



STATE AEFI TECHNICAL  
COLLABORATION CENTRE  
MAULANA AZAD MEDICAL COLLEGE



# E-NEWSLETTER

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## STATE LEVEL TRAINING AT TCC, MAMC

Capacity Building of  
District Immunization and  
Link Officers held on 11<sup>th</sup>  
and 12<sup>th</sup> October, 2022.

*Glimpses from the  
training activity*

The State AEFI TCC under the department of Community Medicine, MAMC has been conducting periodic trainings since its inception on 18<sup>th</sup> October 2021. Till date capacity building of approximately 80 officers involved in various aspects of AEFI reporting, investigating and assessment have been done. This hands on training conducted on 11<sup>th</sup> and 12<sup>th</sup> October 2022 was the first in series of new 6 batches of similar trainings to be conducted till March 2023. This hands on training was attended by District Immunization officers and their link officers. A total of 21 participants attended two day long training with more than 10 hands on sessions.

The AEFI surveillance system is a reporting system where any suspected adverse event following immunization should be recorded and reported as per national AEFI Surveillance guidelines. The reporting of serious/severe AEFI is done using Case Reporting Format (CRF) which is prepared by the Medical Officer of the PHC or the reporter and then sent to the District Immunization Officer within 24 hours of getting the information of the case. In the next 24 hours, the DIO verifies the case details and sends it simultaneously to the state and national level. The goal of a case investigation is to make a clinical diagnosis based on the chronology of medical events and available evidence.

**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 a hands on training session on “Reporting, Investigation and Assessment of Adverse event following Immunization”.**

The participants were administered pre test before starting & post-test following the sessions on AEFI reporting, case investigation, records and format filling and basics of causality assessment. They were then taken to pediatric ward attached with MAMC and LNH for case investigation of identified dummy AEFI cases. A simulation exercise of the whole process from case reporting to investigation and conducting of district review meetings was done on day two of the training. Before the wrap up post test was also administered which showed a median improvement in score from 11 to 13 (out of total score of 15). The minimum score received by any participant before and after training improved by 5 points.

**Table: Questionnaire Item wise Distribution of Training Participants**

	Questions	Pre-Test (N=21)		Post-test (N=20)	
		No	%	No	%
1.	Type of AEFI to be reported	20	95.24	20	100
2.	Onset of interval of severe AEFI associated with which vaccine	12	57.14	20	100
3.	AEFI reporting after 3 months of onset of AEFI	18	85.71	20	100
4.	Reporting serious/severe AEFI conditions	17	80.95	19	95
5.	Factors determining causal relationship for cluster AEFI cases	15	71.43	18	90
6.	Serious AEFI notification	14	66.67	20	100
7.	AEFI Reporting formats and platform for reporting	3	14.29	5	25
8.	Causality Assessment of AEFI	14	66.67	15	75
9.	Sequence of steps in Causality Assessment	9	42.86	14	70
10.	AEFI register	13	61.90	15	75
11.	Documentation for AEFI	20	95.24	20	100
12.	Pre-requisites for assessing Causality in AEFI	20	95.24	20	100
13.	CRF format filling	16	76.19	20	100
14.	Reporting of AEFI causality	19	90.48	18	90
15.	Serious AEFI reporting	14	66.67	18	90

# The Vaccine Industry: Demand and Supply Issues:

Dr. Yogesh Arora, Dr. Gurmeet Singh

Despite devastating outbreaks, low- and middle-income economies still only have limited access to COVID-19 vaccinations, while some economies have already vaccinated more than half of their populations and are reopening.

Blame has been placed on supply bottlenecks. Although vaccine producers claim to have ample capacity, it is understandable that crucial supplies for vaccine production, such as enormous plastic bags and glass vials, are difficult to find since more countries order many vaccines at once. These supply-side difficulties are overstated, though. Because there is not enough demand, vaccination campaigns in low-and middle-income countries have not progressed as much as they should. Advance purchases aid vaccine producers in overcoming three difficulties from a commercial standpoint.

- 1) Inventory risk comes first. Increased inventory reduces the return on capital if vaccines are produced but not sold. Manufacturers often won't let customers reserve capacity in advance because they make money by being able to divide their capacity between customers. This works when demand is steady and they can keep just the right amount of inventory on hand to meet demand. Advance purchases are used to activate additional capacity, though, when demand spikes. For example, Tesla recently bought chips in advance from the semiconductor industry, which has a shortage of chips because of a rise in demand for durable goods that use them. This was done to ensure a steady supply.
- 2) The second difficulty is getting credit. A company might not have the working capital to purchase inputs even though it has a legally binding commitment. Giving the money up front can solve this issue with advance purchases. Banks will be more willing to lend when companies have commitments to buy, even if the money is not paid upfront.



- 3) The identification and removal of supply bottlenecks represent the third challenge. Once vaccine manufacturers have made purchases, they can then make purchases from suppliers, and so forth. For instance, businesses won't learn where to find more bioreactor bags until they start looking.

Castillo et al. (2021) showed that early investment in COVID-19 vaccine production capacity could be the highest-return public investment ever: "Capacity already in place, some of which was installed at risk' before clinical trials were completed, is more valuable than the capacity that comes online later because it can produce vaccine courses without delay." Advance purchase contracts are the way to invest "at risk" in capacity. Attempts at direct procurement also face obstacles. Early in May, only five out of fifty-five African Union members had paid a 15% deposit to secure vaccines through the African Vaccine Acquisition Trust, despite establishing a lending facility to cover the remaining cost. Moreover, as we describe in our paper, vaccines must be authorized for emergency use before they can be purchased through vaccine loan facilities established by multilateral development banks. This requirement may reduce the possibility that ineffective vaccines are procured. Still, it prevents these facilities from funding early "at-risk" capacity investments in the style of Operation Warp Speed or COVAX. To be ready for future pandemics, a facility like COVAX will be allowed to buy vaccines before they are approved by regulators. This will make Operation Warp Speed possible for the poorest countries. In this pandemic, donors realized this one year too late. Some have argued that releasing vaccines from patent protection would help end the pandemic by encouraging additional manufacturers to enter the market and increasing supplier diversity. This could be the case, though, just like with the current supply, governments would need to commit to buying from those manufacturers

## From the Poet's Desk

### # WORLD MENTAL HEALTH DAY

01

Making Mental Health and Well being for All.

02

Transforming mental health requires strenghtening of community based care.

03

Let's talk Depression.

04

Mental Health Care for All, let's make it a reality.

दस अक्टूबर आज है मित्रो विश्व मानसिक स्वास्थ्य दिवस  
तन के साथ मन भी रहे स्वस्थ कार्य करो कुछ ऐसे बस  
विश्व में बढ़ती आत्महत्याओं को मिल कर हमें रोकना है  
विश्व स्वास्थ्य संगठन कह रहा गंभीर कोशिशें करना है  
आत्महत्या के कुछ कारण हैं अत्यंत महत्वपूर्ण  
इसकी मानसिकता वाले की सुनो बातें सम्पूर्ण  
कुछ खोने पर कुछ न पाने पर जन्म ले लेती यह प्रवृत्ति  
घिर जाता अवसाद में जन मिल नहीं पाती अगर उन्नति  
अगर समस्या ऐसी है सुलझा सकते हैं आप  
ईमानदारीसे करो प्रयास सफलता पाएंगे आप  
मनोबल उसका ऊंचा करो पैदा कर उसमें विश्वास  
अच्छा जीवन जीने की फिर से करे नित्य प्रयास  
समझाना है तुम्हें उसे यह तोड़ो नहीं कभी अपना मन  
एक असफलता नहीं बने कारण नष्ट करने का जीवन  
अनेक विकल्प उपलब्ध जगत में चुन लो उसमें कोई एक  
खुद को ढालो परिस्थितियों में कठिनाइयाँ आएंगी अनेक  
अपने में कमियाँ न देखो खाओ सदा संतुलित आहार  
जल्दी सोओ व जल्दी उठो पार्क में जाकर करो विहार  
स्वच्छ हवा में टहलने से मन हो जाता मित्रो ताज़ा  
प्रकृति से प्रेम करो तो कोसों दूर अवसाद चला जाता |

डॉ पन्ना लाल

डायरेक्टर प्रोफेसर, सामुदायिक चिकित्सा विभाग

मौलाना आजाद मेडिकल कॉलेज



## BEHAVIOURAL AND SOCIAL BEHAVIOURAL AND SOCIAL DRIVERS (BESD) OF VACCINE UPTAKE: BESD

To increase vaccine coverage, it is vital to understand the reasons why uptake is low or stagnating. Studies often find lower coverage among people living in poverty, with lower education and health literacy, with larger families, with less access to health services, living in rural or remote areas, or in areas with high levels of instability, conflict, or violence. These studies of root causes need to be complemented with an assessment of the more proximal behavioural and social causes of low uptake. The BeSD of vaccination are defined as *beliefs and experiences specific to vaccination that are potentially modifiable to increase vaccine uptake*. These drivers are often not measured comprehensively or systematically. When they are, the measures vary in their quality regarding validity, conceptual clarity, and comparability within and across countries. These limitations make it difficult to track trends and make comparisons across countries and time. Furthermore, several existing measures often assume a single explanation for low coverage focused on what people think and feel, without giving sufficient attention to social influences and practical issues related to vaccination. To support measurement of a wider range of drivers of vaccination, and based on discussions with core partners, WHO established the Measuring Behavioural and Social Drivers of Vaccination global working group in October 2018. Members of the BeSD working group included representatives of global agencies and experts from multiple geographical regions, covering a range of behavioural and social science disciplines with practical and programmatic experience in low- and middle-income settings.

The framework has 4 domains of behavioural and social drivers of vaccination:

- 1) Thinking and feeling, which includes the cognitive and emotional responses of people to vaccine preventable diseases and vaccines
- 2) Social processes, which includes social norms about vaccination and receiving recommendations to be vaccinated
- 3) Motivation, which includes the intention, willingness, and hesitancy of people to get vaccinated
- 4) Practical issues, which includes the experiences people have when trying to get vaccinated, including barriers faced, e.g. accessing the clinic or costs of transport to the clinic.

The framework includes influences that are measurable, potentially changeable, and specific to vaccination. Within each of the 4 domains of the framework, the working group identified underlying constructs (themes). An example of a construct is "Vaccine confidence", located in the Thinking and Feeling domain. Each construct was matched with one indicator, for example the measure of "Percentage of parents who say vaccines are important". The definitions of key BeSD constructs reflect current evidence and support standardization and reliable measurement. "Vaccine confidence" was defined as the belief that vaccines are effective, safe, and part of a trustworthy medical system. Low vaccine confidence is distinct from, but may contribute to, vaccine hesitancy. "Vaccine hesitancy" is part of the Motivation domain and defined as a motivational state of being conflicted about, or opposed to, getting vaccinated; this includes intentions and willingness. This definition replaces that given by SAGE in 2014, where vaccine hesitancy was defined as a delay in acceptance or refusal of vaccination despite availability of vaccination services. The new definition recognizes hesitancy as an intention or motivation and is separate to the resulting behaviour. This enables behaviours and their many other influences to be better understood and measured separately. The sections below summarize key aspects of the development, testing and validation processes of the tools for both BeSD childhood vaccination and COVID-19 vaccination, and highlights notable findings and outcomes that led to finalization of the tools and indicators for use.

