



Disparities in the availability of social network support to pregnant mothers

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Presenter Disclosures

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

No relationships to disclose

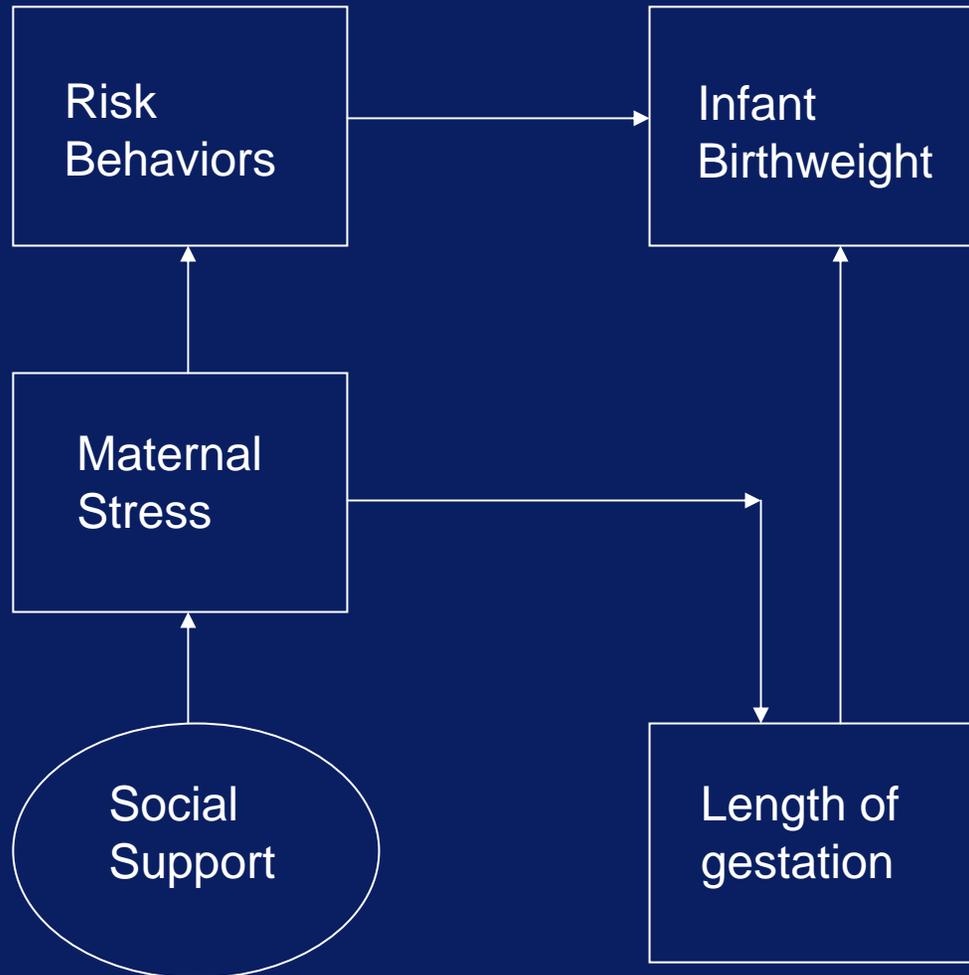


Background: Why study social support during pregnancy?

- Infant mortality rates are still more than two times higher for blacks than for whites, despite an overall decline
- Racial disparity of birth outcome not fully understood
- Social support may have a buffering effect on physiological and psychological stress associated with birth outcome
- Social support promotes mother's well-being and healthful behaviors



Hypothesized Social Support Model



Objectives

- Identify the disparities in social support available to pregnant women
- Examine the effect of social support and maternal stress on birth outcomes (low birthweight or pre-term) and maternal well-being



Methods



We analyzed data collected in the 2005 Los Angeles Mommy and Baby (LAMB) Project

Participants

- Women who delivered a baby in Los Angeles County in 2005 were randomly selected
- Close to 5,500 women responded to the survey in 2005

Procedures

- Follow the Pregnancy Risk Assessment Monitoring System (PRAMS) procedure
- Self-administered mailed survey
- Telephone follow-up for non-respondents



Methods: Instrument



Measuring **instrumental** and **emotional** social support during pregnancy

During your last pregnancy, would you have been able to receive the kinds of help listed below if you had needed them?

1. **Someone to loan me money**
2. **Someone to help me if I were sick and needed to be in bed**
3. **Someone to take me to the clinic or doctor if I needed a ride**
4. **Someone to help with things I had to do (household chores, childcare)**
5. **Someone to give me advice or information**
6. **Someone to listen to me about my problems**

By adding all the “Yes” responses together for the six questions, we get a composite score ranges 0 - 6.



Methods: Instrument



Measuring stress

- The Life Events List adopted from PRAMS to measure stressful events that happened during pregnancy

Measuring outcomes

- Low birthweight (LBW)
- Pre-term (PT)
- Maternal depression
- Maternal mood



Methods: Statistical Analysis



1. Descriptive analysis
2. Correlational analysis
 - Pearson correlation co-efficient
3. Multivariate analysis
 - Variables found significant in the correlational analysis are included in the logistic regression
 - controlling for confounding variables: education, marital status, race and age





Results: demographics

Out of 5211 surveys, 5075 were singleton births and were included. 5031 mothers answered the social support questions. Here are the demographics:

<i>Mother's race/ethnicity</i>	<i>Percentage</i>
Non-Hispanic White	25%
Hispanic	31%
Non-Hispanic Black	21%
Asian / Pacific Islander	21%
Native American	2%

<i>Mother's education</i>	<i>Percentage</i>
Less than high school	17%
High school graduate	24%
More than high school	59%

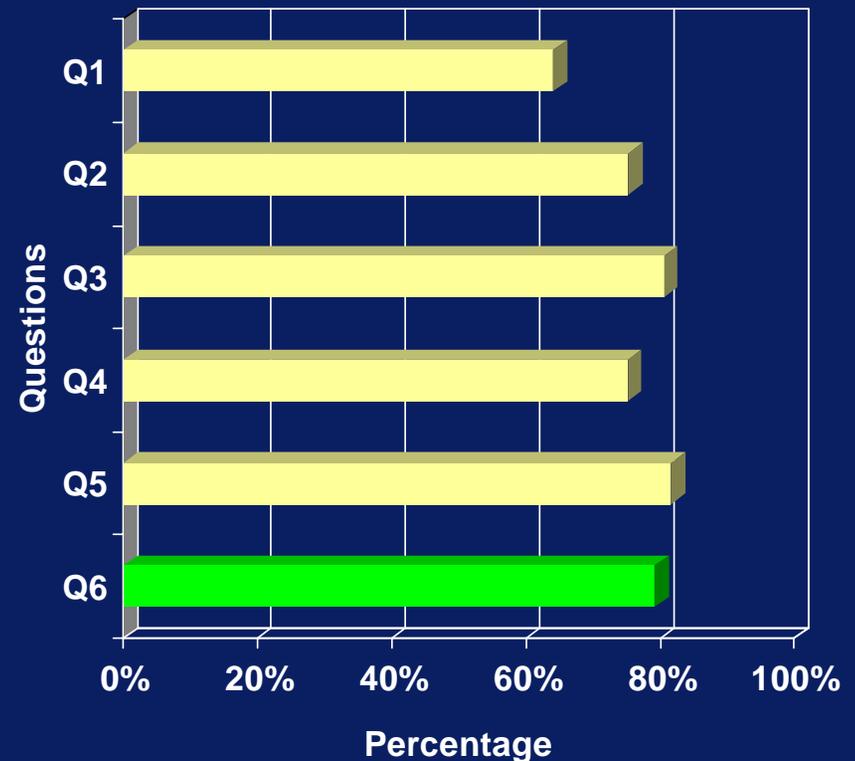
<i>Mother's age</i>	<i>Percentage</i>
< 20	7%
20 to 29	43%
> 29	50%



Results: Individual Questions

1. Someone to loan me money
2. Someone to help me if I were sick and needed to be in bed
3. Someone to take me to the clinic or doctor if I needed a ride
4. Someone to help with household chores
5. Someone to give me advice or information
6. Someone to listen to me about my problems

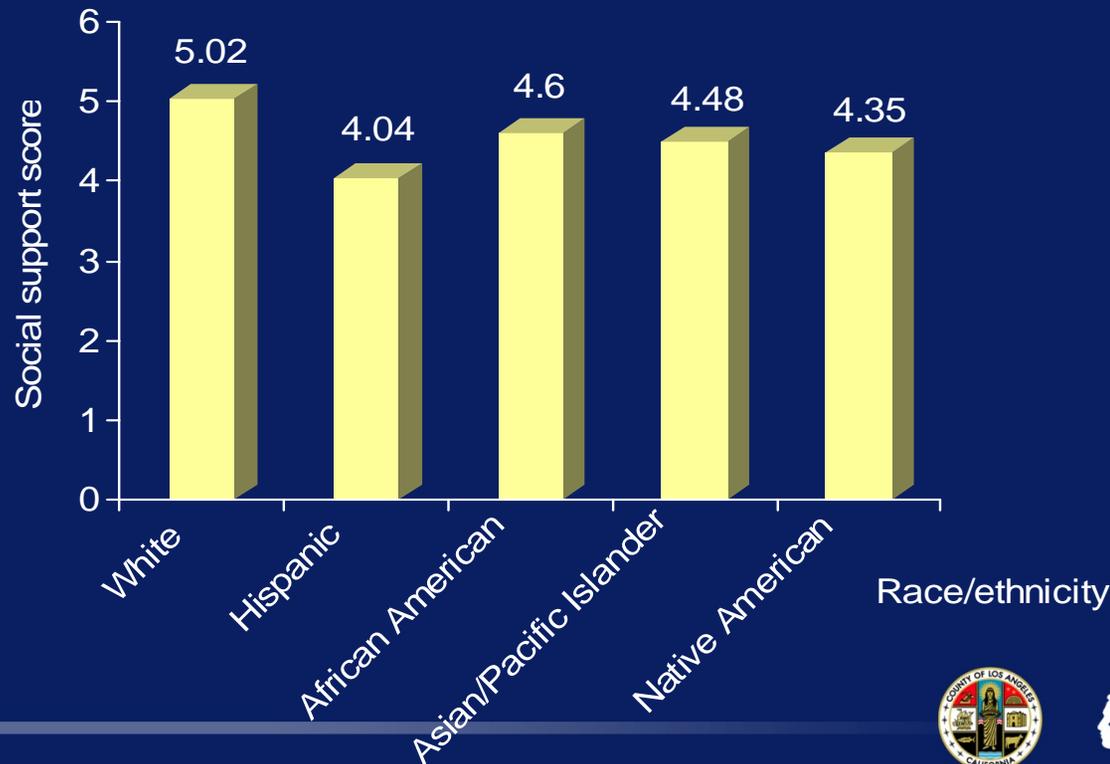
Mothers Responding "Yes" to help availability questions



Results: by Race/Ethnicity

By adding the 'yes' answers together, the average composite score is 4.5 out of 6

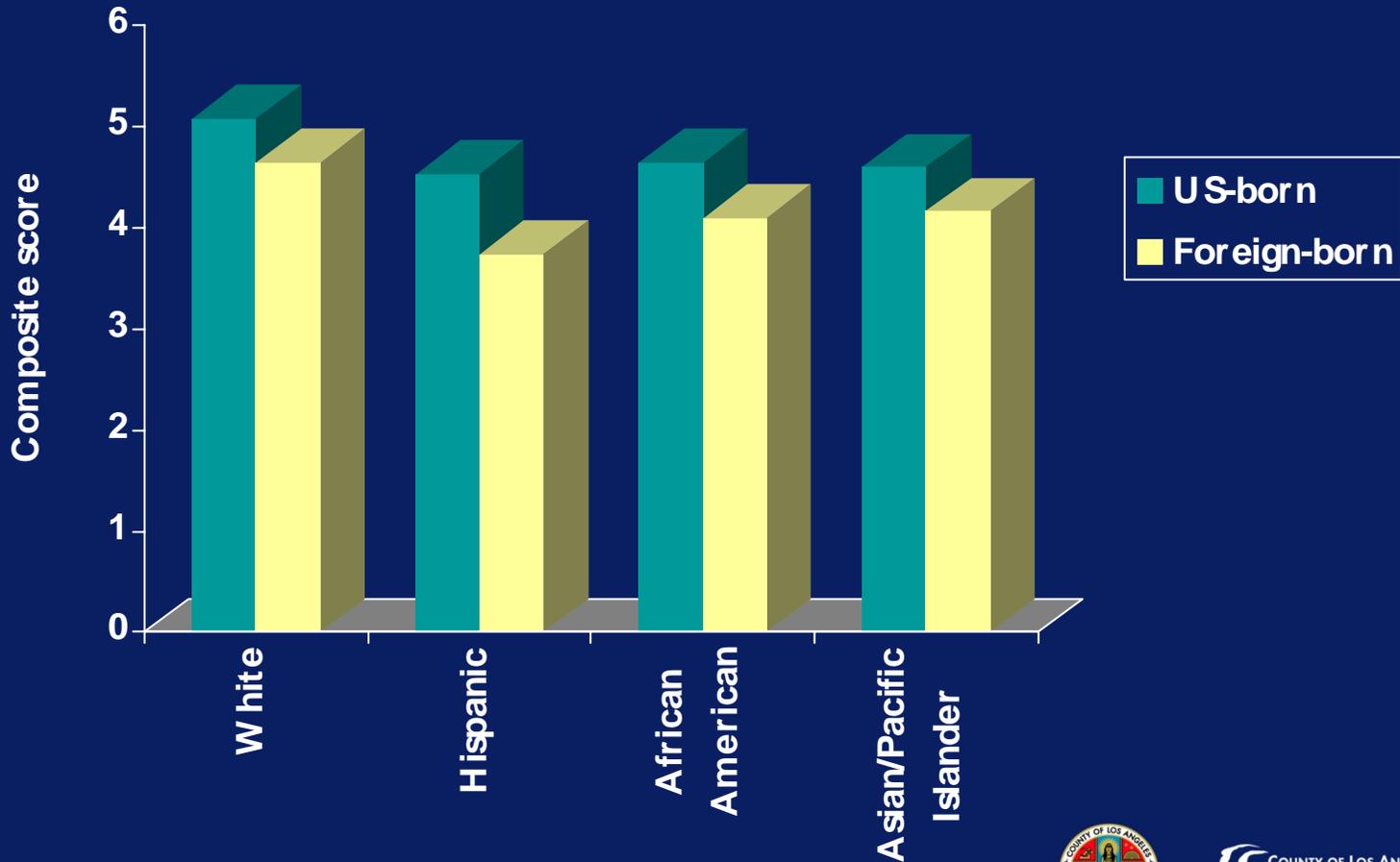
The average composite scores by race/ethnicity are:





Results: by Foreign and US-born

Composite Score by race/ethnicity and Foreign/US-born



Results: by Marital Status



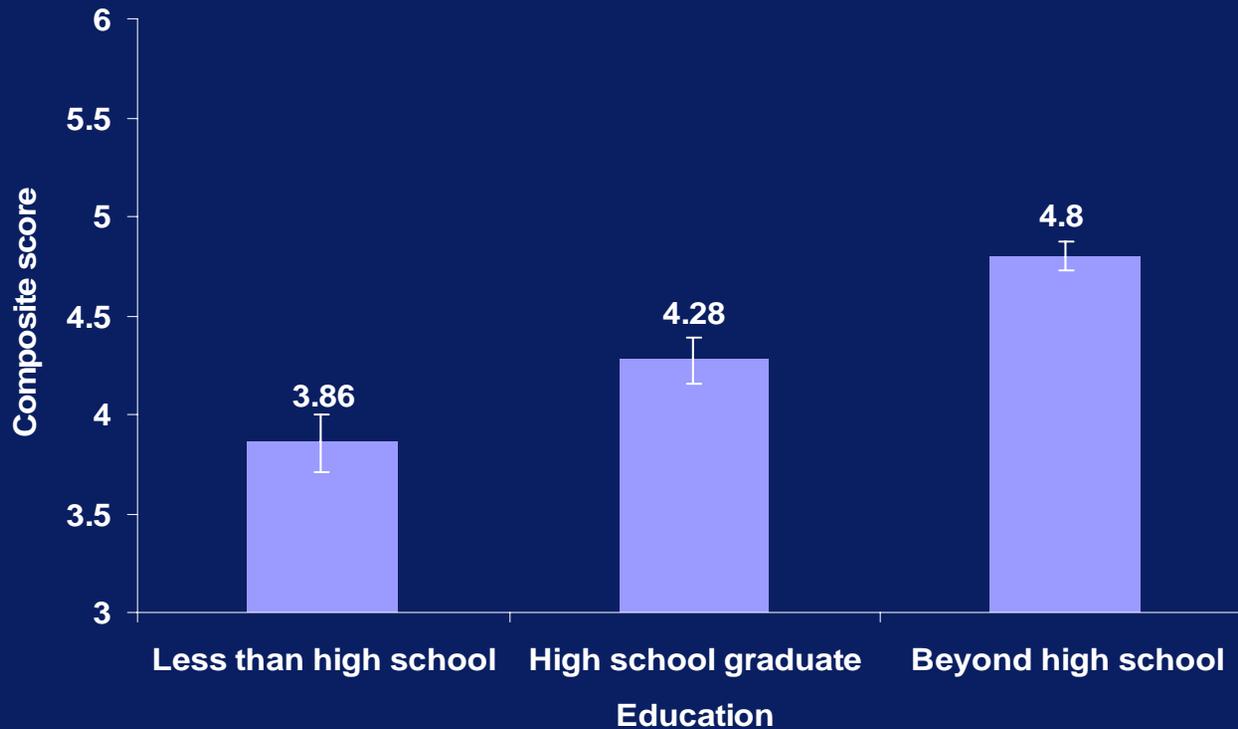
Social support scores by marital status



Results: by Education Attained

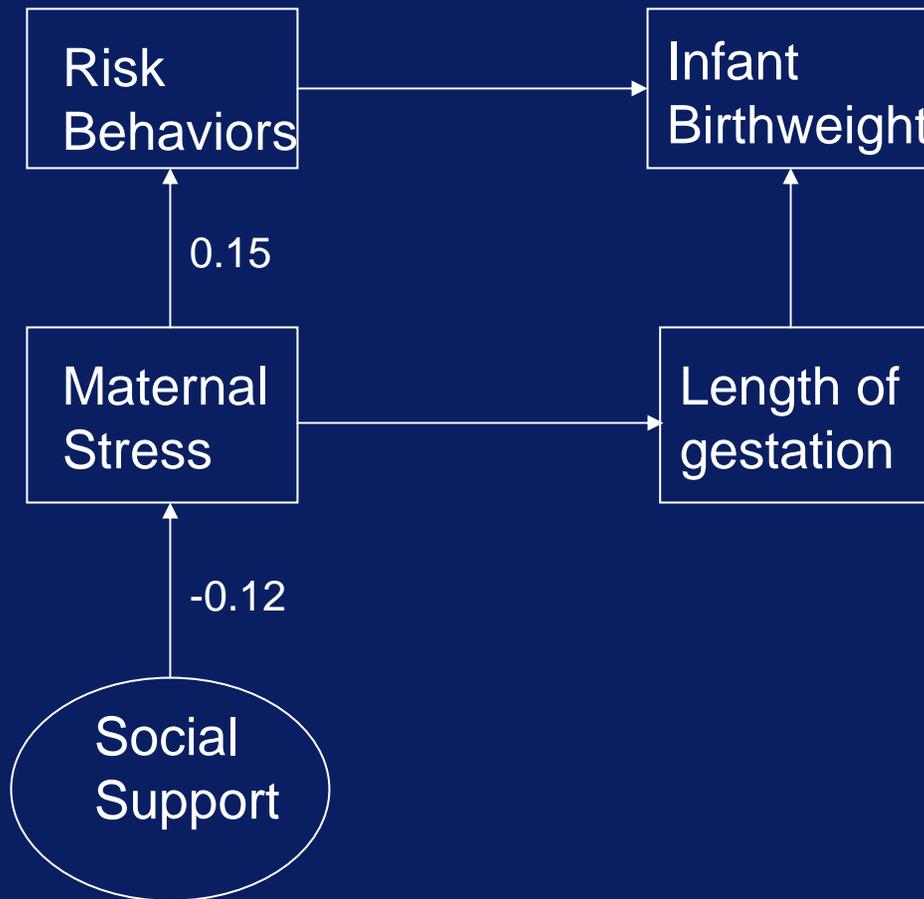


Social support scores by education levels



Results:

Social Support Model Correlations



Results: Multivariate Analysis



- After controlling for marital status, education level, age and race, social support was not found to be associated with preterm birth (PT) or low birth weight (LBW).
- Stressful events is not associated with PT or LBW.
- Social support has a cushioning effect to maternal risk behaviors as a result of stress, confirmed by test of homogeneity.
- Low level of social support increase the likelihood of maternal depression by 62%. Low level of social support also increase the likelihood of mothers reporting time of pregnancy as a 'difficult time' by 50%.



Discussion

- Social support is an important factor in mediating maternal stress during pregnancy. However, the relationship of social support and pregnancy outcome may not be directly observed.

Strengths

Large sample size

Representativeness
unknown

Clear pathway approach

Limitations

Recall biases

Chronic stressors effect



Discussion

- Social support availability varied among racial/ethnic and different socio-demographic groups.
- Similar to some interventional studies, we found that additional social support showed no association with birth outcome, but was associated with improvement in maternal psychosocial outcomes.
- Further research and intervention should focus on reducing disparity in social support to women and family before and during pregnancy.



Implications & Interventions

Reducing disparities in social support network

- Increase awareness through the Los Angeles County Preconception Health Collaborative and the Los Angeles Perinatal Mental Health Task Force
- Continued to collaborate and provide support to mothers through various MCAH programs:
 - Black Infant Health (BIH)
 - Comprehensive Perinatal Services Program (CPSP)
 - Nurse Family Partnership/Prenatal Care Guidance (NFP/PCG)
- Worked with community-based organizations to develop provider care modules and action plans



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