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## **Correspondence**

### **More on the Adverse Effects of Abortion**

I read with interest the recent article on forecasting breast cancer incidence by abortion and fertility rates. [1] The effects on preterm birth risks and cost of medical care are also important considerations.

If the U.S. could slash its current high preterm birth rate (PTB), medical costs could be reduced. Dr. Richard E. Behrman, representing the Institute of Medicine, identified prior first-trimester induced abortion (IA) as an “immutable medical risk factor associated with preterm birth.” [2] The U.S. PTB rate was 12.5% in 2004, [2] 40% higher than the rate of 8.9% in 1980.

Poland’s experience lends much credence to Behrman’s abortion-preterm birth warning. Between 1989 and 1993, Poland’s IA rate/100 births plummeted by 98%, owing to very restrictive Polish abortion laws. [3] If IA significantly elevates PTB risk, one would expect Poland’s PTB rate to slump 5–10 years after the IA rate plunge. One of us (WRJ) located UN data that addresses this expectation: between 1995 and 1997, Poland’s PTB rate dropped by 41.8%, [4] maternal mortality decreased 41.4%, [3] and infant mortality was down by 25.0%. [3] We know of no other such rapid decrease in PTB rate.

Improved diet and better medical care are alternate explanations for the “Polish premie plunge.” However, in a 1987 a study of Polish women, those with prior IAs had 88% higher relative odds of PTB compared to women with zero prior IAs. [5] An October 2007 study listed 58 studies finding significantly higher PTB or LBW (low birth weight) risk for women with prior surgical IAs, and one such study involving chemical abortions. [6]

Although it is possible that the decline in Polish legal abortions is partly offset by illegal abortions, the evidence of controlled studies [5,6] provides very strong evidence that IA elevates the risk of PTB.

There are no peer-reviewed animal studies demonstrating that vacuum aspiration (VA) abortion procedures do not increase the PTB rate in later pregnancies. In fact, there are no published animal studies at all pertaining to the safety of VA. Thus, as of 2007, VA is an unproven experimental procedure.

We predict that cutting the high rate of IA in the U.S. would not only decrease future breast cancer incidence but also reduce PTBs.

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In his ecological study, Patrick Carroll showed that abortion is the “best predictor” of breast cancer, and that fertility is also a useful predictor. [1] He overcame the problem of learning women’s abortion histories by using national data from eight European countries that are believed to have nearly complete abortion counts. His study is not affected by recall bias—a hypothetical problem that the National Cancer Institute [2] and others (inaccurately) claim is a limitation affecting retrospective studies.

Lindfors-Harris et al. is the only study whose authors claimed to find direct evidence of recall bias. [3] That team, however, withdrew their claim in 1998 [4] after Brind et al. [5] and Daling et al. [6] noted the implausibility of their findings. Others have tested for recall bias, and no researchers now claim to have found direct evidence of it. [6-8] The prospective study, Howe et al., reported a statistically significant odds ratio of 1.9 (95% CI, 1.2-3.0) among women who had abortions. [12] Critics, nevertheless, persist in claiming recall bias is a problem plaguing retrospective research. [9-11]

A noteworthy feature of Carroll’s paper is his explanation for the reverse gradient showing that more upper-class women develop breast cancers than do lower-class women (unlike with other cancers). Carroll suggested nulliparous abortions as the reason for this disparity.

Carroll correctly labeled nulliparous abortions as “highly carcinogenic.” His view is consistent with Russo and Russo’s research [13-17] revealing that the worst time for women to be exposed to abortion, combined oral contraceptives, [18-20] or another carcinogen takes place between the onset of menstruation and first full-term pregnancy. During the “susceptibility window,” nearly all of the breast lobules consist of cancer-susceptible Type 1 and 2 lobules, where 95% of all breast cancers originate.

In a normal pregnancy but not in most miscarriages, elevated estradiol levels stimulate the proliferation of Type 1 and 2 lobules. Estrogen is a mitogen and a genotoxin. [21-23] An abortion in the first or second trimester leaves the mother with an increased number of Type 1 and 2 lobules. During the last months of a full-term pregnancy, pheromones produced by the fetus—human chorionic gonadotropin and human placental lactogen—help mature most lobules into fully cancer-resistant Type 4

lobules. At the end of full-term pregnancy, 85% of the lobules are cancer-resistant Type 4 lobules.

Abortion is an accepted risk factor for premature birth, particularly among teenagers. [24-26] Premature birth before 32 weeks gestation increases breast cancer risk. [27-30] The hormonal changes to the breasts are identical in the case of premature birth and abortion.

Carroll's research is consistent with the conclusions reported in earlier analyses of the epidemiological research [31,32] showing that abortion is a risk factor for breast cancer. Significantly, since the publication of his analysis in 2005, no one has challenged Joel Brind's conclusions that, "Recent prospective studies, widely touted as refuting the abortion-breast cancer link, are found to embody many serious methodologic flaws sufficient to invalidate their findings." [32]

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