

The Secretary, Senate Legislative Committee
community.affairs.sen@aph.gov.au

Members of the Committee:

As President of the Breast Cancer Prevention Institute in Poughkeepsie, NY, USA, and Professor of Human Biology and Endocrinology at Baruch College of the City University of New York, I have been active in research and publication re: the issue of abortion and breast cancer for more than a decade. My recent peer-reviewed review of the research on this issue was published last December, and the full text is available online via the following link: <http://www.jpands.org/vol11no4/brind.pdf>.

It has come to my attention that this issue is currently being debated by your committee, and that a publication of the World Health Organization (WHO); specifically, a one-page flyer on the issue put out by the WHO, is being put forth as authoritative. I regret to inform you, however, of serious examples of scientific misconduct by WHO researchers (including prominent epidemiologist Olav Meirik of the UNDP/ UNFPA/WHO/World Bank Special Programme of Research, Development, and Research Training in Human Reproduction in Geneva) on this very subject, misconduct which—though not widely known—came to light in 1998. Herein follows a summary description of the illicit manipulations of data that resulted in false results of no connection between abortion and breast cancer. All the facts detailed below are documented in the peer-reviewed medical literature, as cited in the reference list at the end.

Between 1957 and 2000, 27 out of 33 epidemiological studies reported higher risk of breast cancer among women who had undergone induced abortion. Even as far back as 1970, the World Health Organization itself had found and published evidence of “increased risk (of breast cancer) associated with abortion—contrary to the reduction in risk associated with full-term births.”² One of the studies that reported no risk increase with abortion was the subject of four research papers by Meirik’s team³⁻⁶, published between 1986 and 1991.

Irregularities in these publications were apparent from the first. The 1986 paper³—which focused on oral contraceptive use in Swedish and Norwegian women—showed data on all other reproductive variables (e.g., number of children, age at menarche, etc.), but oddly, the word “abortion” never appeared. The 1990 paper⁵ was a report of the very same study, in which 317 Swedish, and 105 Norwegian breast cancer patients were compared to cancer-free women of the same age (range: 20-49 years). This time, data on both spontaneous (i.e., miscarriage) and induced abortion were reported, with no significant effect shown. In fact, the overall summation of the data reported in this paper shows a slight and non-significant *decrease* in risk among women with any induced abortions. A closer look at the way the study was designed and the data derived shows why: The 105 Norwegian patients were each compared to two healthy subjects (controls) instead of one. This would not affect the results, except that the results were pooled for the Swedish and Norwegian women, and the two populations were vastly different in terms of the prevalence of induced abortion: In Sweden, about one in 12 women had had an abortion, whereas almost one in two Norwegian women had had at least one abortion. Thus, by combining the two nationalities, the study was packed with many extra healthy women who’d had abortions. The result was a higher rate of abortion among the overall control population than among the cancer patient population, so it *looked* as if abortion was associated with a slightly

lower—rather than higher—risk of breast cancer. In a published letter which reanalyzed the abortion data from the 1990 study, Brind *et al.*¹ conclusively proved that the WHO group’s improper statistical methods understated the real relative risk for abortion in this study in the combined study population. Even more strikingly, they proved that the WHO group had covered up an increased risk of breast cancer--of between 12% and 123%--among Norwegian women who’d had any abortions.

Even worse, the Meirik group did not stop at tampering with their own data: They even tried to use their own flawed data to dismiss most of the studies from around the world which did show increased risk of breast cancer with abortion. In 1989, they published a study⁴ on Swedish women based on computerized medical records of induced abortions done between 1966 and 1974. Since it turned out that this computerized abortion registry included all the Swedish women who had been interviewed for the previous studies, the accuracy of the women’s reporting of their abortion history could be checked against the medical records. This comparison was published in another paper in 1991⁶, in which the Meirik group reported statistically significant “underreporting of previous induced abortions among controls relative to overreporting among cases.” In ordinary terms, this was interpreted to mean that the healthy women (controls) tended to lie about their abortions, whereas the breast cancer patients (cases) were more likely to tell the truth. This so called “response bias” could therefore explain why most abortion-breast cancer studies—which usually rely on interview-based data—show more abortions among women with breast cancer than among healthy women, which translates to increased breast cancer risk with abortion.

Of course, in order for this theory to make sense, one has to make the assumption that the computerized record is perfectly accurate. So if the computer says there was *no* abortion, but the woman reports having had one, the computer is presumed to be right, and the woman is presumed to have imagined the abortion; to have “*overreported*” *it!* In fact, this bizarre concept of “overreporting” was essential to the finding of significant evidence of “response bias” claimed in the 1991 study⁶, based on the fact that 7 Swedish breast cancer patients had “overreported” abortions of which the computer had no record (compared to only one healthy control subject).

Under heavy criticism from other researchers in the field, Meirik and colleagues finally withdrew the claim of “overreporting” in a March, 1998 letter⁷ published in the British Medical Association’s *Journal of Epidemiology and Community Health*. They wrote: “We are not surprised to find some Swedish women confidentially reporting having had induced abortions during the period 1966-1974 that are not recorded as legally induced abortions.” The published response¹ in that issue noted that “the claim of ‘over reporting’ is acknowledged by Meirik *et al.* to be unfounded, and with that, significant evidence of response bias evaporates.” The response¹ also included the proof of the cover-up of the abortion breast cancer connection in Norway, and also challenged Meirik *et al.* to “reveal all the raw data” and “to explain the hard questions put to them” about their mishandling of it. They have yet to do so.

Finally, the Committee should be aware that the issue of abortion and breast cancer has also been the focus of one of the most serious cases of scientific misconduct in Australia itself. In 1988, Rohan *et al.*⁸ published a study on women from South Australia, a study which focused principally on dietary risk factors. As any proper study should, the Rohan study also included “gynecologic history” and “reproductive history” on all subjects, but curiously, the word “abortion” never appeared in the study, which reported no strong associations between breast

cancer and any exposure variable studied. Only seven years later, in a 1995 meta-analysis published by Andrieu *et al.* in the British Journal of Cancer⁹, did the abortion data from the Rohan study finally appear. As has been well established by many studies, there was no significant effect of spontaneous abortion (miscarriage), but induced abortion was found to be the strongest and most significant exposure associated with breast cancer, with an overall relative risk of 2.6.

I am therefore glad to take the opportunity of your government's investigation of this issue to bring these facts to light. Since abortion is a *de facto* matter of choice in Australia, and since having one abortion makes a significant difference in a woman's long-term risk of developing breast cancer, abortion is clearly an avoidable risk of which women need to be aware.

Please feel free to contact me for any further information or assistance in this matter, including full texts of references I have cited.

Yours sincerely,

Joel Brind, Ph.D., President, Breast Cancer Prevention Institute, 9 Vassar St., Poughkeepsie, NY
USA 12601

Phone: 866-622-6237, Fax: 845-452-0797 www.bcpinstitute.org

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