Associations among maternal depressive symptoms, maternal diathesis factors and family characteristics in families with young children having developmental delay or disability

Yui Matsuda, PhD, RN, MPH, YunKyung Chang, PhD, RN, Todd Schwartz, DrPH & Linda S. Beeber, PhD, RN, CS, FAAN
This research project was made possible by grant number 2T32NR008856 from the National Institute of Nursing Research (NINR) at the National Institutes of Health. Its contents are solely the responsibility of the authors and do not necessarily represent the official views of NINR.
• Physical and mental well-being of mothers best supports healthy growth in children.

• Maternal depressive symptoms are negatively associated with children’s physical growth, emotional growth, and even their school performance (Surkan, Ettinger, Ahmed, Minkovitz, & Strobino, 2012; Wojcicki et al., 2011).
• Mothers of young children with a developmental delay (DD)/disability tend to have higher depressive symptoms (Feinberg, Donahue, Bliss, & Silverstein, 2012)

• Depressive symptoms impede mothers from providing the best support for her child.

• Having additional children with DD/disability may be associated with higher maternal depressive symptoms.
To examine associations between maternal depressive symptoms and number of children with developmental delay/disability accounting for maternal diathesis factors (predisposing conditions that may lead to negative maternal/family outcome) and family stress factors.
Diathesis-Stress interactions by Monroe and Simons (1991)
Higher Maternal Depressive Symptoms

**FAMILY STRESS FACTORS**
- # of children with disability
- Child with medical condition
- Family conflict
- Absence of partner

**MATERNAL DIATHESIS FACTORS**
- Low self efficacy
- Mother’s health status
- Mother’s education
• A secondary analysis of the pooled **baseline data** from three intervention studies conducted by Beeber et al.
  
  – The “Wings” Depressive Symptom Intervention for Latina Mothers,
  
  – Reducing Depressive Symptoms in Low-Income Mothers,
  
  – EHS Latina Mothers: Reducing Depressive Symptoms and Improving Infant/Toddler Mental Health (2010a, 2010b, 2013)
Methods: Data Source

- Multiple regression analyses were conducted to examine associations between maternal depressive symptoms and number of children with DD/disability (zero vs. one vs. two or more), family stress factors and maternal diathesis factors.

- A post hoc Tukey-Kramer comparison of the least square means were examined among the number of children with DD/disability.
RESULTS
Demographics

- Sample size: 376
- Age: 23 years old ($sd=13$)
- Education: 11 years ($sd=3$)
- Race/Ethnicity: African American 41%, Hispanic 35%, Caucasian 17%, Other 6%
- Working: 39%
- Living without a partner: 46%
- Child age: 22 months ($SD=13$)
- Presence of chronic illness in children: 28%
- # of children with DD/disability: 0=67%, 1=25%, 2+=8%
- Depressive symptoms severity (CES-D 20): 22 ($sd=13$)
In the model including family stress factors, there is a significant linear trend in the mean for maternal depressive symptoms across the number of children with DD/disability ($F[1]=5.14, p=0.024$).

More family conflict ($F[1]=18.28, p<0.001$) and the presence of child’s medical condition ($F[1]=8.85, p=0.0031$) were significant correlates of higher mean maternal depressive symptoms.
- No children with DD/disability $M=22.73$
- One child with DD/disability $M=23.46$
- Two or more children with DD/disability $M=28.61$
• In the model adjusting for both family stress factors and maternal diathesis factors, the trend in depressive symptoms across the number of children with DD/disabilities was attenuated ($F[1]=2.73$, $p=0.0997$).

• The same trend between maternal depressive symptoms and number of children with DD/disabilities per household were observed from the previous model.
- No children with DD/disability $M=22.13$
- One child with DD/disability $M=22.07$
- Two or more children with DD/disability $M=25.85$
• Consideration for multiple regression final model $p$-value

• Characteristics of the pooled dataset:
  – Higher CES-D mean ($M=23$)
  – Sample size

• One of few studies examining maternal depressive symptoms of young children with DD/disability
Mothers who have multiple children with DD/disabilities require extra support to manage depressive symptoms so that they can best attend to their children’s developmental needs.

Potential interventions
– Conflict management at the family level
– Mothers’ empowerment and self-support
– Support to manage the children’s medical needs
Thank you

Gracias

ありがとうございます