

Prevention Of Cervical Cancer

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The purpose of this project is to create a clear understanding of cervical cancer and effective measures to prevent this life-threatening condition. The participants of this project are women aged 21-29 years whose educational level is 5th to 8th grade. The inclusion criteria for the audience involve women from diverse cultural and ethnic backgrounds. The project is aimed at developing awareness of the importance of early detection of cervical cancer, which is a recommended approach to preventing this condition.

Significance Of The Problem

Cervical cancer presents a major health problem to women, particularly in developing countries. According to a recent compilation of global data by the Centers for Disease Control and Prevention (CDC), it is estimated that 4550,000 new cases of cervical cancer occur every year among women worldwide (Koh et al. 2015). Approximately 80% of the cases of cervical cancer have been reported in developing countries where screening services are not well established or are slightly effective. In developing countries, the prevalence of cervical cancer is second after breast cancer. However, it is the leading cause of cancer deaths among women.

Mortality

Cervical cancer has been reported to take the heaviest toll on women in developing countries. According to statistics from the World Health Organization (WHO), the age-standardization mortality rate in developing countries is 8.5 per 100,000 women (Koh et al. 2015). These statistics are twice the rate in developed countries. Approximately 40% of cervical cancer deaths in developing countries are reported in south central Asia a region which includes Bangladesh, Pakistan, and India (Koh et al. 2015).

Mortality rates of cervical cancer act of telling indicators of the impact of the disease on women, families and the community in general. Occasionally, mortality data are used as substitutes for incidence rates in countries with little treatment or screening activity because cervical cancer is fatal when not treated. Prospective studies show that there would be a 30% decline in cervical cancer mortality in Asia, Africa and the Pacific Islands if women had access to early screening and appropriate treatment equivalent to those in developed countries (Fardows et al. 2016).

Age Distribution

The prevalence of invasive cervical cancer is very low in women below the age of 25 years. The incidence increases at about 29 to 40 years and reaches optimum when women are in their fifties and their sixties. According to data, cancer registries in developing about 75% to 85% of confirmed cases in developing countries occur in women aged 35 years and above (Koh et al. 2015). However, these statistics do not imply that young women are not at risk of developing cervical cancer. The differences in the statistics on the prevalence of cervical cancer in different age groups reflect the underlying age structure population and the fact that older women do not usually undergo screening.

Recent projections of cervical cancer show that mortality, prevalence and incidence are lower than the actual rates because the majority of the population with cervical cancer do not have access to medical care and therefore are not included in the national cancer registry. The inability to pay for healthcare services in chronically ill patients, the limitation of diagnostic facilities, and their tendency not to reach older women present further challenges to coming up with accurate estimates (Fardows et al. 2016).

Risk Factors

Research studies show that infection with the Human papillomavirus (HPV) is the cause of almost all cases of cancer of the cervix. Sexual activity with an individual who has HPV is the most common way someone can get infected with HPV (Origoni, Prendiville, & Paraskevaidis, 2015). Although most of the individuals have been infected with HPV at some point in their lives, most of these infections clear up on their own with time. However, HPV, which does clear away, can lead to cancer of the cervix in some women.

Immune system deficiency is another factor that predisposes an individual to developing cervical cancer. A weak immunity can result from immune suppression from organ transplants, corticosteroid medications and treatments for human immunodeficiency virus (HIV) or other forms of cancer. Genital herpes also predisposes an individual to a higher risk of developing cervical cancer. Smoking is also a risk factor for developing cervical cancer. Women who smoke are about twice as likely to develop cervical cancer compared to those who do not smoke. Age is also a predisposing factor to developing cervical. Girls below 15 years rarely develop cervical cancer (Origoni, Prendiville, & Paraskevaidis, 2015). Other risk factors include oral contraceptives and socioeconomic factors.

Signs And Symptoms

Early physical cancers and pre-cancers do not usually present symptoms. More often, the symptoms do not show up until the disease because invasive and attacks the adjacent tissues within the body. When this happens, the most common signs and symptoms include pain during sex. Another common

symptom is vaginal bleeding, such as bleeding after menopause, having menstrual periods that last longer or heavier than usual, and bleeding after vaginal sex. Also, unusual discharge, which may contain blood, may be observed from the vagina. Such discharge may occur between menstrual periods or after menopause (Zaman & Chauhan, 2016).

Prevention

A well-proven way to prevent cervical cancer is through screening to detect pre-cancerous cells before they can turn into invasive cancer. One of the common screening tests is the use of a Pap smear to detect abnormal cervical cells. The procedure for this cytological test involves scraping cells from the cervix, which are then fixed on a glass slide. The cells are examined by a specialist such as a cytologist to examine abnormal cervical cells. The results of this test are usually available after a few weeks (Origoni, Prendiville, & Paraskevaïdis, 2015).

Women are advised to get their first Pap smear the moment they become sexually active and have regular tests every one to three years. Various national guidelines do not approve Pap smears because cervical cancer and its precursors usually develop gradually over several years. Women with low-grade lesions can go for regular Pap smears. Cervical cancer can also be evaluated via colonoscopy, subsequent treatment of suspicious areas and biopsy (Origoni, Prendiville, & Paraskevaïdis, 2015).

Although Pap smear-based screening approaches have been initiated in many developing countries they have not achieved the ultimate which they were intended to achieve. Healthcare practitioners working in low-resource facilities have frequently reported limited access to Pap smear screening, which has jeopardized the program.

Visual Inspection

Another screening method is through the visual inspection method. This technique is usually used in low-resource settings as it is less expensive and produces immediate results. However, the use of this method is limited due to low sensitivity (Zaman & Chauhan, 2016).

Liquid-Based Cytology

Another screening method for [cervical cancer](#) is liquid-based cytology. This method is a variation of the conventional Pap test. Liquid-based cytology has similar advantages to Pap smear in terms of specificity and sensitivity (Zaman & Chauhan, 2016).

HPV

There is a strong association between the development of cervical cancer precursor and persistent infection with high-risk oncogenic types of Human papillomavirus. The subsequent development of cervical cancer is also associated with HPV. Testing for HPV DNA may be useful in the triage of low-grade cervical changes. This protocol is followed up by post-colonoscopy, possible high-grade changes and clarifying indeterminant histology. One approach used to prevent pre-cervical cancer includes getting an HPV vaccine, use of condoms, not smoking, and testing for HPV (Origoni, Prendiville, & Paraskevaidis, 2015).

Treatment

According to Partridge et al. (2014), treatment of cervical cancer is determined by the stage of the tumor. However, other factors can also affect treatment options, including health, age, the type of cancer, the location of the cancer within the cervix, and whether an individual wants to have children after treatment. When the cancer is in its initial stage (carcinoma in situ), doctors often think it is a pre-cancer. All cases of carcinoma in situ can be cured with the right treatment. It is important for the doctor to watch over the patient closely because pre-cancerous changes can recur in the cervix and vagina. Therefore, regular screening is recommended for individuals treated for pre-cancer conditions.

Treatment options for squamous cell carcinoma in situ include laser surgery, cryosurgery, cold knife conization, electrosurgical excision procedure and hysterectomy. Treatment for stage IA1 and stage IA2 depends on whether the patient wants to continue to be able to maintain fertility. The preferred treatment for women who want to maintain fertility is the use of a cone biopsy. Also, trachelectomy with pelvic lymph node dissection is used for women who want to maintain fertility. On the other hand, in women who do not have to maintain fertility, external beam therapy and radical hysterectomy can be used to treat cervical cancer. Chemoradiation and radical hysterectomy are usually used as the standard treatment for stages IB2 and IIA2 (Partridge et al. (2014).

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