



New Studies, Old News: Oral Contraceptive Research in the Media

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Two recent and separate studies have linked the use of oral contraceptives (OC) to increased risk of heart disease and cervical cancer, respectively. We have compiled answers to some frequently asked questions about these studies in order to clarify what the findings mean for women using or considering the use of oral contraception.

What types of studies were conducted?

The first study, released in November 2007 by researchers at Ghent University in Belgium, found an association between the use of oral contraceptives (OC) and increases in **carotid and atherosclerosis plaque** (artery-clogging buildup)--a marker for higher risk of heart attack and stroke. Data was collected from 1,301 women ages 35-55 who had been using OCs for an average of 13 years. The study was conducted in order to determine if there is a link between OC use and increased plaque prevalence. Over time, these can grow large enough to reduce blood flow within the arteries, increasing the risk of advanced cardiovascular disease.

The other study incorporated data from 24 countries worldwide and examined the risk of developing **cervical cancer** for women who take OCs. The study compared the rates of cervical cancer in women taking combined oral contraceptives (which contain both estrogen and progesterone) to women who had never used OCs or had been taking them for less than a year.

Does the study show a significant increase in risk of atherosclerosis for users of oral contraceptives?

The study found a very small likelihood of increased risk of an adverse cardiovascular event with the use of OCs. In fact, both regular users of OCs and non users shared a similar risk for increased plaque buildup in the arteries leading to the neck and head. Furthermore, **the study demonstrates only an increase in plaque, not a real increase in a serious health event.** While an increase in plaque is a marker for high risk of heart attack and stroke, its presence in women who take OCs does not necessarily translate to a higher risk later in life.

It is important to keep in mind that there are many serious risk factors for heart disease including but not limited to family history, smoking, diabetes, obesity, diet, high blood pressure, high cholesterol, and high levels of stress. Exercising, eating a healthy diet,

refraining from smoking, and maintaining a health weight are some of the ways to reduce one's risk of heart disease.

Is there a significant increase in risk of cervical cancer for users of oral contraceptives?

The findings show that the risk of developing cervical cancer for women who have never used oral contraceptives is 3.8 per 1,000 women. For those who had been taking OCs for at least 5 years, the risk is 4 per 1,000 and 4.5 per 1,000 in women who took OCs for at least 10 years. Many experts say this is not a significant increase. **The best way to prevent cervical cancer is to receive routine screening.** The study also found that once women stopped using OCs the risk of developing cancer immediately began to decline and returned to the same rate in about 10 years.

Do you recommend that women change or stop use of oral contraceptives?

The peer review process has not yet been completed for the study on cardiovascular disease and therefore a thorough analysis of the study has yet to occur. Women concerned about an increased risk of heart disease, or other side effects, should discuss this with their health care providers.

Concerning cervical cancer, **many experts consider the increased risk too insignificant to stop oral contraception use.** Further, the use of OCs has been found to protect against ovarian and uterine cancer.

Birth control pills have very few serious side effects and are a safe and effective birth control method for women of reproductive age. They remain one of the most effective, reversible, and widely-used methods of birth control.

How effective are hormonal contraceptives at preventing pregnancy?

Worldwide, an estimated 635 million women – 61 percent of women aged 15-49 – use contraception. More than 100 million – or nearly one in 10 women of reproductive age – rely on hormonal contraceptives, although the proportion of women using these options and the specific methods they choose vary considerably by region and country. The daily pill accounts for the bulk of hormonal contraceptive use, particularly among women in developed countries: Roughly seven percent (7%) of reproductive-age women worldwide rely on the Pill, but this rate is significantly higher in developed regions (15.7%) than in developing regions (5.7%).

What does this mean for the average woman in her reproductive years?

More data is needed and women and health care providers should not immediately act based on this research. There are other factors associated with much higher risk of cardiovascular disease. Of the numerous oral contraceptive studies done in the past, **none has found that the pill is associated with increased risk of heart disease after pill**

discontinuation. Women should speak with their clinicians about their medical history and contraceptive needs, especially if they might be at increased risk of cardiovascular disease. If women are currently on the pill, they should speak to their clinicians about ways to manage their risk factors.

Routine screening is the best way a woman can protect herself against cervical cancer. It is potentially curable if detected early. Women should also remember that the risks of contracting other cancers such as ovarian and uterine have been found to be decreased with the use of oral contraceptives. Women should get screened (Pap tests) regularly in line with the recommendations set by the American College of Obstetricians and Gynecologists (ACOG). Finally, women should speak to their healthcare providers about any steps they should take concerning their use of the pill and their risk of cervical cancer.

Where can I find more information?

On cervical cancer and prevention:

American Cancer Society (ACS) Website:

http://www.cancer.org/docroot/CRI/content/CRI_2_4_1X_What_is_cervical_cancer_8.asp

American College of Obstetricians and Gynecologists (ACOG) Cervical Cancer Screening Guidelines:

http://www.acog.org/from_home/publications/press_releases/nr07-31-03-1.cfm

Center for Disease Control (CDC) Website:

http://www.cdc.gov/cancer/cervical/basic_info/

National Cancer Institute (NCI) website:

<http://www.cancer.gov/cancertopics/types/cervical>

Partnership to End Cervical Cancer

<http://www.nocervicalcancer.org/>

On heart attack and stroke:

American Heart Association Website

<http://www.americanheart.org/presenter.jhtml?identifier=3053>

CDC Website

<http://www.cdc.gov/HeartDisease/>

Department of Health and Human Services

<http://www.4women.gov/FAQ/heartdis.htm>

On the studies:

Cervical Cancer and Hormonal Contraceptives Study Abstract

<http://www.thelancet.com/journals/lancet/article/PIIS0140673607616845/abstract>