Published in final edited form as:

Arch Womens Ment Health. 2011 August ; 14(4): 363–364. doi:10.1007/s00737-011-0228-0.

Postpartum depression: the distribution of severity in a community sample

Lauren O. Pollack

Department of Psychology, University of Missouri-Kansas City, Iowa City, IA 52242, USA

Lisa S. Segre

College of Nursing, University of Iowa, Iowa City, IA 52242, USA

Michael W. O'Hara

Department of Psychology, University of Iowa, Iowa City, IA 52242, USA

Scott Stuart

Department of Psychiatry, University of Iowa, Iowa City, IA 52242, USA

Dear Editor,

The prevalence of postpartum depression (PPD) is well established by a wealth of epidemiological studies (Gavin et al. 2005). Nevertheless, because PPD status is often dichotomous and based on DSM-IV criteria for major depressive disorder (MDD) or on an established cutoff score, little is known about the variation in symptom severity among those diagnosed as depressed. Accounting for variation in severity levels among depressed women would not only inform treatment referrals, but would also improve specificity in the identification of research participants for treatment trials and may more accurately account for differential treatment responses.

To describe variation in depression severity in a sample of clinically depressed women, we analyzed a previously collected data set (O'Hara et al. 2000) with demographic and diagnostic data from 292 women who were recruited for a treatment trial. The data reflect pretreatment depression status. Demographically, these women were predominantly white (96.9%, $n=283$), non-Hispanic (97.9%, $n=286$), and married (87.7%, $n=256$), with an average age of 28.4 years. Over half (59.9%, $n=175$) were employed with an average annual household income of approximately US \$40,200 and average educational level of 14.6 years. All women were diagnosed with MDD according to the Structured Clinical Interview for DSM-IV Disorders (SCID); women with minor depression were not included in the data set. Scores on the Hamilton Rating Scale for Depression (HRSD) were available for each woman.

Using five previously established levels of depression severity based on HRSD scores (Furukawa et al. 2007), we calculated the frequency of depressed women at each severity level. These severity levels have been defined as “level 1—normal/no illness” (HRSD 0–3), “level 2—borderline ill” (HRSD 4–7), “level 3—mildly ill” (HRSD 8–15), “level 4—moderately ill” (HRSD 16–26), and “level 5—severely ill” (HRSD 27–50).

The results indicate that even within a clinically depressed sample of women, there is a wide range of depression severity (Table 1). Noteworthy are the 5% of women who were

diagnosed with MDD based on the SCID, yet received low HRSD scores. One explanation for this discrepancy is that the SCID and HRSD assess slightly different time periods; the SCID assesses the worst 2 weeks in the last month while the HRSD assesses the past week.

These results have important treatment and research implications. From a stepped care model perspective, depressed women with symptoms in the mild range may require less intensive treatment, such as a support group, while depressed women with more severe symptoms may require more aggressive treatment, like therapy or medication. Tailored treatment plans for women suffering from different severity levels of PPD have the potential to be efficient in terms of both time and cost. These results are also potentially informative for clinical research where treatments might have differential efficacy based on depressive severity level. Future treatment trials might examine outcome based on clusters of depression severity to better account for variation in treatment response.

Although these results are not surprising, to our knowledge, this is the first study to analyze the frequency of PPD by severity level. Admittedly, the data set of the present analysis is homogenous in terms of both ethnicity and marital status, so it would be valuable for future studies to examine varying severities of PPD in a more diverse sample. In conclusion, given the aforementioned treatment and research benefits of identifying clinically depressed women by severity level, it is hoped that clinicians and researchers will consider this factor in the future.

Acknowledgments

This work was supported by a grant from the National Institute of Mental Health, Bethesda, MD. MH50524 (PI Dr. Michael O'Hara).

References

- Furukawa TA, Akechi T, Azuma H, Okuyama T, Higuchi T. Evidence-based guidelines for interpretation of the Hamilton Rating Scale for Depression. *J Clin Psychopharmacol.* 2007; 27(5): 531–534. [PubMed: 17873700]
- Gavin NI, Gaynes BN, Lohr KN, Meltzer-Brody S, Gartlehner G, Swinson T. Perinatal depression: a systematic review prevalence and incidence. *Obstet Gynecol.* 2005; 106(5):1071–1083. [PubMed: 16260528]
- O'Hara MW, Stuart S, Gorman LL, Wenzel A. Efficacy of interpersonal psychotherapy for postpartum depression. *Arch Gen Psychiatry.* 2000; 57:1039–1045. [PubMed: 11074869]

Table 1

Prevalence of postpartum depression by severity level

Severity level	1	2	3	4	5
HRSD score	0–3	4–7	8–15	16–26	27–50
Number of women	5	10	47	205	25
% of women	1.7	3.4	16.1	70.2	8.6
Cumulative %	1.7	5.1	21.2	91.4	100