

72nd TB SEAL CAMPAIGN 2021

TB & COVID क्षय एवं कोविड

₹ 5 क्षय एवं कोविड दूर करें HELP FIGHT TB & COVID



2021 TB ASSOCIATION OF INDIA

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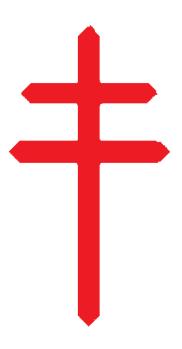
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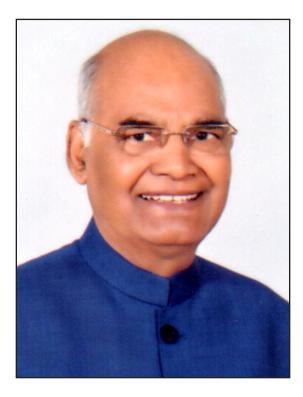
2021 TB ASSOCIATION OF INDIA

THE TUBERCULOSIS ASSOCIATION OF INDIA 3, Red Cross Road, New Delhi-110 001

72nd TB SEAL CAMPAIGN 2021 SOUVENIR



We express our profound gratitude to all the dignitaries who have send their valued MESSAGES published in the following pages. The MESSAGES will cause deeper impact in mobilizing public opinion and means to fulfil our obligations towards service to humanity and in alleviating human suffering



Shri Ram Nath Kovind OUR PATRON



MESSAGE

Tuberculosis is probably one of the biggest health hazards in our country. I am happy to know that Tuberculosis Association of India is organising the Tuberculosis Seal Campaign in order to fight against this widespread disease. It is a matter of pride that this seal is being launched this year also on 2nd October which coincides with the birth anniversary of Mahatma Gandhi, our father of the nation.

It is pleasure for me to know that Tuberculosis Association of India is well on its path of creating awareness to fight against TB and supplementing the National Tuberculosis Elimination Programme launched by Government of India. Tuberculosis Association of India since its inception in 1939 has contributed in myriad ways in the prohibition and elimination of Tuberculosis. I extend my greetings to all associated with the Tuberculosis Seal Campaign and wish them success in their endeavours.

New Delhi September 22, 2021 Ram Nath Kovind)

उपराज्यपाल दिल्ली LIEUTENANT GOVERNOR DELHI



राज निवास दिल्ली-११००५४ RAJ NIWAS DELHI-110054



MESSAGE

I am pleased to learn that the Tuberculosis Association of India is launching its 72nd TB Seal Campaign October, 2021 and is bringing out a Campaign Souvenir (E-Book) on this occasion.

The Tuberculosis Association of India has been making valuable contributions through its various initiatives towards prevention and cure of tuberculosis. Its efforts have been instrumental in increasing awareness about the disease at the grass root level which has not only helped in early detection and treatment of the disease but has also contributed to dispelling the stigma attached to it.

While appreciating the efforts of the Tuberculosis Association of India, I appeal to all citizens to come forward and contribute generously for this cause. I wish the Tuberculosis Association of India and its Campaign all success in their mission against this major public health concern.

(Anil Baijal)

प्रो.(डॉ.) सुनील कुमार एम.बी.बी.एस एवं एम.एस.(एम्स)

PROF. (Dr.) SUNIL KUMAR
MBBS & MS (AIIMS)

स्वास्थ्य सेवा महानिदेशक DIRECTOR GENERAL OF HEALTH SERVICES



भारत सरकार स्वास्थ्य एवं परिवार कल्याण मंत्रालय स्वास्थ्य सेवा महानिदेशालय Government of India Ministry of Health & Family Welfare Directorate General of Health Services



MESSAGE

I extend my heartiest congratulations to the TB Association of India on this historic occasion of the launch of the 72ndTB Seal Campaign by the Honorable President of India.

The last few years has seen the country take definitive steps towards elimination of tuberculosis. Whether it be in the form of conducive plans and policies or scaling up access to free rapid molecular diagnostics and treatment, or even financial and nutritional support to patients. The sustained efforts of the National Tuberculosis Elimination Programme have led to increase in TB notifications and significant improvements along the cascade of care for TB patients from both public and private sectors.

With gradual increase in TB notifications, the Programme has rapidly closed the "missing million" gap. It is also encouraging to see that the Programme has significantly ramped up its diagnostic capacity for TB and now has at least one rapid molecular diagnostic facility available in each district and soon, down to the block level. Together with the large-scale active TB case finding campaigns, engaging health outreach workers and community volunteers to facilitate surveillance of symptoms within households, home collection of sputum samples, teleconsultations with patients, and uninterrupted supply of anti TB drugs, the situation looks favorable.

I look forward to the continued support of the Tuberculosis Association of India in the fight against TB towards a TB Mukt Bharat by 2025.

TB Harega Desh Jeetega!

(Sunil Kumar)



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MESSAGE

The Tuberculosis Association of India (TAI) established in 1939 is one of the oldest organizations working in the field of TB prevention and cure. The Association has affiliates in almost all the States and Union Territories of India. It has all these years supported and supplemented the Government efforts of TB

control through awareness generation in the community and among public and private health care providers.

To Control the menace of Tuberculosis, National TB Control programme was started by Government of India in 1962, which was revised in 1997 adopting Directly Observed Treatment Short-course (DOTS) as its strategy and renamed as National TB Elimination Programme (NTEP) in 2019. NTEP is implementing National Strategic Plan (NSP), 2017-25 to achieve elimination of TB in the country by 2025, five years ahead of global target of 2030. To accomplish it all, the role of organization like Tuberculosis Association of India becomes all the more imperative.

TB Association of India through its multifarious activities such as organising Annual National Conference on TB and Chest Diseases (NATCON), Publication of Indian Journal of Tuberculosis (IJT) and TB seal Campaign among others have been spreading awareness among masses. TB seal Campaign is an annual activity of Tuberculosis Association of India as its information dissemination activity in prevention and control of Tuberculosis.

I wish the 72nd TB Seal Campaign all success.

(Dr. L.S. CHAUHAN) VICE-CHAIRMAN

STOP TB CURE IT WITH DOTS

DONATIONS TO THIS ASSOCIATION ARE EXEMPT FROM INCOME TAX



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India has faced two waves of COVID-19 so far -first in November -December 2020 and the second in March - April 2021. Given the emergence of new viral variants with higher transmissibility, lifting of lockdown, waning of protective immunity against the virus amongst the vaccines, there

is a probability of a third wave of COVID-19 -maybe of a milder nature. Also, the intervening period between the COVID-19 waves is when we have to be cautious. Surveillance for both TB and COVID-19 needs to be meticulously followed as there is every likelihood that respiratory symptoms may be mistaken for one or the other. Also, an increase in TB cases may be expected in the post COVID phase.

COVID-19 pandemic has changed the global society. This pandemic has shown that accelerated research and faster adoption of research findings, rapid information sharing with enhanced global collaboration can result in improved clinical care. With continued access to TB services, good public-private partnership along increased coverage of COVID-19 vaccinations and selective lockdown we can better face the challenges in TB control during future COVID-19 waves. Bidirectional diagnosis of Tuberculosis and Covid is a step forward for control of both diseases.

The Tuberculosis Association of India has all along supplemented the Government's efforts towards eradicating tuberculosis. The Association is committed to work towards achieving the National goal - TB Free India by 2025.

The annual TB seal campaign was introduced in India by the TAI in the year 1950. The campaign is generally inaugurated on 2nd October, the Gandhi Jayanti Day every year by the President of India and aims at propagating TB awareness among people all over India. It also adds to raising funds to be used for promoting voluntary anti TB work in the country. The TB seal conveys the message that TB is preventable and the victim can be restored to normal life if diagnosed and treated early.

Tuberculosis (TB) and COVID-19 are both infectious diseases that attack primarily the lungs. Both diseases have similar symptoms such as cough, fever and difficulty in breathing. TB, however, has a longer incubation period with a slower onset of disease but resembles with Covid as far symptoms are concerned that is why theme of this year of TB Seal had been "TB & COVID".

I am sure the 72nd TB Seal Campaign will be a grand success in spreading the desired TB awareness in the community.

I wish the campaign all success.

(Dr. V.K. Arora)

STOP TB CURE IT WITH DOTS

DONATIONS TO THIS ASSOCIATION ARE EXEMPT FROM INCOME TAX





Dr. Sudarsan Mandal, MDDeputy Director General
Head, Central TB Division
Project Director, NTEP





MESSAGE

Tel.: 011-23061130 E-mail: ddgtb@rntcp.org mandals@rntcp.org

भारत सरकार Government of India स्वास्थ्य एव परिवार कल्याण मंत्रालय Ministry of Health & Family Welfare निर्माण भवन, नई दिल्ली-110108 Nirman Bhawan, New Delhi-110108

I feel privileged to congratulate the Tuberculosis Association of India on the launch of the 72^{nd} TB Seal Campaign by the Honorable President of India.

The National TB Elimination Programme is committed to end Tuberculosis by 2025. In this vein, the programme has instituted accelerated efforts towards reducing TB incidence and mortality. We are proud of the success in creating an inclusive environment involving ministries, departments, PSUs, corporates, industries, professional associations, medical colleges and institutions, private healthcare providers, development partners and the community in critical areas of the TB care cascade. The collaboration of the Central TB Division with TB Association of India amidst the TB Mukt Bharat Campaign further exemplifies such coordinated efforts.

The Programme is also trying to address co-morbidities and adopt novel approaches beyond merely medical interventions, like tackling the social determinants of TB. Landmark initiatives like inter-ministerial coordination committee and other akin engagements are expected to substantially increase TB services through health facilities making it much more nuanced and patient centric, while also increasing the reach amongst vulnerable populations.

The programme has demonstrated remarkable resilience amidst the challenges posed by COVID-19 pandemic and has further ramped up its molecular diagnostic capacities, ensuring decentralized TB diagnosis services. Initiatives like bi-directional TB-COVID screening and screening for TB among ILI/SARI cases shall innovatively corroborate and substantiate active case finding efforts. We have further learnt through the challenges of COVID-19 pandemic and are positively institutionalizing the best practices to further the TB Elimination goals

We look forward to the TB Association of India's support in accelerating activities at states, districts, and blocks to reach the maximum population quickly and generating demand for TB services.

Come let us all unite to End TB.

(Dr. Sudarsan Mandal)

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सर्जन वाइस एडिमरल रजत दत्ता, ए वी एस एम, एस एम, वी एस एम, पी एच एस महानिदेशक सशस्त्र सेना चिकित्सा सेवा

Surgeon Vice Admiral Rajat Datta, AVSM, SM, VSM, PHS **Director General Armed Forces Medical Services**

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कार्यालय महानिदेशक सशस्त्र सेना चिकित्सा सेवा रक्षा मंत्रालय 'एम' ब्लॉक, नई दिल्ली-११०००१

Office of Director General **Armed Forces Medical Services** Ministry of Defence 'M' Block, New Delhi-110001

MESSAGE

- While the global scourge of COVID-19 pandemic has been raging over the past one and a half years, felicitations are in order for the TB Association of India for maintaining their focus and vision on the greater problem of tuberculosis control and management, a significant public health challenge for India. The fact that the prioritization of TB as a long term public health problem has been upheld in the midst of the background noise created by COVID-19 displays the true spirit of resilience and maturity of the health care visionaries of the country. While holding up valiantly in the battle against COVID-19, we have not lost sight on the war against TB.
- TB affects 130 per lakh population globally. India has been the unfortunate leader of the pack of high burden countries on the world map, accounting for 26% of new cases per year globally. Even after decades of fight against TB, first in form the National TB Program (1962-1997) and then, through the RNTCP (1997-2020) which adopted DOTS as a strategy, India is still a long way from achieving a TB free status. In this direction, the National TB Elimination Programme has rightfully adopted notification of cases as the top priority in the myriad of other strategies to fight TB. Although the number of notifications of new cases substantially increased in the initial two months of 2020, the significant strides being made were threatened by the COVID-19 pandemic which posed a huge strain on the national health infrastructure assets. Notification of new TB cases, both public and private, fell by 38% across the country. However, after tenacious efforts by various States and the implementation of TB-COVID bi-directional screening, most States were successful in getting the notifications back on track. This is a highly encouraging trend.
- As the future trajectory of the COVID 19 pandemic mostly remains uncharted, health care establishments are faced with the dual challenge of COVID and TB. While BCG vaccination and DOTS compliance have taken a hit due to COVID related lockdowns and restrictions, we tend to be optimistic that COVID appropriate behaviour like, social distancing, hand hygiene, wearing of masks and general awareness about respiratory disease prevention in the populace would have positive spin-offs on TB transmission.
- The inherent challenges of TB control in our country which are inextricably linked to socio-economic factors, nutritional deficiencies, availability of anti-TB drugs and emergence of TDR-TB needs multi-pronged inter-sectoral approach towards which the Govt is putting its best foot forward.
- I once again applaud the commitment and the spirit of dedication shown by the TB Seal Campaign and wish the Tuberculosis Association of India all the success in their public health endeavours.

'Jai Hind'

Station: New Delhi

Date: **31** Aug 2021

(Rajat Datta) Surg VAdm **DGAFMS**

1/10



Metropolitan Hotel, Bangla Sahib Road, Connaught Place, New Delhi-110001, Tel: 91-11-23370804, Fax: 91-11-23370197, Website: www.searo.who.int

72nd TB Seal Campaign – 2 October 2021 Message from Dr Poonam Khetrapal Singh Regional Director, WHO South-East Asia Region



I convey my best wishes to the Tuberculosis Association of India on the occasion of the launch of the Seventy-second TB Seal Campaign, to be inaugurated by His Excellency, the President of India, on 2 October, the birth anniversary of Mahatma Gandhi.

TB is a major public health challenge in India, the South-East Asia Region and world. The Region is home to 26% of the world's population but accounts for over 44% of global TB incidence. In 2019, estimated TB incidence in the Region was over 4.3 million and about 658 000 people died of the disease. Ending TB in the Region is critical to ending the global TB epidemic, and is one of eight Flagship Priorities in the Region.

Prior to the onset of the COVID-19 pandemic, India was making bold progress towards eliminating TB. In 2019 around 2.4 million TB cases were notified, of which over 0.6 million were from the private sector. First-line standard treatment was initiated for 2.2 million (94.4%) of the notified drug-sensitive TB

cases. The NIKSHAY online portal has significantly expanded the provision of Direct Benefit Transfers schemes, including for nutritional support, cash transfer and travel support in tribal areas.

To protect this progress amid the COVID-19 response, the National TB Elimination Programme has taken bold and decisive action, reflected in efforts to initiate bi-directional screening for COVID-19 and TB, expand the provision of teleconsultations and remote treatment adherence support, and increase doorstep delivery of anti-TB drugs. By the end of December 2020, over 1.8 million TB patients had been notified, exceeding projections made in April 2020 by over 11% – a tremendous achievement. Commendably, the Nikshay Poshan Yojana has provided financial and nutritional support to a significant number of TB patients and their families across the country, which is especially important given the vast social and economic impact of the pandemic.

I take this opportunity to re-emphasize the importance of maintaining strong and sustained commitment towards TB control in both the public and private sectors. To achieve our end TB targets, all health care providers must enhance the provision of TB preventive treatment and strengthen diagnosis and treatment of drug-sensitive and drug-resistant TB. TB Programmes across the Region are encouraged to set their goals for TB preventive treatment high, and to ensure adequate resources are available to managers and frontline workers to deliver quality services to communities.

WHO stands fully committed to supporting India's National TB Elimination Programme throughout the pandemic and beyond, so that together we can achieve our common goal of a TB-free India, a TB-free Region, and a TB-free world.

Dr Poonam Khetrapal Singh Regional Director WHO South-East Asia Region

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The Tuberculosis Association of India is grateful and indebted to the honourable President of India for his partronage, guidance and blessings.

We are grateful to our advertisers, donors, contributors and well wishers who have contributed meaningfull, educative and useful articles incorporating their views as well, in this Souvenir.

The Association also places on record its sincere thanks to all who have helped, assisted and contributed to the success of this Special Souvenir released on the occasion last year.

The contents of this Souvenir mainly comprise of Messages from dignitaries and material on Health Education and Scientific articles and in which the views expressed are those of the contributors



THE DOUBLE-BARRED CROSS

INTERNATIONAL EMBLEM OF THE CAMPAIGN AGAINST TUBERCULOSIS

At the time of crusades, Godefory de Bouillon, Duke of Lorraine, had placed the double Red Cross on his standard when he took possession of Jerusalem in 1099, and after his return of France, it became the emblem of the House of Lorraine.

The Double Red Cross, was considered sigularly appropriate in the rallying sign for the crusade against the most deadly Scourge Tuberculosis - which afficts mankind. Proposal for its adoption as the International Emblem of the campaign against tuberculosis was moved by Dr. Serson on October 23, 1902, at the International Tuberculosis Conference in Berlin. The propositioin was adopted unanimously.

The Council of the International Union Against Tuberculosis, Paris, in September, 1928, decided the National Asociations which are members of the Union should adopt this emblem with a recommendation to the effect that it be legally registered in order to prevent its use for commercial purposes.

In 1957, the Tuberculosis Association of India requested the Ministry of Commerce and Industry, Government of India, to patent the Double Barred Cross in favour of this Association and against fradulent use of this emblem by others. The Central Government by their notification No. 4(3)-TMT/57 dated 13th July, 1959, included in the section of the Emblem and Names, the Double Barred Cross as the emblem of the Tuberculosis Association of India.



THE STORY OF TB SEAL

A kind postman named Einer Holboell , while sorting out heavy Christmas mail in 1903, noticed some children limping across the road. He was extremely moved by the sight of these children who were suffering from tuberculosis of the bone. A thought struck him. If we could get people to buy a special Christmas Seal during Christmas, when the spirit of giving is strong it would be wonderful. There are so many letters and packages, and just a penny seal on each one would bring a lot of money to help the sick and needy children. There might even be enough to start a hospital for children. The idea of Einer Holboell was received enthusiastically by the Danish people. The King of Denmark gave his approval. This was how the first Christmas Seal appear in 1904 with the Patronage of King Christian. The sale of Christmas Seals for collecting funds for anti-tuberculosis work was soon taken up by other countries and today almost all National TB Associations are mobilising funds through this Campaign.

TB Seal Campaign in India

A proposal to introduce the TB Seal to raise funds for anti-tuberculosis work in India was first considered in 1944, but it had to be deferred for because of the war conditions in the country. The post-war days were also found unfavorable for embarking on such a new venture. The Tuberculosis Association of India adopted the proposal in October, 1950. The Government of India permitted the Association to conduct the campaign every year from 1950 onwards.

The annual TB Seal reflect the resolve and determination of the Association to combat tuberculosis. It helps to garner funds and spread awareness about TB.

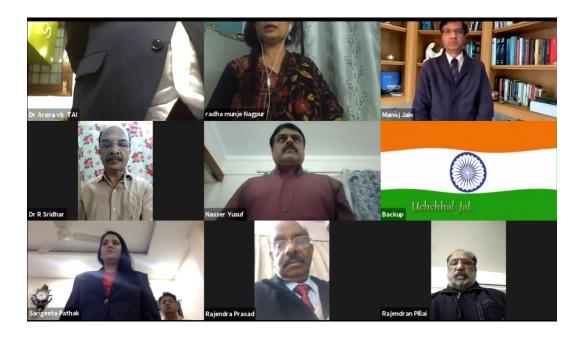


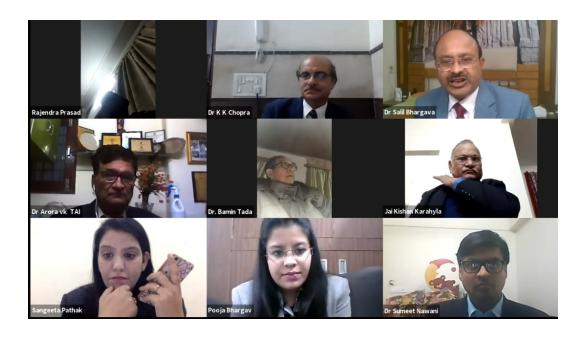
Shri Ram Nath Kovind, President of India and Patron, Tuberculosis Association of India, inaugurating the 72nd TB Seal Campaign on 2nd October, 2021 at Rashtrapati Bhavan, New Delhi

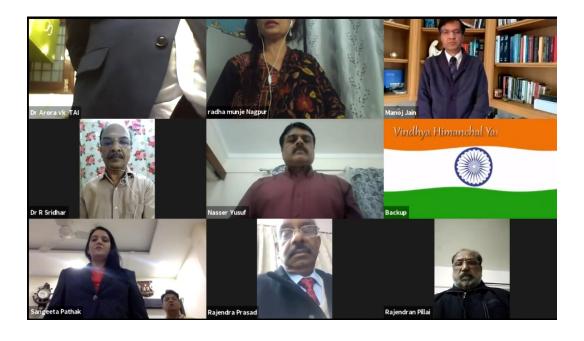


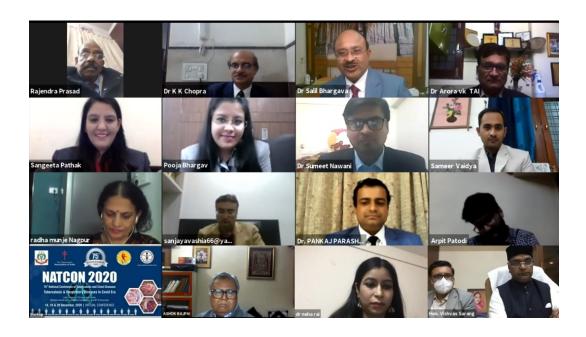
Photograph taken on the occasion of inauguration of 72nd TB Seal Campaign at Rashtrapati Bhavan

















टी॰ बी॰ एसोसिएशन आफ उत्तराखंड द्वारा महामिहम श्री राज्यपाल जी के सहयोग से दिनाँक ०६ जनवरी २०२० राज भवन परिसर देहरादून में आयोजित क्षय रोग जागरुकता कार्यक्रम के तहत पौष्टिक आहार वितरण समारोह





PRESIDENTIAL ADDRESS



Dr. K.S. Sachdeva*

Respected dignitaries, senior colleagues, and my dear friends, a very good evening to all of you. As the President of the NATCON 2020, it is my privilege and honour to welcome you all to the platinum jubilee celebrations of the 75th National Conference of TB and Chest Diseases.

This year's event is unprecedented in more ways than one. Firstly, we are holding this entire event virtually and online.

Secondly, the event is being held during a ravaging global COVID-19 pandemic. The pandemic has laid unprecedented challenges before us both as citizens and as well as public health professionals and policy makers.

In fact, we are at the cusp of reinventing and re-writing the playbook on how pandemics are going to be managed in near future. This to my mind is both an exhilarating opportunity as well as a daunting task. I believe it is also an enormous privilege as public health professionals to witness and contribute in our own ways to the understanding of this global health crisis situation and manage it for effective outcomes.

I am sure this event is going to be an enormously enriching experience with distillation of knowledge and wisdom from the scientific community, public health professionals and policy makers who have congregated here and attended the 3-day online event. Indeed, the learnings will be both enlightening and the deliberations will be equally engaging for all of us. Hope you all are looking forward to it all as much as I do.

^{*}Excepts from the Presidential Address delivered virtually at the Platinum Jubilee Celebrations of 75th National Conference on Tuberculosis and Respiratory Diseases held at Indore in December, 2020.

Significantly, COVID-19 pandemic has taught us valuable lessons and as the saying goes "every crisis brings with it a unique opportunity". This crisis has amply proved that if we all could join force and come together to overcome COVID then what stops us from hoping to achieve victory over TB in the next few years.

As is evident, a massive social reengineering is taking place globally. The public discourse on health has now taken the centre stage. The COVID pandemic has put strenuously to test the health infrastructure and systems, be it in developed or developing countries. COVID-19, therefore, is a watershed moment for public health in the country on two counts.

Firstly, there is a heightened public health awareness among the common man today than ever before on Communicable diseases. COVID-19 and its highly contagious nature have created a huge health-related risk perception among the public.

However, other diseases have been silently claiming more lives annually in our country. Yet, the awareness and sensitization regarding them are underwhelming. For instance, TB suffers from complete invisibilization.

If we can stop COVID in its tracks in such a short time-undoubtedly, we can stop TB too with the same set of resolute determination and concerted efforts.

Due to COVID-19 pandemic the public is highly receptive now more than ever before to receive risk communications and health messages. There is a fundamental shift in the perception of one's vulnerability among the masses both individually and collectively cutting across the rich and poor divide. The pandemic has jolted the public into seeking steps for health and wellness.

I would like to add here that while focus predominantly remains on communicable diseases- Non-communicable diseases should not be neglected and put on the backburner. We need to advocate about these as public health professionals and the health programmes in the country have to actively evolve this and strengthen them further.

Secondly, COVID-19 pandemic has given an entry point to structurally reimagine our core public health delivery systems. More so, in the context of respiratory infections and importantly when you have an ambitious goal of ending TB in the country by the year 2025.

The National TB Elimination Programme (NTEP), under the Ministry of Health and Family Welfare, has taken several steps in that direction and that have the potential to become the "new normal".

Innovations such as doorstep delivery of drugs to TB patients, teleconsultation, active screening for TB through outreach activities, etc. in response to the pandemic, have proved to be a boon for many patients, during the lockdown who struggled to access public/private health care.

The programme in collaboration with the states is ensuring minimal visits to health facilities by the patients who are on treatment by providing sufficient drugs required for more than a month as well as using digital innovations to monitor treatment adherence. All this to ensure there is no inconvenience and interruption in their treatment.

This is a paradigm-shifting opportunity in the health delivery system in the country and can become more of a norm than an exception.

The overall public health system is getting an uplift to ensure they are compliant with air-borne infection control measures and the frontline healthcare workers getting used to newer protocols.

Extending the service delivery further, the programme is going to the doorsteps of the patient to collect the samples to aid in early detection, diagnosis, and initiation of the treatment. It exemplifies the programme's resolve for last-mile access and quality care delivery.

Extensive contact tracing, isolation facilities and sanitoria are again coming back in vogue thanks to their efficacy and practicality in containing a community level spread and pandemic situations.

We are also observing that from a mere patient-centric care approach the systems will need strengthening around community- centric health approaches. The social and environmental determinants need to be addressed in the process. Disease surveillance and enforcing public health regulations will become rigorous and not remain a matter of individual's choice.

Despite the challenges posed by COVID-19, TB programme has bounced back. There is unprecedented focus and momentum to end TB. India is making rapid strides to achieve this goal by 2025, five years ahead of the global schedule.

We have introduced several mitigative measures including bi-directional screening for TB-COVID and convergence in case finding efforts for TB-COVID in the country.

I would like to highlight the several policy reforms made in the last three years. TB has been made a notifiable disease in the country. This has improved the identification of TB cases and helped reduce the gap in identifying the missing cases in the country. One million missing cases were reported in 2017, it has been reduced to 2.4 lakh in 2019. Financial support is being provided to all TB patients under Nikshaya Poshan Yojana, a significant step to reduce out of pocket expenses for the patients and increase treatment adherence. Since April 2018, a total of 940 Crores rupees has been disbursed to TB patients till date. In addition, free drugs and diagnostics are being provided to the TB patients availing treatment in the private sector. The community plays a vital role, and their participation is crucial for any public health programme success. In view of that we have created TB Forums covering all the districts in the country with an aim to provide a platform for all stakeholders, including patient groups to voice their concerns and offer suggestions that can be integrated into the programme.

TB diagnostic and treatment capacities in the country has been ramped up. We have undertaken massive expansion of the diagnostic capacity and currently more than 21,000 microscopic centers are operational across the country. In the last two years we have increased Rapid Molecular Testing devices (CBNAAT and Truenat) to more than 3000 devices with at least one in every district of the country. NTEP has incorporated latest evidence based and injection-free regimen for drug resistance as well as drug sensitive TB. We have also introduced newer drugs with more than 15,000 patients having received Bedaquiline and Delamanid containing regimen treatment from more than 700 DRTB centers spread across various parts of the country. Moreover, the programme is heavily investing in the capacity building of frontline workers to deliver quality care and for effective programme outcomes.

There is an 18 per cent and 12 per cent increase in TB case finding under the National Tuberculosis Elimination Programme (NTEP) in 2018 and 2019 respectively. The government has heavily invested in TB research. The Indian Council of Medical Research and India Tuberculosis Research Consortium are jointly conducting next-generation research on diagnostics, therapeutics,

vaccines, and other such critical areas. World's largest National TB Prevalence Survey with a massive sample size of 500 thousand is underway in the country. It is a significant push towards TB elimination goals in the country.

From increased funding for TB, the discovery of newer drugs and diagnostics, increased access to health facilities, greater investment in research and expanded reach of public health education, seasoned with TB activism and media's proactive role, private sector participation to political advocacy and community engagement, coupled with vaccine trials has renewed the hope of finding the elusive and miraculous breakthrough to END TB and it seems the goal is within the realms of the possibility. The goal to end TB by the year 2025 may look daunting- however, the recent paradigm shift in the policy and the drive of several states & UTs to move towards TB free status through rigorous population-based vulnerability mapping and screening coupled with active case finding will substantially yield results and act as the driving force and will add to the momentum towards Ending TB in the country.

ADRESSING SOCIAL DETERMINANTS OF TUBERCULOSIS



Dr.K.K.Chopra*

Due to the increasing number of Tuberculosis cases throughout the world, focus is now shifting towards addressing the social determinants of TB which continue to cluster among disadvantaged groups like the poor. Growing awareness of the importance of social determinants of health in other areas, like HIV/AIDS, has stimulated interest in the role of these determinants for other communicable diseases such as TB. Socio and economic determinants of health include the social, political, and economic conditions in which people are born, develop, live, work, and age. Apart from medical care, there is increasing evidence of the role of these factors in health and TB epidemiology. The World Health Organization (WHO) has identified the need for a holistic approach to TB, including the underlying social-economic determinants of TB in order to achieve elimination.³. People at high risk of developing TB include PLHIV(People living with HIV/AIDS), children less than 5 years of age, people on immunosuppressive therapy, people recently infected with M.tb in the past 2 years, untreated/inadequately treated TB disease and people suffering from silicosis, diabetes, chronic renal failure, luekemia, lymphoma and cancer of head, neck or lung⁴. Socioeconomic status may influence various stages of TB pathogenesis. Several studies have found an association between per capita gross domestic product and TB incidence. Risk of exposure is related to the underlying disease burden and the environment in which people live.

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People living or working in high burden places are at higher risk of exposure. The characteristics of the environment, airflow and number of people sharing the space will influence the risk of exposure. After the M.tb infection has occurred, increased susceptibility to disease can be related to co-morbidities like HIV infection, diabetes, silicosis, rheumatoid arthritis and other chronic illnesses or immunosuppressive therapies. An analysis that included the 22 High TB Burden Countries estimated the population attributable fraction of malnutrition (27%), smoking (23%), HIV (19%), diabetes (6%) and alcohol abuse (13%). The importance of the risk factor depends on prevalence – HIV is a more important risk factor in high prevalent countries of Sub-Saharan Africa.⁵ A prominent risk factor for tuberculosis is poor nutritional status. As per studies there is a dose–response relationship between degree of under nutrition and risk of TB incidence. Malnutrition increases the susceptibility to disease; income constraints can limit the use of health care services. As per studies, TB stigma, along with lack of social support can further lead to non compliance and poor TB outcomes⁶. Excessive alcohol consumption has also been associated with cavitary disease, delayed smear conversion, increased risk of drug toxicity, poor adherence and death due to TB. As per a study, tuberculosis risk rose as ethanol intake increased, with evidence of a threshold effect.

The study concluded that alcohol consumption caused 22.02 incident cases and 2.35 deaths per 100000 people from tuberculosis in 2014. Alcoholattributable tuberculosis incidence increased between 2000 and 2014 in most high tuberculosis burden countries, whereas mortality decreased. As per various studies^{9,12} HIV-infected patients have a higher risk for TB development compared to persons without HIV. Smoking has also been associated with more frequent cavitation and bilateral radiological findings, higher bacillary load, and delay of smear/culture conversion. Migration is a risk factor for TB, particularly among migrants originating from high burden countries. As per a study¹¹ estimated new smear-positive pulmonary TB incidence rates for Bangladesh, India, and Nepal at 102, 75, and 81 per 100,000, respectively, show little difference. But, in the urban areas of low-income countries, the risk of TB transmission / infection is higher than the national averages. A recently conducted survey of risk of TB infection in India found that infection rates in urban areas were consistently 1.5–2 times higher than in rural areas in all four zones of the country (7) Various other factors like transportation, health care costs associated with TB are both from direct user fees charged at the healthcare

centres and from indirect costs of the visit. The money spent on transportation, co-payments for medication, and loss of work due to a medical appointment are all indirect costs associated with the use of health care services. As per WHO, Neonatal BCG vaccination offers partial protection for infants and young children against severe forms of TB, but it does not protect adolescents and adults, who account for the majority of TB transmission. Reaching the WHO End TB Strategy targets of a 95% reduction in TB mortality plus a 90% reduction in TB incidence, by 2035, will require a new vaccine which is effective across all age groups,. Vaccines also offer the best chance to contain the accelerating spread of multi-drug resistant tuberculosis. The development of new TB vaccines is a priority for WHO as it is an important unmet medical need. WHO's . As per the WHO report, a TB vaccine candidate (M72/AS01_E) was found to be significantly protective against TB disease in a Phase IIb trial conducted in Kenya, South Africa and Zambia, in individuals with evidence of latent tuberculosis infection. The point estimate of vaccine efficacy was 50%, over approximately three years of follow-up.

The way forward is an optimal mix of biological /social interventions for better TB control. A Study suggests that India requires a pro-poor model of patient-centred care and prevention with nutritional, financial and psychosocial support, to address gaps in universal health coverage and social protection, and to launch multi-sectoral efforts to address poverty, under nutrition, unsafe housing, and indoor pollution. Social protection initiatives reduce vulnerability to poverty, mitigate the impact of economic shocks such as illness or loss of employment, and support people who suffer from chronic incapacities as a result of age, illness, disability, or discrimination to secure basic livelihoods¹⁰. As per an article¹, social protection initiatives can enable households to move structurally out of poverty by protecting and building their financial, physical, and human capital assets, thereby contributing to long-term productivity and economic growth. 2 main components of social protection include providing direct transfers of food / money to poor households, with the receipt of these transfers sometimes conditional on other actions, and increasing access to microfinance opportunities to support business development. As per the article ,microfinance initiatives provide a complementary approach to social protection often delivered by the nongovernmental sector. Another important aspect is the training component which can support skills development toward productive activities. To cater to the problem of urban TB urban regeneration and slum upgrading projects have to be adopted. To conclude, addressing social determinants will play a major role in achieving targets of TB elimination in today's scenario.

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TB Harega Desh Jeetega

THE TUBERCULOSIS ASSOCIATION OF INDIA OVER THE YEARS

Dr. V.K. Arora

HISTORICAL PERSPECTIVE

We are in covid-19 pandemic and therefore, the relationship of COVID-19 and TB in particular is relevant for the public health system in India. Tuberculosis Association of India is committed to take on the challenge of both infections as both diseases are airborne and have high mortality. Also, isolation of cases and contacts for controlling COVID-19 can be problematic in low socioeconomic TB households. Under these circumstances and considering the large burden of active tuberculosis patients in India along with localized. hotspot and community transmission of COVID-19, the TB association of India has further extended its wings for creating awareness about both diseases so that stigma could be minimized in the community.

The Establishment of Tuberculosis Association of India in the year 1939 was a great landmark in the history of Tuberculosis prevention and cure in India. With the prime objective of prevention, control, treatment and relief from Tuberculosis the Association has come a long way in its glorious existence of over 80 years.

The Association has a proud tradition of having the blessings of the President of India as it's Patron The Director General of Health Services of the Government of India is ex-officio Chairman of the Association. The general management of affairs of the Association invested in and rests with the Central Committee who for the purpose of Act XXI of 1960 is taken to be and acts as the Governing Body of the Association.

The Central Committee includes among others the nominees of the Patron, Trustees of the Association, Honorary Treasurer, the Members of State TB Association, Members of Parliament, Director General of Armed Forces Medical Services, Director General, Railway Health Services, TB Adviser of the Government of India.

Primarily the main functions of TAI were to act as an Advisory Body on the

prevention, control, treatment and relief of TB. It used to be a coordinating agency for standardizing methods for TB control, establishing model demonstration centres, undertaking research and investigation on subjects concerning TB and training health workers of the community and professionals. In the pre-chemotherapy era, when no anti TB drugs were available, the emphasis was laid on early diagnosis and prevention of the disease, Use of collapse therapy, nutritional support as the treatment and BCG vaccination for prevention of disease were practiced and advocated. TAI used to propagate these policies through workshops and conferences.

During the Chemotherapy era, it was realized that the traditional approach to the TB problem i.e. the sanatorium was beyond the means of our country with the limited resources and hence worked out the scheme of domiciliary treatment (then known as the Organized Home Treatment - OHT). This was later adopted as domiciliary treatment in the National TB Control Programme. To demonstrate OHT, a model clinic, New Delhi TB Clinic was established, where in addition to treatment, patients were given advice regarding sputum hygiene, contact examination and other preventive measures.

Today the TAI has under its umbrella 27 State TB Associations spread almost all over India. The state affiliates of TAI in turn have over 400 district level associations. Over the years, some of the TAI hallmarks are;

NEW DELHI TUBERCULOSIS CENTRE

A Model TB Clinic was established by an agreement between the Tuberculosis Association of India and Government of India. This was later known as New Delhi TB Centre (NDTBC) and is a pioneer institute involved in research. In addition to providing quality treatment services, it has to its credit a number of landmark research studies which have guided the Government of India in framing and revising TB control programs. Important among the studies in past include: Relative merits of various schedules in domiciliary treatment of pulmonary tuberculosis (the study paved the way for concept of domiciliary treatment, at that time known as organized home treatment, as basis of NTP): The place of isolation in treatment and management of tuberculosis patients in India (The study showed that greater emphasis should be given on rather than "Isolation"; A study to evaluate the contribution of an additional regular treatment third drug as an initial supplement in treatment to pulmonary tuberculosis was conducted. It was concluded that the study failed

to show any advantage in adding thiacetazone as the third drug to INH and Streptomycin in the initial stages of treatment in patients with bacilli initially sensitive to: drugs), prevalence of HIV infection among tuberculosis patients, study on epidemiology of tuberculosis in an urban population of Delhi - report of 30 years follow up, radiological and bacteriological profile of pulmonary tuberculosis in diabetics and many more.

All the studies arrived at conclusions which made an impact on guidelines of management of TB cases under the national program. In recent years, the important studies conducted include nation-wide ARTI estimation surveys. findings of which have been used by Government of India in monitoring the TB Control Programme.

When the National TB Control Programme was launched in 1962, New Delhi TB Centre was one of the participating District TB Centres which covered the domiciliary area of old Delhi and provided free diagnosis and treatment facilities to the residents of the area. When Short Course Chemotherapy was introduced, many trials of treatment for evaluating duration and suitable regimen for Indian population were conducted at the Centre and were incorporated in the program.

The laboratory of the Centre has ever been recognized by the WHO. In July 2009, Centre's laboratory was accredited as Intermediate Reference Laboratory for the State of Delhi. The Centre also conducts a TB Health Supervisors' course which has the patronage of the Central TB Division of Government of India.

The TAI has all along played a big role in complementing the Revised National Tuberculosis Control Programme. The activities of the program are pushed and augmented through NDTB Centre. NDTBC is responsible for monitoring and evaluation of the RNTCP in the State of Delhi, analysis of quarterly program management reports, compilation and onward transmission of feedback to the Central TB Division, Government of India. Quality assurance of sputum examination, which is the vital area for success of RNTCP, is controlled by NDTBC. With the support of state affiliates, TAI also conducts sensitization programs in Medical Colleges, state branches of Indian Medical Associations and for private practitioners.

TB SEAL CAMPAIGN

The annual TB seal campaign was introduced in India by the TAI in the year 1950. The campaign is generally inaugurated on 2 October, the Gandhi Jayanti Day every year by the President of India and aims at propagating TB awareness among people all over India. It also adds to raising funds to be used for promoting voluntary anti TB work in the country. The TB seal conveys the message that TB is preventable and the victim can be restored to normal life if diagnosed and treated early. The TB Seals printed by the Association have also won the acclaim of the International Union Against Tuberculosis and Lung Diseases, Paris.

INDIAN JOURNAL OF TUBERCULOSIS

TAI is uninterruptedly publishing IJT, the quarterly journal, for over 65 years now. This is the only renowned TB journal published at the national level. Being a highly respected journal among the medical fraternity, it is indexed in Medline of the National Library of Medicine USA. The Journal incorporates original research articles on TB and respiratory diseases of international standards. It has, on its editorial board, eminent scholars and researchers and good circulation among TB workers, Institutions in India and worldwide. The journal has been given a new look from the January, 2015 issue which coincides with its publication and marketing being outsourced with Mis. Elseviers.

In addition, TAI is periodically publishing guidelines for Medical Practitioners on current issues of management of TB. Some important guidelines published include Management of Extra-pulmonary Tuberculosis, Management of side effects of anti TB drugs, Role of NGOs in TB control, Management of TB in special situations. These are distributed during conferences and workshops and are also available on TAI's website.

NATIONAL CONFERENCE

This was the 75th NATCON held under the aegis of the Tuberculosis Association of India (TAI) and the Mahatma Gandhi Memorial (MGM) Medical College, Indore. The Department of pulmonary and Critical Care medicine under the leadership of Professor Dr. Salil Bhargava was given the uphill task of organising this conference early this year. It was the time when the pandemic was still a juvenile and it could not be imagined what monster it may turn into. Gradually as the pandemic progressed, it was decided that

NATCON would not be organised on a real world platform and hence the idea of virtual NATCON 2020 was born.

Under the able leadership of Prof. Dr.V.K. Arora, Prof. Dr. Salil Bhargava and the guidance and efforts of tuberculosis Association of India (TAI) NATCON 2020 was organised on a virtual platform from 18th to 20th of December 2020. It became the first conference in the field of Pulmonary Critical Care medicine and Tuberculosis to be organised on a virtual platform and the scale on which it was held was huge. Also one could not have imagined some time back that workshops can also be organised successfully on a virtual platform, still the conference consisted of 12 brainstorming workshops on mechanical, ventilation Non-invasive ventilation, sleep breathing disorders, allergy and immunotherapy, pulmonary function test, bronchoscopy and thoracoscopy, quality improvement in Healthcare management in (QIHCM), Airborne infection control (AIC), chest radiology, how and what to do-civil society, MDR tuberculosis and paediatric tuberculosis.

Of these workshops on QIHCM, AIC and how and what to do-civil society were the most unconventional ones and were completely unheard of. Still they were nevertheless meticulously planned and executed and added much to the learning of delegates. Other workshops work were on conventional Pulmonary, Critical Care and Tuberculosis related topics and consisted of extensive lectures and live demonstrations from eminent faculties in the field. Overall it was a great plethora of learning.

The scientific program also consisted of updates which lasted for 2 days and (19th and 20th of December 2020. This fabulous virtual platform was arranged by M/s Alpcord Network Events and conferences Management Company. It consisted of various sections like 5 halls for the conference sessions, 1 section for display of e-posters and a section for stalls. Scientific session started at 8 a.m. on both days and continued till evening. During the sessions some prestigious oration were given. Several keynote addresses were also delivered. There were symposiums by other International speakers.

Among the five halls one hall was dedicated to all the lectures on covid-19 which ranged from Epidemiology, prevention, management and complications of covid-19. There were dedicated streams for current guidelines and Critical Care also. Special mention should be given to Hall D where various new technologies in healthcare were discussed and demonstrated. It was

particularly unprecedented for topics like these to be discussed on such a large forum of pulmonologists and was really interesting, informative and enthusiastic.

The virtual experience provided by the technical team was seamless and it was unbelievably realistic. Also the smooth functioning and excellent time management by the organizing committee which is rarely seen in the contemporary on-site physical conferences was heart-winning. Given the high quality experience it may not be an overstatement that virtual conferences are not the future but the present of continuing medical education.

PROPOSED FUTURE ACTIVITIES

Much has been accomplished but much more has to be done. No national program can succeed without the patronage of institutes like TAI. Community participation plays an important role in its success. TAI proposes to further gear up its research activities. In the last five years, the Association has funded over 100 short term research projects. A Communication Cell will be created which will mainly aim at increasing public awareness about the disease, involve community leaders in the control effort and enlist cooperation of patients and their families in seeking proper diagnosis and to complete treatment till cure. A Cell dealing with Environment has been established. There is also a proposal to set up a TB-HIV cell in TAI complex for disseminating awareness about the co infection, its prevention and management. It is proposed to strengthen the State Associations by providing some funds.

The Tuberculosis Association of India, which is now eighty years old, has really lived up to the aspirations of its founding fathers. It has played a leading role in the prevention and cure of Tuberculosis and shall continue to do so.

CALENDAR OF TUBERCULOSIS WORKERS' CONFERENCE

- 1st The First Conference of Tuberculosis was organised in New Delhi in November, 1934 by the King George Thanks-giving (Anti-Tuberculosis) Fund. Twenyfour delegates attended this three- day conference. Under the auspices of the Tuberculosis Association of India, the First All India Tuberculosis Workers' Conference was held in New Delhi in November, 1939. Fifty delegates attended it.
- 2nd The Second Conference was held in New Delhi in November, 1940. This was attended by ninety delegates.
- 3rd The Third Conference was held in New Delhi in March, 1945. Seventy delegates attended. Sir Joseph Bhore presided.
- 4th The Fourth Conference was held in New Delhi in November, 1946 and was attended by 110 delegates.
- 5th The Fifth Conference was held in January, 1948 at Madras. Over hundred delegates attended it. His Excellency, Sir Archibald Nye, Governor of Madras, inaugurated the conference.
- 6th The Sixth Conference was held in Calcutta in December, 1948. Dr. R. B. Billimoria was its President. Dr. B. C. Roy, Premier of West Bengal, inaugurated the Conference. 130 delegates attended.
- 7th The Seventh Conference was held in Bombay in November, 1949. Its President was Dr. A. C.Ukil. Rajkumari Amrit Kaur, Minister of Health, Government of India, and President of the Tuberculosis Association of India, inaugurated the conference. 130 delegates attended.
- 8th The Eighth Conference was held in Hyderabad in February, 1951. Dr. K. Vasudeva Rao was its President. Over 150 delegates attended. It was inaugurated by Dr. K.C.K.E. Raja, Director-General of Health Services and Chairman, Tuberculosis Association of India.
- 9th The Ninth Conference was held in February, 1952 in Lucknow. Dr. P. V. Benjamin was its president. Over 170 delegates attended. It was inaugurated by Dr. K.C.K.E. Raja, D.G.H.S. and Chairman, Tuberculosis Association of India.
- 10th The Tenth Conference met in Mysore in February. 1953. Dr. K.L. Wig presided in the absence of Late R.B. Lal, the President-elect. It was inaugurated by Rajkumari Amrit Kaur, Union Health Minister and President of the Tuberculosis Association of India.
- 11th The Eleventh Conference was held in Nagpur in February, 1954. Dr. K. L. Wig was its President. About 130 delegates attended. Dr. Pattabhi Sitaramayya, Governor of Madhya Pradesh, inaugurated it.

- 12th The Twelth Conference was held in Amritsar in February, 1955 with Dr. B.B. Yodh as the President. About 175 delegates attended. Shri C.P.N. Singh Governor of Punjab, inaugurated the Conference.
- 13th The Thirteenth Conference was held in Trivandrum in January 1956. Dr. T.J. Joseph was its President. About 150 delegates attended. His Highness the Rajpramukh of Trivancore inaugurated it.
- 14th The Fourteenth Conference was held in Madras in January, 1958. Dr K.S. Sanjivi was its President. About 200 delegates attended. It was inaugurated by Shri Bishnuram Medhi, Governor of Madras.
- 15th The Fifteenth Conference was held in Jaipur, 1959. It was inaugurated by Dr. D.P. Karmakar, Union Health Minister. Over 200 delegates attended. Dr. B.K. Sikand was the President of this conference.
- 16th The Sixteenth Conference was held in Poona in January, 1960. Over 250 delegates attended. Dr. P.K. Sen was its President. It was inaugurated by Rajkumari Amrit Kaur, Union Health Minister and President, Tuberculosis Association of India.
- 17th The Seventeenth Conference was held in Cuttack in January-February, 1961. It was inaugurated by Shri Y.N. Sukthankar, Governor of Orissa. Over 200 delegates attended. A new feature of the conference was that Dr. A.S. Modi attended as the Guest Speaker From Hong Kong. Dr. J. Frimodt-Moller was its President.
- 18th The Eighteenth Conference was held in Bangalore in January, 1962. Dr. R.N. Tandon was its President. Over 300 Delegates attended. The conference was inaugurated by the Maharaja, Shri Jayachamaraja Wadiyar Bahadur, Governor of Mysore.
- 19th The Nineteenth Conference was held in Delhi in April, 1964. Dr. L.R. Dongrey was its President. Over 400 delegates attended. The conference was inaugurated by Dr. Sushila Nayar, Union Minister for Health.
- 20th The Twentieth Conference was held in Ahmedabad in February, 1965, and was presided over by Dr. M.D. Deshmukh. The conference was inaugurated by Nawab Mehdi Nawaz Jung, Governor of Gujarat. About 300 delegates attended it.
- 21st The Twenty-first Conference was held in Calcutta in February, 1966. Dr K.N. Rao, Director- General of Health Services and Chairman, TB Association of India, was its President. About 350 delegates attended. The Conference was inaugurated by Smt. Padmaja Naidu, Governor of West Bengal.
- 22nd The Twenty-second Conference was held in Hyderabad in February, 1967. Major (Dr.) Khushdeva Singh of Patiala was the President of the Conference.

- It was inaugurated by Shri Pattom Thanu Pillai, Governor of Andhra Pradesh. Over 250 delegates attended.
- 23rd The Twenty-third Conference was held in Bombay in January, 1968. Dr. R. Viswanathan was its President. It was inaugurated by Dr. P.V. Cherian, Governor of Maharashtra, Over 300 delegates attended.
- 24th The Twenty-fourth Conference was held in Trivandrum in January, 1969. The Predisent of the Conference was Dr. N.L. Bordia. It was inaugurated by Shri V.Viswanathan, Governor of Kerala. Over 300 delegates attended.
- 25th The Twenty-Fifth National Conference was held in Patiala, Punjab, in January, 1970. Dr. M. Umesh Rao was the President of the Conference. It was inaugurate by Dr. E.C. Pavate, Governor of Punjab. About 250 delegates attended.
- 26th The Twenty-Sixth Conference was held in Bangalore in January, 1971. Dr. K. Somayya was its President. Shri Dharma Vir. Governor of Karnataka, inaugurated the Conference. About 300 delegates attended.
- The Twenty-seventh Conference was held in Patna in November, 1972, Dr.
 K.N. De of Calcutta was its President. Shri Dev Kant Barooah, Governor of Bihar, inaugurated the Conference. About 250 delegates attended.
- 28th The Twenty-eighth National Conference was held in Madras, in January 1974. Dr. S.P. Pamra was its President. Shri K.K.Shah, Governor of Madras, inaugurated the conference. Over 300 delegates attended
- 29th The Twenty-ninth Conference was held in New Delhi in November, 1974. This was combined with the IXth Conference of the Eastern Region of the I.U.A.T. Due to the absence of Dr. M.S. Chadha, Shri S. Ranganathan, President of the Association, Presided over the Conference. The Conference was inaugurated by Shri Fakhruddin Ali Ahmed, President of India and addressed by Dr. Karan Singh, Union Minister for Health and Family Planning. Over 400 delegates attended the Conference.
- 30th The Thirtieth Conference was held in Hyderabad in November, 1975. Dr. H.B. Dingley was its President. Over 200 delegates attended the Conference. It was inaugurated by Shri S. Obul Reddy, Governor of Andhra Pradesh.
- The Thirty-first Conference was held in Lucknow in November, 1976. Dr. Tahir Mirza was its President. Over 300 delegates attended the conference. It was inaugurated by Shri M. Chenna Reddy, Governor of Uttar Pradesh.
- 32nd The Thirty-second Conference was held in Trivandrum in November, 1977. Dr.K.V. Krishnaswami was its President. About 400 delegates attended the conference. Smt. Jyoti Venkatachallam, Governor of Kerala, inaugurated the Conference.

- The Thirty-third Conference was held in Bhopal in November, 1978. Dr. J.L. Bhatia was its President. The Conference was inaugurated by Shri C.M. Poonacha, Governor of Madhya Pradesh. About 300 delegates attended.
- 34th The Thirty-fourth Conference was held in Jaipur in October, 1979. Dr. M.L. Mehrotra was its President. Shri Bhairon Singh Shekawat, Chief Minister of Rajasthan, inaugurated the Conference. About 300 delegates attended.
- 35th The Thirty-fifth Conference was held in Bombay in November, 1980. Dr. M.M. Singh was its President. Dr. Bali Ram Hira, State Health Minister, Maharashtra, Inaugurated the conference. About 500 delegates attended.
- 36th The Thirty-sixth Conference was held in Baroda in November, 1981. Dr. G.D. Gothi was its President. Smt. Sharda Mudherjee, Governor of Gujarat, inaugurated the Conference. About 500 delegates attended.
- 37th The Thirty-seventh Conference was held in New Delhi in November 1982. Dr. Jaswant Singh was its President. Shri M. Hidayatuallah, Vice-President of India, inaugurated the Conference. About 600 delegates attended.
- 38th The Thirty-eithth Conference was held in Panaji in October, 1983. Dr. S. Sivaraman was its President. Shri K.T. Satarawala, Lt. Governor of Goa, Daman Diu, inaugurated the Conference. About 700 delegates attended.
- 39th The Thirty-ninth Conference was held in Cuttack in January, 1985. Dr. A.G. Patel was its President. Shri B.N. Pandey, Governor of Orissa, inaugurated the Conference. About 500 delegates attended.
- 40th The Fortieth Conference was held in Shillong in November, 1985. Dr. D. Umapathy Rao was its President. Smt Mohsina Kidwai, Union Minister for Health and Family Welfare, inaugurated the Conference. About 400 delegates attended.
- 41st The Forty-first Conference was held in Hyderabad in October, 1986. Dr. S.P. Gupta was its President. Smt Kumudben Mani Shankar Joshi, Governor of Andhra Pradesh, inaugurated the Conference. About 500 delegates attended.
- 42nd The Forty-second Conference was held in Lucknow in December 1987. Dr. P.A. Deshmukh was its President. Shri Lokpathi Tripathi, Minister for Health and F.W., U.P. inaugurated the Conference. About 500 delegates attended.
- 43rd The Forty- third Conference was held in Calcutta in December 1988. Dr.S.P. Tripathy was its President Prof. S. Nural Hasan, Governor of West Bengal inaugurated the Conference. About 450 delegates attended.
- 44th The 44th National Conference on Tuberculosis and Chest Diseases was held in Madras in December, 1989. In the absence of Dr. S.C. Kapoor, President

- of Conference, Dr. K. Jagannath presided over the Conference. Dr. K. Deivasnamani, Minister for Health & Family Welfare, Government of Tamil Nadu, inaugurated the Conference. About 600 delegates attanded.
- 45th The 45th National Conference on Tuberculosis and Chest Diseases was held in Rohtak (Haryana) in January 1991. Prof. K.C. Mohanty was its President. Shri Dhanik Lal Mandai, Governor of Haryana, inaugurated the Conference. About 400 delegates attended.
- 46th The 46th National Conference on Tuberculosis and Chest diseases was held in New Delhi on November 1991. Dr. S.B. Trivedi was its President. Dr. M.S. Chadha, President, Tuberculosis Association of India, inaugurated the Conference. About 450 delegates attended.
- 47th The 47th National Conference on Tuberculosis and Chest Diseases was held in Bombay in November 1992. Dr D. P. Verma was its President. Shri C. Subramaniam, Governor of Maharashtra, inaugurated the Conference. About 600 delegates attended.
- 48th The 48th National Conference on Tuberculosis and Chest Diseases was held in Bhopal (Madhya Pradesh) in December 1993. Dr. M.M.S. Siddhu was its President. Shri Mohammed Shafi Qureshi, Governor of Madhya Pradesh, inaugurated the Conference. About 450 delegates attended.
- 49th The 49th National Conference on Tuberculosis and Chest Diseases was held in Pondicherry in October 1994. Dr. R.C. Jain was its President. Shri Paban Singh Ghatowar, Union Dy. Minister for Health and Family Welfare inaugurated the Conference. About 500 delegates attended.
- 50th The Golden Jubilee National Conference on TB & Chest Diseases was held in Trivandrum in December 1995. Dr. C. Srinivasa Rao was its President. Shri P. Shiv Shankar, Governor of Kerala, inaugurated the Conference. About 550 delegates attended.
- 51st The 51st National Conference on TB & Chest Diseases was held in Bangalore (Karnataka) in November 1996. Dr. Hoimi Basu was its President. His Excellency Shri Khursheed Alam Khan, Governor of Karnataka, inaugurated the Conference. About 600 delegates attended.
- 52nd The 52nd National Conference on TB & Chest Diseases was held in Ahmedabad (Gujarat) in December 1997. Dr. R.P Bhagi was its President. Shri Dilipbhai Parikh, Hon'ble Chief Minister of Gujarat, inaugurated the Conference. About 600 delegates attended.
- 53rd The 53rd National Conference on TB & Chest Diseases was held at Bhubaneswar (Orissa) from 27th to 30th December, 1998. Dr. I. Ranga Rao

- was the President of the 53rd National Conference. Shri Jagannath Rout, the Hon'ble Minister of Urban Development, Orissa, inaugurated the Conference which was attended by about 400 delegates.
- 54th The 54th National Conference on Tuberculosis and Chest Diseases was held at L. N. Mishra Institute Auditorium, Bailey Road, Patna (Bihar), from 26th to 29th December, 1999. Dr. M.S. Agnihotri was the President of this 54th National Conference, which was attended by about 400 delegates.
- 55th The 55th National Conference on TB & Chest Diseases was held at Taj Bengal, Calcutta from 7th to 10th December, 2000. Dr. D. Bhounsule was the President of the Conference, which was attended by about 500 delegates.
- 56th The 56th National Conference on Tuberculosis and Chest Diseases was held at Hotel Le Royal Meridien, Chennai from 9th to 12th October, 2001. Dr. M. Pradhan was the President of the Conference, which was attended by about 550 deiegates.
- 57th The 57th National Conference on Tuberculosis and Chest Diseases was held at Kala Academy, Panaji, Goa from 26th to 29th september, 2002. Dr. S.N. Tripathy was the President of the Conference, which was attended by about 500 delegates.
- 58th The 58th National Conference on Tuberculosis and Chest Diseases was held at Taj Lands Ends, Mumbai from 2nd to 4th January, 2004. Dr. P. Jagota was the President of the Conference, which was attended by about 600 delegates.
- 59th The 59th National Conference on Tuberculosis and Chest Diseases was held at LRS Instt. of TB and Respiratory Diseases, New Delhi from 3rd to 6th February, 2005. Dr. V.K. Arora was the President of the Conference, which was attended by about 600 delegates.
- 60th The 60th National Conference on Tuberculosis and Chest Diseases was held at K.G. Medical University, Lucknow, from 23rd to 26th February, 2006. Dr. P.R. Narayanan was the President of the Conference, which was attended by 500 delegates.
- The 61st National Conference on Tuberculosis and Chest Diseases was held at RNT Medical College, Udaipur (Rajasthan) from 23rd to 25th February, 2007. Lt. General Dr. R. Jayaswal was the President of Conference, which was attended by about 500 delegates.
- 62nd The 62nd National Conference on Tuberculosis and Chest Diseases was held at New Delhi TB Centre, New Delhi from 14th to 16th December, 2007. Dr. S.K. Katiyar was the President of the Coference. Dr. Ambumani Ramadoss, Hon'ble Minister for Health & Family Welfare, Govt. of India, inaugurated the Conference, which was attended by about 400 delegates.

- 63rd The 63rd National Conference on Tuberculosis & Chest Diseases and First International Conference of South Asia Region (The Union) was held in New Delhi from 8th to 10 September 2008. Dr. R.K. Srivastava, Chairman, TAI and Director General of Health Services with the President of the Conference. About 550 delegates atended the Conference.
- 64th The 64th National Conference on Tuberculosis & Chest Diseases was held at Science City Auditorium, Kolkata, from 27th to 29th December, 2009. Dr. Manish Pradhan was the President of the Conference. About 350 delegates attended the Conference.
- 65th The 65th National Conference on Tuberculosis & Chest Diseases was held at Bangalore, from 9th to 11th January, 2011. Dr. Prahlad Kumar was the President of the Conference. About 450 delegates attended the Conference.
- 66th The 66th national Conference on Tuberculosis & Chest Diseases was held at Dehradun, Uttrakhand from 19th to 20th November, 2011. Dr. D. Behera was the President of the Conference. About 350 delegates attended the Conference.
- 67th The 67th National Conference on Tuberculosis & Chest Diseases was held at Patna, Bihar from 8th to 10th February 2013. Dr. Rajendra Prasad was the President of the Conference. About 450 deligates attended the Conference.
- 68th The 68th National Conference on Tuberculosis and Chest Diseases was held at New Delhi fron 23rd to 26th Feb 2014 and was inaugrated by the Hon'ble President of India. Dr. L.S. Chauhan was the President of the conference. The conference was organised under auspices of the National Institute of Tuberculosis and Respiratory Diseasis, New Delhi (Eastwhile LRS Institute of TB and Respiratory Diseasis).

 over 600 delegates attented the conference.
- 69th The 69th National Conference on Tuberculosis and Chest Diseases was held at Mumbai from 5th to 7th Feb 2015. Dr. Rohit Sarin was the President of the Conference. The Conference was organised in association with the Anti TB Association of Maharashtra. Over 350 delegates attented the conference.
- 70th The 70th National Conference on Tuberculosis and chest Diseases was held at convention center, King George Medical University, Lucknow (U.P.) in Feb. 2016. Dr. Jai Kishan was the President the conference. The Conference was organised in association with the TB Association of U.P. and the Deptt. of Pulmonary, King George University Lucknow. Over 650 delegats attended the conference.

- 71st The 71st National Conference on Tuberculosis and Chest Diseases was held at PGI Chandigarh from 16th to 18th December, 2016. Dr. K.B. Gupta was President of the Conference. The Conference was inaugurated by Dr. Soumya Swaminathan, Director General, ICMR and Secretary, Department of Health Research, Ministry of health and Family Welfare, Government of India, New Delhi. Over 650 delegates attended the Conference.
- 72nd The 72nd National Conference on Tuberculosis and Chest Diseases was held at Konaseema Institute of Medical Sciences & Research Foundation, Amalapuram and Hotel River Bay, Rajamundry, Andhra Pradesh, from 15th to 17th December, 2017. Dr. Bamin Tada was President of the Conference, Dr. C.V. Rao, Vice-Chancellor, NTR University of Health Sciences, Andhra Pradesh, inaugurated the conference. Over 450 delegates attended the conference.
- 73rd The 73rd Conference on Tuberculosis and Chest Diseases was held at Nagpur, Maharashtra, from 4th to 6th January, 2019. The conference was organised jointly by the Department of Respiratory Medicine, Indira Gandhi Government Medical College, Nagpur, Vidarbha Chest Association and the Maharashtra State Anti-TB Association, Mumbai, under aegis of the Tuberculosis Association of India. Dr. Sunil Khaparde was the President of the Conference. Over 500 delegates attended the conference.
- 74th The 74th Conference on Tuberculosis and Chest Diseases was held at Chennai, Tamil Nadu, from 20th to 22nd December, 2019. The conference was organised jointly by the Government Hospital of Thoracic, Tambaram Sanatorium, Chennai and the Anti-TB Association of Tamil Nadu, Chennai, under aegis of the Tuberculosis Association of India. Dr. K.K. Chopra was the President of the Conference. Over 700 delegates attended the conference.
- 75th The Platinum Jubilee of National Conference of Tuberculosis and Chest Diseases (75th NATCON) was held at Indore, Madhya Pradesh, from 18th to 20th December 2020 on a 3D virtual platform. The conference was organized under the aegis of Tuberculosis Association of India, Mahatma Gandhi Memorial Medical College, Indore and MP TB Association. Dr. K.S. Sachdeva was the President of the Conference. Over 2500 delegates attended the Conference.

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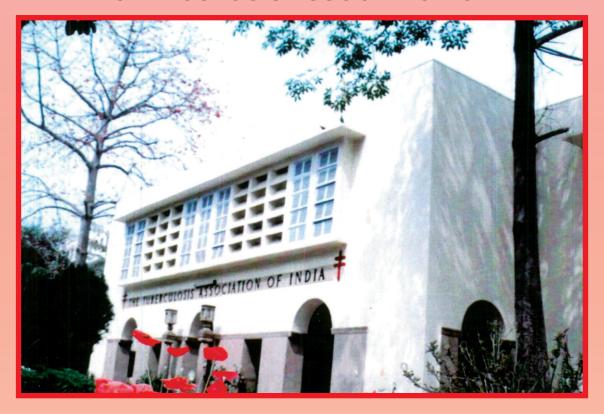
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