

Brief Overview of the Abortion and Mental Health Professional Literature
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For a significant number of women, abortion initiates powerful negative feelings and alienation from others (Kero, Hogberg, & Lalos, 2004; Kero & Lalos, 2000; Kero, Wulff, & Lalos, 2009; Kimport, 2012; Kimport, Foster, & Weitz, 2011; Söderberg, Janzon, & Sjöberg, 1998). A Clinician's Guide to Medical and Surgical Abortion is a textbook written by leading abortion providers (Paul, et al., 1999) for training purposes. The chapter on counseling in this text outlines several negative reactions that women may experience after abortion, including depression, severe guilt, shame, and unresolved grief (Baker et al., 1999). According to the Clinician's Guide, symptoms of depression include the following: crying, suicidal ideation, poor performance in school or work, loss of interest in enjoyable activities, and feelings of worthlessness. Symptoms of severe guilt entail the following: 1) self-punishing behaviors such as substance abuse or indiscriminate sex; 2) nightmares about killing or saving babies; 3) blocking out the experience; 4) avoiding anything that triggers memories of the event; 5) fearing God's punishment; and 6) interpreting misfortune, illness, or accident as signs of God's punishment. Symptoms of shame include the following: 1) relentless thoughts of being a bad person; 2) engaging in self-destructive behaviors; 3) fear of anyone finding out about the abortion. Finally, symptoms of unresolved grief, according to the authors of the abortion text involve engaging in thoughts and behaviors that perpetuate a strong emotional investment in the pregnancy, or that prevent the redirection of emotional energy into moving forward with life.

Over the past several decades, the number of peer-reviewed studies identifying adverse mental health outcomes associated with abortion have increased dramatically, as has the scientific rigor of research on this topic. The literature base, comprised of hundreds of studies,

has revealed that women who choose abortion experience increased risk of mental health problems, including substance abuse, anxiety, depression, suicidal ideation and suicide, among other conditions and symptoms (e.g., Bradshaw & Slade, 2003; Coleman et al., 2002a, 2002b; Coleman, 2005, 2006; Cogle et al., 2003, 2005; Dingle, 2008; Fergusson et al., 2006, 2008; Gissler et al., 2005; 2015; Mccarthy, 2015; Mota et al., 2010; Pedersen, 2007, 2008; Rees & Sabia, 2007; Sullins, 2016).

In a 2013 narrative review of literature published between 1995 and 2011, incorporating 30 peer-reviewed journal articles by Italian researchers Bellieni and Buonocore, the authors concluded, “The studies analyzed here show that abortion is a risk factor for mental illness when compared to childbirth.”

In 2011, I published a meta-analysis titled “Abortion and Mental Health: A Quantitative Synthesis and Analysis of Research Published from 1995-2009” in the *British Journal of Psychiatry*. A meta-analysis is a specific form of systematic literature review wherein quantitative data from multiple published studies are converted to a common metric and combined statistically to derive an overall measure of the effect of an exposure such as abortion. This methodology gives the results more statistical power and much more credibility than the results of any individual empirical study or narrative review. In a meta-analysis, the contribution or weighting of any particular study to the final result is based on objective scientific criteria (sample size and strength of effect), as opposed to an individual’s opinion of what constitutes a strong study.

My review offers the largest quantitative estimate of mental health risks associated with abortion available in the world. After applying methodologically-based selection criteria and extraction rules to minimize bias, the sample consisted of 22 studies, 36 measures of effect, and

877,297 participants (163,880 of whom experienced an abortion). Results revealed that women who aborted compared to women who had not, experienced an 81% increased risk for mental health problems. When compared specifically to unintended pregnancies delivered, abortions were associated with a 55% increased risk of mental health problems.

Separate effects were calculated based on the type of mental health outcome, with the results revealing the following increased risks: anxiety disorders 34%; depression 37%; alcohol use/abuse 110%; marijuana use/abuse 220%; and suicide behaviors 155%. Calculation of a composite Population Attributable Risk (PAR) statistic revealed that nearly 10% of the incidence of mental health problems was directly attributable to abortion.

The scientific evidence linking abortion to increased rates of mental health problems is published in leading peer-reviewed journals in psychology and medicine. There are now dozens of large-scale prospective studies with 1000's of participants incorporating different types of comparison groups and other control techniques, effectively fortifying the level of confidence in the results derived. Potentially confounding variables, controlled in the various studies, include prior mental health, reproductive history, experience of abuse of various forms, and several demographic variables thereby increasing the reliability and validity of the findings.

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