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Evaluating the Edinburgh postnatal depression scale

A case study from Kingston Maternal and Child Health Service in South Melbourne, Victoria, Australia

About the authors

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Introduction

The Edinburgh postnatal depression scale, (EPDS) is a screening tool used to help professionals detect postnatal depression (PND). The EPDS has been found to be a reliable and valid measure for detecting PND and major depression and validated in other countries.

Early detection and treatment of PND improves outcomes for women and decreases the duration of the illness. Professionals caring for women in the postnatal period play a vital role in early detection and improved outcomes for women with PND.

Nurses at the Kingston Maternal and Child Health Service (MCH) in South Melbourne, Victoria, conducted a Quality Improvement (QI) project examining the usefulness of EPDS as a screening tool. Johns[1] says reflective practice is a 'developmental process to empower practitioners to achieve and sustain effective practice.' Reviewing the literature and providing an overview of PND, and the EPDS scale in particular, was seen as vital to the process. This enabled Kingston MCH nurses to reflect on current research and implement evidence-based practice.

Overview of PND

Postnatal depression (PND) is estimated to occur in 10%–20% of women, during the first year after birth.[2] Research and clinical experience has not found a definitive cause of PND. It is thought to be multi-factorial in nature, with biological, sociocultural, environmental and personal history factors influencing the symptoms and severity of the disorder.

It is estimated that 50% of PND occurs during the first three months and 75% within six months.[3] Postpartum disorders are not new phenomena, and were reported by Hippocrates. They also appear to be universal.[4]

The symptoms fit within the *Diagnostic and Statistical Manual IV* (DSM IV) criteria for major depression but there are unique features specific to women in the postnatal period.[5, 6]

Implications

A woman who is suffering from PND may feel distressed and not her usual self. This often impacts on her relationship with her baby.[7, 8] Interpersonal relationships also suffer, particularly with partners,[9] resulting in an increase in family discord and the risk of marital breakdown. Researchers have found that children whose mothers had PND exhibited behavioural, intellectual and emotional developmental problems.[10]

Diagnosis

Early detection and treatment of PND improves outcomes, decreasing the duration of the illness.[11] In the antenatal period, MCH nurses can assess and identify women at risk of developing PND.[12, 13] Alert professionals caring for women in the postnatal period can then monitor vulnerable women more closely, enabling earlier detection and better outcomes.

Primary care professionals who see postnatal women soon after birth, such as MCH nurses, general practitioners, obstetricians and paediatricians, are in a good position to ask the mother how she feels. Mothers are often aware they feel out of sorts and may even admit to PND, once asked. Often, they will be relieved to tell someone, who is outside the family and can be more objective.[14]

Although professionals and the

community have become more aware of PND the condition often remains undetected and untreated. It was for this reason the EPDS was developed.[15]

This simple self-report screening tool is specifically designed to help detect PND.[16] The originators of the scale suggest the recommended threshold score is able to correctly identify depressed women in 86% of cases. It is also recommended that the EPDS should be completed by mothers, initially five to eight weeks after birth, but may be re-administered after two weeks if there is a high score or there is doubt about the initial score.

Postnatal women are generally willing to complete the scale which takes less than five minutes to undertake and score.[17] The implications for the mother can be immediately discussed and a referral, if needed, can be arranged at the same time.

The EPDS is used worldwide to assist in the diagnosis of PND. The EPDS has been found to be a reliable and valid measure for detecting PND[18, 19] and major depression.[20] It has been translated and validated in other cultures.[21]

The EPDS has been found to have:

- a sensitivity (the proportion of women correctly identified as depressed) of 68%-96%;
- a specificity (the proportion of women who are correctly identified as not depressed) of 78%-100%; and
- a positive predictive value (the probability that a woman scoring above the recommended depression threshold of the test, is actually depressed) of about 70%.[22]

It has been suggested that lowering the threshold score would improve the rate of detection.[23] But lowering the score means the positive predictive value decreases, as more false positives are detected. Like all screening tools, the EPDS does not identify all women with PND and a high score does not necessarily mean a woman is depressed.[24]

Criticism of the EPDS

The EPDS is often used without any clear idea about what it is being used for. As a result, inappropriate decisions may be made on its administration, timing and scoring. Considerable stress can also be created where there are not supporting referral mechanisms, or if specialist services (such as mental health services) are poor, scarce or inaccessible. It is not clear who is responsible for follow up or what the moral, ethical and legal position is, if no action is taken for those who return a high score.[25]

Another problem arises when health professionals treat the EPDS as if it were a diagnostic instrument. The EPDS was not designed as a diagnostic tool. Pre-empting a diagnosis may alienate other health professionals who may be more qualified to make an accurate diagnosis.[26]

The EPDS does not make a differential diagnosis. Women who do not fit the clinical criteria for PND – with transient adjustment problems, who are irritable, not coping with children or having relationship problems – are often relieved at the diagnosis of 'postnatal depression,' as it provides an explanation for their experience.[27]

Small, advises caution in the routine use of the EPDS by primary care professionals because of the lack of a planned, coordinated approach to the care of women identified with PND, and a lack of evidence about the effectiveness of different treatment options.[28]

However, the use of the scale has at least led to vulnerable women being identified. Buist and colleagues from the Australian Postnatal Depression Initiative funded by beyondblue, argue: 'It is surely better to identify distress and attempt to deal with it than to deny its existence and suffer the potential long term consequences.'[29] As a result of widespread use of the EPDS there is now a more open approach to PND as primary care professionals, postnatal women, their families and the community are aware of the condition.

The stigma attached to this mental illness has diminished and many women do recover. Holden argues there is evidence that a structured early intervention program in clinical practice, including the EPDS, can help reduce the number of women who later present with high scores, thus alleviating long term consequences and misery for the woman and her family. She argues, 'Surely this is worth aiming for.' [30, 31]

The Quality Improvement project process at Kingston MCH service

Kingston MCH nurses were asked to complete a questionnaire about how useful they found the EPDS scale. Nurses were also asked to assess the user friendliness of the EPDS by completing the scale themselves.

Maternal and child health coordinators from Victoria were emailed regarding the use of the scale, the timing of its administration and usefulness.

Referral pathways and a flowchart were developed to assist MCH nurses to refer appropriately.

A year after the project, Kingston MCH nurses were again surveyed about their use and timing of the EPDS. They were also asked if their confidence in using the EPDS had increased or not and whether they found the referral pathways outlined in the flowchart useful.

Results and discussion

Only 34.5% of municipalities responded to the email sent to MCH coordinators across the state.

Respondents indicated they administered the scale to mothers at various times during the first year postpartum, ranging from six weeks to 12 months.

Some municipalities participating in a La Trobe University Prism Project had been asked not to give the EPDS to mothers themselves. In these areas the scale was administered by project researchers.

Municipalities using the EPDS found the scale to be both useful and user friendly. They found administering the EPDS was a good way to raise awareness of PND among MCH nurses and mothers. Some coordinators said using the scale helped uncover women with PND who may have been missed had the scale not been used. Most municipalities noted the need for good referral pathways for suspected PND.

All Kingston MCH nurses responding to the first questionnaire reported using the EPDS as part of their practice. This contradicted original statements by some MCH nurses who said they did not use the EPDS at all. One explanation may be that nurses did not want to admit this when initially asked, as it is practice protocol that the EPDS be administered to all mothers at six weeks postpartum. Five MCH nurses chose not to submit the questionnaire and recent staff changes may also have impacted on the results.

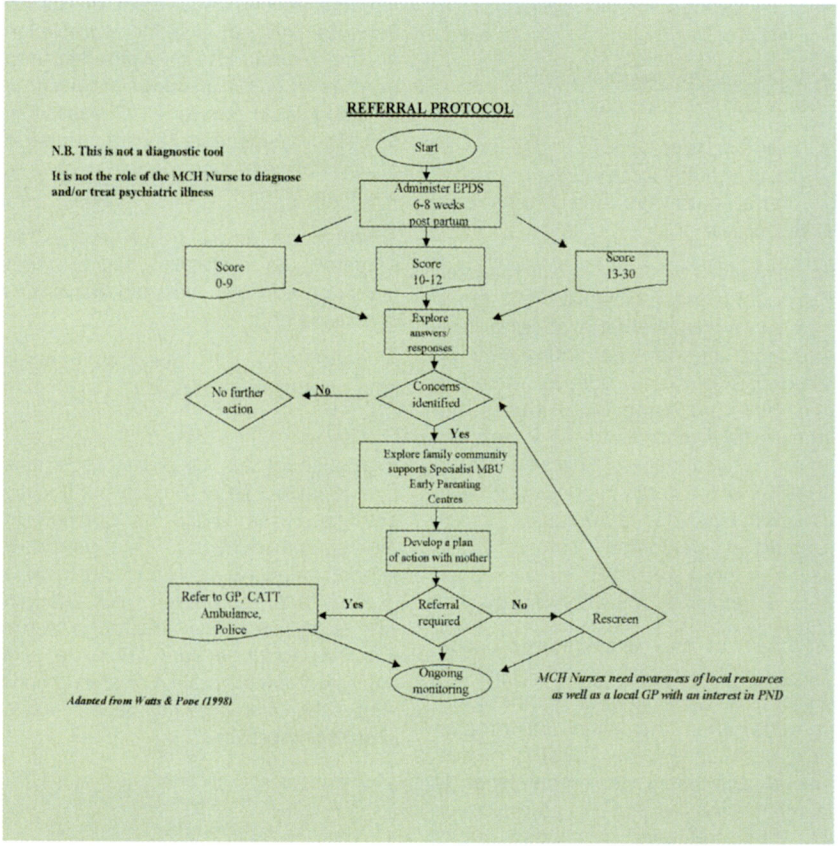
There was also variation about when the EPDS was administered, with Kingston

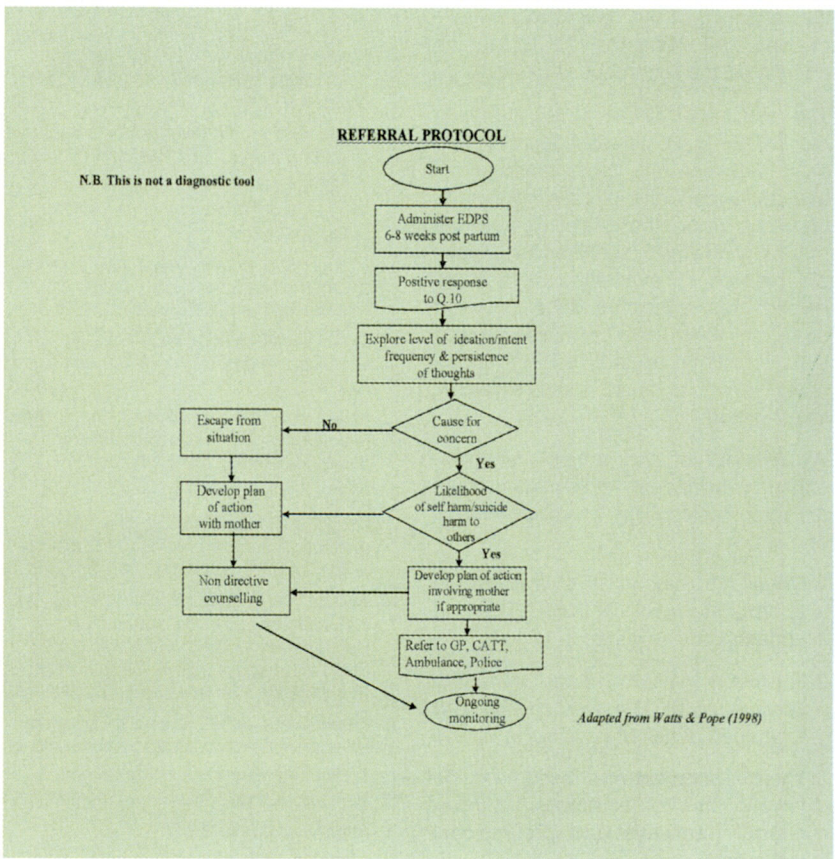
MCH nurses reporting they gave the EPDS to mothers from one to four months postpartum. The majority administered the scale between six and eight weeks postpartum.

To assist Kingston MCH nurses to use the EPDS scale effectively a flow chart (right) was developed, together with guidelines for procedural steps in the administration of the EPDS.

Recommendations for Kingston MCH services

- For the EPDS to be used effectively as a screening tool, nurses should administer the EPDS within six to eight weeks after delivery. This is an optimal time frame as research suggests 50% of PND occurs during the first three months. Nurses should use their clinical judgement in repeating the EPDS at other times during the first year postpartum.
- The flowchart should be displayed prominently in all MCH centres with the local Mental Health Triage phone number clearly shown.
- Kingston MCH nurses should give mothers the Kingston week four handout, which outlines clearly the symptoms of PND and where to get help.
- As part of informed consent, mothers should be advised at the week four visit that they will be asked to complete the EPDS between weeks six and eight, as a way of raising the issue of their emotional wellbeing. They should also be made aware they do not have to complete the EPDS if they do not wish to do so.
- Appropriate referral pathways should be developed.
- Links with local GPs who have an interest in PND should be developed.
- MCH nurses should use appropriate local counselling and support services.
- MCH nurses should maintain links with local Mother Baby Units and specialist psychiatric facilities.
- MCH nurses should improve liaison with maternity services so they are alert to women at risk of developing PND.
- MCH centres should provide ongoing training for its MCH nurses about the appropriate use of the EPDS, being sure to update any new staff.





- MCH centres should develop local PND groups.
- MCH centres should provide up to date training in regard to PND.
- MCH centres should develop a resource guide for its nurses, including referral pathways and professional resources.

In response to this project Kingston Council funded a specific PND group run by a psychotherapist who also provides one to one counselling as needed. There is no cost for attending the group. Kingston MCH nurses can directly refer mothers to the Parent and Infant Relationship Support Group (PAIRS), which is run in conjunction with Central Bayside Community Health Centre, in Melbourne, Victoria. These services have provided much needed referral resources in the community.

As part of the evaluation process, Kingston MCH nurses were given a second questionnaire to complete, 12 months after the initial QI project. The questionnaire investigated nurses' use of the EPDS, their confidence in administering the tool and an evaluation of the strategies developed as a consequence of the project recommendations. All Kingston MCH nurses completed the second questionnaire.

The results indicate all nurses are using the EPDS. Most nurses administer the scale between the recommended six and eight weeks and express more confidence in using the scale. Established referral pathways and an awareness of resources available have also helped. Most nurses found the flow chart useful in their practice. Three nurses indicated they do not use the flowchart. Why this is so requires further investigation.

While most of the project recommendations have been implemented, there are three outstanding which are worthy of mention:

1. Ongoing training for all staff about the appropriate use of the EPDS and updating any new staff.
2. Improved liaison with maternity services so MCH nurses can be alert to women at risk of developing PND.
3. The development of a resource guide for Kingston MCH nurses including referral pathways and professional resources.

Although recent Department of Human Services training and the completion of the Mental Health Aptitudes into Practice (MAPS) training – by some Kingston MCH nurses – addresses the first recommendation in part, the issue of all staff receiving ongoing training, and training for new staff remains.

There is an active movement within Kingston to improve liaison with maternity services, yet this remains a continuing process.

A committee has been formed to develop the resource guide.

Conclusion

Evaluation of this QI project illustrates that Kingston MCH nurses confidently administer the EPDS as outlined in the recommendations. There are now referral pathways and useful resources in the local community for women with suspected PND. Although some recommendations are still to be implemented, this project clearly demonstrates the QI process has been effective in changing practice.

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Focus Brief

National voice for palliative care nurses

Palliative Care Nurses Australia (PCNA) is a new organisation which provides a national voice to all nurses engaged in palliative care.

Nurses in the field have long expressed an interest in forming a national organisation according to Professor Margaret O'Connor, the Vivian Bullwinkel chair in nursing, palliative care at Monash University, and interim chair of PCNA.

Professor of palliative care at Edith Cowan University, Linda Kristjanson, said the PCNA would provide members with an opportunity to promote palliative care as their clinical specialty, and make links with other nurses similarly interested.

See www.pallcare.org.au