2 weeks after the birth. The public health nurses encouraged the fathers to be at home during the home visit. The parents were also invited to contact the well-baby clinic about the mother's possible mental health problems before the appointment at 6 weeks postpartum (Glavin et al., 2009, 2010b). The public health nurses felt that the screening procedure was helpful to the parents in several ways, and they regarded the home visits as particularly valuable (Glavin et al., 2010c). At the home visit, the public health nurses informed the parents about postnatal depression and the screening procedure, and had a dialogue about the mother's mental health. The public health nurses had undergone specific training related to postnatal depression and had more knowledge about this condition. This fact, in addition to the information given in pregnancy and postpartum, the brochure and the invitation to contact the well-baby clinic before the next appointment, may account for the significant difference that was detected between the two groups in the study (Glavin et al., 2009, 2010b). This support and information might have prevented postpartum depressive symptoms in women. Other studies support the findings. Thus, Morrell et al. (2009a) and Brugha et al. (2011) reported a decrease in the depression score among women who received support from the health visitors. Dennis and Creedy (2004) found that home visits after birth by public health nurses or midwives helped to prevent postnatal depression. In another study testing the preventive effect of information about postnatal depression, Taiwanese women were sent a booklet on postnatal depression at 6 weeks postpartum. Compared with those who did not receive this booklet, these women had significantly lower EPDS scores at 3 months postpartum (Heh & Fu, 2003).

These studies suggest that support and information may have a preventive effect on postnatal depression in women. The public health nurses in the study by Glavin et al. (2009c) reported that they thought the focus on mental health problems gave the home visit an altogether different significance. The mothers gave positive reports, and many of the multiparous mothers expressed the wish that they had received this information and tool after their first birth. In the public health nurses' opinion, providing information about mental health and handing out the brochure at the first home visit served as a kind of primary prevention. According to Dennis and Creedy (2004), psychosocial and psychological interventions may be effective treatment strategies, which may also be used in the early postpartum period to prevent postnatal depression. Stern (2006) states that home visits seem to have a positive effect on a wide variety of mental health and other problems, and the nonspecific positive factors may lie in the relationship between the health practitioners and the family, especially the mother. A newly fledged mother needs a secure base and the health practitioner may fill the need for a secure attachment figure (Stern, 2006). The information and support given by health practitioners during the home visit seem to have a preventive effect on postnatal depression in women.

### **3.5 Psychosocial and psychological interventions as prevention**

The importance of psychosocial interventions in preventing minor depression is particularly important, since research suggests that minor depressive symptomatology often precedes a major depressive episode. In a review of 21 studies of preventative interventions for postnatal depression, Boath et al. (2005) found several studies suggesting positive short-term effects of psychological or supportive interventions. Many different psychological or supportive interventions exist. Examples include interpersonal psychotherapy, cognitive-behavioural therapy, psychological debriefing, supportive interactions, continuity of care, antenatal identification and notification, early postpartum follow-up, flexible postpartum care, educational strategies, and relaxation with guided imagery (Dennis & Creedy, 2004). In this review, including 15 trials, Dennis and Creedy (2004) found that women who received a psychosocial intervention were as likely to develop postnatal depression as those receiving standard care. However, one promising intervention was intensive postpartum support provided by public health nurses or midwives. Recent studies suggest that receiving care from health practitioners (health visitors, public health nurses) trained in identification and psychological intervention methods prevents cases of postnatal depression (Brugha et al., 2011; Glavin et al., 2010b).

In the study by Glavin et al. (2010b), the following elements constituted the main content of the intervention procedure postpartum: (1) increased focus on maternal mental health at a home visit about two weeks after delivery, (2) identification of women with postnatal depression at 6 weeks postpartum with the EPDS and a clinical assessment by the public health nurses, (3) one counselling session by a public health nurse after the mothers had completed the EPDS at 6 weeks postpartum, (4) supportive counselling sessions for the depressed mothers, (5) openness about mental health issues at every visit to the well-baby clinic, and (6) a system for referral for further treatment in the municipality.

All mothers had one counselling session with a public health nurse after completing the EPDS at 6 weeks, with a focus on the women's mental health. A clinical assessment by the public health nurse, charting the woman's current condition, how serious her problems

were, her “history” of mental health problems, and her wishes, was important for further follow-up. The women whom the public health nurses regarded as needing treatment were then offered further supportive counselling sessions with the nurses between 6 weeks and 3 months postpartum. The counselling took place at the well-baby clinic, and each woman was followed up by the same public health nurse during the entire period. Each supportive counselling session lasted about 30 minutes. The number of counselling sessions was individualized according to each woman’s need after assessment by the public health nurses and in agreement with the woman (Glavin et al., 2010b).

The public health nurses were trained to use active listening and empathetic communication (non-directive counselling) as a method. Establishing a positive relationship between the woman and the nurse was considered important. The nurse acted as an understanding listener, helping the woman by providing advice and alternative interpretations of past events only when asked (Rogers 1951, 1980). The method focused on the woman’s experience, reflections, and ability to manage her own problems. Some main elements were emphasized in the counselling: 1) to listen and try to understand how things were from the woman’s point of view, 2) to check their own understanding of the situation with the woman if unsure, 3) to treat the woman with the utmost respect and regard, 4) to be self-aware, self-accepting, and open with the woman. If the nurse made the judgment that a woman needed further help for her depression, she was referred to the municipality’s mental health team, which included psychologists who could treat women with serious depression (Glavin 2010a, 2010b).

Findings from the study by Glavin et al. (2010b) suggest that home visits with increased focus on mothers’ mental health, screening at 6 weeks postpartum and supportive counselling by trained public health nurses decrease the level of postnatal depression in the year following childbirth. Other studies support these findings (Brugda et al., 2011; Morrell et al., 2009a, 2009b). Thus, early identification and intervention might improve long-term prognoses for most women. A major part of prevention is being informed about the risk factors and the condition. The primary health care services can play a key role in identifying and treating postnatal depression. Women should be screened by their health practitioner to determine their risk for developing postnatal depression and the health practitioner should be aware of the importance of being sensitive and aware of changes in the mother’s condition at all visits to the well-baby clinic.

### **3.6 The father’s role**

The father has an important role in the postpartum period and is often the nearest person to support the newly fledged mother. It may therefore be very important for the father to be informed about mental conditions that may occur in the postpartum period. In the study by Glavin et al. (2010c), public health nurses stated that it was valuable that the fathers were at home when the nurse visited the family. The information from the public health nurses increased the parents’ understanding that it is common for women to experience postnatal depression in the postpartum period. This may influence the relationship between the parents. Misri et al. (2000) showed that partners’ support reduced depressive symptoms among postpartum women. According to Misri et al. (2000), it is important to realize that the father is important for the child when the mother has postnatal depression. Further research is needed on this topic.

Studies have found the male partners of depressed women have higher than normal rates of depression. A father's depression might have implications for his ability to support his partner and for the relationship with the infant. Marital problems are a risk factor both for depression during the couple's transition to parenthood, and for adverse child outcomes (Buist et al., 2002).

#### 4. Conclusion

Screening instruments such as the EPDS provide a tool to identify women who are depressed, but can also be used as a starting point for discussions about the mothers' psychological condition. The EPDS is easy to score and easy for the mothers to complete, and health professionals identify postnatal depression more frequently using the tool.

Information and support may have a preventive effect on postnatal depression in women. Flexible, individualized postnatal care that is provided by a professional and that incorporates postnatal depression screening tools appears to be promising to prevent postnatal depression in women. Increased focus on mother's mental health during the first year postpartum also seems to have preventive effects on postnatal depression and parenting stress in women.

In several countries, the circumstances for following up postpartum women are satisfactory, and in many countries mothers receive a home visit by a midwife, health visitor or public health nurse after birth. In these countries, almost all women who have given birth have frequent contact with well-baby clinics or health centres during the first year of the child's life. It is important to be aware of the new cases of women likely to be suffering from postnatal depression in the first year postpartum, as depression is strongly related to parenting stress. Trained health practitioners have the opportunity to identify and treat postnatal depression in women, which can improve the quality of the services provided. If additional training of health practitioners and information to the parents at the home visit can improve the quality of the services and provide support to the parents, this would seem to be a worthwhile investment. The prevention and treatment of postnatal depression could make a significant difference in women's lives and the lives of their children and families.

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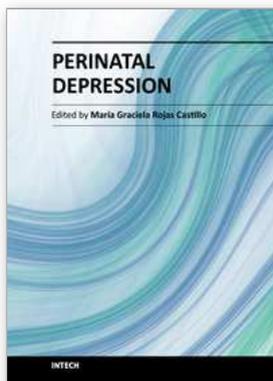
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## **Perinatal Depression**

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This book presents ten chapters that give us important information about epidemiological, biological, clinical and psychological aspects of common mental disorders during pregnancy and in the postnatal period. Some of the issues covered in this book are: detecting postnatal depression using different instruments at the right time, which is very important to avoid the negative effects on the children of depressed mothers; understanding the impact of anxiety and depression during pregnancy and in the postnatal period; biological issues of perinatal anxiety and depression; epidemiological information about perinatal mental health problems among minorities, like immigrant population and underserved rural women. Some information is also provided on postnatal depression in men, which is frequently overlooked.

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