A global epidemic of breast cancer is killing more women each year in all industrialized countries; in the U.S., one in every nine women will get breast cancer, and the occurrence of this dreaded disease is increasing steadily.[2] Every year more than 175,900 American women discover they have breast cancer and every year 44,500 die of it, each of them robbed of an average of 19 years of life--a total loss to our society of 825,000 person-years of life each year. After a 20-year "war on cancer," the nation's cancer establishment still has no firm idea of the causes of this scourge; now, as we will see, new ideas are emerging, but from outside the establishment.

The "cancer establishment" is a common name for the the group of men and women--mostly men--who decide how to spend $2 billion of taxpayers' money each year on cancer research. Cancer research is an expensive and fiercely competitive business. As with any scientific research, in cancer research the questions you ask will limit the kinds of answers you can get. In addition, your perception of any problem can be affected by the way you express or display your answers. For example, incidence of breast cancer is decreasing among women younger than 50 but increasing among women older than 50. So if you average women of all ages, you mask the effect in older women, allowing you to claim that the breast cancer picture doesn't look so bad. The "cancer establishment" likes to average things this way and becomes aggressively hostile toward people who insist on looking into the age-specific details.[3]

In the U.S. and elsewhere, breast cancer is one of the most rapidly increasing cancers. Incidence (occurrence) of cancer is measured as the number of women who get it among every 100,000 women. Between 1973 and 1986, among U.S. women aged 55-64, breast cancer incidence increased steadily 1.4% per year until 297 per 100,000 were getting it in 1986. In the 65-74 age group, breast cancer increased 2.0% each year during the same period until 412 women among 100,000 were getting it. In the age group 75-84, breast cancer incidence increased 1.8% each year, 1973-1986, until 447 women out of 100,000 were getting it. Among all women, aged 45-84, breast cancer increased at a steady 1.4% per year from 1973 to 1986 until, on average, 318 women out of 100,000 were getting it.[4]

Not only is the incidence rate increasing, as we saw in the previous paragraph, but among older women the death rate is increasing as well. (measuring deaths per 100,000 women). Between 1973 and 1988 the death rate for breast cancer among U.S. women under age 65 decreased 0.3% per year, but among women 65 and older it increased at a steady 0.9% per year.[5]

The figures vary not only by age but by race as well. In the period 1973-1988, breast cancer deaths among white women under 65 decreased by 6% but among same-aged black women they increased 11.5%. Among white women 65 and older, breast cancer deaths increased 11.3% during the period, but among same-aged black women the increase was 19.5%.[6]

Breast cancer appears to be caused by social and environmental conditions more than by genetics. Japanese women living in Japan have about one-quarter as much breast cancer as American women. But when Japanese women move to America, by the second generation their risk of breast cancer has risen to "normal" American levels. Something in the environment--food, air, and water--is at work. Social conditions probably also make a difference--age of first birth (younger is better), amount of exercise (some seems to be better than none), animal fat in the diet (less is better), green vegetables and fiber in the diet (more is better) and so on.[1,7]

Cancer experts believe they understand factors that account for 30% of breast cancer, leaving 70% of the disease unexplained.[2]

Recently conditions in Israel have shown that chlorinated chemicals (in this case, pesticides) may be an important cause of breast cancer.[7] In most industrial countries, deaths from breast cancer in young women have been decreasing but in Israel in the 1960s and 1970s breast cancer among young women was INCREASING. Then during the decade 1976-1986, the death rate from breast cancer dropped sharply among Israeli women 44 or younger while the death rate among older Israeli women continued to rise. Improved therapy does not seem to account for the improved death rate among young Israeli women. What could explain this unusual pattern in Israel?

Measurements of three carcinogenic (cancer-causing) pesticides in cow's milk and in human milk in Israel in the 1970s revealed levels of contamination 5 to 1000 times higher than in the U.S. Lindane, DDE [a chemical created when DDT breaks down in the environment] and alpha-BHC were all heavily contaminating Israeli cows' milk and thus human tissues. Then in 1978 a crescendo of public protest brought a ban, and thus rapid reduction in all these contaminants. By 1980 breast milk contamination had dropped 90% or more among Israeli women.

Could these chlorinated carcinogens have caused the unusual reduction in breast cancer deaths among young Israeli women? Many scientists outside the "cancer establishment" seem to think so. Corroborating this view is a soon-to-be-published study revealing that American women with breast cancer have significantly elevated levels of DDT, DDE and PCBs in their fat, compared to a control group of women who do not have breast cancer.[8]

The scientists who studied pesticides and breast cancer in Israel made the important observation that all known factors contributing to breast cancer affect the hormone estrogen. As they said, "The thread that links ALL these factors together runs through the metabolism of estrogen...."[7] Recall from RHWN #264 and 263 that many common synthetic [created by humans] chlorinated chemicals now found everywhere in the environment--including PCBs, dioxins, furans, and many pesticides--mimic or interfere with estrogen and other sex hormones in wildlife and humans. Yet so far the cancer establishment expresses contempt for such ideas because they have not adopted a prevention philosophy.

One cannot help wonder, if cancer of the penis struck 175,900 U.S. men each year, followed in most cases by surgical phallectomy [removal], whether there wouldn't be a pained outcry from Congress with an instant and generous outpouring of funds to find causes and promote prevention. Yet in the case of women's most disfiguring, traumatic and costly cancer, the good old boys who dominate the cancer establishment continue funding work on surgery, chemotherapy and radiation--ways to cut, poison and burn women in the name of saving them--rather than funding research on ways to maintain women's health through prevention. Our lack of knowledge of the precise causes of breast cancer, after a 20-year "war on cancer," is a national disgrace and the people directing this failed "war" should be put out to pasture.

--Peter Montague


one of cancer's "good old boys" says age-specific data showing cancer increases are "boring" and "junk."


[8] Discussed briefly in Devra Lee Davis and David Hoel, editors, cited above, pg. 267; the author of the forthcoming paper is Mary Wolf of Mt. Sinai Medical Center in NYC.

Descriptor terms: breast cancer; cancer; us; industrialized countries; japan; israel; pesticides; health; breast milk; cows milk; carcinogens; chlorinated chemicals; estrogen; prevention;