Rates of positive screens for bipolar disorder in pregnant and postpartum women

Grace Masters[1], Padma Sankaran[1], Linda Brenckle[1], Tiffany Moore Simas[1,2], Linda Weinreb[3,4], Sharina Person[1], Jeroan Allison[1], Nancy Byatt[1,2]
[1]University of Massachusetts Medical School; [2]UMass Memorial Health Care; [3]Medicaid and Mass Health; [4]Fallon Healthcare

Systems and Psychosocial Advances Research Center
SPARC
Improving Mental and Behavioral Health Services for Better Lives and Stronger Communities

ABSTRACT

Background: Bipolar disorder is a severe mental illness which afflicts 3% of the general population and 2-8% of pregnant and postpartum women. Women are at increased risk for new onset bipolar disorder or illness relapse of disease during the perinatal period. Untreated bipolar disorder has been associated with both poor maternal and infant outcomes. The objectives of this study were to describe rates of pregnant and postpartum women who screen positive for bipolar disorder and their associated risk factors, and their participation in treatment, or lack thereof.

Methods: Adult, pregnant and postpartum women were recruited from 14 obstetric clinics in Massachusetts. Primary data were collected via participant telephone interviews consisting of structured interview questions regarding personal obstetric and psychiatric care, in addition to validated screening instruments for depression, bipolar disorder, and substance abuse. Depression screenings were done with the Edinburgh Postnatal Depression Scale (EPDS), where a score of 10 or greater was considered positive. Bipolar disorder screenings were done with the Mood Disorder Questionnaire (MDQ), where scores were dichotomized into positive or negative screens. Substance use screenings were done using the Parents, Partners, Past, and Pregnancy screen (the 4Ps).

Results: The analysis included 293 participants, with a mean age of 31.8 ± 5.6 years. Almost one-tenth of the total sample (28/294 = 9.6%) screened positive for bipolar disorder, and even higher in women self-reporting as Hispanic (10.9%) and/or as Black (15.8%), and in women with public health insurance (Medicaid or Mass Health, 17.0%). Only one-half of participants with a positive bipolar screen reported that they had received a bipolar diagnosis prior to the screening (50.0%). The likelihood of a positive bipolar screen was significantly increased amongst those with prior psychotropic medication treatment before pregnancy, those who felt that needed but were not receiving psychiatric treatment in the prior 3 months, and those who also screened positive for substance abuse. About one-third with a positive bipolar screen reported receiving psychiatric pharmacotherapy (37.5%) and less than half reported that they were currently participating in psychotherapy (45.8%).

Conclusions: In comparison to previously published literature, positive bipolar disorder screening rates were higher than anticipated in our sample of pregnant women, especially in minority populations and those with public insurance. Less than half of our sample were receiving evidence-based treatment, including psychotherapy and pharmacotherapy. Our data suggest that there is a gap in care that needs to be addressed in order to define appropriate treatment and best care practices and to develop ways to reach and treat these women more effectively.

RISKS OF BIPOLAR DISORDER IN PREGNANCY AND POSTPARTUM

- Women are at their highest lifetime risk for new onset or recurrence of bipolar episodes during pregnancy and postpartum, especially if untreated
- Women suffering from untreated BD are more prone to adverse pregnancy outcomes:
  - Gestational hypertension, antepartum hemorrhage
  - Self-injury, substance abuse, suicide
  - Most important known risk factor for postpartum psychosis
- Infant outcomes are also compromised:
  - Preterm birth or small for gestational age, elevated levels of fetal stress hormones
  - Impaired mother-baby bonding

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DEMOGRAPHICS OF PARTICIPANTS

	All participants (n = 293)	Positive Bipolar screen (n = 28)	Negative Bipolar screen (n = 265)
% of sample	100	9.6	90.4
Age, mean (SD)[a]	31.8 (5.6)	29.4 (4.2)	32.0 (5.7)
Education level[a],%			
Grade school/ Some HS	3.9	12.5	3.1
HS diploma or GED equivalent	16.1	29.2	14.9
Some college	18.2	37.5	16.4
Associate Degree	5.9	8.3	5.7
Bachelor's Degree	24.1	8.3	25.6
Master's Degree	23.1	4.2	24.8
Doctoral Degree or Equivalent	8.7	0	9.5
Race[b], %			
Black/African American	14.0	27.3	12.9
White	70.0	63.6	70.6
Asian	7.0	0	7.7
Other	1.9	4.6	1.6
More than one race	7.0	4.6	7.3
Ethnicity[b], %			
Hispanic/Latina	16.1	20.8	15.7
Not Hispanic/Latina	83.9	79.2	84.3
Primary source of medical payment for perinatal care[a], %			
Private health insurance	63.5	25.0	67.1
Medicaid or Mass health	35.1	70.8	31.8
Other kind of health insurance	1.4	4.2	1.2
Prior bipolar diagnosis[a], %	9.2	50.0	4.9
Stopped psychiatric medications after learning pregnant[b], %	62.5	58.3	64.3
Current treatment[a], %			
Any treatment	20.1	54.2	16.9
Psychiatric medications	10.5	37.5	7.9
Therapy	15.2	45.8	12.3

[a]Differences between positive and negative screening groups were significant (p<0.05), except for otherwise noted. [b]Differences were not found to be significantly different across groups.

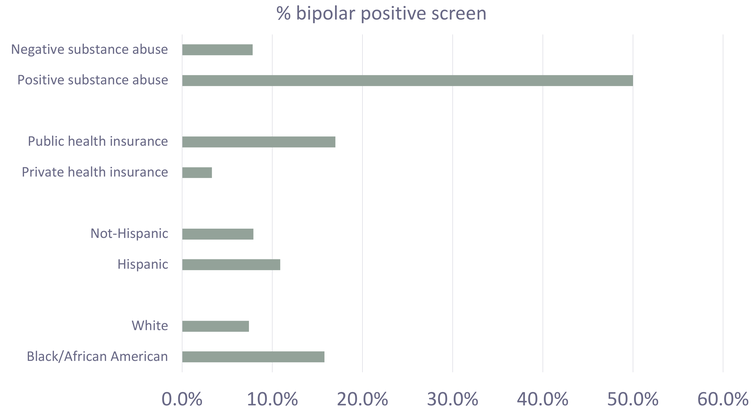
CHARACTERISTICS ASSOCIATED WITH POSITIVE BIPOLAR SCREENS

	aOR[a,b]	95% CI
Prior treatment with psychiatric meds before pregnancy	7.2	(2.4, 21.9)
Felt needed psychiatric treatment but didn't receive in the past 3 months	10.5	(3.6, 30.6)
Positive screen for substance abuse[c]	8.3	(1.1, 61.1)

Shows likelihood of screening positive on the Mood Disorders Questionnaire in adjusted odds ratios.

[a]Adjusted for age, education level, insurance type; [b]All p-values < 0.05; [c]Screens done using the 4Ps substance abuse questionnaire

BIPOLAR SCREENS IN HEALTH DISPARATE GROUPS



CONCLUSIONS

- In comparison to previously published literature, positive bipolar disorder screening rates were higher than anticipated in our sample of pregnant women, especially in younger women and groups with known health disparities
- Only half of our sample that screen positive for bipolar was receiving evidence-based treatment
  - Bipolar is almost universally a life-long illness which requires chronic care
- Women with positive bipolar screens are much more likely to feel like they need psychiatric help but not getting it
- High rates of concurrent positive substance abuse screens
- Our data suggest that there is a gap in screening and care for perinatal bipolar disorder
- Screening must be increased, in accordance with many relevant professional society recommendations
- Important to screen for substance abuse in these populations as well
- Implications for management in preconception planning and for women with existing bipolar diagnosis

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