"The future depends on what you do today" and "In a gentle way, you can shake the world".
– Mahatma Gandhi

AFFORDABLE HEALTHCARE

Affordable healthcare remains one of the most pressing challenges of our time, particularly in developing countries like India, where rising medical costs often push families into financial distress. While significant strides have been made in expanding access to medical services, the gap between policy intent and ground reality continues to hinder equitable healthcare delivery. One of the major barriers to affordable healthcare is the high out-of-pocket expenditure borne by patients. Despite government initiatives such as Ayushman Bharat, which aims to provide financial protection to vulnerable populations, many citizens still struggle to access quality treatment without incurring heavy expenses. This is particularly evident in rural and semi-urban areas, where healthcare infrastructure remains underdeveloped and private healthcare often becomes the only viable option. The imbalance between public and private healthcare systems further complicates the issue. While government hospitals are intended to provide low-cost or free services, they are frequently overburdened, understaffed, and lack essential resources. On the other hand, private hospitals offer advanced care but at a cost that is unaffordable for a large section of society. This duality creates a system where quality healthcare is often seen as a privilege rather than a basic right. Another critical aspect is the shortage of trained medical professionals in underserved regions. Strengthening primary healthcare centers, investing in medical education, and incentivizing doctors to serve in rural areas are essential steps toward addressing this imbalance. Additionally, the integration of digital health technologies, including telemedicine, can play a transformative role in making healthcare more accessible and cost-effective. Preventive healthcare is equally important in reducing the overall burden on the system. Public awareness campaigns, early diagnosis, and regular health check-ups can significantly lower treatment costs and improve health outcomes.

However, these measures require sustained investment and community participation to be truly effective. The role of policy and governance cannot be overlooked. Efficient implementation, transparency, and accountability are key to ensuring that healthcare schemes reach the intended beneficiaries. Collaboration between government bodies, private institutions, and civil society can create a more inclusive and resilient healthcare ecosystem. Delivering affordable healthcare is not merely a policy goal-it is a moral imperative. A healthy population is the foundation of a productive and prosperous nation. Bridging the gap between affordability and accessibility requires a holistic approach that addresses systemic challenges while prioritizing the needs of the most vulnerable. While progress has been made, much remains to be done. Ensuring affordable healthcare for all demands sustained commitment, innovative solutions, and collective responsibility. Only then can the vision of universal healthcare become a reality rather than a distant aspiration.

Human Papillomavirus (HPV) Vaccine: Myths vs Reality

■ DR RASHMI SHARMA

On 28 February 2026, the Government of India launched a nationwide Human Papillomavirus (HPV) vaccination drive targeting 14-year-old girls (those who have completed 14 years but not yet turned 15). Free doses of Gardasil-4 are being provided at government health facilities under the programme. But, since the launch of the vaccine drive various rumours started circulating on the social media regarding safety of the vaccine without verifying the real facts. This created anxiety and distrust among the people. The purpose of this article is to bring true scientific facts before the people so that parents can make well-informed decisions for the protection of their daughters.

What is cervical cancer?

Cervical cancer (cancer of the lower end of the uterus) remains a major public health challenge in India. India accounts for nearly 25% of global cervical cancer deaths. It is the second leading cancer among Indian women after breast cancer. Every year over 127,000 women are diagnosed with the cancer, leading to more than 75,000 deaths in India.

Why is HPV vaccine ?

Human Papillomavirus (HPV) infection is responsible for nearly 99.7% of cervical cancer cases. Most HPV infections are asymptomatic and resolve spontaneously within 1-2 years. However, when the infection persists (stays for longer period or repeated infections), it can lead to cervical cancer. HPV infection can also cause other cancers, including anal, oropharyngeal, vulvar, vaginal, and penile cancers. A vaccine against HPV can give protection against cervical cancer.

HPV Vaccine in the Campaign :

We are givingGardasil-4 vaccine. It is a quadrivalent HPV vaccine that protects against four HPV types:High-risk types 16 and 18 (responsible for about 83% of cervical cancer cases in India) and types 6 and 11 (which cause most cases of genital warts) The World Health Organization (WHO) recommended HPV vaccination as a key strategy for the prevention of cervical cancer, with girls as the primary target population. The global strategy is to eliminate cervical cancer by 2030 includes by :Vaccinating 90% of girls with the HPV vaccine by 15 years of age, Screening 70% of women at ages 35 and 45 and Providing appropriate treatment to 90% of women who test positive.

Gardasil 4 is not a new vaccine:

There are myths/ rumours among people that Gardasil 4 is a new vaccine. People are concerned about its safety concerns. It is the first vaccine against cervical cancer approved by FDA on 8June, 2006 after extensive preclinical and clinical trials. It has been in use globally for nearly 20 years, and more than 500 million (50 crore) doses of HPV vaccines have been administered worldwide with an excellent safety record.

Single dose of HPV vaccine is sufficient to give protection.

Another confusion that is striking in people's mind is "Why free single dose is being given under the campaign; whereas in private practitioners are prescribing 2 to 3 doses". Since we have long experience with the use of HPV vaccine of nearly 20 years and current scientific evidence has suggested that a single dose of the vaccine is as effective as 2 or 3 dose schedule. Currently nearly 160 countries have introduced HPV vaccine in their immunization programme and more than 87 countries stated following a single dose schedule.

Safety issues with HPV vaccine

There are rumours among public regarding safety concerns related to the vaccine. It is time tested safe vaccine. It is not a live vaccine and cannot cause serious disease or cancer. It is non-infectious, a recombinant vaccine like hepatitis B vaccine. It does not interfere with menstrual cycle or reproductive physiology of the girls. HPV vaccine doses not cause infertility or any problem with future pregnancies. Many women are vaccinated with HPV vaccine in the past 20 years and are enjoying healthy motherhood. Adverse events related to HPV vaccine as in case of other vaccines are continuously monitored through established vaccine safety surveillance systems.

Can it be given to other age groups?

Presently under the programme free vaccine is provided only to the girls of 14yrs (before 15th birthday). However, it is more effective between 9 to 15 years of the age and FDA has approved it for use in girls and women from 9 to 45 years of age. Why only girls are vaccinated under the programme and not boys?

It's a public health programme and presently only girls are being protected.It is a sexually transmitted viral infection and by giving vaccine to over 80% of girls, we can also reduce the risk of HPV infection in boy (providing indirect protection to unvaccinated individuals).

HPV vaccine campaign :

For the first three months HPV vaccine is being given on a campaign mode on daily bases in Govt Health Facilities, there after it will be introduced in our universal immunization programme. Although it is an expensive vaccine; it is available at government health facilities free of cost. Visit your nearest health facility and get your daughters vaccinated.

HPV vaccination is a safe, effective, and evidence-based intervention that can significantly reduce the burden of cervical cancer and save thousands of lives in India each year. A single shot for protection with HPV vaccine can give our daughters healthy future.

(The writer is District Immunization Officer Jammu)

Leveraging Information and Communication Technologies for Sustainable Agriculture

■ DR. BANARSI LAL

The Indian government is giving high priority to the rural development with the objective to achieve rural-urban integration in growth processes. The focus of development is to include disadvantaged sections of the society. Biodiversity is declining due to population expansion, extensive agriculture, urbanization, infrastructural development etc. Decreasing rainfall affecting agricultural output, Land degradation, deforestation and ecosystem loss are further aggravated by the extreme climate change vulnerability. The increasing water scarcity negatively affects ecosystems, livelihoods and agriculture. To address all these issues, fast action is required to protect environment and promote sustainable agriculture. The rapid development of agricultural and rural areas can be achieved with the reach of information in remote rural areas of the nation through information technologies. Without the sustainable development of rural areas ,the socio-economic development of a nation is impossible. Information and Communication Technologies abbreviated as ICTs consist of information technologies, enterprise software, audio-visual system etc. using which the user can access, store, transmit and modify information as required. Information and Communication Technologies can be thought as an umbrella under which there reside communication system, device and application. Information and Communication Technologies contribute a lot for the socio-economic development of the rural people. Exponential growth of internet user ,invention of modern communication technologies, significant development of cloud and grid computing etc. have helped ICTs to flourish as a rapid developed technological field in the last decade. Communication maintains and animates the life. It is also a motor and expression of social activity and civilization. It leads people from instinct to inspiration, through process and system of enquiry, command and control. It creates a common pool of ideas, strengthens the feeling of togetherness through the exchange of messages and translates through into action. As the world has advanced, the task of communication has become more complex. However, unless some basic structural changes are introduced, the potential benefits of technological and communication development will hardly be put at disposal of the majority of mankind. Communication is the core activity of human association in general and progress as well as development in particular. No human life can exist in isolation. A man can survive only in society and the survival in society is possible with communication. Therefore, communication is identified as the oldest continued activity of human being since birth and goes on and on till death. More precisely, communication is the basic need of human beings and web of society which makes the survival, growth, progress and development of man possible and holds the society intact and progressive. To sum-up, communication is a vital part of personal life in the society. It is equally important in business, education, civilization, administration and other situations where people encounter with each other to satisfy their needs and wishes.

Present era is an era of information and communication technology (ICT). It is more interactive and can render information as per the need of ultimate users and ensures the possibility for quick information gathering, processing, transmission, preservation and sharing for social, economical and cultural upliftment. The growth of technologies in the field of communication leads to global spread of knowledge and application which leaves multi-dimensional impact on all spheres of human activity by accelerating the process of information exchange and reducing the cost involved in achieving the ultimate objectives at farmers field. The information and communication technology can render technical services in agriculture and allied sectors, weather information, market information, global information regarding agriculture, state and central agricultural schemes formed for the welfare of the farmers. In the country like India, the use of information and communication technology is in an ascent stage to help the farmers in taking right decisions at right time to carry out their farm operations. The effectiveness of any organisation depends upon several factors, out of which effective communication is one of the most important. Presently the dissemination of the agricultural information is mostly depending on information and communication technologies.

In present era, information technology is playing the significant role in the health, education, commerce and marketing services etc. The extension of the agricultural industry chain is an important component of the rural development. In India many problems like inadequate infrastructure are barrier in initiating information and communication technologies in agriculture and other allied sectors. Mostly the farmers in our country are small and marginal and their economic standard is not so strong to afford the cost of information technologies. Inaccessibility of farmers to information and communication technologies will polarize the knowledge of global society. The information and communication technologies like Voice Over Internet Protocol (VOIP) and Wireless in Local-Loop (WLL) are cheaper sources of information infrastructure and this can be a milestone in improving accessibility to new technologies.

Now the internet has started to dispatch its services to the farmers through its network, knowledge services and this will help to flow many kinds of agriculture and allied sectors produces from villages to long distances. Internet is emerging as potential tool to access global information and enabling two way communication. In order to exploit the potentiality of Internet, Food and Agriculture Organisation (FAO) has formulated Virtual Extension and Research Communication Network (VERCON) to establish within human and institutional elements of agricultural and allied sectors research and extension. Videoconferencing is very helpful for the farmers of far-flung areas to interact with researchers, administrators and policy makers.

Digital technology empowers the integration of tertiary industry through the construction of digital infrastructure, industrial digitization and digital industrialization. In order to provide information and communication technologies in the rural areas, several projects have been implemented on pilot basis. The village knowledge centre run by M.S.Swaminathan Research Foundation (MSSRF) in Pudducherry represented an experiment in providing information and knowledge resources to total community on various subjects of education, agriculture, animal husbandry and banking.

This project used wireless radio for data and analog voice transmission between semi-urban hub centre and eight village centres. Information and communication technologies have a remarkable impact on agricultural and allied sectors. In order to enlarge the use of technologies for the rural people we need to design products, services and technologies that can solve the farming related problems and ameliorate local social-economic conditions. The lack of focus on rural areas communication, inefficient market for agricultural products, inability of government in dealing with the natural resources, management to integrate new technology into their operation and badly structure approach towards economic reform in information technology sectors are some of the constraints in transfer of technology to the farmers' fields. The potentiality of information technology is extensive and needs to be exploited for more personalized services in agriculture and allied sectors. The access of information and communication technologies to the farming community should be increased by reducing the cost of cultivation. Information and communication technologies are helpful to (i) Increase the awareness and knowledge of farmers about the new technologies in agriculture and allied sectors.(ii) Increase awareness about the government programmes and policies.(iii)Increase the agricultural productivity of the farmers.(iv)Increase price realization of farm produce at village level.(v)Improvement in agricultural extension.(vi)Enable community based organisation to promote income generating activities. Many farmers have developed their own new package and practices and they are proved useful in increasing the agricultural productivity. Most of these technologies remain in local use and are not disseminated globally. The use of information and communication technologies based measures like video and audio CDs can facilitate the accessibility of these innovations to the farmers who cannot read. Information and communication technologies have largely been understood as the new kind of media and communication development infrastructure which helps in the dissemination of information across distance. The information and communication technologies infrastructure can improve the cost and quality of extension services as the present extension system is severely affected by limited efficient manpower. Competitiveness in the Indian agriculture and allied sectors can trigger higher productivity, higher income and risk management by inducing effective information technology.

In order to find out ways for suitable information technology in agriculture, our research organisations need to set some village knowledge centres. Whenever a new sound technology is developed, it should be supplied to village knowledge centre from where it can be used by the farmers. Significant results of agricultural technologies should be shown to the farmers using new communication technologies like multi-media, video-conferencing and internet in their villages to create awareness. There is need to foster an atmosphere conducive to ICTs adoption by emphasising agricultural extension and training programmes especially for rural youths.Training and education can empower rural youths to use ICTs effectively.There is need to stress on ICTs infrastructure and create policies that promote the adoption of sustainable technologies in agricultural and environmental protection.

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The crisis looming over sparrows is a silent warning for the world

■ YOGESH KUMAR GOYAL

Birds are an essential part of the Earth's ecosystem, and their presence plays a crucial role in maintaining environmental balance. The sparrow, once a familiar sight chirping in our courtyards, rooftops, and gardens, and an integral part of our daily lives, is now becoming increasingly rare. This tiny bird, which once nested in our homes and nearby trees, is now on the brink of extinction, and its cheerful chirping has almost faded away. There was a time when waking up to the sound of sparrows brought peace and joy to our minds, but today, that melody seems to have disappeared. Sparrows have held a special place in Indian folklore and poetry and have long been a part of our emotions and everyday experiences. Until about two decades ago, they could be seen flying in flocks everywhere, but now they have become a threatened and rare species.

The decline in sparrow populations is not limited to India; it is a global concern. In several parts of Europe, sparrow numbers have dropped significantly. In the Netherlands, sparrows have been categorized as a "rare species," and countries such as Germany, Britain, Italy, France, and the Czech Republic have also witnessed a rapid decline. In many Western nations, their population has fallen to alarming levels. To raise awareness about the rapidly declining existence of sparrows and to encourage conservation efforts, World Sparrow Day is observed every year on March 20. This day was initiated in 2010 by the Nature Forever Society, founded by renowned Indian environmentalist Mohammed Dilawar. It serves not only to spread awareness about sparrow conservation but also reminds us of our responsibilities toward nature.

Sparrows are not just birds; they are an important part of our childhood memories, traditional culture, and environmental balance. They contribute significantly to biodiversity. Sparrows feed on small insects and grains, helping control pest populations in agricultural fields. They also contribute to maintaining soil fertility and play a role in the food chain as a source of food for other creatures. The disappearance of such a small bird is a clear indication of serious environmental changes. Urbanization and industrialization have destroyed the natural habitats of sparrows. The cutting of trees and the replacement of traditional houses with concrete structures have reduced nesting spaces. Air pollution, noise pollution, and climate change have all contributed to their decline. Radiation from mobile towers is also considered a potential threat. Additionally, the excessive use of pesticides and chemical fertilizers in agriculture has reduced food availability for sparrows. Over the past two to three decades, our lifestyle has undergone significant changes. Driven by selfish interests, we have destroyed forests, disrupted ecological balance, and endangered numerous species of birds and animals by hunting them or destroying their habitats. Sparrows have also been severely affected by these changes. Lack of food and water, absence of nesting spaces due to modern housing, rapid deforestation, changing lifestyles, harmful radiation, and rising temperatures are among the key reasons behind their decline. The increasing use of pesticides in fields has further worsened the situation. Another contributing factor is the vulnerability of their nests, which are often destroyed or preyed upon by crows and other birds.

Today's generation is increasingly disconnected from nature and wildlife. Lack of awareness is also a major challenge for sparrow conservation. To protect sparrows, we must plant more trees and create nesting spaces in line with traditional housing designs. Promoting organic farming and reducing pesticide use can improve food availability for sparrows. Small wooden or earthen nest boxes can be installed to help them breed. Placing grains and water in courtyards or on rooftops can also support their survival. Additionally, the government should implement strict regulations to control harmful radiation from mobile towers. Awareness programs in schools, colleges, and social institutions are also necessary.

Although the Government of India and wildlife conservation organizations have launched several initiatives to increase sparrow populations and promote their conservation, much more needs to be done. Organizations such as Nature Forever Society, Bombay Natural History Society, and several local groups have undertaken commendable efforts, including installing nest boxes in homes and public spaces. However, these efforts need to be expanded and accelerated. If we fail to act now, sparrows may survive only in books and stories in the future. Therefore, collective and sincere efforts are essential to ensure that the cheerful chirping of sparrows once again fills our homes and gardens.

(The author is a senior journalist)