

ABSTRACT

Background – Postpartum depression, which is known to appear within six weeks of child birth, is a disabling illness, which has an impact on the well being of the mother, the child and the whole family. No research on postpartum depression has been carried out so far in Sri Lanka. Screening for postpartum depression in the community needs a valid instrument to identify cases.

Objective – To study the prevalence, incidence and correlates of postpartum depression.

Methodology – This was a community based prospective study, carried out in the District of Puttalam, in Sri Lanka, during the period of October 2003 to April, 2004. The study was carried out in two stages;

Stage I: The translated Sinhala version of Edinburgh Postnatal Depression Scale (EPDS) was validated to detect depression in a community based sample of antenatal (at 34 weeks of POA) and postnatal (at 6 weeks after partus) mothers. Sinhala is the mother tongue of the majority community in Sri Lanka. For criterion validation of the screening instrument the ‘gold standard’ was the psychiatric diagnosis by a Consultant Psychiatrist based on ICD – 10 diagnostic criteria. The cut off points to detect depression was determined by ROC curves drawn separately for antenatal and postnatal mothers.

Stage II: The prevalence, incidence and the correlates of postpartum depression was studied in a community based sample of mothers, in the Puttalam District. A sample of 1100 mothers were assessed antenatally at 34 weeks of POA, using the EPDS. Questionnaires on socio demographic data and on reproductive health, Maternity Social Support Scale, Abuse Assessment Questionnaire and the Modified Life Events Inventory were also administered at the same time to identify the independent variables associated with postpartum depression. Second assessment was at 6 weeks after child birth, using the validated EPDS for postnatal mothers. The questionnaire on delivery and the index child was also administered at the same time.

Significant variables associated with postpartum depression were identified by univariate analysis. Multivariate logistic regression analysis was applied to prevalent and incident cases of postpartum depression for controlling for confounding factors and the results were expressed as odds ratios and their 95% confidence intervals.

Results -

Stage I: The translated Sinhala version of EPDS was found to detect depression in antenatal mothers at a cut off score of '9' with a sensitivity of 90.7% and a specificity of 86.8%. A score of '9' was found to detect depression in postnatal mothers at a sensitivity of 89.9% and a specificity of 78.9%.

Stage II: Using the above cut offs the prevalence of postpartum depression in the district of Puttalam was 32.1% and the incidence 23.9%.

The sample of mothers recruited were mainly Sinhala (95.7%) Buddhists (54.7%). Mean age was 25.8 years (S.E. = 3.3; Range = 15 – 40 years). Most of them were married (98.1%) and were housewives (90.1%). Fifty percent of the mothers had studied at least up to Grade 10. More than half (60.6%) lived in nuclear families and 22.5% belonged to the low social class. Forty percent of them were primies. Nineteen percent of them had not planned this pregnancy. Most (83.1%) had normal vaginal deliveries.

In the univariate analysis the following variables were found to be significantly associated with prevalent and incident cases of postpartum depression:

Prevalent cases – Low level of education of the mother (OR=1.4; 95% CI: 1.1 –1.8), low social status (OR=1.6; 95% CI: 1.2 –2.1), unplanned pregnancy (OR=1.95; 95% CI: 1.4 – 2.7), lack of family support (OR=2.5; 95% CI: 1.7 –3.6), lack of support from the husband/partner (OR=1.8; 95% CI: 1.2 –2.7), conflicts with the husband (OR=1.6; 95% CI: 1.3–2.1), a feeling of not being loved by the husband (OR=2.5; 95% CI: 1.4 –4.6), ever physical abuse (OR=2.9; 95% CI: 1.9 –4.3), physical abuse with in last year (OR=5.3; 95% CI: 2.8 –10.0), physical abuse during pregnancy (OR=10.6; 95% CI: 3.6 –

31.5), serious illness requiring hospital admission (OR=1.6; 95% CI: 1.04 –2.60), death of a close friend (OR=2.1; 95% CI: 1.3 –3.3), use of harsh words by husband (OR=3.1; 95% CI: 2.1 –4.5), arguments with husbands (OR=3.7, 95% CI: 2.2 –6.2), unfaithful partner (OR=2.7; 95% CI: 1.4 –5.0), arguments among family members (OR=2.3; 95% CI: 1.3 –4.2), recent involvement in a big fight (OR=3.2; 95% CI: 1.6 –6.6), head of household becoming unemployed (OR=2.5; 95% CI: 1.2 –5.3), family income reduced drastically (OR=1.9; 95% CI: 1.3 –2.6), getting into debt beyond means of repayment (OR=2.4; 95% CI: 1.5 –3.8), normal vaginal delivery (OR=1.9; 95% CI: 1.3 –2.8), low birth weight of the baby (OR=1.5; 95% CI: 1.01 –2.30), illness in the baby (OR=1.98; 95% CI: 1.30 –3.10), and poor sleeping pattern of the baby at night (OR=1.4; 95% CI: 1.04 –1.90).

Incident cases – Ever physical abuse (OR=1.9; 95% CI: 1.08 –3.40), death of a close friend (OR=2.1; 95% CI: 1.3 –3.5), use of harsh words by the husband (OR=1.9; 95% CI: 1.04 –3.30), arguments among family members (OR=3.0; 95% CI: 1.3 –7.3), head of household becoming unemployed (OR=2.9; 95% CI: 1.1 –7.7), normal vaginal delivery (OR=2.1; 95% CI: 1.2 –3.5), condition of the baby (OR = 5.7; 95% CI = 1.7 – 19.9), pre maturity of the baby (OR=2.2; 95% CI: 1.3–2.3) and illness in the baby (OR=2.2; 95% CI: 1.2 –3.8).

From the multivariate analysis nine factors were identified as significant correlates of prevalent cases of postpartum depression and six factors for incident cases. Three factors were common to both prevalent and incident cases, namely, recent death of a close friend [OR = 2.2 (prevalent cases), 2.5 (incident cases)], having a normal vaginal delivery at the present pregnancy [OR = 1.7 (prevalent cases), 2.2 (incident cases)] and illness in the new baby [OR = 2.1 (prevalent cases), 2.4 (incident cases)].

Unplanned pregnancy was significant factor in prevalent cases (OR = 1.6). Turmoil at home by way of conflicts with the husband (OR = 1.3), subject to physical abuse during pregnancy where the husband was the abuser in 78% of the mothers and harsh words by

the husband (OR = 2.1) were significant factors associated with postpartum depression in prevalent cases. ✓

Problems in the baby, such as the low birth weight (OR = 1.6 in prevalent cases), prematurity (OR = 2.2 in incident cases), condition of the baby (OR = 1.8 in incident cases), and poor sleeping pattern of the baby (OR = 1.6 in prevalent cases) were also significant associates of postpartum depression.

Conclusions and Recommendations - The EPDS was considered a reliable and valid instrument to determine postpartum depression and the cutoff scores were identified as 9/10 for antenatal and postnatal mothers. Prevalence and incidence of postpartum depression was 32.1% and 23.9% respectively. The correlates for prevalence were unplanned pregnancy, conflicts with husband, physical abuse during pregnancy, use of harsh words by the husband, death of a friend, normal vaginal delivery and low birth weight, illness and poor night sleeping pattern of the baby. The correlates for incidence were death of a friend, arguments with family members, normal vaginal delivery, condition of the baby, pre maturity and illness of the baby.

The use of the EPDS is recommended for field use by the public health staff. Mental health services to be made available and accessible. Family and pregnancy planning to be strengthened. To carryout awareness programs for health staff and the community on postpartum depression. To emphasize on life skills and personality development among the adolescent. Marriage counseling to be made available to address issues of abuse and family conflicts. To strengthen the extended family system in order to support the mother in the care of the baby.

Key words: postpartum depression, Edinburgh Postnatal Depression Scale, prevalence, incidence, correlates, unplanned pregnancy, physical abuse, life events.