



# CORRELATES OF POOR ANTEPARTUM MENTAL HEALTH AMONG WOMEN IN THE US: A NATIONALLY REPRESENTATIVE POPULATION-BASED STUDY



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MADISON

Nov 11, 2009 Whitney Witt, PhD, MPH: Population Health Science

## Presenter Disclosures

**Whitney P. Witt, PhD, MPH**

(1) The following personal financial relationships with commercial interests relevant to this presentation existed during the past 12 months:

No relationships to disclose

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## Overview

- Background and Significance
- Aim and Hypotheses
- Methods
- Results
- Conclusions
- Next Steps

## BACKGROUND AND SIGNIFICANCE

## Background

- Mental health problems disproportionately affect women
- Inconsistent reports on the prevalence and risk factors of poor antepartum mental health

## Significance

- Poor mental health during pregnancy has been associated with adverse birth outcomes
- Additional research is needed to:
  - ▣ 1) estimate the national prevalence of antepartum mental health problems
  - ▣ 2) identify risk factors

## AIMS AND HYPOTHESES

## Aim of the Present Study

- To identify the socio-demographic, health, and mental health-related risk factors associated with antepartum mental health problems
- Estimate prevalence

## Hypotheses

- Pregnant women with mental health problems are more likely to be/have:
  - Without a partner
  - Living in poverty
  - Health problems
  - History of mental health problems
 compared to pregnant women without mental health problems

## METHODS

## Sample and Data Source

- 2,935 pregnant women from eleven panels of the 1996-2006 Pregnancy Detail Files of the Medical Expenditure Panel Survey (MEPS)
- Data were collected from each household at 5 interviews over the 2-year panel

**Dependent Variable:**  
**Poor Antepartum Mental Health**

- Poor antepartum mental health was defined as a self-report of depression or anxiety, or an overall mental health rating of “fair” or “poor” on a 5-point scale during pregnancy

**Independent Variables**

- Maternal and family socio-demographics
  - Age, race/ethnicity, education, marital/partner status, # of work hours per week, health insurance, family poverty threshold, household composition, region of US, and MSA
- Health-related risk factors
  - Physical health status, smoking status, pre-pregnancy BMI, chronic and acute medical conditions, substance abuse, and STDs
- Mental health-related risk factors
  - Pre-pregnancy mental health (“history”)

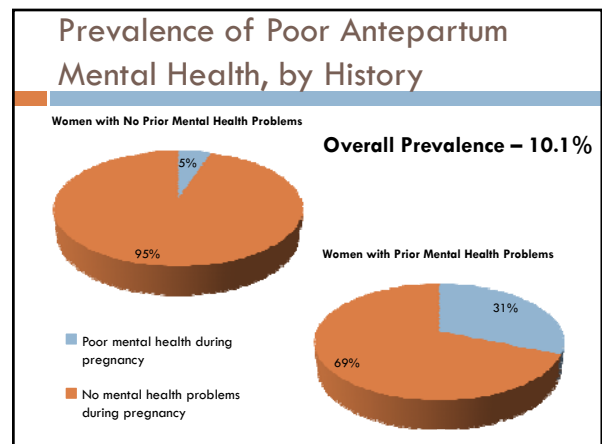
**Analytic Approach**

- Stratified analyses by history of poor mental health
  - due to the high correlation between history of mental health problems and antepartum mental health
- Chi-squared analyses

**Analytic Approach**

- Multivariate logistic regression
  - Included regardless of significance: age, race/ethnicity, marital status, education, income, health status, and mental health history (based on the literature)
  - Remaining variables were included if they were statistically significant or changed the point estimate of key predictors by 10% or more
  - Sensitivity analyses on smoking and BMI

**RESULTS**



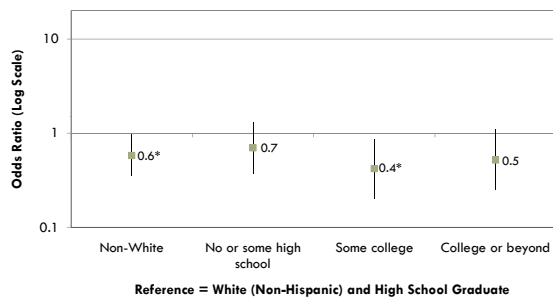
### Descriptive Results

- Women with antepartum mental health problems but no previous mental health problems were likely to be/have:
  - Less educated
  - Never married
  - Chronic Medical condition
  - Fair/poor physical health status
  - Publicly funded insurance
  - 1 pregnancy during the MEPS
  - One child (age 5-17)
  - Family income below 100% of the Federal Poverty level

### Descriptive Results (2)

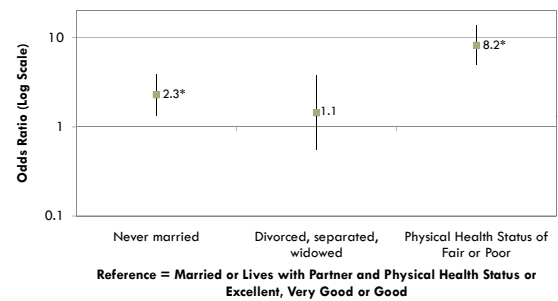
- Women with antepartum mental health problems AND previous mental health problems were likely to be/have:
  - Divorced, Separated or Widowed
  - Never married
  - Smoked during pregnancy
  - Substance abuser
  - Acute conditions or infections
  - Fair/poor physical health status
  - Family income between 100 to 200% of the Federal Poverty level

### Antepartum Mental Health without any Previous Mental Health Problems†



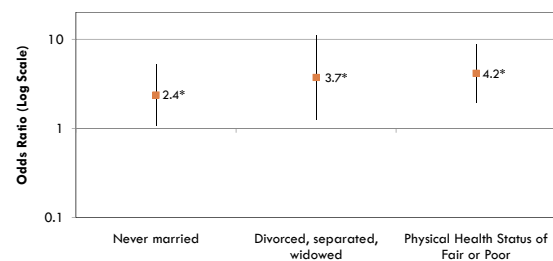
†Controlling for confounders \*Statistically Significant

### Antepartum Mental Health without any Previous Mental Health Problems†



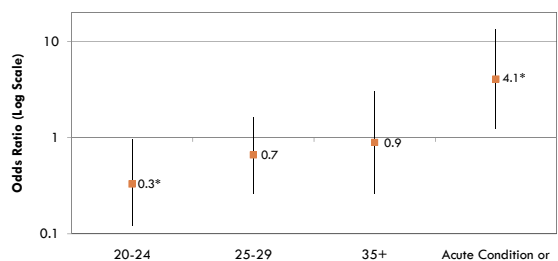
†Controlling for confounders \*Statistically Significant

### Antepartum Mental Health with Previous Mental Health Problems†



†Controlling for confounders \*Statistically Significant

### Antepartum Mental Health with Previous Mental Health Problems†



†Controlling for confounders \*Statistically Significant

## CONCLUSIONS

### Conclusions

- As hypothesized, certain subgroups of pregnant women were more likely to report poor mental health
- Regardless of history of poor mental health, never having been married is a risk factor for poor antepartum mental health
- For women with a history of poor mental health, there was a very strong association between being divorced or separated and reporting poor mental health during pregnancy
  - no such association was found among women without a history of poor mental health

### Implications

- Women with a history of poor mental health are at greater risk for poor antepartum mental health, and lack of social support increases this risk
  - These women in particular should be targeted for mental health screening before pregnancy
- Women in poor physical health, or those with an acute condition or infection, are more likely to experience poor antepartum mental health
  - Prenatal care and screening

### Limitations

- Symptoms were not assessed and various factors may affect a woman's self-assessment and disclosure of mental health status
- No data on quality of social support

## NEXT STEPS

### Next Steps

- Examine the associations between poor antepartum mental health and:
  - pregnancy complications
  - birth weight
  - postpartum mental health
  - health care expenditures

## Thanks!

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- This research was supported by grants from the:
- National Institutes Health
  - U.S. Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation
  - Institute for Research on Poverty