

Prevalence of Postpartum Depression in Mothers Presenting to a Pediatric Otolaryngology Clinic

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Background

Postpartum depression (PPD) affects 13-20% of mothers and is one of the most common complications of pregnancy, yet frequently goes undiagnosed or untreated. Lack of treatment has been associated with long-term consequences for both the mother and child, including effects on cognitive, emotional, social, and language development of the infant.

Sleep and/or feeding issues in infants have been associated with maternal psychological stress. Pediatric otolaryngologists commonly evaluate patients with diagnoses that contribute to these issues, and we hypothesize that there may be an increased rate of mothers with PPD presenting to these clinics. Pediatric otolaryngologists are suspected to be well-placed to observe the mother-child dyad in clinic and intervene if PPD is suspected.

Objective

This study seeks to further understand the specific risk factors for development of PPD with the goal of improved recognition and utilization of screening.

Methodology

A prospective cohort study was designed to screen for PPD in mothers of infants presenting to the pediatric otolaryngology clinic at this a large tertiary care children's hospital. Mothers who qualified for inclusion and consented were presented with Edinburgh Postnatal Depression Scale (EDPS) to complete during their visit.

Data

Table 1: Mother and child's demographics stratified by mother's EPDS score. *statistically significant, p<0.05.

| | ≤10 (N=69) | >10 (N=16) | P-value | Overall (N=85) |
|---|-------------------|-------------------|---------|-------------------|
| Mother's age at time of consent (years) | | | | |
| Mean (SD) | 32.8 (4.56) | 28.3 (4.33) | 0.0011* | 32.0 (4.83) |
| Median (Q1, Q3) | 32.9 (29.9, 35.6) | 28.9 (26.0, 31.2) | | 32.3 (29.3, 35.2) |
| Payer type | | | | |
| Private | 39 (67.2%) | 6 (50.0%) | 0.325 | 45 (64.3%) |
| State assistance (Medicare, Medicaid, CHIP, etc.) | 19 (32.8%) | 6 (50.0%) | | 25 (35.7%) |
| Missing | 11 (15.9%) | 4 (25.0%) | | 15 (17.6%) |
| Diagnosis category | | | | |
| Craniofacial (Cleft lip, cleft palate, MDO/PRS) | 8 (13.6%) | 1 (7.69%) | 0.805 | 9 (12.5%) |
| Ear infections | 3 (5.08%) | 1 (7.69%) | | 4 (5.56%) |
| Microtia or ear malformation | 28 (47.5%) | 5 (38.5%) | | 33 (45.8%) |
| Noisy breathing | 6 (10.2%) | 2 (15.4%) | | 8 (11.1%) |
| Tongue or lip tie | 11 (18.6%) | 4 (30.8%) | | 15 (20.8%) |
| Other | 3 (5.08%) | 0 (0%) | | 3 (4.17%) |

Table 2: Mother's EPDS score by child's diagnosis category. *statistically significant, p<0.05

| | Craniofacial (N=9) | Microtia or ear malformation (N=33) | Noisy breathing (N=8) | Tongue or lip tie (N=15) | Other (N=7) | P-value | Overall (N=85) |
|------------------------------------|--------------------|-------------------------------------|-----------------------|--------------------------|-------------------|---------|-------------------|
| EPDS Score: Mean (SD) | 6.67 (3.87) | 6.82 (2.90) | 6.88 (4.49) | 7.67 (3.90) | 7.29 (2.56) | <0.001* | 7.13 (3.32) |
| EPDS Score: Median (Q1, Q3) | 5.00 (4.00, 7.00) | 6.00 (5.00, 8.00) | 4.50 (4.00, 7.75) | 7.00 (4.50, 10.5) | 7.00 (6.00, 8.00) | | 6.00 (4.00, 9.00) |
| EPDS Category: ≤10 | 8 (88.9%) | 28 (84.8%) | 6 (75.0%) | 11 (73.3%) | 6 (85.7%) | <0.001* | 69 (81.2%) |
| EPDS Category: >10 | 1 (11.1%) | 5 (15.2%) | 2 (25.0%) | 4 (26.7%) | 1 (14.3%) | | 16 (18.8%) |

Results

85 EPDS screens were available for analysis. Results demonstrated a significantly lower mean age of 28.3 years for positive screening compared to 32.8 years for negative screening.

The rate of positive PPD screening among mothers of infants presenting to pediatric ENT clinic was 18.8%. An increased rate of positive screening was demonstrated within the subgroups of frequent noisy breathing (25%) and tongue or lip tie (26.67%).

Conclusions

This study demonstrates the potential benefit of increased PPD screening of mothers of children with sleeping, eating, or airway issues, as well as young mothers and those of lower socioeconomic classes.

Additionally, this study demonstrates how the integration of PPD screening in specialty clinics may aid the diagnostic process and help to identify mothers who could utilize additional support and referrals for care.

Disclosures

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