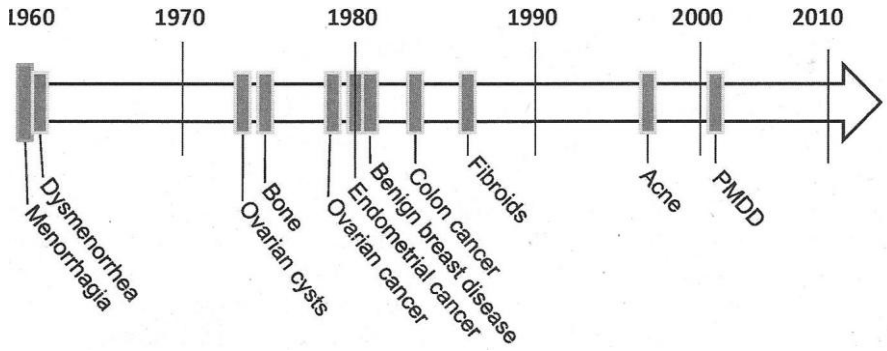
ORAL CONTRACEPTIVES

Oral contraceptives are the most commonly used contraceptive method in young women.

There are numerous health benefits that directly result from oral contraceptive use that we have learned about since their development in the 1960's. Acknowledged medical benefits are listed chronologically [1]:



Menorrhagia—

In 1960 Bishop demonstrated that administering norethindrone lead to normal bleeding patterns in women with menorrhagia [2]. This finding has been validated by Fraser in comparing birth control pills against non-steroidal anit-inflammatory drugs, danazol and placebo. Women using the oral contraceptives had significantly decreased volume of menstrual blood loss compared with placebo [3].

Dysmenorrhea—

Decreased menstrual discomfort has long been known to be a benefit of oral contraceptive use. Robinson reported that 66% of women achieved improved dysmenorrhea and decreased menstrual flow on birth control pills [4].

Ovarian Cysts—

A 1974 publication in JAMA originally reported use of oral contraceptives decreased incidence of functional ovarian cysts from 20% in non-users to 1.7% in women using pills [5]. As the estrogen dose has decreased over time, so has the protective effect for functional ovarian cysts [6-8]. Another study showed the risk of benign ovarian tumors was reduced in oral contraceptive users and the greatest reduction was observed in endometriomas [9].

Bone Health—

In 1975 a study demonstrated long-term users of oral contraceptives had a higher bone mineral density than non-users [10]. Later, in 1999, another paper showed use of Oral Contraceptives by women in their 40's was associated with a 25% reduction in fracture risk later in life [11]. Since

this time confounding results have been observed and a Cochrane review has not validated any benefit to bone mineral density for younger women using oral contraceptives [12].

Ovarian Cancer—

In 1979, Casagrande in pioneering work showed that the likelihood of a woman having ovarian cancer was inversely related to increasing duration of oral contraceptive use [13]. This was confirmed in another publication showing use of oral contraceptives, even for short interval, reduced the likelihood of epithelial ovarian cancer [14]. Even for women at high risk for breast and ovarian cancer, those with BRCA1 and BRCA2 genetic mutations, a 50% decreased incidence in development of ovarian cancer was noted for women who had ever used oral contraceptives [15].

Endometrial Cancer—

In 1980, Weis and Sayvetz showed a 50% decreased risk of endometrial cancer amongst women who had ever used oral contraceptives [16]. More recently the association of oral contraceptive use with decreased likelihood of developing endometrial cancer has been confirmed [17].

Benign Breast Disease—

In 1981, Brinton and associates showed that current users of oral contraceptives had a lower incidence of various breast lesions including fibroadenoma, cystic breast disease and nonbiopsieed breast lumps than non-users [18]. The same study also reported the likelihood of having these benign lesions decreased related to increasing years of oral contraceptive use. Two studies have shown that although there is no protective effect of oral contraceptive use for development of breast cancer, there is no increase in incidence of breast cancer amongst users of oral contraceptives [19-20].

Colorectal Cancer—

In 1983, Potter et al first reported the protective effect of oral contraceptive use with a 50% reduction in incidence of colorectal cancer in women who had been users [21]. This has been confirmed in a recent meta-analysis of numerous studies [22].

Fibroids—

In 1986 a study showed that users of oral contraceptive were less likely than non-users to develop uterine fibroids [23]. Another study demonstrated that oral contraceptive use does not increase the incidence of users developing fibroids [24]. Oral contraceptives are well known to decrease menorrhagia and dysmenorrhea associated with fibroids.

Acne—

In 1997, Redmond and colleagues first published data showing use of oral contraceptives benefitted women with acne reducing inflammatory lesions significantly [25]. These findings were confirmed in subsequent studies [26].

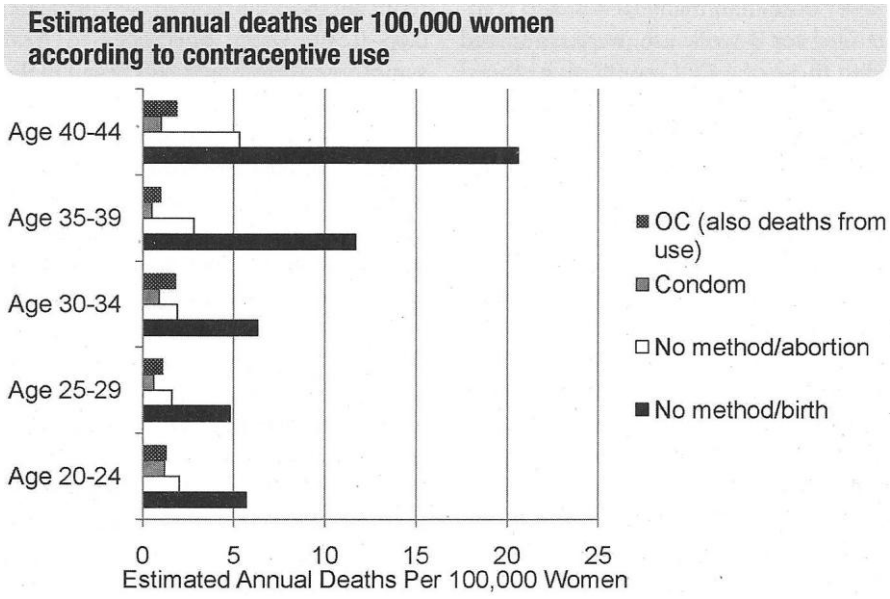
Premenstrual Dysphoric Disorder—

In 2001, Freeman and associates presented evidence supporting improvement of premenstrual dysphoric disorder in oral contraceptive users [27]. This finding has been substantiated in a Cochrane literature review [28].

Summary

Oral contraceptives have innumerable direct health benefits apart from their use in preventing unintended pregnancies.

A recent review article summarized the various benefits of oral contraceptives and concluded that death rate of women using oral contraceptives was lower through the reproductive years than that of women not using birth control [1].



The reduced mortality rate of oral contraceptive users is not only related to mortality reduction from the various benefits listed above, but the clear mortality reduction caused by preventing pregnancy. Pregnancy is clearly dangerous with a maternal mortality rate typically quoted at 1 per 10,000 pregnancies.

Additional information on contraception is available from various lay sources including WebMD and the DWC website.

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