

Bachelor's thesis

Degree Programme in Nursing

2011

Ainomaija Kirjavainen

USE OF THE EDINBURGH POSTNATAL DEPRESSION SCALE (EPDS) IN THE DETECTION OF POSTNATAL DEPRESSION

– A systematic literature review



TURUN AMMATTIKORKEAKOULU
TURKU UNIVERSITY OF APPLIED SCIENCES

BACHELOR'S THESIS | ABSTRACT
TURKU UNIVERSITY OF APPLIED SCIENCES

Degree Programme in Nursing

March 2011 | 38 pages

Heikki Ellilä

Ainomaija Kirjavainen

USE OF THE EDINBURGH POSTNATAL DEPRESSION SCALE (EPDS) IN THE DETECTION OF POSTNATAL DEPRESSION

Ongoing maternal depression is associated with children's developmental and behavioral problems, which makes it a particular concern for health care. Screening provides a mechanism for enhancing the early detection of postnatal depression, and the Edinburgh Postnatal Depression Scale (EPDS) is the most widely used screening tool.

This bachelor thesis discusses the use of the EPDS in the detection of postnatal depression. Method used was a systematic literature review, and the research question was:

"What are the important factors in the successful use of the EPDS as a screening tool by nurses?"

All together 8 articles were selected into the review. As a result, 3 categories were formed to answer the research question. These categories present the important factors in the use of the EPDS as a screening tool by nurses; 1) Education and training on how to use the EPDS, 2) considering special groups of mothers, and 3) collaboration and support of the multiprofessional team.

The results of the thesis concluded that the EPDS is a useful screening tool to be used in clinical practice by nurses, if they are appropriately trained to use it. Support of the multiprofessional team was also considered important. According to the results of this thesis, education about screening special groups of mothers should also be implemented into the training programs.

KEYWORDS:

depression, maternal depression, screening, EPDS

Ainomaija Kirjavainen

EDINBURGH POSTNATAL DEPRESSION SCALE (EPDS) -KYSELYN KÄYTTÖ SYNNYTYKSEN JÄLKEISEN MASENNUKSEN TOTEAMISESSA

Äidin jatkuva masennus on yhteydessä lapsen kehityksen ja käytöksen häiriöihin. Sairaus on näin ollen erityinen huolenaihe terveydenhuollossa. Oireiden seulonnan avulla voidaan kuitenkin parantaa synnytyksen jälkeisen masennuksen mahdollisimman varhaista toteamista. Edinburgh postnatal depression scale (EPDS) -kysely on yleisin tähän tarkoitukseen käytetty seula.

Tämä opinnäytetyö käsittelee kyselyn käyttöä synnytyksen jälkeisen masennuksen seulonnassa. Työ on systemaattinen kirjallisuuskatsaus, joka pyrkii vastaamaan seuraavaan tutkimuskysymykseen: mitkä ovat EPDS-seulan onnistuneeseen käyttöön liittyviä tärkeimpiä tekijöitä käytännön hoitotyössä?

Kirjallisuuskatsaukseen valittiin yhteensä kahdeksan artikkelia, joiden tuloksiin perustuen löytyi kolme tekijäryhmää vastaamaan tutkimuskysymykseen. Nämä ryhmät esittävät tärkeimmät tekijät EPDS-seulan onnistuneeseen käyttöön: 1) kyselyn käyttöön liittyvä koulutus, 2) äitien erityisryhmien huomioonottaminen ja 3) moniammatillisen työryhmän yhteistyö.

Kirjallisuuskatsauksen tulokset osoittavat, että EPDS on hyödyllinen seula käytettäväksi hoitotyössä, mikäli sairaanhoitajat on koulutettu sitä käyttämään. Myös moniammatillisen työryhmän tuki koettiin tärkeäksi. Tulosten mukaan myös tiettyjen erityisryhmien seulontaa koskevat asiat tulisi sisällyttää koulutusohjelmiin.

ASIASANAT:

masennus,

äidin

masennus,

seulonta,

EPDS

CONTENT

1 INTRODUCTION	6
2 BACKGROUND	7
2.1 Depression	7
2.2 Postnatal mental health disorders	9
2.2.1 Postpartum blues	9
2.2.2 Postnatal depression	10
2.2.3 Puerperal psychosis	13
2.3 Diagnosing and screening of postnatal depression	14
2.4 The Edinburgh Postnatal Depression Scale	15
3 THE PURPOSE AND THE AIM OF THE STUDY	16
4 METHOD	16
4.1 Systematic literature review	16
4.2 The review process	17
4.3 Analysis of the material	19
5 RESULTS OF THE REVIEW	24
6 RELIABILITY	26
7 LIMITATIONS	27
8 DISCUSSION	27
9 CONCLUSION	30
10 SOURCE MATERIAL	30

APPENDICES

Appendix 1. Database: Cinahl	36
Appendix 2. Database: PubMed: PubMed Central (PMC)	37

PICTURES

Picture 1. The EPDS questionnaire	38
-----------------------------------	----

TABLES

Table 1.	21
----------	----

Table 2.	22
----------	----

LIST OF ABBREVIATIONS

PD	Postnatal depression
PP	Puerperal psychosis
EPDS	Edinburgh Postnatal Depression Scale

1 INTRODUCTION

Depression is a common mental health disorder that has a consistently high prevalence rate worldwide. It is a difficult disorder affecting the person's ability to cope with daily life, including work and maintaining social relationships. (Haddad 2010.) Women are more prone to depression after childbirth than during any other phase in life. Postnatal depression is a common disorder specific to the postnatal period, affecting women worldwide, irrespective of culture. It is also an under-diagnosed illness, and in many women the condition is left untreated. (Boath & Henshaw 2001.)

Postnatal depression occurs during the vulnerable and crucial phase of mother-infant attachment and is a specifically important concern as it impacts not only the depressed mother, but also the newborn baby and the family as a whole (Edhborg 2008). Screening instruments offer a valuable tool for helping health care professionals in the detection of the disorder. Screening of mothers has yielded good results and earlier referrals to treatment minimizing the adverse effects on the child and the family. (Hanusa et al 2008.)

The idea for the topic of this bachelor thesis came out of interest towards postnatal depression. The author was interested in the impact of the disorder on children's health. When making literature searches and reading material about the disorder the screening tool called the Edinburgh Postnatal Depression Scale came up several times. There was also a lot of researched information dealing with the screening tool. A Finnish website introducing a project established in Vantaa, Finland, confirmed that the EPDS was also used as a screening tool in Finland. The topic became clear as it turned out to be current as well. This bachelor thesis discusses the properties of the most widely used screening instrument for the symptoms of postnatal depression worldwide, the Edinburgh Postnatal Depression Scale. It also briefly introduces depression in general and provides an overview on the different postpartum mood disorders.

2 BACKGROUND

2.1 Depression

Depression is a major public health problem with a consistently high prevalence rate worldwide (Haddad 2010). About 5 % of the adult population will have a major depressive episode every year, and roughly one-half of these cases will come to medical attention. Women are affected by depression twice as often as men (Warren 2010.) In fact, one in eight women will develop depression within her lifetime, usually starting between the ages of 25 and 44. The reason for this might be the hormonal changes women go through. (Paolucci & Paolucci 2007.) About one-third of both women and men suffer one of the milder depressive syndromes that do not fulfill the criteria of major depression, and another 25-35% of people have some depressive symptoms that interfere with daily living at some time in their lives. Altogether only a minority of people avoid depression. (Warren 2010.)

The different types of depression include its major and minor forms, and depression related to bipolar disorder. The symptoms of minor depression are bothersome to the person, and last at least 2 years at low level. However, these symptoms are usually not enough to disable the person. In case of major depression, the person is disabled by sadness and the depressive symptoms. (Paolucci & Paolucci 2007.) It is the most severe form of depression and has strict diagnostic criteria (Warren 2010). In bipolar disorder, the periods of depression take turns with shorter periods of mania (Paolucci & Paolucci 2007).

The clinical features of depression include both physical and psychological symptoms. The symptoms are pervasive and sustained. (Haddad 2010.) Some people may have one episode of major depression, but most have several in their lifetime, especially if they are not treated (Paolucci & Paolucci 2007).

According to the American Psychiatric Association the two core symptoms of depression include low mood and diminished interest. For the diagnosis of depression one or other of these must be present. In addition to these there are other symptoms which include reduced energy or fatigue, insomnia or hypersomnia, agitation or slowed down speech or movement, disturbed appetite which may be accompanied by significant weight loss or gain, feelings of guilt or worthlessness, reduced concentration, and recurrent thoughts of death or suicidal ideas. (Haddad 2010.) For the diagnosis been given the symptoms have to be present for a period of two weeks or more, and at least five symptoms expressed most of the day nearly every day (Burcusa & Iacono 2007).

However, depression is a very treatable condition, and the sooner it is detected and treated, the less likely it will become chronic and disabling (Paolucci & Paolucci 2007). The most effective treatment for depression is generally a combination of biological and non-biological therapies. This means using a combination of both medication and psychotherapy. (Ainsworth 2000.) Minor forms of depression may respond to non-medical approaches or to psychotherapy alone, but most of the depressions will be controlled faster and for longer periods of time if medications are also used (Paolucci & Paolucci 2007).

Only about one-quarter of the patients with depression will satisfy the criteria for major depression, but it is, however, more likely to be diagnosed than milder forms, and primary care has been criticized in the past for failing to diagnose people with depression. However, the use of structured questionnaires has been shown to increase the detection rate of depression. As already mentioned, when depression is diagnosed and treated early it is shorter in duration and less severe. (Warren 2010.)

2.2 Postnatal mental health disorders

The postnatal mental health disorders in ascending order of severity include the postpartum blues, postnatal depression and puerperal psychosis. There has been debate whether these disorders are distinct from each other or one disorder that ranges among a continuum of severity. (Boath & Henshaw 2001.)

This thesis concentrates on postnatal depression that 13-19% (Boath & Henshaw 2001) of new mothers experience in the first year after birth. However, in order to understand postpartum mood disorders better, their main features are discussed distinctively in the following chapters.

2.2.1 Postpartum blues

Taking the three postpartum depressive disorders as distinct, the most prevalent and the mildest disturbance of the postnatal period is called the 'postpartum' or 'baby blues'. Its prevalence rate ranges from 50 to 80 % and is in fact so common, that it is considered as a normal reaction resulting from hormonal changes following childbirth. It occurs in the first few days postpartum and lasts from 24 to 48 hours. Its symptoms include weepiness, irritability, insomnia, anxiety and depressive mood. (Boath & Henshaw 2001.)

The expression of these symptoms may be variable and generally fade by two weeks postpartum without any specific treatment (Schanie et al 2008). It has also been argued, that the baby blues has been recognized as a medical condition not only because of its high prevalence rate, but also because it occurs during the mother's stay in the hospital and therefore under the supervision of health care staff (Boath & Henshaw 2001).

2.2.2 Postnatal depression

Postnatal depression (PD) can be seen as intermediate of the three postpartum mood disorders, between postpartum blues and puerperal psychosis. When these two conditions can be distinguished from depression outwith the puerperium, postnatal depression is more complicated to define. (Boath & Henshaw 2001.) It is however, a major depression defined to occur during the first 6 months, the first 4 weeks, and the first 3 months postpartum, from which the first 3 months being the most recent definition (Craig & Howard 2009). According to Boath and Henshaw, its incidence rate on new mothers is 13-19% and its symptoms include similar ones to depression occurring at other times in life (Boath & Henshaw 2001). A meta-analysis of studies mainly based in resource-rich countries found the incidence of postnatal depression to be 12-13%, with higher incidence in resource-poor countries (Craig & Howard 2009). According to Chew-Graham et al, postnatal depression represents a substantial public health problem affecting 8–15% of women and can result in long-term adverse consequences for maternal mood and infant development (Chew-Graham et al 2009).

In the Diagnostic and Statistical Manual, an episode of major depression after delivery is defined as two weeks or more of persistent: 1) depressed mood, or 2) loss of interest in daily activities plus four associated symptoms: appetite disturbance, sleep disturbance, psychomotor agitation or slowing, fatigue, feelings of worthlessness or inappropriate guilt, poor concentration, suicidal ideation that onset within 4 weeks after childbirth. (Sit & Wisner 2009.) According to the World Health Organization, the specific postpartum onset symptoms may also include fluctuations in mood, preoccupation with infant wellbeing, severe anxiety, panic attacks, and fearfulness of being alone with infant (Craig & Howard, 2009). Postnatal depression is present for the majority of time for at least two weeks (Schanie et al 2008).

According to Sit & Wisner, the presentations of postnatal depression vary, but mothers with major depression typically describe a diminished pleasure in interacting with people or formerly enjoyable activities as well as feelings of low self-efficacy, rather than having depressed mood (Sit & Wisner 2009). According to Craig and Howard, the symptoms are similar to symptoms of depression at other times of life, but in addition women with postnatal depression also experience guilt about their inability to look after their new baby (Craig & Howard 2009). All in all a depressed mother is less positive, less contingent, and shows less vocal and play interaction to her child. Resulting from the mother's depressive symptoms, the infant shows less positive affection, and less contingent behaviour. (Righetti-Veltema et al 2003.)

Postnatal depression can be considered a particular concern because of its effect on the mother and her long-term relationships, an adverse effect on the family as a whole, and in particular the mother-infant relationship, which may in turn affect the infant's development. (Boath & Henshaw 2001.) The disturbances in the early mother-infant relationship might lead to delays in cognitive development particularly for boys, insecurity of the infant-mother attachment, and behavioral disturbances (Edhborg 2008). According to McCarthy and McMahon, there is also a relationship between postnatal depression and decreased sensitivity in maternal-infant interaction during feeding and play (McCarthy & McMahon 2008). Also the new fathers are more likely to be depressed postpartum if they have a partner who has been depressed during the pregnancy or early postpartum (Edhborg 2008).

Currently there are three different theories about the causes of postpartum depression; medical, stress and coping, and feminist model. The first one of these is the most prevalent and suggests that the hormone fluctuations that accompany pregnancy, delivery, and the postpartum period, as well as neurotransmitter fluctuations, may play a role in postpartum disorders.

The stress and coping model by Lazarus and Folkman (1984) suggests that different stressors and life-changes following child birth contribute to postpartum depression, and with adequate social support the disorder can be both prevented and alleviated. The feminist model by Nicholson (1990) suggests that the mood changes and depressive symptoms after child birth would not be abnormal at all. According to Nicholson women naturally grieve the physical and emotional changes they experience, as well as the loss of their former identity without the motherhood. (Schanie et al 2008.)

However, once postnatal depression is identified, rapidly implemented treatment is important. Without the treatment, patients are at risk for lengthy illness that could lead to impaired functioning, worsening symptoms, treatment resistance and even suicide. The treatment of postnatal depression is focused on the same interventions as the management of major depressive disorder outside postpartum period, including psychotherapy and/or antidepressant medication. (Sit & Wisner 2009.) However, there is a limited amount of research available considering antidepressant treatment considering postnatal depression, and when prescribing this treatment general recommendations are followed assuming that the pharmacological treatment is the same as for depression occurring at other times in life (Boath & Henshaw 2001). Milgrom et al suggest that from the psychological interventions especially counseling, cognitive behavioral therapy, and psychodynamic/interpersonal therapies are effective in treating postnatal depression (Milgrom et al 2005).

Most women with PD are treated in primary care (Chew-Graham et al 2009), but according to McCarthy and McMahon, the recognition by primary care professionals of depression is poor. The majority of women suffering from PD do not seek professional help, and up to half of them do not seek help from family and friends either. Women seem unwilling to talk about emotional difficulties, and as many as 50% of the cases remain undetected. (McCarthy & McMahon 2008.)

2.2.3 Puerperal psychosis

Puerperal psychosis (PP) is the most severe postpartum mood disorder (Boath & Henshaw 2001). Fortunately it is a rare psychiatric disorder with a prevalence rate of 0,1% (Schanie et al 2008). The condition occurs in 1-2/1000 childbearing women within the first 2-4 weeks after the delivery (Sit et al 2006). Puerperal psychosis involves severe disconnection from reality by severe depression, mania, and hallucinations or delusions. A mother suffering from this condition is seriously disconnected from the reality and therefore usually requires hospitalization. (Boath & Henshaw 2001.)

The onset of the symptoms is rapid, and as early as 2-3 days after childbirth the patient develops paranoid, grandiose, or bizarre delusions, mood swings, confused thinking, and grossly disorganized behavior that represent a dramatic change from her previous functioning. Because of the severe symptoms the safety and well-being of the mother and her offspring is endangered, and it is critical to identify the symptoms and to treat the mother. The treatment of puerperal psychosis consists of acute pharmacotherapy and supportive therapies. Acute pharmacotherapy for puerperal psychosis concentrates on managing the psychotic and mood-related symptoms. According to Sit et al, psychotherapy options found effective in the treatment of postpartum mood disorders in general, such as family-focused therapy, cognitive behavioral therapy, or interpersonal psychotherapy are effective with treating puerperal psychosis as well. (Sit et al 2006.)

All in all, puerperal psychosis is a rare condition, and according to data available, puerperal psychosis is an overt presentation of bipolar disorder after delivery. From the patients who develop PP immediately after childbirth 72%-88% have bipolar illness or schizoaffective disorder, and 12% have schizophrenia. Puerperal hormone shifts, obstetrical complications, sleep deprivation, and increased environmental stress are possible contributing factors to the onset of illness. The risk for developing puerperal psychosis also increases in case of a previous episode. (Sit et al 2006.)

2.3 Diagnosing and screening of postnatal depression

Many postpartum mothers have little knowledge about depression, and may not be aware that they are depressed (Freeman 2005). According to McCarthy and McMahon, the stigma about mental illness may also deter mothers for seeking help. In addition, women were also unable to differentiate between normal levels of postpartum distress and depressive symptoms that might require intervention. Talking about their distress and experiences, both with health professionals and other mothers, was regarded as a primary importance in the recovery process. (McCarthy & McMahon 2008.)

Women are also often reluctant to accept the clinical diagnosis of being labeled as depressed. The study done by Bilszta et al highlights that health care professionals have to be more aware of the personal and societal attitudes which prevent women from talking about their distress. According to the research, a key facilitator to help seeking is a professional who is empathic, does not attempt to normalize or minimize feelings, helps women recognize depression as not a sign of failure. (Bilszta et al 2010.)

However, many of the cases are never identified by health care providers nor receive mental health treatment. This, in turn, prolongs the depression. Ongoing maternal depression is associated with children's developmental and behavioral problems, which as already mentioned, makes it a particular concern for health care. (Boath & Henshaw 2001.) Screening for postnatal depression is important because it is the first step in the pathway to treatment (Hanusa et al 2008). It also provides a mechanism for enhancing the early detection of postnatal depression. In general, postpartum is difficult time for a woman and mothers are often overwhelmed and sleep deprived. Therefore, the screening tool must also be simple. (Freeman 2005.) It is obvious, that caring for a baby may lead to symptoms which are common in depression, such as fatigue. Therefore it has been necessary to develop screening tools that are not influenced by caring for the baby, and do not give inflated scores. (Fuggle et al 2002.)

2.4 The Edinburgh Postnatal Depression Scale (EPDS)

The Edinburgh Postnatal Depression Scale (EPDS) is the most widely used screening tool for postnatal depression. It has been validated in both English and non-English-speaking countries and translated to a number of Asian languages as well. (Fuggle et al 2002.) The scale is specifically developed for use in the postpartum setting and researches show that active use of the EPDS at post-partum follow-up visits increases the detection of postnatal depression (Freeman et al 2005). In comparative studies the EPDS has compared favorably with other self-report scales designed to detect depression. According to Clifford et al, studies to validate the use of the scale indicate that the EPDS may help to diagnose a substantial number postnatal depression cases. (Clifford et al 1999.)

The screening tool was developed following dissatisfaction with standard instruments for detecting depression, which appeared to have reduced sensitivity and specificity in the postpartum period (Henshaw & Elliott 2005). Unlike other screening instruments the EPDS identifies depressive symptoms, but does not focus on the somatic symptoms such as appetite changes, which can be difficult to assess in most women in the postnatal period (Craig & Howard 2009). The scale measures the intensity of depressive symptoms within the previous seven days (Freeman et al 2005).

The patient-completed questionnaire of depressive symptoms includes 10 questions (Freeman et al 2005) with four possible responses related to mood and feelings (Clifford et al 1999). Each question is rated from 0-3, so the total ranges from 0 to 30 points (Freeman et al 2005). A score of 0 indicates absence of symptoms, 3 represents maximum severity whilst a score of 1 and 2 are intermediary statements. Mothers are asked to indicate their reaction to each of the items in the self-report scale. (Clifford et al 1999.) Normally, a cut-off point of 12 is used (Freeman et al 2005). In practice this means, that a score of 12 on the scale is identified as the point at which health workers should be alerted to the risk of postnatal depression being present (Clifford et al 1999).

3 THE PURPOSE AND THE AIM OF THE STUDY

The purpose of this thesis is to view published studies about the use of the Edinburgh Postnatal Depression Scale (EPDS) in the detection of postnatal depression.

The aim of the study is to answer the following research question: What are the important factors in the successful use of the EPDS as a screening tool by nurses?

4 METHOD

4.1 Systematic literature review

The aim of a literature review is to present an entirety of available research (Johansson et al 2007). There are different kinds of literature reviews that may for instance present a wide literature analysis, or on the other hand discuss and compare only two researches. However, literature reviews always require a certain amount of research data. Also health care and health science have traditions in providing information and research to be used in clinical practise (Johansson et al 2007). Literature reviews are also becoming more and more important in health- and social care due to the growing importance of evidence-based practice (Aveyard 2007).

The method used in this thesis is the systematic literature review. Systematic reviews in general aim at evaluating and interpreting all available research evidence relevant to a particular question (Glasziou 2001). It focuses on researches made at certain time, and therefore has to be updated time to time to maintain the relevancy of the results. The systematic literature review differs from other types of literature reviews because of its specific purpose and detailed selecting, analyzing, and synthesizing processes.

They provide collected information from a topic that is predefined, and indicate how much and what kind of researched information is available about the chosen topic. (Johansson et al 2007.) A systematic review includes five discrete steps; question formulation, finding studies, appraisal and selection of studies, summary and synthesis of relevant studies, and determining the applicability of results (Glasziou 2001).

4.2 The Review process

The electronic databases used in the literature search were chosen from the Turku University of Applied Sciences library intranet Nelli Portal. Full-text articles were searched from two databases, Cinahl and PubMed Central, using several search terms. The terms “postnatal depression” and “EPDS” were used the most, also in combination with other terms. The numbers of hits for each search in both of the databases are presented in the appendices. The inclusion and exclusion criteria for the literature searches are presented below.

The inclusion criteria for the chosen researches

1. The EPDS is used as a screening tool in detecting postnatal depressive symptoms
2. The research has been published between the years 2000-2010
3. The research has been published in a scientific journal

The exclusion criteria

1. The research concentrates solely in screening mothers for perinatal depression
2. The research does not mention nurses in the screening process

Majority of the articles were found already from the first searched database. In Cinahl, search term “postnatal depression” gave 187 hits. Adding other terms to the search yielded more articles answering the research question. Adding the terms “screening”, “nurses”, and “treatment”, the selection of the articles became clearer. The results from these combinations gave similar and also same articles.

Search terms “postnatal depression” and “screening” gave 44 hits. From these hits 21 articles had an interesting heading, and 12 were selected from the basis of the abstract. From these 12 articles, 11 articles answered to the research question and were accepted to the review. From the two researches conducted on an Australian sample, the other one was excluded. Search terms “postnatal depression” and “nurse” gave 14 hits, but did not yield any new articles into the review. From these 14 articles 3 were relevant to the research problem and already included into the review through the previous search.

Search terms “postnatal depression” and “treatment” yielded 30 hits, from which three articles answered the research question. From these three two had already been included through previous searches, and therefore one new article was included into the review.

Searching with only the term “EPDS” yielded altogether 69 hits. Adding the terms “screening” and “nurse” gave more limited results. Unfortunately neither one of these searches brought new researches into the review. The terms “EPDS” and “screening” gave 11 interesting headings, from which 7 had already been accepted into the review and 2 been previously excluded. The 2 remaining articles did not fulfil the inclusion criterion of discussing about nurses in the screening process. The last combination of search terms, “EPDS” and “nurse”, yielded 3 articles from which 2 were relevant to the research problem. However, the other one of these was already chosen for the review and the other discussed a translated version of the EPDS. Since one research discussing about a translated version of the tool was already chosen for the review, this one was excluded. The article did not discuss about nurses using the tool either.

From the database PubMed Central search terms “postnatal depression”, “EPDS”, and the combinations of “postnatal depression” and “screening”, “postnatal depression” and “treatment”, and “EPDS” and “screening” yielded all lots of hits. When using three search terms, the number of hits was smaller, and the abstracts seemed to answer the research question better.

The combination of three search terms “postnatal depression”, “screening” and “nurse” yielded 56 hits, from which 5 abstracts were read. After reading the abstracts, 4 articles were excluded because they poorly answered the research question. One article was included into the review, because of providing information about midwives and public health nurses screening for postnatal depression.

The combinations of the terms “postnatal depression”, “treatment” and “nurse”, as well as “EPDS”, “screening” and “nurse” yielded many same articles as the previous search. This also happened with the terms “EPDS” and “validation”, but as a result from this search one new article discussing about a translated version of the EPDS was included. From both of the databases originally altogether 13 articles were chosen for the review. Later, with an advice of the thesis supervisor, the author excluded 5 articles from the review. After this exclusion, the remaining articles answered clearly to the research question. Among these 5 articles were also the two articles from PubMed Central, meaning that all the researches for the review were taken from Cinahl. However, the literature searches from PubMed Central yielded also same researches that were already chosen for the review from Cinahl.

4.3 Analysis of the material

This chapter discusses the 8 articles (Buist et al 2008, Davies et al 2003, DeRosa & Logsdon 2006, Downie et al 2003, Fuggle et al 2002, Gerrard et al 1993, Jomeen & Martin 2007, Leverton & Elliott 2000) chosen for the review. The inclusion and exclusion criteria are presented, and the articles are explained briefly in a table form.

As already mentioned, as a result from the literature searches, all together 13 articles were included into the review and later 5 articles excluded. After this exclusion, the material answered clearer to the research question addressed by the author, and also made analysing the material clearer.

According to the inclusion criteria addressed, in all of the researches, screening with the EPDS was carried out by nursing professionals including child health nurses, health visitors, and midwives. In the beginning of the literature search, the author also found many researches discussing the EPDS in general, and comparing it to other screening instruments. However, the author wanted to gain information about the EPDS as close to practise as possible, and therefore, excluded the articles not fulfilling this criterion.

The author also wanted to include articles rather new into the review, but made an exception with an article (Gerrard et al 1993) describing a training program about the use of the EPDS. This article published in the year 1993 offered information on training health visitors on the use of the EPDS. The other researches (Buist et al 2008, Davies et al 2003, DeRosa & Logsdon 2006, Downie et al 2003, Fuggle et al 2002, Jomeen & Martin 2007, Leverton & Elliott 2000) take place between years 2000 and 2008. Two of the 8 researches (Davies et al 2003 & Gerrard et al 1993) have been published in Journal of Advanced Nursing. Five articles (Buist et al 2008, DeRosa & Logsdon 2006, Fuggle et al 2002, Jomeen & Martin 2007, Leverton & Elliott 2000) have been published in mental health journals; Australian & New Zealand Journal of psychiatry, Journal of child and adolescent psychiatric nursing, Journal of psychiatric and mental health nursing, and Journal of reproductive and infant psychology. One research (Downie et al 2003) has been published in Nursing and Health Sciences. The numbers of articles together with the year of publication are presented in table 1.

Table 1

Year of publication	1993	2000	2002	2003	2006	2007	2008
Number of researches	1	1	1	2	1	1	1

The type of researches included into the review is varied. Four of the articles (Buist et al 2008, Davies et al 2003, Downie et al 2003, Jomeen & Martin 2007) aimed at examining the screening process of postnatal depression with the EPDS, evaluate the EPDS as a screening tool and to improve early detection and treatment of postnatal depression. One of these articles (Buist et al 2008) described a longer project that used the EPDS as a screening tool for identifying mothers at risk for postnatal depression in women giving birth in Australia between the years 2002 and 2004 and discusses also screening special groups of mothers.

Altogether four articles discuss the use of the EPDS in special groups of mothers (Buist et al 2008, Downie et al 2003, DeRosa & Logsdon 2006, Fuggle et al 2002). Because the tool has been translated into several languages, the author also wanted to include an article about the use of a translated version of the EPDS (Fuggle et al 2002), and chose one to describe the development and use of a Bengali version of the EPDS. The article offered valuable information also about the use of translated versions of the EPDS in general. The third article describes different screening tools for detecting postnatal depression in adolescents (DeRosa & Logsdon 2006) in order to provide information to health care providers on the choice of instrument. In addition to these, an article describing a training project regarding the use of the EPDS (Gerrard et al 1993), and an article discussing about the predictive value of the EPDS (Jomeen & Martin 2007) were included into the review. The main objectives and results of the chosen 8 researches are summarized and presented in table 2.

Table 2

<i>Authors</i>	<i>Place of research taken place and the year of publication</i>	<i>Main objectives of the research</i>	<i>Main results</i>
Buist, AE; Austin, MP; Hayes, BA; Speelman, C; Bilszta, JL; Gemmill, AW; Brooks, J; Ellwood, D; Milgrom, J	Australia, 2008	To describe the postnatal mental health of women giving birth in Australia 2002-2004 at 6-8 weeks postpartum	Women using the private health services had a significantly lower prevalence of elevated EPDS scores than the ones using the public services.
Davies, BR; Howells, S; Jenkins, M	United Kingdom, 2003	To improve early detection and treatment of postnatal depression in the general practise to which they were attached.	Health visitors should screen for PD throughout the period of their contact with mothers. The knowledge and skills to use the EPDS can be developed through close collaboration.
DeRosa, N; Logsdon, MC	USA, 2006	To provide data on several depression screening tools so that health care providers can make an informed choice for the best instrument to use with postpartum adolescents	In order to recognise the symptoms of PD in adolescents, a combination of screening instruments should be used. The manuscript suggests that a combination of the CES-D and the EPDS could enhance detecting PD in postpartum adolescents.

Downie, J; Wynaden, D; McGowan, S; Juliff, D; Axten, C; Fitzpatrick, L; Ogilvie, S; Painter, S	Australia, 2003	To evaluate the use of the EPDS as a screening tool in child health context.	The EPDS is a useful screening tool for identifying women who may be at risk of developing postnatal depression. Further nurse education should be implemented in order to ensure best practise standards. There are special target groups at risk.
Fuggle, P; Glover, L; Khan, F; Haydon, K	India and United Kingdom, 2002	To describe the development and use of a Bengali version of the EPDS.	One item of the EPDS presented some translation difficulties. A translated version should be used in culturally sensitive way, and the health care worker has to have good knowledge about the use of the scale.
Gerrard, J; Holden, JM; Elliott, SA; McKenzie, P; McKenzie, J; Cox, JL	United Kingdom, 1993	To describe a project offered to health visitors in the use of the EPDS.	Training considering the use of the EPDS enabled the health visitors positively influence the emotional well-being of postnatal women. There is also a need for support from management, other members of the health care team, as well as back-up from psychological and psychiatric services.

Jomeen, J; Martin, CR	United Kingdom, 2007	To evaluate the predictive value of the EPDS.	The study supports the predictive value of the EPDS. Mental health nurses should be able to contribute to the identification and treatment of postnatal depression.
Leverton, TJ; Elliott, SA	United Kingdom, 2000	To present the relationships between EPDS plus a health visitor report, and EPDS plus psychiatric interview for a sample of mothers.	Both primary and secondary care providers require education about the EPDS and its implications before routine screening is introduced.

5 RESULTS OF THE REVIEW

After summarizing and going through the results and conclusions of each article chosen, the author started synthesizing and listing factors that gave answers to the research question. The most important factors considering the use of the EPDS by nursing professionals were at first listed starting from the factor most frequently mentioned in the researches. These factors are discussed in the discussion part. Three categories were formed to combine some of the similar factors and to make the results clear. Some of the categories are also linked to each other. Each category is explained more thoroughly.

The important factors in the use of the EPDS by nurses and the number of researches supporting these factors in brackets are presented below.

1. Education and training on how to use the EPDS (4)
2. Considering special groups of mothers (4)
3. Collaboration and support of the multiprofessional team (3)

Education and training in order to gain good skills in using the EPDS and considering the special groups of mothers were the first priorities in screening with the EPDS in clinical practise. These two factors were also many times linked to each other, when education and training enabled or would enable nursing staff to consider the special groups of mothers better. This is why these groups are explained together. The reason why the author presents education before the special groups was because of it being linked to both of the following groups.

Especially health care workers who are not specialized in mental health often are unfamiliar with recognising depressive symptoms. For example Leverton and Elliott (2000) suggested that health visitors are not mental health professionals and both primary and secondary care providers need education about the EPDS. Downie et al (2003) also suggested, that further nurse education should be implemented in order to ensure best practise standards and that there are special target groups at risk for high scores. These special target groups found out in this thesis include single mothers, women using the public health services associated with lower incomes and education levels, Bangladeshi women, and adolescents. Downie et al (2003), and Buist et al (2008) suggested, that single mothers, as well as mothers using the public health services were at a greater risk for scoring higher on the EPDS. When using the translated version of the EPDS being culturally sensitive as well as familiar with the tool was important. When screening postpartum adolescents, Derosa and Logsdon (2006) suggested, that the EPDS alone is not a reliable instrument to detect postnatal depression, but instead a combination of tools should be used for this purpose.

In addition to these factors, the third group formed was the collaboration and support of the multiprofessional team. Altogether 3 researches (Gerrard et al 1993, Jomeen & Martin 2007, Davies et al 2003) supported this factor being important in using the EPDS in clinical practise. The factor was also connected to the requirement of education, because of Davies et al (2003) suggesting that the skills to use the EPDS can be developed by close collaboration between the nursing staff.

Jomeen and Martin (2007) suggest, that also mental health nurses should have a chance to contribute and use their knowledge in screening for postnatal depression. Gerrard et al (1993) also mention the importance of collaboration in the primary care team, as well as support from management as well as psychological and psychiatric services.

6 RELIABILITY

Although the overall quality of the researches chosen for this review was good, 3 researches (Buist et al 2008, Fuggle et al, 2002, Leverton & Elliott 2000) from the chosen 8 showed some limitations. In the British research (Leverton & Elliott 2000) that presented the relationships between EPDS plus a health visitor report, and EPDS plus psychiatric interview for a sample of mothers, the inexperience of the health visitors in the use of the EPDS was considered a limitation. The health visitors had for example problems in referring the women scoring high on the EPDS to follow-up treatment.

In the Australian study (Buist et al 2008) describing the postnatal mental health of women giving birth in Australia 2002-2004 at 6-8 weeks postpartum the number of women returning the EPDS questionnaire was small. On the other hand the study discusses, that the number of depressed mothers may have been even higher, because of it being less likely for a depressed person to fill in and return a questionnaire. In the research considering the translated version of the EPDS (Fuggle et al 2002), the questionnaire was conducted as an oral conversation, which might have affected the results obtained.

7 LIMITATIONS

The possible limitations of this thesis constitute one researcher, the small number of researches, and that the researches were conducted in only three countries. According to Johansson et al (2007) at least two researchers are needed to achieve reliable results in a systematic literature review.

In the planning process of this thesis however, the systematic literature review was recommended for being done as a single work. Although the overall quality of researches in the review is good, it constituted only from 8 articles, which is a rather small number for achieving a reliable research. Altogether 5 researches were conducted in the United Kingdom (Gerrard et al 1993, Leverton & Elliott 2000, Jomeen & Martin 2007, Davies et al 2003, Fuggle et al 2002) one of these in both United Kingdom and India (Fuggle et al 2002). Two researches were conducted in Australia (Buist et al 2008 & Downie et al 2003) and one in the USA (DeRosa & Logsdon 2006). Also two of the researches supporting higher scores on the EPDS for single mothers, and women with lower education levels and incomes (Buist et al 2008 & Downie et al 2003) were both conducted in the same country, Australia.

8 DISCUSSION

The important factors in the use of the EPDS in clinical practise are now discussed more thoroughly. The three important groups of factors were:

1. Education and training on how to use the EPDS (4)
2. Considering special groups of mothers (4)
3. Collaboration and support of the multiprofessional team (3)

Education and training about the use of the EPDS was linked to both of the following categories. The women in danger scoring higher on the EPDS were mothers using the public health services associated with lower incomes and education levels, single mothers, postpartum adolescents and mothers from foreign cultures. The health care professional's ability to answer the needs of these groups is a challenge. Education and training was also essential when using the EPDS in a culturally sensitive way when dealing with mothers coming from different cultures.

Screening of foreign mothers was challenging for health care professionals since all the cultures have differential attitudes and perception of motherhood, family and depression. The studies chosen for this review support the fact that in addition to the use of the EPDS itself, it is essential for the nurse to be able to facilitate a conversation about depressive symptoms in a culturally sensitive way.

This would naturally mean having knowledge about different cultures. Repeated screening and contact with a mother from a different culture throughout the postpartum period would also give the practising nurse a chance to learn about the culture the mother is coming from. In Finland, at the end of the year 2008 there were 143 256 foreign citizens from over 20 countries and cultures (Tilastokeskus 2008).

In addition, being culturally sensitive would also apply to different minority groups. There are for instance 10 000 gypsies living in Finland (Unicef 2010). This ethnic group has their own language, customs and culture. Their attitudes towards pregnancy and child birth also differ considerably from the Finnish one, and the things related to the mother during and after pregnancy is a sensitive topic to talk about.

Collaboration and support from the multiprofessional team was considered to be important to the practising nurses. Support was needed from the management, as well as the mental health professionals, such as mental health nurses and also psychological and psychiatric services. Management was also expected to organise education and training about the use of the EPDS.

Health care workers not specialized in mental health might have limited knowledge about depressive disorders. In Finland, screening with the EPDS started at some child health clinics already in the year 2003. In 2005, a project was established for creating a new practise for recognising the symptoms of postnatal depression as early as possible to child health clinics in Vantaa, Finland. (Terveyden ja hyvinvoinnin laitos 2010.)

A psychiatric nurse met altogether 166 mothers at different child health clinics, and guided public health nurses in screening mothers for depressive symptoms with the EPDS in the postpartum period. The experiences in general from both the mothers and the public health nurses were positive. The mothers were happy to talk about their feelings at the clinic and to receive help and individual counselling from the psychiatric nurse when needed. The public health nurses, in turn, were thankful for the guidance and support they received in the use of the scale, and gained also valuable information about the depressive disorder itself. (Terveyden ja hyvinvoinnin laitos 2010.)

In addition to giving answers to the research question, the research process brought up also limitations for the use of the EPDS. The original idea was to create a second research question, but in order to keep the results of the thesis clearer, the author decided to mention this factor in the discussion part. Although Davies et al (2003) suggest, that health visitors should screen mothers repeatedly, one research (Mosack & Shore 2006) excluded from the review argued the EPDS being a valid screening tool for postpartum screening only. In turn, Vivilaki et al (2009) suggest that routine screening for mothers would facilitate more conversation about postnatal depression, and would therefore be beneficial to the overall discussion and recognition of the disorder.

9 CONCLUSION

The EPDS is a useful screening tool to be used in clinical practise by nurses, if they are appropriately trained to use it. Without proper education about the EPDS, the desirable results are hardly reached.

Education and training about the EPDS should be offered to all levels in the health care team, including management, head nurses, as well as practising nurses. Educating all members of the care team would also enable support and collaboration. According to the results of this thesis, education about screening special groups of mothers should also be implemented into the training programs.

10 SOURCE MATERIAL

Ainsworth, P. 2000. Understanding depression. USA. University Press of Mississippi.
<http://site.ebrary.com.ezproxy.turkuamk.fi/lib/turkuamk/docDetail.action?docID=10157908&p00=depression>

Referred 11.3.2011

Aveyard, H. 2007. Doing a Literature Review in Health and Social Care : A Practical Guide. Open University Press.
<http://site.ebrary.com.ezproxy.turkuamk.fi/lib/turkuamk/docDetail.action?docID=10229848&p00=systematic%20literature%20review>

Referred 11.3.2011

Bilszta, J; Ericksen, J; Buist, A; Milgrom, J. 2010. Women's experience of postnatal depression – beliefs and attitudes as barriers to care. Australian Journal of Advanced Nursing Vol. 27, No.3, 44-53.
<http://web.ebscohost.com.ezproxy.turkuamk.fi/ehost/pdfviewer/pdfviewer?vid=4&hid=18&sid=622c3909-10c7-4e8b-95e3-2e48ee57e1c4%40sessionmgr12>

Referred 9.3.2011

Boath, E & Henshaw, C. 2001. The Treatment of postnatal depression: a comprehensive literature review. *Journal of Reproductive & Infant Psychology* Vol 19 No. 3, 215-48.
<http://web.ebscohost.com.ezproxy.turkuamk.fi/ehost/pdfviewer/pdfviewer?vid=4&hid=107&sid=d9fb0c7f-b234-4b4e-a5ec-0cc9da568be6%40sessionmgr113>

Referred 21.4.2010

Buist, AE; Austin, MP; Hayes, BA; Speelman, C; Bilszta, JL; Gemmill, AW; Brooks, J; Ellwood, D; Milgrom, J. 2008. Postnatal mental health of women giving birth in Australia 2002-2004: findings from the beyondblue National Postnatal Depression Program. *Australian & New Zealand Journal of Psychiatry* Vol 42 No.1, 66-73.
<http://web.ebscohost.com.ezproxy.turkuamk.fi/ehost/pdfviewer/pdfviewer?vid=4&hid=111&sid=77d24526-a8c0-4964-8252-5f560f53b2f9%40sessionmgr111>

Referred 18.5.2010

Burcusa, SL; Iacono, WG. 2007. Risk for recurrence in depression. *Clinical Psychology Review* Vol 27 No.8, 959-985.

<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2169519/?tool=pmcentrez>

Referred 11.3.2011

Chew-Graham, CA; Sharp, D; Chamberlain, E; Folkes, L; Turner, KM. 2009. Disclosure of symptoms of postnatal depression, the perspectives of health professionals and women: a qualitative study. *BMC Family Practice* (Online).
<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2637839/?tool=pmcentrez>

Referred 9.3.2011

Clifford, C; Day, A; Cox, J; Werrett J. 1999. A cross-cultural analysis of the use of the Edinburgh Post-Natal Depression Scale (EPDS) in health visiting practice. *Journal of Advanced Nursing* Vol 30 No.3, 655-664.
<http://web.ebscohost.com.ezproxy.turkuamk.fi/ehost/pdfviewer/pdfviewer?sid=3769d2a9-d0ac-4a2f-932a-1171ba8dcfb1%40sessionmgr4&vid=5&hid=18>

Referred 10.3.2011

Craig, M & Howard, LM. 2009. Postnatal depression. *Clinical Evidence* (Online).
<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2907780/?tool=pmcentrez>

Referred 9.3.2011

Davies, BR; Howells, S; Jenkins, M. 2003. Early detection and treatment of postnatal depression in primary care. *Journal of Advanced Nursing* Vol 44 No.3, 248-55.
<http://web.ebscohost.com.ezproxy.turkuamk.fi/ehost/pdfviewer/pdfviewer?vid=8&hid=111&sid=77d24526-a8c0-4964-8252-5f560f53b2f9%40sessionmgr111>

Referred 16.4.2010

DeRosa, N & Logsdon, MC. 2006. A Comparison of Screening Instruments for Depression in Postpartum Adolescents. *Journal of Child and Adolescent Psychiatric Nursing* Vol 19 No.1, 13-20.

<http://web.ebscohost.com.ezproxy.turkuamk.fi/ehost/pdfviewer/pdfviewer?vid=5&hid=111&sid=77d24526-a8c0-4964-8252-5f560f53b2f9%40sessionmgr111>

Referred 16.4.2010

Downie, J; Wynaden, D; McGowan, S; Juliff, D. Axten, C; Fitzpatrick, L; Ogilvie; Painter, S. 2003. Using the Edinburgh Postnatal Depression Scale to achieve best practice standards. *Nursing and Health Sciences* Vol 5 No.4, 283-7.

<http://web.ebscohost.com.ezproxy.turkuamk.fi/ehost/pdfviewer/pdfviewer?vid=6&hid=111&sid=77d24526-a8c0-4964-8252-5f560f53b2f9%40sessionmgr111>

Referred 16.4.2010

Fuggle, P; Glover, L; Khan, F; Haydon, K. 2002. Screening for postnatal depression in Bengali women: preliminary observations from using a translated version of the Edinburgh Postnatal Depression Scale (EPDS). *Journal of reproductive and infant psychology* Vol 20 No.2, 71-82.

<http://web.ebscohost.com.ezproxy.turkuamk.fi/ehost/pdfviewer/pdfviewer?vid=13&hid=111&sid=77d24526-a8c0-4964-8252-5f560f53b2f9%40sessionmgr111>

Referred 16.4.2010

Gerrard, J; Holden, JM; Elliott, SA; McKenzie, P; McKenzie, J; Cox, JL. 1993. A trainer's perspective of an innovative program teaching health visitors about the detection, treatment and prevention of postnatal depression. *Journal of Advanced Nursing* Vol 18 No.11, 1825-32.

<http://web.ebscohost.com.ezproxy.turkuamk.fi/ehost/pdfviewer/pdfviewer?vid=18&hid=111&sid=77d24526-a8c0-4964-8252-5f560f53b2f9%40sessionmgr111>

Referred 16.4.2010

Glasziou, P. 2001. *Systematic Reviews in Health Care: A Practical Guide*. UK. Cambridge University Press.

<http://site.ebrary.com.ezproxy.turkuamk.fi/lib/turkuamk/docDetail.action?docID=10006795&p00=systematic%20literature%20review>

Referred 11.3.2011

Haddad, M. 2010. Caring for patients with long-term conditions and depression. *Nursing Standard* Vol 24 No.24, 40-50.

<http://web.ebscohost.com.ezproxy.turkuamk.fi/ehost/pdfviewer/pdfviewer?vid=5&hid=106&sid=f706832a-92a3-44c9-a963-a78ca1cb2f9d%40sessionmgr112>

Referred 13.4.2010

Hanusa, BH; Hudson Scholle, S; Haskett, RF; Spadaro, K; Wisner, KL. 2008. Screening for Depression in the Postpartum Period: A Comparison of Three Instruments. Journal of Women's Health Vol. 17 No.4, 585-596.

<http://web.ebscohost.com.ezproxy.turkuamk.fi/ehost/pdfviewer/pdfviewer?vid=4&hid=18&sid=aaea780a-61b4-42de-be52-be3fdf7ab0c5%40sessionmgr4>

Referred 10.3.2011

Henshaw, C & Elliott, S. 2005. Screening for perinatal depression. UK. Jessica Kingsley Publishers.

<http://site.ebrary.com.ezproxy.turkuamk.fi/lib/turkuamk/docDetail.action?docID=10096199&p00=edinburgh%20postnatal%20depression%20scale>

Referred 10.3.2011

Huang, Y; Mathers, N. 2001. Postnatal depression - biological or cultural? A comparative study of postnatal women in the UK and Taiwan. Journal of Advanced Nursing Vol 33 No.3, 279-87.

<http://web.ebscohost.com.ezproxy.turkuamk.fi/ehost/detail?vid=4&hid=18&sid=c983fd23-5c8c-4dfd-986b-fddc8170bee8%40sessionmgr10&bdata=JnNpdGU9ZWhvc3QtbGl2ZQ%3d%3d#db=cin20&AN=2001062800>

Referred 9.3.2011

Johansson, K; Axelin, A; Stolt, M; Ääri, RL. 2007. Systemaattinen kirjallisuuskatsaus ja sen tekeminen. Turku. Turun Yliopisto.

Jomeen, J & Martin, C.R. 2007. Replicability and stability of the multidimensional model of the Edinburgh Postnatal Depression Scale in late pregnancy. Journal of Psychiatric and Mental Health Nursing Vol 14 No.3, 319-24.

<http://web.ebscohost.com.ezproxy.turkuamk.fi/ehost/pdfviewer/pdfviewer?vid=11&hid=111&sid=77d24526-a8c0-4964-8252-5f560f53b2f9%40sessionmgr111>

Referred 18.5.2010

Leverton, T.J & Elliott, S.A. 2000. Is the EPDS a magic wand? A comparison of the Edinburgh Postnatal Depression Scale and health visitor report as predictors of diagnosis on the Present State Examination. Journal of Reproductive and Infant Psychology Vol 18 No.4, 279-96.

<http://web.ebscohost.com.ezproxy.turkuamk.fi/ehost/pdfviewer/pdfviewer?vid=7&hid=111&sid=77d24526-a8c0-4964-8252-5f560f53b2f9%40sessionmgr111>

Referred 16.4.2010

McCarthy, M & McMahon, C. 2008. Acceptance and experience of treatment for postnatal depression in a community mental health setting. *Health Care for Women International* Vol 29 No.6, 618-37.

<http://web.ebscohost.com.ezproxy.turkuamk.fi/ehost/pdfviewer/pdfviewer?vid=4&hid=107&sid=18848e75-7ec6-432f-b357-7efe8577800f%40sessionmgr112>

Referred 13.4.2010

Milgrom, J; Negri, LM; Gemmill, AW; McNeil, M; Martin, PR. 2005. A randomized controlled trial of psychological interventions for postnatal depression. *British Journal of Clinical Psychology* Vol 44, 529-542.

<http://web.ebscohost.com.ezproxy.turkuamk.fi/ehost/pdfviewer/pdfviewer?vid=4&hid=18&sid=a5120221-28b1-4cb4-90f9-60cecad6a1b%40sessionmgr13>

Referred 10.3.2011

Mosack, V & Shore, E. 2006. Screening for depression among pregnant and postpartum women. *Journal of Community Health Nursing* Vol 23 No.1, 37-47.

<http://web.ebscohost.com.ezproxy.turkuamk.fi/ehost/pdfviewer/pdfviewer?vid=5&hid=13&sid=f80abce9-7e02-46c0-b2eb-58c59e0dc24a%40sessionmgr10>

Referred 13.4.2010.

Paolucci, SL & Paolucci, SJ. 2007. Depression FAQs. B.C. Decker Incorporated.

<http://site.ebrary.com.ezproxy.turkuamk.fi/lib/turkuamk/docDetail.action?docID=10171430&p00=depression>

Referred 11.3.2011

Schanie CL; Pinto-Foltz MD; Logsdon MC. 2008. Analysis of popular press articles concerning postpartum depression: 1998-2006. *Issues in Mental Health Nursing* Vol 29 No.11, 1200-16.

<http://web.ebscohost.com.ezproxy.turkuamk.fi/ehost/pdfviewer/pdfviewer?vid=4&hid=106&sid=f706832a-92a3-44c9-a963-a78ca1cb2f9d%40sessionmgr112>

Referred 13.4.2010

Sit, D; Rothschild, AJ; Wisner, KL. 2006. A Review of Postpartum Psychosis. *Journal of Women's Health* Vol 15 No.4, 252-268.

<http://web.ebscohost.com.ezproxy.turkuamk.fi/ehost/pdfviewer/pdfviewer?vid=4&hid=18&sid=3335a9c1-3fd4-46e7-b1fe-bc72eb1b35be%40sessionmgr15>

Referred 10.3.2011

Sit, D & Wisner, KL. 2009. The Identification of Postpartum Depression. *Clinical Obstetric Gynecology* Vol 52 No.3, 456-468.

<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2736559/?tool=pubmed>

Referred 11.3.2011

Terveyden ja hyvinvoinnin laitos. 2010. Innovaatioita terveyden edistämiseen mielenterveys- ja päihdetyössä - kokemuksia Pohjanmaa-hankkeesta, Sateenvarjo-projektista ja Lapin mielenterveys- ja päihdetyön hankkeesta 2005-2009. Pages 11-15. Helsinki. Yliopistopaino.

Unicef. 2010. Lisätietoa romaneista.

http://www.unicef.fi/lisatietoa_romaneista

Referred 20.5.2010

Tilastokeskus. 2008. Väestö: Ulkomaiden kansalaiset.

http://www.stat.fi/tup/suoluk/suoluk_vaesto.html

Referred 19.5.2010

Vivilaki, VG; Dafermos, V; Kogevinas, M; Bitsios, P; Lionis, C. 2009. The Edinburgh Postnatal Depression Scale: translation and validation for a Greek sample. BMC Public Health.

<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2748079/?tool=pmcentrez>

Referred 13.4.2010.

Database: Cinahl

Search terms	Number of hits
postnatal depression	187
postnatal depression, screening	44
postnatal depression, nurses	14
postnatal depression, treatment	30
EPDS	69
EPDS, screening	27
EPDS, nurse	3

Database: PubMed: PubMed Central (PMC)

Search terms	Number of hits
postnatal depression	484
postnatal depression, screening	229
postnatal depression, screening, nurse	56
postnatal depression, treatment	344
postnatal depression, treatment, nurse	77
EPDS	132
EPDS, screening	90
EPDS, screening, nurse	25
EPDS, validation	6

1. I have been able to laugh and see the funny side of things:
 - o As much as I always could
 - o Not quite so much now
 - o Definitely not so much now
 - o Not at all
2. I have looked forward with enjoyment to things:
 - o As much as I ever did
 - o Rather less than I used to
 - o Definitely less than I used to
 - o Hardly at all
3. I have blamed myself unnecessarily when things went wrong:*

 - o Yes, most of the time
 - o Yes, some of the time
 - o Not very often
 - o No, never

4. I have been anxious or worried for no good reason:
 - o No, not at all
 - o Hardly ever
 - o Yes, sometimes
 - o Yes, very often
5. I have felt scared or panicky for no very good reason:*

 - o Yes, quite a lot
 - o Yes, sometimes
 - o No, not much
 - o No, not at all

6. Things have been getting on top of me:*

 - o Yes, most of the time I have not been able to cope at all
 - o Yes, sometimes I have not been coping as well as usual
 - o No, most of the time I have coped quite well
 - o No, I have been coping as well as ever

7. I have been so unhappy that I have had difficulty sleeping:*

 - o Yes, most of the time
 - o Yes, sometimes
 - o Not very often
 - o No, not at all

8. I have felt sad or miserable:*

 - o Yes, most of the time
 - o Yes, quite often
 - o Not very often
 - o No, not at all

9. I have been so unhappy that I have been crying:*

 - o Yes, most of the time
 - o Yes, quite often
 - o Only occasionally
 - o No, never

10. The thought of harming myself has occurred to me:*

 - o Yes, quite often
 - o Sometimes
 - o Hardly ever
 - o Never

Response categories are scored 0, 1, 2, and 3 according to increased severity of the symptom. Items marked with an asterisk () are reverse scored (i.e., 3, 2, 1, and 0). The total score is calculated by adding together the scores for each of the 10 items. Women with scores above 12 likely have depression.*

