

Deaths Associated with Abortion and Childbirth:

A Brief Summary with Attention to Mental Health Issues

Martha Shuping, M.D.

1. Suicide:

A large record based study in Finland reported a higher rate of suicide after abortion. Women who had an abortion had a 650% higher risk of death from suicide compared to women who carried to term. This study linked actual death certificates to medical records.¹

The higher suicide rates after abortion persist for several years and are highest for younger women. This was seen in a large study of more than 173,000 California Medicaid records in which the increased rate of suicide persisted for the 8 years studied, and which was not explained by prior mental illness (at least not during the year preceding the target pregnancy).²

A records based U.K. study comparing suicide attempts before and after abortion indicated the increase in suicide rates after abortion was not related to prior suicidal behavior but was most likely related to adverse reactions to the abortion.³ The rate of attempted suicide remained level or decreased before and after pregnancies that resulted in giving birth.⁴ But following abortion, the suicide rate increased from a normal baseline to a significantly higher rate.⁵

There are reports of attempted or completed suicides coinciding with the anniversary date of the abortion or expected due date of the aborted child.^{6,7} This would tend to indicate a possible causal relationship between the abortion and the suicide or attempted suicide.

Risk of death by suicide is reduced in women who carry a pregnancy to term. In the Finland study, women giving birth had a suicide rate about half that of the general population of Finnish women.⁸ Several studies have shown carrying a pregnancy to term and giving birth are associated with a reduced risk of suicide.^{9,10,11,12}

“In one study of women with prior psychiatric problems, none of those who carried to term subsequently committed suicide over an eight-to-thirteen year follow up, while five per cent of those who aborted subsequently committed suicide.”¹³ A study of Canadian women also showed that women with previous psychiatric problems had a higher suicide rate after abortion.¹⁴

Teens are at much higher risk of a suicide attempt after abortion. Researchers at University of Minnesota found suicide attempts increased ten-fold for teens who were post-abortive in the preceding 6 months.¹⁵ Fergusson found that 50% of post-abortive teens (15-18 years) had suicidal thoughts and behaviors, double the rate for pregnant but never aborted, and double the rate of never pregnant girls.¹⁶

Suicide Summary: There is a much higher rate of suicide in post-abortive women compared to women who have given birth. Women who have given birth have a suicide rate that is below the community baseline. Even in women with prior mental illness, it still holds that those who have abortions have higher rates of suicide, while those who give birth have the lowest rate of suicide, lower than the non-pregnant baseline. There is evidence that there is a causal relationship between abortion and suicide, for example in case reports showing suicide was on anniversary of abortion and in Morgan’s study. The data consistently show that the risk of suicide is less after giving birth, and higher after abortion.

2. Accidental Death

Large records-based studies show that post-abortive women have an increased death rate due to accidents, compared to women who were not pregnant and compared to women who carried a pregnancy to term.^{17, 18} Women who gave birth have the lowest death rate and women who had abortions, the highest, compared to the non-pregnant group.^{19, 20} In Gissler's study post-abortive women had more than four times the accidental death rate of women who delivered.

Reardon et al. suggest that some of the increase in the accidental death rate may be due to suicidal behavior that is not recognized as such.²¹ "Reports of post-abortive women deliberately crashing their automobiles, often in a drunken state, in an attempt to kill themselves have been reported by post-abortion counselors and in the published literature."²² One post-abortive woman reported intentionally going out and sitting in a puddle during a thunderstorm.²³ Another said, "I cracked up my car three times, driving recklessly at extreme speeds. In one wreck, I broke four ribs and punctured my lung. My life became a series of ... accidents and self-destructive benders."²⁴

Accidental death rate may be affected by drug and alcohol abuse which is increased after abortion.^{25, 26}

Accidental Death Summary: It stands to reason that if we see in two large studies that post-abortive women have a higher rate of accidental death compared to women who gave birth, something other than mere chance is operating. Two important factors in this increased rate of accidental death after abortion seem likely to be 1) suicidal behavior that is incorrectly interpreted as an accident, and 2) substance abuse causing genuine accidents, or a mix of both. Other factors are discussed in a report by Reardon et al.²⁷ Interestingly, the delivering women have a lower rate of accidental deaths than the baseline for never pregnant women. It has been suggested that this may be due to mothers of infants avoiding risk in order to avoid injury to themselves or their children.²⁸ In any event, those giving birth have lower risk of accidental death.²⁹

3. Death from Natural Causes

In the Finland study, women who had an abortion were found to have a 60% higher risk of death from natural causes during the year after their abortion compared to women who gave birth.³⁰ In the California Medicaid study, women who aborted also had a higher risk of death from natural causes during the eight years of the study, 44% higher than women who gave birth.³¹ There are several possible factors that may contribute to this.

1. Abortion is associated with increased drug and alcohol abuse which in turn are associated with multiple health problems (as well as contributing to accidents as noted above).

- Numerous studies show a strong association between abortion and substance abuse (including alcohol), and Coleman's 2005 review article includes many of them.³²
- Fergusson et al. in a 2006 study found higher rates of illicit drug dependence (but not alcohol dependence) in post-abortive women compared to women who had been pregnant but non-abortive, and also compared to never pregnant women. This association (drug dependence associated with abortion) persisted after controlling for confounding factors.³³

2. Abortion is associated with increased cigarette smoking^{34, 35, 36, 37} which is associated with established health risks (cardiovascular, cerebrovascular, and respiratory diseases). Women who abort are twice as likely to become heavy smokers and suffer the associated health risks.

3. There is an increased risk of depression after abortion which is very well established.

- In a large review by Thorp et al. considering all large (100 or more patients) long term (more than 60 days) available at the time, it was found that abortion was clearly associated with depression serious enough to cause risk of self-harm.³⁸
- In Fergusson's 2006 study, in New Zealand, young women had increased rates of depression and suicidal thoughts and attempts after abortion; the association persisted after controlling for confounding factors.³⁹ **In the 15 to 18 year old group, 78.6% of those who had abortions had major depression, which was 42.9% higher than girls who had been pregnant but did not abort. In the same age group, 50% of post-abortive girls had suicidal ideation, among those who had been pregnant without aborting, only 25% had suicidal ideation, similar to the 23% in the never-pregnant girls. For all age groupings the never- pregnant were statistically the same as the pregnant-but-never-aborted, while the post-abortive girls had significantly higher depression and suicidal ideation.**

4. Depression decreases general health by several mechanisms:

- It is known that depression is associated with suppression of the immune system, which could increase the risk of infections and cancers.⁴⁰
- Depression has been shown to be a risk factor for many types of cancers.⁴¹
- Depression is an independent risk factor for death from heart disease.^{42, 43, 44}
- Depression has also been studied in relation to cerebrovascular disease.⁴⁵

5. Studies show Posttraumatic Stress Disorder and symptoms of posttraumatic stress are experienced by post-abortive women.⁴⁶ PTSD has been shown to be a predictor of poor general health.⁴⁷

- A recent study comparing post-abortive Russian and American women found that both Russians and American women had higher trauma scores (on the TSI Belief Scale) than a population of battered women, with the Russian women scoring higher than the Americans. In addition, 65% of the American women had symptoms of PTSD, with 14.3% meeting full criteria for diagnosis.⁴⁸
- Posttraumatic stress disorder is predictive of poor health. This was the conclusion in a study that controlled for a "wide range of variables predictive of poor health."⁴⁹

In the California Medicaid study, among women with only one pregnancy during the 8 years of the study, those who had abortions were nearly three times more likely to die of circulatory diseases (Odds Ratio 2.87),⁵⁰ and over five times more likely to die from cerebrovascular disease (Odds Ratio 5.46).⁵¹

In the California Medicaid study, it was found that abortion was significantly associated with risk of death from HIV (AIDS). Pelvic Inflammatory Disease is a relatively common complication of abortion,^{52, 53, 54} and Pelvic Inflammatory Disease may increase the risk of HIV transmission.⁵⁵ Since, as we have already seen, abortion also is associated with increased substance abuse, this also can be a factor in post-abortive individuals contracting HIV via IV drug abuse.

Natural Death Summary: Since Thorp's 2003 review article, it has become clear that there truly is an association between abortion and depression. In fact, the authors concluded that women should be cautioned in the informed consent process about depression severe enough to cause risk of self harm. Now with Fergusson's excellent study, this relationship between abortion and clinical depression becomes even more clear. Suicide is understandable on the basis of the depression. The accidents can also be understood as suicidal or very self-destructive behavior. But risk of natural death being higher after abortion—that is surprising and less intuitively understandable. How is it that post-abortive women could be at higher risk of death from natural causes after a simple ten minute procedure? And yet, the data shows that clearly, that women are at an increased risk of dying after an abortion compared to non-abortive women.

Reardon et al. suggest “the findings would appear to support the view that induced abortion produces an unnatural physical and psychological stress on women that can result in a negative impact on their general health.”⁵⁶ As indicated above, it is known that depression is associated with suppression of the immune system, and with a number of general health effects. Likewise, post-traumatic stress is associated with poor general health.

The mechanism and the intricate neurochemical processes by which psychological stress exerts damaging effects on the body is still being studied, and is only partially understood. But we can see the results of overwhelming stress.

It appears that women's general health is worsened after the abortion. In a study involving 10,000 London patients in a group practice, an 80% increase in requests for health care services was seen in the year following an abortion compared to the year prior to the abortion.⁵⁷

Another study examined health ratings from 1,428 patients randomly chosen from sixty-nine general practitioners.⁵⁸ It was found that a woman with a history of pregnancy loss, particularly abortion, had significantly lower general health ratings than other women. The more losses, the lower her general health score. Although miscarriage was associated with a lower score, abortion was more strongly associated with a lower health rating and was more often identified by the women as the cause of their poor health. In this study, if a birth had occurred after the pregnancy loss, the effect of the loss was less negative.

The current research seem to show that abortion is associated with harmful effects on a large number of women, for example the 65% of post-abortive American women who experienced symptoms of posttraumatic stress disorder, the post-abortive Russian and American women who scored, on average, higher than a population of battered women. We see also the 78.6 of post-abortive teens (15-18 years) with major depression, and the 50% with suicidal thoughts or behavior. These are high percentages of women having serious symptoms. Although it could be tempting to minimize or dismiss these psychological symptoms, the increased health care costs for women seeking increased treatment for poorer health, and the increased death rates should make us realize that something very real is going on here, and that this overwhelming stress is having an effect on women which cannot be ignored.

Under the guidelines of some nations, abortion is permitted only when abortion is medically safer than carrying a child to term. But when is it safer or better for her health to have an abortion?

We have seen that post-abortive women have higher suicide rates, and that delivering women have lower suicide rates, lower than the community baseline. Gissler's study using Finnish public health

data, and linking medical records to death certificates, is probably the most accurate study on suicide after abortion, indicating a 650% increase in the suicide rate following abortion, and would expect the possibility of something in that range for Northern Ireland girls following abortion.

Not only do we have the increased suicide rate, but also the increased accidents after abortion, with decreased accidents following childbirth. And then the very real increased death rate from natural causes during the year following the abortion, and in the California Medicaid study, for the eight years following; no one has studied further.

In reality, there have been no studies to show that abortion is a treatment for depression, nor studies to show that abortion prevents suicide. When girls present to clinic saying they are depressed and suicidal and want an abortion, the tendency is to take that at face value and offer the abortion. But in fact, there are no evidence-based studies to show that abortion treats depression or that it prevents suicide. What we have in fact is the exact opposite, that girls and young women in Fergusson's study, from ages 15 up through 25, have much higher rates of depression as well as suicidal thoughts and behaviors after their abortions. Girls and young women who fell pregnant but did not abort do not have the increase in depression or suicidal ideation, but have the same rate as the non-pregnant group, in a study in which all known confounding variables have been controlled.

If one searches the literature for cases where maternal lives have been saved by abortion, the cases are not found. A report in the Irish Medical Journal⁵⁹ of 74,317 pregnancies found twenty-one maternal deaths. However, of these deaths, 7 were not related to pregnancy and thus would not have been prevented by abortion; 11 resulted from complications of pregnancy but came about through unforeseen complications, and thus a therapeutic abortion could not have been offered as the problems were completely unforeseen. Three deaths were the result of chronic disease so far advanced that abortion would have had no possibility of affecting the outcome. The authors concluded that therapeutic abortion could not have prevented any of the maternal deaths. They state there is a severe absence of research indicating when, if ever, abortion might actually reduce the risk of death for pregnant women with severe health problems, particularly since the abortion itself may involve as much or more risk than childbirth.

When one takes together the increased suicide rate after abortion, the increased accidental deaths, the harmful effects of substance abuse and cigarette smoking which worsen the health and shorten the life span, and also taking into account the healthy effects of childbirth, it becomes possible to see that it is not hard to see that it is not difficult to see that it is much safer and healthier to carry the child to term. It has not yet been demonstrated under what conditions an abortion is safer than childbirth.

Further issues involving maternal deaths vs. abortion deaths are discussed in depth in a review article in the Journal of Contemporary Health Law and Policy, and are beyond the scope of this paper. But they shed additional light on the crucial issue of determining which is most protective of the woman's life and health.

A large body of research from diverse locations including U.S., U.K., New Zealand, Finland and other places shows that abortion is associated with a worsening of physical and mental health, and the death rate is higher for post-abortive women. There is no evidence to demonstrate that abortion is a safe and effective treatment for clinical depression or suicidal thinking, and no actual studies to establish under what circumstance it saves lives if ever. Until further research is available to show the health benefits of abortion, it is inadvisable to rush toward legalization when the risks to health are so clear and so serious. Childbirth is much safer than abortion.

Note: This report draws heavily on the following report on which I am a co-author:

Reardon DC, Strahan TW, Thorp Jr. JM, and Shuping MW. Deaths associated with abortion compared to childbirth – a review of new and old data and the medical and legal implications. *The Journal of Contemporary Health Law and Policy*. 2004; 20 (2): 279-327.

My hope was to provide a brief summary of some of the more important content of this review article which runs to 48 pages. I have also incorporated some of the newer research that has come out since this review was published in 2004, while covering a number of key points from the original review.

REFERENCES:

1. Gissler M, Hemminki E, Lonnqvist J. *Suicides after pregnancy in Finland: 1987-1994: register linkage study*. *British Medical Journal* 1996; 313: 1431-4.
2. Reardon DC, Ney PG, Scheuren FJ, Cogle JR, Coleman PK, Strahan T. "Deaths associated with pregnancy outcome: a record linkage study of low income women," *Southern Medical Journal*. 2002; 95 (8):834-841.
3. Morgan CM, Evans M, Peter JR, Currie C. *Suicides after pregnancy: mental health may deteriorate as a direct effect of induced abortion*. *British Medical Journal* 1997; 314: 902.
4. Ibid.
5. Ibid.
6. Tischler C. *Adolescent suicide attempts following elective abortion*, *Pediatrics* 1981; 68(5):670-671.
7. Reardon DC, Strahan TW, Thorp Jr. JM, Shuping MW. *Deaths associated with abortion compared to childbirth—a review of new and old data and the medical and legal implications*. *Journal of Contemporary Health Law and Policy*. 2004; 20(2):279-327.
8. Gissler M, et al., op. cit.
9. Appleby L. *Suicide During Pregnancy and in the First Postnatal Year*. *British Medical Journal*. 1991; 302: 137.
10. Drower SJ & Nash ES. *Therapeutic Abortion on Psychiatric Grounds: Part I. A Local Study*, *South African Medical Journal*. 1978; 54: 604
11. Jansson B. *Mental Disorders After Abortion*. *Acta Psychiatrica Scandinavica*. 1965; 41: 87.
12. Appleby L, Turnbull G. *Parasuicide in the First Postnatal Year*. *Psychol. Med*. 1995; 25: 1087..
13. Reardon DC, Strahan TW, Thorp Jr. JM, Shuping MW. Deaths associated with abortion compared to childbirth—a review of new and old data and the medical and legal implications. *Journal of Contemporary Health and Law*. 2004; 20(2):279-327, citing Jansson B, op. cit.
14. Greenglass E. *Therapeutic Abortion and Psychiatric Disturbance in Canadian Women*. *Canadian Psychiatric Ass'n J*. 1976; 27: 453.
15. Garfinkel B, Hoberman H., Parsons, J., and Walker, J. "Stress, Depression and Suicide: A Study of Adolescents in Minnesota," *Responding to High Risk Youth* (University of Minnesota: Minnesota Extension Service, 1986.
16. Fergusson DM, Horwood LJ, Ridder EM. *Abortion in young women and subsequent mental health*. *Journal of Child Psychology & Psychiatry*.
17. Gissler M, Kauppila R, Merilainen J, Toukoma H, Hemminki E *Pregnancy-Associated Deaths in Finland 1987-1994—Definition Problems and Benefits of Record Linkage*, *Acta Obstetricia et Gynecologica Scandinavica*. 1997; 76: 651.
18. Reardon DC, Ney PG, Scheuren FJ, Cogle JR, Coleman, PK, Strahan T. *Deaths Associated with Pregnancy Outcome: A Record Linkage Study of Low Income Women*. *Southern Medical Journal*. 2002; 95: 834.
19. Gissler M, Kauppila R, Merilainen J, Toukoma H, Hemminki E *Pregnancy-Associated Deaths in Finland 1987-1994—Definition Problems and Benefits of Record Linkage*, *Acta Obstetricia et Gynecologica Scandinavica*. 1997; 76: 651.
20. Reardon DC, Ney PG, Scheuren FJ, Cogle JR, Coleman, PK, Strahan T. *Deaths Associated with Pregnancy Outcome: A Record Linkage Study of Low Income Women*. *Southern Medical Journal*. 2002; 95: 834.
21. Reardon DC, Strahan TW, Thorp Jr. JM, Shuping MW. *Deaths associated with abortion compared to childbirth—a review of new and old data and the medical and legal implications*. *Journal of Contemporary Health Law and Policy*. H2004; 20(2):279-327.
22. Ibid.
23. Burke T and Reardon DC. *Forbidden Grief: The Unspoken Pain of Abortion*. 2002; Springfield, IL: Acorn Books.
24. Ibid.
25. Reardon DC, Strahan TW, Thorp Jr. JM, Shuping MW. Deaths associated with abortion compared to childbirth—a review of new and old data and the medical and legal implications. 2004; 20(2):279-327.

26. Coleman, PK. *Induced Abortion and Increased Risk of Substance Abuse: A Review of the Evidence*. Current Women's Health Reviews. 2005;1:21-34.
27. Reardon DC, Strahan TW, Thorp Jr. JM, Shuping MW. Deaths associated with abortion compared to childbirth—a review of new and old data and the medical and legal implications. 2004; 20(2):279-327.
28. Ibid.
29. Ibid.
30. Gissler M, Kauppila R, Merilainen J, Toukoma H, Hemminki E *Pregnancy-Associated Deaths in Finland 1987-1994—Definition Problems and Benefits of Record Linkage*, Acta Obstetricia et Gynecologica Scandinavica. 1997; 76: 651.
31. Reardon DC, Ney PG, Scheuren FJ, Cogle JR, Coleman PK, Strahan T. "Deaths associated with pregnancy outcome: a record linkage study of low income women," *Southern Medical Journal*. 2002; 95 (8):834-841.
32. Coleman, PK. *Induced Abortion and Increased Risk of Substance Abuse: A Review of the Evidence*. Current Women's Health Reviews. 2005;1:21-34.
33. Fergusson DM, Horwood LJ, Ridder EM. *Abortion in young women and subsequent mental health*. Journal of Child Psychology & Psychiatry.
34. Harlap, "Characteristics of Pregnant Women Reporting Previous Induced Abortions," Bulletin World Health Organization. 1975; 52(1): 49
35. Meirik N. "Outcome of First Delivery After 2nd Trimester Two Stage Induced Abortion: A Controlled Cohort Study," Acta Obstetricia et Gynecologica Scandinavia 1984; 63(1):45-50.
36. Levin, et al., "Association of Induced Abortion with Subsequent Pregnancy Loss," JAMA, 243:2495-2499, June 27, 1980.
37. Coleman P K, Reardon DC, Cogle J. *Substance use among pregnant women in the context of previous reproductive loss and desire for current pregnancy*. Br J Health Psychol in press.
38. Thorp, JM. Jr., Hartmann, KE, Shadigian E. Long-Term Physical and Psychological Health Consequences of Induced Abortion: Review of the Evidence, Obstetrical & Gynecological Survey. 2003; 58(1):67-79.
39. Fergusson DM, et al., op. cit.
40. Irwin M, Daniels M, Bloom ET, Smith TL, Weiner H. *Life events, depressive symptoms and immune function*. Am J Psychiatr 1987; 144:437-41.
41. Linkins RW, Comstock GW. *Depressed Mood and Development of Cancer*. Am J Epidemiology 1990; 132 (962): 962
42. Pennix BWJH et al. *Depression and Cardiac Mortality*, Archives Gen. Psychiatry 2001; 221.
43. Carney RM et al. *Depression and Coronary Heart Disease: A Review for Cardiologists*. Clinical Cardiology. 1997; 20:196.
44. O'Connor et al. *Depression and Ischemic Heart Disease*. Am Heart J 2000; 140: 63.
45. Krishnan KRR, *Depression as a Contributing Factor in Cerebrovascular Disease*. Am Heart J. 2000; 140:70.
46. Rue VM, Coleman PK, Rue JJ, et al. Induced abortion and traumatic stress: A preliminary comparison of American and Russian women. Medical Science Monitor, 10, SR5-S16.
47. Lauterbach D, Vora R, Rakow M. The relationship between posttraumatic stress disorder and self-reported health problems. Psychosomatic Medicine. 2005 Nov-Dec 67(6):939-47.
48. Rue VM, et al., op. cit.
49. Lauterbach D. et al., op. cit.
50. Reardon DC, Strahan TW, Thorp Jr. JM, Shuping MW. Deaths associated with abortion compared to childbirth—a review of new and old data and the medical and legal implications. 2004; 20(2):279-327.
51. Ibid.
52. Heisterberg L. *Pelvic Inflammatory Disease Following Induced First-Trimester Abortion*. Danish Medical Bulletin. 1988; 64.
53. Sorensen J.L. et al. *Early- and Late-Onset Pelvic Inflammatory Disease Among Women with Cervical Chlamydia Trachomatis Infection at the Time of Induced Abortion—A Follow Up Study*. Infection. 1994; 22: 242.
54. Hillis S. D. et al. *Delayed Care of Pelvic Inflammatory Disease as a Risk Factor for Impaired Fertility*. Obstetrics & Gynecology 1993; 1503.
55. Levy JA. *Transmission of AIDS: The Case of the Infected Cell*. JAMA. 1988; 3037:3037.
56. Reardon DC, Strahan TW, Thorp Jr. JM, Shuping MW. *Deaths associated with abortion compared to childbirth—a review of new and old data and the medical and legal implications*. 2004; 20(2):279-327.
57. Berkeley D, et al., *Demands Made on General Practice by Women Before and After an Abortion*. J. Royal College Gen. Practitioners. 1984: 34:310, 313.
58. Ney PG, et al., *The Effects of Pregnancy Loss on Women's Health*, Social Science & Medicine. 194; 1193:1193-94.
59. Murphy JF, O'Driscoll K. *Therapeutic Abortion: The Medical Argument*. Irish Medical Journal. 1982:304:305-06.