Science prevails: abortion and mental health

Politics and ideology have long battled — and often trumped — the scientific evidence surrounding the safety of abortion. This has been particularly true of the issue of abortion and mental health. Although major organizations, including the American Psychological Association, have been firm in their assertions that abortion does not harm mental health, anti-choice activists have used questionable science to push the concept of “post-abortion syndrome” into both clinical practice and law. For years, this specious claim has been fueling attempts in the United States to legislate that women be informed of this “risk” or denied access to abortion to protect them from “risk”. The U.S. Supreme Court cited the possibility of women experiencing “regret...[which can be followed by] severe depression and loss of esteem” after abortion in its decision to uphold the Partial-Birth Abortion Ban Act (Gonzales v. Carhart), all the while acknowledging that there are “no reliable data to measure the phenomenon” [1].

Fortunately, recent reviews of the scientific literature reinforce what many reproductive health care providers already know: evidence for the claim that abortion negatively affects a woman’s mental health is lacking. How well we as reproductive health providers and advocates are able to convey this positive message to patients, the public, and policymakers will depend, in part, on how well we ourselves understand the findings and feel confident in their scientific integrity. Here, we examine the details of some recent analyses, the strength of their scientific underpinnings, and their implications for clinical practice.

Complex, but reassuring, analyses

Two recent reviews of the scientific research on abortion and mental health have come to similar conclusions. One by Charles et al. [2] concluded that “...the highest quality studies had findings that were mostly neutral, suggesting few, if any, differences between women who had abortions and their respective comparison groups in terms of mental health sequelae. Conversely, studies with the most flawed methodology found negative mental health sequelae of abortion.” The other review, by the American Psychological Association abortion task force [3], similarly found that, to date, the most rigorous research shows that having a first-trimester abortion does not increase a woman’s risk for negative mental health outcomes compared with delivering the pregnancy among adult women who have an unintended pregnancy.

Conducting a study to determine whether having an abortion causes poor mental health outcomes is not possible because women cannot be randomly assigned to have an abortion or a delivery. Thus, as Adler [4] discussed, all research studies comparing the mental health effects of women who have abortions with those of women who have deliveries contain methodological flaws in answering this question. Instead, what can be answered is whether there is evidence (or not) for the claim that abortion leads to negative mental health effects.

While Adler [4] stated that placing less faith in the most poorly designed research — those using case studies, highly selected samples, having no standardized or replicable method of data collection or analysis — is reasonable, such research cannot be ignored because it is introduced into state legislatures or courts as a reason to ban abortions or to require informed consent. For instance, the claim that abortion leads to severe depression and loss of self-esteem was a justification for upholding the partial-birth abortion procedure ban [1]. In such a climate, in which strong scientific evidence is dismissed and the most unscientific research is used for political agenda, the advancement of science may be thwarted: scholars must continue to consider the claim that abortion leads to negative mental health outcomes in designing their research, despite a growing consensus that lacks evidence for such a claim. As a result, little research considers potential positive mental health aspects of having an abortion. A woman may feel positively about her ability to exercise control of her reproductive decisions, or positive emotions may arise from the belief that her other children will have more opportunities because of her decision. Furthermore, for the few women who do experience negative mental health outcomes after an abortion, it may be less negative for them than if they had chosen to deliver their pregnancy.

It remains crucial to continue to conduct well-designed research examining the psychological outcomes of abortion because the findings from poorly designed research are widely disseminated to the public, used in setting policy...
and presented as scientifically sound when they are not. An example of a study by Cougle and colleagues used for such purposes concluded that “...findings highlight the clinical relevance of exploring reproductive history [i.e., abortion history] in therapeutic efforts to assist women seeking relief from anxiety” [5]. Its conclusions were drawn from a study using particularly poor methodological and data analysis techniques. First, it excluded women who had subsequent abortions from the delivery group but not from the abortion group. In biasing the delivery group, the authors increased their chances of confirming their claims. Second, they excluded women who experienced a period of anxiety prior to their first pregnancy. Excluding women who experienced previous anxiety is an inappropriate statistical technique to control for previous anxiety. Instead, a covariate that controls for whether or not a woman experienced previous anxiety should be included in the model. Finally, they excluded important contextual variables (e.g., violence history) that have been shown to be associated with both abortion history and negative mental health outcomes.

In a reanalysis of the data used by Cougle et al. [5], Steinberg and Russo [6] controlled for the number of subsequent abortions, and included experience of previous anxiety symptoms and having been raped in their analysis. There was no difference in the prevalence of post-pregnancy anxiety between women who terminated and those who delivered their first pregnancy. Instead, pre-pregnancy anxiety and having been raped were strongly related to post-pregnancy anxiety, regardless of pregnancy outcome — consistent with existing research. Additionally, in a second study, Steinberg and Russo [6] found that having multiple abortions was associated with both negative mental health outcomes and violence experience (e.g., having been raped, molested or held captive/threatened with a weapon/kidnapped). When analyses were conducted that included both violence experience and having multiple abortions (versus not), having multiple abortions was no longer associated with a greater likelihood of having negative mental health outcomes. Violence experience, however, remained associated with negative mental health outcomes [6]. The same factors that increase a woman’s chance of experiencing more negative post-abortion psychological experiences also increase her chance of negative reactions to other types of stressful life events, including childbirth. The focus on abortion as the cause of negative mental health outcomes has detracted from other known causes of or predispositions for negative mental health outcomes: violence and previous mental health. For instance, rather than focusing on the negative psychological outcomes of abortion, Steinberg and Russo’s [6] results suggest the need for clinicians to provide women who have abortions or unintended pregnancies with referrals to services that help victims of violence [6]. Scientific progress in understanding the experience of women’s reproductive decisions does not have to be stunted by those with a political agenda.

**Implications for clinical practice and policy**

The burgeoning data trend is that abortion does not harm women. For the millions of women already dealing with complex emotions as they face an unintended pregnancy, the good news is that they can thoroughly examine all available options for themselves and their families without the additional risk of worrying about developing anxiety or other negative mental health sequelae should they choose abortion.

The messages from sound scientific research for health care practitioners and public policy crafters are clear:

- Health care providers need to screen for violence. Screening for violence could certainly have an impact on picking up treatable anxiety as well as helping prevent unintended pregnancies.
- Health care providers should exercise and strengthen their critical appraisal skills. By analyzing the data and being clear and well-versed on the methodological biases and design flaws apparent in studies, clinicians can be confident of their medical practice, instill deepened confidence in their patients, and help sway a confused public when faced with ideologically divisive matters.
- Reproductive health policy and legislation must be based on the best available science. Evidence-based science serves to acknowledge the complicated emotional terrain that many women face when confronting an unintended pregnancy and provides them access to sound and unbiased information, enabling them to make their own decisions.

As reproductive health care advocates, researchers and providers of comprehensive and compassionate care, it goes without saying that only the highest quality studies should inform their clinical practice and public policy. But anti-reproductive rights activists are using poor science to reposition their strategy from a fetally focused platform to a mother-focused “abortion hurts women” argument. The March 2009 *Contraception* editorial will further examine the ideologically driven “woman-protective anti-abortion framework” that continues to permeate reproductive health practice, public policy and legislation.

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References


