

ETHICS & MEDICS

A Commentary of The National Catholic Bioethics Center on Health Care and the Life Sciences

THE ABORTION-BREAST CANCER LINK

Thirty years ago when *Roe v. Wade* was decided, I was a third-year medical student at Georgetown University. The third year is when medical students leave the classroom and go into hospitals to do their clinical rotations. The ruling had an immediate effect on the practice and ethics of medicine. No longer would my obstetrics professor tell his students that his was a unique specialty, that he always had two patients to consider, mother and child. Now only when the mother wanted the child did we treat two patients. When the mother didn't want the child, no consideration would be given to the unborn's humanity. It was no longer a child but a blob of tissue, a "product of conception," a parasitic entity or whatever the mother chose to call "it." For the first time, every doctor in every state could legally kill another human being. On my pediatric rotation that year, I helped to resuscitate a child who was born four months prematurely crying aloud, struggling to breathe. She was the result of a failed abortion. She was wizened and burned from the hypertonic saline used to try to kill her on the hospital floor just below the nursery. I can still see her clearly in my mind's eye.

One and a half years after *Roe v. Wade*, when I graduated something else very profound had happened. The Hippocratic Oath we took, that had stood medicine in good stead for twenty-four hundred years, had been changed. The part about refusing to give a woman a pessary to induce an abortion had been deleted.

Ten years after *Roe v. Wade* I watched my mother fight and lose her battle with breast cancer. Added to her physical torment was her mental anguish at the thought of leaving my youngest brother before he was fully grown.

Twenty years after *Roe v. Wade*, I was settled into a surgical practice devoted to breast cancer. I found that breast cancer risk was no longer one out of twelve women, as I had learned in medical school, but had increased dramatically to one out of eight. Not only that, but the women with breast cancer were no longer postmenopausal grandmothers, but young thirty-year-old mothers with toddlers. I knew from my own painful experience what they would face.

The *Roe v. Wade* ruling not only changed the Oath I took at graduation, but also my practice. We all know someone, either personally or through friends and family, who has had breast cancer. Breast cancer is the only major cancer that continues to rise. Most of this increase has occurred in

members of my own generation, those women who were twenty-five to thirty-nine when *Roe v. Wade* was decided.

Epidemiological Evidence

Abortion is a risk factor for breast cancer. I see it every day in my practice. Thirty percent of my breast cancer patients who are in their thirties do not have a family history of cancer, but have had an abortion. It is estimated that an additional ten thousand cases of breast cancer occur each year because of abortion.

The abortion-breast cancer link (ABC link) is supported by the published epidemiological studies, the physiology of the breast, and the experimental studies done in mammals. Epidemiological studies overwhelmingly support the ABC link; however, to put them into proper perspective, one must understand why some have referred to epidemiology as a "pseudo-science."

Epidemiology can be defined as the study of disease in large populations. These studies can never be taken as proof positive that any risk found is causal. For example, large studies would probably show unequivocally that more people with lung cancer carry matches in their pockets than those without cancer. This would not mean that matches cause lung cancer, even though large studies were done well, were statistically significant, and were reproducible. Biology has shown that it is the carcinogens in match-lit cigarette smoke which causes lung cancer. Similarly, without the support of the well-known breast physiology and experimental data, the studies documenting an abortion-breast cancer link *would* be inconclusive.

Let us look at the epidemiology first, and then the supporting data. Epidemiologists have defined five criteria which should be largely satisfied before a risk factor can be considered a potential causal risk.

1. The patient must be exposed to the risk before the cancer develops.
2. There must be similar findings in many studies. One or two studies can never be taken to prove anything. In the case of the ABC link, twenty-eight out of thirty-five worldwide studies show a link between abortion and breast cancer. Thirteen out of fifteen studies done in the U.S. show a link.

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WHAT TODAY'S EVIDENCE SHOWS

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3. There must be statistically significant increases. Scientists need to show with ninety-five percent certainty that their results could have not occurred by chance alone. There are seventeen statistically significant studies that show a link between abortion and breast cancer and eight were done in the U.S.

4. There should be a dose effect, that is, the risk should be higher with more exposure. In the case of cigarettes and lung cancer, the more cigarettes one smokes, the greater the risk of lung cancer. In the case of abortion, the longer one is pregnant before the abortion, the higher the risk of breast cancer. This was shown in the 1994 Daling study commissioned by the National Cancer Institute.¹

5. There should be a large effect observed. In the case of abortion and breast cancer there are subsets of women with very high risk. For example, in the 1994 Daling study, all the teenagers who had abortions at eighteen or younger and had a family history of breast cancer developed breast cancer by the age of forty-five. The risk could not be calculated and was reported as infinity.

Now even having satisfied these criteria, the ABC link would still not be proven unless there was a sound biological basis for this risk. All the studies in the world showing that lung cancer occurs most frequently in people who carry matches in their pockets does not mean matches cause lung cancer. I believe that the biological basis for the ABC link is the most powerful and persuasive argument supporting it.

The Biological Basis

The same biology that accounts for ninety percent of all risk factors for breast cancer accounts for the ABC link. Simply stated, the biology rests on two principles.

1. The more estrogen a woman is exposed to in her lifetime, the higher her risk for breast cancer.

2. The younger a woman's breasts mature from Type 1 and 2 lobules to Type 3 and 4 lobules, the lower her risk.

If a woman starts her menstrual cycles early, e.g., at age nine, and continues to menstruate into her late fifties, she is at higher risk because she has more years exposed to monthly estrogen elevations. Through a large, recent, well-publicized study, women became aware that the estrogen in their hormone replacement therapy increased their breast cancer risk. In a similar way, birth control pills elevate breast cancer risk.

Type 1 and 2 lobules are known to be where cancers arise. Type 3 and 4 lobules are mature and resistant to carcinogens. When a child is born, she has only a small number of primitive Type 1 lobules. At puberty when estrogen levels rise they form Type 2 lobules. But it is only through the hormonal environment and length of a full-term forty-week pregnancy that there is full maturation to Type 3 and 4 lobules. This maturation protects a woman and lowers her risk of breast cancer. This is why women who undergo a full term pregnancy have a lower risk of breast cancer and why women who remain childless have a higher risk of breast cancer.

It is the interplay of these two principles, estrogen exposure and breast lobule maturation, that accounts for the fact that abortion can cause breast cancer. Within a few days of conception, a woman's estrogen level rises. By the end of the first trimester estrogen levels have increased by two thousand percent. Every woman notices her breasts get sore and tender because the estrogen stimulation results in the multiplication of Type 1 and 2 lobules. It is only after thirty-two weeks that her breasts stop getting larger and mature into Type 3 and 4 lobules in preparation for the breast feeding of her child.

If abortion ends her pregnancy before full maturation of her breasts, she is left with an increased number of the immature Type 1 and 2 lobules. She now has a greater number of breast lobules where a cancer can arise. This causes her to be at greater risk for breast cancer. It is through this same biologic mechanism that *any* premature birth before thirty-two weeks more than doubles breast cancer risk.

Suppression of Data?

The question now arises, if it is true that abortion increases breast cancer risk, why would organized medicine not support the data? One reason is fear of the results of peer pressure. In my own case, I have worried that I would lose referrals from ob-gyns who do abortions when I have lectured on this topic. Even a family doctor who would refer numerous patients said to me, "You don't tell my patients *that*, do you?" I worried about my practice. I was also worried about being labeled a pro-life zealot or an anti-choice fanatic. I can understand why a Harvard professor of risk assessment at a Boston cancer institute would tell me privately that she knew abortion was a risk factor for cancer but would not bring it up in her talks on risk. She might lose her job. I have a colleague who did lose an appointment at a New York medical school just because he was quoted in *The Lancet* giving credence to a study supporting the ABC link.

Janet Daling, an adamantly pro-choice epidemiologist, told me she refused to speak on the topic anymore because she was tired of having rocks thrown at her. I learned what it felt like first-hand when I presented a research project in a poster session at the San Antonio Breast Symposium in December 2001. Although the abstract had been accepted six months earlier and had the word "abortion" in the title, the program director angrily accused me of using his meeting as a platform to hand out anti-abortion literature. Most troubling is that several years ago the then-president of the American Society of Breast Surgeons told me that her board did not want to have a speaker on the subject at their meeting because they felt it was "too political." I argued that it was also medical, but to no avail. The director of the Miami Breast Cancer Conference also felt it was "too political." He returned a check I had given him so that our Breast Cancer Prevention Institute could not even have an exhibit table. I am waiting for a response from the American College of Surgeons. I hope they too will not deem this topic "too political." What is so telling is that not one authority in the field of breast cancer that I have spoken to directly has said that the data is not true or that I was wrong about the science.

Perhaps another reason physicians have not acknowledged the link is the Semmelweiss Phenomenon. In 1840, forty years before the germ theory was known, a resident in obstetrics noted that there was a twenty-five percent mortality rate from childbed fever on the doctors' ward. On the midwives' floor, where there was frequent hand washing, the mortality rate was only two percent. When at his suggestion an experiment was done by having doctors wash their hands, the infection and death rate on their own ward was greatly reduced. Instead of rewarding Semmelweiss and promoting hand washing to reduce mortality, he lost his job and was vilified. It seems that it was easier for doctors to let women die than change their own practices. They would have to acknowledge that the midwives had provided better care and that professors had been corrected by a lowly resident.

Women's groups such as the National Organization for Women have not brought this information out. The idea of safe and legal abortion is the foundation of their cherished reproductive rights. What if it became known that abortion is not safe but lethal to some women exercising that right? The abortion industry does not want to lose clients for its billion-dollar industry, so their trade organization, the National Abortion Federation, tries to dismiss it.

Signs of Hope

Public knowledge of abortion as a risk factor for breast cancer will not only help women obtain true informed consent; it also helps women who have had an abortion. Once a woman knows she is at higher risk, she will be more likely to get screened with mammograms. This can increase likelihood of survival should she develop cancer.

Even if someone remains unconvinced of the causal nature of the abortion-breast cancer link, surely no one can feel that there is so little evidence that women should not be informed of the possibility. It is unconscionable that women's lives and health are sacrificed to maintain an attitude of political correctness.

I am glad to report there are signs of hope. This past June the National Cancer Institute took down its inaccurate and misleading fact sheet on the ABC link on its website. Twenty-eight U. S. Congressmen had sent a letter to the NCI's director pointing out the errors. My older textbooks did not even mention abortion as a possible risk. The newer ones do, even if they try to dismiss the data as inconclusive. One very notable exception to this was written by a researcher who is at Georgetown University, Professor Robert Dickson, who first included it in his chapter on the molecular biology of breast cancer more than ten years ago.²

The issue is being discussed in the press. *Crisis* magazine, a Washington, D.C.-based publication, recently explored this issue in a feature article. There have been countless letters to the editor in newspapers all over the country by laymen and doctors. Miss Oregon, Brita Stream, had as her platform the abortion-breast cancer link and went on to the Miss America pageant in Atlantic City this year. This issue has also entered breast cancer research politics. The Coalition on Abortion/Breast Cancer, an international lay organization, has made

the public aware of the issue. They have made women aware that the Susan G. Komen Foundation, an organization which raises money for breast cancer research, also gives this money to Planned Parenthood. They pointed out to Komen and its donors that Planned Parenthood caused a significant amount of breast cancer as the nation's largest abortion provider. This has placed pressure on the Komen organization to stop that practice, with some success.

A month ago I saw in my office identical-twin women. One had several abortions as a teenager and was thirty-six years old when she got breast cancer. I was able to reassure her worried sister, who had a child in her twenties, that she did not share the same risks as her twin and that most likely her biopsy would be benign. When the results came back, it was. An analysis of my own patients with breast cancer in their thirties showed thirty percent had abortions but no family history of the disease.

The most important paper concerning the abortion-breast cancer link was the 1996 meta-analysis done by Dr. Joel Brind.³ His paper prevented someone from saying, "Some studies say yes, some studies say no." See the chart on the following page showing his meta-analysis. All results on the right of the vertical line are the ones that show a link. At the time of publication there were seventeen out of a total of twenty-three. If it had not been published, I would still be in my office wondering why I have so many thirty-year-olds with breast cancer.

When Dr. Brind's study appeared it created a furor. In response, Dr. Stuart Donnan wrote an editorial in which he said, "I believe that if you take a view (as I do), which is often called 'pro-choice,' you need at the same time to have a view which might be called 'pro-information' without excessive paternalistic censorship (or interpretation) of the data."⁴ Dr. Brind likes to add "And that's from an understated Englishman." At the risk of political incorrectness, I would like to add, "God bless them both."

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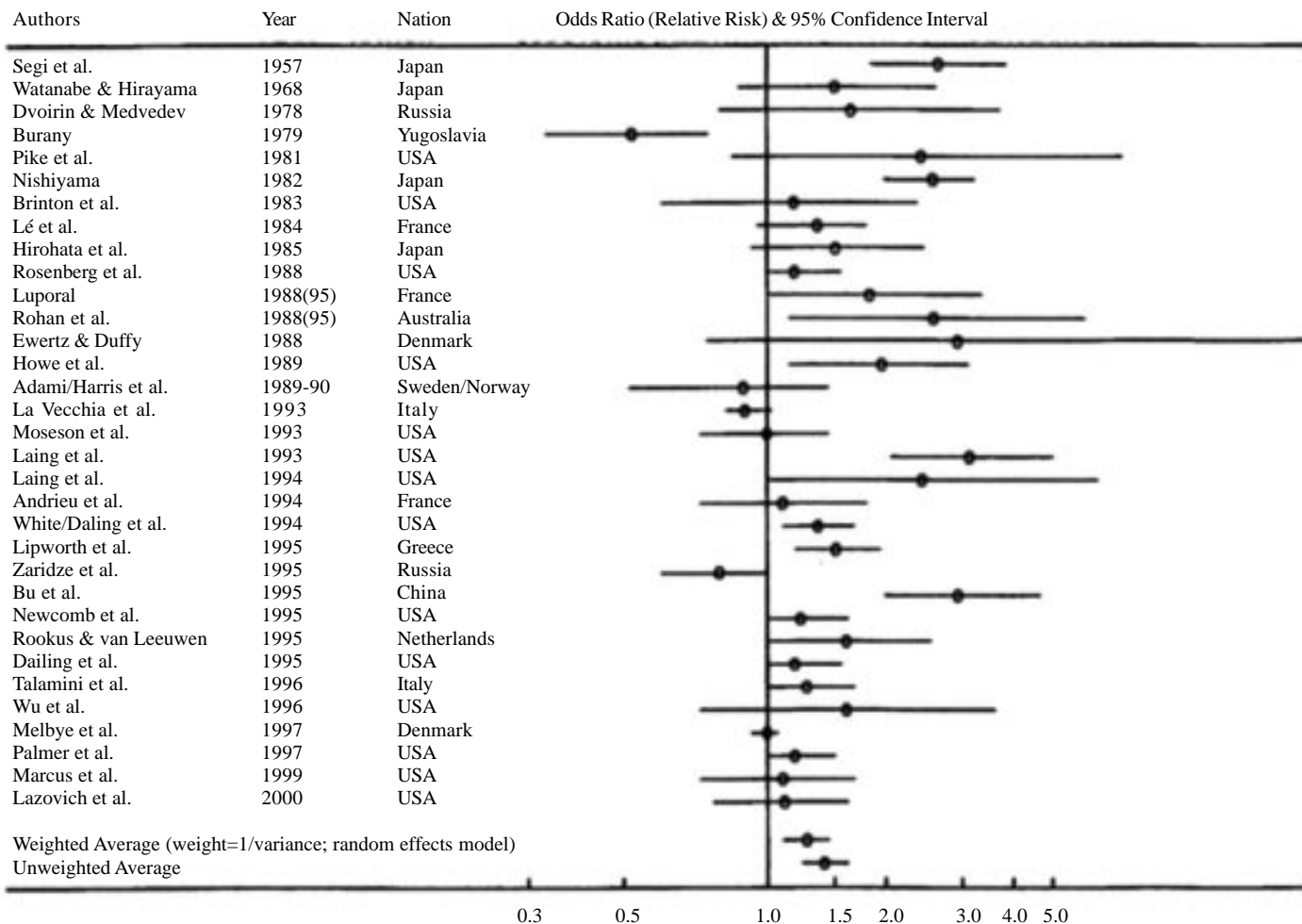
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Each study above is listed by the author's name, year of publication, and nationality of the women studied. The dot on the horizontal line indicates the "point estimate" of "relative risk." This value tells us how many times more likely a woman is to develop breast cancer if she has had at least one abortion. Point estimates to the left of the vertical line represent decreased risk. Point estimates to the right indicate increased risk of breast cancer.

