

## The Costs of Not Asking about Abuse: Empirical Evidence

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## 1792 Yellow Fever Epidemic in Philadelphia

### Possible causes

Brought by immigrants  
Judgment from God  
Rotten coffee

### Proposed moderators

“hot sun, night air, too much liquor, and anything else that might lower their resistance.”

Race – African Americans worked as nurses because it was thought they could not be infected.

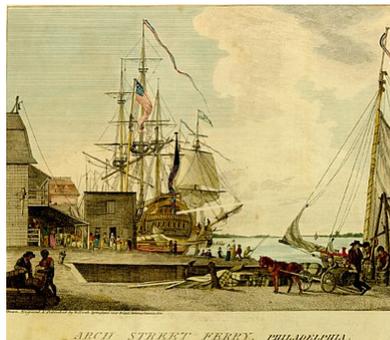


Photo in public domain.  
[http://en.wikipedia.org/wiki/Yellow\\_Fever\\_Epidemic\\_of\\_1793#cite\\_note-12](http://en.wikipedia.org/wiki/Yellow_Fever_Epidemic_of_1793#cite_note-12)

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**Prevention**  
 Some left during summer  
 Disinfecting with vinegar  
 Quarantines

**Benjamin Rush's Treatments**  
 Purging  
 Bloodletting  
 To activate body's defenses

Rush accused of killing more than saving

Ideas that filth, not immigrants, caused the disease were not politically popular.



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**Good scientific models** have *benefits*.

Kill mosquitoes, people don't get sick.

**Bad scientific models** have *costs*.

African American nurses put at risk, and bloodletting could be worse than nothing.

**Even with** vastly improved clinical research methods, we must

- identify third variables
- tease apart causal factors from markers
- model mediation and moderation accurately

....to gain benefits, and to avoid costs.

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Researchers and IRBs required to

1) consider “*the importance of the knowledge that may reasonably be expected to result.*”

-45.CFR.46.111, italics added.

2) gather *systematic and comprehensive information* about proposed research.”

- The Belmont Report, italics added.

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### **The Costs To Society and Science of Not Asking about Abuse: 3 Examples**

1. Family Structure and Mental Health
2. Cardiovascular disease
3. Abortion and Mental Health

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## 1. Family Structure and Mental Health

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MODERNmom<sup>®</sup>  
**PARENTING**

## Depression in Children From Single-Parent Homes

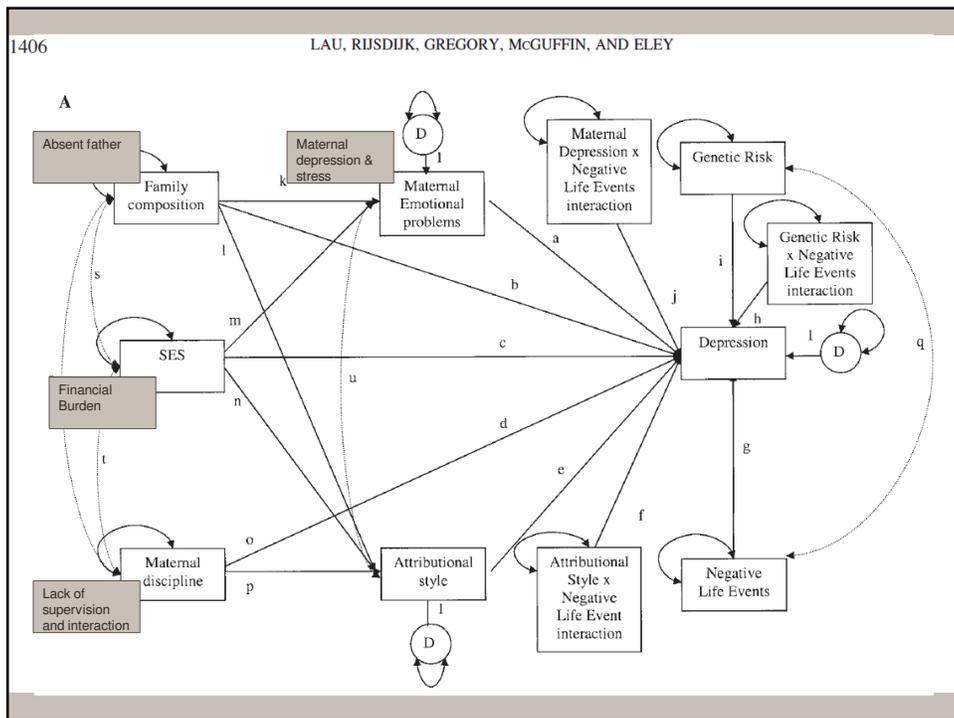
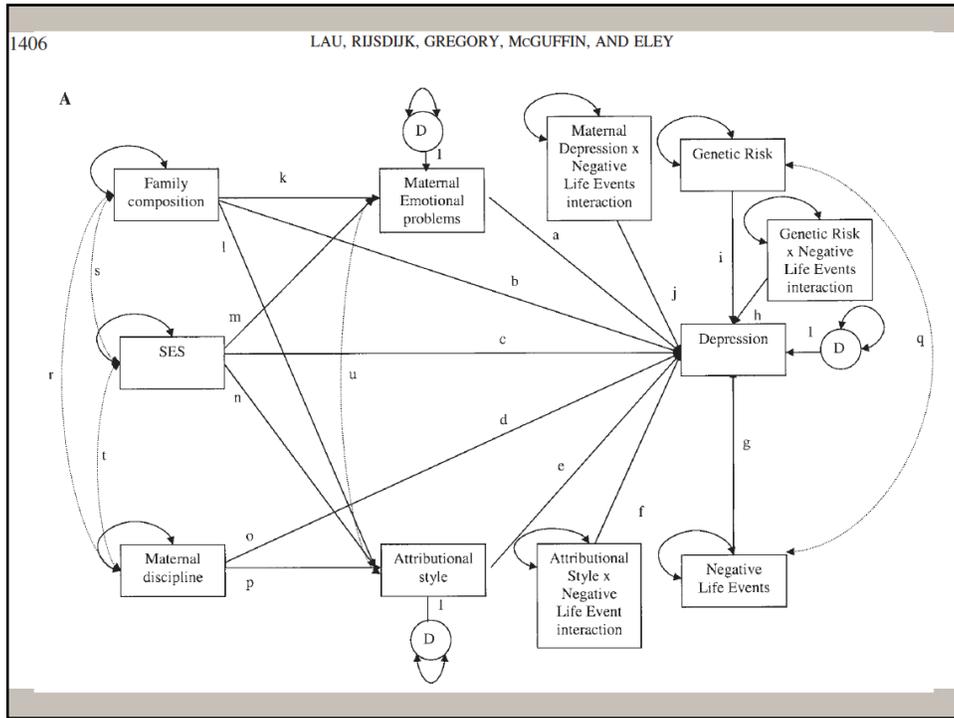
By *Candace Webb* on January 25, 2011

### Included causes of childhood depression:

- Absent father
- Emotional stress by the mother, who has to fill both roles
- Financial hardship
- Social isolation
- Parental depression (can be taught to child)
- Lack of supervision and interaction with children (due to working long hours)

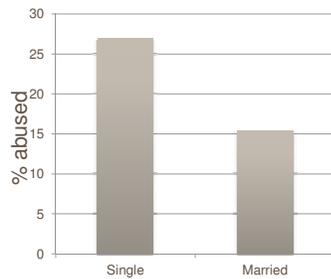
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<http://www.modernmom.com/article/depression-in-children-from-single-parent-homes>

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### Lipman, MacMillan, and Boyle (2001)

Single Moms Are More Likely to Have Been Abused as Children



Child Abuse Predicts Mothers' Emotional Problems

	Mothers' Mood/Anxiety Disorder	Mothers' Substance Abuse Disorder
Single Parent	1.44	1.10
Child Abuse	2.22*	3.17*

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### Turner, Finkelhor & Ormrod (2006)

Depression in 2- to 9-year-olds

	Model 1	Model 2
<i>Gender, Age, Race/Ethnicity, SES controlled</i>		
Single Parent	**	ns
Step-Parent	**	ns
Sexual Assault		**
Child Abuse		**
Witness Family Violence		**
Other Major Violence		**
Adjusted R <sup>2</sup>	.194	.228

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## 2. Cardiovascular Disease

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### **Risk factors** By Mayo Clinic Staff

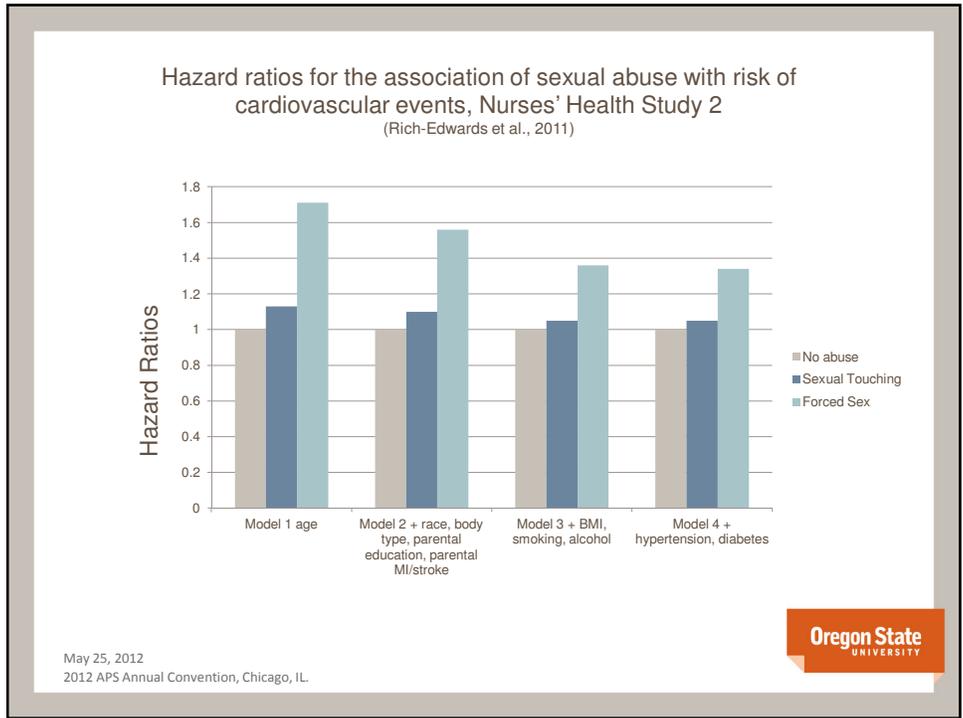
*Heart disease risk factors include:*

- Your age.
- Your sex.
- Family history.
- Smoking.
- Poor diet.
- High blood pressure.
- High blood cholesterol levels.
- Diabetes.
- Obesity.
- Physical inactivity.
- High stress.
- Poor hygiene.

<http://www.mayoclinic.com/health/heart-disease/DS01120/DSECTION=risk-factors>

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### 3. Abortion and Mental Health

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**Womens Health Zone**  
www.WomenHealthZone.com

General Health | Healthy Living | Sexually Transmitted Diseases | Tests And Treatments | Women's Health

**Does Abortion Affect Your Health? Know About Abortion Risks!**

**Psychological effects of abortion:**  
Many women suffer with emotional and psychological problems after experiencing abortion.

- depression,
- acute feeling of grief
- fear of disclosure
- eating disorders,
- suicide tendencies,
- anxiety
- increased consumption of alcohol and drugs.

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Coleman (2012):

“Women who had undergone an abortion experienced an 81% increased risk of mental health problems, and nearly 10% of the incidence of mental health problems was shown to be attributable to abortion.”

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### Risk of PTSD by Abortion Status

Steinberg and Russo (2008)

Abortion Status	B	P value	Odds Ratio (CI)
2 vs. 0	1.065	0.004	2.90 (1.44 – 5.87)
2 vs. 1	1.043	0.066	2.841 (0.931 – 11.904)
1 vs. 0	0.84	0.05	2.31 (0.99 – 5.38)

No control variables.

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Table 7

NCS: descriptive statistics for demographic characteristics and major variables for all first pregnancies ending in a live birth or abortion

	Abortion	Delivery
Unweighted n	273	1549
<b>Race</b>		
White	75.4% (4.2%)	73.1% (2.7%)
Black	12.4% (3.6%)	14.7% (1.9%)
Hispanic	10.5% (3.0%)	9.1% (1.7%)
Other	1.7% (0.5%) <sup>a</sup>	3.1% (0.8%) <sup>b</sup>
<b>Marital status</b>		
Married/cohabitating	64.9% (3.5%) <sup>a</sup>	76.4% (1.6%) <sup>b</sup>
Divorced/separated/widowed	16.1% (2.9%)	12.4% (1.4%)
Never married	19% (2.6%) <sup>a</sup>	6.3% (0.9%) <sup>b</sup>
<b>Violence exposure</b>		
Rape	15.1% (3.6%) <sup>a</sup>	7.5% (0.8%) <sup>b</sup>
Molestation	18.3% (3.2%) <sup>a</sup>	11.6% (1.0%) <sup>b</sup>
Child physical abuse	5.3% (1.7%)	5.5% (0.7%)
Captured/kidnapped/threatened with a weapon	11.9% (2.9%)	7.9% (1.0%)
Physically attacked	9.7% (2.3%)	7.0% (0.8%)
Any type of violence	39.1% (5.1%) <sup>a</sup>	26.8% (1.4%) <sup>b</sup>
<b>Pre-existing disorder</b>		
GAD	2.0% (0.7%)	3.2% (0.5%)
Social anxiety	12.6% (2.3%)	13.8% (1.1%)
PTSD	10.4% (2.6%)	7.5% (0.8%)
<b>Post-pregnancy anxiety disorder</b>		
GAD	6.2% (1.7%)	7.3% (0.8%)
Social anxiety	12.0% (2.4%)	13.5% (1.0%)
PTSD	10.2% (2.9%)	7.8% (0.8%)
Mean income	19,521 (1860)	13,484 (643)
Age at first pregnancy outcome	20.02 (0.314) <sup>a</sup>	21.97 (0.185) <sup>b</sup>
Education	13.83 (0.198) <sup>a</sup>	12.78 (0.094) <sup>b</sup>
Subsequent abortions	0.23 (0.042) <sup>a</sup>	0.08 (0.015) <sup>b</sup>
Subsequent children	0.96 (0.109) <sup>a</sup>	1.29 (0.054) <sup>b</sup>

Data Source: National Comorbidity Study

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## Risk of PTSD by Abortion Status – Controlling for Covariates including abuse

Steinberg and Russo (2008)

Abortion Status	B	P value	Odds Ratio (CI)
2 vs. 0	0.25	0.64	1.29 (0.43 – 3.84)
2 vs. 1	0.27	0.64	1.32 (0.41 - 4.21)
1 vs. 0	-0.02	0.94	0.98 (0.54-1.78)

“Women who were raped, kidnapped/ held captive/threatened with a weapon or physically attacked and those with PTSD before their pregnancy were significantly more likely to have PTSD.”

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In sum:

- Abuse is a significant predictor of diverse, expensive problems.
- When we don't ask about abuse when it is relevant, science loses. We miss important predictors, develop bad models, waste time and money.
- Society loses, too. Public has inaccurate information. Our prevention and intervention strategies are less effective, or even harmful.
- The costs to science and society of not asking about abuse are high.

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