Barriers and facilitators of postpartum depression screening as reported by mothers

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Background

- **Postpartum depression (PPD):** onset anytime from birth until one year after giving birth, lasting beyond two weeks postpartum
- Affects approximately 14.5% of women within 3 months after giving birth
- Higher rates PPD among women of lower socioeconomic status and social support, history of depression, poor pregnancy outcome
- Most common serious postpartum disorder

Gaynes B, et al. Perinatal Depression: Prevalence, Screening Accuracy, and Screening Outcomes. AHRQ. Evidence Report/Technology Assessment Number 119.

Rich-Edwards J, et al. Sociodemographic predictors of antenatal and postpartum depressive symptoms among women in a medical group practice. J Epidemiol Community Health 2006; 60: 221-227.

Background

Consequences of PPD

•**For mothers, PPD may cause**

-Feelings of guilt, of being a “bad mother”
-Stress on mother’s relationships and family
-Decreased medical compliance

•**For children, mother’s PPD may affect**

-Mother-infant bonding: resulting in negative effects on child’s behavioral and cognitive development

-Infant behavior: resulting in higher risk for depression, anxiety, conduct disorders later in child’s life

Kumar R, Robson K. A prospective study of emotional disorders in childbearing women. *B J Psychiatry* 1984;144:35–47.
Murray L, et al. The impact of postnatal depression and associated adversity on early mother-infant interactions and later infant outcome. *Child Dev* 1996;67(5):2512–26.

Background

Postpartum depression screening

- US Preventive Task Force (USPTF) and Agency for Healthcare Research (AHRQ) recommend:

  -routine depression screening in primary care offices with systems in place to assure accurate diagnosis, effective treatment, and follow-up
- American Academy of Pediatrics (AAP) and American College of Obstetricians and Gynecologists (ACOG) recommend:

  -pregnant women be educated about PPD during third trimester

  -obstetricians/gynecologists consult with their patients about their risk for psychiatric illness during the postpartum period

http://www.cdc.gov/prams/References/PPD.htm

Background

Public Health Problem

- Effective treatments exist for PPD, but rates of diagnosis and treatment are low due to lack of recognition by medical providers
- Many women not speak about PPD symptoms with provider due to: social stigma, fear losing children, feeling that condition normal after having baby
- Use of *standardized screening tool* by maternity care providers increases diagnosis rates of PPD, but…most screening only includes question in clinical interview
- Medical providers identify barriers to PPD screening: lack of time, reimbursement, and mental health training

Objectives

- Identify PPD screening rate *as reported by mothers*
- Determine if women who are more at-risk for PPD are more likely to be screened by their maternity provider
- Determine factors from *women's perspective* that facilitate and hinder PPD screening between women and maternity care providers

Methods

Listening to Mothers II Survey

- National survey of new mothers' recent pregnancy and birth experiences (n=1573)
- English speaking women ages 18-45 who gave birth in 2005, to a still living singleton in hospital
- Sponsored by Childbirth Connections
  - national not-for-profit organization, advocates for maternity care quality improvement
- www.childbirthconnections.com

Methods

Survey Development

- Questions written by Childbirth Connections team, led by Carol Sakala, Ph.D and Gene Declercq, Ph.D
- Email and telephone survey conducted by Harris Interactive (nat'l independent research organization)
- 30 minute web survey (n=1373) and slightly shorter telephone survey (n=200). Telephone survey reached black and Hispanic mothers to help offset undersampling in web based survey.
- Results weighted to be more representative of U.S. birthing population

Representativeness of *Listening to Mothers II (LTMII)* Compared to National Birth Data		
Maternal Characteristics	**LTMII (2005) (N=1573)**	**Singleton Hosp. Births Mothers 18-45 (2004) (N=3,780,803)**
Birth Attendant	%	%
Doctor	92	92
Midwife	8	8
Mother's Race/Ethnicity		
White non-Hispanic	63	57
Black non-Hispanic	12	14
Hispanic	21	23
Asian & Other	4	6
Mother's Age		
18-24	28	34
25-29	27	28
30-34	25	24
35-39	14	12
40-45	6	3

Methods

Sample Population from LTM II

- Women that attended one or more postpartum visits with maternity provider between 3-8 weeks postpartum (n=1478, 94% of entire sample)
- Mothers responded to question, “During your postpartum visits in the first 3-8 weeks after birth, did any of your caregivers ask you if you were experiencing feelings of depression?” (n=1467)
- 59.9% of mothers responded they were asked about postpartum depression

Results

PPD Screening Rates by Maternal Variables (Chi-Square Analysis)

	Total n (n=1467)	% Women screened	p-level
Age (years)			0.26
18-24	400	59.5	
25-29	402	63.9	
30-34	369	57.5	
35-45	296	58.1	
Educational level			0.04*
Less than high school	142	51.8	
High school grad	481	56.2	
Some college	416	63.0	
College grad or more	427	62.3	
Annual Income			0.79
<$25,000 per year	322	59.3	
25-49,999	377	58.9	
50-74,999	271	60.1	
75,000+	402	62.2	

* p value<0.05

Results

PPD Screening Rates by Maternal Variables (Chi-Square Analysis)

	Total n (n=1467)	% Women screened	p-level
Health Insurance			0.12
Public	534	62.7	
Private	898	58.6	
Race/ethnicity			0.02*
White, Non-Hispanic	917	62.8	
Black, Non-Hispanic	179	57.5	
Hispanic	306	54.2	
Marital Status			0.13
Married	1042	61.8	
Unmarried with partner	337	56.7	
Unmarried, no partner	74	54.1	

* p value< 0.05

Results

PPD Screening Rates by Provider Characteristics (Chi-Sqare Analysis)

	Total n (n=1467)	% Women screened	p-level
Maternity care provider			<0.01*
Obstetrician/gynecologist	1161	60.1	
Family med physician	121	43.8	
Nurse midwife	137	72.3	
Depression screening at prenatal care appointment			<0.01*
Yes	688	77.0	
No	766	45.3	
Continuity of maternity care			0.36
Yes	1072	60.6	
No	395	58.0	

* p value< 0.05

Continuity of maternity care: mother answered they always or almost always saw the same maternity care provider at each visit

Logistic Regression Model

Adjusted Odds ratios (95% confidence intervals) for predictors of being screened for PPD

Maternal Variables	AOR	(95% CI)
Education level		
HS education or less	0.44	(0.27, 0.74)
HS grad	ref	
Some college	1.2	(0.91,1.7)
College grad	1.6	(1.1,2.3)
Health Insurance		
Public	1.2	(0.84,1.6)
Private	ref	
Race/Ethnicity		
Hispanic	0.75	(0.55,0.98)
Black Non-Hispanic	0.71	(0.49, 1.0)
White Non-Hispanic	ref	
Marital Status		
Unmarried, no partner	0.75	(0.54,1.0)
Unmarried, with partner	0.82	(0.42,1.5)
Married	ref	

Adjusted for age, maternity provider, prenatal depression screening

Logistic Regression Model

Adjusted Odds ratios (95% confidence intervals) for predictors of being screened for PPD

Provider Variables	AOR	(95% CI)
Provider type		
Family medicine physician	0.55	(0.36, 0.85)
Nurse midwife	1.9	(1.2, 3.1)
Obstetrician/gynecologist	ref	
Screened for depression at prenatal visit		
Yes	4.4	(3.4,5.7)
No	ref	

Adjusted for by age, marital status, education, race/ethnicity, health insurance

Conclusions

- 40% of women not being asked about postpartum depression by maternity provider
- Most likely more are never administered a standardized depression screening tool
- Include questions in future LTM III surveys which can differentiate standardized PPD screening and clinical interview

Conclusions

Multivariate Predictors of PPD Screening

- Women with less than high school education, of Hispanic or Black race/ethnicity, unmarried, seeing a family medicine physician *are less likely to be asked about postpartum depression*
- Women with higher education, married, seeing a nurse midwife, and asked about depression prenatally *are more likely to be asked about postpartum depression*

- Variables not included in model: continuity of maternity care, having a low birth weight baby (<2500g), parity, and pregnancy intention

Limitations LTM II Survey

- Convenience sample of women

  -Nationally representative sample

  -Minority women oversampled

  -Survey data weighted to reflect internet bias
- Recall bias

  -Time between birth and survey recorded
- Questions asked about depression screening are general, could be interpreted differently by women

  -May overestimate number women asked about PPD

Implications

- Target screening efforts to women most at-risk for experiencing postpartum depression, the women providers are least likely to be screening
- Further identify barriers for women to speak to their maternity provider about feelings of depression

- *Part 1: Routine depression screening in primary care offices…*

  Part 2: Ensure have systems in place to assure accurate diagnosis, effective treatment, and follow-up

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