The Costs of Not Asking about Abuse: Empirical Evidence

Kathryn Becker-Blease
Oregon State University

Jennifer J. Freyd
University of Oregon

Nancy Felipe Russo
Arizona State University and Oregon State University

Janet Rich-Edwards
Harvard University

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.
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.

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.
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.

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
1. Family Structure and Mental Health

---

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

Single Moms Are More Likely to Have Been Abused as Children

Child Abuse Predicts Mothers’ Emotional Problems

<table>
<thead>
<tr>
<th></th>
<th>Mothers’ Mood/Anxiety Disorder</th>
<th>Mothers’ Substance Abuse Disorder</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single Parent</td>
<td>1.44</td>
<td>1.10</td>
</tr>
<tr>
<td>Child Abuse</td>
<td>2.22*</td>
<td>3.17*</td>
</tr>
</tbody>
</table>

Turner, Finkelhor & Ormrod (2006)

Depression in 2- to 9-year-olds

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender, Age, Race/Ethnicity, SES controlled</td>
<td>**</td>
<td>ns</td>
</tr>
<tr>
<td>Single Parent</td>
<td>**</td>
<td>ns</td>
</tr>
<tr>
<td>Step-Parent</td>
<td>**</td>
<td>ns</td>
</tr>
<tr>
<td>Sexual Assault</td>
<td>**</td>
<td></td>
</tr>
<tr>
<td>Child Abuse</td>
<td>**</td>
<td></td>
</tr>
<tr>
<td>Witness Family Violence</td>
<td>**</td>
<td></td>
</tr>
<tr>
<td>Other Major Violence</td>
<td>**</td>
<td></td>
</tr>
<tr>
<td>Adjusted R²</td>
<td>.194</td>
<td>.228</td>
</tr>
</tbody>
</table>
2. Cardiovascular Disease

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
Hazard ratios for the association of sexual abuse with risk of cardiovascular events, Nurses’ Health Study 2 (Rich-Edwards et al., 2011)

<table>
<thead>
<tr>
<th>Model</th>
<th>Hazard Ratios</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model 1 age</td>
<td>1.2</td>
</tr>
<tr>
<td>Model 2 + race, body type, parental education, parental MI/stroke</td>
<td>1.5</td>
</tr>
<tr>
<td>Model 3 + BMI, smoking, alcohol</td>
<td>1.4</td>
</tr>
<tr>
<td>Model 4 + hypertension, diabetes</td>
<td>1.6</td>
</tr>
</tbody>
</table>

3. Abortion and Mental Health
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.

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.”
Risk of PTSD by Abortion Status
Steinberg and Russo (2008)

<table>
<thead>
<tr>
<th>Abortion Status</th>
<th>B</th>
<th>P value</th>
<th>Odds Ratio (CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 vs. 0</td>
<td>1.065</td>
<td>0.004</td>
<td>2.90 (1.44 – 5.87)</td>
</tr>
<tr>
<td>2 vs. 1</td>
<td>1.043</td>
<td>0.066</td>
<td>2.841 (0.931 – 11.904)</td>
</tr>
<tr>
<td>1 vs. 0</td>
<td>0.84</td>
<td>0.05</td>
<td>2.31 (0.99 – 5.38)</td>
</tr>
</tbody>
</table>

No control variables.

Data Source: National Comorbidity Study
### Risk of PTSD by Abortion Status – Controlling for Covariates including abuse

Steinberg and Russo (2008)

<table>
<thead>
<tr>
<th>Abortion Status</th>
<th>B</th>
<th>P value</th>
<th>Odds Ratio (CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 vs. 0</td>
<td>0.25</td>
<td>0.64</td>
<td>1.29 (0.43 – 3.84)</td>
</tr>
<tr>
<td>2 vs. 1</td>
<td>0.27</td>
<td>0.64</td>
<td>1.32 (0.41 - 4.21)</td>
</tr>
<tr>
<td>1 vs. 0</td>
<td>-0.02</td>
<td>0.94</td>
<td>0.98 (0.54-1.78)</td>
</tr>
</tbody>
</table>

“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.”

---

**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.