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Abstract: Cervical cancer is the propagation of cells that are out of control in the cervix; it affects the entire reproductive system of the body, such as the uterus, ovaries, and fallopian tubes. There is a long history of devising a proper method for screening cervical cancer status. As early as 400 BCE, Hippocrates recognized cervical cancer as incurable. In Nepal, cervical cancer is the most common cancer among women and a leading cause of cancer-related mortality. According to the Human Papillomavirus and Related Cancers Fact Sheet by the ICO/IARC HPV Information Centre (2023), cervical cancer accounts for approximately 20% of all female cancers in the country. The government should put in an effort to screen the cervical cancer and treat it where possible.

Keywords: Cervical Cancer, history, Nepal

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Introduction

Cell proliferation in the cervix that is out of control is a defining feature of cervical cancer. The entire uterus, ovaries, and fallopian tubes may be affected after it starts in the cervix. Precancerous lesions form in the lining of the cervix in most cervical cancer cases. Undiagnosed or untreated precancerous lesions have the potential to develop into cervical cancer. It's crucial to remember that these lesions might not always be cancerous and might go away on their own. Among gynecological cancers, cervical cancer is distinct in that it is preventable(1). In Nepal, cervical cancer is the most common cancer among women and a leading cause of cancer-related mortality. According to the Human Papillomavirus and Related Cancers Fact Sheet by the ICO/IARC HPV Information Centre (2023), cervical cancer accounts for approximately 20% of all female cancers in the country. Each year, around 2,244 new cases are diagnosed, and about 1,493 women die due to the disease. Despite being preventable and curable when detected early, the lack of widespread awareness, low coverage of HPV vaccination, and poor screening uptake have contributed to the persistent high burden of cervical cancer among Nepalese women(2). Conducting this research in Ward No. 14 is essential to understanding the localized risk factors and gaps in knowledge, attitudes, and practices related to cervical cancer. The findings will help identify vulnerable subgroups, assess behavioral and reproductive health trends, and inform targeted interventions at the community and municipal levels.

Method: The literature review was done on Google, Google Scholar.

Model initiation: Early Recognition & Carcinoma in Situ

- As early as 400 BCE, Hippocrates recognized cervical cancer as incurable.
- In the late 19th century, Sir John Williams (1886) and Thomas Cullen (1900) documented histological changes such as carcinoma in situ. Around 1908–1912, several researchers refined the concept of pre-invasive lesions(3).
- **Emergence of the Pap Smear-1920s to 1940s**: In 1928, Dr. George Papanicolaou first introduced the idea of using vaginal surface cell smears to distinguish between healthy

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and cancerous cervical cells, based on animal studies and human samples, including those provided by his wife, Mary, over many years(4).

- The method gained formal validation in 1941, when Papanicolaou and Herbert Traut published a landmark study in the American Journal of Obstetrics and Gynecology. Their monograph in 1943, Diagnosis of Uterine Cancer by the Vaginal Smear, laid the foundation for cytopathology.
- Mid-20th Century: Adoption, Tools & Cell Lines
- In 1946, the Aylesbury spatula was introduced to better collect cervical cells for Pap smears.
- The first immortal human cell line, HeLa, derived in 1951 from cervical cancer cells (Henrietta Lacks), revolutionized biomedical research.
- Organized Pap smear–based screening programs spread across developed countries between the 1960s and 1980s, significantly reducing cervical cancer rates(5).
- HPV Discovery & Advances in Screening: In 1976, Harald zur Hausen and colleagues discovered HPV DNA in cervical cancer lesions; zur Hausen later received a Nobel Prize for this work. During the 1980s, cervical cancer's link to persistent high-risk HPV infection was firmly established, shifting prevention toward virus-based strategies(5).

Vaccines and HPV Testing Era

2006: FDA approved the first HPV vaccine, targeting key high-risk HPV types.

By 2015, expanded research showed broader protection across multiple HPV infection sites; single-dose protection evidence emerged around 2018.

Conclusion

Cervical cancer remains a significant public health concern in Nepal, especially due to limited awareness, low screening rates, and inadequate HPV vaccination coverage. Understanding localized risk factors among women in Ward No. 14 of Janakpurdham is essential for designing targeted interventions that can reduce incidence, improve early detection, and ultimately save lives.

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