

COCAINE  
&  
PREGNANCY

T H E L I N D E S M I T H C E N T E R

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# COCAINE & PREGNANCY

**R**ising cocaine use and the emergence of crack cocaine in the 1980s spurred fears about its effects on the developing fetus. Pregnant women should not use cocaine. Nonetheless, dozens of studies now indicate that (1) the pharmacological impact of cocaine has been greatly exaggerated, (2) other factors are responsible for many of the ills previously associated with cocaine use, and (3) political and legal responses have done more to exacerbate than alleviate the situation of poor and/or drug-using pregnant women and their stigmatized children.

Policies and preconceptions about drug-using pregnant women and their children are based on early studies and media coverage.

- In 1985, Ira Chasnoff, et al.,<sup>1</sup> reported damaging effects of cocaine use during pregnancy based on a case study, touching off a massive media response.<sup>2</sup>
- Other early studies reported problems associated with cocaine use during pregnancy, including increased exposure to sexually transmitted diseases,<sup>3</sup> maternal weight loss, nutritional deficits<sup>4</sup> and polydrug use,<sup>5</sup> premature detachment of the placenta,<sup>6</sup> premature birth and reduced/low birth weight, reductions in newborn body length and head circumference,<sup>7</sup> rare birth defects including genito-urinary tract malformations<sup>8</sup> and extremely rare bone<sup>9</sup> and neural tube<sup>10</sup> abnormalities, and concerns about developmental problems.
- Many politicians capitalized on this research and media excitement to enact laws requiring health care professionals to report pregnant illicit drug users to child welfare authorities,<sup>11</sup> initiate policies requiring authorities to separate children from mothers who used drugs while pregnant,<sup>12</sup> and pursue legislation making drug use during pregnancy a criminal offense.<sup>13</sup>
- In 1997, South Carolina's Supreme Court became the first and only supreme court to uphold the criminal prosecution of women for child abuse by way of prenatal drug use (penalized with a prison sentence of up to 10 years).<sup>14</sup>

Analyses of early research found methodological flaws, and most researchers now put forth more cautious conclusions about the effects of prenatal cocaine use.

- A meta-analysis of most 1980s studies on prenatal cocaine use found serious methodological flaws, including (1) lack of control groups,<sup>15</sup> (2) failure to distinguish cocaine use from the use of other drugs and other environmental risks,<sup>16</sup> (3) failure to study the ensuing health of the newborn,<sup>17</sup> and (4) use of case reports alone.<sup>18</sup>
- Well-controlled studies find minimal<sup>19</sup> or no<sup>20</sup> increased risk of Sudden Infant Death Syndrome (SIDS) among cocaine-exposed infants. Early studies which reported a greatly increased risk of SIDS did not control for socioeconomic characteristics.<sup>21</sup>
- Early studies which described a "fetal cocaine withdrawal syndrome" were non-blind (the observers were told which infants had been exposed to cocaine). Subsequent blind studies (in which the observers did not know the status of the infants) were unable to detect the phenomenon.<sup>22</sup>
- Child development studies are still underway, although it is clear that the effects of cocaine are far more subtle than originally presumed. A series of four well-controlled studies on cocaine-exposed children reported no effects on measures of development, including IQ,<sup>23</sup> play behavior,<sup>24</sup> mental development, and psychomotor<sup>25</sup> and language<sup>26</sup> abilities. However, a subsequent meta-analysis of eight child development studies, published in *Science*, found that cocaine exposure led to reductions in IQ and language that would be a serious concern when combined with other risk factors, such as maternal poverty and malnutrition.<sup>27</sup>

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- Studies of social cocaine use by pregnant women find no direct effects on the health or development of newborns.<sup>28</sup> Some animal<sup>29</sup> and human<sup>30</sup> studies of chronic use find similar results. Others encounter varied or inconsistent results,<sup>31</sup> leading many researchers to believe factors other than cocaine use may be responsible.<sup>32</sup>
- A 1989 study in *The Lancet* found that scientific results describing harmful effects of cocaine use during pregnancy were more likely to be accepted for presentation and publication than studies of equal or superior methodology showing few or no harmful effects.<sup>33</sup>

No causal link has been established between cocaine use and poor fetal development.<sup>34</sup> Among the general population there has been no detectable increase in birth defects which may be associated with cocaine use during pregnancy.<sup>35</sup> There does appear to be increased risk of low birth weight and preterm delivery directly attributable to chronic cocaine use and cocaine may magnify the effects of poverty, malnutrition, and poor prenatal care.<sup>36</sup> Moreover, cocaine, like any drug, enters the bloodstream of the developing fetus and has the potential to affect development.<sup>37</sup>

Much evidence points to the lack of quality prenatal care, poverty, and the use of alcohol and tobacco as primary factors in poor fetal development among pregnant cocaine users.

- Only a small proportion (1-5%) of birth defects are due to chemical (including drug) exposure.<sup>38</sup>
- The lack of quality prenatal care services is associated with prematurity, low birth weight, and other fetal development problems.<sup>39</sup> Provision of quality prenatal care to heavy cocaine users (with or without drug treatment) has been shown to significantly improve fetal health and development.<sup>40</sup>
- Abuse of alcohol,<sup>41</sup> more than any other recreational drug, causes the greatest number of and most severe birth defects: 0.19% of all newborns (about 7600, or 1% of all newborns exposed to alcohol<sup>42</sup>) are diagnosed with Fetal Alcohol Syndrome.<sup>43</sup>
- Tobacco use is associated with low birth weight, prematurity, growth retardation, SIDS,<sup>44</sup> and cognitive, achievement, and behavioral problems.<sup>45</sup>
- Other factors strongly associated with poor fetal development include poverty,<sup>46</sup> lead exposure,<sup>47</sup> psychiatric problems,<sup>48</sup> and maternal depressive symptoms associated with life stress, lack of social support, and low weight gain.<sup>49</sup>
- Even if medical providers are unable to address a patient's use of cocaine per se, improving these factors may significantly improve the health of a developing fetus.

Political and legal responses to the perceived hazards of prenatal cocaine use may cause more harm than good.

- Criminalizing substance abuse during pregnancy discourages substance-using or abusing women from seeking prenatal care, drug treatment, and other social services,<sup>50</sup> and may lead to unnecessary abortions.<sup>51</sup>
- Overloaded child welfare services are often unable to find homes for otherwise healthy children branded as "crack babies."<sup>52</sup>
- Pejoratively labeling children lowers teacher and parent expectations.<sup>53</sup> Presented with children randomly labeled "cocaine-exposed" and "normal," child-care professionals ranked the performance of the "cocaine-exposed" children below that of the "normal."<sup>54</sup>
- Regardless of similar levels of illicit drug use during pregnancy,<sup>55</sup> African-American and Latina women constitute 80% of those prosecuted for delivering drug-exposed children<sup>56</sup> and are much more likely than Caucasian women to be reported to child welfare agencies for prenatal drug use.<sup>57</sup>

A small number of drug treatment programs in the United States accept pregnant addicts and provide child care services.<sup>58</sup> However, preconceptions about drug use often prevent social service providers from working with pregnant women who use drugs to help minimize potential hazards.<sup>59</sup> Addressing risk factors beyond cocaine use—including inadequate nutrition, health care, and housing—increases the likelihood of a healthy mother and child.

ENDNOTES

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- 10Bingol N,Fuchs M,Diaz V,Stone RK,Gromisch DS. Teratogenicity of cocaine in humans. *Journal of Pediatrics* 1987;110:93-96.
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24468, 31 May, 1996;This decision is in conflict with the decisions of four other state supreme courts (Nevada, Kentucky, Florida, and Ohio) and numerous state appellate court decisions around the United States. *Whitner v. State*, Petition for a Writ of Certiorari.No. (U.S Supreme Court, 19 March 1998).

CHART [see reference 11]:

SURVEY OF SUBSTANCE ABUSE AND CHILD PROTECTIVE SERVICES DIRECTORS FROM 50 STATES AND WASHINGTON, DC		
Policies/Practices	1992	1995
Criminal prosecution of drug-using pregnant women	45%	71%
Positive maternal toxicology defined as abuse/neglect by:		
Law	6%	6%
Agency	16%	15%
Positive neonatal toxicology defined as abuse/neglect by:		
Law	14%	35%
Agency	33%	63%
Mandatory drug/alcohol testing of:		
Pregnant women	2%	12%
Neonates	0%	7%
Mandatory reporting of positive toxicology during pregnancy to:		
Child protective services	2%	17%
Health department	4%	7%
Criminal justice	0%	5%
Mandatory reporting of positive toxicology in neonates to:		
Child protective services	31%	43%
Health department	6%	16%
Criminal justice	6%	21%
Normally report positive toxicology results for:		
Pregnant women	13%	61%
Neonates	35%	65%
Mandatory treatment for:		
Pregnant women	NA	24%
Neonates	NA	26%
Women with children		

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# COCAINE & PREGNANCY

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