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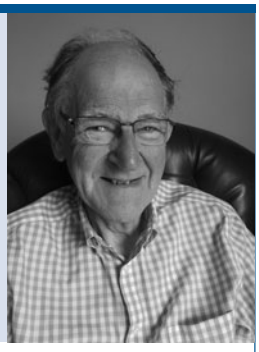
Editorial

Thirty years with the Edinburgh Postnatal Depression Scale: voices from the past and recommendations for the future

John Cox



Summary

The Edinburgh Postnatal Depression Scale (EPDS) was published over 30 years ago as a ten-item self-report questionnaire to facilitate the detection of perinatal depression – and for use in research. It is widely used at the present time in many regions of the world and has been translated into over 60 languages. It is occasionally misused. In this editorial, updated recommendations for optimal use in primary and secondary care as well as research are provided. Future studies to evaluate its use and validity in naturalistic community populations are now required, and to determine the psychometric properties and practical usefulness of the EPDS when completed online.

Declaration of interest

J.C. has no financial interest in the use of, or reproduction of, the EPDS.

Keywords

Edinburgh Postnatal Depression Scale; screening; translations; guidelines; post natal depression.

John Cox is Professor Emeritus of Psychiatry at Keele University, UK. He is Past President of the Royal College of Psychiatrists and former Secretary General of the World Psychiatric Association. He is a founder member of the Marcé Society. Currently he continues academic work in Cheltenham – as well as his interest in music and the brain.

Fifty years ago, Brice Pitt published a seminal paper "Atypical' depression following childbirth' in the *British Journal of Psychiatry*.[1] Pitt was the first to develop a self-report questionnaire to detect women who were depressed postpartum – and commented on the adverse impact of depression on the infant – and other family members. He was alerted to the frequency of this common mood disorder by health visitors in the East End of London. His finding that 10.8% of new mothers developed a marked depression postpartum influenced and challenged a generation of perinatal community researchers.[2–5]

The Edinburgh Postnatal Depression Scale (EPDS): early origins

Pitt's research inspired me to carry out a controlled study of perinatal psychiatric morbidity in 263 rural women in Uganda, and later a prospective study in Edinburgh – each using the Structured Psychiatric Interview. These early studies[6,7] uncovered much unmet need and exposed a very large treatment gap. Most women were unable to care adequately for their infants – and most women with depression in the Edinburgh study had marked relationship problems with their partner. At that time specific therapy for this condition was unavailable, and existing depression scales (the Hospital Anxiety and Depression Scale (HAD), General Health Questionnaire, Beck Depression Inventory) lacked criterion and face validity for postnatal depression. Hence, a short self-report questionnaire acceptable to mothers and health professionals, with satisfactory psychometric properties, was required.

With Jenifer Holden and Ruth Sagovsky, I therefore set about this task in an iterative manner to enable detailed feedback from the women and primary care workers on the content, wording and ordering of items – several from existing scales, such as the HAD and other items of our own construction. We rejected somatic items because it was very difficult, in a self-completed scale, to distinguish the somatic symptoms caused by physiological changes of childbirth from those associated with a mood disorder. Other items were omitted because they seemed inappropriate for the social and domestic circumstances of the peripartum period – or were too intrusive. Each item was carefully piloted.

Our initial validation study[8] confirmed the acceptability of the scale, and found a cut-off of 12/13 (range 0–30) gave optimal sensitivity (86%) and specificity (78%) for Major and Minor depression using research diagnostic criteria. The EPDS should be administered by a health professional trained to identify women with a 'false negative' score, who may have a severe retarded depression or psychotic symptoms. The sensitivity of item 10 ('the thought of harming myself has occurred to me') was not separately established, but any mother scoring above zero on this item should be carefully assessed.[9] The EPDS, for example, does not provide a differential diagnosis: a score above cut-off can occur in a mother with post-traumatic stress disorder or an anxiety disorder. The cut-off of 12/13 was found to be useful in a secondary-care parent and baby day unit, which I founded, in Stoke-on-Trent as both a referral criterion and outcome measure.

Screening

In a review of EPDS validation studies, the scale was an effective screening tool for Major and Minor depression at a cut-off of 9/10, but its accuracy increased if the cut- off was raised to 12/13.[10] There was marked heterogeneity in the studies reviewed – especially when the EPDS was used in translation. It is essential therefore, in screening and cross-cultural studies, to establish the semantic, technical, diagnostic and conceptual equivalence of the EPDS before the scale is used in clinical work or research. Nuances of language can change over time, and the vagaries of mood states and the meaning of metaphors ('things have been getting on top of me')

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are also not static. The EPDS, although developed as a self-completion questionnaire, is also used as a starting point for discussion with the mother about her symptoms. In this way the nature of the underlying psychiatric condition is clarified, and the impact of any disorder on the infant and extended family determined.[9] Its use in a secondary-care services such as a mother and baby unit or a day unit facility has yet to be more fully established.

International use

In several countries (for example USA, Sweden, Faroe Islands, Malta, Australia, and Scotland) the EPDS is a core component of national screening programmes. In England the National Institute for Health and Care Excellence (NICE) recommendations suggest its use as an adjunct to asking the two Whooley screening questions for depression and, contrary to much opinion in the USA,[11] do not recommend universal screening. I hope that NICE will recommend universal screening as new clinical and research evidence becomes available. Interestingly in this regard the EPDS performed slightly better than the oral Whooley questions when used with an interpreter.[12] The accuracy and honesty of the item responses can increase when a collaborative relationship with the health professional is established, and when the scale is used with an experienced interpreter. The EPDS has been translated into over 60 languages and our initial validation in Edinburgh is a frequently cited publication.

Updated recommendations for current use

The Appendix lists ten updated recommendations for optimal use at the present time.[13]

Future developments

The national and international meetings of the Marcé Scientific Society, the Global Alliance for Maternal Mental Health and the Perinatal Faculty of the College can each provide a forum where new thinking about the EPDS and other scales can be considered. The EPDS for example is available as an app in the USA, with measures of child development reported by mothers, supervised by community paediatricians. In the UK, phase two funding from NHS England for community perinatal services can support studies to establish more thorough evidence-based screening and the development of outcome measures sensitive to mother–infant bonding, attachment between parents and the integrative person-centred approach. Restoration of the key role of health visitors and training the trainers programmes, pioneered in Edinburgh, London and Stoke-on-Trent, would improve services for young families. These programmes should include for example how to ask the Whooley questions, how to listen to the answers, how to create culturally sensitive referral pathways (including fathers), how to mend fractured relationships, and how to administer the EPDS and other screening scales optimally.

Brice Pitt is a voice from the past, but his research, leadership, advocacy and familiarity with the hidden dynamics of human relationships are of contemporary importance. He understood as an educator, researcher and clinician the key tasks for psychiatrists in this multidisciplinary field. Perinatal psychiatry, and the use of the EPDS, are each rooted in the understanding of reproductive biology, the genomics of mood disorder and the cultural context of the developmental processes that occur at this time. Mixed methods studies to evaluate the use of the EPDS in naturalistic community populations, and to determine the scales practical usefulness when completed online are required.

This new evidence base for the use of the EPDS and other screening scales would enable firmer international advocacy for screening and treatment of these disabling disorders and so relieve much suffering.

John Cox, Professor Emeritus of Psychiatry, Keele University, UK

Correspondence: 23 New Court, Lansdown Rd, Cheltenham GL50 2JG, UK.
Email: John6.cox@gmail.com

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Appendix

Ten updated recommendations for the optimal use of the Edinburgh Postnatal Depression Scale (EPDS) (reproduced with permission from *Archives of Women's Mental Health*, 2017)[13]

1. Be careful to check the validity of the scale for the population of mothers completing the EPDS.
2. Establish its sensitivity, specificity, positive predictive value and optimal cut-off points for the purpose of your clinical or research work.
3. Remember that the EPDS is NOT diagnostic of mental disorder. A 'high score' indicates that depressive symptoms are present – but not their duration or intensity. The EPDS is not a test for postnatal depression or for an anxiety disorder.
4. When using the EPDS in other languages, make sure that the back translation is satisfactory and that there is also evidence of satisfactory face, semantic, conceptual and technical validity.
5. Remember that the EPDS is NOT a checklist of common symptoms of perinatal depression. It deliberately omitted somatic symptoms and items concerned with the mother–infant relationship.
6. Remember that the EPDS was validated, piloted and evaluated in Edinburgh by a clinically informed research team to assist with the detection of postnatal and antenatal depression in community clinics.
7. When using the EPDS as an aid to assessment, or in universal or targeted screening, remember that its administration must be supervised by a trained health professional with access to mental health services.
8. When used to assess a mother in the community, the practitioner should discuss the responses with her, listen to her story, ascertain whether clinical depression or another mental disorder is present – and consider referral and/or further listening visits.
9. The risk of developing a postnatal psychosis should always be assessed. The EPDS does NOT screen for bipolar disorder.
10. The EPDS was developed in Edinburgh over 30 years ago. Please read the recent EPDS Manual[9] so that the scale continues to be used optimally in research and clinical work.

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