



NEWS & EVENTS

Pranab Jyoti Bhuyan

Inadvertent administration of JE live vaccines in Pregnancy in Adult Mass Immunization Programme:

JE live vaccine is contraindicated during pregnancy which may be inadvertently administered during missed period in Mass Immunization Programme. Pregnancy testing is not a prerequisite for JE vaccination. Inadvertent administration of JE live attenuated or JE live vaccine to a pregnant woman is not an indication for termination of Pregnancy. No untoward findings were reported from 24 Pregnant women inadvertently vaccinated during clinical trials of IXIARO SA 14-14-2 vero cell derived vaccine.

(*Japanese Encephalitis Vaccine: WHO Position paper, No- 9, 2015-27th Feb, Page-69-88*)

India has been declared as YAWS Free by WHO Director General at Geneva on 5th May, 2016.

India eliminated yaws after years of sustained campaign using injectable benzathine penicillin to treat affected individuals and their close contacts in the community. A celebratory function was organized to mark the end of Yaws from India on 14th July, 2016 at National Media Center, Raisina Road, New Delhi.

(http://www.who.int/neglected_diseases/news/India_global_eradication_yaws_celebration/en/)

The Indian Council of Medical Research (ICMR) released three indigenously developed diagnostic kits on 20th February 2014.

These include a -

- (i) polymerase chain reaction (PCR) or PCR-based kit to detect pathogens in food and water.
- (ii) An ELISA-based kit to estimate iron in the blood.

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(iii) **A sample blood collection kit that can be used to test the levels of vitamin A in a person.**

All three have been developed by the National Institute of Nutrition (NIN), Hyderabad. ELISA for ferritin estimation helps to diagnose iron deficiency. Dried blood spot collection (kit) is a field-friendly method for blood sample collection for vitamin A analysis. Blood is collected on a special type of filter paper which can be stored for seven days at room temperature and for several days more under refrigeration. This allows for transport of blood samples from the community to the laboratory for mass screening. *(NCDC Newsletter, April-June, 2015, Vol-3, Issue-2)*

Use of Modern Technology in Public Health:

National Health Portal (NHP): <http://nhp.gov.in>: The Ministry of Health and Family Welfare (MoHFW), Government of India has set up the National Health Portal (NHP) in pursuance to the decisions of the National Knowledge Commission to provide health care related information to the citizens of India and to serve as a single point of access for consolidated health information. The National Institute of Health and Family Welfare (NIHFW) has established a Centre for Health Informatics (CHI) to be the coordinating entity for managing the activities of the NHP. The goal is to create a gateway to authentic health information for all. The NHP aims to make this as a single point access for authenticated health information for citizens, students, health care professionals and researchers. The NHP will achieve the above vision by collecting, verifying and disseminating information related to health and health care delivery services for all citizens of India. *(NCDC Newsletter, April-June, 2015, Vol-3, Issue-2).*

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World Immunization Week 2017 (24-30 April 2017)

Theme: #VaccinesWork

World Immunization Week – celebrated in the last week of April – aims to promote the use of vaccines to protect people of all ages against disease. Immunization saves millions of lives and is widely recognized as one of the world’s most successful and cost-effective health interventions. Today, there are still 19.4 million unvaccinated and under-vaccinated children in the world.

Five years into the Decade of Vaccines

2017 marks the halfway point in the Global Vaccine Action Plan (GVAP) – endorsed by 194 Member States of the World Health Assembly in May 2012 – which aims to prevent millions of deaths from vaccine-preventable diseases by 2020 through universal access to immunization.

Despite improvements in individual countries and a strong global rate of new vaccine introduction, all of the targets for disease elimination—including measles, rubella, and maternal and neonatal tetanus—are behind schedule. In order for everyone, everywhere to survive and thrive, countries must make more concerted efforts to reach GVAP goals by 2020. Additionally, those countries that have achieved or made forward progress towards achieving the goals must work to sustain those efforts over time.

2017 Campaign objectives

The main goal of the campaign is to raise awareness about the critical importance of full immunization throughout life, and its role in achieving the 2030 Sustainable Development Goals.

As part of the 2017 campaign, WHO and partners aim to:

- Highlight the importance of immunization as a top global health investment priority.
- Promote understanding of the action steps required to achieve the Global Vaccine Action Plan.
- Showcase immunization’s role in sustainable development and global health security.

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Why immunization matters now more than ever

Expanding access to immunization is crucial to achieving the Sustainable Development Goals. Routine immunization is a building block of strong primary health care and universal health coverage—it provides a point of contact for health care at the beginning of life and offers every child the chance at a healthy life from the start.

Immunization is also a fundamental strategy in achieving other health priorities, from controlling viral hepatitis, to curbing antimicrobial resistance, to providing a platform for adolescent health and improving antenatal and newborn care.

<http://www.who.int/campaigns/immunization-week/2017/event/en/>

Influenza vaccine linked to 24% reduced risk of death in patients with type 2 diabetes

Published in *CMAJ*, a large study involving 124,503 patients with type 2 diabetes suggests that influenza vaccination in individuals with type 2 diabetes leads to reduced rates of hospital admission for acute cardiovascular and respiratory diseases, as well as all-cause mortality, over a seven-year period.

To date, very few studies have assessed the effects of influenza vaccine in individuals with diabetes. This study, by a team at Imperial College London, found that vaccination was associated with a 19 per cent reduction in hospital admissions for acute myocardial infarction during flu season. Hospitalisation for stroke and heart failure was reduced by 30% and 22 per cent, respectively. Compared to unvaccinated type 2 diabetes patients, patients who were vaccinated had a 24 per cent lower rate of death rate.

According to the lead author Dr.EszterVamos: "In this large population-based study, influenza vaccination in people with type 2 diabetes was associated with reductions in rates of hospital admission for acute cardiovascular and respiratory diseases, and in all-cause mortality across seven influenza seasons".

The study authors recommend that “efforts should be focused on improvements in vaccine uptake in this important target group as part of comprehensive secondary prevention”.

References

Vamos EP, et al. Effectiveness of the influenza vaccine in preventing admission to hospital and death in people with type 2 diabetes. CMAJ July 25, 2016 First published July 25, 2016, doi: 10.1503/cmaj.151059.

First live-attenuated Zika vaccine proves safe and effective

The first live-attenuated Zika vaccine has been shown to completely protect mice against the virus after a single dose, according to new research published in *Nature Medicine*.

Rapid and promising progress has been made toward the development of a Zika vaccine. These research efforts have largely focused on an inactivated vaccine of the Zika virus or subunits of the virus. The new live-attenuated version would have the advantage of single-dose immunisation, rapid and strong immune response and potentially long-lived protection.

Senior author, Pei-Yong Shi, said a fine balance between efficacy and safety is needed for a successful vaccine. "Vaccines made from attenuated live viruses generally offer fast and durable immunity, but sometimes with the trade-off of reduced safety, whereas inactivated and subunit viruses often provide enhanced safety but may require several doses initially and periodic boosters. Therefore, a safe live-attenuated vaccine will be ideal in prevention of Zika virus infection, especially in developing countries."

Shi added: "Our Zika vaccine showed promising safety profile in mice when compared with clinically approved live-attenuated vaccines, such as the yellow fever vaccine."

The initial target of the Zika vaccine will be women of childbearing age, their sexual partners and children less than 10 years old.

References

Press release: The first live-attenuated vaccine candidate completely protects against Zika infection. University of Texas Medical Branch. 2017 April 10 [Cited 2017 April 13]. Available from: <https://www.utmb.edu/newsroom/article11496.aspx>

Shan, C et al. A live-attenuated Zika virus vaccine candidate induces sterilizing immunity in mouse models. *Nature Medicine*. 2017 April 10 [Cited 2017 April 13] doi:10.1038/nm.4322 Available from: <http://www.nature.com/nm/journal/vaop/ncurrent/full/nm.4322.html>