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INDIAN SOCIETY FOR
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THE IMMUNE

Harnessing Immunity



Issue Highlights:

Article

- Vaccination in Pre-Independence Era
- Technological advancements in Vaccine Development

Masterclass

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India Story:
Vaccine Supremacy and G20
presidency



**INDIAN SOCIETY FOR
ADULT IMMUNIZATION**

IS PROUD TO ANNOUNCE

ISAICON '24

AT

**DHANO DHANYE,
KOLKATA**

ON

20-21ST JANUARY 2024

INDIA STORY:

FROM VACCINE SUPREMACY TO G20 PRESIDENCY

As India commemorates her 77th year of independence, a remarkable story unfolds, one that resonates with pride and admiration for the nation's resolute response to the global pandemic. From the vantage point of a public health researcher with a background in medicine, the journey of India's resilience and self-sufficiency stands as a remarkable example of a nation's commitment to change within the health system

DR. ARKA PROVO PAL

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Immunization



In this narrative, the Government of India emerges as a central protagonist, steering the nation through the tumultuous waves of the pandemic with sagacity and purpose. The orchestration of an extensive vaccination campaign, among the most comprehensive in modern history, reflects a nation's resolve to safeguard its citizens while simultaneously assuming a global leadership role in healthcare, garnering international recognition for administrative and implementation prowess.

Crucial to this narrative are the Indian pharmaceutical companies, whose indomitable spirit, ingenuity, and collaborative efforts have been pivotal in propelling the nation towards healthcare prominence. This pivotal juncture witnessed these entities contributing not only to India's vaccine self-sufficiency but also extending their support to nations grappling with vaccine shortages globally. This collaborative approach echoes the ethos of India's G20 presidency, where the nation assumed a pioneering role in fostering collective solutions that transcend national boundaries, reflecting the age-old principle of 'Vasudhaiva Kutumbakam' - "The world is One family".

Bridging the chasm between tradition and innovation, India's aspiration to integrate traditional Indian medicine with contemporary technology resonates with the concept of One Health. This paradigm shift aims to transcend the compartmentalization of healthcare, offering a comprehensive approach that amalgamates preventive, curative, and promotive aspects.

The narrative further advances as the spotlight turns to the evolving landscape of medicine, from evidence based to precision medicine, underscored by immunology's pivotal role. Vaccines, quintessential immunological tools, epitomize the human body's remarkable defense mechanism against infectious agents. This remarkable phenomenon extends its influence beyond communicable diseases, holding the potential to revolutionize treatment strategies for non-communicable ailments.



As the story unfolds, a compelling narrative of partnership between the government, pharmaceutical companies, and the medical fraternity comes to the fore. Together, these stakeholders are tasked with nurturing and expanding the horizons of healthcare through novel modalities of treatment, centered around vaccines. This collaborative pursuit necessitates governmental facilitation and support for cutting-edge research, while the medical fraternity serves as the custodian of these initiatives, adeptly blending traditional Indian medical wisdom with contemporary advancements.

India's 77th year of independence marks not only an anniversary of past achievements but a heralding of its transformative journey towards healthcare leadership. As observed by the dispassionate lens of a public health researcher rooted in medical understanding, India's saga exemplifies the power of collective determination, innovation, and cooperation. This journey serves as an ode to the nation's intent to reshape the healthcare paradigm, contributing meaningfully to the well-being of the global community.

MESSAGE FROM PRESIDENT

DEAR ESTEEMED MEMBERS,

I stand before you with immense pride and gratitude as we reflect upon the remarkable success of the **ISAICON 23** on the 4th- 5th of February 2023 at Science City, Kolkata. The resonance of this event among the medical fraternity, transcending disciplines, has truly been overwhelming. The enthusiasm with which doctors have embraced the concept of adult vaccination as an integral facet of healthcare delivery has been nothing short of inspiring.

DR. SAURABH KOLE

Founder President
Indian Society For
Adult Immunization



The essence of progress lies in adaptation and innovation, and I am pleased to announce that ISAI has taken a significant stride forward. With the vision of making vaccination an ingrained practice in the medical field, we will be introducing online courses tailored to guide doctors in administering vaccinations with scientific precision very shortly. This initiative aims to bridge knowledge gaps, ensuring that every Indian doctor is equipped to provide the best care and protection to their patients through vaccination.

Our commitment to inclusivity and community well-being has been evidenced by our recent endeavors. On the occasion of **World Hepatitis Day**, the **28th of July 2023**, ISAI joined hands with **Solidarity and Action Against The HIV Infection in India (SAATHII)** to organize an adult vaccination awareness camp. The highlight of this event was the Hepatitis B vaccination drive for the transgender community *at Islampur, West Bengal*. This collaboration underscored our dedication to reaching marginalized groups and promoting health equity through proactive vaccination efforts.

Looking ahead, I am thrilled to unveil the upcoming milestone in our journey. Mark your calendars for **ISAICON 24**, scheduled to take place at the **Dhanadhanyo Auditorium in Kolkata** on the **20th-21st January 2024**. In the current era, characterized by the relentless rise of viral infections, the importance of vaccine-generated immunity cannot be overstated. We are at a juncture in medical history where the foundation of a pandemic-resilient healthcare system hinges upon widespread vaccination awareness and implementation.

ISAICON 24 represents a watershed moment in this trajectory. It will serve as a beacon of vaccine consciousness, guiding the medical fraternity towards embracing vaccines as a central pillar of individual and community health. I extend a fervent call to action to each member of our society.

Let us unite our efforts and energies to ensure that ISAICON 24 becomes a resounding success, echoing our collective commitment to a healthier and safer world.



Collaboration: The key?

As we march forward, let us keep in mind the words of **Mahatma Gandhi**: "**The future depends on what you do today.**" Let us seize this moment to sow the seeds of a resilient and vibrant healthcare landscape, rooted in the principles of prevention, compassion, and unwavering dedication.

Thank you, and let us together create a lasting impact in the realm of Adult Immunization.

MESSAGE FROM SECRETARY

DEAR FRIENDS,

Congratulations on the eve of 77th Independence Day. We definitely feel proud of this day but with a heavy heart I like to say that as of today (even 76 years after Independence) we the Indians still reel under the effect of undernutrition & various infectious diseases.

DR. (PROF.) PARTHA S. KARMAKAR

HOD,
Department of
Medicine
Hon. Secretary
Indian Society of Adult
Immunization



We have just overcome from COVID grip, the threat that stretched for almost two and half years. This pandemicity has definately decreased our inertia & increased our awareness about adult immunisation to some extent but we both the doctors & the people (from all walk of life) are far away from expected level of awareness. It is really a failure on the part of the medical fraternity to spread the importance of vaccination among adults & elderly citizens. It's still a matter of children.

I humbly appeal to all the doctor readers to be member of our society (ISAI) and together we can take an oath to work hand in hand to have complete control over vaccine preventable diseases.

We shall overcome..
We shall overcome..
We shall overcome....
.....The menace of
infectious diseases very
soon.
Thank you.
Be safe & healthy.

STILL HESITANT?



MANAGEMENT OF OCCUPATIONAL EXPOSURE TO NEEDLESTICK INJURIES

Needlestick injuries are frequent occurrences in healthcare settings. It can lead to serious complications. While the introduction of universal precautions and safety-conscious needle designs has led to a decrease in needlestick injuries, they still do occur.

DR. RINA GHOSH

**Consultant
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Vice President,
Indian Society for
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Awareness of needlestick injuries started to develop soon after the identification of HIV in the early 1980s. However, today the major concern after a needlestick injury is not HIV but hepatitis B or hepatitis C.

Guidelines have been established to help healthcare institutions to manage needlestick injuries. Risk increases if patient has high viral load.

Average risk of infection after an occupational exposure:

<i>Disease</i>	<i>Risk</i>
Hepatitis B	9-40%
Hepatitis C	1-10%
HIV	0.3% (1 in 300)

Body fluids to which universal precautions apply

1. Blood
2. Other body fluids containing visible blood
3. Semen
4. Vaginal secretions
5. Cerebrospinal fluid (CSF)
6. Synovial fluid
7. Pleural fluid
8. Peritoneal fluid
9. Pericardial fluid
10. Amniotic fluid

PREVENTION OF OCCUPATIONAL EXPOSURE

STANDARD PRECAUTIONS (UNIVERSAL WORK PRECAUTIONS) AND SAFE PRACTICES:

1. Wash hand after patient contact, removing gloves.
2. Wash hands immediately if hands contaminated with body fluids.
3. Wear gloves when contamination of hands with body substances anticipated
4. *Protective eyewear* and *mask* should be worn when splashing with body substance is anticipated
5. All health care workers should take precautions to prevent injuries during procedures and when cleaning or during disposal of needles and other sharp instruments.
6. Handle and dispose sharps safely



Safety precautions for **sharps** disposal:

- 1) Needle *should not* be **recapped**.
- 2) Needles should not be purposely bent or broken by hand.
- 3) Needles should *not removed* from disposable syringe *nor manipulated* by hand.
- 4) After use disposable syringes and needles, scalpel blades and other sharp items should be placed in a **puncture resistant container**.

7. Health care workers who have exudative lesions or dermatitis should refrain from direct patient care and from handling equipment.
8. Clean & disinfect blood / body substances spills with appropriate agents.
9. Adhere to disinfection and sterilization standards
10. Regard all waste soiled with blood/body substance as contaminated and dispose of according to relevant standards.
11. **Vaccinate all clinical and laboratory workers against Hepatitis B.**
12. Double gloving, changing surgical techniques to avoid "exposure prone" procedures use of needle-less systems and other safer devices.

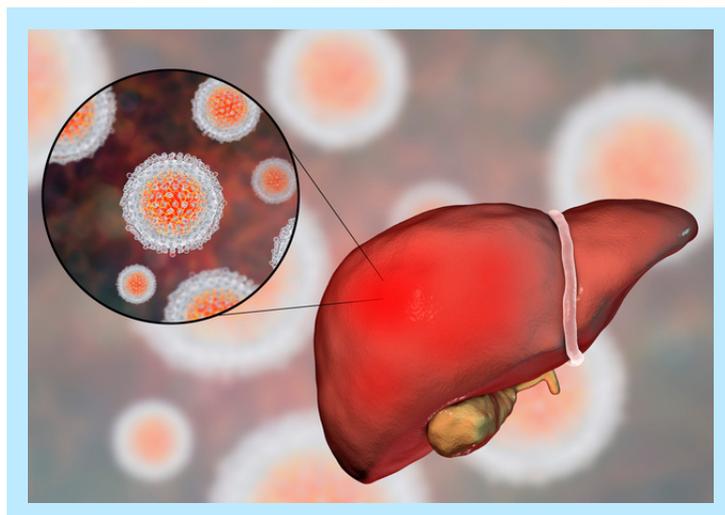


POSTEXPOSURE PROPHYLAXIS TO PREVENT HEPATITIS B VIRUS INFECTION

The guidelines for management of persons with nonoccupational exposure to hepatitis B virus (HBV) through a discrete, identifiable exposure to blood or body fluids. Guidelines for post exposure prophylaxis of occupational exposures include serologic response for employees.

I. HBsAg-Positive Exposure Source

- Persons who have written documentation of a *complete hepatitis B vaccine series* and who *did not receive post-vaccination testing* should receive a single vaccine booster dose.
- Persons who are *in the process of being vaccinated* but who have *not completed* the vaccine series should receive the appropriate dose of Hepatitis B immune globulin (HBIG) and should complete the vaccine series.
- *Unvaccinated* persons should receive **both** HBIG and Hepatitis B vaccine *as soon as possible* after exposure (preferably **within 24 hours**). Hepatitis B vaccine may be administered simultaneously with HBIG in a **separate injection site**. The hepatitis B vaccine series should be completed in accordance with the age-appropriate vaccine dose and schedule. For persons who refuse Hepatitis B Vaccine, a *second dose* of Hepatitis B Immune Globulin (Human) should be given *1 month* after the first dose.



II. Unknown HBsAg Status Exposure Source

- Persons with written documentation of a complete hepatitis B vaccine series require **no** further treatment.
- Persons who are not fully vaccinated should **complete** the vaccine series.
- Unvaccinated persons should receive the hepatitis B vaccine series with the first dose administered as soon as possible after exposure, preferably **within 24 hours**. The vaccine series should be completed in accordance with the age-appropriate dose and schedule.

Guidelines for Perinatal Exposure of Infants Born to HBsAg-positive Mothers

Infants born to HBsAg-positive mothers are at risk of being infected with hepatitis B virus and becoming chronic carriers. This risk is especially great if the mother is HBeAg-positive. For such infants with perinatal exposure to an HBsAg-positive and HBeAg-positive mother, a regimen combining one dose of Hepatitis B Immune Globulin (Human - 0.5 mL containing 100 IU) intramuscularly at birth with the hepatitis B vaccine series started soon after birth preferably within 12 hours. HB vaccine (0.5ml), recombinant should be administered IM opposite to the limb where HBIG has been administered. This regimen is 85%–95% effective in preventing development of the HBV carrier state. Regimens involving either multiple doses of Hepatitis B Immune Globulin (Human) alone or the vaccine series alone have 70%–90% efficacy, while a single dose of Hepatitis B Immune Globulin (Human) alone has only 50% efficacy.

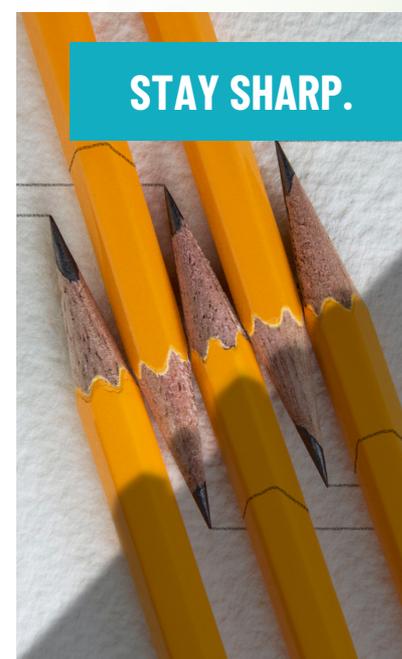
Recommendations for Hepatitis B Prophylaxis Following Percutaneous or Permucosal Exposure

Source	Exposed Person	
	Unvaccinated	Vaccinated
HBsAg-Positive	1. Hepatitis B Immune Globulin (Human) x1 immediately [‡]	1. Test exposed person for anti-HBs.
	2. Initiate HB Vaccine Series [‡]	2. If inadequate antibody, [‡] Hepatitis B Immune Globulin (Human) (x1) immediately plus HB Vaccine booster dose, or 2 doses of HBIG; [‡] one as soon as possible after exposure and the second 1 month later.
Known Source (High Risk)	1. Initiate HB Vaccine Series	1. Test Source for HBsAg only if exposed is vaccine nonresponder; if source is HBsAg-positive, give Hepatitis B Immune Globulin (Human) x1 immediately plus HB Vaccine booster dose, or 2 doses of HBIG; [‡] one as soon as possible after exposure and the second 1 month later.
	2. Test source for HBsAg. If positive, Hepatitis B Immune Globulin (Human) x1	
Low Risk HBsAg-Positive	Initiate HB Vaccine series	Nothing required.
Unknown Source	Initiate HB Vaccine series within 7 days of exposure	Nothing required.

[‡] Hepatitis B Immune Globulin (Human), dose 0.06 mL / kg IM.

[‡] HB Vaccine dose 20 µg IM for adults; 10 µg IM for infants or children under 10 years of age. First dose within 1 week; second and third doses, 1 and 6 months later.

[‡] Less than 10 sample ratio units (SRU) by radioimmunoassay (RIA), negative by enzyme immunoassay (EIA).

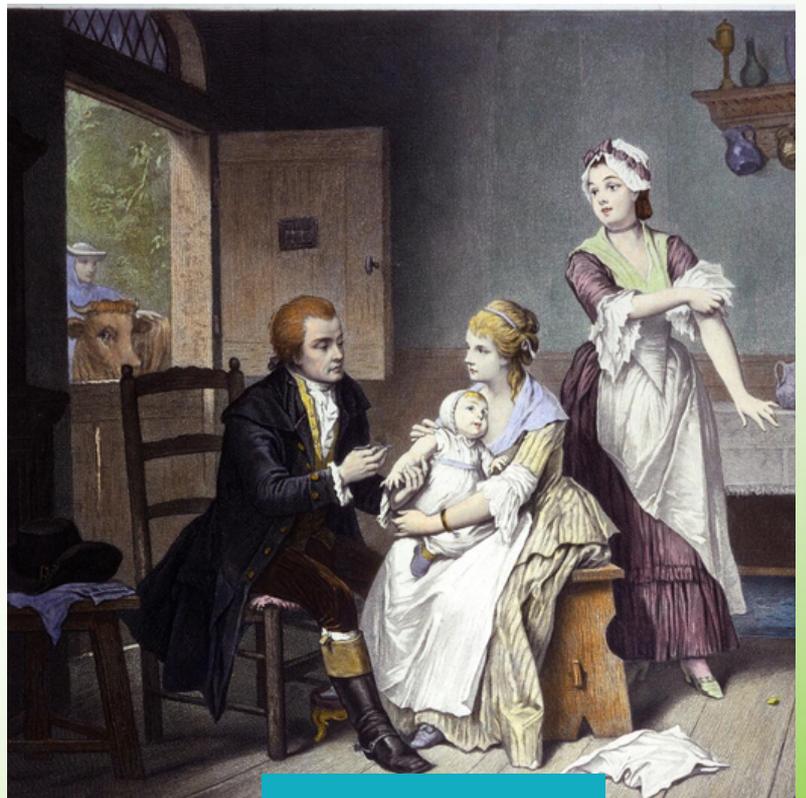


VACCINATION IN PRE INDEPENDENCE ERA

Vaccination is a proven and one of the most cost-effective survival interventions. All countries in the world have an immunization programme to deliver selected vaccines to the targeted beneficiaries, specially focusing on pregnant women, infants and children, who are at a high risk of diseases preventable by vaccines. The number of antigens in the immunization programmes varies from country to country; however, there are a few selected antigens against diphtheria, pertussis, tetanus, poliomyelitis, measles, hepatitis B which are part of immunization programmes in most of the countries in the world. The first vaccine (small pox) was discovered in 1798. The most striking success of these efforts has been the eradication of smallpox disease from the planet. Though a proven cost-effective preventive intervention, the benefits of immunization is not reaching to many who are at the maximum risk of the diseases preventable by these vaccines.

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Assistant
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EDWARD JENNER

ANCIENT TIMES TILL FIRST DOCUMENTED SMALLPOX VACCINATION IN INDIA IN 1802

- **Ancient Times (3000 years ago):** Smallpox, along with other infectious diseases like measles, is believed to have originated in India or Egypt. Early observations by scholars like Thucydides (430 BC) and Rhazes (910 AD) suggested that those who survived smallpox were protected from future infections. Abu Bakr (900 AD) distinguished between measles and smallpox.
- **1545 AD:** A significant smallpox epidemic is reported from Goa, India, causing an estimated 8,000 child deaths. Smallpox is sometimes referred to as the 'Indian Plague,' indicating its prevalence in India historically.
- **Around 1000 AD:** Smallpox inoculation (variolation) is practiced in China. Similar practices are adopted in India, Turkey, and possibly Africa. Inoculation involves infecting a healthy person with a mild form of the disease to provide protection from severe illness in the future.
- **1767:** Dr. JZ Holwell describes the practice of smallpox inoculation in India to the Royal College of Physicians in London. The practice is documented in Bengal and Bombay presidencies.
- **Late 18th Century (1774):** Benjamin Jesty, an English farmer, inoculated his family with cowpox matter, demonstrating potential immunity to smallpox.
- **1798: Edward Jenner** published "*An Enquiry into the Causes and Effects of Variolae Vaccinae*," detailing his discovery of the smallpox vaccine. He observes that cowpox virus inoculation provides protection against smallpox.
- **Early 19th Century (1802):** The smallpox vaccine arrives in India, four years after its discovery by Jenner. This marks the first documented smallpox vaccination in India.

VACCINATION IN INDIA (1802-1899)

The first doses of smallpox vaccine lymph in India arrived in **May 1802**.

Anna Dusthall, a *three year old* child from Bombay (now Mumbai) became the first person in India to receive smallpox vaccine on **June 14, 1802**.

From Bombay, through *human chain of vaccines*, the smallpox vaccine as lymph was sent to Madras, Poona (Pune), Hyderabad and Surat. The proven benefits of smallpox vaccination had such impact that *variolation was outlawed* in many European countries and also in some provinces of India as *early as 1804*.



GODDESS SHITALA

Barriers and Challenges:

The uptake in the general public was low due to several reasons including need to pay a small fee for vaccination, belief in the practice of inoculation and that the disease was a wrath of goddess and many other misconceptions. There were special efforts done by officials of **Indian Medical Services** to popularise smallpox vaccination. Indian queens volunteered.

Another major factor was organized oppositions by erstwhile '**Tikadaars**' (who were involved in variolation) to smallpox vaccination fearing that they might lose their jobs.

By **1850 AD**, as vaccine coverage increased, the challenges such some *post-vaccination deaths, post-operative complications and unsuccessful vaccine take* raised programmatic difficulties.



WADIYAR QUEENS

In 1805, Devajammani, a young queen in the Mysore royal court, embarked on a remarkable mission. Commissioned by the East India Company, her portrait captured a pivotal moment as she championed the smallpox vaccine, a recent discovery by English doctor Edward Jenner. Facing suspicion and resistance, she showcased the vaccine's promise, bridging politics and power for India's well-being. Her portrait, once forgotten, now stands as a testament to a pioneering immunization campaign that changed lives

VACCINE AVAILABILITY AND MANUFACTURING IN INDIA (1802-1899)

In India, till 1850, the vaccine was imported from Great Britain. However, there were real logistic challenges in transport of vaccine to India. There are records of a few research efforts in Bombay as early as **1832** and the animal experiments for lymph started in Madras in **1879**, with initial success in **1880**. In later part of the 19th century, with increased vaccine material supply, the research focus shifted to *an effective preservation technique* to ensure transport of vaccine material to the *rural and difficult to access areas*.

As early as in **1895**, **glycerine** was used in India for efficient transport of vaccine material as glycerinated lymph paste. *Lanoline and Vaseline* were other preservatives used in India. **Vaccine with boric acid**, which was also reported to be effective, was developed in **1925**.



Cholera Pandemic in Bengal and First Indian Vaccine

Following a recommendation of British Government, the Government of India accepted a request of **Dr Haffkine** to come and conduct Cholera vaccine trial in India.

In **1893**, Dr Haffkine conducted vaccine trials in Agra, Uttar Pradesh, and showed the efficacy of his vaccine in the effective control of the disease. Though Haffkine knew the process for the development of cholera vaccine, he had *proven its efficacy here in India*.

A plague epidemic started in India in **1896** (which led to the enactment of ***Epidemic Act of 1896***, which is still applicable in the country). The Government of India requested him to work on the development of plague vaccine and provided him a two-room set in Grant Medical College, Mumbai, to set up his Laboratory.

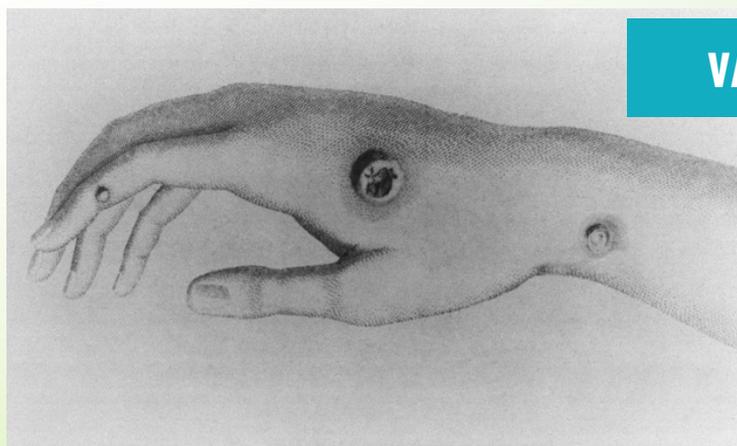
Dr Haffkine developed **plague vaccine in 1897** and it is arguably, the *first vaccine developed in India*. This laboratory was called *Plague Laboratory* since **1899**, renamed as *Bombay Bacteriological Lab* in **1905** and then finally named as **Haffkine Institute in 1925**, as it is known today.

VACCINATION IN INDIA (1900-1947)

The beginning of twentieth century witnessed a significant socio-scientific-geopolitical events, which had lasting effect on vaccination efforts in the country.

- *Outbreak of cholera and plague in India (1896-1907)* : services of already limited number of vaccinators were diverted to epidemic control efforts.
- *The First World War (1914-1918)* started and with coinciding *Influenza Pandemic 1920* (which reportedly killed around 17 million Indians) became a priority for the Government.
- New scientific understanding that *two doses of smallpox vaccine* would be needed for long lasting protection. It was a challenge considering that it meant convincing people to get vaccinated twice with perceived inconvenient and painful procedure⁶.
- Most significantly, the *Government of India Act of 1919*, which devolved a number of administrative powers from Centre to Provinces, by which the local self-governments were assigned the responsibilities of providing health services, including smallpox vaccination. (The health service delivery being a State subject in India has an origin in this Act).

This period provides an insight as to how socio-political situation can adversely affect health of the people. Specially, 'The 1919 Act' originated with good intentions but the local government had limited financial capacities to fund vaccinators and often led to the variable efforts and progress on smallpox vaccination. The vaccination efforts continued with variable progress till 1939, when World War II was started. Vaccination efforts, though still a focus of local administration, became a casualty of the war. The vaccination coverage went down and in 1944-1945 in India, the highest numbers of smallpox cases in the last two decades were reported. As soon as the World War II ended, the focus was brought back on smallpox vaccination and cases decreased suddenly.



VARIOLATION

TECHNOLOGICAL INNOVATIONS IN VACCINE DEVELOPMENT

UNLOCKING THE POTENTIAL OF IMMUNIZATION

In the ever-evolving landscape of public health and immunology, technological advancements are revolutionizing the field of vaccine development. From the remarkable success of mRNA vaccines against COVID-19 to the personalized approach of precision medicine, these innovations are not only reshaping the way we combat diseases but also igniting renewed interest in the intersection of immunology and public health.

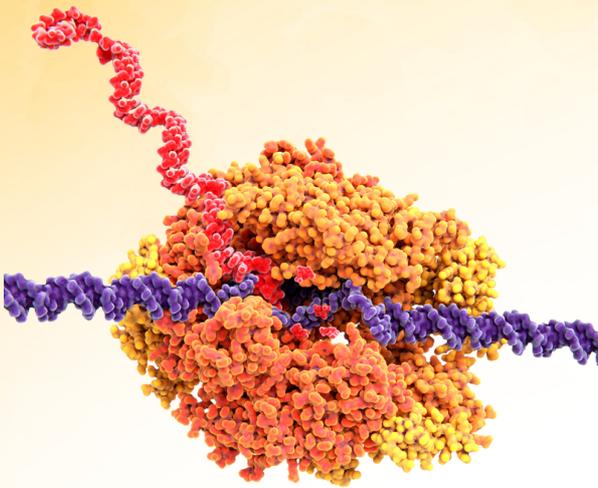
mRNA VACCINES: A TRANSFORMATIVE BREAKTHROUGH

Recent strides in messenger RNA (mRNA) technology have redefined the possibilities of vaccine development. The emergence of mRNA vaccines represents a monumental leap forward in our ability to respond swiftly to emerging pathogens. The COVID-19 pandemic served as a litmus test for the potential of mRNA vaccines, showcasing their scalability and adaptability in the face of a global crisis[1]. The unprecedented speed at which mRNA vaccines were developed, authorized, and administered underscored their remarkable potential to transform the traditional vaccine landscape.

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Hospital,
Kolkata**





Beyond their rapid development, mRNA vaccines exhibit exceptional safety profiles due to their non-infectious nature[2]. By delivering genetic instructions that stimulate an immune response without introducing live pathogens, mRNA vaccines provide a safer alternative for vulnerable populations. Furthermore, the platform's adaptability allows for the swift modification of vaccines to target new variants, reinforcing their relevance in an ever-changing viral landscape.

ENHANCING IMMUNOGENICITY WITH VIRAL VECTOR VACCINES

Viral vector platforms have emerged as another promising avenue in the quest for enhanced vaccine immunogenicity. Leveraging viruses as delivery vehicles, these vaccines stimulate robust immune responses by presenting antigens in a dynamic context. Notable examples include adenovirus-based vectors, which have demonstrated their efficacy in delivering antigens from various pathogens[3]. Adenovirus-vectored COVID-19 vaccines, for instance, have shown encouraging results in eliciting strong and lasting immune protection.

In addition to adenovirus, Vesicular Stomatitis Virus (VSV) vectors are gaining traction as a means to combat emerging diseases. These vectors exhibit an inherent ability to trigger both humoral and cellular immunity, providing a multi-faceted defense against pathogens[4]. VSV-vectored vaccines hold promise not only for their effectiveness but also for their potential to address diseases with complex immune responses, such as HIV and Ebola.



SUBUNIT AND PROTEIN-BASED VACCINES: PRECISION IN IMMUNIZATION

Advancements in recombinant DNA technology have paved the way for the production of subunit and protein-based vaccines. These vaccines offer a nuanced approach by targeting specific components of pathogens, enhancing both safety and efficacy. By presenting only the essential antigens, subunit vaccines minimize the risk of adverse reactions while focusing the immune response on critical targets[5].

Furthermore, the precision afforded by subunit and protein-based vaccines allows for tailored vaccine design. This is particularly relevant for diseases with multiple strains or variants, as researchers can strategically select antigens that induce broad protection. As we grapple with the ever-changing landscape of infectious diseases, these vaccines stand as a testament to the power of molecular design in immunization strategies.

NANOTECHNOLOGY: A PARADIGM SHIFT IN VACCINE DELIVERY

Nanotechnology has emerged as a game-changing force in vaccine delivery systems. Nanoparticles, microscopic carriers for vaccine antigens, provide a platform for targeted delivery and controlled release. This innovation tackles several challenges associated with traditional vaccine administration, including improving immune stimulation and enhancing stability[7].

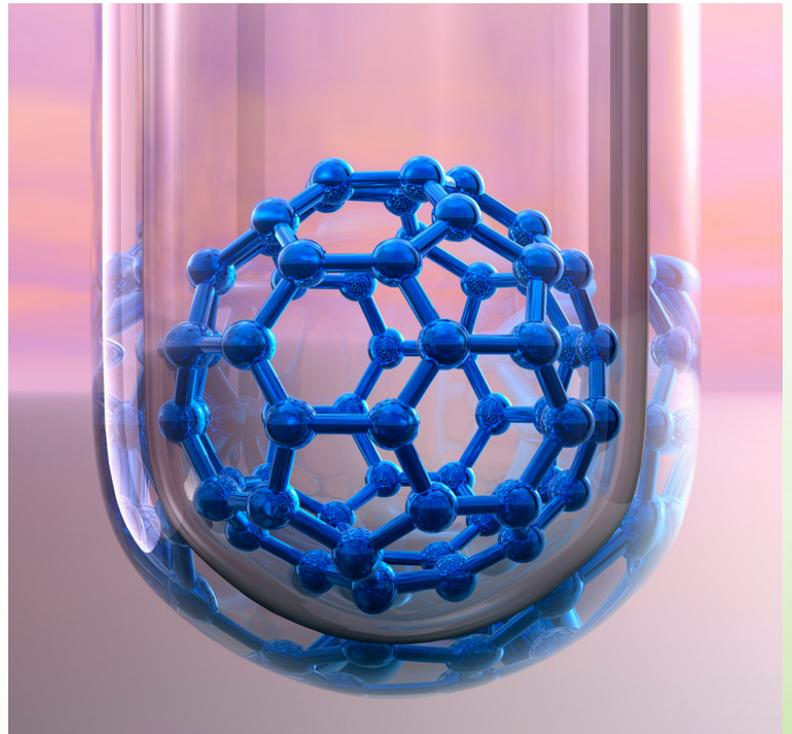


The ability of nanoparticles to mimic pathogens at a molecular level heightens the immune system's response, leading to more robust and long-lasting immunity. Moreover, their capacity to encapsulate antigens protects them from degradation, allowing for extended shelf life and facilitating global distribution. As nanotechnology continues to mature, the prospect of personalized and adaptable nanovaccines becomes increasingly tangible.

CONCLUSION

The landscape of vaccine development is undergoing a profound transformation driven by technological innovation. From the mRNA revolution that propelled us beyond traditional vaccine timelines to the personalized precision of individualized immunization, these advancements are shaping the future of public health.

As general practitioners and immunology enthusiasts alike, the opportunity to witness and engage with these breakthroughs rekindles our curiosity and commitment to safeguarding global health through the power of science and innovation.



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BRIDGING GAPS AND FOSTERING INCLUSIVITY:

ISAI'S TRANSFORMATIVE OUTREACH ON WORLD HEPATITIS DAY

In the heart of Islampur, nestled within the vibrant tapestry of West Bengal, a groundbreaking initiative orchestrated by the Indian Society for Adult Immunisation (ISAI) is poised to rewrite the narrative of healthcare accessibility for marginalized communities. Against the backdrop of World Hepatitis Day, ISAI's vaccination camp has transcended geographical and societal boundaries, delivering hope and protection to a hard-to-reach community that often remains invisible on the healthcare radar.

DR. DEBAYAN PODDER

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The success of this transformative endeavor reflects not only the potency of immunization campaigns but also the power of understanding, empathy, and community engagement. Led by the indomitable spirits of Dr. Saurabh Kole, Dr. Arkaprovo Pal, Dr. Debayan Podder, and Dr. Debducta Haldar, this initiative underscores ISAI's unwavering commitment to bridging health disparities and creating an all-encompassing framework for community well-being.

Viral hepatitis, a global public health challenge, assumes alarming proportions within vulnerable pockets of society. However, the vaccination camp in Islampur, targeting the LGBTQ+ population, has emerged as a testament to the impact of culturally tailored interventions. Despite the inherent challenges posed by the geographical remoteness of the region and societal taboos, ISAI's resolute efforts have resulted in a monumental achievement.



The event's pivotal moment arrived when 80 beneficiaries, predominantly from transgender and Targeted Intervention (TI) groups, embraced the camp's offerings with open hearts and minds. The State AIDS Control Society (SACS) coordinator's involvement further fortified the initiative's reach and durability. Through these interactions, ISAI demonstrated that healthcare is not just about medical procedures; it's a profound exchange of respect, understanding, and empowerment.

The camp was a clarion call, a declaration that healthcare services can indeed transcend boundaries and foster understanding and acceptance.



Coverage of our work published in a renowned Bengali daily. Source: ABP News



As the story of ISAI's outreach resonates beyond the borders of Islampur, it illuminates a path that other organizations and individuals can tread. It beckons us to step out of our comfort zones, embrace diversity, and contribute to a future where healthcare knows no bounds. Through the power of compassion and unwavering determination, ISAI's journey in Islampur reminds us that each vaccination is more than a shot—it's an investment in the fabric of a healthier, harmonious society.

" It was a glorious experience where first time this kind of initiative was arranged for the marginalized community for their better health service. most of them of the Trans community is not aware about the particular Hepatitis virus which is most communicable disease. I am feeling honored to be present at the event"

Ms.Sudipa Chakraborty
State Program Specialist (SPC)
Saamaasik Swaasthya



ADULT IMMUNIZATION RECOMMENDATIONS

Vaccine	Recommended Age for Vaccination	Dosing Schedule
Influenza	Annual vaccination for adults ≥ 60 years and high-risk individuals	Annually
Tdap	Adults who have not received a Tdap vaccine previously	One-time dose, followed by a Td booster every 10 years
HPV	Adults up to 45 years of age	Two or three doses, depending on age at initiation
Pneumococcal	Adults ≥ 65 years and high-risk individuals	One or two doses, depending on vaccination history and risk factors
Hepatitis B	Adults at risk, including healthcare workers, household contacts of people with Hepatitis B, and others with risk factors	Three doses
Measles, Mumps, and Rubella (MMR)	All adults	Two doses, separated by at least 28 days
Varicella	Adults without history of varicella or vaccination	Two doses, separated by at least 28 days
Zoster	Adults ≥ 50 years	Two doses
Meningococcal	Adults with certain risk factors or travel to areas with high meningococcal disease activity	One or more doses, depending on risk factors
Rabies	Adults at risk of exposure to rabies, such as veterinarians, animal handlers, and travelers to rabies-endemic areas	Pre-exposure prophylaxis: three doses; Post-exposure prophylaxis: four or five doses





MEMORY CELLS



Attended by eminent National and International faculties & 200+ Online delegates during **World Immunization Week 2023**

World Zoonoses Day celebration at Diamond Harbour MCH, West Bengal on **6th July 2023** with special emphasis on the role of immunization in the prevention of zoonoses.



Hepatitis B Vaccination Drive and awareness campaign among vulnerable populations -

- Healthcare professionals
- LGBTQ+ community in collaboration with organizations like SAATHII, Dinajpur Notun ALO Society, WB





NEXT DOSE



CME:

Adult Immunization: For Doctors

Date: 23rd September 2023

Venue: Belle Veu Clinic

Health Promotion and Vaccination Awareness Campaign among Elderly

Date: Sep-Oct 23

Place: Greater Kolkata



INDIAN SOCIETY FOR
ADULT IMMUNIZATION



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Adult Immunization Movement



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