Effects of obeying traditional rituals during postpartum period on depression in Taiwan

The role of male support and marital satisfaction

Presenter: Yi-Hua Chen, Ph.D

Chen CH, Au HK, Huang MC, Liang LJ, Lin WC, Chen YH
School of Public Health, Taipei Medical University, Taiwan

Presenter Disclosures
Presenter Yi-Hua Chen

Disclosure
- All authors have no conflict of financial interest to declare

Prevalence of postpartum depression

- 19% within 3 months of delivery
  - by Edinburgh Postnatal Depression Scale, EPDS
  - (Huang and Mathers, 2001)
- 40% mild to severe PPD at 6 weeks postpartum
  - by the Beck Depression Inventory
  - (Chen et al. 1994)

Background

Postpartum Practices
- Cultures acknowledge a woman’s transition to motherhood using different practices and customs
  - In U.S. culture
    - Childbearing is viewed as a healthy process
    - After birth, women quickly become mobile and assume care for self and infant
  - In Chinese culture
    - Childbirth is viewed as a health concern because it is believed to create an imbalance within the body
    - Women participate in a traditional practice called “zuoyuezi” or “doing the month”

Doing the month
- A formalized system during the first month post-childbirth designed to
  - provide recognition and reward for childbearing
  - promote maternal postpartum recovery
- These practices are believed to
  - restore body harmony and health
  - prevent future illness

(Chu, 2005; Holroyd, Lopez, & Chan, 2011)
Effects on postpartum depression
- Adherence to doing the month was negatively correlated with aerobic endurance and positively correlated with depression at 6 weeks (Liu et al., 2012)
- Adherence to doing the month practice was associated with lower severity of physical symptoms and lower odds of postpartum depression (Chien et al., 2006)
- No relationship between postpartum mood and confinement (Matthey et al., 2002)
- Confinement perceived by Chinese women to be protective of psychological and physical well-being (Chiang, 1987)

Gap of existing findings
- Little consensus in previous literature
  - effects of “doing the month” on postnatal depression?
  - What is the role of paternal involvement?
  - What is the role of marital adjustment?

Study Aims
- To examine the effects of obeying doing the month practices during postpartum period on depression
  - to investigate the role of paternal involvement on the link above
  - to investigate the role of marital adjustment on the link above

Methods

Sample
- Inclusion criteria
  - undergo a postpartum visit in the Department of Obstetrics and Gynecology
  - deliver a live baby within a month
- Exclusion criteria
  - unable to read and write Chinese questionnaires
  - severe psychiatric illnesses
  - Written informed consent was obtained before interview started
  - Institutional Review Board approval was obtained

Time and Place
- Time: since July, 2011
- Place: 5 selected hospitals in Taipei, Taiwan
**Data Collection Process**

- Interviewers are trained for standardization
  - Contact women when they are undergoing their postpartum visits
  - Explain the study and obtain informed consent
  - Begin answering questionnaires (returned questionnaires are checked for missing and inappropriate responses)
  - Follow-up can be done during the next visits or postal mails

**Instrument I**

- Self-reported questionnaires
  - Edinburgh Postnatal Depression Scale, EPDS
    - 10 questions
    - Total: 30, the higher the score, the higher the depression
    - Chinese version: Cronbach’s $\alpha =0.87$ (Heh, 2001)
  - Doing the month
    - 3 questions (avoid bathing, going out, reading/watching TV)
    - Total: 12, the higher the score, the higher the adherence

**Instrument II**

- Self-reported questionnaires
  - Paternal Involvement
    - Adopted from the Early Childhood Longitudinal Program (ECLS, 2010)
      - Engagement, accessibility, and responsibility
      - the higher the score, the higher the involvement
      - Chinese version: Cronbach’s $\alpha =.84$
    - Locke-Wallace marital adjustment test
      - 15 questions
      - the higher the score, the worse the adjustment
      - Cronbach’s $\alpha =.9$ (Locke, H. et al, 1959)

**Statistical analysis**

- Bivariate analysis
  - Categorical variables: chi-square test
  - Continuous variables: t-test, one-way ANOVA
- Logistic regression models
- Using STATA 11.0
- $\alpha <0.05$ for statistical significance

**Results**

Figure 1: Practices of “doing the month” on depression (n=602)
Table 5: Effects of “doing the month” practices on depression (n=602)

<table>
<thead>
<tr>
<th>Adherence to “doing the month” practices</th>
<th>Crude OR (p-value)</th>
<th>Adjusted OR (p-value)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>1.0</td>
<td>1.0</td>
</tr>
<tr>
<td>Medium</td>
<td>0.97* (0.03)</td>
<td>0.92* (0.04)</td>
</tr>
<tr>
<td>High</td>
<td>0.93* (0.04)</td>
<td>0.94* (0.046)</td>
</tr>
</tbody>
</table>

*Adjusted for maternal demographics (education, family income, urbanization level, and parity), comorbid chronic conditions (hyperlipidemia, thyroid dysfunction, urinary tract infections, deficiency anemia, and depression), infant gender, birthweight, and postpartum care.

Discussion

Summary
- Adherence to “doing the month” practices was associated with lower risk of postpartum depression
  - especially among those with high paternal involvement
- Our findings are consistent with some studies (Chien et al., 2006; Cheung, 1997), but not others (Liu et al., 2012; Matthey et al., 2002)
- introduce the impact of paternal involvement

Why?
- Elements of ritualized care that protected against postpartum depression
  - (1) cultural patterning of a distinct postpartum period
  - (2) protective measures to acknowledge the vulnerability of the new mother
  - (3) social seclusion
  - (4) mandated rest
  - (5) assistance with household tasks and infant care
  - (6) social recognition through rituals, gifts and the preparation of special foods and tonics

Limitation
- Selection bias
- less depressive women
- Social desirability bias
- the tendency of respondents to answer questions in a manner that will be viewed favorably by others (self-reported data)

Conclusion
- Appropriate accommodation of cultural knowledge on “doing the month” into health education could serve to promote the congruence with the cultural health beliefs of self protection
- facilitate psychological health condition

although “Doing the month” practice might not be a panacea for postpartum depression!
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Chen, Ping-Ling, PhD
Graduate Institute of Injury Prevention and Control, Taipei Medical University

Huang, Jian-Pei, MD
Department of Obstetrics and Gynecology, Mackay Memorial Hospital

Huang, Min-Chao, MD
Department of Obstetrics and Gynecology, Mackay Memorial Hospital

Hsu, Chun-Sen, MD
Department of Obstetrics and Gynecology, Taipei Municipal Wan-Fang Hospital

Lee, Hsin-Chien, MD
School of Psychiatry, Taipei Medical University, Shang Ho Hospital

Au, Heng-Kien, MD
Department of Obstetrics and Gynecology, Taipei Medical University Hospital

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