### Postpartum Mental Health in Mainland China: A Call for Action

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## **Postpartum Depression**

- Subset of Major Depressive Disorder
  - Onset 4 weeks after childbirth
- Consequences of PPD

- A risk to family, maternal, and child health

- Risk factors of PPD
  - History of previous depression
  - Low social support
  - Life stress

#### **Cross-cultural Explorations of PPD**

- Wide variation in PPD prevalence rates
  - 10% 15% in the U.S.
  - 0% 40% worldwide
- Cultural variations
  - Definitions
  - Diagnostic standards
  - Manifestations of PPD
- Sociopolitical, historical and cultural contexts
- Traditional postpartum practices

# **Postpartum Practice in China**

- Zuoyuezi, or "Doing the month"
  - Culturally mandated bed rest
  - One-month confinement period
  - Care by mother or mother-in-law







- Adherence to strict guidelines
  - Restore balance in the body/spirit (*ying-yang*)
  - Foods according to hot/cold theory
  - Observe cultural taboos

#### **Prior Studies in Chinese Populations**

- Protective effect of *zuoyuezi* on PPD
  - Found in Chinese populations in Hong Kong, Taiwan, and immigrant populations.
- Taiwan
  - Better health status
  - Reduced stress levels
  - Live in parents' home
  - Receive care from own mothers

- Hong Kong
  - Better social support
  - Lower risk of PPD
  - Conflict with mother-in-law\*

# **Study Objectives**

- Conduct pilot study of PPD in China
- Determine the prevalence of PPD in China
- Identify correlates of PPD in China

# Study Design & Location

- Cross-sectional design
- Beijing, China
- Peking University Health Science Center
  - Peking University First Hospital
  - Women & Children's Hospital
  - Obstetrics outpatient clinic



# Study Group

- Inclusion criteria
  - May 19, 2006 July 21, 2006
  - Present at general obstetric outpatient clinic
  - During expected 6-8 week postpartum visit
  - 18 years of age or older
- Exclusion criteria
  - Serious health complications

#### Self-Administered Questionnaire

- Demographic characteristics
- History of mental health issues
- Factors in postpartum practice *zuoyuezi*

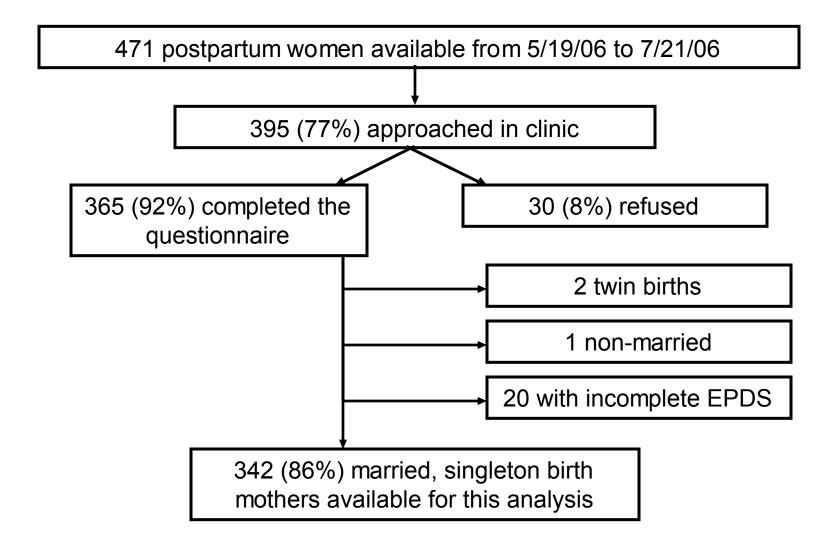
# Screening for PPD

- Edinburgh Postnatal Depression Scale (EPDS)
  - Ten question screen
  - Widely validated in many languages
  - Possible range of scores: 0 to 30
- Cut-off score for PPD symptoms
  - Original English version:  $\geq$  13
  - Chinese Mandarin version
    - Hong Kong, official:  $\geq 10$
    - Taiwan version:  $\geq$  13

## **Statistical Methods**

- Categorical demographic and postpartum support factors
  - Odds ratio and chi-square tests
  - Logistic regression
- SAS (v9.1, Cary, NC)

# **Resultant Study Group**



## Results

- Basic demographics of study group
- PPD outcome
- Comparison between PPD and non-PPD
  - History of mental health issues
  - Postpartum practice *zuoyuezi*

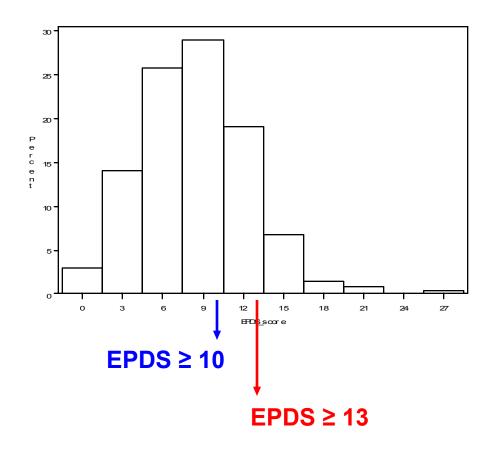
# **Demographic Characteristics**

- All married, singleton births
- Age: 24 42; Mean: 30 ± 3.4
- 95% Han ethnicity
- 59% originally from Beijing
- 70% college degree or greater
- 75% had health insurance
- 46% owned a car



#### **Postpartum Depression**

- EPDS scores
  - Range: 0 27
  - Mean: 8.4 ± 4.0
  - Median: 8.0
- EPDS ≥ 10: 39%
- EPDS ≥ 13: 16%



# History of Mental Health Issues

- 327 (96%) of 342 women had never:
  - consulted a mental health practitioner, or
  - taken prescription medications,
  - or traditional medications for emotional issues.
- No association between history of formal treatment for emotional issues and PPD

## **Postpartum Practice**

PPD		
n / N (%)	OR	95% CI
20 / 156 (13)	1	
24 / 110 (22)	2.06	1.08, 3.92
5 / 41 (12)	1.03	0.36, 2.90
19 / 178 (11)	1	
31 / 146 (21)	2.26	1.21, 4.19
	n / N (%) 20 / 156 (13) 24 / 110 (22) 5 / 41 (12) 19 / 178 (11)	n / N (%)    OR      20 / 156 (13)    1      24 / 110 (22)    2.06      5 / 41 (12)    1.03      19 / 178 (11)    1

327 (96%) of 342 women practiced zuoyuezi

## **Multivariate Analysis**

Risk Factor	Crude OR	Adjusted OR	95% CI
Mother-in-law care	2.06	2.01	1.02, 3.93
<i>Zuoyuezi</i> not helpful	2.26	2.24	1.16, 4.30

N = 327

• Adjusting for age, Han ethnicity, being from Beijing, income, car ownership, and having health insurance

## Summary of Results

- 16% 39% PPD in this study group
  Depending on cutoff scores of EPDS
- 96% had never formally treated for emotional issues
- 96% practiced *zuoyuezi*
- Women with doubled odds of PPD if:
  - Mother-in-law provided primary care during *zuoyuezi*
  - Perceived *zuoyuezi* as not helpful

#### Mental Health Needs in this Study Group

- PPD is a concern
- No history of formal treatment for emotional issues
- Mental health needs of this study group:
  - Greater access to mental health resources
  - More screening for PPD
  - More research on PPD, prevention, and treatment

#### **Importance of Postpartum Practices**

- Zuoyuezi is still commonly practiced in China
- Nature of mother-in-law conflict
- Perceptions of *zuoyuezi* 
  - Quality of social support?
  - Life stress?
- Can inform obstetric practices in immigrant populations

## Limitations

- Not generalizable
- Lack of directionality
- "Perceived" risk factors
- Assessment of mental health history
- Validation of mainland Chinese Mandarin EPDS

## Conclusions

- Adds China to the discussion on PPD and traditional postpartum practices
- Mental health needs more attention
  - Greater access to mental health resources
  - More screening for PPD
  - More research on PPD, prevention, and treatment
- Informs work in U.S. immigrant populations

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