



NewsLetter

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EDITORIAL

HEALTHY DYING AND GOOD DEATH

There are different ways people die. The first is the sudden death. The other is the long death, which is what most of us will likely experience. "The reality is death from cancer, where you actually know it's going to happen, and you can say goodbye".

It was 18th March 2004, I received a call from my friend. He had lung cancer with hepatic and brain metastasis. Disease had progressed relentlessly despite surgery, radiotherapy and chemotherapy. He was alert and said "I want to talk to you privately in other room. There was pin drop silence in the house. We went to the other room and he broke his silence. "Ajay. I know I have little time, may be few hours or few days. I am ready to go now. I have finished all my household agenda, my property matters, my will and even my professional commitments. My family is with me, my loving daughters, my wife, my brother and even my parents. I don't want to be tied to wires and tube and ventilator. Infact I want to go to heavens from home. No more hospital please, convince my family. After some sobs and silence, we came out of the room as if nothing happened. I counselled the family and prepared them for the end. Next day morning he took tea at 6:30AM and said "I want to see my parents, my family." Everyone huddled in small room and he didn't take much time to leave peacefully. This was "healthy dying." Healthy dying means when one is "well"-prepared for, it's expected, and other people know about it."

NODA (No One Dies Alone) a non-profit volunteer organization says "no one is born alone, and no one should die alone, Death should be "Peaceful" which seems like an indispensable criterion for the best death. The best way to die is being ready, like being physically, emotionally, spiritually ready to go."

The philosophers have developed a set of five standards for the ideal death:

1. It must be after a person has exhausted his purpose; there's got to be nothing more for him to do.
2. Lessening of energy – mental and physical.
3. The person's affairs should be in order-paperwork, wills, goodbyes, all of it.
4. The person should feel he's leaving something good behind.
5. The death should be quick and painless.

Conventional medical care settings have led to 'bad' deaths, typified by excessive use of technology, patient and family wishes ignored, lack of patient knowledge and autonomy in decision-making, the patient gets reduced to a pathological system, and the quality of life gets devalued. Hospitalized patients stay in pain without their wishes known, and in isolation.

In 2008, Hales reviewed 17 studies defining quality of life at the end of life. Seven common broad domains were found to be important: physical experience, psychological experience, social experience, spiritual or existential experience, the nature of medical care, life closure and death preparation, and circumstances of death. Expectedly, pain and symptom management were the most common issues. Attention to emotional or psychological and social well-being are also crucial.

In early 2000's some studies reported that patients with advanced serious

illness want to know about future course of their illness so as to put personal affairs in order to make financial arrangements and personal business; to not be a burden to family, to prepare their families for the future; and for some, to plan one's own funeral. These studies show that preparation is not limited to patients; families also need to be prepared for what to expect about the course of illness and decision-making. Another less expected domain is the nature of health care. This domain focuses on issues such as appropriateness of level of technological intervention as well as communication with health-care providers. Attributes of life completion include coming to peace, resolving conflicts, contributing to others, spending time with family and friends, and saying good-bye.

'Good dying' is distinct from "good death". For example, immediately after a diagnosis of metastatic disease, preparation may include discussion of possible course of treatment, the combination of curative and palliative therapies and helping patients remain integrated with normal work and social roles. As illness progresses, preparation may include discussion of decreasing the use of curative therapies and increasing palliative approaches and discussion of hospice. As dying becomes imminent, preparation may involve working with the family about expectations of care, location of care and education regarding the very end of life. Good dying is infact preparation for good death.

Take the following steps to reinforce the concept of dying in a health way. Focus on patient safety and autonomy. "Healthy dying is when patients themselves get to choose the agenda and get to take their own time-as long as they're not suffering at all. Acknowledge death as a part of life. Reset loved one's expectations. Prepare family members for what is going to happen. Encourage family members to talk to patients. Ceremonies, prayers and songs can help make this time meaningful too. Loved ones may say goodbye in their own ways."

At the end of life **curative model** changes into a **care model**. Services can be quite brilliant and culturally appropriate. Different views of different faiths and cultures exist on how hard one should strive to keep alive. Jews and Muslims, for instance, tend to argue for doing everything to keep people alive, life itself being seen as the most precious divine gift. Many Christian group are less concerned with length of life than with last rites and final absolution. We need to adopt a new approach to dying striving for a good death. The care of our dying is an indicator that reflects the overall quality of our medical care.

Employing low end technologies and early hospice care will address the terrible symptoms of late stage cancer. The intractable symptoms of cancer in dying need early interventions aimed at preventing or reducing the discomfort and pain of malignancy. This is no simple pursuit of the "good death" but rather a pushing back of the horror of "bad death".

In palliative care, dying is seen as more than the physical diagnosis and disease. Patients are treated "holistically." The dying person's journey ends in death, so we associate the two terms. But dying is not to be conflated with death in one important and crucial way - **dying is living**. The dying are not the dead. And if the dying are living then they are entitled to aspire to everything that other living people should aspire to quality of life that means good company, good professional care, a right to contribute to society in their preferred way, safety at home and in public spaces. **Why should dying be any different!**



Dr. A. K. Dewan

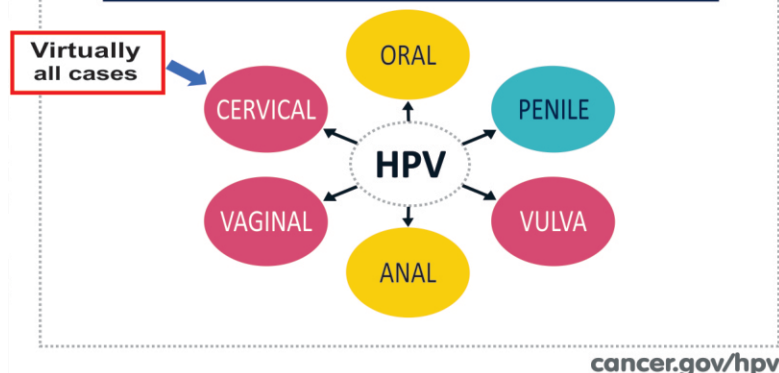
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HPV VACCINATION IN INDIA: NEW PROGRESS AND THE WAY FORWARD

Journey of Cancer: In a promising advance in its fight against cervical cancer, India recently launched its first locally produced version of the human papillomavirus (HPV) vaccine “Cervavac”. Currently, India lacks a national immunization program for carcinoma cervix eradication. Inclusion of Cervavac into the national immunization schedule will undoubtedly boost the fight against cervical cancer.

HPV is a group of more than 200 related viruses, sexually transmitted HPV types fall into two groups, low risk and high risk. High-risk HPVs can cause several types of cancer. **HPV infection is common.** Nearly all sexually active people are infected with HPV within months to a few years of becoming sexually active. **Most HPV infections don't cause cancer.** Our immune system usually clears most of HPV infections. **Only about 1% of High-risk HPV infections that persist can cause cancer.** Human papillomavirus (HPV) infection is a well-established cause of cervical cancer and there is growing evidence of HPV being an important factor in other anogenital cancers (anus, vulva, vagina, and penis) as well as head and neck cancers.

HUMAN PAPILLOMAVIRUS CAN CAUSE SEVERAL TYPES OF CANCER



India has a population of 511.4 million women ages 15 years and older who are at risk of developing cervical cancer. Almost all cervical cancers are caused by persistent infection with one of the 14 high-risk types of human papillomavirus (HPV), with HPV types 16 and 18 accounting for 73% of cervical cancers globally and **80–85% of cervical cancers in India.** Cervical cancer is the second most common cancer in India, with an estimated 1, 23,907 new cases and 77,348 deaths annually (Globocan2020) which is close to one-fifth of the global burden of this cancer. With more than three-quarters of cases diagnosed at a locally advanced clinical stage with poor prospects of survival.

History of HPV Vaccine – It's implementation and studies in India

2008	• Bivalent and quadrivalent vaccines licensed in India
2009	• HPV vaccination demonstration projects in Andhra Pradesh and Gujarat and seven deaths reported (Later found to be not associated with vaccination) • India IARC multicentre study on two versus three doses of HPV vaccination starts recruitment
2010	• HPV vaccination suspended in research studies but continues to be available for prescription
2016	• HPV vaccination initiated by Delhi State Government • Similar efficacy of two and three doses of HPV vaccination established in the India IARC study

2017	• Punjab initiates HPV vaccination in the Bathinda and Mansa districts
2018	• 2018 Similar efficacy of one versus two or three doses reported • Sikkim initiates state-wide HPV vaccination targeting girls aged 9-14 years in 1166 schools • Updated evidence from the India IARC study indicates two doses
2019	• Updated evidence from the India IARC study indicates two doses of the vaccine could be extended to girls aged 15-18 years
2022	• SII launched Cervavac, India's first indigenously made HPV vaccine in September 2022

Types of Vaccines presently available in India

- **Gardasil** - Quadrivalent vaccine, licensed for use since June 2006, by the FDA & since 2008 in India. It targets four strains of human papillomavirus (HPV) -- HPV-6, 11, 16, and 18. HPV-16 and HPV-18 account for about 80-85% of all cervical cancers in India. HPV-6 and -11 cause about 90% of genital warts though benign can be very distressing for the patient.
- **Gardasil – 9** - Nonvalent vaccine, licensed for use in India since 2018 prevents infection with the nine HPV types. Besides 6,11,16 & 18 it contains five other high risk HPV types 31, 33, 45, 52, and 58, that account for an additional about 10% of cervical cancers
- **Cervavac** - Quadrivalent vaccine. It targets four strains of human papillomavirus (HPV) - HPV-6, 11, 16, and 18. This is India's first indigenous vaccine available in market since January 2023. India's first homegrown HPV vaccine can be a game changer as it will be more affordable and accessible.

An indigenous affordable HPV vaccine can address India's cervical cancer burden if other barriers surrounding vaccination are addressed at the same time. Inclusion in the national immunization program will make people realize its importance, as well. Mass awareness campaigns to address vaccine-related myths, misconceptions, stigma etc. need to be organized in order to increase its acceptance. Accurate information is key to boosting the vaccination rate. HPV vaccination provides safe, effective, and lasting protection against the HPV infections that most commonly cause cancer

Age & Dosage Recommendations (FOGSI GCPR / NCI / CDC GUIDELINES)

- Preferred target age group 9-14 years. Two doses: 0 & 6 months (second dose may be given at 5-15 months)
- Catch-up vaccination (15-26 years) Three doses: 0, 1, 6 months (Bivalent, No longer available in India) 0, 2, 6 months (Quadrivalent & Nonavalent)
- Older age groups (27-45 years) Three doses: 0, 1, 6 months (Bivalent) & 0, 2, 6 months (Quadrivalent & Nonavalent). Women aged > 26 years who have been sexually active should be counselled regarding reduced efficacy in older age group and the importance of screening.

HPV vaccination prevents new HPV infections but does not treat existing HPV infections or diseases. Most sexually active adults have already been exposed to HPV, although not necessarily all of the HPV types targeted by vaccination. At any age, having a new sex partner is a risk factor for getting a new HPV infection. People who are in a long-term, mutually monogamous relationship are not likely to get a new HPV infection. **The most favourable time to take the vaccine is "Before the Sexual Debut".**

HPV vaccines should be administered intramuscularly in the deltoid region of the upper arm. HPV vaccines do not protect against all HPV types that can cause cancer. Women who have been vaccinated are advised to follow the same screening recommendations as unvaccinated women.

HPV Vaccination (Special Situations)

- HIV positive or immunocompromised girls – Three doses
- Interrupted doses - Continue with the remaining doses as per age-based recommendation, vaccination series need not be restarted
- Pregnancy and Lactation - Not recommended in pregnancy (if inadvertently given, no need for MTP) Can be given during lactation
- The vaccination of secondary targets such as boys (9-26Years) and older females is recommended where feasible and affordable.

WHO now recommends: (Updated In a new position paper published in Dec. 2022 WHO)

- **A one or two-dose schedule for girls aged 9-14 years**
- **A one or two-dose schedule for girls and women aged 15-20 years**
- **Two doses with a 6-month interval for women older than 21 years**

But one dose efficacy with Cervavac not yet established.

Vaccine Safety: HPV vaccines are based on virus-like particles (VLPs) that are formed by HPV surface components. VLPs are not infectious because they lack the virus's DNA. However, they closely resemble the natural virus, and antibodies against the VLPs also have activity against the natural virus.

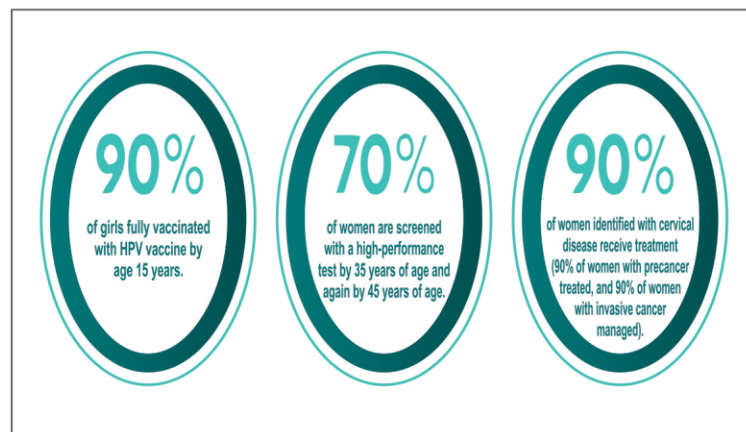
Over 15 years of monitoring has shown that **HPV Vaccine is very safe.**

Like any vaccine or medicine, HPV vaccines can have minor side effects. The most common side effects Pain, redness, or swelling in the arm where the shot is given, Dizziness or fainting (fainting after any vaccination, including HPV vaccine, is more common among adolescents), Nausea / Headache etc. The benefits of HPV vaccination far outweigh the risk of potential side effects. To prevent fainting and injuries from fainting, adolescents should be seated or lying down during vaccination and for 15 minutes after getting the shot.

Cervical cancer is one cancer that we can actually eliminate: it's time to do it.

Eliminating any cancer would have once seemed an impossible dream, but we now have the evidence-based tools to make that dream a reality, they just

need to be made accessible and acceptable. In 2020, World Health Organization approved a strategy aimed at eliminating Cervical Cancer worldwide. To eliminate cervical cancer, all countries must reach and maintain an incidence rate of below 4 per 100 000 women..



Elimination strategy suggests a Three - Pillar approach

- **Vaccination:** 90% of girls fully vaccinated with the HPV vaccine by the age of 15
- **Screening:** 70% of women screened using a high-performance test by the age of 35, and again by the age of 45
- **Treatment:** 90% of women with pre-cancer treated and 90% of women with invasive cancer managed

Each country should meet the 90–70–90 targets by 2030 to get on the path to eliminate cervical cancer within the next century. About 125 countries have HPV vaccine in their national immunisation programme for girls, with about 47 countries extending the programme also to boys. However, this corresponds to only around a third of the global target population. Introduction of the vaccine in low-income and middle-income countries (LMICs), where 90% of deaths occur, remains slower. **There is a long way to go to meet the 2030 elimination target of 90% in India as presently less than 1% of our girls are vaccinated and less than 2% of Indian women have ever been screened according to NFHS-5.**

HPV vaccination is our best defence in preventing HPV-related cancers. India has an impressive track record in its childhood immunization program and recently COVID-19 vaccination. Inclusion of HPV Vaccine into the national immunization schedule will undoubtedly boost the fight against cervical cancer. A strong political and bureaucratic will and an effective public awareness campaign with positive messaging are imperative for the success of any such endeavour. By creating awareness, removing misconceptions and myths the cervical cancer menace can be effectively controlled. It takes Government, NGOs, and other concerned organizations to come together to fight against HPV and cervical cancer. Improvements in screening, diagnosis, and treatment are urgently needed, but widespread vaccination against human papillomavirus will have the largest effect towards eliminating the disease.

The HPV vaccine is CANCER PREVENTION

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QUANTUM LEAPS IN NUCLEAR ONCOLOGY - TOWARDS PRECISION MEDICINE



Over the last few years, the field of nuclear oncology has witnessed several advancements based on continued research. Progress in nuclear medicine is leading to better outcomes in treating several cancers. Especially in cases of thyroid cancer, prostate cancer and neuroendocrine tumours, nuclear medicine has offered a lot of hope, said Dr. P. S. Choudhury, Director of the Nuclear Medicine Department, Rajiv Gandhi Cancer Institute and Research Centre (RGCIRC) and the Organising Chairperson of the annual conference of the Society of Nuclear Medicine India-Northern Chapter 2023, held at New Delhi.

Nuclear medicine is a branch of medicine that uses radioactive substances called radiopharmaceuticals to diagnose and treat diseases, including cancer. The annual conference of the Society of Nuclear Medicine India (Northern Chapter) under the aegis of Indian College of Nuclear Medicine was organized by RGCIRC this year with the theme **"Quantum Leaps in Nuclear Oncology - Towards Precision Medicine"** on Saturday, 08th April 2023 at Indraprastha Hall, RGCIRC, Rohini, Delhi.

"The conference was an effort to share knowledge and exchange ideas about the rapidly growing field of nuclear oncology and its movement towards precision medicine. This meeting saw participation from nuclear medicine physicians, onco surgeons, medical oncologists, radiation oncologists, pathologists, radiologists, technologists, medical physicists, and scientists, essentially all the stakeholders that are involved in cancer treatment and planning", said Dr Manoj Gupta, Sr. Consultant - Nuclear Medicine, RGCIRC and Organising Secretary of the Conference 2023.

The conference had experts from AIIMS New Delhi, AIIMS Rishikesh, AIIMS Jodhpur, PGI Chandigarh, SGPGI Lucknow, and several leading private hospitals. Four international faculties from Australia and South Africa also participated physically, taking an active part. Nuclear medicines therapies work on the concept of Theranostics (Therapy + Diagnosis). The same target is being used for diagnosing and treating a particular type of cancer. Hence, it provides a precision treatment with limited side effects. The most recent developments include new therapies for metastatic prostate cancer and neuroendocrine tumours.

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