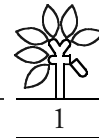


Research on Post-Abortion Complications: An Overview



Induced abortion has been widely used and accepted in North America since the 1970s. In the U.S. the number of abortions rose steadily from 1967 to reach a peak of over 1.5 million in the early 1990s. Since that time the numbers have declined to about 1.3 million annually. In Canada the induced abortion rate has remained steady at about 120,000 per year for the past decade. All together this means that tens of millions of women in North America have now experienced induced abortion. Nevertheless, the reporting of the effects of this widespread procedure on women's health is either neglected or tends to be limited to short-term complications. By contrast, studies from other countries reveal many of the problems women may experience after an abortion, such as *pelvic inflammatory disease (PID)*, *ectopic pregnancies*, *endometritis*, and other infections. The question arises: Are abortion services more efficient in Canada and the United States or does North-American research methodology miss many complications by relying only on short-term follow up and incomplete coding?

The lifelong risks of repeat, induced, and late-term abortions on women's health are not being addressed in the research literature, and further studies need to be done on the long-term effects of abortion, including a probable link to breast cancer. It seems clear that if women are going to give "informed consent" to an abortion, they should be made aware of the possible consequences of the procedure to their present and future health. It is likely that women are not being made aware of these risks in most abortion facilities in North America.

Research on Post-Abortion Complications

With about 120,000 induced abortions a year in Canada and 1.3 million in the United States, the health of a significant number of women is affected. What is the impact of this procedure and of the numerous complications that can occur?

Limitations in the Available Literature

It must be recognized at the outset that there are serious problems with the validity of much research on the physical after-effects of abortion on women:

1. Short-term Follow Up

In the first place, the reporting of medical sequelae tends to be based on very short-term findings. Longer-term follow up uncovers issues that would not be discovered immediately, such as infertility, which might not surface until the woman wishes to carry a pregnancy to term, perhaps as long as a decade after the abortion.

However, both Canada and the United States have seen a dramatic increase in the number of abortions occurring in clinics where follow up is negligible. For example, in studies such as one by Ferris and colleagues, which looked at post-abortion complications in Canadian abortion clinics and hospitals, 98.9 per cent of the women had day surgery.¹ The follow up was limited to the few hours after the procedure. Yet it is generally accepted that even short-term complications may appear up to several days or weeks after the procedure.

2. Lack of Reporting Policy

To the question, "Do hospitals or clinics in your area notify you if one of your patients has had an induced abortion?" Of 179 respondents, 107 said no, 48 said yes, and 24 were unsure.*

*This and all subsequent boxed quotations are taken from the *Survey of Canadian Physicians on Women's Health after Induced Abortion* conducted in 1997 by the de Veber Institute.

Because no reporting policy exists in Canada or the United States, it is unclear precisely what happens when complications emerge several days or weeks later. For the most part it appears that the diagnosis and treatment of follow-up issues are left to community hospitals or family physicians. These diagnoses and treatments may never be linked statistically to the original abortion procedure, and therefore they will seldom appear in the North-American literature as the sequelae of an induced abortion.

Until this bias is corrected, it is best to assume that data originating from day patient abortion facilities are a minimum baseline that typically ignores complications that did not prevent the patient from leaving the clinic. The data or studies cannot be interpreted as a close look at actual outcomes.

Because there is no standard reporting procedure, the Institute surveyed family physicians across Canada about sequelae reported in their practices. While their reports are anecdotal, they are all that are available at present concerning many longer-term issues. In the chapters that follow we outline some of the methodological difficulties. It is hoped that this will assist in targeting future research in neglected areas.

3. Possible Political Bias in Some Medical Literature

Because abortion is very much a political issue in North America, all research results need to be interpreted with care, bearing in mind the problem cited above – that North-American clinics typically do not follow up and identify only very short-term complications. The authors of many studies are, themselves, abortion providers who have a vested interest in minimizing negative findings.

An additional, highly significant discrepancy has emerged between what North-American journals consider worthy of publication and what European and Oceanic journals publish. For example, Sykes, a New Zealand researcher at Christchurch Women's Hospital, publishing in the *New Zealand Journal of Medicine*, reports that his results are

consistent with European and British findings.³ But Sykes then compares his results with results published in North-American journals: He notes that “Hakim-Elahi et al. report very low abortion complication rates and other American authors suggest complication rates should be lower than reported from Christchurch.”⁴

To demonstrate why his own complication rates “should be” lower, Sykes reports research data from Grimes and Cates, and Castadot.⁵

This discrepancy raises the question about where the bias or faulty science originates – in New Zealand or in North America? Indeed, MacLean, another medical researcher from New Zealand, responded to Sykes’ findings by suggesting that the cited complication rate was an underestimate because of a) the reluctance of women to attend for treatment and b) the fact that a number of serious complication cases are readmitted to other hospitals.⁶

It is, of course, possible that a real difference between North-American women and women in New Zealand – perhaps based on culture, food, health, or religion – affects abortion complication rates. But no such difference has been documented.

In addition, there are often glaring inconsistencies between the actual research results and the summaries and conclusions of articles. (A number of these will be identified in the following pages, but see in particular, Chapter 17.) Attempts to minimize negative results and to explain away findings that are not consistent with accepted opinion exist throughout the literature on abortion sequelae. A medical practitioner or family counselor is then left to wonder: Whose findings should be accepted? Could researchers such as Sykes, who report a higher complication rate, be published in a North-American journal?

In Chapter 2, we will discuss the case of Dr. Joel Brind, who conducted a *meta-analysis* of all epidemiological studies that showed a positive relationship between abortion and breast

cancer.⁷ His results were published in *The Journal of Epidemiology and Community Health*, a prestigious international journal that is not known for any extreme political position on the abortion issue. The handling of Brind's research results in North America raises serious questions as to how open North-American medicine is to genuine bad news about abortion sequelae.

Changes Since the 1970s

Repeat Abortion

Over the past decade, the trend towards the use of abortion as a primary method of fertility regulation has grown exponentially. For example, the repeat abortion rate now stands at more than 29 per cent in Canada. Among teenagers the repeat rate in 1993 was *four times the rate of first abortions* (81 per 1000 vs. 19 per 1000).⁸ Given that almost one in three women attending for abortion is now a repeater, we must consider the effects that a habitual recourse to abortion will have on the medical – and ultimately also the psychological – health of women. This report addresses the issue of repeat abortions and attempts to synthesize and analyze the research data available.

Chemical Abortion

Abortion induced by drugs as an alternative to surgical intervention is increasingly used for both first- and second-trimester abortions (see Chapter 8). Since this type of abortion has been available for less than ten years, research tends to be short-term and comparative. The main thrust is to justify its use over against the surgical approach. But, generally speaking, long-term complications, such as infertility or psychological issues, are not addressed in the literature.

Late-term Abortions

Wadhera and Millar from Statistics Canada note that the actual reported numbers of second-trimester abortions decreased from around 10,000 in 1974 to approximately 7000 in 1991.⁹ A 1995 Statistics Canada report indicates that complications in late-term abortions are higher than in earlier abortions for

women of all ages but that among the oldest group of women (30-39 years) the complication rate is almost 22 per cent for abortions between seventeen and 24 weeks gestation. Similarly, Koonin and colleagues of the Centers for Disease Control (CDC) report that the percentage of abortions occurring after the thirteenth week of pregnancy was twelve per cent in 1991 and thirteen per cent in 1992.¹⁰ The growing use of genetic testing for an increasing variety of conditions or traits will undoubtedly lead to many more second-trimester abortions.

Pelvic Inflammatory Disease (PID)

A further concern is the increasing incidence of pelvic inflammatory disease (PID) triggered by an induced abortion. One episode of PID can lead to *secondary infertility* or increase a woman's risk for future ectopic pregnancies. British and Scandinavian researchers have concluded that women who have an untreated *sexually transmitted disease (STD)* at the time of their abortion, have a cumulative 63 to 72 per cent risk of developing early or late PID by observing patients for two years following the abortion.¹¹

Abortion Complications – General Statistics

The growing number of women who abort, particularly those who are having a second abortion, changes the complication numbers considerably. In Canada, the number of known abortions performed in 1969, the first year that abortion was partially decriminalized, was approximately 8000. By 1994, that number had risen to over 100,000. This is an increase of 1200 per cent, while the total population of Canada in this period grew by only approximately ten per cent. There was a sharp rise in the number of women of child-bearing years, but this rise would not account for the massive increase in abortion.

The UK's Royal College of Obstetricians and Gynaecologists has recently established that the immediate physical complication rate of induced abortion is at least eleven per cent.¹² In 1969 this complication rate affected only 400 Canadian women. But in the 1990s and 2000s, it would mean that over 13,000 Canadian women currently suffer

each year from a medical condition related to their abortion. Among the 30 per cent who are undergoing a repeat abortion, the risk of complications is sharply higher. The rise in non-hospital abortion facilities (26 per cent from 1989 to 1998 alone) can only have accentuated the problem, since abortion clinics are not well equipped to handle complications. In the 32 years since induced abortion was legalized in Canada, then, somewhere in the neighborhood of 300,000 Canadian women may have required medical services owing to complications after their abortion. In the United States, the current abortion rate of 1.3 million per year means that over 140,000 women a year have an immediate medical complication arising from their elective abortion. Some of these complications have grave consequences for women's health and the health of their future children.

Different complication rates have been reported from different countries. For example, Sykes studied 2879 cases of abortion performed at Christchurch Women's Hospital in New Zealand and found a complication readmission rate of 5.8 per cent, including two patients who presented with immediately life-threatening conditions: a uterine *hemorrhage* due to perforation and a severe sepsis.

Sykes' findings provide a non-political framework in which to evaluate complication rates. If two of every 2879 abortion patients in North America have life-threatening complications, then, of the more than 1.5 million women who abort yearly, 1042 would suffer such complications.

Sykes also reports 167 readmissions for various complications. Of these, fewer than one per cent were immediate complications such as perforations, hemorrhage, endometritis, and retained fetal or placental tissue while 84 per cent required a second *dilation and curettage (D&C)*.

Forty per cent of the admissions were in the first week but some patients still presented more than six weeks later, according to Sykes' report. Although Sykes had all admissions for complications registered, he recognized that the actual complication rate may be much higher than their

data showed because some complications might be presented to hospitals other than Christchurch, while other patients could also be lost to follow up as a consequence of being treated privately. One statistic that points to this conclusion is that women who lived outside the region accounted for about nine per cent of the abortions but only six per cent of the complications. It is unlikely that women who happened to live outside Christchurch experienced a lower rate of complication. More likely, these women sought treatment in their home communities.

In a small UK study of *post-abortion morbidity*, Duthie and colleagues found a twelve per cent rate of morbidity due to complications including retained tissue, pelvic inflammatory disease (PID), and infections. Seventy-one per cent of those with PID also tested positive for *chlamydia trachomatis*, while only eight per cent of chlamydia-positive women had “uneventful recoveries”. The women displaying these sequelae are described by Duthie as “clinically ill”. Like Sykes, Duthie also found that a number of patients (ten per cent) did not return for follow up. Whereas Sykes concludes that such women would also experience complications but seek treatment elsewhere, Duthie’s team asserts “we assumed that they remained asymptomatic”. No reasons are given for this assumption.¹³

The studies by Sykes and Duthie are confirmed in a recent publication of the Royal College of Obstetricians and Gynaecologists in the UK, which acknowledges an immediate physical complication rate of over eleven per cent. This percentage takes no account of long-term complications such as infertility and cancers of the breast and reproductive tract.

Most recently, an important American study of the psychological responses of women after abortion also discovered that seventeen per cent of these women reported physical complications such as bleeding or pelvic infection after their first-trimester abortion.¹⁴

When compared with the complication rates reported in other Western countries with advanced medical systems, North-American statistics are strikingly lower. Is this because abortion services in Canada and the United States are safer and more efficient? Or is it because the North-American research methodology misses many complications owing to short-term follow up, incomplete coding, and political bias? The most recent American study, by Major and colleagues, shows that *when women themselves are asked whether they suffered physical complications, at least one in six (seventeen per cent) report that they did.*

Overview of This Study

It is likely in North America that the complications of induced abortion are under-reported. This report examines the available findings and attempts to map out the areas and degree of risk.

The report also looks at long-term effects of induced abortion. Epidemiological research, particularly on cancer and infertility, has uncovered several long-term consequences of induced abortion. We will focus primarily on three areas: cancers of the breast and reproductive system, future fertility, and difficulties with future pregnancies. We also touch on repeat abortion, pain during the procedure, and maternal mortality in abortion. Finally, in Chapter 17, we provide an account of the limitations of methodology in this field.

To sum up, we believe that women are not usually made aware of the most statistically significant risks of induced abortion. Though it may be difficult to convey to a distressed individual that a given course of action may lead to a different distress some years down the road, everyone who believes in a woman's right to "informed consent" must agree that accurate information should be made available to her when she is about to make a significant and irreversible decision in her life.

Key Points Chapter 1

- Limitations exist in the available literature on physical after-effects of abortion.
- There are no standard reporting procedures of complications after abortions in Canada, the United States, or by WHO (the World Health Organization), and those complications which are reported, are only short term.
- The abortion question in North America is very politicized, which may explain why reported negative sequelae are significantly fewer than in medical reports from other countries.
- Since the 1970s, there has been a marked increase in North America in the number of abortions and repeat abortions, which may explain the significant increases in pelvic inflammatory disease (PID), uterine hemorrhage, sepsis, pain due to endometritis, retained fetal or placental tissue, and the increasing evidence of an abortion-breast cancer link.
- What accounts for the significantly lower reporting of negative sequelae after abortion in North America? Are its abortion services more efficient, or are they missing complications as a result of relying on short-term follow up and incomplete coding?
- This study will examine long-term effects of abortion on women's health and the importance of "informed consent" for women considering abortion.

Research on Post-Abortion Complications: An Overview

Notes

- 1 Ferris LE, McMMain-Klein M, Colodny N, Fellows GF, Lamont J. Factors associated with immediate abortion complications. *Canadian Medical Association Journal* 1996 June 1;154(11):1677-85.
 - 2 Osser S, Persson K. Postabortal pelvic infection associated with *Chlamydia trachomatis* and the influence of humoral immunity. *American Journal of Obstetrics and Gynecology* 1984 November 15;150(6):699-703.
 - 3 Sykes P. Complications of termination of pregnancy: a retrospective study of admissions to Christchurch Women's Hospital 1989 and 1990. *New Zealand Medical Journal* 1993 March 10;106(951):83-5.
 - 4 Hakim-Elahi E, Tovell HM, Burnhill MS. Complications of first-trimester abortion; a report of 170,000 cases. *Obstetrics & Gynecology* 1990 July;76(1):129-35.
 - 5 Grimes DA, Cates W Jr. Complications from legally-induced abortion: a review. *Obstetrical and Gynecological Survey* 1979 Mar;34(3):177-91.
 - Castadot RG. Pregnancy termination: techniques, risks, and complications and their management. *Fertility and Sterility* 1986 January;45(1): 5-17.
 - 6 MacLean N. Complications of legal abortion [Letter]. *New Zealand Medical Journal* 1993 May 12;106(955):186.
 - 7 Brind J. Abortion, breast cancer, and ideology. ed. Koterski JW. *Life and Learning VII*. University Faculty for Life; 1997 June; Loyola College, Baltimore, Maryland:139-44.
 - 8 Millar WJ, Wadhera S, Henshaw SK. Repeat abortions in Canada, 1975-1993. *Family Planning Perspectives* 1997 January-February;29(1):20-4.
 - 9 Wadhera S, Millar WJ. Second trimester abortions: trends and medical complications. *Health Reports* 1994;6(4):441-54.
 - 10 Koonin LM, Smith JC, Ramick M, Green CA. Abortion surveillance-United States, 1992. *Morbidity and Mortality Weekly Report*, Centers for Disease Control, Surveillance Summaries 1996 May 3;45(3):1-36.
 - 11 Blackwell AL, Thomas PD, Wareham K, Emery SJ. Health gains from screening for infection of the lower genital tract in women attending for termination of pregnancy. *The Lancet* 1993 July 24;342(8865):206-10.
- Sorensen J, Thranov I, Hoff G, Dirach J. 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(4):242-6.

Women's Health after Abortion: The Medical and Psychological Evidence

12 Royal College of Obstetricians and Gynaecologists (UK). The care of women requesting induced abortion: 4. Information for women.2000. www.rcog.org.uk/guidelines/induced_abortion.html.

13 Duthie SJ, Hobson D, Tait IA, Pratt B, Lowe N, Sequeira P, et al. Morbidity after termination of pregnancy in first trimester. *Genitourinary Medicine* 1987;63:183-7.

14 Major B, Cozzarelli C, Cooper ML, Zubek J, Richards C, Wilhite M, Gramzow RH. Psychological responses of women after first-trimester abortion. *Archives of General Psychiatry* 2000 August 57(8):777-84, p. 780.