**The Effects of Hormonal Birth Control and the Relation to Cervical Cancer**

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**Hormonal birth control as well as other methods of birth control have become an extremely popular method of preventing pregnancy. Hormonal birth control is marketed in a variety of different ways that is pleasing to the eye of its user (women) including: preventing pregnancy and regulating menstrual cycles. These methods of marketing come with warnings, but society has made it a regular commodity for women without talking about the deadly side effects that could come with it: Cervical cancer. Women in underdeveloped countries are at an increased risk for developing cervical cancer due to the lack of medical treatment and screening. Studies directly link hormonal birth control with cervical cancer, although there are other influencing factors such as HPV that may be a cause as well. Women with increased usage in hormonal birth control, as well as women with an increased number of full-term pregnancies, and hormonal birth control usage stand at a higher risk for developing cervical cancer, or pre-cervical cancer. Although research is still developing as birth control methods change over the years, it is clear to say hormonal birth control plays a major role in cervical cancer, instead of simply focusing on human papillomavirus, and its relation to cervical cancer.**

**Introduction**

 Birth control methods other than traditional means have become increasingly popular options over the last two decades. There are a variety of different methods of birth control that come across as quick and effective to the plain eye; however some come with deadly consequences. Although marketing for various new types of birth control may seem appealing to the modern eye, not all of them are made out to be what they seem.

There are a variety of different factors that play a major role in cervical cancer, one being hormonal contraceptives. Other risk factors in direct correlation to cervical cancer include: aspects of sexual behavior, smoking, immunodeficiency, and human papillomavirus (HPV) (Iversen et al., 2021). Other factors include obesity, poor diet, abnormal vaginal microbiota as well as alcoholism and other infections such as Chlamydia trachomatis (Mendoza-Almanza et al., 2019). Hormonal birth control, although it is not the only direct cause of cervical cancer, is a majorly used contraceptive in modern society dating back to the 1960’s when it was first introduced (Peachman, 2018). Data collection in the past couple of decades directly links contraceptives with cervical cancer, except for vaginal rings and contraceptive patches, where there is insufficient data needed in order to properly calculate the risk for cervical cancer (Iversen et al., 2021). Most of the research done in the past heavily focused on the correlation between human papillomavirus (HPV), and has since shifted to look at the correlation between hormonal birth control and cervical cancer as well.

With its steady increase in usage, modern studies are able to track the usage of women in correlation to cervical cancer. In 2019 there were over 151 million women using contraceptives all over the world (Iversen et al., 2021). From this study, the majority of users, about two-thirds, lived in underdeveloped countries outside of North America and Europe (Iversen et al., 2021).

Studies have shown that cervical cancer is the fourth most common global health challenge for women, especially prevalent in foreign countries (Cohen et al., 2019). There are over a half a million women that are positively diagnosed with cervical cancer globally every year with over 300,000 deaths worldwide (Cohen et al,, 2019). This poses a major threat to women in every country, but specifically underdeveloped countries where medical care is not fully funded and is underdeveloped. The majority of deaths globally from cervical cancer are present in countries such as: Africa, Latin America, Asia as well as the Caribbean (Iversen et al., 2021). Women residing in these countries are at an increased risk for cervical cancer related fatalities due to the lack of screening that is available to them, posing a major threat.

**Recent Progress**

 Hormonal birth control has always come with major risks as well as major benefits. Many women find using various forms of birth control appealing for a variety of different reasons including: lowering the risk of ovarian cancer, preventing pregnancy, and treating endometriosis, heavy periods, discomfort of periods, and severe acne (Peachman, 2018). Although there are positive benefits to hormonal birth controls, there are adverse side effects that can be fatal such as an increased risk for breast cancer and cervical cancer. (Peachman, 2018). Research on the effect hormonal birth control plays in correlation to cervical cancer has been increasing over the past decades due to the change and increase in the amount of contraceptive options available for women, and technological advances.

There have been a variety of different studies done to determine direct causes of cervical cancer. Most of the studies include looking at both women that are infected, or have been infected, with HPV in the past as well as women using hormonal, or oral, contraceptive methods as birth control. In a study done by EPIC Cohort, it was determined that the duration of oral contraceptives was in direct correlation with a significant increased risk of cervical cancer (Roura et al., 2016). The study clearly showed that the longer a woman uses hormonal, or oral, birth control, the higher the risk for cervical cancer was. On the other hand, as the duration for ceasing hormonal birth control increased, the lower the risk of developing cervical cancer became for women.

When birth control first came out in 1960, dosages were extremely high compared to today’s dosage for various hormonal birth control methods, specifically oral contraceptives (Peachman, 2018). This plays a major role in the development of cervical cancer in women that took birth control during these higher dosage times, and may have stopped for a period of time, carried full term pregnancies and got back on birth control.

 Full-term pregnancies also play a role in cervical cancer along with hormonal birth control. Women who had an increasing number of full-term pregnancies and a long duration of hormonal birth control prior to, or after becoming pregnant had a higher risk of cervical cancer, or cervical pre-cancer (Roura et al., 2016).

**Discussion**

 The studies and research that has been done, and is continuing to be done, on hormonal birth control lead to the case that they do play a role in women developing cervical cancer. There are a variety of different ways that women are able to develop cervical cancer as mentioned, such as HPV, but hormonal birth control is not nearly talked about as much, and has some of the same effects.

 Women often gravitate towards these methods of contraception because of the positive gains, and do not necessarily look at the downside of orally taking them. There are a variety of different methods of birth control that allow women mostly all of the same effects, without the chance of cervical cancer, according to studies, such as certain IUD’s.

 Research is developing every year on birth control and the adverse side effects that it causes. As research continues to develop, and contraceptives are altered to new dosages, women are able to learn more about what exactly they are putting in their bodies.

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