

Prevalence of Psychiatric Disorders in Women With Obstetric Complications: Results From the National Epidemiologic Survey on Alcohol and Related Conditions-III

To the Editor: The perinatal period is a time of increased vulnerability for women to the onset or relapse for psychiatric disorders.^{1,2} Stressful life events during pregnancy, particularly obstetric complications (OC), are well-known risk factors for perinatal psychiatric disorders,^{3–5} such as depression and anxiety disorders.^{6,7} The literature remains incomplete regarding the association between OC and suicide attempts or other disorders, including substance use, posttraumatic stress, or eating disorders.

Our aims were (1) to determine the prevalence of OC in the United States and (2) to examine the associations between OC and psychiatric disorders during the perinatal period in adult US women.

Methods

We used cross-sectional data from the National Epidemiologic Survey on Alcohol and Related Conditions-III (NESARC-III) (N = 36,309; 60.1% response rate).⁸ This face-to-face survey was conducted in 2012–2013 and included a nationally representative sample of civilian, noninstitutionalized US adults aged 18 years and older.⁸

The analysis focused on women of childbearing age (18–50 years old) who responded affirmatively to the question, “Were you pregnant at any time during the last year?” defining the perinatal period as in previous work.^{6,9} We used a single question to determine the presence of OC, consistent with

previous studies.^{6,9} Psychiatric disorders in the past 12 months and lifetime were assessed using a structured interview (the Alcohol Use Disorder and Associated Disabilities Interview Schedule-5) to assess all current psychiatric disorders in the perinatal period. Among them, we determined psychiatric disorders with perinatal onset (for women with no previous history).⁸ Data were reported for mood disorders (including major depressive disorder, bipolar disorder, and dysthymia), anxiety disorders (including panic disorder, social phobia, specific phobia, and generalized anxiety disorder [GAD]), posttraumatic stress disorder (PTSD), eating disorder (including anorexia, bulimia, and binge), history of suicide attempt, and substance use disorders (including alcohol, cannabis, stimulants, opioids, and tobacco).

Results

Of the 1,320 women in the perinatal period, 19.1% had OC. The presence of OC was associated with a significantly higher prevalence of current mood disorders (24.63% vs 17.68%, adjusted odds ratio [AOR] = 1.54, 95% CI, 1.01–2.36) and current anxiety disorders (23.83% vs 14.45%, AOR = 1.82, 95% CI, 1.07–3.09) during the perinatal period compared to women without OC, after adjustment for sociodemographic data (Table 1). In particular, OC were significantly associated with a 2-fold increased prevalence of current panic disorder and GAD during the perinatal period.

There was no difference in the prevalence of current PTSD, eating and substance use disorders, and history of suicide attempt during the perinatal period between the 2 groups. For all psychiatric disorders, the prevalence of perinatal onset was not significantly different between women with and without OC.

Discussion

In this representative sample of the US population, 19.1% of peripartum women had OC, representing over 700,000 cases annually in the US population. OC are associated with a higher prevalence of mood and anxiety disorders in the perinatal period, consistent with previous research.^{6,10–12} Interestingly, our study found no significant association between perinatal-onset psychiatric disorders and OC. Women without a psychiatric history did not have a higher prevalence of perinatal psychiatric disorders when they experienced OC compared with women without OC. The risk of perinatal psychiatric disorders is particularly high in women with a history of psychiatric disorders.⁶ Therefore, women with a history of psychiatric disorders should be followed closely after undergoing OC. Although NESARC is 10 years old and was not designed to answer these questions (the definition of the perinatal period is broad and lacks details concerning OC), and while the cross-sectional design does not allow us to establish a causal relationship between the various psychiatric disorders and

Table 1.

Prevalence of Psychiatric Disorders in the Perinatal Period and Perinatal-Onset Psychiatric Disorders Associated With Obstetrical Complications

	Obstetrical complications (n = 252)		No obstetrical complications (n = 1,068)		Obstetrical complications vs no obstetrical complications ^a	
	%	SE	%	SE	AOR	95% CI
Prevalence of current psychiatric disorders in the perinatal period						
Any mood disorder	24.63	3.24	17.68	1.66	1.54	1.01–2.36
Major depressive disorder	20.00	3.06	14.50	1.42	1.46	0.90–2.35
Bipolar disorder	3.58	1.15	2.39	0.51	1.41	0.60–3.28
Dysthymia	5.87	2.03	2.31	0.51	2.57	1.07–6.19
Any anxiety disorder	23.83	4.13	14.45	1.28	1.82	1.07–3.09
Panic disorder	9.83	2.35	4.23	0.77	2.34	1.20–4.57
Social phobia	4.97	1.77	3.03	0.63	1.62	0.62–4.22
Specific phobia	12.05	2.81	7.44	1.05	1.61	0.93–2.79
Generalized anxiety disorder	9.66	2.98	4.15	0.75	2.56	1.11–5.88
Posttraumatic stress disorder	12.46	2.90	7.41	1.23	1.68	0.87–3.25
Eating disorders	2.37	1.20	1.14	0.37	1.73	0.47–6.35
History of suicide attempt	0.77	0.63	0.30	0.15	2.59	0.32–21.21
Any substance use disorder	25.42	1.63	26.09	3.16	0.90	0.62–1.33
Alcohol use disorder	10.45	2.57	11.68	1.24	0.83	0.48–1.44
Cannabis use disorder	3.11	1.34	3.12	0.71	0.96	0.36–2.61
Opioid use disorder	2.00	1.17	0.70	0.32	2.53	0.47–13.57
Tobacco use disorder	20.95	2.95	18.35	1.63	0.97	0.64–1.48
Prevalence of perinatal-onset psychiatric disorders						
Any mood disorder	6.44	2.10	5.03	0.86	1.60	0.76–3.37
Major depressive disorder	4.89	1.71	3.75	0.78	1.61	0.72–3.60
Bipolar disorder	0.57	0.56	0.45	0.15	0.83	0.14–4.93
Any anxiety disorder	8.05	2.48	4.46	0.92	2.84	0.47–17.03
Panic disorder	2.04	1.22	0.41	0.25	5.22	0.84–32.59
Generalized anxiety disorder	0.92	0.92	0.25	0.16	3.52	0.39–31.97
Posttraumatic stress disorder	0.67	0.49	0.45	0.21	1.38	0.23–8.45
Eating disorders	0.00	0.00	00.7	0.07	—	—
History of suicide attempt	0.82	0.68	0.26	0.15	3.43	0.38–31.41
Any substance use disorder	11.95	2.92	10.76	1.44	1.06	0.54–2.08

^aOdds ratios were adjusted for sex, race (categorized into 5 groups: (i) white, (ii) black, (iii) Native American, (iv) Asian, and (v) Hispanic), nativity (categorized into 2 groups: (i) the US-born and (ii) foreign-born), age (continue), education (classified into 3 groups: (i) less than high school, (ii) high school graduate, and (iii) some college or higher), income (continue), marital status (classified into 4 groups: (i) married or common law, (ii) widowed, (iii) divorced or separated, and (iv) never married), urbanicity (categorized as either (i) urban or (ii) rural), and region (grouped into 4 categories: (i) northeast, (ii) midwest, (iii) south, and (iv) west), and estimated through logistic regression. Significant differences are in bold.

Abbreviations: AOR = adjusted odds ratio, CI = confidence interval, SE = standard error.

OC, these findings highlight the vulnerability of women with a psychiatric history, who need special support in the event of OC.¹³

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Article Information

Published Online: May 27, 2024.
<https://doi.org/10.4088/JCP.23115169>

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J Clin Psychiatry 2024;85(2):23115169

To Cite: Jacquelin M, Dubertret C, Ngameni EG, et al. Prevalence of psychiatric disorders in women with obstetric complications: results from the National Epidemiologic Survey on Alcohol and Related Conditions-III. *J Clin Psychiatry*. 2024;85(2):23115169.

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Relevant Financial Relationships: None.

Funding/Support: This research received no specific grant from any funding agency in the commercial or not-for-profit sectors.

Disclaimer: This article does not reflect the opinions or views of the National Institute on Alcohol Abuse and Alcoholism (NIAAA) or the US Government.

Tweetable Statement: Obstetrical complications are associated with a higher prevalence of mood and anxiety disorders during the perinatal period.

Ethical Standard: The authors assert that all procedures contributing to this work comply with the ethical standards of the relevant national and institutional committees on human experimentation and with the Helsinki Declaration of 1975, as revised in 2008.

Author Contributions: Dr Jacquelin drafted the initial manuscript and approved the final manuscript as submitted. Dr Tebeka carried out the initial analyses, revised the manuscript, and approved the final manuscript as submitted. Drs Dubertret, Ngameni, Belzeaux, and Le Strat significantly revised the manuscript and approved the final manuscript as submitted.

Acknowledgments: The authors are grateful to the NIAAA for providing the necessary data for this research. This article was prepared using a limited access data set obtained from the NIAAA.