

A Note from the President

By Angela Lanfranchi MD

In 2010, *Time* magazine had a cover story on “the Pill” celebrating its 50th year of widespread use. It was also the year that the Royal College of General Practitioners (RCGP) published in the *British Medical Journal* (BMJ) a study of over 46,000 British women who had been followed for 39 years, a large prospective cohort study which is considered one of the most reliable types of study. In other words, any findings would be hard to disregard. They compared the mortality of ever users of contraceptives with never users. While they found ever users had “significantly lower rates of death from all cancers; large bowel/rectum, uterine body, and ovarian cancer; main gynaecological cancers combined; all circulatory disease; ischaemic heart disease; and all other diseases.” They also found that ever users “had higher rates of violent deaths.” Violent deaths included suicide, homicide, and accidents. It seemed that there could be a biologic cause as there was a gradient in the data. The longer a woman used oral contraceptives, the higher her risk of a violent death. These results were also statistically significant, meaning that there was 95% certainty the results could not have occurred by chance alone. (As reported by BCPI previously, a large Danish study in 2018 revealed all hormonal contraceptives increased the risk of suicide, which now explains some of these findings.)



(Continued on page 2)

Vitamin D Can Reduce Breast Cancer Risk

Vitamin D is made when our skin is exposed to UV-B light from sunshine. Only 10% is from our diets. It is estimated that 1 billion people worldwide are deficient in Vitamin D. Breast cancer is the most common cause of cancer deaths in 98 countries and the most common cancer among women in 161 countries. Vitamin D deficiency is associated with diabetes, rheumatic arthritis, Parkinson, Alzheimer diseases, osteomalacia, osteoporosis, and fractures in adults as well as cancers. Many studies and meta-analyses show an inverse association between serum vitamin D concentration and incidence of several cancers, including breast, colorectal, kidney, lung, and pancreatic. An inverse association means that low levels of Vitamin D are associated with higher incidences of breast cancer, for example. If you live above the 40th latitude in the winter months without supplements of Vitamin D, your Vitamin D level will probably be low, defined as below 50nmol/L. One meta-analysis concerning breast cancer and Vitamin D found that there was a 45% reduction in breast cancer risk when women with the highest Vitamin D levels (top 25%) were compared with the lowest (bottom 25%).



(Continued on page 2)

Borderline Personality Disorder, Hormonal Contraception and Violent Death

Borderline personality disorder (BPD) is the most common personality disorder in the United States. Approximately 10% of all psychiatric outpatients and 20% of psychiatric inpatients are diagnosed with BPD. There are about 4.1 million women in the U.S. with BPD. In 2003, researchers first discovered that women diagnosed with BPD had their symptoms worsen in the parts of the menstrual cycle when estrogen levels were highest. Subsequently, researchers found that hormonal contraceptives worsened symptoms of BPD. Those symptoms include impulsive and risky behaviors, such as reckless driving, drug abuse, suicidal threats and self-injury. Women with BPD also suffer from a wide mood swing which includes intense anger resulting in loss of temper and physical fighting. As accidents and suicide are included in the category of violent deaths associated with the use of hormonal contraception, women with BPD should be counseled to use other methods of fertility control. They should be screened for a diagnosis of BPD or BPD symptoms before being prescribed these drugs.



(Continued on page 2)

Thank You!

We want to thank Russ’s Wrench auto repair in Clinton, New Jersey for their fundraiser to benefit BCPI. Held last October at the Bloomsbury Volunteer Fire Department facility, the Cornhole tournament was enjoyed by the many participants donning masks and enjoying a beer between games, despite the dreaded virus. Many thanks to Russ and Becky who made it all possible. Unfortunately, our annual golf tournament is in doubt for early June.



The Breast Cancer Prevention Institute
is a non-profit, 501(c)(3) corporation, with headquarters at
531 US Highway 22 East, Suite 170
Whitehouse Station, NJ 08889 USA

Phone toll-free: 1-86-NO CANCER (1-866-622-6237)
Email: info@bcpinstitute.org • www.bcpinstitute.org
Contributions are tax-deductible to the extent provided by law.

The authors of the study stated they could not explain their results concerning increased risk of violent death, but a letter to the editor about their paper intrigued me. The letter was written by a researcher who felt that it was the effect of oral contraceptives on a woman's choice of mate that could be the factor that resulted in their findings of an increased risk of violent death. A woman *not* taking hormonal contraceptives naturally chose mates that were *dissimilar* to themselves in the major histocompatibility (MHC) genes. This would result in children with more variety of these MHC genes, an advantage in survival because MHC genes are important in fighting infections. A woman taking hormonal contraceptives chose mates that were similar to themselves in the MHC genes. When researchers study the behavior of couples in regards to MHC genes, those that are similar have decreased fertility and children that are less healthy. Women were also sexually less responsive to their mates and more likely to have "extra-pair bondings," i.e. sociologic speak for adultery if married. I thought these factors could contribute to intimate partner violence leading to homicide. Seemed reasonable but it was just one study. As the influence of human pheromones was thought to be responsible for the behaviors on and off the Pill, I started reading the literature on this subject.

Then, in 2014 another prospective cohort study of over 120,000 American women was published in the BMJ concerning mortality among ever and never users of oral contraceptives. They followed these women for 36 years and confirmed there was a statistically significant increase in the risk of a violent death. The authors stated they could not explain their results but they doubted there was a biologic cause for them. I spent the next several years always on the lookout for a clue that would provide an answer to this mystery. I believe I have found a compelling hypothesis as to the biologic mechanism and have submitted a review to a journal for publication. After publication, I will post it on the BCPI website. In the meantime, through articles in the BCPI Report, I will share some literature I found fascinating along the way and hope you will be interested as well. In this April 2021 Report I will explain how hormonal contraceptives affect those women with borderline personality disorder which can contribute to a violent death.

Vitamin D Can Reduce Breast Cancer Risk

(Continued from page 1)

Vitamin D receptors (VDRs) are found in the breast. One of their functions is to regulate hormone differentiation and milk production. The maturation of breast lobules so that the lobule is able to produce milk is known to protect the breast from carcinogenesis. (For more information on breast lobule maturation and breast cancer risk, please look at the yellow brochure under the resources tab on our website at www.bcpinstitute.org.) Vitamin D deficiency increased the risk for breast cancer among both pre- and postmenopausal women. A 2014 study in Iran found more than 50% of newly diagnosed premenopausal women with breast cancer had severe Vitamin D deficiency. Another study showed Vitamin D deficiency increased risk of postmenopausal breast cancer 7.5 fold. The good news is that a 2017 study showed that Vitamin D supplementation lowered breast cancer risk in postmenopausal women. While we speak of Vitamin D as a vitamin, something necessary for good health that we get from food, it is actually a hormone that also regulates calcium metabolism. It is fat soluble and it is possible to develop toxicity if too much is taken. While we need Vitamin D to maintain healthy bones, too much can actually drive calcium from bone through its reduction of vitamin K2. Nothing is simple. It is extremely rare to have toxic levels of Vitamin D. Your physician can check your Vitamin D level and recommend the amount of supplement you probably need to safely elevate your level to reduce your breast cancer risk.

Borderline Personality Disorder, Hormonal Contraception and Violent Death

(Continued from page 1)

The physiology which results in worsening of BPD symptoms may have already been discovered by radiologists at Montefiore Hospital in New York City. In the April 2020 BCPI Report, a study was described which showed that oral contraceptives were associated with changes in the hypothalamus which regulates mood. Women on oral contraceptives had a smaller hypothalamus volume/size as measured by MRI which was also associated with greater anger.

In 2012, researchers at Oakland University in Michigan found that women on oral contraceptives had greater overall sexual jealousy than women who were fertile. This resulted in increased mate retention tactics in both partners as measured by the Mate Retention Inventory (MRI) used by psychologists in studies. These tactics can range from benign behaviors such as making oneself more attractive through better grooming and treating a mate to a well prepared meal to those behaviors which include verbal threats and physical violence.