North Carolina Maternal and Perinatal Substance Abuse Initiative Study:
Social Support and DSS Investigation Risk for Child Abuse or Neglect

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Background

• In 1988 the Anti-Drug Abuse Act (PL 100-690) increased set aside money from federal block grants for women’s services from 5 to 10%.

• In 1992 the NC Substance Abuse Treatment Section put out the first request for proposals to “increase the availability, accessibility, and coordination of comprehensive regional substance abuse programs for alcohol and drug abusing pregnant women and their children.”

• Currently, North Carolina supports 23 perinatal and maternal substance abuse treatment programs across the state.

• Coordinating care for dependent children of clients and working with families on custody related issues are key components of all treatment programs supported by the Perinatal and Maternal Treatment Initiative.
Rationale

• It is estimated that 40-80 percent of the families involved with child protective services have a member who has a problem with AOD.

• The National Institute on Drug Abuse (NIDA) estimates that 15% of women ages 15-44 are substance abusers.

• A 1992 survey by NIDA estimated of over 5% of pregnant women using illicit drugs and over 18% using alcohol during their pregnancy.

• Addiction can leave women and their families vulnerable to social service involvement due to the direct effects of prenatal drug use, but also due to concerns about women’s reduced capacity to care for their children when their addiction is untreated.

• Recovery, pregnancy and family reunification are all stressful events, through they may seem on the surface to be positive.
Rationale Continued

- Support can moderate the effects of stressors as well as many of the other risk factors for child abuse or neglect prevalent in this population including poverty and low education.

- The protective effects of support have been noted in research literature for families with regard to being at risk for child abuse and neglect.

Research Hypothesis

Having supportive relationships is protective for DSS investigation at the six-month follow up assessment among women who have children and are in the NC Perinatal/Maternal Substance Abuse Treatment Initiative.

Women with supportive relationships are less likely to be investigated by DSS than women without supportive relationships.
Methodology

• Intake and follow up data was collected by Perinatal and Maternal Treatment Programs across the state from women served between November 1996 and June 1999 for administrative monitoring and outcome evaluation purposes.

• Four-hundred-sixty-four women who had children during their first six months of treatment were included in this case control study.

• Case Section Flow Diagram
Methodology Continued

• Data was entered and analyzed using SPSS versions 7.5 and 8.0

• Bivariate analysis was used to identify confounding variables and a full logistic regression model was used in the final analysis.

• This was a case control study with an internal comparison group. Women with DSS investigations during the first six months of treatment were compared to women without DSS investigations during this time period.

• The dependent variable was DSS Investigation during the first six months of treatment.

• The primary explanatory variable of interest was “…does the client have supportive, non-violent, substance-free primary relationships”.
Findings

After controlling for other confounding variables, it was found that having supportive relationships was significantly ($p < .001$) protective against DSS investigation in this study population (Odds Ratio $0.27$, 95% CI $0.17 - 0.42$).

Women without supportive relationships were 3.7 times more likely to be investigated by DSS during their first six months of treatment than women who had supportive relationships.

Though not the focus of this study, use of cocaine was found to be a predictor of DSS investigation. Women who used cocaine, when controlling for other confounding variables in this model, were 2.83 (95% CI, $1.63 – 4.92$, $p < .001$) times more likely to be investigated than women who did not use cocaine.
Discussion of Findings

• Support is critical for the recovery process of persons with addictive disorders.

• Research indicates that risk factors for abuse and neglect such as low education and low socioeconomic status can be moderated by the presence of supportive relationships.

• Women in the Perinatal and Maternal Substance Abuse Initiative share many of the risk factors for abuse and neglect present in the general low income population.

• When controlling for other explanatory variables, having supportive relationships remained strongly protective in this high risk population.

• Cocaine use emerged as a strong risk factor for DSS investigation. This is likely due to three key factors: a greater stigma is associated with cocaine use than other drugs such as alcohol and marijuana, cocaine use is more easily
identified through drug screening than alcohol use, and there may be lifestyle issues for the cocaine addict that put them at greater risk for DSS involvement.
Clinical Implications

• Women’s treatment programs should make a serious effort to screen carefully to determine if their clients have supportive persons in their lives.

• Results from support assessments can be used to educate clients about the importance of support for their recovery and for their family’s welfare.

• Women should be referred to twelve step and other self help groups where they might get social support for their role as recovering mothers.

• Parenting support groups, where women are free to talk about their addiction issues, may offer a way to enhance the support available to women.

• In the health research literature, home visitation and case management models have been reported as improving birth outcomes and lowering risk of DSS involvement for low income women in the general population. A case management or otherwise comprehensive treatment approach may provide
some of the critical support needed by families in this substance abuse initiative.
## Variables Analyzed for Association with DSS Investigation

**Odds Ratios and 95% confident intervals**

<table>
<thead>
<tr>
<th></th>
<th>Protective</th>
<th>No Effect (1.0)</th>
<th>Risk Factor</th>
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<tbody>
<tr>
<td>Supportive relationships</td>
<td>.18—.28—.43</td>
<td></td>
<td></td>
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<tr>
<td>Crime since intake</td>
<td></td>
<td>1.37—2.52—4.65</td>
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<tr>
<td>MH Hospitalization</td>
<td>.57</td>
<td>1.96—6.62</td>
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<tr>
<td>SA Hospitalization</td>
<td>1.47—2.45—4.06</td>
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<tr>
<td>Uses Alcohol</td>
<td>1.01—1.52—2.30</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Uses Cocaine</td>
<td>2.27—3.64—5.88</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Uses Marijuana</td>
<td>.63—.99—1.53</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Uses Other Drugs</td>
<td>.32—.86—2.25</td>
<td></td>
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<tr>
<td>In Remission</td>
<td>.09—.23—.54</td>
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</table>
Logistic Regression Model

When controlling for other explanatory variables, are women with supportive relationships less likely to be investigated by DSS than women without supportive relationships? **YES.**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Odds Ratio</th>
<th>95% CI</th>
<th>Significant(p&lt;.001)</th>
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<tbody>
<tr>
<td>Supportive Relationships</td>
<td>.27</td>
<td>(.17 - .42)</td>
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<tr>
<td>Substance Abuse Hospitalization</td>
<td>1.55</td>
<td>(.91 – 2.65)</td>
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<tr>
<td>Criminal Offense</td>
<td>1.70</td>
<td>(.90 – 3.20)</td>
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<tr>
<td>Alcohol Use</td>
<td>1.05</td>
<td>(.66 – 1.67)</td>
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</tr>
<tr>
<td>Cocaine Use</td>
<td>2.83</td>
<td>(1.63 – 4.92)</td>
<td>***</td>
</tr>
<tr>
<td>In remission</td>
<td>.28</td>
<td>(.06 – 1.27)</td>
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<tr>
<td>Interaction Term</td>
<td>3.95</td>
<td>(.66 – 23.76)</td>
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Population Demographics at Intake