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Burden of Cervical Cancer and its Barriers to Screening

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ABSTRACT

Cervical cancer ranks as the second most cause of female cancer deaths in India and is the second leading cause of cancer deaths in women aged 15 to 44 years in India. About 87% cervical cancer deaths occur in less developed regions. The estimation of new cancer cases, by major states of India, reveals that burden is very high, in those states which are highly populous. Nearly 41.3% of cancers seen in Indian females are accounted by cancer of cervix and cervix alone. Cervical cancer is a huge general wellbeing trouble in most agricultural nations, where it is a significant reason for mortality and horribleness among ladies. Several factors are attributed to the wide spread incidence of cancer, the precise etiology of which remains unclear. Awareness of Cancer should be encouraged in its prevention, detection and treatment. Indian women face a 2.5% cumulative life time risk and 1.4% cumulative death risk from cervical cancer, at any given time, about 6.6% of women in the general population are estimated to harbor cervical HPV infection. Early detection and treatment via screening can prevent up to 80% of cervical cancers in developed countries, where efficient screening programs are in place. This orderly review analyzed the ongoing writing on knowledge and attitudes in regards to cervical malignant growth and barriers to evaluating for cervical disease among ladies in India. India has pressing need to foster wellbeing framework ability to guarantee productive cervical malignant growth screening project and local area level endeavors to further develop information about cervical disease and screening programs. This work would assist with saving a huge number of young ladies and their families from an incredible disaster.

Keyword: *Cervical cancer, Barriers, India, Cancer screening.*

INTRODUCTION

Health is a state of complete physical, mental and social well-being and not merely an absence of disease or infirmity[1]. Actual wellbeing is basic for by and large prosperity and is the most noticeable of the different elements of wellbeing. Wellbeing incorporates profound stability, consistent discernment, the capacity to adore, makes embrace change, practice instinct and experience a proceeding with feeling of spirituality. Disease is a sort of inner state which is either an impedance of ordinary useful capacity, for example a decrease in at least one utilitarian capacities underneath common productivity, or a restriction on practical capacity brought about by ecological agents[2].

Women's health is a unique specialty of health care. Women are becoming more and more aware of their health status as a result of modern education, electronics, print media and health agencies. While women have made progress in most of the fields but still they tend to inexplicably neglect their own health. However in present age ladies know about their concerns, their status to look for help from the wellbeing faculty is prevented by monetary limitations, social shame and inflexible eccentric convictions in regards to wellbeing problems.[3]

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Cervical cancer is the fourth most frequent cancer in women worldwide, according to the World Health Organization[4].In 2012 there were an estimated 445,000 new cases and approximately 270,000 deaths from cervical cancer, more than 85% of which occurred in low- and middle- income countries[4] .Unfortunately, not much progress has been made over the past few decades. According to the Institute for Health Metrics and Evaluation (IHME), the ratio of women dying compared to new cases was almost the same in 2010 as it was in 19802. While cervical malignant growth cases are declining in the developed world, they represent a significant weight on emerging nations, where the risk of creating cervical disease is 35% more prominent contrasted with developed countries.[5]

The counteraction of cervical disease can be accomplished by, support in cervical malignant growth avoidance programs, including PAP and HPV screening and HPV antibody acknowledgment which, is critical for restricting the frequency of cervical malignant growth. Intercession can without much of a stretch be given in school or a medical services setting; it can altogether expand their insight about contamination and can significantly affect their wellbeing. HPV schooling ought to be investigated as an economical and effortlessly applied deterrent measure for cervical cancer.[6] Despite sufficient evidence supporting the use of screening as an effective intervention, there are still very few large-scale screening programs being implemented in India.[7]

MATERIALS AND METHODS

Data Sources

The literature search was conducted in March and April of 2022, using the following databases: PubMed, Google Scholar, Embase, and CINAHL. The following terms and keywords were used: ‘cervical cancer,’ ‘India,’ ‘South Asia,’ ‘knowledge,’ ‘attitudes,’ ‘screening,’ ‘barriers to cervical cancer screening.’ Literature published between 2000 and 2021 was reviewed.

Study Selection

Inclusion criteria for articles included: relevance to topic; qualitative and quantitative studies considered; peer reviewed; based in India or another South Asian country. Exclusion criteria included studies conducted in high-income, developed countries.

Types of Studies

Only articles written in the English language were included. Multiple types of studies and reviews were considered and potentially included.

CURRENT SCENERIO IN INDIA

In India, it is estimated that there are 96,922 new cervical cancer cases (9.2%) with an age-standardized incidence rate of $14.7/10^5$ (higher than the rates observed in many other countries across the globe) and 60,078 cervical cancer deaths (8.4%) with a mortality rate of $9.2/10^5$. The incidence rates of malignant growth cervix inside India showed variety. The frequency rates for cervical malignant growth in significant Indian disease vaults are, 15.29 in Bengaluru (2012), 16.09 in Barshi (2012-2014), 15.89 in Chennai (2012-2013), and 18.98 in Mumbai (2012).[8]

Be that as it may, scattering of the rules was poor and practically zero activity was taken further. By and large, at the essential and optional level of the general wellbeing framework, there is restricted limit and restricted foundation to perform screening or oversee screen-

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positive ladies. In 2012 another program for the control of all major non-transmittable sicknesses was presented, which assigned explicit assets for disease control through a local area arranged approach. Functional rules were created to suggest cervical disease evaluating for ladies yet gives in execution remained[9]. While there is no public screening program, some state legislatures have stepped up to the plate. The Tamil Nadu Health Systems Project, laid out in 2005, is a bosom and cervical malignant growth screening program in the territory of Tamil Nadu. The public authority of Tamil Nadu gotten a Technology Company to foster an information assortment and the executive's framework to consider remarkable patient identifiers, information assortment, and the board of records.[10]

Factors that contribute to development of cervical cancer

A risk factor is anything that increases a person's chance of developing cancer. Notwithstanding the way that peril factors as often as possible effect the progression of harmful development, most don't clearly cause illness. Certain people with a couple of hazard factors never encourage sickness, while others with no acknowledged gamble factors do. Understanding your gamble factors and examining them with your doctor could help you with making more taught lifestyle and clinical benefits choices.

The accompanying variables might raise the gamble of creating cervical malignant growth:

- **Human papillomavirus (HPV) infection.** The main factor for cervical malignant growth is HPV. HPV is a typical contamination. Most contaminations happen after individuals become sexually active and many people clear the infection without issues. There are more than 100 unique kinds of HPV. Not every one of them are connected to malignant growth. The HPV types, or strains, that are most often connected with cervical malignant growth are HPV16 and HPV18. Beginning to have intercourse at a prior age or having various sexual accomplices puts an individual at higher gamble of being tainted with high-risk HPV types. HPV immunizations can keep individuals from fostering specific diseases, including cervical malignant growth.
- **Immune system deficiency.** Individuals with a brought down insusceptible framework have a higher gamble of creating cervical malignant growth. A lowered immune system can be brought about by insusceptible concealment from corticosteroid drugs, organ transplantation, therapies for different kinds of disease, or from the human immunodeficiency infection (HIV), which is the infection that causes AIDS (AIDS). Whenever an individual has HIV, their immune system is less able to fight off early cancer.
- **Herpes.** Individuals who have genital herpes have a higher gamble of creating cervical malignant growth.
- **Smoking.** Individuals who smoke tobacco are about two times as liable to foster cervical malignant growth contrasted and individuals who don't smoke.
- **Age.** Individuals more youthful than 20 years of age seldom foster cervical malignant growth. The gamble goes up between the late teenagers and mid-30s. Individuals past this age bunch stay in danger and need to have normal cervical disease screenings, which incorporate a Pap test as well as a HPV test.
- **Financial variables.** Cervical disease is more common among gatherings who are less inclined to approach evaluating for cervical malignant growth. Those populaces are bound to incorporate Black individuals, Hispanic individuals, American Indian endlessly individuals from low-pay families.
- **Oral contraceptives.** Some examination studies recommend that oral contraceptives, which are conception prevention pills, might be related with an expanded gamble of cervical disease and might be related with higher-risk sexual way of behaving.

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Nonetheless, more examination is expected to comprehend how oral prophylactic use and the improvement of cervical malignant growth are associated.

- **Exposure to diethylstilbestrol (DES).** Individuals whose moms were given this medication during pregnancy to forestall unsuccessful labor have an expanded gamble of fostering an intriguing kind of disease of the cervix or vagina. Individuals presented to DES ought to have a yearly pelvic assessment that incorporates a cervical Pap test as well as a 4-quadrant Pap test, in which tests of cells are taken from all sides of the vagina to check for abnormal cells.

Factors reducing women's participation in the cervical screening programme

The factors reducing the participation of women in the cervical screening programme are:

- Poor awareness of the indications and benefits of the cervical smear test
- Absence of information on cervical disease and its causing factors;
- Apprehension about humiliation, torment, or malignant growth;
- Absence of female screeners or helpful center times;
- Nervousness brought about by getting an unusual cervical smear result;
- Unfortunate comprehension of cervical screening systems.

Issues Affecting Women's Participation in the Cervical Screening Programme

Provision of information

Women have reported a need for information on the indications, benefits, and procedures of cervical screening; such data is successful in expanding participation for essential screening.[11,12,13,14] The segment above proposes that ladies' elevated degrees of uneasiness on the receipt of an unusual smear result might start in an absence of comprehension of the significance of cervical anomalies, and that the arrangement of data might diminish tension. In spite of the fact that ladies have different survival techniques, and as an outcome require various measures of data, undesirable composed data will in general stay uninitiated.[15,16,17,18] so that it is unlikely that excess information increases anxiety or decreases attendance. Indeed, increased information is associated with increased confidence in the service provision, reduced anxiety and improved attendance for colposcopy.[19,20]

Quality of communication

Women may be highly anxious during consultations and so unable to absorb fully what is being said or to ask questions; information should be provided clearly so that women do not misunderstand or forget what they have been told.[21] Although information leaflets are provided by many colposcopy clinics, some leaflets may be difficult to read,[22] particularly as there may be a preponderance of women with low educational attainment among the women with abnormal smears.[23,24] Indeed, information leaflets do not generally take into account that English may not be the first language of many women.

Patient satisfaction

The research described suggests that individual preferences exist among women in respect of both the treatment they receive and the amount of information they require, and that concordance with these preferences leads to increased satisfaction. Since it is deep rooted that fulfillment is an indicator of compliance,[25,26] inspecting approaches to expanding ladies' satisfaction is significant with the cervical cancer screening service provided. Furthermore, as patients are considered to be service users, they should, in consultation with their clinician, be able to choose their preferred treatment.

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Health System Issues

In a country as unique as India, where the healthcare system is especially complex and quality can vary significantly from state to state, a nationwide screening program can be difficult to implement. Health coverage and quality of care in India is fragmented, with significant inequalities between states, socioeconomic groups, castes, and rural and urban areas. In recent years, India has taken steps towards improving and monitoring quality of healthcare. Launched in 2008, the Health Management Information System monitors health programs with data from district reports by facility. The Indian Council of Medical Research (ICMR) additionally keeps up with libraries for various infections. In spite of late enhancements, execution of value medical services stays an issue. The Indian government comes up lacks a single, intelligent way to deal with tending to normalized rules for wellbeing administrations across the country.[27]

Community Level Issues

Another major barrier to cervical cancer screening is the lack of knowledge and awareness of the community about prevention and treatment of cervical cancer and HPV. Much of the literature highlighted a gap between knowledge of cervical cancer and actual uptake of screening among community women. While numerous ladies have known about cervical malignant growth, less know about its side effects, and far less have gone through a screening. However, numerous ladies communicated an ability to go through screening notwithstanding the low take-up. Numerous analysts arrived at comparative resolutions, featuring the requirement for expanded wellbeing training around cervical malignant growth and the significance of screening among both urban and rural ladies in India.[28]

Comparison of Cervical Screening Program in India and Developed Countries

In India, current program indicates that there is a lack of exclusive cervical cancer screening and it is a part of common cancer control program under the scheme of NPCDCS whereas UK and Australia have a specific screening program for detection of cervical cancer[29,30]. Cervical Cancer screening is the most successful disease prevention programs in developed world. However, developing countries are unsuccessful in attaining the same results. In developed countries like UK and Australia cervix screening with Pap and HPV DNA testing is considered as a routine examination. Cytology based examinations are difficult to organize in screening programs in India due to absence of trained human resources and infrastructure at the grassroots level, logistics, quality assurance, repeat screening/testing and economic factors involved.[31]

CONCLUSION

This paper has discussed the reasons why some women do not participate in the cervical cancer screening programme, and has highlighted how low levels of information, coupled with poor communication, contribute to high levels of distress in women with abnormal cervical smear results and may lead to non-attendance for colposcopy. The research summarized here suggests that maximizing patient compliance will require changes to the way in which both patients and clinicians approach health care. Changes in screening practice, such as the provision of evening clinics, the availability of a female practitioner, and an increase in educational information, may remove many of the obstacles that prevent women participating in the screening programme. India has critical need to foster wellbeing framework ability to guarantee productive cervical disease screening system and local area level endeavors to further develop information about cervical malignant growth and

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screening programs. These endeavors would assist with saving a huge number of young ladies and their families from an incredible catastrophe.

RELEVANCE FOR CLINICAL PRACTICE

Assessing the current level of knowledge and attitudes toward HPV, cervical cancer, and screening among Indian women and men is important in determining areas for improvement. Addressing the gaps in knowledge and the overall lack of awareness of cervical cancer identified is a critical first step towards earlier detection and fewer deaths. Awareness campaigns accompanied by state-wide and national level screening efforts are necessary to address the heavy burden of this disease in India. Simultaneously, the capacity of health systems across urban and rural India must also be built up in order to sufficiently and effectively screen and treat the women. Organized screening programs require the health system to monitor program participation, processes, and outcomes, along with referral pathways and follow ups. The International Cancer Screening Network identified six essential elements of national cancer screening programs5 , which the Indian government and the governments of other low- and middle- income countries can take note of: (1) development of a clear screening policy, (2) recognition that screening is part of a continuum of care, not a stand-alone event, (3) strong infrastructure, (4) establishment of a monitoring and evaluation system, (5) a plan for community engagement, and (6) implementation of scientific evidence in health delivery settings.

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