

# **Abortion and Women's Mental Health**

Martha W. Shuping

Laurel Shaler

## **Abstract**

Abortion is a frequent surgical procedure that for some women has adverse psychological effects. This paper reviews some of the strongest studies on psychological outcomes after abortion, then gives suggestions for interventions based on currently available research. Further research is needed on outcomes of various interventions.

**Keywords:** abortion, abortion recovery, reproductive loss

## **Literature Review of Mental Health Outcomes**

From 1995 through 2014, the annual number of U.S. abortions gradually decreased from 1,359,400 to 926,000 (Jones & Jerman, 2017). However, abortion remains a common surgical procedure experienced by many women, with the potential for negative psychological sequelae, recognized in two textbooks of the National Abortion Federation (Anne Baker & Beresford, 2009; Anne Baker et al., 1999).

## **Report of the American Psychological Association**

The American Psychological Association (A.P.A), in a 2008 report, identified at least 17 risk factors, indicating subgroups of women at increased risk for problems after abortion. If the woman feels a commitment to the pregnancy, if she experiences her pregnancy as wanted and meaningful, or if she feels she is being coerced to have an abortion she doesn't want, she is at increased risk for psychological problems after abortion. However, the A.P.A. concluded: "The best scientific evidence published indicates that among adult women who have an unplanned

pregnancy the relative risk of mental health problems is no greater if they have a single elective first-trimester abortion than if they deliver that pregnancy” (A.P.A., 2008, p. 4).

Although the A.P.A conclusion implies there is no increased risk of mental health problems after abortion, the qualifying statement that the conclusion applies to only those having a “single” abortion means that women who have repeat abortions (about 50% of abortions are repeats—Cohen, 2017) are excluded from this conclusion of no increased risk. Likewise, by stating the conclusion applies to “adult women,” the conclusion excludes the 18% of U.S. abortion patients who are adolescents (Jones, Finer, and Singh, 2010). Women obtaining abortions beyond the first trimester (11% of all abortion patients—Guttmacher Institute, 2014) are also excluded. Thus, these and other women are included in risk groups in which *some* women do experience abortion-related psychological distress.

### **Meta-analyses**

A meta-analysis is a type of study design considered useful for resolving controversies when previous research has given contradictory results (Rosner, 2011; Higgins & Green, 2011). Data from many studies are combined to produce a larger sample size with greater statistical power, providing increased ability to detect an effect in cases where the original studies were too small to detect the effect.

Coleman (2011) conducted the first meta-analysis to address abortion and mental health. Her sample combined 22 studies and 877,181 participants, with 163,831 of these having experienced an abortion. The results showed that “women who had undergone an abortion experienced an 81% increased risk of mental health problems, and nearly 10% of the incidence of mental health problems was shown to be attributable to abortion” (Coleman, 2011, p. 180). Specific outcomes studied included: marijuana (increased risk 230%); suicide behaviors

(increased risk 155%); alcohol use/abuse (increased risk 110%); depression (increased risk 37%); and anxiety (increased risk 34%).

A subsequent meta-analysis by Fergusson, Horwood, and Boden showed similar results, with increased risk of several mental health outcomes after abortion. Originally published as a letter to the editor of the *British Journal of Psychiatry* (2011), the full report was published in 2013. The report concluded: "There is no available evidence to suggest that abortion has therapeutic effects in reducing the mental health risks of unwanted or unintended pregnancy" (Fergusson, et al., 2013).

### **Longitudinal Studies**

The National Longitudinal Study of Adolescent to Adult Health (Add Health) was designed to be the largest and most extensive study of the health-related behaviors of U.S. adolescents during the transition to adulthood (Harris et al., 2016). Funded by 23 U.S. government agencies and foundations, this study used a nationally representative sample of 20,745 U.S. adolescents (males and females), retaining 81% in the data set. The Add Health data has produced more than 6,000 articles and publications to date.

Sullins analyzed Add Health data for 8005 young women for whom mental health and reproductive data were available, over a 13-year period. After adjustment for all known confounding factors, abortion (compared to giving birth, and compared to involuntary pregnancy losses) was associated with increased risk of depression, anxiety, suicidal ideation, alcohol abuse, drug abuse, cannabis abuse and nicotine dependence. The results were statistically significant ( $p < .0001$ ). One-eleventh of the prevalence of mental disorders examined over the 13-year period were attributable to abortion.

Sullins' results were consistent with similar longitudinal studies by Fergusson, et al. in New Zealand (2006, 2008) and Pederson in Norway (2007, 2008). Sullins concluded:

As far as repeated longitudinal measures can establish, the effect of abortion appears to be causal and independent of confounding associations. The overall level of distress, accounting for about a tenth of mental disorders for women in their late 20s, may be characterized as moderate, but it is not trivial.

(Sullins, 2016, p. 24).

### **PTSD Studies**

In 2015, Daugirdaitė, van den Akker, and Purewal published the first systematic review of PTSD after reproductive losses, including abortion. Forty-eight studies were included in this review, with 27 of the studies including data related to PTSD associated with abortion. The authors concluded that abortion is a stressful event that is traumatic for some women, and that some women experience PTSD after abortion, though it is impossible to determine the prevalence from existing studies.

A 2007 study (Suliman et al.) is noteworthy for having been conceived by a physician who provides anesthesia for abortion patients, with the study including before and after psychological tests on the day of the abortion, with one-month and three-months follow-up. Three months after abortion, 18% of the women experienced PTSD, which the authors considered “high” (Suliman et al., 2007).

In a study of university women on three North American campuses (Canada and U.S.) *all* women who had a previous abortion reported symptoms of posttraumatic stress disorder (PTSD) symptoms on the Impact of Events Scale, Revised (IES-R) and perinatal grief on the Perinatal Grief Scale (PGS) (Curley & Johnston, 2013). The IES-R is a test which requires the person to

state the date and the nature of the specific trauma that was experienced, then answer questions related to that trauma, for example, questions about nightmares or intrusive thoughts concerning the specific traumatic event, in this case, a past abortion. The elevated perinatal grief scores indicate that at least part of the women's distress related to loss of the unborn child through abortion. On average, women who had a past abortion had experienced distress for three years at the time of the study. More than 50% of these young women desired treatment.

### **Suicide after Abortion**

Grief after abortion can affect women deeply, sometimes leading to suicide. British artist Emma Beck committed suicide after her 2007 abortion, writing in a note: "I told everyone I didn't want to do it, even at the hospital . . . now it is too late . . . I want to be with my babies" ("Artist hanged herself," 2008). A study in Finland linking medical records to death certificates showed that the risk of suicide was 650% higher after abortion compared to childbirth, and also significantly higher when compared to miscarriage (Gissler, Hemminki, & Lonnqvist, 1996). A study of 173,279 Medi-Cal recipients, using medical records linked to death certificates, showed a significantly increased risk of suicide in women who had abortions compared to women who gave birth (Reardon et al., 2002). The increased risk persisted for the 8 years of the study. This study controlled for prior psychiatric illness.

### **Recommended Interventions Supported by Published Literature**

#### **Increase Social and Emotional Support**

The 2017 *Clinical Policy Guidelines* of the National Abortion Federation (NAF) recommends several counseling resources to guide counselors who provide pre- or post-abortion counseling. NAF-recommended authors Anne Baker and Terry Beresford (2009) identified lack of emotional support as a "risk factor for negative emotional sequelae" (p. 57) after abortion

(also Anne Baker et al., 1999). The A.P.A.'s 2008 report identified lack of social support as a risk factor. Taylor et al. (2000) showed that under stress conditions, women desire social support from other women which is important to their coping. Thus, NAF-recommended authors Needle and Walker (2008) are correct in their recommendation that establishing support is an important part of the coping process after abortion. Many women are finding faith-based support groups to be helpful (Aspen Baker, 2015).

### **Address Grief**

Needle and Walker (2008, p. 149) recommend exploration of the woman's emotions, including grief: "If a woman needs to cry or grieve, allow her to do so." NAF-recommended author Perrucci (2012, p. 41), quotes a woman who states, prior to the abortion, "I will miss the baby after it's gone" (2012). NAF author Anne Baker (1995) states that not all women experience sadness after abortion, but she acknowledges that some women have grief related to the child lost to abortion.

The Wisconsin Association for Perinatal Care (WAPC) issued a position statement on "Childbearing Loss and Grief" (2002), recognizing grief associated with sixteen types of reproductive losses, including elective abortion and abortion induced for medical reasons. The WAPC recommends use of "mementos" or "ritual" to facilitate the grieving process, as does Perrucci (2012). A ritual could be a simple action such as lighting a candle (Stalhandske, Makenzius, Tyden, & Larsson, 2012), or could take the form of a Memorial Service including Christian Communion, as reported by psychiatrists McAll and Wilson (1987).

Mementos or "memorials" are frequently used in processing grief after any pregnancy loss, including abortion. Harper (2008) gives examples of placing a candle with family photos, painting a mural or planting a garden. The creation of memorial gardens has become a popular

means of processing grief of reproductive losses; websites and blogs of pregnancy loss organizations (not necessarily focused on abortion) offer suggestions for designing memorial gardens (Czukas, 2015). A review article (Zeanah, 1989) reports that it is an established practice after perinatal loss to encourage parents "to name the child and to plan a memorial service congruent with their religious beliefs" (p. 467). While Zeanah is writing more generally about perinatal loss, those women who experience grief after abortion would also benefit. Several faith-based abortion recovery programs, include a Memorial Service and/or use of mementos in their protocols; some are discussed below and are supported by research indicating efficacy.

### **Facilitate Forgiveness and Resolution of Spiritual Issues**

Anne Baker (1995) and Needle and Walker (2008) agree that some women experience a need for God's forgiveness after an abortion, and that issues related to receiving forgiveness by God are appropriate for post-abortion counseling. Coleman (2014), in a review of risk factors, reported that 18 studies show that religious women, those who frequently attend church, or whose personal values conflict with abortion, have more negative psychological outcomes after abortion. For women who experience a need for God's forgiveness, faith-based group programs including SaveOne (Harper, 2008) and Forgiven and Set Free (Cochrane, 2015) lead women to explore their own image of God, and to examine Scripture verses related to forgiveness.

### **Faith-based Interventions**

Rachel's Vineyard is an abortion recovery ministry with locations in more than 80 countries on six continents, with a structured manual that has been translated into 23 languages. This faith-based program uses a team approach including a mental health professional, a minister or priest, and at least one volunteer peer counselor who has had personally experienced abortion. It is usually conducted as a weekend retreat (Friday-Sunday); a once-a-week alternative is also

possible. There is a published manual for Catholic ministry teams, and a separate manual for Protestant use which has been vetted by Protestant pastors.

Rachel's Vineyard uses a series of Biblical meditations called "Living Scriptures" in which an entire story from the Gospels is read, reflected on, and then brought to life through some tangible action. For example, when the story of Blind Bartimaeus is re-enacted in the group, each person receives a lighted candle, followed by a discussion of the specific emotional or spiritual healing that each person desires. Sensory components including soft music and breathing exercises may help participants to access and verbalize emotions that may be stored in non-verbal parts of the brain in those who are affected by PTSD (Fisher & Ogden, 2014; van der Kolk, 2014).

Rachel's Vineyard utilizes standard grief counseling methods, such as use of a grief doll to help focus their grief, and writing a letter to express their feelings. Candles are lit when each child is named. The weekend concludes with a Memorial Service at which participants receive mementos.

In research using pre- and post-tests, women participating in Rachel's Vineyard demonstrated highly significant ( $p < 0.001$ ) reductions in shame and increased self-esteem on the Internalized Shame Scale, and significant ( $p < 0.01$ ) reductions in avoidance and hyperarousal symptoms of PTSD on the IES-R (Jaramillo, 2017).

Previous research (Layer et al., 2004; Layer, personal communication 2017) gave similar results in a study of women enrolled in the once-a-week faith-based support group programs *Forgiven and Set Free* (Cochrane, 2015) and *Surrendering the Secret* (Layton, 2008). Combined results from these weekly groups showed decreased shame and increased self-esteem on the ISS, and decreased hyperarousal and avoidance symptoms of PTSD on the IES-R, with statistically

significant results. The weekly group programs were compared to the Rachel's Vineyard weekend; however, the improvements did not reach statistical significance for Rachel's Vineyard. It is possible the number of participants was too low to reach significance as there were only 35 participants in all, with only 12 completing Rachel's Vineyard, compared to 39 women participating in Rachel's Vineyard in Jaramillo's 2017 research.

Both Rachel's Vineyard and SaveOne allow husbands and wives to participate together if desired, which can enhance the support available to the woman, and may reduce marital stress if present after abortion.

### **Conclusions and Future Study**

Some women experience adverse outcomes related to abortion. For those who do, research shows significantly decreased avoidance, decreased hyperarousal, decreased shame, and increased self-esteem after faith-based interventions. Additional research is needed since samples were small. Future research may clarify which interventions are most beneficial, which may vary depending on the issues unique to individual women. A book chapter by Shuping (2016) covers additional issues that may arise after abortion, and interventions that have been studied.

This article was originally published in a newsletter of the American Association of Christian Counselors. The citation is:

Shuping, M., & Shaler, L. (2017). Abortion and women's mental health. *CounselEd* (3)11.

### **References:**

- American Psychological Association, Task Force on Mental Health and Abortion. (2008). Report of the Task Force on Mental Health and Abortion. Washington, DC: Author. Retrieved from <http://www.apa.org/pi/wpo/mental-health-abortion-report.pdf>
- Artist hanged herself. (2008, Feb 22). *The Telegraph*. Retrieved from <http://www.telegraph.co.uk/>
- Baker, Anne. (1995). Abortion and options counseling: A comprehensive reference, *revised and expanded edition*. Granite City: Hope Clinic for Women.
- Baker, Anne, & Beresford, T. (2009). Chapter 5, Informed consent, patient education and

- counseling. In M. Paul, E. S. Lichtenberg, L. Borgatta, D. A. Grimes, P. G. Stubblefield, & M. D. Creinin (Eds.), *Management of unintended and abnormal pregnancy: Comprehensive abortion care*. Chichester, UK: Wiley-Blackwell.
- Baker, Anne, Beresford, T., Halvorson-Boyd, G., & Garrity, J. M. (1999). Chapter 3, Informed consent, counseling, and patient preparation. In M. Paul, E. S. Lichtenberg, L. Borgatta, D. A. Grimes, & P. G. Stubblefield, (Eds.), *A clinician's guide to medical and surgical abortion*. Philadelphia, PA: Churchill Livingstone.
- Baker, Aspen. (2015). *Pro voice: How to keep listening when the world wants a fight*. Oakland: Berrett- Koehler Publishers, Inc.
- Cochrane, L. (2015). *Forgiven and set free: A post-abortion Bible study for women, revised and updated edition*. Grand Rapids: Baker Books.
- Coleman, P.K. (2011). Abortion and mental health: A quantitative synthesis and analysis of research published from 1995-2009. *British Journal of Psychiatry*, 199, 180-186. Retrieved from <http://bjp.rcpsych.org/content/199/3/180.full>
- Coleman, P.K. (2014). Women at Risk for Post-abortion mental health problems and abortion associated relationship challenges. In Pontifical Academy for Life, *Post-abortion trauma: Possible psychological and existential aftermaths* (pp.147-210). Rome: Pontifical Academy for Life. Retrieved from [http://www.academiavita.org/\\_pdf/documents/pav/post\\_abortion\\_trauma.pdf](http://www.academiavita.org/_pdf/documents/pav/post_abortion_trauma.pdf)
- Curley, M., & Johnston, C. (2013). The characteristics and severity of psychological distress after abortion among university students. *The Journal of Behavioral Health Services & Research* 40(3), 279-293.
- Czukas, E. (2015). Planning a memorial garden after a pregnancy loss. Retrieved from <http://miscarriage.about.com/od/rememberingyourbaby/a/Planning-A-Memorial-Garden-After-A-Pregnancy-Loss.htm>
- Daugirdaitė, V., van den Akker, O., & Purewal, S. (2015). Posttraumatic stress and posttraumatic stress disorder after termination of pregnancy and reproductive loss: A systematic review. *Journal of Pregnancy*, 2015:646345 doi: 10.1155/2015/646345.
- Fergusson, D.M., Horwood, L.J., Boden, J.M. (2013). Does abortion reduce the mental health risks of unwanted or unintended pregnancy? A re-appraisal of the evidence. *Australia and New Zealand Journal of Psychiatry* 47, 819-27. Retrieved from <http://anp.sagepub.com/content/47/9/819>
- Fergusson, D.M., Horwood, L.J., & Boden, J.M. (2011) Letter to the Editor. A further meta-analysis: A reply to Coleman's "Abortion and mental health: quantitative synthesis and analysis of research published 1995-2009". *British Journal of Psychiatry*, 199 (4). doi: 10.1192/bjp.bp.110.077230
- Fergusson, D.M., Horwood, L.J., & Boden, J.M. (2008). Abortion and mental health disorders: evidence from a 30-year longitudinal study. *British Journal of Psychiatry*, 93(6), 444-451.
- Fergusson, D.M., Horwood, L.J., & Ridder, E.M. (2006). Abortion in young women and subsequent mental health. *Journal of Child Psychology & Psychiatry* 47, 16-24.
- Fisher, J. & Ogden, P. (2014). Sensorimotor psychotherapy. In C.A. Courtois and J.D. Ford (Eds.), *Treating complex traumatic stress disorders: Scientific foundations and therapeutic models*. New York: The Guilford Press.
- Gissler, M., Hemminki, E., Lonnqvist, J. (1996). Suicides after pregnancy in Finland: 1987-1994: register linkage study. *British Medical Journal*, 313, 1431-4.

- Guttmacher Institute (2014). Fact sheet: Induced abortion in the United States. New York: Author.
- Harris, K.M., Halpern, C.T., Whitsel, E., Hussey, J., Tabor, J., Entzel, P., & Udry, J.R. (2009). The National Longitudinal Study of Adolescent to Adult Health: Research design. Retrieved from <http://www.cpc.unc.edu/projects/addhealth/design>.
- Higgins, J.P.T., & Green, S. (Eds.) (2011). Cochrane handbook for systematic reviews of interventions version 5.1.0. The Cochrane Collaboration. Retrieved from [http://handbook.cochrane.org/chapter\\_9/9\\_1\\_3\\_why\\_perform\\_a\\_meta\\_analysis\\_in\\_a\\_review.htm](http://handbook.cochrane.org/chapter_9/9_1_3_why_perform_a_meta_analysis_in_a_review.htm)
- Harper, S. (2008). *SaveOne: A guide to emotional healing after abortion*. Garden City, NY: Morgan James Publishing.
- Jaramillo, S. (2017). Mending broken lives: Post-abortion healing. (Doctoral Dissertation). Retrieved from ProQuest Dissertations and Theses (Accession Order No. 10274360) [http://gateway.proquest.com/openurl?url\\_ver=Z39.88-2004&res\\_dat=xri:pqdiss&rft\\_val\\_fmt=info:ofi/fmt:kev:mtx:dissertation&rft\\_dat=xri:pqdiss:10274360](http://gateway.proquest.com/openurl?url_ver=Z39.88-2004&res_dat=xri:pqdiss&rft_val_fmt=info:ofi/fmt:kev:mtx:dissertation&rft_dat=xri:pqdiss:10274360)
- Jones, R.K., & Jerman, J. (2017). Abortion incidence and service availability in the United States, 2014. doi: 10.1363/psrh.12015
- Jones, R.K., Finer, L.B., & Singh, S., (2010). Characteristics of U.S. abortion patients, 2008. New York: Guttmacher Institute.
- Layer, S.D., Roberts, C., Wild, K., and Walters, J. (2004). Postabortion grief: evaluating the possible efficacy of a spiritual group intervention. *Research on Social Work Practice, 14*(5), 344-350.
- McAll, K., & Wilson, W. P. (1987). Ritual mourning for unresolved grief after abortion. *Southern Medical Journal, 80*(7), 817-821.
- National Abortion Federation (2017). *Clinical Policy Guidelines*. Washington, D.C.: National Abortion Federation. Retrieved from <https://prochoice.org/wp-content/uploads/2017-CPGs-for-Abortion-Care.pdf>
- Needle, R., and Walker, L. (2008). *Abortion counseling: A clinician's guide to psychology, legislation, politics, and competency*. New York: Springer Publishing Company.
- Pedersen W. (2008). Abortion and depression: A population-based longitudinal study of young women. *Scandinavian Journal of Public Health, 36*(4), 424-428. doi:10.1177/1403494807088449.
- Pedersen W. (2007) Childbirth, abortion and subsequent substance use in young women: a population-based longitudinal study. *Addiction, 102*(12), 1971–1978.
- Perrucci, A. C. (2012). *Decision, assessment and counseling in abortion care: Philosophy And practice*. Lanham, MD: Rowman & Littlefield.
- Reardon, D.C., Ney, P.G., Scheuren, F.J., Cogle, J.R., Coleman, P.K., Strahan, T. (2002). Deaths associated with pregnancy outcome: a record linkage study of low income women. *Southern Medical Journal, 95*(8), 834-841.
- Rosner, B. (2011). *Fundamentals of Biostatistics, Seventh Edition*. Boston: Brooks-Cole.
- Shuping, M. (2016). Abortion Recovery Counseling: Pro-choice, Pro-life, and Pro-voice, Common Ground (pp. 115-136). In R. MacNair (Ed.) Peace psychology perspectives on abortion. Kansas City, MO: Feminism and Nonviolence Studies Association.
- Suliman, S., Ericksen, T., Labuschgne, T., de Wit R., Stein, D., Seedat, S. (2007). Comparison of pain, cortisol levels, and psychological distress in women undergoing surgical

- termination of pregnancy under local anaesthesia versus intravenous sedation. *BMC Psychiatry*, 7(24). doi:10.1186/1471-244X-7-24
- Sullins, P. (2016, July 22). Abortion, substance abuse and mental health in early adulthood. Thirteen-year longitudinal evidence from the United States. *Sage Open Medicine*. Retrieved from [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2813546](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2813546)
- Stalhandske, M. L., Makenzius, M., Tyden, T., & Larsson, M. (2012) Existential experiences and needs related to induced abortion in a group of Swedish women: a quantitative investigation. *Journal of Psychosomatic Obstetrics and Gynecology*, 33(2), 53-61. doi: 10.3109/0167482X.2012.677877
- Taylor, S.E., Klein, L.C., Lewis, B.P., Gruenewald, T.L., Gurung, R.A.R, Updegraff, J.A. (2000). Biobehavioral responses to stress in females: Tend-and-befriend, not fight-or-flight. *Psychological Review*, 107(3), 411-429.
- van der Kolk, B. (2014). *The Body Keeps the Score: Brain, Mind, and Body in the Healing of Trauma*. Penguin Publishing Group. Kindle Edition.
- Wisconsin Association for Perinatal Care (2002). Position statement: Childbearing loss and grief. Retrieved from [http://www.perinatalweb.org/assets/cms/uploads/files/childbearin\\_loss\\_and\\_grief\\_statement.pdf](http://www.perinatalweb.org/assets/cms/uploads/files/childbearin_loss_and_grief_statement.pdf)
- Zeanah, C.H. (1989). Adaptation following perinatal loss: A critical review. *Journal of The American Academy of Child & Adolescent Psychiatry*, 28(4), 467-631.