Abortion: Risks and complications

he research studies described in this briefing examine the association between what is known as an 'exposure' or 'risk factor' (eg induced abortion) and an outcome or health effect (eg premature birth). Even though the studies may show an association or link between the exposure variable and a health effect, the way that studies are designed mean that we cannot always be certain that the exposure definitely *causes* the health effect. Such studies can provide evidence of some relationship, but they may not always fully take account of other possible exposures that people encounter in day to day life, which may simultaneously influence the health effects. We therefore need to be cautious about stating that an exposure directly causes a health effect.

Mental health outcomes

There is no clear evidence of a mental health benefit from abortion compared to birth and some factors increase the risk of negative outcomes post abortion.

The most comprehensive review into the mental health outcomes of induced abortion, carried out in the UK in 2011, ¹ found that having an *unwanted pregnancy* is associated with an increased risk of mental health problems. However, the rates of mental health problems for women with an unwanted pregnancy were the *same*, whether they had an abortion or gave birth. Therefore, when a woman has an unwanted pregnancy, rates of mental health problems will be largely unaffected whether she has an abortion or goes on to give birth. In other words abortion made no difference to the outcome.

Women who have mental health problems *before abortion* are at greater risk of mental health problems after abortion. The same review concluded that the most reliable predictor of post-abortion mental health problems is having a history of mental health problems prior to the abortion. A range of other factors produced more mixed results, although there is some suggestion that stressful life events, pressure from a partner to have an abortion, a negative attitude towards abortions in general and a negative

emotional reaction immediately following an abortion may all have a negative impact on mental health.

The results of this review were re-examined by Fergusson, who confirmed that there is no evidence that abortion reduces the mental health risks of unwanted pregnancy. He found that there were small to moderate increases in risks of some mental health problems post abortion. ²

A growing body of evidence suggests that women may be at an increased risk of mental health disorders (notably major depression, substance misuse and suicidality) following abortion, even with no previous history of problems. Researchers not associated with vested interest groups have published this growing scientific evidence. They include Fergusson in New Zealand ³ and Pedersen in Norway. ⁴

Preterm births

There is strong evidence of a link between abortion and subsequent preterm birth.

There are more robust studies on the association between abortion and preterm delivery in later pregnancies than the current Royal College of Obstetricians and Gynaecologists (RCOG) guidance suggests.⁵

The risk of a preterm birth in someone who has had a previous abortion is small but real. In 2013 a review of induced abortion and early preterm birth found'...a significant increase in the risk of preterm delivery in women with a history of previous induced abortion.' 6 Women who had one prior induced abortion were 45% more likely to have premature births by 32 weeks, 71% more likely to have premature births by 28 weeks, and more than twice as likely (117%) to have premature births by 26 weeks.

Another study in 2013 in Finland found a 28% higher risk of an extremely preterm birth. ⁷ A review published in the *American Journal of Obstetrics & Gynecology* in 2010, found that terminations in the first and second trimesters are associated with a 'very small but apparently real increase in the risk of subsequent spontaneous preterm birth'. ⁸

The link is supported by two European studies from 2005 9 and 2004 10 and a further two studies from 2009 by Swingle and Shah. Swingle et al. found a 64% increased risk of preterm birth at less than 32 weeks with just a single abortion. 11 Shah et al. found an increased risk of preterm birth of 35% in patients with only one abortion. The risk increased as the number of abortions increased. 12 There are now over 100 studies in the medical literature confirming this association.

They also state that women are more likely to seek medical help for bleeding after medical abortion than after surgical abortion and to report heavier bleeding than they expected from a medical abortion. 17

Christian Medical Fellowship, 6 Marshalsea Road, London SE1 1HL Last updated 2014

Breast cancer risk

New evidence suggests that abortion may increase susceptibility to breast cancer.

The possible existence of a link between induced abortion and a subsequent risk of developing breast cancer has been dismissed by the RCOG but the evidence remains highly controversial. A meta-analysis of 36 studies on abortion published in 2014 by Huang et al. concluded that induced abortion is significantly associated with an increased risk of breast cancer – by as much as 44% after one induced abortion and even more as the number of abortions increases. ¹³ This is consistent with the first systematic review of the link by Brind et al. in 1996. ¹⁴ However, the findings of both Huang and Brind differ from those of another major meta-analysis, by Beral et al. in 2004. ¹⁵ Beral's analysis indicated that abortion does not increase the risk of breast cancer and this is one of the primary papers cited as evidence that there is no causal link.

Further research is needed to settle this issue but in the meantime women have a right to know that there is ongoing debate about it.

Short-term physical complications There is a small but real risk of physical complications from abortion.

Government statistics report complications for 278 abortions out of 185,000 in England and Wales in 2012, with twice as many complications from medical abortions as surgical. Complications include haemorrhage, damage to the cervix, uterine perforation and/or sepsis but this only includes those reported up to the time of discharge from the place of termination. ¹⁶ The RCOG reports complication rates of 1–2 per 1,000 abortions but warns that lack of standardisation in reporting hampers collection of accurate data.

References

- Induced Abortion and Mental Health: A systematic review of the evidence full report and consultation table with responses. Academy of Medical Royal Colleges (AoMRC). December 2011
- Fergusson D, Horwood L & Boden J. Does abortion reduce the mental health risks of unwanted or unintended pregnancy? A re-appraisal of the evidence. Aust N Z J Psychiatry 2013;47:1204-1205 hit Iv/WFFPm5
- Fergusson D, Horwood L & Boden J. Reactions to abortion and subsequent mental health. British Journal of Psychiatry 2009;195(5):420-6 bit.ly/ftWeTCM. Fergusson, D, Horwood, L & Boden J. Abortion and mental health disorders: Evidence from a 30-year longitudinal study. British Journal of Psychiatry 2008;193:444-51
- Pedersen W. Abortion and depression: A population-based longitudinal study of young women. Scandinavian Journal of Public Health 2008;36(4):424-8. 1.usa.gov/1qwNoxc
- 'Women should be informed that induced abortion is associated with a small increase in the risk of subsequent preterm birth, which increases with the number of abortions. However, there is insufficient evidence to imply causality.' The care of women requesting induced abortion: Evidence-based clinical guideline number 7. RCOG 2011 bit.ly/lgknzMH
- Hardy G, Benjamin A, Abenhaim H. Effect of induced abortions on early preterm births and adverse perinatal outcomes. J Obstet Gynaecol Can 2013;35(2):138-143 bit.ly/insj5UU
- Räisänen S, Gissler M, Saari J, Kramer M, Heinonen S. Contribution of risk factors to extremely, very and moderately preterm births – register-based analysis of 1,390,742 singleton births. PLoS One. 2013;8(4):e60660 1.usa.gov/1CILhmd
- Iams J, Berghella V. Care for women with prior preterm birth. American Journal of Obstetrics & Gynecology 2010;203(3):89-100 1.usa.gov/Y7WEib
- Moreau C et al. Previous induced abortions and the risk of very preterm delivery: Results of the EPIPAGE study. Br J Obstet Gynaecol 2005;112:430-437 1.usa.gov/1A1nvlh
- Ancel P et al. History of induced abortion as a risk factor for preterm birth in European countries: Results of the EUROPOP survey. Hum Reprod 2004;19:734-40 1.usa.gov/InskDhS
- Swingle H, Colaizy T, Zimmerman M & Morris F. Abortion and the risk of subsequent preterm birth: An asystematic review with meta-analyses. J Reproductive Med 2009;54(2):95-108 1.usa.gov/1qWMUOQ
- Shah P, Zao J. Induced termination of pregnancy and low birth weight and preterm birth: A systematic review and meta-analysis. BJOG 2009;16(11):1425-1442 1.usa.gov/ttWgfxm
- Huang Y, Zhang X, Li W, Song F, Dai H, Wang J, Gao Y, Liu X, Chen C, Yan Y, Wang Y, Chen K.
 A meta-analysis of the association between induced abortion and breast cancer risk among Chinese females. Cancer Causes Control 2014;25(2):227-36
- Brind J, Chinchilli V, Severs W, Summy-Long J. Induced abortion as an independent risk factor for breast cancer: A comprehensive review and meta-analysis. J Epidemiol Community Health 1996;50:481-496 bit. Jy/189Bb6k
- Beral V, Bull D, Doll R, Peto R, Reeves G. A collaborative reanalysis of data from 53 studies, including 83,000 women from 16 countries. Lancet 2004;363:1007-16 Lusa.gov/OI3BXE
- 16. 187 reported complications were after medical abortion and 91 after surgical abortion. Abortion statistics, England and Wales: 2012. April 2014. Department of Health. NHS Choices state that after an abortion, the main risk is infection in the womb. bit.ly/1rbtBVi
- The care of women requesting induced abortion: Evidence-based clinical guideline number 7. RCOG 2011:37 bit.ly/1gknzMHf

