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Prevalence of Inpatient Postpartum Anxiety and Post-Traumatic Stress Symptoms: A Quality Improvement Initiative

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Background & Hypothesis:

- Current Problem: Mental health conditions are the leading cause of maternal mortality in the US
 - Account for 23% of deaths within one year postpartum
 - Include postpartum depression, anxiety, and PTSD



- Implementation guidelines remain unclear
- Optimal timing of screening not established
- Study Aims: Determine the prevalence of inpatient postpartum anxiety and PTSD
 - Identify associated risk factors



Study Design & Methods

- Study Type: Quality Improvement (QI) initiative (IRB exempt)
 - **Time Period:** Three-week prospective assessment
- Study Population: All delivering adult patients $(\geq 23$ weeks gestational age)

Screening Protocol:

- Timing: Within 36 hours of delivery
- **Tools**: State-Trait Anxiety Inventory (STAI; cutoff \geq 80) and PTSD Checklist for DSM-5 (PCL-5; cutoff \geq 28) 9

Data Collection:

Full PCL-5 Evaluation

(20 questions)

Referral for social

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- Methods: In-person, telephone, or email follow-up
- **Inclusion**: Regardless of primary language



Results

Participation Rate: 263 of 275 eligible patients (95.6%) completed screening

Prevalence:

- Anxiety: 12.5% screened positive
- PTSD: 4.9% screened positive
- Concurrence: 3.8% screened positive for both conditions

Risk Factors:

- Prior psychiatric diagnosis/medication use: Independent risk factor for anxiety
- Factors associated with worse anxiety scores:
 - Older age, higher education, English-speaking
 - 😧 Non-Hispanic ethnicity, higher income
- Factors associated with worse anxiety & PTSD scores:



ASA 3 status, Apgar <7, pre-term birth

	Unadjusted OR (95% Cl)	р	Adjusted OR (95% CI)	р
Language				
Non-English	Ref		Ref	
English	4.47 (1.32, 15.09)	0.016	1.38 (0.32, 6.03)	0.669
Ethnicity				
Non-Hispanic	Ref		Ref	
Hispanic	0.40 (0.17, 0.96)	0.040	0.43 (0.11, 1.72)	0.232
Gestational Age				
37-42 week	Ref		Ref	
<32 week	2.94 (0.74, 11.77)	0.127	0.35 (0.01, 12.81)	0.565
32-36 week	2.86 (0.85, 9.60)	0.090	0.84 (0.15, 4.72)	0.844
ASA physical status				
2	Ref			
3	1.14 (0.37, 3.51)	0.821		
Delivery method				
Vaginal	Ref			
Cesarean delivery	1.36 (0.64, 2.86)	0.421		
Previous Psychiatric History	4.93 (2.28, 10.69)	<0.001	1.96 (0.69, 5.59)	0.206
Psychiatric medications	83.16 (10.11, 683.73)	<0.001	48.27 (4.16, 560.20)	0.002



Conclusions & Discussion

Screening Recommendations:

- Support universal inpatient anxiety screening
- Suggest targeted PTSD screening for high-risk groups:
 - Patients with pre-existing psychiatric conditions
- Patients with complicated pregnancies

Clinical Implications:

Early identification may improve maternal outcomes



Targeted interventions needed for vulnerable populations

Future Research Directions:

- Determine optimal screening and referral guidelines
- Develop early targeted interventions
 - Evaluate long-term impact of early screening on maternal outcomes