

AEFI TECHNICAL COLLABORATION CENTRE MAMC, New Delhi

nomic, or any other social condition.

low-income countries is still strikingly low.

COVID-19, unless COVAX is able to

support LICs beyond 20 percent vaccina-

tion rate, the financial burden of vaccinat-

ing an additional 50 percent of the popula-

tion will fall on most vulnerable countries.

Additionally, some countries are already

delivering booster doses, which indicates

that COVID-19 vaccinations may become

Equitable access to safe and effective

vaccines is critical to ending the COVID-19 pandemic, so it is hugely encouraging

to see so many vaccines proving and

going into development. Safe and effec-

tive vaccines are a game-changing tool:

but for the foreseeable future we must

continue wearing masks, cleaning our

hands, ensuring good ventilation indoors,

physically distancing and avoiding

crowds. Being vaccinated does not mean

that we can throw caution to the wind and

put ourselves and others at risk, particular-

ly because research is still ongoing into

how much vaccines protect not only against disease but also against infection

and transmission.

a recurring expenditure for countries.

NO ONE IS SAFE FROM COVID-19, UNTIL EVERYONE IS SAFE Vaccine equity means that vaccines should be allocated across all countries based on needs and regardless of their

economic status. Access to and allocation of vaccines should be based on principles grounded in the right of every human to enjoy the highest attainable standard of health without distinction of race, religion, political belief, eco-

Globally, the distribution of vaccines is shaped by challenging political, economic, social, diplomatic, and healthrelated matters. Therefore, accurate and up-to-date data and information are critical components in guiding the inter-

national community's understanding of vaccine equity and shed light on the blind spots essential for achieving the

last mile on vaccine equity. A slower and delayed vaccination rollout in low and middle-income countries has left them vulnerable to COVID-19 variants, new surges of the virus and a slower recovery out of the crisis. High-income

countries started vaccination on average two months earlier than low-income countries and vaccination coverage in

Data from the MI4A COVID-19 Vaccine Purchase Dataset shows that the average cost per COVID-19 vaccine dose

ranges between US2 - 40. The estimated delivery cost is US3.70 per person vaccinated with two doses, after accounting for vaccine wastage. This represents a significant financial burden for low-income countries, where the

average annual per capita health expenditure amounts to US\$ 41 (Global Health Expenditure Database). While vac-

cination programmes will increase healthcare costs across all countries, it is especially the case in low-income countries as they would need to increase their health expenditure by a staggering 30-60 percent to reach seventy percent

of their population under the current pricing and over a period of one year. High-income countries are expected to

COVAX provides a global risk sharing mechanism for pooled procurement and equitable distribution of COVID-19

vaccines to vaccinate 20% of countries population. As a greater coverage is required to ensure a stop to the spread of

increase theirs by only 0.8 percent to achieve the same vaccination rate in one year.

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Special points of interest:

April 15, 2022

- Highlights from the training sessions of AEFI nodal officers
- Children COVID-19 vaccination intention among parents
- Newer Vaccines
- Scientific Brief: Technical Perspectives of the Researchers
- Causality assessment in AEFI monitoring
- World Health Day Special

From the TCC's Desk

India is the largest producer of vaccine supply in the world (approx 62%). Vaccine equity is of high importance. In India, vaccination campaigns have increased full immunization coverage among 12-23 month old children from an estimated 62% in 2015-2016 to 76% in 2019-2020. The introduction of Mission Indhradhanush and Intensified MI rounds have increased the coverage, however the pandemic has disrupted the routine immunization coverage. Therefore, there is a need to intensify the routine immunization activities along with ongoing COVID-19 vaccination campaign

- Dr. Pragya Sharma

-Adapted from UNDP

Vaccine Performance against Variants of Concerns

Source – WHO	Cov- ishield	Bha- rat- Co- vaxin	Mode rna	Pfizer BioN- Tech-	Sput- nik V
Delta					
Severe disease	↔3	-	↔4	↔7	-
Symptomatic disease	↔ to ↓↓6	↓1	↔2	\leftrightarrow to \downarrow 5	-
Infection	↔ to ↓5	-	↔ 6	↔ to ↓7	-
Neutralization	↓15	⇔to ↓4	↓15	⇔to ↓41	↓to ↓↓↓3
Omicron					
Severe disease	-	-	$\downarrow/\downarrow\downarrow\downarrow1$	$\downarrow\downarrow/\downarrow\downarrow\downarrow3$	-
Symptomatic disease	$\downarrow\downarrow\downarrow\downarrow1$	-	$\downarrow \downarrow / \\\downarrow \downarrow \downarrow 2$	$\downarrow\downarrow\downarrow\downarrow2$	-
Infection	$\downarrow\downarrow\downarrow\downarrow1$	-	↓↓↓3	$\downarrow\downarrow\downarrow\downarrow$ 3	-
Neutralization	$\downarrow\downarrow\downarrow\uparrow$ 7	$\downarrow \downarrow 1$	$\downarrow\downarrow\downarrow\downarrow18$	↓↓↓38	$\downarrow \downarrow 1$
"↔"<10percentage point(pp)reduction in VE, or VE>90% with no com- parator, or that there was a <2-fold reduction in neutralization					

"↓"10 to <20 pp reduction in VE, or 2 to <5-fold reduction in neutralization "↓↓"20 to <30 pp reduction in VE, or 5 to <10-fold reduction in neutralization

'' $\downarrow \downarrow \downarrow$ '' $\geq\!\!30\,pp$ reduction in VE, or $\geq\!\!10$ -fold reduction in neutralization

Editors: Dr. Pragya Sharma, Dr. Shivani Rao, Dr. Amod Laxmikant Borle, Dr. Warisha Mariam, Dr. Gurmeet Singh, Dr. Amita Raut (DFW, GNCT of Delhi)

HEADLINES

- COVID vaccination for children aged 12-14 began on 16th March 2022. They are being jabbed with Corbevax vaccine. Around 7.11 crore children are expected to be vaccinated in this age group
- Approximately 2 crore children aged 12-14 years were already covered till first week of April
- Persons aged 18 years and above will be eligible to get COVID-19 vaccine booster doses at private vaccination centres from 10th April 2022
- AEFI State TCC, MAMC conducted third training session for AEFI reporting nodal officers from various districts of Delhi



AEFI State TCC, MAMC conducted third training session on Reporting, Investigation and Assessment of Adverse event following immunization

With the aim to strengthen the AEFI surveillance and reporting, State Technical Collaboration Centre for Adverse Events Following Immunization, Department of Community Medicine, MAMC organized third training session on Reporting, Investigation and Assessment of AEFI on 15 March 2022 for AEFI reporting nodal officers from various districts of Delhi.

Resource Persons (Trainers) -

pants for this training session.

- 1. Dr. Vineet Goyal, AEFI Focal Person, WHO India Country Office
- 2. Dr. Manoja Kumar Das, Director Projects, INCLEN
- 3. Dr. Puneet Jaitley, SEPIO GNCT of Delhi
- 4. Dr. Raghvendra Singh, Professor, Dept. of Pediatrics, MAMC
- Dr. Manju Lata Sharma, OSA, WHO Country Office, Delhi 5.
- Training session Monitor Dr. Nandini Gupta, 6.
- (Professor, Zonal AEFI Senior Consultant (North and West), ITSU-MoHFW)

The workshop started with the registration from 9am onwards. An intro-

duction round followed by welcoming the participants was done by Dr. Warisha Mariam, Senior Resident. The participants were nominees from various hospitals across Delhi for the training session. To set the context and agenda a pre-test was conducted by the session moderators by using a semi-structured questionnaire to access the pre-existing knowledge of the participants regarding Reporting, Investigation and Assessment of Adverse event following immunization. Then, Dr. Puneet Jaitley, SEPIO, GNCT of Delhi sensitized all the participants regarding various AEFI forms and documents with their relevance of proper completion of the form. This was followed by concepts on recording and reporting in National AEFI surveillance system which was conducted by Dr. Vineet Goyal, AEFI Focal Person, WHO India Country Office. Dr. Manoja Kumar Das, Director Projects, INCLEN had taken a session on AEFI case and its investigation.. After the lunch break, Dr. Raghvendra Singh, Professor, Pediatrics, MAMC took a session on the approach to AEFI causality assessment. After this session, participants were divided into four groups for exercise on "reporting and investigation of an AEFI". Sample AEFI cases were given to each team for this exercise, and each case was further discussed in the session. Dr. Manju Lata Sharma facilitated the entire case discussion session along with other resource persons. Before the certificate distribution and closing remark, post-test was conducted by using the same questionnaire. Certificates were distributed to partici-

- TEAM AEFI TCC, MAMC, New Delhi

Newer Vaccines

Immunization is the most cost-effective intervention for prevention of diseases. Recently four newer vaccines which have been introduced in India's Universal Immunization Program (UIP) include rotavirus vaccine (RVV), pneumococcal conjugate vaccine (PCV), measles-rubella (MR) vaccine, and human papillomavirus (HPV) for reducing the mortality and morbidity due to diarrhoea, pneumonia, measles, rubella among under-five children, and cervical cancer among women. These diseases are the cause of major public health problems in both under developed and developing countries. Globally, rotaviruses are the major cause of diarrhoea among children under 5 years of age. Measles and rubella are highly transmissible viral diseases that spread by contact with an infected person through coughing and sneezing. Rubella is a mild viral infection that occurs commonly in children and young adults. Rubella infection during pregnancy can result in abortion, stillbirth, and may lead to multiple congenital abnormalities in the newborn; such as blindness, deafness, and heart defects; known as congenital rubella syndrome (CRS). The HPV type 16 is found to be associated with 70%-90% of cervical cancer cases. It is the second most common cancer occurring in women in India. It is important for every country to ensure equitable distribution of vaccines to protect the mass starting from the most vulnerable.

- Dr Shivani Rao, Assistant Professor, Dept of Community Medicine, MAMC



Children COVID-19 vaccination: Intention among parents

Background: Despite the success of adult vaccination against COVID-19, providing vaccines to children was a challenge for policymakers globally. As parents are primary decision-makers for their children, we aimed to assess parents' perceptions and intentions regarding COVID-19 vaccination in India.

Methods: A cross-sectional web-based study was designed, parents or caregivers (N=770) were recruited through snowball sampling using Google form. Cross -tabulation was performed by parents' intention to vaccinate their children against COVID-19 virus with sociodemographic characteristics and their risk perception towards COVID-19, trust in the healthcare system, and their history of vaccine hesitancy behavior. Multivariable logistic regression analysis was performed to compute the predictors of child vaccination intention among Indian parents.

Results: 770 parents across the country have completed the survey. Of the 770 participants, 258 (33.5%) have shown intent to vaccinate their children. The stated likelihood of child vaccination was greater among parents who had a bachelor's degree or higher education (aOR: 1.98, 95% CI: 1.15-3.51); as well as among parents who intended to vaccinate themselves (aOR: 2.35, 95% CI: 1.30-4.67). Parental concerns centered around vaccine safety and side effects.

Conclusion: Indian parents reported high knowledge of the COVID-19 virus and were aware of the development of a novel vaccine. However, about one-third of parents intended to vaccinate their children, and about half of them were not sure whether to vaccinate their children or not against the COVID-19 virus. The study highlighted the need for health promotion strategies that promote vaccine uptake among parents. Resource— medRxiv **doi** : https://doi.org/10.1101/2021.10.30.21265449

- Dr. Bijaya Kumar Padhi, Dr. Vineeth Rajagopal, Dr. Madhu Gupta, Department of Community Medicine & SPH, PGIMER, Chandigarh

COVID Vaccination amongst the Elderly- A Short Review

COVID-19 has affected all age groups but the elderly have been the most impacted by this pandemic. The risk for severe illness with COVID-19 increases with age, with older adults at the highest risk. That is the reason for the importance of the Elderly population getting vaccinated.

Vaccination against COVID-19 infection has been launched all over the world. Getting the right vaccines into the right people at the right time during a pandemic is, unsurprisingly, proving to be a logistical challenge. There are multiple types of COVID-19 vaccines including inactivated virus, virtual vector-based and RNA-based vaccines.

Vaccinating the elderly in India has become a success story for the entire world to watch. India's ambitious program to vaccinate a vast population against COVID-19 and in the process India's reputation as a manufacturer and innovator just moved into the fifth gear.

We are 1 year 29 days into protecting our most vulnerable population. From 1st March 2021, India had first begun vaccinating the most vulnerable population above 60 years of age and those above 45 years of age with co-morbidities. This population is estimated to be about 20% of the country's total population of 1.3 billion.

According to Brian Wahl (Johns Hopkins Bloomberg School of Public Health, Baltimore, MA, USA), India's strong domestic vaccine sector has enabled the country to launch one of the largest and fastest COVID-19 vaccination campaigns in the world.

India has previous experience in carrying out large and targeted vaccination campaigns against diseases, such as, for example, measles, tetanus, and diphtheria, under the country's Universal Immunization Program, which targets 26.7 million newborns and 29 million pregnant women every year. The country has also eradicated smallpox and polio. For the ongoing COVID-19 vaccination programme, the government has covered—apart from various other places—urban slums, tribal areas, and remote areas. "More than a lakh vaccinators were trained; multiple mock exercises were conducted; a pan-India national exercise was also conducted.

According to CDC Atlanta, people aged 65 and more who received both doses of either Pfizer or Moderna vaccines showed a 94% reduced risk of COVID-19 related hospitalization. Unvaccinated people should get vaccinated and continue masking until they are fully vaccinated. Last year, an official survey found four in 10 unvaccinated adults above the age of 70 years were hesitant to take the shot against Covid-19. The Centre has been regularly asking states to focus on fully covering this cohort, and to take appropriate measures to address hesitancy and other challenges.

- Dr Samar Hossain¹, Dr Aanchal Anand² 1-Assistant Professor, Army College of Medical Sciences, Delhi, 2- PG Resident- III, Maulana Azad Medical College, Delhi

Causality Assessment in AEFI monitoring

Causality Assessment is the systematic evaluation of the information obtained about an AEFI to determine the likelihood of the event having been caused by the vaccine/s received. It is a critical part of AEFI monitoring and enhances confidence in the national immunization programme. The State have to conduct Causality Assessment for reported AEFI cases. The AEFI report must have investigation formats, relevant documents and a diagnosis for being eligible for Causality Assessment. The Causality Assessment process has four steps: (1) *Eligibility*: To determine if the reported AEFI case satisfies the minimum criteria for Causality Assessment as mentioned above. (2) *Checklist*: To systematically review the relevant and available information to address possible causal aspects of the AEFI. (3) *Algorithm*: To obtain a direction as to the Causality with the information gathered in the checklist. (4) *Classification*: To categorize the AEFI's association to the vaccine/vaccination based on direction determined in the algorithm. All the cases being investigated by the district should be assessed by the causality assessment experts of the state AEFI committee after discussing all the investigation formats and reports available. It is recommended to disseminate the results so that others can learn from the experience. Immunization errors will need to be corrected and for coincidental incidents, communication to maintain confidence is necessary.

- Operational Guidelines, MoHFW

Editors: Dr. Pragya Sharma, Dr. Shivani Rao, Dr. Amod Laxmikant Borle, Dr. Warisha Mariam, Dr. Gurmeet Singh, Dr. Amita Raut (DFW, GNCT of Delhi)

WORLD HEALTH DAY SPECIAL



The Poet's Lens

विश्व स्वास्थ्य दिवस

धन के अभाव में माँ बाप जहाँ समझें न खुद को असहाय भूख से बिलखते मरते रहे बच्चों की परिवार न पीड़ा पाय नवजात शिशु को करा न पाए स्तनपान जाए स्वर्ग सिधार चिकित्सा के अभाव में रोगी कोई प्रियजन खोए न परिवार तड़पते कांपते साँसें गिनते बुजुर्ग ऐसा बुरा समय न हो गाँव से अस्पताल पहुंचाए जो उस वाहन की कमी न हो डाक्टर का हो कोमल स्पर्श और चेहरे पर मधुर मुस्कान सुरक्षाशक्ति का सत्य अहसास ज्यों पानी युक्त रेगिस्तान न्याय और समता सर्वत्र, बच्चे सुरक्षित बाहर हों या घर आओ मिल प्रयास करें दुनियाँ बने स्वस्थ्य और बेहतर

> - डॉ पन्ना लाल निदेशक प्राध्यापक

Our Planet, Our Health

Our planet is alluring. But beauty I cannot see enduring. The humongous dumps of trash. Foreshadows the upcoming crash. People use and misuse. Every available resource they abuse. We destroy the life on our planet, Like an owner behaving as a tenant. But we will never find another home, If we kill the only planet for life known. As we need every bit, For our body to be fit. Likewise earth needs trees, water and air, And all of those are becoming unfit. And take steps to save the life. Four future generations, to prevent strife. So, they will grow, breathe and flourish. And the earth, our planet, our only home is able to nourish.

On this occasion, Let's celebrate this day.

Kanchan Snehi PhD Student, Panjab University, Chandigarh



World Health Day celebration in MAMC

The World Health Day is celebrated globally on April 7th every year. WHO organises international, regional and local events on the day related to a particular theme to garner global attention. The theme for this year is "Our Planet, Our Health". The theme was selected to create awareness about the effects of planet's health on ours. Various events were organised on the occasion of World Health Day by the Department of Community Medicine of Maulana Azad Medical College and its attached

peripheral health centres at Delhi Gate, Basti Vikas Kendre (BVK) and Barwala.

A street play was enacted by the interns of MAMC posted at Delhi Gate health centre. The play highlighted the importance of physical activity, exercises, yoga etc. in day to day life. A health talk was given on maternal and child health. A skit was prepared highlighting the theme of



World health day and was enacted for the local residents of BVK. The skit showcased how malpractice like burning garbage openly contributes to air pollution which has a detrimental impact on health of people. Further, it emphasized on the significance of drinking safe water, so it can prevent gastrointestinal diseases such as Cholera and Typhoid fever. Demonstration was also given by team on ORS preparation and steps of handwashing. In addition, the skit suggested simple and effective preventive measures that could be exercised by public to avoid larger health catastrophes and work towards a healthier and a greener planet.

A role play highlighting the issues of water pollution, air pollution and poor sanitation was conducted at RHTC, Barwala by the interns and PGs to create awareness among the local people. Health talk emphasising the importance of clean environment was given. The beneficiaries were encouraged to adopt healthy practises to lead a healthier life.

MBBS 3rd semester students posted for FHAP in the department made colourful posters focussed on water conservation, healthy nutrition, and adverse effects of air pollution. The posters were displayed on the department's bulletin board.

All the activities were well appreciated by local residents. There was active participation of students, interns, PG residents, SRs as well as local community. Many myths and malpractices were pointed out and were replaced by simpler and effective alternatives to lead a healthier life in a healthier planet.

- Department of Community Medicine, MAMC



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