

# PERILS AND POSSIBILITIES

Reflections on the Use of Scientific Evidence in  
Abortion Court Cases and Why the Public Health  
Community Should Care

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# Perils and Possibilities: Reflections on the Use of Scientific Evidence in Abortion Court Cases and Why the Public Health Community Should Care

## A Working Paper

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**ABSTRACT:** As state legislatures across the United States usher in health-justified abortion restrictions, courts are increasingly called upon to analyze the effects of these laws on women’s rights, and to evaluate the role that empirical evidence should play in this analysis. Examples from a systematic review of 70 state and federal cases challenging the constitutionality of abortion restrictions from 2011-2015 illustrate perils and possibilities for the consideration of scientific evidence in abortion cases. Overall, courts do not take a uniform approach to incorporating public health and medical evidence into their analyses of burdens imposed by abortion restrictions on women’s health and lives, which leads to varying normative constructions of rights, and gross abortion access inequalities across the country. More concerted efforts are required among public health researchers and advocates to ensure that scientific methods and findings are understood by courts and subsequently translated into rulings that affect women’s lives.

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## 1. Introduction

The upcoming United States Supreme Court decision on *Whole Woman's Health v. Hellerstedt* has enormous implications, not just for normative constructions of sexual and reproductive rights and their application to women's lives, but also in terms of how public health and scientific evidence is used in establishing those legal standards. On March 2, the Supreme Court heard oral arguments on what is likely to be the most influential abortion case in over a decade. At issue is the constitutionality of Texas legislation (HB 2) that threatens to shut down approximately 26 of the state's 36 abortion clinics by imposing ambulatory surgical center requirements and requiring all abortion providers to have admitting privileges in hospitals no more than 30 miles away from their practice. Central to the issue before the Supreme Court is if and how judges should evaluate whether abortion restriction laws that purport to protect women's health actually do so.

The current legal standard used to evaluate the constitutionality of abortion restrictions, known as the "undue burden" test, was established in the 1992 Supreme Court Case *Planned Parenthood v. Casey*. This balancing test recognizes that states may have an interest in protecting potential life, but firmly stipulates,

A finding of an undue burden is a shorthand for the conclusion that a state regulation has the purpose or effect of placing a substantial obstacle in the path of a woman seeking an abortion of a nonviable fetus. A statute with this purpose is invalid because the means chosen by the State to further the interest in potential life must be calculated to inform the woman's free choice, not hinder it.<sup>1</sup>

As Linda Greenhouse and Riva Siegel argue in a *Yale Law Review* article,<sup>2</sup> the facts matter. Both the data used to justify abortion regulations and the relevant information regarding their impacts must be considered by judges when applying the undue burden test "to prevent legislatures from circumventing constitutional limitations that protect women's dignity."<sup>2 (1449)</sup>

The significance of the Supreme Court decision stems in part from the fact that courts<sup>i</sup> maintain vastly different understandings of what the undue burden test requires when evaluating ostensibly health-justified abortion restrictions. In some courts, such as the Seventh Circuit,<sup>ii</sup> public health and epidemiologic evidence from both sides is heavily scrutinized. Indeed, in an opinion on the constitutionality of a Wisconsin admitting privileges law, Judge Richard Posner of the U.S. Court of Appeals for the Seventh Circuit wrote “The feebler the medical grounds, the likelier the burden, even if slight, to be ‘undue’...”<sup>3</sup> However, in others, judges place no burden on the state to show “rational relation to legitimate state interest” in either women’s or fetal health. Thus, it is up to the plaintiff or defendant to show the “substantial obstacles” caused by the law in question. In an Eighth Circuit<sup>iii</sup> case, the burden of proof was entirely shifted from the state to Planned Parenthood, which the court posited must “show that abortion has been ruled out, to a degree of scientifically accepted certainty, as a statistically significant causal factor in post-abortion suicides.”<sup>4</sup>

The disputes over the normative balancing test in the undue burden framework, which lead to vast inequalities in abortion access, are at least in part based on the ways empirical evidence is used by courts. Perhaps no issue more than abortion illustrates as clearly that when courts do review empirical evidence, public health researchers and advocates should be wary of *how* those facts are understood and *translated into* standards that affect women’s lives. Findings from a systematic thematic analysis of the use of scientific evidence in 70 abortion-related state and federal judicial opinions between January 2011 and March 2015, conducted by these authors, show both the perils and possibilities associated with courts’ interactions with scientific evidence. In this commentary, we take an expanded look at one of the themes examined in our analysis of cases: the extent to which courts refer to and understand peer-reviewed journal articles as “evidence” in their rulings.

On the one hand, when reviewing science on the effects of abortion, courts often fail to understand public health methods and statistical tests; and distort scientific findings within

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<sup>i</sup> In the United States court system, federal courts (which include district trial courts, Circuit appeals courts, and the Supreme Court) hear civil cases arising under the Constitution (i.e.: challenges to the constitutionality of a state abortion law). Sometimes state and federal court jurisdiction overlaps, meaning that some cases can be brought in both courts. There are as many district courts as there are district attorneys---who represent the federal government in each district; and there are 12 Circuit courts, which hear cases that are appealed following a district court decision. The U.S. Supreme Court can decide appeals of all federal and state court cases that deal with federal law.

<sup>ii</sup> The Seventh Circuit has jurisdiction over the district courts of: Illinois, Indiana, and Wisconsin.

<sup>iii</sup> The Eighth Circuit has jurisdiction over the district courts of Arkansas, Minnesota, Iowa, Missouri, Nebraska, North Dakota, and South Dakota.

rulings. At the same time, however, we see a growing, if uneven, consideration by courts of public health evidence on the indirect effects of restrictive laws on women’s lives in undue burden analyses, which illustrate the potential for public health to open a less formalistic approach to this, as well as other, balancing tests used by courts. The following illustrations, drawn from the thematic analysis of 70 cases, point to both the dangers and opportunities for public health evidence to be used by courts.

## **2. Perils: Misconstruing Empirical Study Methods and Findings**

Our review reveals that with respect to the effects of abortion itself, courts do not discern between varying degrees of methodological rigor found in different types of “evidence”, which leads to the drawing of conclusions that are not well grounded in empirical data. In recent years, a number of state laws have involved requiring providers to inform patients of increased risk of suicide and suicide ideation. The question before the courts in these cases is whether the “suicide advisory” is untruthful, misleading or not relevant in patients’ decisions to have abortions, thus constituting an undue burden. The opinion of the Eighth Circuit Court of Appeals in *Planned Parenthood Minn v. Rounds*,<sup>4</sup> which upheld such a law in South Dakota, illustrates the significance of failing to understand public health methods correctly. The initial question taken up by Judge Gruender in the opinion is the accepted usage of “increased risk” in the medical field. However, the court does not distinguish between studies of differing methodological rigor in its decision. While a systematic review,<sup>5</sup> which concluded that women who have abortions are no more or less likely to suffer psychological effects than women who give birth is discounted for not being an analysis of original data, a study<sup>6</sup> presenting proportions and bivariate odds ratios of suicide following abortion, miscarriage, or birth is understood as medical justification for the “suicide advisory”; despite the study authors’ not controlling for potential confounders, such as risk factors for abortion and suicide, as well as their acknowledgment that it is impossible to tell whether the association found between abortion and subsequent suicide is spurious.

Moreover, “relative risk” and “correlation” are conflated in judicial rulings. In that Eighth Circuit ruling, for example, the court refers to a group of studies submitted by the state, which found statistically significant *correlations* between abortion and suicide, as evidence of *increased relative risk* of suicide among women who have abortions compared those who give birth or do

not become pregnant. The irrelevance of a never-pregnant control group to the research question at hand is only pointed out in the joint dissenting opinion by Judge Murphy.

Another recent sweep of state-level abortion laws prohibit abortion beginning at 20 weeks gestation (measured from date of fertilization) based upon arguments related to fetal capacity to feel pain. One such law, passed in Arizona in 2012, was challenged in *Isaacson v. Horne*. Though ultimately appealed to the Ninth Circuit<sup>iv</sup>, where the ban was ruled unconstitutional, the case was initially dismissed by the District Court, which refers to the “substantial and well documented evidence”<sup>7</sup> used by the Arizona state legislature to show that a fetus can feel pain during an abortion by 20 weeks gestation. However, in discussing the evidence on fetal pain, the court only cites two affidavits submitted by anesthesiologists who do not conduct research in this area. One of the affidavits does not refer to any scientific literature; the other selectively refers to outdated articles and to the work of a pediatrician whose “purported expertise regarding fetal pain perception has been rejected in a published decision by another district court in this Circuit”.<sup>8</sup> The court’s reliance on these affidavits as opposed to peer-reviewed, scientific literature is not unique and reveals a lack of understanding of the way strength of evidence is established in public health and in scientific studies, which may permit the equivalency of pseudo-science or uninformed opinion with peer-reviewed studies.

In other courts, the deference to the state/legislature goes even further in undermining the role of empirical evidence. In a challenge to the Texas admitting privileges requirement, Judge Jones of the Fifth Circuit<sup>v</sup> asserts that factual review is not part of the court’s role; and that “rational speculation unsupported by evidence or empirical data” is a legally acceptable justification for enacting a law.<sup>9,10</sup>

In combination, the apparent lack of desire to and lack of understanding of how to conduct or evaluate an independent scrutiny of the effects of abortion, an essential reproductive health service, should give the public health community pause. Strategies that have been used in other arenas to enhance the setting of legal standards based on scientific evidence appear to be observed idiosyncratically in this highly-politicized field. Predictable effects include

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<sup>iv</sup> The Ninth Circuit has jurisdiction over the district courts of Alaska, Arizona, California, Guam, Hawaii, Idaho, Montana, Nevada, Oregon, and Washington.

<sup>v</sup> The Fifth Circuit has jurisdiction over the district courts of: Louisiana, Mississippi, and Texas.

significant lacunae of factual information underpinning health policy-making and regulation, and in turn dramatic repercussions for women's lives.

### **3. Possibilities: Public health evidence on delays in abortion access is increasingly weighed in undue burden test across courts**

While courts have not reached a consensus on the evidence needed to show the impact of abortion legislation on women's ability to access services, a small but growing number are considering increasing public health evidence on abortion delays that result from restrictive laws (for example, increased cost, time, and distance) when applying the undue burden test. For example, the 7<sup>th</sup> Circuit opinion<sup>3</sup> on the Wisconsin admitting privileges law presents geographic data for the town of Appleton, which shows how far women would have to travel in order to access abortion, were the law to take effect. In another admitting privileges case, a District Court opinion for the Middle District of Alabama Northern Division<sup>11</sup> goes into unprecedented detail about cost and travel barriers to abortion, referring to statistical findings of various studies in the record<sup>12</sup> (though no reference information is given for most), on the relationship between clinic distance and abortion delay.

The 9<sup>th</sup> Circuit, too, in an Arizona medication abortion restrictions case<sup>13</sup> and an Idaho case<sup>14</sup> brought by a woman who was prosecuted under a 1972 criminal abortion restriction, includes public health evidence<sup>15-19</sup> on delays in its undue burden analyses. In the Arizona opinion, the court frames its conclusion with this evidence:

On the current record, the burden imposed by the Arizona law is undue even if some women who are denied a medication abortion under the evidence-based regimen will nonetheless obtain an abortion. Neither the Supreme Court nor this court has ever held that a burden must be absolute to be undue. Evidence in the record shows that women in Arizona will be burdened with a significant increase in the cost of medication, and that many women will be delayed in, or deterred from, seeking an abortion if the evidence-based regimen is foreclosed to them.<sup>13</sup>

In short, while not a uniform view, increasingly courts seem willing to explore the effects of legislation on women's actual ability to exercise their rights, rather than looking only

formalistically at the application of norms in an abstract bubble of privacy without consideration for the wider conditions of their lives.

While other areas of the law have been subject to more empirical studies,<sup>20,21</sup> the pitched ideological battles surrounding abortion have meant that the indirect effects of restrictions have not heretofore been as well understood as constituting infringements on rights. The methods of public health, as well as other sciences and social sciences, may potentially become increasingly needed to show the differential impacts of legislation, including but beyond abortion, on people's lives and health, given their economic and social conditions and real abilities to exercise their rights in practice.

#### **4. What's data got to do with it?**

Facts matter. They matter for designing appropriate interventions. But they also matter for the design of just social arrangements and regulations in society. Greenhouse and Seigel refer to the generalized disregard for scientific facts by courts as “abortion exceptionalism”, which they argue, “denotes something more than the fact of singling out abortion for special, health justified restrictions...there is a special moral valence to abortion that, because it concerns the unborn, warrants special forms of health regulation not imposed on procedures of comparable risk”.<sup>2(1448)</sup> While in many other areas of the law, strategies have been or are being developed to promote a more accurate assessment of “scientific evidence” by judiciaries – e.g., vaccine court, juvenile mental health, intellectual property with respect to medications—we have yet to address the threat that not doing so in abortion cases poses to women's fundamental rights to control their bodies and lives. Abortion adjudication holds important lessons for the public health field, which has increasingly prioritized the “translation” of research to practice. The way we approach translation has major implications for the consistency of Circuit court rulings on undue burden, and what the Supreme Court comes out with later this year; but it also has implications far beyond, in a global context, where the issues of critical reproductive, as well as other, health entitlements are invariably subject to legal regulation, legislation, and increasingly, judicialization.

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