March 2016

Re-Evaluating the Criminalization of in Utero Alcohol Exposure: A Harm-Reduction Approach

Adam J. Duso

John Stogner

Follow this and additional works at: https://scholarship.law.wm.edu/wmborj

Part of the Family Law Commons, and the Law and Gender Commons

Repository Citation


Copyright © 2016 by the authors. This article is brought to you by the William & Mary Law School Scholarship Repository.

https://scholarship.law.wm.edu/wmborj
INTRODUCTION

The right of women to self-govern their bodies and make informed decisions about continuing a pregnancy has long been recognized by the courts. Over forty years ago, *Roe v. Wade* clearly established legal protections and guaranteed women the right to terminate a pregnancy early in the reproductive process. Yet, *Roe* also confirmed that states have a legitimate interest and responsibility in protecting potential life; however, *Roe* did not adequately address the issue of protecting an early-term fetus against potentially harmful maternal behaviors in instances where an intent to carry to full term existed. Of course, the Court could not fully appreciate the fetal risk related to substance use at that time given that Fetal Alcohol Syndrome (FAS) and its symptomology would not be described until five months later. Though abortion remains a central issue in political debates, other policies have been introduced which would similarly shift autonomy away from pregnant women without comparable debate and public interest. A number of states are utilizing punitive policies, in an effort to protect the future citizenry, that will supposedly deter or prevent pregnant women from consuming alcohol. These states choose to criminally charge women who give birth to a child displaying alcohol-related birth defects or confine pregnant women who fail to cease their alcohol use.

The impetus behind punitive maternal alcohol laws is readily apparent. Policy-makers are designing regulations with the intent of limiting the morbidity associated

* Adam J. Duso & John Stogner, Department of Criminal Justice and Criminology, University of North Carolina at Charlotte. This Article was written in support of a symposium issue of the *William and Mary Bill of Rights Journal*. Correspondence concerning this Article should be addressed to: John Stogner, Department of Criminal Justice & Criminology, University of North Carolina at Charlotte, 9201 University City Boulevard, Colvard 5080, Charlotte, NC 28223. Contact email: JohnStogner@uncc.edu.

1 410 U.S. 113 (1973).
2 Id. at 162.
3 Id. at 163.
6 Id. at 196.
with a major preventable health issue that critically impacts the healthcare, educational, financial, and criminal justice systems within their states. FAS is estimated to affect over 40,000 newborns each year, a number that grows significantly when related maladies such as alcohol-related birth defects and alcohol-related neurological deficits are included. Agreeing that the health of potential citizens is a legitimate governmental interest, we build on an earlier work supporting the constitutionality of these measures by assessing their overall utility. This Article challenges the assumption that punitive action will be effective in limiting fetal risk and demonstrates that these policies are likely causing more harm to women and their children than they ameliorate. As such, punishing pregnant women for alcohol consumption appears to be an imprudent measure inconsistent with the rationale behind it.

In order to depict the insufficiencies with extant punitive policies, this Article first introduces the reader to the etiology of alcohol-related fetal abnormalities and how alcohol’s effects are largely contingent on dose, frequency, and gestational timing. Many argue that the majority of restrictive policies are ineffective because interventions are unable to affect alcohol consumption during the time at which the fetus is at greatest risk (the first trimester). Similarly, criminal prosecution is unfruitful, as any potential deterrent effect of punishment is diminished by the uncertainty that FAS is an inevitable result of occasional drinking and because of the limited number of prosecutions (totaling less than 500 in the United States from 1973–2005), even when a child is born with FAS. Once a number of unintended consequences are considered, such as pregnant substance users increasingly avoiding prenatal care, it becomes clear that punitive policies are inconsistent with a harm-reduction approach. While the risks of fetal harm from alcohol consumption are significant, punitive policies are unlikely to significantly lessen this burden and instead restrict liberties, isolate at-risk women, and jeopardize pregnancies via abstention from prenatal care. As such, policymakers are directed towards educational and supportive measures, such as priority access for pregnant women in substance abuse treatment centers.


\[8^\text{See John Stogner, The War on Whiskey in the Womb: Assessing the Merit of Challenges to Statutes Restricting the Alcohol Intake of Pregnant Women, 7 RUTGERS J.L. \\& PUB. POL’Y 259, 260, 277 (2009) (noting that state statutes aimed at restricting alcohol consumption while pregnant are constitutional because “[t]he Supreme Court has acknowledged that states have a more than legitimate interest in the health of a viable fetus”).}]

\[9^\text{See infra notes 108–23 and accompanying text.}]


\[11^\text{See infra notes 96–140 and accompanying text.}]}
I. ALCOHOL AND THE FETUS: A PRESSING CONCERN

A. The Etiology of Alcohol-Related Fetal Harm Through the Gestational Cycle

In order to effectively evaluate the legality and practicality of measures taken against maternal alcohol use within a harm-reduction approach, we must examine the detriments that maternal alcohol use may have on a fetus. Although it is necessary to explore the scope of FAS/Alcohol Related Neurological Disorders (ARND) and the breadth of these problems, it is perhaps more critical to examine how these effects vary with quantity, duration, and timing of alcohol consumption as related to the gestational cycle. In addition, an assessment of outcome disparities is critical as the scope and prevalence of these disorders may vary across demographical groups. Further, an exploration of post-birth outcomes and the non-biological considerations that contribute to the legal and ethical debate is needed.

A great deal of medical and scientific literature has explored and strengthened the seemingly self-evident link between the nutritional intake of a pregnant mother and the health of her fetus.\textsuperscript{12} Good nutritional intake is a significant contributor to fetal growth and development.\textsuperscript{13} In contrast, the consumption of alcohol and other toxins can have deleterious effects on the fetus both “directly, by acting on fetal tissue, and indirectly, by interfering with the maternal support of the growing fetus.”\textsuperscript{14} Direct effects on fetal tissue are a result of ethanol’s ability to breach the placental blood barrier, where it directly affects cellular mitosis and causes apoptosis (self-destruction of developing cells within fetal tissue).\textsuperscript{15} Indirect effects of maternal alcohol consumption include impairment of maternal physiology, including neurological function,\textsuperscript{16} which impacts the developing fetus \textit{in vivo}. This may yield effects such as low birth weight and a heightened propensity for other behaviors that also endanger the fetus, such as illicit drug use.\textsuperscript{17} Indirectly, alcohol consumption has effects on eating habits, which can affect nutritional intake,\textsuperscript{18} as well as an effect on the ability of the mother

\begin{thebibliography}{9}
\bibitem{13}Marques et al., \textit{supra} note 12, at 34.
\bibitem{15}\textit{Id.} at 178.
\bibitem{16}\textit{Id.} at 175 (“Alcohol also may indirectly harm the fetus by impairing the mother’s physiology.”).
\bibitem{17}\textit{Id.} at 175.
\bibitem{18}See Elizabeth Lloyd-Richardson et al., \textit{The Relationship Between Alcohol Use, Eating Habits and Weight Change in College Freshmen}, 9 EATING BEHAVIORS 504, 507 (2008)
\end{thebibliography}
to pass adequate nutrition to the fetus via a slowing of placental nutrient transport.\textsuperscript{19} Each of these issues can lead to fetal nutritional deficiencies.\textsuperscript{20}

It is important to consider that direct and indirect effects of alcohol on the fetus do not appear in the form of a static dichotomy.\textsuperscript{21} The extent to which alcohol consumption by pregnant women affects the development of the fetus may be conditioned by factors such as gestational timing, duration, and quantity of alcohol consumption.\textsuperscript{22} The overall damage done by alcohol consumption on the developing fetus is contingent, both individually and in aggregate, on these factors.\textsuperscript{23} However, a great deal about these moderating factors is still unknown or untested.\textsuperscript{24} With quantity, there appears to be a “line” under which risk is minimal and above which alcohol consumption can lead to various fetal health issues; however, where this quantity “line” is set is still unclear and may differ among maternal ethnicities, weight, age, or other factors.\textsuperscript{25} There is evidence to support that low levels of alcohol consumption are not associated with deleterious effects on a fetus; consumption at amounts averaging one drink per week appears safe.\textsuperscript{26} The minimal rates at which research firmly associates with negative consequences are approximately “30–40 g per occasion, and as little as 70 g per week.”\textsuperscript{27} Based on the National Institute of Health’s definition of a “standard drink” at fourteen grams of alcohol, consumption of approximately two to three servings of alcohol are associated with risk of fetal effects.\textsuperscript{28} Alcohol consumption beyond these low limits substantially increases the apparent likelihood of serious impediments to the developing fetus.\textsuperscript{29} Although durational effects are less clear, some evidence in laboratory animal studies support that animals exposed to

\begin{flushleft}
\textsuperscript{20} Id.
\textsuperscript{21} See id.
\textsuperscript{23} See id. at 170–83.
\textsuperscript{24} Goodlett & Horn, \textit{supra} note 14, at 176.
\textsuperscript{25} See id. (noting that genetic factors complicate determining how alcohol affects fetal health).
\textsuperscript{26} Pat O’Brien, \textit{Is It All Right for Women to Drink Small Amounts of Alcohol in Pregnancy?}, 335 BRITISH MED. J. 856, 856 (2007).
\textsuperscript{27} O’Leary & Bower, \textit{supra} note 22, at 178.
\textsuperscript{29} O’Leary & Bower, \textit{supra} note 22, at 172–74.
\end{flushleft}
alcohol over a six-week period in comparison to a test group of three weeks experienced greater fetal effects on skeletal structure and hypocalcemia (abnormally low amounts of calcium in the blood).30

Pertinent to the larger discussion about the legality and potential efficacy of laws surrounding maternal alcohol consumption is an examination of how the effects of alcohol exposure vary over the course of the gestational period. While research has shown that alcohol and its fetal toxicity exists throughout the gestational period, there has been a focus on “critical periods” during the first trimester that occur between the second and eighth weeks of gestation.31 During this embryonic stage of the first trimester, alcohol exposure is increasingly associated with physical defects, gross neurological damage, and, in cases of high exposure, termination of pregnancy.32 Prior to the second week of gestation, the consumption of alcohol generally does not directly affect the preembryo (zygote), as the preembryo is self-contained at that stage; however, particularly heavy consumption at this time may lead to spontaneous termination of pregnancy.33 In weeks three to six, during periods of initial gastrulation (division into distinct cell layers), the cells that form the neural crest are particularly susceptible to direct damage by alcohol exposure.34 The neural crest cells differentiate into a number of structures, including facial features. Damage to this cellular structure can result in the classic facial abnormalities that are one of the central components of FAS diagnosis.35 Other bodily systems can also be greatly affected through alcohol exposure during this period. Examples include the fetal precursors to the cardiovascular system, where “alcohol can impede the proliferation, migration, and specification of cardiac progenitor cells” by modifying the levels of essential nutrients.36 The central nervous system (CNS) is also at heightened risk during this time frame

32 Whitty & Sokol, supra note 31, at 4.
34 Id.
35 Id.
36 Id.
with morphological concerns relating to neural glia. Effects also incur upon ocular and vision neurology and brain tissues.

Beyond the first trimester, the fetus is less sensitive to the effects of alcohol and begins to self-regulate by the third trimester, and most of the primary fetal organ systems are at a more stable and less vulnerable state of their initial genesis. However, alcohol exposure still presents a potentially deleterious effect on fetal development. The shift of these effects moves from specific structure and organ damage to whole-body effects such as slowed growth rate. Neurological deficits can also result from alcohol consumption after the first trimester due to the resultantly slowed development of the cerebellum and neural glia that form the basis of the CNS. It is clear that alcohol can have deleterious effects on fetal development, although the nature of this effect appears to differ on a number of factors, including duration and quantity. The effects on the fetus clearly appear to be contingent upon the point within the development cycle at which the fetus is exposed.

B. Specific Outcomes of Prenatal Exposure to Alcohol

Alcohol exposure in vivo can lead to a number of conditions that become apparent postpartum. The “classic” presentation of these conditions is termed Fetal Alcohol Syndrome (FAS), diagnosed by the presence of a triad of identified criteria: (1) growth deficiency, either prenatal or post-natal; (2) a characteristic pattern of minor physical abnormality, usually expressed in the form of shortened eye slits, flat midface, short upturned nose, smooth philtrum, and thin upper lip; and (3) varying degrees of CNS damage, from physical manifestations such as tremors and fine or gross motor problems, to cognitive deficits such as learning challenges, hyperactivity, and, in some cases, mental retardation. Beyond this classic definition, however, there exists a

37 Gemma Rubert et al., Ethanol Exposure During Embryogenesis Decreases the Radial Glial Progenitor Pool and Affects the Generation of Neurons and Astrocytes, 84 J. NEUROSCIENCE RES. 483, 484 (2006) (citing findings suggesting that glial “could be a target of ethanol-induced abnormalities in the developing brain”).

38 O’Neil, supra note 33.

39 Id.

40 Id.

41 Id. (“There is no point during development when prenatal alcohol exposure lacks consequences . . . ”).

42 Id.

43 Toshikazu Saito et al., The Effects of Ethanol on Neuronal and Glial Differentiation and Development, 29 ALCOHOLISM 2070, 2073 (2005).

44 See supra notes 37–39 and accompanying text.

range of differential diagnoses for alcohol exposure. As a broad umbrella classification, Fetal Alcohol Spectrum Disorder (FASD) is used to refer to all abnormalities that relate to maternal alcohol exposure. Fetal Alcohol Exposure/Effect (FAE) has been used with varying definitions to include those physical effects of alcohol exposure without the corresponding cognitive or neurological deficits. FAE as a diagnostic term, however, is less utilized in recent literature in favor of more specifically defined language, primarily by separating the diagnoses into categories of Alcohol-Related Birth Defects (ARBD) and Alcohol-Related Neurodevelopmental Disorders (ARND), which represent situations where prenatal alcohol exposure has only physical or neurocognitive effects, respectively. ARBD can include gross abnormalities to organs and limbs, though most research centers on the physical effects most strongly associated with FAS. Observational studies on groups of infants with confirmed ARBD diagnoses show physical malformations such as smooth philtrum, thin vermilion border (demarcation between lip and adjacent normal skin), and reduced birth length. These issues do appear to be linked to dose of exposure. However, this research did not identify a minimum threshold exposure. In contrast, ARND refers to those children who have a confirmed maternal exposure to alcohol with associated CNS abnormalities and cognitive abnormalities. Approximately 80% of FASD-diagnosed children exhibit neurological deficits such as microcephaly (decreased brain size) or behavioral abnormality, a rate that exceeds that of physical birth defects significantly. Abnormal cognitive deficits express themselves “in many domains, including specific mathematical deficiency, difficulty with abstraction . . . , and problems with generaliz[ation].” Poor attention capacity, judgement, memory, hyperactivity, negative conduct, and other behavioral issues are also noted within this population.

18 (1998); Larry Burd et al., Diagnosis of Fetal Alcohol Spectrum Disorders: A Validity Study of the Fetal Alcohol Syndrome Checklist, 44 ALCOHOL 605, 607 (2010) (citing diagnostic criteria for FASD, including the smooth philtrum, thin vermilion border of upper lip, ADHD, fine motor dysfunction, and mental retardation).

40 See Am. Acad. of Pediatrics, Fetal Alcohol Syndrome and Alcohol-Related Neurodevelopmental Disorders, 106 PEDIATRICS 358, 358 (2000).

47 Id.

48 Anna N. Taylor et al., Fetal Alcohol Syndrome, Fetal Alcohol Exposure and Neuro-Endocrine-Immune Interactions, 6 CLINICAL NEUROSCIENCE RES. 42, 43 (2006).

49 Feldman et al., supra note 31, at 673.

50 Id. (showing an increased risk for smooth philtrum, thin vermilion border, and reduced birth length with an increase in alcohol).

51 See id.

52 Id. at 670.

53 Am. Acad. of Pediatrics, supra note 46, at 358.

54 Id.

55 Id.

56 Id.
C. Scope and Financial Impacts of FASD

Due to under-reporting, unclear diagnostic criteria, and inconsistent clinical presentation, the exact number of infants and children who suffer from fetal alcohol exposure and related abnormalities is unknown. Other potential confounding factors that may have led to under-reporting by mothers and physicians include stigmatization, which may lead women who have consumed alcohol to avoid care for themselves and their child. As a result, studies and surveys assessing the scope of fetal alcohol exposure are likely to be conservative in their estimates.

Medical records indicate that FAS affects somewhere between 0.2 and 1.5 out of every 1,000 live births, with data originating from Alaska, Arizona, Colorado, and New York. Other records-based analyses have found FAS in children ages seven to nine at a rate of 0.3 out of every 1,000. Studies involving in-person examination and community studies have reported higher rates, suggesting rates of FAS between 6 and 9 per 1,000 children. The gap between these estimates highlights the potential for FAS to go undiagnosed or undisclosed. Regardless, all of these estimates are small compared to rates of FASD in general, the diagnosis of which does not require the complete specific triad of conditions inherent to FAS. Estimates for FASD in industrialized nations, such as the United States and many Western European countries, range between 20 and 50 out of every 1,000 births; thus, up to 5% of some populations are affected by FASD.

An alternative method for ascertaining the potential scope of FASD and FAS involves examining alcohol use by women of childbearing age who are sexually active. Although this method of examining the population cannot provide us with a direct causal link to rates of FASD, it does allow policymakers to conceptualize how many women are at risk for potentially exposing a fetus to alcohol, whether knowingly or not. Recent nationwide surveys (2012) of women aged 18–44 show that 7.6% of pregnant women, and just over half (51.5%) of non-pregnant women, reported drinking alcohol within the thirty-day period prior to the survey. Of this

60 Id.
61 Id.
62 Id.
63 Id.
population, 1.4% of pregnant women and 15% of non-pregnant women reported episodes of binge drinking (more than four drinks per occasion) within the same thirty-day period.\textsuperscript{65}

A brief examination of the costs associated with FASD is helpful in identifying the social impetus for action against maternal drinking and involvement in the personal behaviors of pregnant women. Estimates of fiscal costs relating to medical care, special educational needs, home/residential care, and other needs vary significantly in the literature, largely due to inconsistent prevalence estimates of FAS. However, median estimates based on an examination of multiple studies suggest a cost of approximately $3.6 billion annually, which includes medical costs and residential care support.\textsuperscript{66} Lifetime costs per individual with FAS have been estimated to be approximately $2.9 million.\textsuperscript{67} These cost estimates relate only to the quantifiable aspects of FAS specifically. The wider net of FASD, and its associated challenges, makes the total cost of maternal alcohol use/exposure much greater. Further, inclusion of factors such as lost productivity and increased involvement with the criminal justice system would better demonstrate the exorbitant costs of maternal drinking.\textsuperscript{68} Additional research estimated direct and social costs of FASD within the United States to exceed $5.4 billion annually;\textsuperscript{69} however, the detriments to the health of children remains the more important “intangible” cost associated with maternal alcohol consumption.

II. ADDRESSING THE PROBLEM OF MATERNAL ALCOHOL USE: MULTIPLE APPROACHES

Acknowledging that a substantive problem exists regarding use and abuse of alcohol by pregnant women, the critical reader is asked to allow for the assumption that curbing or preventing the ramifications of drinking by pregnant women is a persuasive public interest. This interest is predicated on the health, economic, lost productivity, and resource expenditure issues associated with the problem. With this as background, this Part examines the different approaches employed at multiple levels of government, as well as a variety of approaches in the private sector. The methods examined in this Article fall largely into a soft dichotomy of “educational” versus “legal” approaches, the latter of which can be further subdivided into preventative and punitive approaches. Some programs may fall somewhere in-between, or merit

\textsuperscript{65} Id.

\textsuperscript{66} Chuck Lupton et al., \textit{Cost of Fetal Alcohol Spectrum Disorders}, 127 C. AM. J. MED. GENETICS 42, 43–44 (2004); see also Svetlana Popova et al., \textit{Cost of Fetal Alcohol Spectrum Disorder Diagnosis in Canada}, 8 PLOS ONE 1, 3 (2013) (estimating the annual cost of FASD diagnosis in Canada at a lower estimate of $3.6 to $5.2 million and a higher estimate of $5.0 to $7.3 million (both in Canadian Dollars)).

\textsuperscript{67} Chuck Lupton et al., \textit{supra} note 66, at 46.

\textsuperscript{68} Id. at 48.

\textsuperscript{69} Svetlana Popova et al., Correspondence, \textit{Evaluating the Cost of Fetal Alcohol Spectrum Disorder}, 72 J. STUD. ON ALCOHOL & DRUGS 163, 163 (2011).
their own category; however, a complete exploration of every program available is beyond the scope of this Article.

“Educational” approaches are largely defined here as prevention programs that are based on providing understanding and context to pregnant women, their families, and the community at large about the dangers inherent to alcohol consumption while pregnant. The federal government, under the auspices of the Centers for Disease Control and Prevention (CDC) and the U.S. Department of Health and Human Services (DHHS), has funded multiple state and local programs that have attempted to meet this policy goal over the past decade.70 The CDC also has launched a number of national initiatives: the FASD Practice and Implementation Centers (PICs) that aim to improve healthcare-based prevention efforts; educational resources such as the National Organization on Fetal Alcohol Syndrome (NOFAS); and partnerships with other national organizations such as the American Academy of Pediatrics.71 Non-governmental organizations also take on the task, including private hospital systems, educational institutions, private foundations, and family-based support groups.72 Educational approaches utilize a number of different evidence-based approaches with differing scopes and target communities. As broad measures, guided self-change (GSC) programs are “low intensity” efforts designed to help those who have alcohol abuse concerns, but who are not entirely alcohol dependent, to self-intervene with a support network and a host of “personal feedback, advice, goal-setting, and self-monitoring” techniques.73

Other programs include targeted media campaigns designed to develop awareness and attitudes conducive to abstention from alcohol during pregnancy.74 These programs often target particular demographic groups perceived to be at higher risk, including some minority groups and those receiving assistance from the Special


73 Previous Projects, supra note 70.

Supplemental Nutrition Program for Women, Infants and Children (WIC) and other federal assistance programs. Efficacy of media programs was determined to have some basis related to frequency of broadcasts, with study participants who heard messages more often exhibiting greater knowledge scores when tested.

Within DHHS, multiple state and local programs have been funded utilizing different methodologies. These range from brief educational interventions to robust multi-year programs designed to assist pregnant mothers with established substance abuse concerns. Outside of these arenas, programs such as the U.S. Surgeon General’s warnings on alcohol and other teratogenic substances have been employed, with studies showing limited success in reducing alcohol consumption among pregnant women but not affecting those who are merely at risk of becoming pregnant. The overall efficacy of educational-based approaches is mixed, with some significant reduction shown in individual projects; however, overall rates of reduction fall short of policy expectations and goals in the aggregate.

Educational programs such as these typically do not face excessive opposition, and there is little reason to argue that they interfere with individual rights and freedoms. Thus, a lengthy discussion of their morality and legality would be largely imprudent. Yet, these programs fall short of desired reductions because they rely on the presumption that pregnant women, given the appropriate educational information and awareness of harm, will make the choice to cease their alcohol use. This is similar to assuming those who know the harms of unhealthy eating will choose to consume only healthy foods. Because awareness of a problem does not always lead to a correction of undesirable behaviors, governing bodies have chosen to utilize legal means of intervening.

In a legislative effort to attack the problems of FASD and maternal alcohol abuse, states have developed a variety of statutes, both preventative and punitive, that aim to further reduce rates of drinking among pregnant women. Preventative statutes are varied and may include policies that ensure priority access to alcohol treatment programs for pregnant women. A number of states have placed mandatory
reporting requirements on healthcare providers and other officials who determine that maternal alcohol use is occurring, either through screening or toxicological testing, in order to allow for resources to be directed appropriately towards those who need assistance. Punitive statutes can allow for the civil commitment of individuals who refuse to abstain from drinking or utilize the criminal justice system by allowing women who drink while pregnant to be charged with violating child abuse and neglect laws. In contrast, some states have gone in an opposite direction, writing statutes that specifically limit the circumstances in which courts can use evidence of alcohol use against mothers in child neglect cases.

The number of states that have chosen legal mechanisms to reduce rates of maternal drinking and FASD has increased between 2003–2012. The most popular mechanism is that of mandatory reporting of indicators associated with fetal exposure to alcohol. Thirty-five states have some manner of reporting requirement for various professionals including healthcare providers, social workers, and law enforcement personnel. An analysis of state statutes found that nineteen states had “predominantly supportive” approaches in their statutes, employing the methods of warning signs, priority treatment, and mandatory reporting. These states have also created limitations in the ability to criminally prosecute women for child abuse or neglect. Missouri is an example of such a state. As of 2014, their statutes mandate reporting by physicians; however, the statutes allow for physician discretion in determining which children have been exposed. Missouri also employs warning signs, allows for priority substance abuse treatment for pregnant women, and places limitations on the ability of the State to prosecute maternal drinkers. In contrast, twelve states have “singularly or predominately punitive” approaches, which rely on the capacity for civil commitment of substance-dependent women, punitive reporting, and a “definition of child abuse and neglect that specifically includes alcohol dependence, alcohol abuse, [and] prenatal alcohol use.” North Dakota is among the states with the harshest policies, with specific measures in place for civil commitment and criminal prosecution under child abuse statutes, whilst lacking any supportive measures such as those highlighted above. As of 2014, only eight states were found to have no

82 Drabble et al., supra note 5, at 194–95.
83 Stogner, supra note 8, at 266.
84 Drabble et al., supra note 5, at 195.
85 Id. at 197.
87 Drabble et al., supra note 5, at 198.
88 Id.
90 Id. § 191.737.
91 Drabble et al., supra note 5, at 198.
appreciable legal mechanisms in place to affect prenatal alcohol exposure or incidence of FAS.\textsuperscript{93}

Outside of these two primary approaches, other mechanisms that attempt to control and curb prenatal alcohol use do exist. One of the more controversial methods advocated by some proponents includes voluntary sterilization or implantation of long-term birth control devices in women who are known to have substance abuse problems. Advocated by some NGOs, these programs are often decried by detractors as having racist or eugenic policy goals.\textsuperscript{94} An appraisal of these programs is outside of the focus of this assessment. Other considerations include informal social controls related to the “stigmatization” of alcohol use by pregnant mothers. This stigma exists both within the popular media and within families and communities and may help reduce levels of maternal alcohol use more than the threat of legal interventions. As levels of knowledge about the dangers of prenatal alcohol consumption increase due to the prevalence of educational programs, mass media portrayals, and adverse legal effects, these family- and peer-based informal social controls could increase in efficacy.\textsuperscript{95} It remains pertinent, however, to assess the legal options utilized to manage fetal alcohol exposure.

III. BALANCING RISK VERSUS HARM WHEN USING THE LAW TO LIMIT IN UTERO ALCOHOL EXPOSURE

A. Punitive Policies, Constitutional Challenges, and the Harm-Reduction Framework

A reduction in fetal alcohol-related morbidity is a laudable goal and consistent with the objectives of the public health system, and government as a whole. Certainly, the use of legal policy, whether in punitive or preventative form, to limit the alcohol consumption of pregnant women is well-intended with the subsequent and potential complications associated with those regulations either overlooked or underestimated. Yet, however noble the goal, the utilization of the legal system to promote positive health behaviors has the potential to create unintended consequences that are greater in scope than the harms they may ameliorate. If the damages associated with the implementation of a policy outweigh its benefits, that policy fails

\textsuperscript{93} Drabble et al., supra note 5, at 198.


\textsuperscript{95} See Deborah Maloff et al., Informal Social Controls and Their Influence on Substance Use, in ISSUES IN CONTROLLED SUBSTANCE USE: PAPERS AND COMMENTARY, CONFERENCE ON ISSUES IN CONTROLLED SUBSTANCE ABUSE 5, 5–35 (Deborah R. Maloff & Peter K. Levison eds., 1980).
to serve the overall public good, even if it is associated with a degree of success as measured by its primary goals. Thus, the overall assessment of legal policies intended to curtail pregnant women’s alcohol consumption must employ a population-level harm-reduction framework. These assessments, such as the one presented in the following paragraphs, are likely to demonstrate that the aforementioned punitive legal interventions are not in the best interest of public health.

B. Considering the Constitutionality of Punitive Statutes Related to Prenatal Alcohol Exposure

The overall theme of this analysis and the conclusions reached within this review may seem incompatible and inconsistent with one of the author’s well-documented views appearing in another outlet some five years previous.96 Careful readers of Stogner97 will note, however, that the focus of that manuscript was the constitutionality of legislation in states such as Wisconsin and South Dakota, rather than an assessment of the policy.98 That work’s primary finding was that “these statutes violate neither an individual’s constitutional right to privacy nor the Equal Protection clause.”99 Thus, while the author has argued that states are within their rights to enact punitive and restrictive legislation directed against pregnant alcohol consumers, he has not offered a complete academic opinion on the overall utility and efficacy of these policies. This is perhaps one of the broader issues with academic and legal publishing; given length restrictions and time pressures, professionals are often forced to present evidence and arguments in a piecemeal fashion. As a result, readers often only have access to a microcosm of an author’s perspective on an issue;100 these readers would not be failing to see the forest for the trees, but, rather, the full forest could not be adequately presented in a standard length academic manuscript.

To summarize, Stogner argues that the constitutional challenges to statutes that restrict alcohol intake by pregnant women are without merit. A number of individuals have labeled these policies a governmental overreach, with some going so far as to utilize the term “gestational gestapo” in reference to the government’s involvement.101

96 Stogner, supra note 8, at 259.
97 Id.
98 Id.
99 Id. at 260.
100 Id.
101 See Alison M. Leonard, Note, Fetal Personhood, Legal Substance Abuse, and Maternal Prosecutions: Child Protection or “Gestational Gestapo”? 32 NEW ENG. L. REV. 615, 637–39 (1997); see also Lynn M. Paltrow, Governmental Responses to Pregnant Women Who Use Alcohol or Other Drugs, 8 DEPAUL J. HEALTH CARE L. 461, 465–67 (2005) (discussing the varying governmental interferences and punishments in different states); Erin N. Linder, Note, Punishing Prenatal Alcohol Abuse: The Problems Inherent in Utilizing Civil Commitment to Address Addiction, 873, 873–901 (2005) (arguing that some of these policies are unconstitutional).
Stogner attacks the constitutional privacy challenges noting that the issue at hand is not the right to become pregnant as some may insinuate but instead the decision to consume alcohol while carrying a fetus—a non-fundamental privacy right. As such, this work demonstrates that the policies are consistent with the rational basis test. Further, the initial work demonstrated the inadequacy of equal protection challenges, noting precedent set in Robinson v. California. In sum, the statutes do not legislate against gender, ability to become pregnant, or pregnancy status. Rather, they regulate actions associated with a status as allowed under Powell v. Texas. Put simply, the legislation which was in question did “not allow for confinement of a person because she is a pregnant alcoholic, but rather because she commits the act of drinking while pregnant.” We stand behind the conclusions within the original review contending that the statutes are indeed constitutional. A number of recent opinions seem to mirror our own, although there is dissent. The issue, in our minds, is not whether the government has the right to enact legal controls, as seems to be too frequently discussed, but whether those policies should be implemented. To paraphrase an oft quoted segment of Michael Crichton’s Jurassic Park—the field has been so preoccupied with whether or not they could, they didn’t stop to think if they should. It is our contention that while states can constitutionally use punitive means to limit alcohol use by pregnant women, such efforts do not appear to be in the public’s interest.

There are certainly a number of issues that must be considered prior to supporting a policy; in fact, it is far harder to evaluate whether a policy should be implemented than to assess whether it is consistent with the current legal system. As the impetus for fetal-alcohol exposure legislation is public health (and the policies do not unconstitutionally interfere with individual rights), these policies must be evaluated under a harm-reduction framework—the issue being whether implementation of punitive policies yields a society with less pain and suffering than one without them. Ideally, a harm-reduction assessment would evaluate all feasible alternatives and the maladies and costs associated with each. In this instance, however, the comparison is limited to the presence or absence of punitive legal policies for prenatal alcohol exposure. Fetal alcohol spectrum disorders should certainly be a central issue within the debate; however, the impact of legal restrictions on drinking while pregnant may be minimal. Issues such as the potential for punitive regulation to reduce familial support or to deter visits to physicians must be considered.

104 Stogner, supra note 8, at 283.
C. Assessing Whether Punitive Fetal Alcohol Policies Are Consistent with the Goals of Punishment

Of the goals of punishment, deterrence and incapacitation are most salient to the present argument. Few would claim that punishing a mother who consumed alcohol while pregnant is likely to promote rehabilitation more so than raising an impaired child or that retribution is warranted when the mother is so directly exposed to the suffering of her child. Thus, the rationale behind the aforementioned policies is deterrence and/or incapacitation. Theoretical works in the field of criminology have long championed the importance of deterrence—arguing that the dissemination of the law and the associated certain, swift, and severe penalties for violating it serve a key role in deterring illicit behavior.\footnote{108} The U.S. criminal justice system was largely based on deterrence ideology, yet this theoretical perspective fails in terms of consistent, extensive statistical support in empirical research,\footnote{109} particularly when compared to competing theories.\footnote{110} Potential offenders, which would be pregnant women considering drinking alcohol in this case, do not seem to be deterred by the threat of punishment, regardless of the severity of that punishment. It has been argued that the average individual dismisses that her behavior may result in formal sanctions against her; instead, individuals view the risk of punishment as negligible.\footnote{111} This may be especially true in the instance of laws related to prenatal alcohol exposure, as they are used very infrequently and inconsistently in states which have adopted them.\footnote{112} In other words, research on deterrence-based theories suggests that the chance of punishment is unlikely to have any effect on behavior. It is perhaps related that some pregnant women are willing to drink alcohol in the first place—these women may perceive the risk of FAS to be so low that it does not impact their behavior. Overall, there appears to be no empirical evidence that FAS-related drinking restrictions are effective in reducing FAS prevalence or maternal drinking. Thomas, Cannon, and French report focus group data suggesting that post-partum women and key governmental agents are largely uninformed about the alcohol pregnancy laws, which would suggest that they are neither effective nor well-implemented.\footnote{113} To be clear, there is

\footnote{109 Pratt et al., supra note 108, at 367–96.}
\footnote{110 See RONALD L. AKERS, CRIMINOLOGICAL THEORIES: INTRODUCTION, EVALUATION, AND APPLICATION (3d ed. 2000) (reviewing criminological theories).}
\footnote{111 Linder, supra note 101, at 892.}
\footnote{112 See Paltrow & Flavin, supra note 10.}
\footnote{113 Sue Thomas, Carol Cannon & Jillian French, The Effects of State Alcohol and Pregnancy Policies on Women’s Health and Healthy Pregnancies, 36 J. WOMEN POL. & POL’Y 68, 68–94 (2015).}
also no concrete evidence that the policies are ineffective other than the assumption that they would follow a pattern similar to other health-related legal restrictions. For example, Burris’s work notes that the criminalization of HIV exposures through unprotected sex has little influence on personal decisions. Similarly, Lindholm argues that criminalization of performance-enhancing drug usage will have little deterrent effect on athlete drug use. Thus, the policies are based on an assumption of efficacy rather than evidence—an assumption that related research suggests is likely wrong.

The incapacitation-based arguments in support of these policies may have more merit than deterrence-based ones, but the claims are still suspect. Incapacitation in this case refers to creating a situation, whether institutionalization or civil confinement, which prevents a pregnant woman from consuming alcohol and is clearly not referring to interference with a woman’s right to continue a pregnancy or become pregnant in the future. Much like the deterrence-based arguments, the notion that confining pregnant alcohol consumers in an alcohol-free location would reduce the prevalence of FAS makes intuitive sense. However, a careful examination of the etiology of FAS and the existing policies demonstrates that the incapacitation of expectant mothers who repeatedly drink alcohol is unlikely to significantly impact the prevalence of alcohol-related maladies. First, and as noted previously, the main teratogenic effects of alcohol on the fetus occur during the first trimester of pregnancy (specifically weeks 2–8). Although alcohol use after this time period may be associated with some issues, these are dwarfed in magnitude and frequency by those associated with alcohol use earlier in the pregnancy. This high-risk window corresponds to a time when law enforcement officials and family members may not be able to classify individuals as pregnant on the basis of their appearance; in fact, pregnant substance users have reported concealing their pregnancies from contacts as long as possible due to their continued substance use. By the time that key individuals are aware of the pregnancy, the main teratogenic window would have likely reached its conclusion. Similarly, the existing laws are written in such a way that impairs immediate action. For example, Wisconsin law requires that an expectant woman demonstrate “habitual lack of self-control in the use of alcohol [sic] beverages.”

---

116 Once again, programs that incentivize birth control or sterilization are external to the scope of this Article.
117 Feldman et al., supra note 31, at 674.
118 Id.
119 See Rebecca Stone, Pregnant Women and Substance Use: Fear, Stigma, and Barriers to Care, 3 HEALTH & JUST. 1, 6–7 (2015).
instance of which governmental agents are made aware cannot lead to civil confinement.\textsuperscript{121} A pattern must be evident after a woman is known to be pregnant.\textsuperscript{122} Further, the woman must have been offered and failed to comply with less restrictive services.\textsuperscript{123} All of this suggests that by the time Wisconsin Statute § 48.193 becomes relevant, the damage has likely been done. It fails to incapacitate the expectant mother at the time when incapacitation would be beneficial in reducing the likelihood of FAS.

D. Unintended Harms: Problematic Outcomes from Well-Intended Policy

While the preceding two paragraphs stress that punitive legislation directed towards expectant mothers has yet to be effective and is overwhelmingly unlikely to be effective, they have not highlighted any harms outside of limiting personal choice. Yet, the unintended consequences to public health must be considered and weighed. The most pressing concern associated with restrictive and punitive statutes is that they may deter pregnant women from seeking the appropriate prenatal care.\textsuperscript{124} Prenatal care is increasingly important as evolving medical science has empowered physicians to assist women with their pregnancies and ameliorate a number of issues that may have otherwise caused problems to either the mother or the fetus.\textsuperscript{125} Mothers obtaining prenatal care are much more likely to give birth to a healthy baby than those that do not.\textsuperscript{126} Unfortunately, a significant number of American women are still unable to access, or choose not to utilize, prenatal services. A 2013 analysis estimated that inadequate prenatal care utilization was present in 15.1% of pregnancies, with some variances in compliance existing between ethnic groups.\textsuperscript{127} The assumption that punitive laws limit at-risk women’s willingness to seek prenatal care seems to have

\textsuperscript{121} Id.
\textsuperscript{122} Id.
\textsuperscript{123} Id.
\textsuperscript{126} Steven L. Gortmaker, The Effects of Prenatal Care Upon the Health of the Newborn, 69 AM. J. PUB. HEALTH 653, 653–56 (1979).
merit. The articles by Thomas, Cannon, and French,\textsuperscript{128} and Stone\textsuperscript{129} each report narratives from women who considered or avoided prenatal care due to the assumption that they may be identified as substance users and referred to mandatory services. These seem to confirm earlier studies linking the fear of reporting to avoiding prenatal care.\textsuperscript{130} This association may be strongest within disadvantaged populations; minorities and the poor may be particularly susceptible to fear of identification as a pregnant substance user and referral to the criminal justice system.\textsuperscript{131} Even those pregnant women with alcohol issues who do seek initial prenatal care may eventually cease healthcare visits to healthcare providers due to the stigmatization they face during clinical visits. A recent study noted how pregnant alcohol users experienced discomfort and shame during clinical visits that led them to avoid follow-ups.\textsuperscript{132} As a result of this information, child interest organizations such as the American Academy of Pediatrics question the utility of punitive policies due to their deterrent effect on vital healthcare visits.\textsuperscript{133}

The negative effect of punitive policies on prenatal care rates may exist independent of whether policies require, allow, or prohibit reporting by physicians. As pregnant women, members of the population, and even those charged with enforcing policies are generally uninformed about such policies,\textsuperscript{134} the perception of policy clearly influences behavior more than the actual policy. Safeguards forbidding reporting by prenatal clinics may not have their intended effect (i.e., reducing fear and aversion of visits) in that at-risk women may not be confident that they can avoid detection or punitive restrictions. Pregnant women who have drunk infrequently may be unduly influenced by these policies as they may assume that any medically confirmed alcohol use could trigger legal action while statutes instead focus on habitual use.\textsuperscript{135}

The connection between health care and punitive policy may also impair the patient-physician relationship when prenatal care is acquired. Healthcare providers with a real or assumed obligation to report substance use by pregnant women may not elicit honest answers from their patients during the medical interview.\textsuperscript{136} An environment of mistrust may foster situations where physicians are suspicious of patients, offer treatment based on limited information, and seem confrontational to their patients. Similarly, distrustful patients may be acting on medical advice driven by

\begin{itemize}
\item \textsuperscript{128} Thomas, Cannon & French, \textit{supra} note 113.
\item \textsuperscript{129} Stone, \textit{supra} note 119, at 3–4.
\item \textsuperscript{130} See Marilyn L. Poland et al., \textit{Punishing Pregnant Drug Users: Enhancing the Flight from Care}, 31 DRUG & ALCOHOL DEPENDENCE 199, 199, 202–03 (1993); Sarah C.M. Roberts & Amani Nuru-Jeter, \textit{Women’s Perspectives on Screening for Alcohol and Drug Use in Prenatal Care}, 20 WOMEN’S HEALTH ISSUES 193, 195–98 (2010).
\item \textsuperscript{131} Paltrow & Flavin, \textit{supra} note 10.
\item \textsuperscript{132} Thomas, Cannon & French, \textit{supra} note 113.
\item \textsuperscript{133} Horn, \textit{supra} note 124, at 650.
\item \textsuperscript{134} Thomas, Cannon & French, \textit{supra} note 113.
\item \textsuperscript{135} See Stone, \textit{supra} note 119.
\item \textsuperscript{136} Drabble et al., \textit{supra} note 5, at 192–93.
\end{itemize}
an inaccurate medical history due to the exclusion of substance use. Distrust of healthcare providers and the general medicinal industry has the potential to drive even greater problems, including a lifetime suspicion of medical advice and low compliance due to misgivings about physician and systematic legitimacy.

Another underappreciated risk associated with punitive or restrictive policies is the potential to lead pregnant women to isolate themselves from existing social support structures. Stone’s study highlights how women who use alcohol while pregnant may conceal their pregnancy in order to continue to drink without fear of stigmatization or legal reprisal. Further, these women isolate themselves from family and others in order to minimize awareness of their behavior. This avoidance likely damages social capital and weakens the connection to those who may exert a positive influence and assist with desistence from alcohol use. States which encourage concerned family members to report an expectant mother’s alcohol use may inadvertently be weakening existing informal social controls in that the potential for the family to be used as a legal tool, through applying to confine a pregnant woman in a relative’s home, may strain relations, create an environment of dishonesty, and reduce the frequency of familial interactions. A related additional potential harm associated with punitive policies is tied to societal reaction after a child is born with signs of FAS. McBride suggests that punitive policies may result in increasing guilt, shame, and stigmatization of mothers—ones that are likely to need significant social support to raise a child with a disability. As McBride argues, the “blame” approach takes alcohol use out of culture contexts and distracts from public health goals; the focus becomes the cause of the child’s issues rather than how to best assist them. McBride goes so far as to highlight that the name of the syndrome reinforces its origins and perhaps further stigmatizes the family.

**CONCLUSION**

When examining punitive responses to in utero alcohol exposure, it is simply not enough to consider the issue only on the basis of those responses’ constitutionality. The constitutionality of legislation against drinking by pregnant women is not at issue; a thorough assessment of legal challenges demonstrates that privacy rights and the Equal Protection Clause are not violated. Rather, it is far more important to

---

137 Stone, *supra* note 119.
140 *Id.*
141 Stogner, *supra* note 8.
consider whether policies that use punitive measures in an effort to reduce the prevalence of FAS are likely to be effective in their primary goal and whether these policies may create larger societal issues. Using the comprehensive lens of a harm-reduction framework leads to the conclusion that criminalization of prenatal alcohol exposure is poor policy. To be clear, FAS is a tragic malady and every effort should be made to limit the suffering of future citizens; however, criminalization, or even civil confinement of pregnant women with alcohol issues, is not a solution likely to yield notable results. For one, it is alcohol consumption during the first trimester which poses the greatest risk of harm, yet extant policies fail to address this time frame. Additionally, these policies are based on ideology and theory inconsistent with research evaluating determinants of deviant behavior. Worse, punitive policies directed at maternal substance use create harms and problems that would not otherwise exist in that at-risk women become increasingly likely to avoid prenatal care, question medical advice, and isolate themselves from social support structures. Policymakers are thus advised to take a broader view of harms when designing policy and consider that legislation directed at correcting one issue may not only fail but also create other societal problems. Thus, advocacy against the development and continued implementation of punitive policies directed towards pregnant women who drink alcohol is encouraged.