

EFI Bulletin

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# EFI Bulletin

Bulletin of Epidemiology Foundation of India





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## President's Corner



### Protect yourself from misleading presentations of clinical trial results

**Dr. Manya Prasad, Dr. Umesh Kapil**

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When applying the principles of epidemiology in assessing the credibility of clinical trial results, the fundamental questions revolve around bias and random error. Epidemiologists are hardwired to delve into methodological issues that could potentially distort trial results, or issues related to imprecision, yielding an unreliable result. However, it is becoming increasingly clear that trial results may still mislead despite having adequately addressed issues of bias and imprecision.

In the new age of epidemiological investigation, there are clinical trials that are phenomenally well-conducted and adequately powered, and yet are presenting results in a way that give the impression that the intervention is better than it probably is in real life. Certainly, when subjected to the usual tools for critical appraisal, these studies pass with flying colours. However, in trying to present things in a more appealing form than it actually is, they still hold the threat of misleading the audience. The following points highlight this so called 'spin' to the results that from the red flags to be wary of:

#### 1. Beware substitute or surrogate endpoints

Ideally, trials are most credible when they demonstrate a benefit in an outcome related to the way a patient 'feels, functions or survives'—so called 'patient important outcomes'. Outcomes such as stroke, myocardial infarction, health-related quality of life (HRQL), and death constitute patient important outcomes. Conducting these trials requires such a large sample size or extended patient follow-up that researchers or drug companies look for alternatives. Substituting laboratory or physiologic measures that are associated with patient-important outcomes (surrogate end points) allow researchers to conduct smaller and shorter trials, thus circumventing the problem posed by studying patient important outcomes (1).

As is the case with diabetes treatments, one would prefer to observe an effect on what is important for the patient—i.e., micro- and macro-vascular effects such as myocardial infarction, amputations, blindness, need for dialysis, and death. However, most trials in diabetes treatments report the effect in the form of surrogate endpoints blood glucose or HbA1c. In doing so, industry funded studies are able to get away with demonstrating an apparent dramatic effect, and unfortunately, most guidelines are informed by this evidence.

One must be skeptical with surrogate endpoints—focus more on patient important outcomes. Reliance on surrogate end points may be beneficial or harmful. On the one hand, use of the surrogate end point may lead to rapid and appropriate access to new treatments. The substitution of surrogate end points for patient-important outcomes is attractive when the surrogate can be measured earlier, more easily, more frequently, with higher precision, or with less confounding by competing risks or other therapies (2).

On the other hand, reliance on surrogate end points can be misleading and thus result in excess morbidity and mortality. For instance, flosequinan, milrinone, ibopamine, vesnarinone, and xamoterol all improve surrogate outcomes of hemodynamic function in ambulatory patients with heart failure, but RCTs found that each of these agents leads to excess mortality (3-5).

## **2. Beware composite endpoints**

Demonstration of an effect on a hard outcome such as mortality makes a convincing case for the intervention in question. However, as medical science advanced, the frequency of outcomes such as mortality have reduced. While this is great news for mankind, this has made it harder for trialists to detect a signal. The resultant low event rates provide challenges for clinical investigators who consequently require very large sample sizes and longer follow-up to test the incremental benefits of new therapies.

Clinical trialists have increasingly responded to these challenges by using composite end points that capture the number of patients experiencing any one of several adverse events—eg, death, MI, or hospitalization—as a primary study end point. By increasing the number of events, such composite end points decrease the necessary sample size and also may reduce duration of follow-up (6). Another justification of using composite endpoints is presence of competing risks.

However, the use of composite endpoints presents interpretational challenges. Consider a composite endpoint of ‘death, MI or revascularization’. It is possible that an intervention may do nothing for death and nothing for MI, but only reduce revascularizations. Most would agree that the usefulness of such an intervention is debatable as it only demonstrates a benefit on the least important of the individual components. Often, the component that drives the benefit observed from the intervention is a surrogate endpoint and has the potential to mislead readers into thinking that the benefit was observed across all components of the composite (7).

Whenever presented with a composite endpoint, one must look at the effect on the individual components. A large gradient in the importance of individual components must prompt one to take a closer look. It would be comforting if the individual components are comparable with respect to patient importance, for e.g., a composite of death and disabling stroke.

## **3. Beware Faulty Comparators**

One major way that trials can make interventions look better than they actually are, is through the choice of comparators. The use of a placebo and no treatment as comparators is common, even when RCTs have established the effectiveness of active treatments. In this case, the use of placebo may not be justified (8, 9).

Another way that faulty comparators may mislead is by giving an excessively large dose of the standard treatment in the comparison arm, allowing a larger proportion of the individuals to experience adverse events, as is what happened with some trials on anti-psychotics (10, 11). This will make the intervention look less toxic than it actually is. Other faulty comparators that may potentially mislead:

- Comparison with less effective agents when more effective comparators are available
- Comparison with more toxic agents when less toxic comparators are available

- Comparison with too low a dose (or inadequate dose titration) of an otherwise effective comparator, leading to misleading claims of effectiveness

#### 4. Beware large treatment effects in trials with only a few events

Often, trials yield unexpectedly large (>50% relative risk reduction) and highly statistically significant results with only a small number of events (<100). Though an apparently impressive finding, it is likely that this result is an aberration from the trial stopping too early (12).

In any given sample of clinical trials that study a true modest benefit, some studies will overestimate the effect in the beginning and 'regress to the truth' as more and more events accrue. Similarly, some trials will demonstrate harm in the beginning, and arrive at the true effect as more events accrue (1). If these trials are methodologically robust, then this variation is only because of chance. However, in the absence of a sound and formal stopping rule, and perhaps because trialists took multiple looks at the data, the trial was stopped at a point where it was at a point in the distribution where the effect was an overestimate. Had the trial continued to enroll more patients, it is likely that this large effect would disappear or even reverse (13).

For this reason, clinicians should be skeptical of large treatment effects from trials that are stopped early with few events. Moreover, changes in practice should generally wait until at least 1 replication has been reported with at least 300 events across the available studies (14).

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## From the Editor



I still remember well it was almost the same weather during mid of December 2020 when along the side of ongoing annual conference of IAPSM UPUK chapter at PIMS, Lucknow, with his foresight and vision Prof V K Srivastava advised me to take over the role of the Editor to EFI Bulletin. He wanted me not only to take up the challenge of reviving it but also to bring it on par with IBS and ISMS Bulletins for which I have already served as the Editor. Being the Editor EFI Bulletin, I everyday realize and get reminded that we must come-up to the level to meet his expectation; that may be one of the ways to express our respectful gratitude to his soul. For the past almost one year now our effort has been to ensure timely publication of the Bulletin on a quarterly basis in order to regain faith in esteemed members of the foundation. We attempted our best to seek interest and participation of the readers by initiating a few regular dedicated columns that are well appreciated.

This time we bring to you an editorial under communicable diseases by Prof F U Ahmed with a critical analysis of his own on the role of Community medicine during the recent pandemic, apart from publishing an interesting guiding write-up by Prof Umesh Kapil and Dr Manya Prasad, under the President's Corner. I am bound to insert some lastminute inputs under the CME column due to reasons beyond our control. Prof. Sonu Goel and Dr Garima have been kind enough to provide us with an original article on the lead issue of Tobacco use under the non-communicable diseases column. Though the beautiful coverage of the EFICON2021 was already made available on the U-tube it is our mandate to provide you a ready reference report in details on that hybrid mega-event compiled by Dr Pankaj Bhardwaj, the Organising Secretary of the conference.

We have been requesting the readers and inviting their healthy comments repeatedly to publish under the column 'Response to the Editor'. Also, we would like to encourage the active participation of the young enthusiastic readers that are yet lagging behind in contributing articles based on their respective interest areas.

We have the good news that Dr Pradeep Agarwal, being a member of EFI governing Body has been recently notified to be the Secretary of the foundation. We welcome him in his new role and are sure that with the zeal and enthusiasm he has been working and undertaking a variety of challenging tasks simultaneously, he would certainly prove to be a successful Secretary to EFI. But I shall be a loser, as he has continuously been helping single handedly the timely publication of the EFI bulletin from its inception in 2019. The constitution of EFI Bulletin's Editorial Board was getting postponed in the past due to reasons beyond our control, but now we are firm to have an active team on board by early 2022. We invite interests from life members of EFI separately to manage academic and technical contents; national and international news and events including member news etc and so on and so forth. I shall personally be grateful to receive such interests from young volunteers.

**Ajit Sahai**

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## Aims of EFI

To identify and promote areas of cooperation and understanding among researchers and like-minded organizations, individuals, scientific networks and other Governmental and Non-Governmental, National & International agencies which are contributing towards realizing the objectives of the Foundation.

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# Editorial

## Uncomfortable Truths — What COVID-19 has revealed about Community Medicine.

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Scientific information fuels and directs the response to epidemics. Public health professionals, clinicians, politicians, journalists, and members of the public will make critical decisions based on existing knowledge about the disease as the outbreak unfolds.(1). Experts in Community Medicine/Public Health are always the prime stakeholders in containment of pandemics. But the Covid-19 pandemic in India revealed some uncomfortable facts about the involvement of Community Medicine in pandemic containment and its relevance in the present-day health care system. In the past pandemics of Plague, Spanish Flu, Influenza, SARS, MERS, and NIPHA, the serving public health specialists in the health care system along with the faculty members of Public Health & Hygiene/ Social & Preventive Medicine/ Community Medicine of medical colleges assisted by the scientists of a premier institution like ICMR, NICD, were at the forefront in planning and organising effective containment measure. Specialists from the clinical department were at the forefront of providing patient care for early recovery and limiting the progress of adverse sequelae and fatality. During this pandemic, there was a role reversal, and the role of formally trained & experienced public health experts, teachers, and practitioners of community medicine in the decision-making process during COVID-19 is inconspicuous. The nature of the policy decisions and public statements made by the prominent clinical specialists and biomedical scientists of premier institutes and research organisations substantiate the hypothesis that they played a key role in the pandemic response in India. The experts engaged in public health decision making should have competency and experience in constructing the natural history of the disease based on available epidemiological data and knowledge of evidence based preventive measures, (levels of prevention) and knowledge or experience of the outcome of different containment measures reflecting the

community behaviour in implementing any containment measures in the past. One should always remember that the outcome of a bad clinical decision affects only one individual, but a bad public health decision affects the entire community.

In the history of public health, India is the first country to quarantine 1.3 billion people distributed in 28 states and 8 union territories to contain the spread of the COVID-19 cases when there were only 519 confirmed cases and 10 deaths in a few states. The prevailing epidemiological situation and possible public health reasoning leading to such drastic public health decisions needs exploration. During the initial period of an emerging pandemic, epidemiological data is available for the affected areas only and the health authority uses it for containment of the local spread and not for a country wide quarantine. The decision of nationwide lockdown seems to be based on the available deterministic/ stochastic models of the COVID-19 cases based on Wuhan Data. Mathematical modelling of epidemics plays an important role in suggesting necessary intervention strategies for controlling disease outbreaks. Classic compartmental models such as SI, SIS, SIR (2), SEIR and their derived/extended models (3) have long been successfully used to study transmission dynamics for different viruses. It provides the estimated transmission rate (basic reproduction Number  $R_0$ ) of COVID-19 infection and the probable cumulative numbers of cases. One chilling projection says there will be about 300 million cases, of which four to five million could be severe, requiring intensive care facilities like ventilators, adequate oxygen supply and services of adequately trained emergency care doctors, paramedics, and ancillary staff. This was convincing enough to make the hard decision. The success story of using lockdown to contain the spread in China went viral during that period, which may have also influenced the selection of the lock down strategy. While modelling statistics are a potent tool used for the selection of containment measures to reduce disease transmission, its adverse consequences could be so severe and inequitable as to outweigh any benefit. Prof. D. A. Henderson of the University of Pittsburgh Medical Centre cautioned against relying on models that do not take into consideration the adverse effects or practical constraints such public health interventions

would entail. Accepting such models uncritically, he warned, could cause policies that “take a perfectly manageable epidemic and turn it into a national disaster.”

An epidemic of an infectious disease must have three basic elements: an infected individual, a susceptible individual, and the probability of transmission. The dynamics of person-to-person transmission depend on the duration of infectivity in the infected, chances of contact between infected and susceptible person, probability of transmission, and susceptibility of contacts. To interrupt the transmission, the standard public health measure is surveillance. Surveillance is the backbone of public health diseases control. It includes vigilance in the community to detect cases and isolate them to provide treatment & prevent complication, tracing/tracking all contacts of cases and quarantine them until the longest incubation period or test negativity in the screening tests. To contain the spread of disease, the measures are Non-Pharmaceutical Interventions (NPI) and vaccination with a potent vaccine. The NPI includes wearing of masks to prevent the entry of viruses to the susceptible and minimise the viral spread from the infected (symptomatic/ asymptomatic), avoiding close contact with others by Physical distancing (termed as social distancing) visiting crowded places, frequent handwashing to prevent transmission through fomites and visit the designated health centre immediately if a person has Covid-19 symptoms for early diagnosis and treatment.

From the above facts, it is apparent that the prime factor in the transmission and prevention of COVID-19 outbreak is human being more precisely individual and community behaviour against any biological threat because of the occurrence of disease, disability, and discomfort. Like immune response against any microbial agent, the biological threat of disease evokes amygdaloid response, which is manifested in specific types of behaviour in individuals. (4). The perception of the disease threat and the coercive measures used in the disease control measure enforced by law enforcement agencies triggers the amygdaloid fear response in individuals influencing the behaviour of flight or fight, which causes the adverse outcome. It's the same phenomenon, along with rumourmongering against adverse effects of vaccine is the primary cause of vaccine hesitancy.

During the current pandemic, the emphasis was more on the biological factors of the disease, which include ongoing mutations in the virus, different immune response, and pathological changes in the patients with or without comorbidity. The current pandemic control seems to be based on the clinical medicine paradigm using prescription of personal preventive measures dispensed with the help of law enforcement agencies, forcing individuals and community to practise the control measures prescribed by authority. Experts engaged in briefing the government may have their own valid scientific reasoning for advising the government to take drastic steps like country-wide lockdown and engage law enforcement agencies from the initial stage. However, it will be naïve to say that it is as per the public health doctrines of pandemic control affecting the community's response, reflective of the adverse social and economic outcome affecting the health of the population. Any experienced Community medicine expert who goes through rigorous theoretical and field-based training in behavioural science and public health decision making besides epidemiology, biostatistics, principles of preventive medicine and history of pandemic control will never ignore the role of people's behaviour and its effect on the outcome of such control measures. If community medicine experts cannot point out that the sequel to the wrong public health decision proves that postgraduate training is mostly curriculum based rather than competency based. This needs urgent attention from the teachers of community medicine especially in the postgraduate training.

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'good morning', if not tomorrow, maybe after another million or billion years.

## CME

### The Foundations in Research – Some Basic Thoughts

Dr Ajit Sahai

It is said that Nature is constantly evolving, and we do have to surrender to the dynamic nature of our Universe in response to many happenings that are beyond our expectation, prediction-framework control. Continuous changes in Nature over time bring uncertainty and variability in each and every sphere of life as well affect the objects and subjects of the various Sciences. Even some of the well-known and tested principles and laws of basic Sciences do fail with the test of time. This uncertainty and variability prevalent in nature makes it difficult to satisfy our inner-urge of acquiring knowledge of objects and subjects around and surround us and also to decode the mechanism involved during the travel from cause to effect (Cohort studies) or the reverse way (Retrospective or Case-control studies) that should be more difficult due to censoring of events in the passage.

Encountering the uncertainty and variability and thereby understanding their role in rational explanation of the facts becomes the basic feature of all sciences. While we can by no means control or remove the factor of uncertainty, we are capable of measuring it in terms of probability. Simultaneously, hypothetical assumptions of the possibility of any event can't be ignored, but, rather can be recognised through the probability, of course, evidenced based. For example, that the sun will rise tomorrow from the east is certain - the probability of success is 1 or 100%. This is based on the fact that the earth has rotated consistently and in the same manner and fashion for millions or billions of years, and every single one of those daily trials has been successful without even a single failure registered so far. But it is quite logical and possible that the Sun may ditch us not saying

Measurements of uncertainty in terms of probability help in many ways during experimentation and also in making out inferences and decisions with known or minimum interference of the chance or luck factor. However, there are two schools of thought. One school always gives credit to and believes in the critical role of chance impacting on each and every event or occurrence, perhaps and even most likely beyond our knowledge. For this school of thought, it is sure that the luck factor will always prevail and can never be defeated. In contrast the second school of thinking strongly believes that there is no such thing as a luck or chance factor; rather it attributes any shortcoming in our current status to ignorance and/or inability to diagnose or decode the fast and complicated processes leading to any event or occurrence. This School maintains an optimistic viewpoint that as the sciences advance and our level of sensitivity, efficiency and wisdom in making observations and measurement improves, the time will come when we should be able to minimize it or to say goodbye to 'good luck'. If this school of thought is correct, then we should rest assured in statistical terms a Bayesian approach should gather more strength day-by-day. However, is it possible that Gaussian thinking will continue to prevail?

To continue with our thinking derived from the philosophy that this whole universe is full of uncertainties, it is true in the case of variability also, whether two exactly similar subjects or even objects can exist in this universe? Each subject or object with its own updated identity is subject to change within itself every fraction of time in Nano or Pico seconds, apart from being distinguished to be quite different from other similar objects and subjects. If we are sensitive in making measurements, we must realize that we are not the same individuals today as we were yesterday; Or even a few hours ago. One's own physiological, biochemical and anthropometric profile is changing every fraction of seconds continuously. Some are random fluctuations, while others are supposed

to be permanent changes as part of the process of aging.

Searching for any natural phenomena or characteristic that can be called a constant may not yield results but identifying a variety of variables and observing their behavior is everyday science. Whatever way we might define homogeneous groups or individuals, heterogeneity is bound to prevail at some level. Variability, like uncertainty once again can't be eliminated but is potentially measurable. Indeed, measures of deviation and central tendency play a key role in all research. Though this universe is full of uncertainty and variability, a large set of experimental / biological observations tend to follow a Normal distribution.

This unique behavior of data is the key to entire inferential statistics. Using the Gaussian distribution to derive numerical cut- points to differentiate between normal and abnormal observations or to define healthy and diseased is one of the most important roles of statistics used by all sciences. Also, desirable is to construct the confidence intervals in understanding the behavior of variables in broader perspective

It is useful to divide intra-subject or object variability into three phases: natural phenomena are either in the making/shaping phase or in the maintenance phase or otherwise in the deteriorating/declining/ destruction phase. Interventions in phase one tend to be more fruitful & effective due to nature's healing/protective touch, though become weaker in phase two and gradually worse in phase three. So, if we talk of any human health intervention programs we must be clear whether we are dealing with children and youth, young adults or an aged population; that means three settings at three stages of life are entirely different even for the same individual.

It is the same analogy applicable to all material things in this universe. Today many variables at a cross-section may not be capable of being measured beyond nominal or ordinal scale but tomorrow with advancements in science of measurement they may become eligible to be

measured, if not by a ratio scale where absolute zero is known, at least by an interval scale. Most of the qualitative characteristics involved in experimentation either as independent or dependent variables, are measured in relative terms. Although a variety of scoring and grading systems were evolved considering weights to various facets and domains, we require extra intelligence to capture the play of relativity hidden in any experimentation or observation. Qualitative variables and factors like environmental pollution, happiness, pain, beauty, and pleasure do suffer from the limitations of relativity components involved in measurements.

Though still more difficult is to understand the role of relativity hidden invariably in most of the scientific explanations, it is desirable to know the limitations and care needed in acquiring the scientific knowledge. Do we notice or feel that day and night we are riding a great spaceship called Earth, revolving around the Sun with a speed of approximately 105,600 Kms an hour or 30 Kms per second? But riding a motorbike with 100 Kms speed is exciting. The Sky looks blue, but it is neither blue nor in existence? Objects get magnified looking with the eye of an elephant? Many insects, bacteria and viruses live a short life but probably enjoy life with satisfaction in that short span as compared to 100 yrs of human life. By reasoning it can be seen that life and death co-exist and one owes its existence to the other. The same is the case with pleasure and pain; good and bad; light and darkness; health and disease; rich and poor and so on. If either of the two are non-existent then the other will perish.

Continuing with the concepts of uncertainties, variability and relativity let us focus on the role of; Inductive and deductive reasoning; Repeating the experiments essentially under the same conditions and keenly observing the outcome each time and relating them to derive a fact is the system followed in inductive reasoning in science. The body of each specific science is full of innumerable principles, where each and every single principle is derived mostly on the basis of inductive reasoning. To substantiate this thought process 'Physics' is an



example of 'empirical science' or inductive reasoning. Whereas, 'Pure Mathematics' is an example of 'formal science', or deductive reasoning where the conclusions are derived on the basis of existing facts, definitions, theorems, and axioms. If inductive reasoning helps us in developing the principles that can be generalized, deductive reasoning guides us in decision-making. For example the discovery of gravitation theory and thereby framing laws for gravitational forces based on objects falling down and only down repeatedly and not going left or right; not going up or hanging in air and so on; was a difficult exercise following empirical science by keenly observing the outcome each time with inquisitiveness. But it should have been termed to be still an easy proposition as compared to applied sciences like health and medicine where outcomes in question are not comprehensive, exhaustive, mutually exclusive, equally likely and independent.

So we may conclude that the empirical science approach that is based on inductive reasoning helps us to determine probability of various outcomes in calculation and estimation of probability of events exploiting 'Gaussian' probability distribution. Whereas, predictions in applied sciences as compared to pure sciences have to be more dependent on deductive reasoning with further refinements to be brought-in using Bayesian approach. Essentially, the logic and reasoning domains of all the sciences require continued evidence support.

We the human being gifted with larger or the largest dimensions of gray matter in our head are bound to continue critically reviewing and revising our perceived concepts and thoughts from crude to refine and that way all the sciences and especially applied sciences are presumed to lack in attaining perfection at any given point of time. Scientific community is fond of developing various models to explain the outcome based on the same inductive or deductive reasoning or the combination of both. Similarly different decision trees are developed to reach the same goal. All the Sciences have derived the facts and principles that were based

only on the evidence made available from time to time. The exact similar background is for various paths in sciences, especially, the popular systems recommended alternatively in health and medicine.

To summarize, we very well know that the history of innovations in medicine had always been evidence based and therefore, just satisfying ourselves with latest terminologies such as "evidence based medicine" or "evidence based sciences"; (of course with minor modifications in approach), that sometimes may deprive us from a critical review and the access to the earlier evidences in favour or disfavour of any phenomenon, so we have to be very careful and cautious in deriving conclusions. The most recent past evidence in favour of some outcome can't be considered as gold standard sacrificing evidence made available in the past history of 50 to 100 years or more as the case may be, especially if that have worked well earlier and are still working smoothly showing favourable results. In such situations neither we have refuted the earlier evidence nor claimed an invention but have some refinements. The problem here is that for a particular objective or to say for the treatment of a disease if a variety of alternatives had been available and are still valid today, then how can the fashion of today's choice be claimed to be the best?

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# NON-COMMUNICABLE DISEASES

## Building a case for Tobacco Endgame in India: A Teaser of Good and Replicable Practices

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### Abstract

India has made a significant progress in reducing the prevalence of tobacco use and undertaken various initiatives to advance tobacco control across states. In order to improve knowledge exchange in organizations good and replicable practices (GRP) are essential. The process documentation of these practices offers standardization and escalation of activities in similar situations to solve problems. However, in India, such good practices in the area of tobacco control are rarely being replicated or documented. The Resource Center for Tobacco Control (E-RCTC) conducted a "National Conclave on Best Practices under National Tobacco Control Programme in India" that helped in compilation of 27 innovations towards implementation of tobacco control policies in India in a case-study format. These were presented by stakeholders across organizations, govt. officials, academia and civil society covering diverse range of areas related to tobacco control in the country. It was emphasized to engage multiple stakeholders so as to leverage the strengths of all implementing agencies along with conduction of regular monitoring and performance appraisal of respective best practice. Besides, it was recommended to bring out a compendium of GRP followed by its recurring updation.

### Keywords

Good and replicable practices, tobacco control, multistakeholder, India

### Background

Tobacco use kills 8 million individuals annually across the globe and is a major risk factor for non-communicable diseases (NCDs). Further, the low- and middle-income nations account for

more than 80% of the world's 1.3 billion tobacco consumers.(1) Tobacco use kills over 1.35 million people in India yearly with approximately 267 million adults (aged 15 years and above) use tobacco in any form.(2) The total economic losses associated with tobacco use in India from all diseases for people aged 35 and above equaled to INR 177341 crore. (USD 27.5 billion).(3) The most popular smokeless tobacco (SLT) products include khaini, gutkha, betel quid with tobacco, and zarda while bidi, cigarette, and hookah are the most common tobacco smoking practices.(2) India is a party to World Health Organization's Framework Convention on Tobacco Control (WHO-FCTC)(4) and has been implementing the evidence based measures suggested in the WHO-MPOWER Package (Monitor tobacco use and prevention policies, Protect people from tobacco smoke, Offer help to quit tobacco use, Warn about the dangers of tobacco, Enforce bans on tobacco advertising, promotion and sponsorship, Raise taxes on tobacco).(5) The Government of India enacted the Cigarettes and Other Tobacco Products Act, 2003 (COTPA, 2003)(6) in order to prohibit advertisement of, and to provide for the regulation of trade and commerce in, and production, supply and distribution of cigarettes and other tobacco products in India. Further, the National Tobacco Control Programme (NTCP) was started in 2008 to increase awareness among the general public about the harmful effects of smoking and other tobacco products and effectively implement COTPA.(7)

India has made a significant progress in letter and spirit in tobacco control in the last two decades. Among the key initiatives include, India launched National Tobacco Cessation Quitline Services [1800-112-356]; 'mCessation' services [011 22901701]; mandatory 85% pack warnings on tobacco products, regulated the use of cigarettes and other tobacco products in films and TV programmes; established the 'Global Knowledge Hub for Smokeless Tobacco', approved accession to the Protocol to Eliminate Illicit Trade in Tobacco Products under the Article 15 of WHO FCTC, introduced The Prohibition of Electronic Cigarettes (Production, Manufacture, Import, Export, Transport, Sale, Distribution, Storage And



Advertisement) Act, 2019 and established three National Tobacco Testing Laboratories.(7)

Good and replicable practices are valuable tools for improving knowledge exchange in organizations. The process documentation of best practices allows standardizing and scaling work in similar context for addressing problem. In addition, it allows for discovering methods to improve what doesn't, and share that information with other organizations or institutions.

The Ministry of Health & Family Welfare, Government of India has been conducting National Summit on Good and Replicable Practices and Innovations in Public Healthcare Systems in India since year 2013. This has become an institutional mechanism for the sharing of innovations under the National Health Mission. These innovations are designed at various levels of health care delivery system as a response to a specific problem to improve a health outcome or addressing a programmatic dimension required for improved performance ranging from innovations in service delivery, human resources for health, community processes, financing and governance.(8) The practices presented encompass a myriad of areas, from Reproductive, Maternal, Neonatal, Child, and Adolescent Health to communicable diseases to emerging areas of Non-Communicable Disease control programmes along with digital initiatives & transformations such as National Digital Health Mission, Aarogya Setu App, e-Sanjeevani digital platform, telemedicine. The overarching goal of such innovative solutions is to promote people's health and, on the other hand, to strengthen public health systems in a sustainable way.(9)

India has undertaken an array of initiatives for tobacco control at policy and programmatic level and the progress is reflected through decline in prevalence (from 34.6% in Global Adult Tobacco Survey-1; 2009-10 to 28.6% in GATS-2; 2016-17) of tobacco use.(2,10) Further, there are many more good practices that are being implemented at the sub national level either as standalone measures or through collaboration between civil society organizations and academia or research institutions. However, in India, such good practices in the area of tobacco control are

rarely being replicated or taken up in other similar settings. In addition, there is lack of documentation of such innovations in tobacco control and hence need to be recorded for wider dissemination and visibility. Besides, replication of such good practices and innovations would also help in refinement, establishing an institutional framework and being evolved into a more structured and robust format.

At global level, best practices on tobacco control have been documented from few countries on diverse areas such as on taxation, tobacco advertising and display of tobacco products at point of sale, surveillance of patterns, mass media campaigns etc., to set benchmarks that tobacco control advocates can cite as examples of what is possible.(11) The Centre for Disease Control launched its Best Practices for Comprehensive Tobacco Control Program in 2014 (an update to 2007). This was an evidence based guide to help states in planning and implementing proven tobacco control interventions. It recommended level of state investment to reach these goals and to reduce tobacco use in each state.(12)

In India, various states have implemented best practices regarding various sections of COTPA and elements of NTCP; however, they are not being documented. There is a felt need to disseminate lessons learned and challenges across states and find solutions to further strengthen tobacco control in India. In this regard, the Resource Center for Tobacco Control (E-RCTC) under Department of Community Medicine, School of Public Health, PGIMER, Chandigarh conducted a "National Conclave on Best Practices under National Tobacco Control Programme in India" 28<sup>th</sup> October-30<sup>th</sup> October 2021 that helped in compilation of innovations towards implementation of tobacco control policies in India. E-RCTC, a collaborative venture of PGIMER Chandigarh and International Union against TB and Lung Diseases (The Union), is a digital platform for exhibiting tobacco control initiatives, advancements, policies, and learning from all over the country. Furthermore, this online hub contains the most recent national and state government notices and circulars pertaining to the proper execution of the NTCP. E-RCTC

collects, channels, and disseminates accurate and reliable information from a single source. The overall goal of the conclave was to strengthen the National Tobacco Control Programme in the country by documenting the best practices of tobacco control carried out at national and sub-national level and sensitize the stakeholders about the same in India so that they can institutionalize & replicate the same in their settings. Besides, it also increased awareness and facilitated cross learning among stakeholders for strengthening the tobacco control policies in respective states along with bringing out a compendium of best practices of tobacco control in India.

### **Methodology**

#### **Phase 1: Initiation & Planning phase**

During the initiation & planning phase a total of two discussion meetings were conducted with representatives from E-RCTC, All India Institute of Medical Sciences, Bhubaneswar, Odisha, Jawaharlal Institute of Postgraduate Medical Education & Research (JIPMER), Puducherry, North Eastern Indira Gandhi Regional Institute of Health & Medical Sciences, (NEIGRIHMS), Shillong, Meghalaya, and Gandhi Medical College (GMC), Hyderabad. The first meeting focused upon delineating the need, goals and objectives of the event followed by finalization of dates, venue, target group and duration of the conclave. The meeting deliberated upon listing out the good and replicable practices (GRP) and mapping of potential stakeholders. In the second meeting, the criteria for GRP were defined. It was further supplemented with

discussions on modality and logistics requirements for the event.

#### **Phase 2: Execution phase**

There were 35 participants (including government officials, civil society representatives, and academia) along with national experts participated at the 3-day national conclave held from 28-30<sup>th</sup> October 2021 at Chandigarh. A total of 27 initiatives across various states of the country were being identified as a GRP based on its outcome to strengthen tobacco control in the specific region or a community. The participants were shared a pre-defined format (Box-1) to present each practice before-hand. During the conclave, the participants presented the best practices in the format which was followed with a discussion. The participants were provided time to refine the GRP based upon the discussions and suggestions of other participants.

#### **Phase 3: Closure phase**

The draft write up of each good practice was circulated to respective presenter and their feedback was sought through on the same for accuracy and resonance with their experiences. After incorporating the revisions, the second draft was circulated to the independent expert group for their review. The reviews received from the expert reviewers were shared with the presenters/ participants for addressing the comments. Thereafter, a compendium of best practices in tobacco control at national and sub-national level in India was developed.

#### **Box 1: Outline of best practices**

#### **Box 1: Outline of best practices**

1. Background and challenges to implementation: Introduction (definition) followed by history, & harmful impact
2. Intervention and Response: Chronological journey of the intervention.
3. Results and lessons learnt: Outcome of the intervention with a way forward.
4. Institutionalization of Intervention-The action of establishing the intervention as a convention or norm in an organization or culture.
5. Novelty: innovation in the practice/ intervention
6. Multi-stakeholder engagement: Involvement of different departments to strengthen the implementation of the intervention.
7. Translatory value: Benefits to common people as a result of the intervention.
8. Conclusion and key recommendations: Description of main events of the intervention in a nutshell and key recommendations to further strengthen its implementation.
9. References

## Results

A total of 27 good and replicable practices in a case-study format were presented by stakeholders across organizations, govt. officials, academia and civil society. The practices presented during the national conclave covered almost every area related to tobacco control from advancing leadership and management in tobacco control in India to taxation policy on tobacco products in the country.

The representative from government of Himachal Pradesh presented the involvement of multi-sectoral engagement for effective tobacco control and establishing **'Tobacco Free Panchyats /villages'**. This practice highlighted the role of multiple stakeholders along with the need for innovative approaches & financing to sustain tobacco control. The case on **'Yellow Line Campaign'** from government of Chhattisgarh focused upon demarcating an area of 100 yards from the boundary wall of any Educational Institution to comply with Section 6 b & a of COTPA, prohibiting use and sale of tobacco products. The concept of Yellow Line was launched in principle to sensitize the people and students as per the strategy of "P" under MPOWER. A doctors led initiative called **'Voice of Tobacco Victims (VoTV)'** campaign led by a civil society- Sambandh Health Foundation, Gurugram, India was presented that turned out to be an important tool for political advocacy. The victims of tobacco use and their family sensitize policy makers and enforcers about the dangers of tobacco usage, tobacco industry activities, lack of stringent action against tobacco companies and growing plight of victims across the country.

A civil society, MACT from Kerala launched **'Tobacco Monitor'**-an application that helps in acquiring the information from general public regarding violation of tobacco control Act in India. Another civil society organization, Salaam Bombay Foundation undertook the initiative of **'Establishing Tobacco Free Schools in Urban Slums'** in Mumbai in order to protect youth from harmful effects of tobacco. This campaign has translated into curbing the use of tobacco among the adolescents in India as evident from reduction in current tobacco users in the age group in 13-15 years age group which was

14.6% (GYTS-3) in 2009 and reduced to 8.5% (GYTS-4) in 2019.

Another case study by an organization named HEALIS on **'Advancing Leadership and management'** in tobacco control highlighted the importance of leadership ineffective enforcement of tobacco control laws. It stressed upon the fact that leadership is required when policies need to be introduced, changed or modified. A case study from a civil society in Bihar named SEEDS presented on harnessing **'Print Media for Advocacy in tobacco control'** focusing on the vital role played by the media in containing tobacco use, creating awareness, exposing the violations and violators, industry interference through investigative journalism. It further emphasized that how media advocacy supported in bringing ban on sale of gutka and pan masala without tobacco and getting a ban on spitting in public places during COVID-19 Pandemic.

The concept of **'Tobacco Free Homes'** was shared from Punjab where an initiative of a civil society organization (Generation Savior Association) led to a smoke free residential complex. This could eventually motivate people to quit smoking and eliminate exposure to second hand smoke at homes protecting residents, reduce insurance costs and save expenses. Another success story from Punjab government was on **'ENDS Ban'** making the state first to impose a ban on Electronic Nicotine Delivery System (ENDS). This step was taken to regulate the ENDS & like products through involvement of stakeholder departments. This was further scaled up and government of India introduced the Prohibition of Electronic Cigarettes (Production, Manufacture, Import, Export, Transport, Sale, Distribution, Storage and Advertisement) Act, 2019.

**'Tobacco Vendor Licensing'** (TVL) is a step towards better compliance of existing tobacco control laws. It requires that the government ensures that all stores that sell tobacco to obtain a special license for privilege of selling these products to consumers. This case study was presented by a developmental organisation, The Union. State governments such as Himachal Pradesh, Uttarakhand, Uttar Pradesh, Rajasthan, Madhya Pradesh, West Bengal and Assam explored their local Municipal Acts and

culled out provisions that made compulsory licensing, for tobacco storing, packing, pressing, cleansing, preparing for manufacturing and sale by any process whatsoever and issued relevant orders for compliance of the law. Monitoring in tobacco control should be evidence based, timely and comparable. This was emphasized by a case study by an organization named HEALIS on **'Advancing Operational Research in Tobacco Control'**. It presented findings from International Tobacco Control (ITC) Project- a multi-country prospective cohort study, designed to measure the psychosocial and behavioral impact of key policies of the World Health Organization (WHO) - Framework Convention on Tobacco Control (FCTC). Another case study, establishment of **'National Resource Centre on Oral Health Care'** at PGIMER, Chandigarh under the aegis of National Oral Health Programme is expected to facilitate the provision of accessible, affordable, acceptable, appropriate and comprehensive oral health care in the country. Besides, it aims to generate research innovations and evidences related to oral health and tobacco in particular to strengthen the NOHP at the national level.

The **Role of Civil Society Organizations** in advancing tobacco control in close coordination with the government at national and sub-national level was presented by a developmental organisation, The Union. Through various examples, the presentation highlighted the vital role played by NGOs for effective policy implementation as participants and collaborators; watch dogs/whistle blower in tobacco control through sensitization of politico-administrative leadership, establishment of institutional framework, enforcement of legislation, coordination support to STCCs/DTCCs, capacity building, and monitoring of tobacco control implementation. The CSO's have been also on the forefront offering regular support on various policy issues and carrying out media sensitization and advocacy. Rajasthan Cancer Foundation presented its experience of establishing a **Tobacco Cessation Centre (TCC)** and **'Quitline'** in a private health care set up for assisting tobacco users quit. It demonstrates the feasibility of delivering the state-of-art quit-line services through the State Medical Helpline and

high quit rates achieved at TCC in 4 years follow up. Another case study from a civil society in West Bengal named MANT was shared regarding successful adoption of **'FCTC Article 5.3'** for restricting Tobacco Industry Interferences at the district level through bottom up approach. West Bengal now has 10 district level FCTC 5.3 protocols covering over 300 million people.

A case study on **'Audio- Visual Media Advocacy'** presented by the Voluntary Health Association of India, New Delhi highlighted the important role of news media in advancing democratic discussion around policy debates in tobacco control. The study highlighted the fact that as a result of the efforts taken by the tobacco control advocates, over 4000 journalists were sensitized and over 12000 stories were generated on tobacco control issues.

India's **'National Tobacco Testing Laboratories (NTTLs)'** are aimed at strengthening tobacco control through regulation of the contents and emissions of the plethora of tobacco products. Senior representative from MOHFW, Govt. of India presented the achievement of three National Tobacco Testing Laboratories (NTTLs) in India which are envisioned as 'Accredited World Class Laboratories' engaged in providing analytical facilities for tobacco and tobacco products the required generate scientific evidences. Another case study presented by a legal expert on the **'Journey of the Cigarettes and other Tobacco Products Act 2003-2020'** deliberated upon the gaps and proposed amendments in the law. These included deletion of provision that allows creation of smoking area in restaurant, hotel and airports; bans direct and indirect advertisement of tobacco products through all mediums of communication; increasing the age of sale from 18 to 21 years; sale of tobacco products in sealed, intact, original packaging, minimum quantity packs; insertion of a new Section 10A, to eliminate all illicit trade in tobacco products; and increase the fine amounts for violations.

**'Tobacco free Kumbh Mela 2021'** was presented by a civil society working in the state of Uttarakhand. The strategy for the same began in 2020 following which one to one sensitization



meetings were held with Govt. officials, religious leaders, NGOs etc. Thereafter, a district level task force was formed and trained comprising of 4-5 members of different stakeholder departments. Group-sensitizations of several religious leader cohorts, engagement of media houses, civil societies and NGO partners were carried out. These timely and concerted efforts resulted into implementation no use/sale/advertisement of tobacco within the Kumbh Mela, Haridwar. A case study on ban of spitting of **Smokeless Tobacco during the COVID-19 pandemic** was discussed by a developmental organisation, The Union. Public health organizations issued advisories in mid-March, 2020 indicating evidence of links between smoking and tobacco use and COVID-19 infection. Union Health Ministry directed all states and UTs to use the necessary authority under the Epidemic Diseases Act, 1897, the Disaster Management Act 2005, Indian Penal Code 1860 and Code of Criminal Procedure (CrPc) and take preventive measures to prohibit the use and spitting of chewing smokeless tobacco products in public.

**Youth interventions** for tobacco control were presented by HRIDAY-a civil society and Public Health Foundation of India. The presentation highlighted various initiatives underpinning youth over several years, such as Youth representatives, All India Students' Parliament on Health – Cigarette and Other Tobacco Products Act (COTPA) 2003, Youth Ask: When Will We Get 85% Pictorial Health Warnings (2009-10), Promoting Tobacco-Free Schools, Homes and Communities etc which has contributed to decrease in tobacco use among youth. **Increasing tobacco taxes** has been documented as one of the best practices globally to reduce tobacco use. A case on reforms in tobacco taxes in India was presented by lead tobacco economist of India. As per the case, the Goods and Service Tax (GST) in India has been one of the major upheavals that impacted the current framework of tobacco taxation wherein, the tax slabs for Cigarettes – 28% GST + 5% ad valorem cess + specific cess based on length (average Rs.2885.3/1000 sticks), Bidis – 28%, Smokeless – 28% GST + 72% ad valorem cess (on most items) – rate varies from 11% to 290%. A case study on **Building Capacity of**

**NTCP officials** for advancing tobacco control was presented by Voluntary Health Association of India-Madhya Pradesh. It presented as to how the officials, especially for new recruits, from all stakeholder departments (Health, Police, Education, Municipal, Panchayat) were trained through training manuals, field level enforcement procedures and live field examples. Training programs were carried out for panchayat, block, district and state level officials by organizing district level workshops, sensitizing 2500 district officials, training 2000 officials from health, police, municipal, education departments. Use of **PIL Tool for Advocacy** in tobacco control was also demonstrated by Faith Foundation, a civil society in Gujarat during the conclave exhibiting judicial activism. In the wake of growing interference of tobacco industry and lack of sustained political will, litigation appears to be a potent and effective tool for claiming public health rights related to tobacco control. He demonstrated the use of PIL in various instances like Ban on smokeless tobacco in toothpaste, Ban on minors' access to tobacco products, Ban on advertising, promotion and sponsorship, Ban on gutka, Ban on sale of smokeless tobacco in plastic sachets. A senior behavioral scientist and communication expert from the World Health Organization emphasized upon the need for women centric tobacco control policies & tailored interventions in order to make gendered equitable progress in mitigating the tobacco epidemic.

### **Conclusion and Recommendations**

Various good and replicable practices undertaken at national and sub national were presented by representatives from Government, organizations, researchers, academia, civil society advocates and national level experts for advancing tobacco control in the country. The conclave facilitated sharing & cross learning among the participants for possible replication in other jurisdictions. It was emphasized that these practices have been identified as best practices in terms of its outcome to strengthen tobacco control in the specific region or a community. The participants and experts at the national conclave recommended that the good practices of a

jurisdiction can be effectively replicated by the other jurisdictions of India. These can be customized based upon requirements of respective regions. Further they emphasized on documenting gaps during implementation and undertaking revisions to these innovations in order to bridge those gaps resulting in robust framework. Besides, it was emphasized that a region or a state could take up multiple good practices based on the resources available and engages multiple stakeholders so as to leverage the strengths of all implementing agencies. It was also recommended to conduct regular monitoring and performance appraisal of respective best practice by a third party. Further, it was suggested to develop a compendium of these good practices for enhanced reproducibility and undertake its periodic revisions to incorporate more & advanced innovations resulting in achieving the Sustainable Development Goals.

### Acknowledgements

We thank E- Resource Center for Tobacco Control (E-RCTC) established under Department of Community Medicine, School of Public Health, PGIMER, Chandigarh, for organizing the 'National Conclave on Best Practices under National Tobacco Control Programme in India'. Special thanks to The International Union Against Tuberculosis and Lung Diseases (The SEA) for offering their technical support towards the event.

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**Table1: List of best practices presented and presenting authors**

Sr.No.	Best Practice	Author
1.	Advancing Leadership and Management in Tobacco Control in India	Dr. P.C. Gupta, Director of Healix - Sekhsaria Institute of Public Health, Navi Mumbai
2.	Journey of COTPA 2003 to COTPA 2020 (Proposed Amendments)	Mr. Ranjit Singh, Advocate, Supreme Court of India, New Delhi
3.	ENDS Ban in India	Dr. Rakesh Gupta, Director and President, Strategic Institute of Public Health and Research, Chandigarh
4.	Using PIL Tool for advocacy	Ms. Susan Samson, Director, Faith Foundation, Gujarat
5.	Advancing Operational Research in tobacco control since COTPA 2003	Dr. Mangesh S Pednekar, Director, Healix Sekhsaria Institute for Public Health, Navi Mumbai
6.	Tobacco Monitor App: Mobile based intervention for Monitoring Non-Compliance	Mr. Cyril Alexander, Executive Director, Mary Anne Charity Trust, Tamil Nadu (MACT), India
7.	Multisectoral Engagement in Tobacco Control in Himachal Pradesh and Establishing Tobacco Free Villages in Himachal Pradesh	Dr. Gopal Chauhan, SPO, NTCP, Govt. of Himachal Pradesh
8.	Establishing Tobacco Free Schools in Urban Slums in Mumbai	Ms. Tshering D Bhutia, Vice President - Preventive Health Programme, Salaam Bombay Foundation, Mumbai
9.	Tobacco free home concept	Ms. Opinder Preet Gill, Director Programs, Generation Saviour Association, Mohali
10.	Establishment of National Tobacco Testing Laboratory in India	Dr. L Swasticharan, Addl DDG, Ministry of Health and Family Welfare, Government of India, New Delhi
11.	Youth interventions in Tobacco Control	Dr. Monika Arora, Executive Director HRIDAY, New Delhi
12.	TVL: Experience across various states of India	Dr. Nidhi Sejpal, Senior Technical Advisor, The International Union Against Tuberculosis and Lung Diseases (The SEA), New Delhi
13.	Establishing Quitline in Rajasthan	Dr. Rakesh Gupta, President, Cancer Foundation, Jaipur
14.	Setting up of Tobacco Cessation clinics in Private Hospital	Dr. Rakesh Gupta, President, Cancer Foundation, Jaipur
15.	Building capacity of NTCP officials for advancing Tobacco Control in India	Mr. Mukesh Kumar Sinha, Executive Director, Madhya Pradesh Voluntary Health Association, Madhya Pradesh
16.	Yellow Line Campaign	Dr. Kamlesh Jain, Professor, Department of Community Medicine State Nodal Officer, NTCP, Chattisgarh
17.	Establishment of National Resource Centre on Oral HealthCare	Dr. Arpit Gupta, Associate Professor, OHSC, PGIMER, Chandigarh
18.	Harnessing the potential of whistle-blowers in Tobacco control: Engaging CSO	Dr. Rana J Singh, Deputy Regional Director, The International Union Against Tuberculosis and Lung Diseases (The SEA), New Delhi
19.	Banning Smokeless tobacco (SLT) During COVID pandemic in India	Dr. Amit Yadav, Senior Technical Advisor, The International Union Against Tuberculosis and Lung Diseases (The SEA), New Delhi
20.	Harnessing Print Media for Advocacy in Tobacco Control.... Political Advocacy"	Mr. Deepak Mishra, Executive Director, Socio-Economic and Educational Development Society, Bihar
21.	Tobacco Survivors: An important tool for political advocacy	Dr. Ashima Sarin, Director, Sambandh Health Foundation, Gurugram, Haryana
22.	Audio-Visual on Media Advocacy	Mr. Binoy Mathew, Programme Manager – Communications at Voluntary Health Association of India, New Delhi
23.	Tobacco free movies-Regulations in India	Dr. Astha Chugh, HRIDAY, New Delhi
24.	From boom to Top: Article 5.3 in West Bengal	Dr. Nirmalaya Mukherjee, Head of Tobacco Control wing of MANT, Kolkata
25.	Tobacco Free Kumbh Mela 2021	Ms. Mamta Thappa, Senior Program Head, Balajee Sewa Sansthan, Dehradun, Uttarakhand
26.	Fluctuating taxation policy on Tobacco products in India	Dr. Rijo John, Health Economist, Rajagiri College of Social Sciences, Kerala
27.	Women and Tobacco Issues, Gaps, Challenges and Way Forward	Dr. Mira B Aghi, Behavioural Scientist and Communication Expert, World Health Organization

# CONFERENCE REPORT - EFICON 2021

## Transforming GlobalHealth

### Integrating Medical, Social and Behavioral Interventions

Epidemiology Foundation of India and  
All India Institute of Medical Sciences, Jodhpur

School of Public Health (SPH) and Department of Community Medicine & Family Medicine (CMFM), AIIMS Jodhpur organized a 2nd Annual Conference of Epidemiology Foundation of India (EFICON 2021) from 29th to 30th October 2021 with the theme "Transforming GlobalHealth: Integrating Medical, Social and Behavioral Interventions". The conference was held in virtual mode under the patronship of Professor Sanjeev Misra, Director and CEO, All India Institute of Medical Sciences Jodhpur

The organizing Committee of EFICON 2021 was headed by Dr. Kuldeep Singh (organizing Chairperson), Dr. Pankaja Ravi Raghav (organizing chairperson), Dr. Pankaj Bhardwaj (organizing secretary), Dr. Manoj Kumar Gupta (joint organizing secretary), and Dr. Akhil Dhanesh Goel (joint organizing secretary)

This conference brought together 1200 participants from pan India and abroad. A total of 176 Scientific abstracts were submitted. The conference had 19 scientific evidence-based plenary sessions along with free paper sessions that comprised 75 oral and 101 poster presentation sessions for sharing evidence-based research by participants as part of the scientific agenda

### Preconference

Pre-conference workshops were organized on the 26th, 27th, 28th October 2021 with focus on electronic data capture in epidemiology, mathematical modelling in infectious diseases, Cigarettes and Other Tobacco Products Act (COTPA) and social epidemiology. These pre-workshops were conducted in collaboration with eminent organizations-JIPMER, IIPH-D, The UNION and Department of Community and Family Medicine, AIIMS Jodhpur.

Electronic data capture in epidemiology session was held on 26th October 2021. This session was inaugurated by Prof. Pandey, HOD

Department of Biostatistics, AIIMS Delhi. In this preconference session, decision techniques of data capturing and mapping were highlighted with demonstration and exercises.

Also, on the same day one more preconference session on End line compliance assessment for Cigarette and Other Tobacco Products Act (COTPA) was held. The chief guest for this session Dr. Sonu Goel from (Prof. at PGIMER and Director E-RCTC) inaugurated this session. Introduction on various sections of COTPA was provided and discussion on compliance assessment were conducted.

On 27th October 2021 pre conference session on Mathematical Modeling and Prediction in Infectious Disease Epidemiology in collaboration with Indian Institute of Public Health, Delhi, Public Health Foundation of India was held. Chief Guest for the session Dr. Sitanshu S Kar, Professor & Head, Dept of PSM, JIPMER provide the welcome address. Dr Ashish Awasthi, Assistant Professor (INSPIRE Faculty) and Dr Surabhi Pandey, Associate Professor, Indian Institute of Public Health, Delhi Public Health Foundation of India were the resource person for the session. Overview for various models used in epidemiology were discussed and partial training for the same was imparted. On 28th October 2021 last pre conference session on Social epidemiology in collaboration with Centre for Public Health School of Health Systems Studies (SHSS) Tata Institute of Social Sciences (TISS), Mumbai was conducted. The aim of this session was to generate interest in Social Epidemiology among epidemiologists / public health professionals /Community Medicine practitioners in India, and to orient them towards considering the application of principles and concepts of social epidemiology. Prof Amarjeet Singh, Head, Dept of Community Medicine, PGIMER was the chief guest for the session. Prof Mathew George, Professor, Centre for Public Health, SHSS, TISS, Dr Narendra Kakade, Chairperson, Centre for Public Health, SHSS, TISS, Dr Nilesh Gawde, Assistant Professor, Centre for Public Health, SHSS, TISS, Dr V Gowri, Assistant Professor, Centre for Public Health, SHSS, TISS and Prof Harshad Thakur, Professor, Centre for Public Health, SHSS, TISS were the resource person of this session

**DAY 1****Inauguration**

EFICON 2021 main conference started with an inaugural ceremony at 9:00 am. The Organizing Chairpersons of the Ceremony were Prof. Kuldeep Singh (Dean Academics, Head of Department -Paediatrics) and Prof. Pankaja Raghav (Head of the Department, CM&FM) who gave overview of the extravagant 2-day long e-conference. Before beginning the ceremony, blessings of "Maa Saraswati" were sought with a melodious Vandana. The August gathering was then welcomed by Prof. Sanjeev Misra, Director & CEO, AIIMS Jodhpur. The President of Epidemiology Foundation of India (EFI), Dr. Umesh Kapil addressed all the delegates participating in EFICON 2021. With this, the Souvenir of EFICON 2021 was released. Rakesh Sarwal, Additional Secretary, NITI Aayog, GoI was the Chief Guest of the Ceremony and was enthusiastic for part of such a big platform. Dr Pankaj Bhardwaj (Additional Professor CM&FM, Vice-Dean Research, Coordinator School of Public Health), Organizing Secretary EFICON 2021 conveyed heartfelt thanks to the audience and whole organizing team for their extended support. The ceremony was closed by the playing of the National Anthem. Inaugural ceremony was moderated by Dr. Neha Mantri from the School of Public Health, AIIMS-Jodhpur. Prof. V.K. Srivastava oration started at 9:30 am in Main Hall. It was moderated by Dr. Neha Mantri from the School of Public Health, AIIMS-Jodhpur. The Chairperson Prof. Surekha Kishore, Executive Director, AIIMS-Gorakhpur introduced Prof. V. K. Srivastava and his wonderful journey and extended gratitude for the loss of such a great researcher. Dr. Sanjeev Kumar, Chair, Advisory Committee, Indian Alliance of Patient Group and Indian Academy of Public Health introduced Dr. Sanjeev Misra, Director, AIIMS, Jodhpur who received Prof. V. Srivastava Oration. Dr. Sanjeev Misra extended his heartfelt thanks and was privileged to receive this very first Oration.

**Global Health**

Session on Global Health was held on 29th October 2021 between 10:00am to 11:00am in the Main Hall of the virtual platform of the conference. The session had 3 speakers: Sanjay Zodpey, Vice President- Academics, PHFI, New

Delhi who spoke on Human resources for health: Strategic options for transforming health system in India. The next speaker was Dr. Karma Tenzin, Dy. Dean, Faculty of Post Graduate Medicine, Khesar Gyalpo University of Medical Sciences, Bhutan. who took a session on Health equity in Bhutan: Understanding Access and Health Outcomes. The last discussion was held by Yasmin Zaveri Roy on Understanding experiences of the Swedish Health care system: A take home message for India. The sessions were chaired by Dr. B.S. Garg, Secretary, Kasturba Health Society. Director, Dr. Sushila Nayar School of Public Health. and Dr. Harivansh Chopra, Professor and Ex- HOD, Community Medicine, LLRMC, Meerut, National President Elect. IAPSM India. At the end of all sessions discussion were held. The session was moderated by Dr. Annu Choudhary and Dr. Anjali Agrawal, MPH scholars.

**Front of Pack Nutrition Labelling**

Front of Pack Nutrition Labelling to Promote Healthier Food Choices: Current Practice and Opportunities session was held on 29th October 2021 between 10:00am -11:00am in the Hall A. The session had four speakers who presented their views on the respective topics - Dr Rashmi Kundapur (Additional Prof. CMFM, AIIMS BibiNagar Hyderabad)- Front of package labelling and its role in controlling non communicable disease. Dr. Umesh Kapil (President EFI, Professor, Epidemiology and Clinical Research, ILBS, New Delhi)-Nutritional Profile model: Setting the right context for strong Front of Package Label. Ms. Vandana Shah, (Regional Director, South Asia Programs Global Health Advocacy Incubator)-Food industry resistance to progressive FOP nutrition labels. Dr Pradeep Agarwal (Associate Prof. CMFM, AIIMS Rishikesh)-Call to action to Public Health professionals for strong FOPL in India. The sessions were chaired by Dr Rakesh Kakkar, Professor & Head, CMFM, AIIMS, Manglagiri and Dr Hari Shanker Joshi, Professor & Head, CMFM, AIIMS Gorakhpur. At the end of all session's discussion were held. The session was moderated by Dr Divya Gehlot and Dr Manasvee Chopra Saluja, MPH scholars.

**One Health**

Session on One Health was held between 11:00 pm and 12:00 pm in the Main Hall. The session



was chaired by Dr. Abhay Gaidhane, Director School of Epidemiology and Public Health & Professor & Head of Community Medicine, J N Medical College, Wardha and Dr. Subeer S. Majumdar, Distinguished professor & former Director, National Institute of Animal Biotechnology (NIAB). The session had four speakers, Dr. Nagendra R. Hegde from National Institute of animal Biotechnology, India who apprised us about the "One Health Consortium India". The next speaker was Dr. Michael Walsh, Senior Lecturer, Infectious disease Epidemiology, Sydney School of Public Health, Co- lead, one health node Sydney Institute for Infectious Diseases who held a session on "The impact of forest loss and biodiversity on Kyasanur Forest disease risk in the Western ghats, India." Third session was held by Dr Deepak Saxena, Professor and Acting Registrar, Indian Institute of Public Health Gandhinagar on "One Health research: An urgent need for convergence". The last session was by Dr Timo Falkenberg, Senior researcher, University of Bonn on "One health Implementation: Challenges and way Forward." At the end of all session's discussion were held. The session was moderated by Dr Ishani Chadha and Dr Kajal Taluja, MPH scholars at AIIMS Jodhpur.

#### **NTEP- Current Updates**

Session on National Tuberculosis Elimination Programmes -current updates between 11.00pm and 12:00pm in Hall A of the virtual platform of the conference. The session had four speakers, Dr. Anil J Purty, Professor & HOD, Community Medicine, Registrar, Pondicherry Institute of Medical Sciences, Puducherry who spoke on "NTEP Policy update". The next speaker was Dr. Vinod Kumar Garg, State TB Officer, Jaipur, Rajasthan spoke on "TB elimination activities in Rajasthan." It was followed by the session on "PMTPT" by Dr. Ashok Bhardwaj, Chairman NTF, NTEP, Former Professor and Head, Dr. Radhakrishnan Medical College and Hospital, Hamirpur. The last session was taken by Dr. Gunjan Soni, STF Chairman Rajasthan, Senior Prof. & Head Respiratory Medicine, S. P. Medical College, Bikaner on "Role of Medical colleges in NTEP". The sessions were chaired by Dr. Neeraj Agarwal Prof. & Head, Community and Family Medicine, AIIMS, Bibinagar and Dr. Pradeep Deshmukh Prof. &

Head, Community and Family Medicine, AIIMS Nagpur. At the end discussion/ Q&A was taken up. The session was moderated by Kavitha M.G. and Kanupriya Joshi, MPH Scholars, School of Public Health, AIIMS Jodhpur.

#### **Prof. Abhaya Indrayan Oration**

Prof. Abhaya Indrayan Award session was held from 12:00-12:30 pm in Main Hall. The session was moderated by Dr. Mamta Patel from School of Public Health, AIIMS, Jodhpur. The session was chaired by Prof. Vikas Bhatia (Executive Director, AIIMS, Bibanagar) and Prof. Dileep Mavlinkar (Director, IIPH Gandhinagar). Prof. Vikas Bhatia introduced Prof. Abhaya Indrayan (Biostatistics consultant, Max Healthcare), the only Biostatistician in the country to be elected as the Fellow of Indian Academy of Sciences, besides several other fellowships of learned academies/societies. Further, Prof. Dileep Mavlinkar introduced Prof. Atanu Bhattacharjee (Assistant Professor, Center for Cancer Epidemiology, Tata Memorial Center) who received this Award

#### **Public Health Emergency Management**

Session on Public Health Emergency Management was held between 12:30pm and 1:30pm in the Main Hall. The session had 3 speakers, Dr. Rajeev Sharma from U.S. Centres for Disease Control and Prevention (CDC), Country Office, India who spoke on Emergency Response Capacity Building during Active COVID-19 Response. The next speaker was Dr. Bitra George, Country Director, FHI 360 Country Office, India who held a session on Importance of addressing One Health in India to prevent pandemics. The last session was held by Dr. Priyanka Singh, Global Health Security Agenda GHSA Liaison Coordinator, FHI 360 Country Office, India on Planning of the prehospital care, triage and field hospital. With the changing climatic conditions and increasing number of disasters this session addressed the need for emergency preparedness and management. The session was coordinated by Dr Raju Thappa, Junior Consultant from National Institute of Disaster Management (NIDM). The sessions were chaired by Dr. Jugal Kishore Director Professor & Head, Community Medicine, Vardhman Mahavir Medical College and Safdarjung Hospital, New Delhi and Dr. Suman Bhansali Professor, Community Medicine, Dr.

S.N. Medical College, Jodhpur. At the end of all session's discussions were held. The session was moderated by Dr Megha Mohanan and Dr Krishna Prajapat, MPH scholars.

### **GIS in Public health**

Session on Application of GIS in Public health was held between 12:30pm and 1:30pm in the Hall A of the virtual platform of the conference. The session had 1 speaker, Dr. S Srinivasa Rao, General Manager and Scientist, Regional Remote Sensing Centre (West), NRSC/ISRO, Jodhpur who spoke on Application of GIS in Public health. The sessions were chaired by Dr Arun Sharma Director ICMR- NIIRNCD, Jodhpur and Dr. Arun Kr. Agarwal, Professor, Community Medicine and School of Public Health, PGIMER, Chandigarh. At the end sessions discussions was held. The session was moderated by Dr. Shruti Goyal and Dr. Sejal Rathore, MPH scholars.

### **Tribal Health**

Session on Tribal Health was held between 2:00pm and 3:00pm in the Main Hall. The session had 3 speakers. The first speaker was Prof. K.V. Somasundaram, Director, School of Public Health & Dean, Pravara Institute of Medical Sciences, Ahmednagar, India who spoke on Ethnomedicine Practices of Tribal Healers. The next speaker was Dr. Prasanth NS, Assistant Director (Research), IPH Bengaluru who held a session on Social Determinants of Tribal Health. The last session was held by Dr. Kuldeep Singh [Dean (Academics) & Principal Investigator, Centre of Excellence for Tribal Health, AIIMS Jodhpur] on MITTRA (Managing Illness using Telemedicine for Tribal in Remote Areas).

Though it has long been suspected that tribal people have poor health and unmet needs, health care for tribal people remains subsumed, hence, this session addressed important aspects of tribal health. The session was coordinated by Dr. Rakhi Drivwedi, Research Scholar, Centre of Excellence for Tribal Health, AIIMS Jodhpur. The sessions were chaired by Dr. Jayendrakumar Kosambiya, Professor & Head, Dept. of PSM, Govt. Medical College, Surat and Dr. Paramita Sengupta, Professor & Head, Community Medicine and Family Medicine, AIIMS Kalyani. Discussion was held at the end of all the sessions. The session was moderated by Dr

Swati Suman and Dr Tanvi Kaur Ahuja, MPH scholars.

### **Urban Health**

Session on Urban Health was held between 4:00pm- 5:00 pm in the main Hall. It was moderated by Dr. Rakesh Kumar (Chief Advisor, PSI) with Mahewash Ansari and Premrata Meghwal, MPH Scholars of AIIMS Jodhpur. The chairperson of the session was Dr. Yonette Thomas (Founder and CEO, Urban Health 360). The session was led by three speakers, Dr. Yonette Thomas, Dr. Sainath Banerjee (Lead Operations Hub-SAMAGRA) and Mr. Gautam Chakravorty (Development Assistance Specialist (Health Financing)-USAID). The session was started by Dr. Yonette Thomas and talked about importance of Urban health. Dr. Sainath Banerjee spoke about the introduction of SAMAGRA. Mr. Gautam Chakravorty presented Journey of Urban Health in India. Panel Discussion was conducted between Dr. P. Ashok Babu (Joint Secretary, MoHFW), Prof. Vikas K Desai (Technical Director, Urban Health and Climate Resilience Centre of Excellence (UHCRCE)), Dr. Sheila Vir (Nutrition) (Founder Director, PHNDC), Dr. Aparajita Gogoi (Gender) (Executive Director, C3), Dr. Gaurav Arya (Child Health) (Executive Director, CIFF), Andrea Oyuela (Subject Matter Expert, Urban Food Systems, Urban Health 360) and Dr. Damodar Bachani (NCD and Urban Health) (Deputy Project Director, JSI). Lastly, session was concluded by Dr. Yonette Thomas and Dr. Rakesh Kumar.

### **Addressing Maternal, Adolescent and Childhood Obesity in India**

Addressing Maternal, Adolescent and Childhood Obesity session was conducted in Hall A between 3:00pm to 4:00pm. The session was organized by Dr. Uplabdh Sahu and Dr. Diksha Mahajan, MPH Scholars, School of Public Health, AIIMS Jodhpur. The session was chaired by Dr. Umesh Kapil president of EFI and Dr. J. S. Thakur Professor, Community Medicine and School of Public Health, PGIMER. Dr. Vani Sethi, Dr. Rachita Gupta and Dr. Shariqua Yunus Khan were the speakers of the session who spoke about "Landscape Study on Estimates and Predictors of Obesity among children and Adolescent in India", "Regulations vs. Sales and Marketing of HFSS Foods in India" and

“Leveraging Governments Schemes and Programs to Address Obesity.”

### **WASH**

Session on WASH was scheduled between 2:00pm - 3:00pm in Hall A. It was moderated by Dr. Rupali Gupta and Dr. Zeba Bano, MPH Scholars of AIIMS Jodhpur and coordinated by two chairpersons, Dr. Puneet Misra (Professor, Centre for Community Medicine, AIIMS Delhi) and Dr. Quazi Syed Zahiruddin (Director (R&D), Associate Dean (Global Health), Adjunct Faculty Georgia Southern University, USA, J.N. Medical College, Wardha). The session was led by three eminent speakers, Dr. Sandul Yasobant (Researcher, IIPH Gandhinagar), Dr. Robert Dreibelbis (Associate Professor, Department of Disease Control, Deputy Director, Environmental Health Group, London, School of Hygiene and Tropical Medicine) and Dr. Ravindra Khaiwal (Addl. Professor of Environment Health, Community Medicine & School of Public Health, PGIMER, Chandigarh). Dr. Sandul Yasobant presented a multi-level, multi-site study on prioritizing WASH assessment for HCFs. Dr. Robert Dreibelbis also presented a study on Improving Hygiene Behaviours Along the Continuum of Care in the Peri-Natal Period. Dr. Ravindra Khaiwal spoke about Water and Sanitation issues in North India, bridging the gaps for better health.

### **Public Health in Rajasthan**

Panel discussion session on Public Health in Rajasthan: Lessons Learned and Future Prospects was held in Hall A between 3:00 PM to 4:00 PM. The session was organized by Dr. Jinesh Saini and Dr. Neelam Kumari, MPH Scholars, AIIMS Jodhpur and was moderated by Dr. Pankaj Bhardwaj. Dr. S D Gupta and Dr. Amita Kashyap were the chairpersons for the session. Dr. Rekha Acharya, Dr. Kusum Gaur, Dr. Afzal Hakim, Dr. Vaseem Naheed Baig and Dr. Rupesh Kumar were the panelist for the session. Dr. Vaseem Naheed Baig discussed the management strategies during the COVID-19 outbreak. He shared his experience about how he worked with the limited resources and how he managed the chaos. Dr. Afzal Hakim and Dr. Rupesh Kumar discussed the lessons learned during COVID- 19 pandemic. They emphasized how public health came into the limelight during the COVID- 19 pandemic. They suggested

various changes in UG and PG study patterns. The practical portion should be focused more rather than the theory portion. The study pattern should be technical friendly. Dr. Rekha Acharya discussed the changes in public health perspectives. Earlier, the senior faculty used to go into the field with the students, but they avoid field visits nowadays, which is not a good practice. Dr. Amita Kashyap spoke about the coordination developed between the clinicians and public health experts during the COVID-19 pandemic. The session was concluded by Dr. S D Gupta with the suggestion that public health experts should work at the ground level and increase their publications on their work.

### **Landscaping Tobacco Cessation**

Landscaping Tobacco Cessation: Now or Never-session was conducted at Hall A between 4:00pm -5:00. Chairpersons of this session were Dr. Rakesh Gupta (consultant Santokba Durlabhji hospital Jaipur) and Dr. Ratan K Srivastava (former HOD community Medicine, BHU). Facilitators of this session were Dr. Sonu Goel (Director-RCTC Chandigarh), Dr. Ravi Mehrotra (Founder, Centre for Health Innovation and Policy Noida, India), Dr. Vikrant Mohanty (Professor and Head department of public health Dentistry, Maulana Azad Institute of Dental Science, New Delhi) and Dr. Shivam Kapoor ( Technical Advisor The UNION South-East Asia office). Dr. Shivam Kapoor, introduced both chairs Dr. Rakesh Gupta and Dr. Ratan K Srivastava and requested them to introduce all 4 speakers. Dr. Chunilal and Dr. Arthi from SPH AIIMS Jodhpur coordinated the session.

### **National PG quiz**

In the late evening between 6:30pm to 8:30 pm a National PG quiz: “Mind Benders” was organized in the Main hall by the Organizing Team Members- Dr. Shaili Vyas, Dr. Abhishek De, Dr. Akhil Goel, Dr. Malatesh Undi, Dr. Rivu Basu, Dr. Neha Sharma, Dr. Sharon Baisil, Dr. Waseem Ansari

### **Day 2**

### **Tracking Progress Towards Reducing Maternal Mortality in India**

On the second day of main-conference, the first session was organized on “Maternal Death Surveillance and Response (MDSR)” between 9:00 am to 10:00 am at Main Hall. Theme of the session was “Tracking Progress Towards



Reducing Maternal Mortality In India." The session was chaired by Dr. Suneela Garg and Dr. Himanshu Bhushan. Dr. Suneela Garg is National President, IAPSM, Professor of Excellence, Director Professor, HAG, Maulana Azad Medical College & Associated Hospitals, New Delhi. Dr. Himanshu Bhushan is Advisor & Head, PHA Division, national Health System Resource Centre (NHSRC) and Former Deputy Commissioner & I/C MH Division, MoHFW. Four speakers participated in the MDSR session were Dr. Padmini Kashyap, Dr. Dinesh Baswal, Dr. Pankaja Raghav and Dr. Reeta Rasaily. Dr. Padmini Kashyap (Assistant Commissioner - Maternal Health, MOHFW, Gol) talked about "Implementing maternal death surveillance and response- Guidelines." Dr. Dinesh Baswal (Deputy Director Program MAMTA HIMC, Ex-Joint Commissioner, Maternal Health & Family Welfare) spoke on "Strategies adopted by India to reduce maternal mortality." Dr. Pankaja Raghav (Prof. & Head, Community Medicine & Family Medicine, AIIMS Jodhpur) briefed about findings of study on "Systems approach for assessment of Maternal Deaths in Rajasthan" - ICMR funded study. Dr. Reeta Rasaily (Scientist 'G' and Head, Division of RBMCH & Nutrition, Chief Nodal Officer-North East Region, ICMR) spoke about "ICMR Research Priorities and Programs in Maternal Health."

### **Health Technology Assessment (HTA)**

Next session in Main Hall was on Health Technology Assessment (HTA) which was conducted between 10:00-11:00AM. Universal Health Coverage in India: HTA Perspective topic was discussed by Dr. Kavitha Rajsekar, Scientist-E, ICMR, Dept. of Health Research, MoHFW ; Policy applications of HTA in India session was taken by Dr. Shankar Prinja, Additional Professor of Health Economics, Community Medicine & School of Public Health, PGIMER ; TeCHO+ program in Gujarat: HTA Perspective was deliberated by Dr. Somen Saha , Associate Professor, IIPH, Gandhinagar and Assessment of E- Health Programs: HTA Perspective was discussed by Dr. Pankaj Bhardwaj, Vice Dean (Research), Prof. (Additional), Community Medicine & Family Medicine, Coordinator, School of Public Health (SPH), AIIMS Jodhpur. The Chairpersons for this session were Dr. Sanghamitra Pati, Scientist- G

and Director, RMRCBB, ICMR, Dr. Deepak B Saxena, Professor and Acting Registrar, IIPH Gandhinagar.

### **Gender Inequalities in Health and Well Being**

Session on Gender Inequalities in Health and Well Being was organized from 11:00 am-12:00 pm in Main Hall. Dr. Bilkis Vissandjee from University of Montreal, Montreal, Quebec, Canada discussed on Gender as a social determinants of health. Dr. Aqsa Shaikh, Associate professor, Department of Community Medicine, Hamdard Institute of Medical Sciences & Research talked about Health Needs of Transgender Community and Dr. Mala Ramnathan,

Professor, Sree Chitra Tirunal Institute for Medical Sciences and Technology, Trivandrum discussed on measuring gender differentials in health. Overview of Gender and Disability intersectionality was provided by Dr. Satendra Singh, Professor, Physiology, UCMS, Delhi, Co-Chair: International Council for Disability Inclusion in Medical Education, MacLean Center for Clinical Medical Ethics fellow, University of Chicago. This session was chaired by Chairpersons: Dr. Nandini Sharma, Prof. & Head, Community Medicine, Maulana Azad Medical College and Dr. Mohua Moitra, Prof. & Head, Community Medicine, GMC Baroda.

### **Geriatric Health**

Geriatric Health session was conductive from 12:00pm-1:00 PM. Topics discussed in this session were - National Program For Health Care of The Elderly by Dr. Anil Kumar, DDG, MoHFW; UN Decade of Health Ageing 2021-2030 by Dr. Atreyi Ganguly, National Professional Officer, WHO, India; Gaps in uses of ATs among elderly by Dr. Ravindra Singh, ICMR and Epidemiology of Ageing in India by Dr. Ashish Goel, Professor & Head, Medicine, AIMS Mohali. Chairpersons of this session were Dr. Arvind Mathur, Director, Asian Centre for Medical Education, Research & Innovation (ACMERI) and Dr. Sashi Kant, Professor & Head, Center for Community Medicine, AIIMS Delhi.

### **Ethics in Medical Practice and Research**

Session on Ethics in Medical Practice and Research was organized in Hall A from 10:00-11:00 am. This session started with a talk by Dr. Anant Bhan, Adjunct Professor in the Centre for Ethics, Yenepoya University, Mangalore on

Ethical angle in incentivizing participation in Health Research. After this Dr. Amar Jesani, Consultant (Researcher/Teacher), Bioethics & Public Health provided the overview on Ethics of Academic Publishing. Dr. Nalin Mehta Director, NEIGRIHMS, Shillong discussed Ethics in Medical Practice and Research which was followed by Questions and Answers. This session was chaired by Dr. Pradeep Kumar, Chief Editor IJCM, Professor, Dr. MKS Medical College, Ahmedabad, Gujarat and Dr. Chandrakant Lahariya, Public Policy and Health systems expert.

### **Adult Vaccines**

Session on Adult Vaccines was conducted from 11:00 am -11:15 am in Hall B. Dr. N.K. Arora, Chairman of India's COVID-19 Working Group, National Technical Advisory Group on Immunisation (NTAGI) provided his expert opinion on COVID-19 Vaccination Drive and discussed about challenges faced during its planning and implementation. Dr. Naveen Thacker, President Elect, International Pediatric Association (IPA) Director, Deep Children Hospital and Research Centre, Gandhidham discussed A way forward for Adult Immunization and the need of Adult Immunization and Target Vaccines was discussed by Dr. Madhu Gupta Professor, Community Medicine and School of Public, PGIMER which was followed by question answer session. Chairpersons of this sessions were Dr. Anand Krishnan Professor, Center for Community Medicine, AIIMS Delhi and Dr. A. M. Kadri, Secretary General, IAPSM, Executive Director, SHSRC, Gujarat.

### **AYUSH**

Session on AYUSH was held in Hall A from 12:00 pm to 1:00 pm. Dr. Sudipta Kumar Rath Associate Professor of Dravyaguna, National

Institute of Ayurveda (NIA), Jaipur illustrated contribution of Ayurveda in Universal Health Policy. Thereafter a discussion on integrative approach of Cancer Management was taken by Dr. Harish Bakhuni, Associate Professor, Deptt. of Kayachikitsa, NIA, Jaipur. Dr. Sumit Nathani Associate Professor, Dept. of Dravyaguna, NIA, Jaipur provide insights on Management of Diabetes Mellitus from Ayurveda perspective. This Session ended with Open Discussion and Q&A. Dr. Kashinath Samagandi, Associate Professor, Dept. of Swasthavritta & Yoga (Ayurveda Preventive, Social Medicine & Yoga), NIA, Jaipur moderated the session and Chairpersons for the session were Dr. Manish Chaturvedi Professor, Community Medicine, NIHFW and Dr. Sanjay Rai Professor, Center for Community Medicine, AIIMS Delhi.

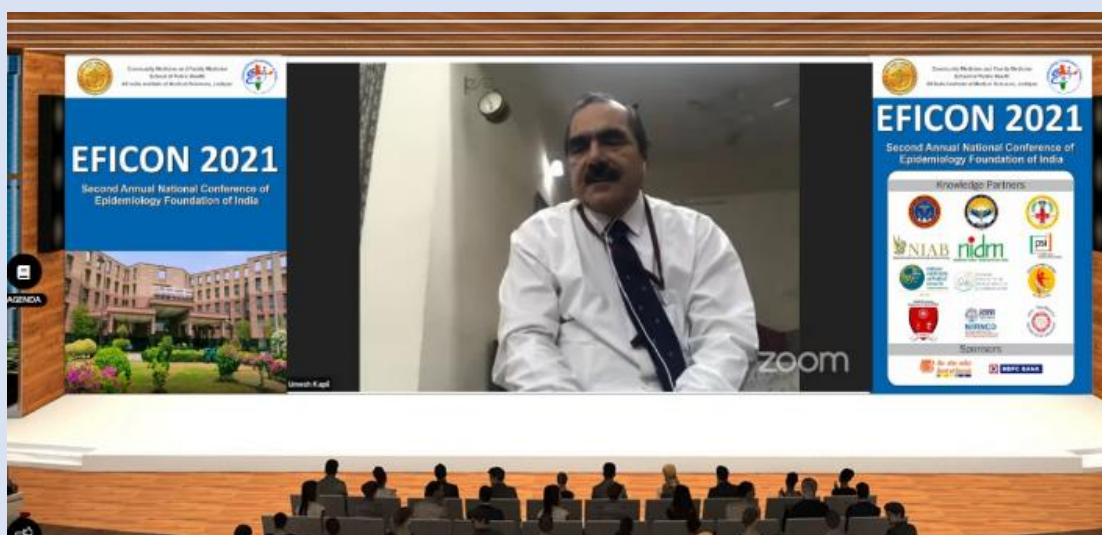
Thereafter in last session after welcoming of by Dr Sanjeev Misra, Director & CEO, AIIMS Jodhpur, Gurudev Sri Sri Ravi Shanker bestowed the audience with his blessings. Dr. Pankaj Bhardwaj, Organizing Secretary Conveyed thanks to Gurudevji. The session was moderated by Dr Neha Mantri from School of Public Health.

### **Valedictory**

Valedictory event was coordinated by Dr. Mamta Patel from School of Public Health. Announcement of results of quiz was made by Dr Akhil Dhanesh Goel, Associate Professor, Department of CMFM followed by announcement of awards of oral and poster presentation by Dr Srikant S., Associate Professor, Department of CMFM. Concluding remarks were delivered by Dr Umesh Kapil, President, EFI. At the end of the valedictory event, vote of thanks was given by Dr Pankaj Bhardwaj, Additional Professor, Department of CMFM.

# Annexure

## Inauguration



## Souvenir





## News and Events

EFICON 2022 at King George's Medical University, Lucknow, Uttar Pradesh



IAPSMCON 2022, NAGPUR | India ([iapsmconnagpur2022.com](http://iapsmconnagpur2022.com))



**49<sup>TH</sup> ANNUAL NATIONAL CONFERENCE OF IAPSM &  
23<sup>RD</sup> JOINT IAPSM & IPHA CONFERENCE, MAHARASHTRA CHAPTER 2022**

**BEYOND THE PANDEMIC: TIME TO MOVE**

Organized By: Government Medical College Nagpur and  
Indira Gandhi Govt. Medical College Nagpur

📅 03 - 05 March 2022

📍 Govt. Medical College, Nagpur