



eNewsletter

January 15, 2022

Volume 1, Issue 2

Special points of interest:

- Highlights from the State **AEFI TCC Inauguration**
- COVID-19 Vaccination at a Glance
- Challenges in Reporting of **COVID-19 Vaccination and** its AEFI
- Scientific Brief: Technical Perspectives of the Researchers

From the TCC's Desk

This newsletter is the second issue of the State AEFI Technical Collaboration Centre at MAMC. Through this newsletter we envisage to provide our readers with the ongoing recent updates and advancements in the field of Vaccinology, the activities pertaining to the State AEFI TCC and scientific perspective and view point of the researchers from across the field of public health.

Since the time of ongoing pandemic, this issue focusses on various aspects of COVID-19 Vaccination. Including the activities being carried out in COVID Vaccination Centers (CVCs) of Medical Colleges in Delhi, ongoing researches and the challenges and barriers being faced in reporting the AEFI.

I thank the Dept. of Community Medicine, MAMC and my team or their efforts in bringing out this issue.

-Dr. Pragya Sharma Nodal Officer, State AEFI TCC

Setting up State AEFI TCC: A Leap to New Start

Setting up of the State Technical Collaboration Centre for AEFI in Maulana Azad Medical College (MAMC) along with Lok Nayak Hospital (LNH) and GB Pant Hospital is a novel initiative by Government of National Capital Territory of Delhi. The aim of this unit is to provide support to the Immunization Division of Directorate of Family Welfare in terms of capacity building of the state and district officials for investigation of adverse events following immunization, their causality assessment, the surveillance activities, monitoring of trends of adverse events and ensuring quality in data. Strengthening of this important component of Immunization program will lead to its more effective implementation.

This TCC was inaugurated on 18th October 2021 in the August presence of the Dean MAMC and Director, DFW GNCT of Delhi and other esteemed members from the field of public health.

The inaugural event started with lamp lighting and blessings of the Lord.

During the inaugural address the Head, Dept of Community Medicine gave a warm welcome to the guests. This was followed by introducing the gathering to the objectives of setting up the State TCC by Dr. Pragya Sharma, the Nodal officer of the State AEFI TCC. She informed the audience regarding the errors and problems related to reporting, recording and causality assessment of AEFI cases in Delhi and thus, the need for capacity building and hand holding. As part of the activities being initiated by State TCC, three batches of training has been proposed for the hospital AEFI nodal officers. First batch of training has been concluded on 17th December 2021. The training for other two batches are in line. The release of quarterly enewsletter is also a part of the activity under the TCC.





MAMC at Forefront of COVID-19 Vaccination

public besides the students, doctors and employees of Maulana Azad Medical College was rolled out on 02.02.2021. This was the largest government Medical College vaccination site of Delhi Government. Two parallel sites were identified and made operational. These sites are being managed by the department of Community Medicine, Maulana Azad Medical College, New Delhi in coordination with the district administration. Though initially, the site was intended to vaccinate only the employees, students, teaching and nonteaching faculty doctors of the College and associated hospitals, however later,

COVID-19 vaccination for general the services were extended for the general public due to its well managed and coordinated activity and timely response in managing of Adverse Events Following Immunization (AEFI), vaccine hesitancy and eagerness. Development of standard operating procedures, effective advocacy and communication strategies and display of adequate Information, Education and Communication materials were the key strategic interventions ensured to increase and scale the uptake of vaccines by the beneficiaries.

Kev Achievements:

Total sessions held till date: 398

Total number of beneficiaries with first dose: 16,326

Total number of beneficiaries with second dose: 12,724

Total Precaution doses: 219

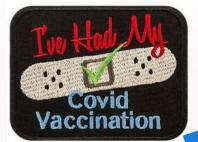
Total HCW with 2 doses: 1259 Total FLW with 2 doses: 2422

Total 18-44 years with 2 doses:

Total 60+ years with 2 doses:

Total 45-59 years with 2 doses:

- Dr. Shivani Rao, Nodal COVID Vaccination Centre



A MIX OF

ANXIETY AND

EXCITEMENT:

TEENS GET JAB

FOR COVID 19

HEADLINE: COVID VACCINATION IN SPECIAL GROUPS



COVID-19 Vaccination for teens aged 15—18 years i.e. those born in 2007 or before was initiated from 3rd January 2022 onwards.

There are estimated 10 lakh teens in the age group 15 to 18 years in Delhi. There are a total of 159 COVID Vaccination Centres (CVCs) identified for them.

The CVC at Maulana Azad Medical College under the Dept. of Community Medicine also started with this initiative and have till date vaccinated more than 150 teens. The precaution dose for the Health Care workers, Frontline workers and adults more than 60 years has also been initiated at MAMC CVC under all COVID appropriate protocols in place in spite of the rapid surge in Omicron cases in Delhi.

COVID Vaccination for Antenatal and Post Natal Women at UHTC Kalyanpuri, East Delhi

Background: Urban Health Training Centre (UHTC), Kalyanpuri is the field practice area of Lady Hardinge Medical College in East Delhi run by the Department of Community Medicine. The centre is situated in Block-13 of Kalyanpuri, East Delhi having a population of approx. 28000 (census 2011) and caters to the catchment area Kalyanpuri and extends to Khichripur, Trilokpuri, East Vinod Nagar. The primary mandate of the centre is to provide comprehensive healthcare to the community with maternal and child health services being the thrust areas.

Vaccination Initiative during the COVID Pandemic: COVID vaccination for Pregnant and lactating women was commenced from September 7, 2021, at the centre and for operational feasibility it was clubbed with Routine Antenatal Clinic Days (held every Tuesday).

Preparatory Phase activities: Considering the current situation of pandemic, the National Technical Advisory Group (NTAGI) recommended pregnant women should not be excluded from vaccination because exposure probability is very high and therefore the benefit far outweighs the risk. Close on heels the Union Health Ministry announced that pregnant women are eligible for Covid vaccination in July 2021, based on recommendations of NTAGI.

However in view of the vaccine hesitancy and the various misconceptions prevailing in the community, an extensive awareness campaigns and vaccine advocacy was undertaken. Interactive health talks and Focus Group discussions with ASHAS & ANMs of the area were conducted to address all concerns related to COVID vaccination in this group. Liasoning with the adjacent Lal Bahadur Shastri hospital was done for establishing referral linkages in the event of severe adverse effect post-immunization. Facility for oxygen supply, AEFI kits, laptops, CCTV cameras, cold chain equipment and other pre-vaccination arrangements were made.

Protocols followed: At present all pregnant and lactating women ≥18 years (registered on COWIN app & walk-in candidates with Aadhaar cards) are eligible and are offered Covishield vaccine as per GOI guidelines. All women are thoroughly counseled and signed consent forms are obtained before vaccination. A mandatory 30min observation post-vaccination is followed. 145 eligible women have received vaccination till date. No severe or serious AEFIs have been reported by the women vaccinated so far.

It may also be noted that the **COVID Vaccination Centre (CVC)** under the Department of Community Medicine was already operational in the Oncology Block at LHMC & Associated Hospital since **16th January 2021** under the abled guidance of Faculty In-charge & Director Professor, Dr. J.G Prasuna and is functional till date as one of the **Model Vaccination Centre** of Delhi with a huge daily footfall.

-Dr. S.K.Rasania (Director Prof & HOD), Dr. Anita S. Acharya (Director Prof & Centre Incharge), Dr. Nazish Rashid (Assoc. Prof & Co-incharge) & Dr. Ananya Ray Laskar (Assoc. Prof & Co-incharge), Dr. Shibajee Debbarma (Assist. Prof & Co-incharge)







THE COVID BOOSTER DOSE-HOW DOES IT WORK?

CHALLENGES IN COVID-19 VACCINE AEFI REPORT-ING IN INDIA: FROM THE LENS OF HEALTH SYSTEM

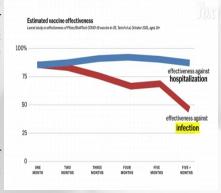
Booster Dose hesitancy in the beginning-

In September 2021, the CDC recommended booster shots for those at high risk and the elderly in the United States. Following that decision, the roll out of the booster dose started in various countries like the United Kingdom and Singapore. Two months later i.e. on November 19th 2021, the CDC recommended that the booster shots should not be confined to just two categories and it should be administered to all adults. However this was a grey area that was not met with enthusiasm by various scientists working in this field said that there was no need for the booster for the general population. Dr Celine Gounder, a leading infectious disease specialist and professor at the New York University wanted more evidence about long term immunity before advocating boosters for all. But recently with the emergence of the Omicron variant her stance on this changed and she added that "If Omicron is truly evading, we can likely overcome that immune evasion with boosters (similar to what was seen with Beta)." The opinion of many other

Scientists has changed since the emergence of the new variant leading many to opt for the Booster Dose.

How does the BOOSTER Work?

Vaccination stimulates different branches of your immune system that include the B cells,



T cells and antibody levels. These antibody levels protect a person against the infection, particularly soon after vaccination. The Antibody levels wane eventually over a time period, and once they fade away the B cells become factories to make the antibodies. Subsequently on reexposure to the virus, the B cells recognize the virus and produce antibodies all over again. A person might not be fully protected against all infection but one still has very long lived memory B cell responses that are still protective against the severe form of disease, hospitalization and death.

Evidence regarding the booster in India-

A booster shot of indigenously developed CoOVID-19 vaccine Covaxin, administered six months after getting two doses of the vaccine, has been found to successfully neutralize both the Omicron and Delta variants of SARS-CoV-2, a study conducted at Emory University has shown. Bharat Biotech said the study conducted using a live virus neutralization assay showed the booster dose generated robust neutralizing antibody responses against both Omicron (B.1.529) and Delta (B.1.617.2).

India has begun giving booster doses of the Covid-19 vaccine to priority groups amid a surge in infections.

Health and frontline workers and people above 60 years old with comorbidities are currently eligible to take the jab. The drive began as India battles a spike in Covid cases fueled by the Omicron variant of the coronavirus. Early studies from other countries have suggested that a booster vaccine may provide more protection against Omicron.

-Dr Samar Hossain, Consultant Epidemiologist, IDSP, NCDC

Prologue: Surveillance of the Adverse Events Following Immunization is one of the most important part of the COVID-19 vaccine process. But India's system was woefully unprepared for this, leaving families confused, sowing vaccine hesitancy in communities, while robbing the system of valuable data.

(Source: BMJ; http://dx.doi.org/10.1136/bmj.n3146)

India's Universal Immunization Programme (UIP) is the world's largest vaccination programme. The COVID-19 Vaccination drive which was initiated last year in 2021 utilized the existing UIP machinery including the human resource, logistics and most importantly the cold chain points. The recording and reporting system in UIP is already filled with a lot of challenges, further embedding the COVID vaccine safety systems to it in adapting this already existing pediatric immunization programme to adults has added additional hurdles. So, when the country began vaccinating healthcare workers in January 2021, the post-licensure safety surveillance system for children's vaccines had to be modified for adult vaccines. This AEFI reporting system is three tiered. Once a hospital or healthcare provider voluntarily reports a serious AEFI, a district committee gathers all related data and sends them to a state committee. The state committee then investigates whether the AEFI is causally related to the vaccine and sends the data to a national committee for verification. After verification, these data are supposed to go back to immunizers and vaccine recipients. This feedback loop is weak, however, it is critical because it helps immunizers to avoid errors and handle AEFIs better, while also bringing closure to victims of serious adverse events. When COVID-19 vaccines were developed, the committees hurriedly recruited adult physicians, such as cardiologists and neurologists, and trained them in causality assessments. Furthermore, adult physicians have not been used to reporting vaccine adverse events. Even though the government sent letters asking district officials to sensitize hospitals about reporting, "relatively fewer reports" have been coming This data gap is significant, because over half of all Indians approach the private sector for treatment when they become ill. On top of this, the pandemic and the immunization programme itself have stretched the safety system. Meanwhile, district immunization officers have to meet high vaccination targets, while also pushing hospitals to report adverse events and collecting the necessary medical records to investigate them. The net result is very low levels of reporting, delay in the collection of medical records, and slow causality assessments.

Since India began its COVID immunization programme therefore, compared with the current passive system, in which doctors can choose whether to report an adverse event, an active one would solicit such information from healthcare providers so that the active surveillance programme can identify rare events such as TTS and multisystem inflammatory syndrome. It is also necessary to supplement the national committees with regional and state committees. A strong safety system will also allow finer calculations of a vaccine's benefit-risk ratio in specific age groups. For instance, on the basis of data showing that younger people had a higher risk of TTS and a lower risk of severe covid-19, the UK is now offering alternatives to AstraZeneca's vaccine among healthy adults under. In January 2022 India opened up vaccinations to 15-17 year old, among whom severe COVID-19 is even rarer, making a sensitive safety surveillance system critical.

- Dr Pragya Sharma, Dr. Warisha Mariam

(Adapted from BMJ (http://dx.doi.org/10.1136/bmj.n3146)

SCIENTIFC READS

COVID-19 DISEASE IS LESS SEVERE IN RECIPIENT of Measles/MR VACCINE

Manifestations of SARS-CoV-2 infection among children have been reported to be mild to moderate disease and probably due to immunization with routine childhood vaccination. With this speculation, authors had conducted an observational study among 141 children of age group up to 15 years, resident of Central district, Delhi, and tested positive for SARS-CoV-2 by rapid antigen test (RAT) or reverse transcriptase-polymerase chain reaction test (RT-PCR). Their Immunization history was verified from their immunization card. Association between severity of COVID-19 disease (categorized as per clinical Management Protocol for COVID19) and immunization status of the children were found out.

The salient findings of the study are, out of the total, 70.9% were symptomatic, with mild, moderate, and severe disease in 62.4%, 6.4%, and 2.1%, respectively. Significantly, a higher proportion of boys (14.5%) (P<0.01) had the moderate and severe disease as compared to the girls. Symptomatic infection was more in the case of partially immunized children as compared to the fully immunized children (75% vs 69.7%; P=0.60). In partially immunized children, combined moderate and severe disease was more (16.7%) as compared to fully immunized children (7.0%) (P=0.26). Among the recipients of the measles/MR (Measles and Rubella) vaccine (first dose as well as second dose), disease severity was significantly less as compared to those who did not receive [6.3% vs 57.1%; P=0.001] for the first dose, and [6.1% vs 40%; p=0.005] for the second dose. However, no such association was observed with other vaccines. The odds of having combined moderate and severe disease was 19.6 times higher (for the first dose) and 10.2 times higher (for the second dose) among those who did not receive measles/MR vaccine as compared to the recipient of the vaccine. In conclusion, those who received the measles/MR vaccine had a less severe form of COVID-19 disease as compared to those who were not vaccinated. Also, symptomatic infection was more in the case of partially immunized children as compared to the fully immunized children.

Source: Majhi MM, Borle AL, Lal P, Meena M, Ramani KV. Vaccination With Routine Childhood Vaccines and Severity of COVID-19 Among Children in Delhi. Indian pediatrics. 2021 Nov 29. [E-PUB AHEAD OF PRINT]

- Dr. Madan Mohan Majhi, Dr. Amod Laxmikant Borle, Dr. Panna Lal

COVID-19 AND CHILDREN-PRIORITIZED VACCINATION LACKS EVIDENCE FOR ACTION

Several states in India have borne the brunt of the second wave of the coronavirus disease 2019 (COVID-19) pandemic which resulted in large-scale morbidity and mortality and have announced their preparedness plan for a the third wave with focus on protecting children and adolescent. There have been some isolated calls for prioritizing vaccination in young adolescents causing increased stress and anxiety in families despite the lack of any definitive recommendation by any health or medical organization. People below 18 years of age constitute nearly 29.1% of the global population and achieving effective herd immunity through paediatric vaccination represents an ethical and policy dilemma considering the low impact of the COVID-19 upon children. Epidemiologic studies worldwide show that children and adolescents experience less severe forms of the COVID-19 and reduced mortality in comparison with adults probably due to differential immune and clotting function mechanisms apart from underdeveloped and fewer nasal angiotensin-converting enzyme 2 receptors. The number of COVID-19 infections is least in children with 2% to 5% infections recorded in the<18 age group in India. A nationwide serosurvey by the Indian Council of Medical Research in December 2020 estimated the seroprevalence in the 10 to17 age group to be 27.2% (95% confidence interval 24.9–29.4).

We also conducted a state-wide serosurvey in Delhi, India in January 2021 that observed a high seroprevalence of severe acute respiratory syndrome coronavirus 2 immunoglobulin G in all the child and adolescent age groups from 5 to 17 years signifying the clinical spectrum of infection was asymptomatic or mild inmost cases. The comparatively higher seroprevalence estimates in Delhi was likely because of the high population density especially in the slum and resettlement colony populations. Even in the children having moderate-severe COVID-19 disease and needing hospitalization, the risk of death is low and mostly concentrated in those with underlying illnesses. A study from Mumbai reported a case fatality rate of 11.4%(n=969) among hospitalized children. In contrast, moderate-severe adult COVID-19 cases hospitalized at a tertiary care hospital in Delhi had a comparatively higher case fatality rate (13.7%) with most deaths occurring after the age of 40. During the second wave of the pandemic in India leading to a massive surge in cases, newer COVID-19 strains especially the B.1.617 (Delta) have been implicated to confer increased infectiousness and potential virulence in the viral agent. Nevertheless, there is no evidence till date to suggest that the Delta strain has greater propensity to infect or cause severe disease in children.

In conclusion, the expansion of vaccination coverage to achieve herd immunity in the overall population is an ethical imperative for governments to halt the COVID-19 pandemic. Limited vaccine stocks globally especially in developing countries signify the need to equitably distribute vaccines to the most vulnerable populations. Consequently, people with comorbidities, older people, middle-aged adults and finally young adult people continue to warrant a substantially higher vaccine prioritization compared to children due to the likely protection accorded against severe disease in the former. The development of safe and effective COVID-19 vaccines for children after rigorous clinical trials that are able to reduce disease transmission is also necessary to make a case for ramping vaccine coverage in this cohort which is otherwise significantly less vulnerable to adverse disease outcomes.

- Dr. Nandini Sharma, Dr. Saurav Basu, Dr. Pragya Sharma

Editors: Dr. Pragya Sharma (MAMC), Dr. Shivani Rao (MAMC), Dr. Amod Laxmikant Borle (MAMC), Dr. Warisha Mariam (MAMC), Dr. Amita

SCIENTIFC READS

VACCINE HESITANCY, DELAYS AND BARRIERS IN COVID-19 VACCINATION AMONG EDUCATED CLASS OF GENERAL POPULATION IN INDIA

Introduction: Vaccine hesitancy has emerged as one of the leading global health threats as identified by WHO, that may be detrimental to efforts to control the pandemic. In India COVID vaccines were introduced in a phased manner initially for health care workers in January 2021 closely followed by ≥ 60 years and then ≥ 45 years, subsequently for all the adults in the age range of 18-44 years by May 2021. Assessing factors influencing the behavioural decision to delay or reject is imperative in scaling-up the vaccine uptake.

Objectives: To estimate the vaccine hesitancy or delay in COVID-19 vaccination among school teachers and their family members.

Methods: An online cross-sectional, observational study was conducted among teachers and their eligible family members, using structured questionnaire on vaccination hesitancy/delay incorporated into kobo toolbox. The determinants to hesitancy were assessed and data was analysed using SPSS version 20.

Results: Out of total 362 participants, 43% were totally unvaccinated. Most common reasons included doubts regarding vaccine effectiveness (52.3%) and apprehension about the side effects (48.6%). The sources that influenced their opinion were whatsapp and other social media (39%) rather than credible sources.

Recommendations: Risk communication and vaccine advocacy should be tailor-made to curb all doubts and concerns of the general public and counter the misinformation in order to improve the vaccine uptake.

Source: Ahead of print in Healthline Journal Volume 12 Issue 4 (October-December 2021)

- Dr. Ananya Ray Laskar, Dr. Shyambhavee Behera, Dr. Poddar AS, Dr. SK Rasania, Dr. SS Saha

NEUTRALIZING ANTIBODY RESPONSES TO SARS-COV-2: A POPULATION BASED SEROEPIDEMIOLOGICAL ANALYSIS IN DELHI, INDIA

Several population-based SARS-CoV-2 seroepidemiological studies have been conducted in India. However, these studies primarily focussed on screening antibodies in the participants through antibodies recognizing SARS-CoV-2 spike antigens and/or nucleoprotein. Consequently, it is important to identify the extent to which these populations have also developed protective neutralization antibodies. We conducted this study to estimate seroprevalence of neutralizing antibodies in the general population and to further correlate it with the IgG SARS-CoV-2 IgG levels. This present cross-sectional analysis was conducted as a sequel to a state level community-based seroepidemiological study in Delhi, India. A total of 2564 seropositive samples were selected from 25622 seropositive samples through simple random sampling. Neutralizing capacity was estimated by performing a surrogate virus neutralization test with the sVNT (GenScript) assay.

Neutralizing antibody against the SARS-CoV-2 virus was operationally considered as detected when the signal inhibition was \geq 30%. A total of 2233 (87.1%, 95% C.I. 85.7, 88.3) of the 2564 SARS-CoV-2 seropositive samples had detectable neutralizing antibodies. On bi-variate analysis but not on adjusted analysis, Covid-19 vaccination showed a statistically significant association with the presence of neutralizing antibodies (p<0.001). The signal/ cut off (S/CO) of SARS-CoV-2 IgG ranged from 1.00 to 22.8 (median 11.40). In samples with S/CO \geq 4.00, the neutralizing antibodies ranged from 94.5 to 100%, while in samples with S/CO <4.00, it ranged from 52.0 to 79.2%. The neutralizing antibody seroprevalence strongly correlated with the S/CO range (r=0.62, p=0.002). In conclusion, in populations with high SARS-CoV-2 seroprevalence, neutralizing antibodies are generated in nearly 9 of 10 seropositive individuals.

This study also suggests that a higher signal to cut-off ratio may be considered as an indirect predictor for the presence of neutralizing antibody response. This finding may have a clinical implication towards recommending booster doses in vulnerable populations such as the immunocompromised and healthcare workers. Certain variants of concern especially the Delta have demonstrated the ability to bypass existing immune response and elicit symptomatic disease even in vaccinated and more rarely in recovered individuals [10]. However, in this study, vaccination with at-least one dose of vaccine, either CHADOX1 NCOV-19 (Covishield) or BBV152 (Covaxin) was likely to induce robust neutralizing antibody response.

- Dr. Pragya Sharma, Dr. Ekta Gupta, Dr. Saurav Basu, Dr. Suruchi Mishra, Dr. Pratibha Kale, Dr. Nutan Mundeja, Dr. B S Charan, Dr. Gautam Kumar Singh, Dr. M.Meghachandra Singh

THE PERSPECTIVES

शिक्ष शिक्ष क्रिक्स क

सोलह मार्च का दिन मित्रो ! विश्व खसरा प्रतिरक्षण दिवस खसरा क्या है? कैसे फैलता? जागरूकता फ़ैलाने की दिवस अत्यधिक संक्रामक रोग, बच्चे होते अधिक प्रताडित बचपन में टीका न लगे तो व्यक हो सकते प्रभावित अफ़्रीकी एशियाई गरीब देशों में, सर्वाधिक पीड़ित होते कुपोषण विटामिनों की कमी आपदाकाल, भीड़ में होते करोड़ों बच्चे आते चपेट में मृत्यु का प्रमुख कारण विकलांगता पैदा करता बहत जरूरी इसका निवारण हर दो तीन वर्ष में एक बार लेता महामारी का रूप पांच वर्ष से या तीस से बड़े, धारण करे गंभीर रूप तेज ब्खार आँखें लाल खांसी छींक नाक का बहना सफ़ेद धब्बे गाल में व चेहरे गर्दन शरीर पर दाना पैरामिक्सो वायरस नामक वायरस खसरा संक्रमण रोगीसम्पर्क में दसबारह दिन बाद पैदा होते लक्षण अनेक जटिलताएं हो सकतीं न्युमोनिया गंभीर अतिसार कान संक्रमण निर्जलीकरण अंधापन व मस्तिष्क बुखार विटामिन ए कमी हो जाती गंभीर प्रोटीनऊर्जा कुपोषण प्रतिरक्षा क्षमता घटने से, उग्र हो जाते दूसरे संक्रमण खांसनेछींकने के समय वायरस पीड़ित से हवा में आता जो भी सांस ले उस हवा में खसरा का खतरा बढ़ जाता जब भी खसरा हो किसी को, मूंह को ढककर सामने आएं वरना खांसीछींक में निकली छींटों से खसरा संक्रमण पाएं खसरे की कोई दवाई नहीं, केवल लक्षणों का होता उपचार खांसी,ब्खार की दवा,प्नर्जलीकरण, जटिलताओं का उपचार टीकाकरण ही केवल उपाय जिससे खसरा रोका जाता जीवनभर बच्चे रहते स्रक्षित मृत्युभय कम हो जाता खसरा वैक्सीन द्नियाँ भर में दो करोड़ बच्चों को बचाती एमएमआर रूप में देने से अस्सी प्रतिशत मौत घट जातीं अच्छा भोजन विटामिन ए खुराक हवादार आवास जरूरी विवाह से पहले हर बच्चे को, एमएमआर वैक्सीन जरूरी सभी टीके निश्लक लगते सरकार चला रही बड़ा कार्यक्रम स्वास्थ्यकेंद्र,अस्पतालों में लागू राष्ट्रीय टीकाकरण कार्यक्रम |

- डॉ पन्ना लाल



VACCINE SAFETY SURVEILLANCE IN CONTEXT OF COVID VACCINATION

The COVID-19 vaccine safety guidance manual, launched in early 2021, was developed upon recommendation and guidance of WHO Global Advisory Committee on Vaccine Safety (GACVS) in May 2020. The manual was designed to ensure infrastructure and capacity for surveillance of the safety of COVID-19 vaccines should be in place in all countries and existing infrastructure be reactivated and engaged when Covid vaccines are introduced. This manual been the guiding force behind several vaccine safety strengthening initiatives taken in countries over the past one year. The focus has been to strengthen the routine safety data capturing mechanisms, rather than running any alternative or parallel systems to capture adverse events following covid vaccinations. WHO vaccine safety technical experts across all regions have supported the national regulatory agencies and national immunization programs to conduct activities and workshops to ensure that the member states meet at least the minimum safety surveillance requirements for a functional surveillance. Support has provided in strengthening AEFI reporting, investigation, and causality assessment. National expert committees have been expanded and trained to adapt to the challenges and approach needed to assess causality for serious cases reported post covid vaccination. Technical support has been provided to constitute, expand, and train sub-national investigation teams to ensure timely and comprehensive investigations of serious AEFI cases. In addition, countries have been guided on improving AEFI case reporting through enhanced national and provincial level inter-stakeholder coordination, ensuring dissemination of reporting and investigations forms adapted to Covid vaccination context and ensuring cascaded trainings of health care workers and vaccinators at health facility levels. Technical and financial support has also been provided to initiate Safety Surveillance for Adverse Events of Special Interest (AESI) cases through adaptation of WHO protocols for Cohort Event Monitoring (CEM) and Sentinel Site

Member states have been encouraged and supported to adopt safety data capturing software (e.g., DHIS2, Med Safety, VigiFlow) to ensure smooth and real time data transmission from field to national level and also commit safety data in the global database (VigiBase) to enhance signal detection. Over the past 12 months, more than 2.9 million AEFI cases following Covid vaccination have been shared across all WHO regions. This has helped to detect many new/potential signals over the past months (e.g., TTS, pericarditis, myocarditis, GBS, capillary leak syndrome) that has helped countries take important policy decisions

With WHO Emergency use approval granted to Covovax, the EUL Covid vaccines list has expanded to nine, thereby allowing countries more and more options to choose from. Besides, many countries are using multiple vaccine platforms simultaneously. Many countries have already introduced third doses/ boosters and the target age groups have been expanded along with vaccination or pregnant/lactating women. It therefore becomes pertinent for member states to continue strengthening safety surveillance. Many challenges remain, especially at the implementation level, that need to be urgently addressed. Besides, member states are encouraged to undertake more and more post-authorization active surveillance and research studies to address current knowledge gaps on safety surveillance and monitoring. The recommendations from WHO Strategic Advisory group on Immunization (SAGE) can be a useful source to identify such areas that best suit the country context.

- Dr Sujeet Kumar Jain
Technical Officer
Vaccine Quality and Safety
WHO-Regional Office for Africa