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THE HINDU

Nod for Covovax vaccine for 12-17 age-group

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COVID-19 vaccination drive underway in North Delhi. File | Photo Credit: Sushil Kumar Verma

Serum Institute's Adar Poonawalla says 'younger age groups will follow shortly'

India's drug regulator has granted restricted emergency use authorisation to the Serum Institute's COVID-19 vaccine Covovax for the 12-17 age-group subject to certain conditions.

Confirming the Drugs Controller General of India's (DCGI) approval, Serum Institute of India Chief Executive Officer Adar Poonawalla on Tuesday tweeted: "@SerumInstIndia's brand Covovax has completed bridging studies in India and has

இந்து தமிழ் திசை

2025-ம் ஆண்டுக்குள் காசநோய் இல்லாத இந்தியாவை உருவாக்க இலக்கு: தமிழக காசநோய் அலுவலக கூடுதல் இயக்குநர் தகவல்

Published : 11 Mar 2022 05:50 am

சென்னை டிஎம்எஸ் வளாகத்தில் காசநோய் குறித்த கருத்தரங்கம் நேற்று நடைபெற்றது. இதில் பங்கேற்ற மாநில காசநோய் அலுவலக கூடுதல் இயக்குநர் டாக்டர் ஆஷா, உலக சுகாதார நிறுவனத்தின் காசநோய்த் தடுப்பு பிரிவு ஆலோசகர் டாக்டர் பிரபு ராவணன்.

சென்னை: தமிழ்நாடு மருத்துவ மற்றும் கிராமப்புற சுகாதார சேவைகள் இயக்குநரகம் மற்றும் பத்திரிகை தகவல் தொடர்பு அலுவலகம் இணைந்து காசநோய் குறித்த....

Continued in page No.3

been granted Emergency Use Authorisation by DCGI for adults and for children above the age of 12. Younger age groups will follow shortly."

It is the fourth vaccine to receive the regulator's nod for use among those below 18 years. However, only one vaccine — Bharat Biotech's Covaxin — is used for the 15-18 age-group in the vaccination drive in the country after the government approval.

The DCGI approval comes after the Subject Expert Committee on COVID-19 of the CDSCO last week recommended granting emergency use authorisation (EUA) to Covovax for those aged 12 to 17.

The government has still not taken a decision on vaccinating those aged below 15 and the Health Ministry has consistently said additional need for vaccination and inclusion of population for vaccination were examined constantly.

'Highly efficacious'

In the EUA application to the DCGI on February 21, Prakash Kumar Singh, Director (government and regulatory affairs) at the SII had stated that the data from two studies on about 2,707 children aged 12 to 17 showed that Covovax was highly efficacious, immunogenic, safe and well-tolerated.

Mr. Singh, in his application, had said, "this approval will not only be beneficial for our country, but will benefit the entire world, fulfilling our Prime Minister's vision of 'making in India for the world'.

The DCGI has already approved Covovax for restricted use in emergency situations in adults on December 28. It has not yet been included in the country's vaccination drive.

The DCGI on February 21 granted restricted EUA to Biological E's COVID-19 vaccine Corbevax for the 12-18 age-group subject to certain conditions.

Covovax is manufactured by technology transfer from Novavax and is approved by the European Medicines Agency for conditional marketing authorisation and also granted emergency use listing by the WHO in December 2020. ZyCov-D is the first vaccine cleared by India's drug regulator for inoculation of those aged 12 and above in August last year. Indigenously developed Covaxin received approval for emergency use in 12 to 18 age-group in December last year.

THE HINDU

Govt. working to achieve TB-free India by 2030

BELAGAVIMARCH 07, 2022 22:37 ISI

The State Government will work with various medical education institutions and hospitals to achieve the goal of TB-free India by 2030, District Tuberculosis Officer Iranna Dharwadkar said in Vijayapura on Monday.

He said that the BLDE hospital has been included in various schemes to diagnose and provide treatment for patients with tuberculosis and resistant tuberculosis, completely free.

He said that the Government has set up costly equipment to trace and treat the disease. He requested all senior citizens not to ignore signs of illness and to take the benefit of government schemes.

He spoke of healthy habits in preventing the spread of tuberculosis. He urged people to join the government in removing the stigma attached to the disease in the community.

Anand P. Ambali of the Geriatric Clinic spoke in detail about typical and atypical symptoms of tuberculosis in senior citizens. Senior citizens

should not neglect symptoms such as fever, reduced appetite, loss of weight, night sweats lasting for more than 15 days, he said. He stressed that tuberculosis is completely curable with availability of new drugs.

The event was organised by the Geriatric Clinic of BLDE Deemed to be University's B.M. Patil Medical College Hospital and Research Centre in collaboration with District Health and Family Welfare Services and District Tuberculosis Office.

Imam Kalburgi S. Sawant and others were present.

Continued from page no.1

2025-ம் ஆண்டுக்குள் காசநோய் இல்லாத இந்தியாவை உருவாக்க இலக்கு:

..... கருத்தரங்கம் சென்னை டிஎம்எஸ் வளாகத்தில் நேற்று நடைபெற்றது சென்னை: தமிழ்நாடு மருத்துவ மற்றும் கிராமப்புற சுகாதார சேவைகள் இயக்குநரகம் மற்றும் பத்திரிகை தகவல்

இதில், மாநில காசநோய் அலுவலக கூடுதல் இயக்குநர் டாக்டர் ஆஷா பேசும்போது, ''காசநோய் பாதிப்பை படிப்படியாகக் குறைக்கமத்திய, மாநில அரசுகள் தொடர்ந்துபல்வேறு நடவடிக்கை எடுத்து வருகின்றன. அரசு மருத்துவமனைகளில் காசநோய் பரிசோ தனைகள் மையங்கள் இருக்கின்றன.

இதேபோல், ஆரம்ப சுகாதாரமையங்களிலும் காசநோய் பரி சோதனைகளை அதிகரிக்க திட்டமிடப்பட்டுள்ளன. இதற்கான, கட்டமைப்புகளும் மேம்படுத்தப்பட்டு வருகின்றன. தற்போது ஒரு லட்சம்பேரில் அதிகபட்சமாக 162 பேர்காசநோயால் பாதிக்கப்படுகின்றனர். 2025-ம் ஆண்டுக்குள் காசநோய் இல்லாத இந்தியாவை உருவாக்க இலக்கு நிர்ணயித்து பணியாற்றி வருகிறோம்'' என்றார்.

உலக சுகாதார நிறுவனத்தின் காசநோய்த் தடுப்பு பிரிவு ஆலோசகர் டாக்டர் பிரபு ராவணன் பேசும்போது, ''இந்தியாவில் ஒரு லட்சம் பேருக்கு 37 பேர் என்ற வீதத்தில் காசநோயால் உயிரிழக்கின்றனர். மேலும், கிராம அளவில் காசநோயைக் கண்டறிவதற்காக நடமாடும் சோதனை மையங்கள் செயல்பட்டு வருகின்றன. இதன்எண்ணிக்கை மேலும் அதிகரிக்கப்படவுள்ளன. காசநோய் சிகிச்சை பெறுபவர்களுக்கு நேரடி வங்கிப் பரிவர்த்தனை மூலம் அரசு நிதிஅளித்து வருகிறது'' என்றார்.

இந்து தமிழ் திசை

கோவையில் 'மக்களைத் தேடி மருத்துவம்' திட்டத்தின்கீழ் 28 லட்சம் பேருக்கு பரிசோதனை செய்ய இலக்கு

Published : 08 Mar 2022 04:12 am

கோவையில் 'மக்களைத் தேடி மருத்துவம்' திட்டம் கடந்த ஆண்டு ஆகஸ்ட்முதல் செயல்படுத்தப்பட்டு வருகிறது.இந்த திட்டத்தின்கீழ் சுமார் 450

பெண்தன்னார்வலர்கள் பணியாற்றி வருகின்றனர்.அவர்கள் வீடுகள்தோறும் சென்று 18 வயதுக்கு மேற்பட்டவர் களுக்கு ரத்த அழுத்தம், சர்க்கரையின் அளவை பரிசோதித்து வருகின்றனர். மேலும், வாய் புற்றுநோய்க்கான அறிகுறிகள் யாருக்கேனும் இருக்கிறதா என்பதையும், 30 வயதுக்கு மேற்பட்டபெண்களுக்கு மார்பக புற்றுநோய்,கருப்பை வாய் புற்றுநோய் அறிகுறிகள் இருக்கிறதா என்பதையும்
கேட்டுதெரிந்துகொள்கின்றனர்.

கோவையில் நடக்க முடியாத நிலையில் உள்ள மூதாட்டியின் வீட்டுக்கு சென்று சிகிச்சை அளித்த 'மக்களைத் தேடி மருத்துவம்' திட்டப் பணியாளர்கள்.

நோய்க்கான அறிகுறிகள் இருப்பின் அவர்களுக்கு தகுந்த ஆலோசனை வழங்கி, அரசு ஆரம்ப சுகாதார நிலையங்கள், அருகில்உள்ள அரசு மருத்துவமனைக்கு செல்ல பரிந்துரை செய்கின்றனர். இதேபோல, மன அழுத்தத்தால் பாதிக்கப்பட்டவர்கள், குடிபோதைக்கு அடிமையானவர்கள், காசநோய் பாதிப்புள்ளவர்களை கண்டறிந்து உரிய சிகிச்சைக்கு அனுப்பிவைக்கின்றனர்.

இதுதொடர்பாக, தொற்றா நோய்கள் மாவட்ட திட்ட அலுவலர் டாக்டர் விஜயகுமார்
கூறியதாவது: கோவை மாவட்டத்தில் 18 வயதுக்குமேற்பட்டவர்கள் சுமார் 28 லட்சம் பேர்உள்ளனர். அவர்களில் இதுவரை 6.61 லட்சம் பேரின் சர்க்கரை அளவும், 6.58 லட்சம் பேரின் ரத்த அழுத்தமும் பரிசோதிக்கப்பட்டுள்ளது. எஞ்சி யுள்ளவர்களுக்கும் மே 31-ம் தேதிக்குள் இந்த பரிசோதனைகளை மேற்கொள்ள இலக்கு நிர்ணயிக்கப் பட்டுள்ளது. இந்த பரிசோதனையில் புதிதாக 26,941 பேருக்கு உயர் ரத்த அழுத்தமும், 17,983 பேருக்கு சர்க்கரையின் அளவும் அதிகமாக இருப்பது கண்டறியப்பட்டுள்ளது. ஏற்கெனவே அரசு மருத்துவமனை களில் ரத்த அழுத்தம், சர்க்கரை நோய்க்காக சிகிச்சை பெற்று வருபவர்களுக்கு இரண்டு மாதங்களுக்கு தேவையான மருந்து பெட்டகங்கள் தன்னார்வலர்கள் மூலம் வழங்கப்பட்டு வருகின்றன.

பிசியோதெரபி சிகிச்சை தேவைப் படுவோரின் வீட்டுக்கு சென்று நோயாளியுடன் இருக்கும் ஒருவருக்கு அந்த சிகிச்சையை தொடர்ந்து வழங்குவதற்கான பயிற்சி அளிக்கப்படுகிறது. மேலும், படுத்த படுக்கையாக இருப்பவர்களின் வீட்டுக்கே சென்று, அவர்கள் முறையான சிகிச்சை பெற உடனிருப்பவர்களுக்கு பயிற்சி அளிக்கப்படுகிறது. மக்களைத் தேடி மருத்துவம் திட்டத்தின்கீழ் இதற்கென கோவையில் மொத்தம் 18 வாகனங்கள் இயங்கி வருகின் றன. அதில், ஒரு செவிலியர், பிசியோதெரபி நிபுணர் ஆகியோர் இடம்பெற்றிருப்பர். தன்னார்வலர் கள் மட்டுமல்லாது, ஆரம்ப சுகாதார நிலைய செவிலியர்கள், அங்கன்வாடி பணியாளர்கள் ஆகியோரும் நோயாளிகளை கண்டறிந்து தகவல் தெரிவிக்கின்றனர்.

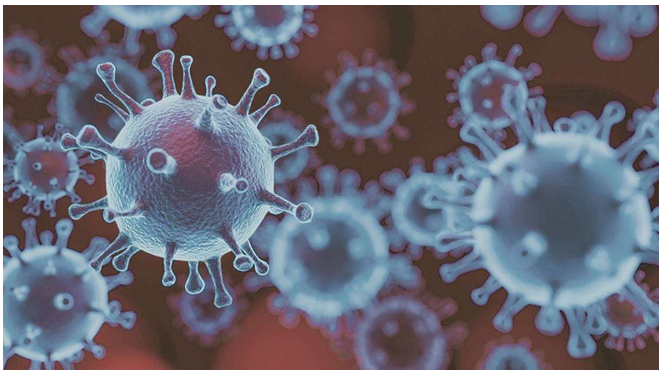
இதுதவிர, 104 என்ற எண்ணை அழைத்தும் மக்கள் தகவல் தெரி விக்கலாம்.என்று அவர் கூறினார்.

The Indian EXPRESS

New study finds evidence of brain damage due to Covid-19

The study, published in the latest issue of Nature journal, examined the brain scans of the 401 participants before and after they were infected with Covid-19, and compared them with scans of 384 people who had remained uninfected.

By: Express News Service | Pune |
March 8, 2022 5:29:41 pm



The researchers claimed that this was the first large-scale study in which the brain scans prior and post the infection could be compared.

A new study in the United Kingdom has found "strong evidence" for brain-related abnormalities owing to Covid-19 infection, especially among older age groups. This study, carried out on 785 people in the UK, found greater reduction in brain size, reduction in grey matter thickness and potential for damage in the ability to smell things.

The study, published in the latest issue of Nature journal, examined the brain scans of the 401 participants before and after they were infected with Covid-19, and compared them with scans of 384 people who had remained uninfected. It found "a significant, deleterious impact associated with SARS-CoV2".

The researchers claimed that this was the first large-scale study in which the brain scans prior and post the infection could be compared. The availability of pre-infection brain scan data reduced the possibility of mistaking the damages seen in subsequent scans as manifestations of pre-existing problems.

"The infected participants also showed on average larger cognitive decline between the two timepoints," the study said, pointing out that these signs were evident even among patients who had not been hospitalised.

The study by scientists at American and British institutions said it was not clear whether these impacts of Covid-19 would persist in the long-term or can be reversed, and called for further investigations.

The New York Times quoted Dr Serena Spudich, chief of neurological infections and global neurology at the Yale School of Medicine, not involved in the study, as saying that the study did seem to present convincing evidence that Covid-19 had effected changes in the brains of the participants.

But she said it would be wrong to conclude that everyone infected with Covid-19 suffered from brain damage. "To make a conclusion that this has some long-term clinical implications for the patients I think is a stretch. We don't want to scare the public and have them think, 'Oh, this is proof that everyone's going to have brain damage and not be able to function'," she said.

The study said the impact of Covid-19 infection was observed mainly in the limbic system, that part of the brain that is responsible for emotional or behavioural responses, and the olfactory

cortical system which deals with the sense of smell.

The Indian EXPRESS

Drug regulator grants emergency use authorisation to Covovax for 12-17 age group

It is the fourth vaccine to receive the regulator's nod for use among those below 18 years.

By: PTI | New Delhi |
Updated: March 9, 2022 8:05:02 pm

The DCGI has already approved Covovax for restricted use in emergency situations in adults on December 28. It has not yet been included in the country's vaccination drive. (File)

India's drug regulator has granted restricted emergency use authorisation to Serum Institute of India's **COVID-19 vaccine Covovax** for the 12-17 years age group subject to certain conditions, official sources said on Wednesday.

It is the fourth vaccine to receive the regulator's nod for use among those below 18 years.

The Drugs Controller General Of India's (DCGI) approval comes after the Subject Expert Committee on COVID-19 of the CDSCO last week recommended granting emergency use authorisation (EUA) to Covovax for those aged 12 to 17.

The government has still not not taken a decision on vaccinating those aged below 15 years. The health ministry has consistently said that additional need for vaccination and inclusion of population for vaccination are examined constantly.

In the EUA application to DCGI, Prakash Kumar Singh, director (government and regulatory affairs) at SII on February 21 had stated that the data from two studies on about 2707 children aged 12 to 17 years show that Covovax is highly efficacious, immunogenic, safe and well tolerated in this age group of children.

"This approval will not only be beneficial for our country alone, but will benefit the entire world, fulfilling our prime minister's vision of 'making in India for the world'. In line with the philosophy of our CEO, Dr Adar C Poonawalla, we are sure that Covovax will play an important role to protect children of our country and world at large against COVID-19 disease and will keep our national flag flying high globally," an official source had quoted Singh as having stated in the application.

The DCGI has already approved Covovax for restricted use in emergency situations in adults on December 28. It has not yet been included in the country's vaccination drive.

The DCGI on February 21 granted restricted EUA to Biological E's COVID-19 vaccine Corbevax for the 12 to less than 18 years age group subject to certain conditions.

Covovax is manufactured by technology transfer from Novavax and is approved by the European Medicines Agency for conditional marketing authorisation and also granted emergency use listing by WHO on December 2017, 2020.

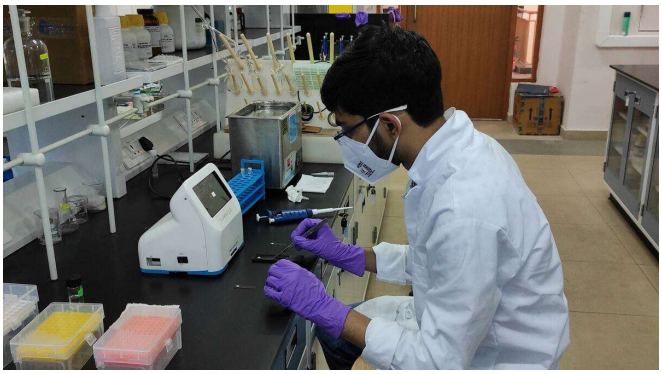
India has been using Bharat Biotech's Covaxin to vaccinate adolescents between 15-18 years. ZyCov-D is the first vaccine cleared by India's drug regulator for inoculation of those aged 12 years and above in August last year. Indigenously-developed Covaxin received approval for emergency use in 12 to 18 in December last year.

The Indian EXPRESS

IISc Bengaluru researchers develop cheaper, simpler way to detect hydrogen peroxide

The paper-based sensor can be used to check household and healthcare products' quality and for testing biological fluids like blood.

By: **Express News Service** | Bengaluru |
Updated: March 9, 2022 9:08:31 pm



The technique they used involves preparing a gel from a solution containing a specially designed molecule treated with a liquid that has hydrogen peroxide, and air-drying them on a thin paper disc of about 0.45 cm in diameter. (Express photo)

Researchers at the Indian Institute of Science (IISc) have developed a paper-based sensor for detecting even tiny volumes of hydrogen peroxide. This chemical is used widely in household and healthcare products like hand sanitiser as a disinfectant, in rocket fuel as a propellant, and is also found in biological cells. This low-cost system could be adopted to quantify or detect hydrogen peroxide for quality-control purposes or other applications.

The technique they used involves preparing a gel from a solution containing a specially designed molecule treated with a liquid that has hydrogen peroxide, and air-drying them on a thin paper disc of about 0.45 cm in diameter. The paper disc emits a green light when placed under an ultraviolet lamp only in the presence of hydrogen peroxide. The intensity of the light was found to be directly proportional to the concentration of hydrogen peroxide.

"You can actually visualise this green emission (photoluminescence) with the naked eye. You don't need any sophisticated instruments. All you need is a simple UV (ultraviolet) light source. Since the paper disc is low-cost, biodegradable and easy to use, it could serve as a powerful tool in low-resource settings, even for testing biological fluids like blood. Detecting hydrogen peroxide efficiently is also crucial in other fields; peroxide-based explosives, for example, can be traced using hydrogen peroxide, which is sometimes used as a starting material," said Arnab Dutta, a PhD student in the Department of Organic Chemistry and the first author of the study published in the ACS Sensors journal.

When the researchers applied this technique to randomly test five different hand sanitiser brands, they found that only three of them contained the level of hydrogen peroxide mandated by the World Health Organization – 0.125 per cent. A fourth appeared to have much lower than 0.125 per cent and one had almost no hydrogen peroxide.

"Hydrogen peroxide can be detected on a larger scale using titration and other experiments, but those are cumbersome and require training. This method is easy because of

its simplicity," said Uday Maitra, professor in the department and a senior author of the study.

Maitra's lab has been working on developing several "sensitiser" molecules that turn on the photoluminescence of elements called lanthanides in the presence of specific chemicals or compounds. They have previously developed paper-based sensors for detecting specific antioxidants in green tea – and thereby testing its quality – as well as sensors for various enzymes.

The sensitiser molecule they designed enables a metal called terbium to emit a green light under an ultraviolet lamp. When the sensitiser is combined with a masking agent, the green light vanishes. When hydrogen peroxide is added to this combination, it unmasks the sensitiser molecule, making it glow green once again. Maitra added,"The molecule we have designed is very specifically unmasked by hydrogen peroxide."

The team is working on cutting down the reaction time; it takes a bit longer if the concentration of hydrogen peroxide is lower. Maitra said they were also working on developing a small, portable device where the detection can be done in a more automated manner. "We are in touch with a start-up in Chennai. We have a few prototypes made with UV LEDs and a camera to generate the emission, take a photograph, and use an image processing app to quantify the amount of hydrogen peroxide," he said.

The Indian EXPRESS

Global Covid toll may be over 3 times higher than official records: Lancet study

The number of people who died of Covid-19 worldwide could be more than three times the official toll, according to an analysis published in the Lancet.

By: Express News Service | Pune |
Updated: March 11, 2022 8:51:43 am

While the official Covid-19 death toll was 5.9 million between January 1, 2020 and December 31, 2021, the new study estimates 18.2 million excess deaths occurred over the same period, suggesting the full impact of the pandemic may have been far greater.

With 5.3 million excess deaths, South Asia had the highest number of estimated excess deaths from Covid-19, followed by North Africa and the Middle East (1.7 million) and Eastern Europe (1.4 million). At the country level, the highest number of estimated excess deaths occurred in India (4.1 million), the USA (1.1 million), Russia (1.1 million), Mexico (798,000), Brazil (792,000), Indonesia (736,000), and Pakistan (664,000). These seven countries may have accounted for more than half of global excess deaths caused by the pandemic over the 24-month period, the authors of the study stated.

Excess deaths – the difference between the number of recorded deaths from all causes and the number expected based on past trends – are a key measure of the true death toll of the pandemic.

Among these countries, the excess death rates were highest in Russia (375 deaths per 100,000) and Mexico (325 deaths per 100,000), and were similar in Brazil (187 deaths per 100,000) and the USA (179 deaths per 100,000). Because of its large population, India alone accounted for an estimated 22% of the global total deaths. India, according to the study, has reported 4.89 lakh deaths with Covid mortality rate being 18.3 per lakh .The total excess mortality, as per the study, is estimated at 40.70 lakh deaths with the excess mortality rate of 152.5 /per lakh. While there have

been several attempts to estimate excess mortality from Covid-19, most have been limited in geographical scope by the availability of data. The new study provides the first peer-reviewed estimates of excess deaths due to the pandemic globally and for 191 countries and territories along with 252 sub-national locations such as states and provinces.

The analysis indicates that global excess deaths due to the pandemic may have totalled 18.2 million – more than three times higher than the official reported figure – by December 31, 2021. The excess death rate is estimated to be 120 deaths per 100,000 population globally, and 21 countries were estimated to have rates of more than 300 excess deaths per 100,000 population.

The highest estimated excess death rates were in Andean Latin America (512 deaths per 100,000 population), Eastern Europe (345 deaths per 100,000), Central Europe (316 deaths per 100,000), Southern sub-Saharan Africa (309 deaths per 100,000), and Central Latin America (274 deaths per 100,000). In stark contrast, some countries were estimated to have had fewer deaths than expected based on mortality trends in prior years, including Iceland (48 fewer deaths per 100,000), Australia (38 fewer deaths per 100,000), and Singapore (16 fewer deaths per 100,000).

The ratio of excess deaths to reported deaths is far greater in South Asia (excess deaths 9.5 times higher than reported deaths) and sub-Saharan Africa (excess deaths 14.2 times higher than reported) than other regions.

The large differences between excess deaths and official records may be a result of under-diagnosis due to lack of testing and issues with reporting death data. Evidence from initial studies sugTo date, only 36 countries have released data on cause of death for 2020. As data from more countries becomes available, it will be possible to determine in a better manner the number of excess deaths that were directly due to Covid-19.

Lead author of the study, Dr Haidong Wang of the Institute for Health Metrics and Evaluation, USA, said: "Understanding the true death toll from the pandemic is vital for effective public health decision-making. Studies from several countries suggest Covid-19 was the direct cause of most excess deaths, but we currently don't have enough evidence for most locations.".

The Indian EXPRESS

Silicosis patients find themselves out of govt portal

The Rajasthan government silicosis portal data shows a high rejection rate of applications. According to the data, 66.2 per cent of the total 1.74 lakh applications are rejected, with only 14.4 per cent (28,478) actually getting certificates.

Written by **Deep Mukherjee** | Jaipur | Updated: March 4, 2022 7:16:30 pm

Activists say that inconsistencies and lack of streamlining and coordination at various levels of the government while adding silicosis patients with physical certificates to the online database, mean there are many like Lal. Many are attending the ongoing Jawabdehi Dharna in Jaipur. (Representational)

In April 2016, mine labourer Narayan Lal, then 48, received a certificate from the Rajasthan government confirming that he had been diagnosed with silicosis. An incurable lung disease that results from the inhalation of silica dust, silicosis is most common among mine workers.

The certificate was issued by the office of the District Tuberculosis Prevention Centre in Bhilwara and signed by three doctors, including those specialising in lung diseases.

However, recently, when Lal tried to register on Rajasthan's silicosis portal with his Aadhaar number, his application was 'rejected'. The reason cited was 'symptoms not found, rejected at appointment level'. Lal said he was never called for any appointment or put through any medical tests apart from the ones in 2016, following which he got his silicosis certificate.

"I have been suffering since 2016 and have breathing problems. How can I not have symptoms if tested?" said Lal, a resident of Bicchudra village in Bhilwara district.

The Rajasthan government silicosis portal data shows a high rejection rate of applications. According to the data, 66.2 per cent of the total 1.74 lakh applications are rejected, with only 14.4 per cent (28,478) actually getting certificates.

Activists say that inconsistencies and lack of streamlining and coordination at various levels of the government while adding silicosis patients with physical certificates to the online database, mean there are many like Lal. Many are attending the ongoing Jawabdehi Dharna in Jaipur.

After he was certified as a silicosis patient in 2016, Lal received Rs 1 lakh as compensation under the Vasundhara Raje-led BJP government. The current Ashok Gehlot government has enhanced relief for silicosis patients, which Lal says he has not received.

Sardar Singh, Misri Singh, Prabhu Singh and Vijay Singh, of Bhilwara district, also said their applications had been rejected despite them holding certificates dating back five-six years identifying them as silicosis patients. "We were never told that we had to appear before a medical board (for recertification)," said Misri Singh.

Activist Nikhil Dey from the Mazdoor Kisan Shakti Sangathan said the government should have ensured that when the silicosis patient database was made online, data of the existing patients was automatically uploaded.

"When a silicosis patient gets rejected, then complains and still gets rejected, it's almost like the end of the road for the person," said Dey, questioning the logic of calling a person for a re-test if he had been certified as a patient of silicosis already, considering it is an incurable disease.

In 2019, the Congress government had launched its silicosis policy, raising one-time assistance to affected persons who have certification from Rs 1 lakh to Rs 3 lakh, apart from Rs 2 lakh as compensation to next of kin in case of death, and monthly pension of Rs 1,500.

Labourers such as Misri Singh added that they never received the monthly pension of Rs. 1,500 from the state government.

In reply to a Lok Sabha question in March 2020, the Ministry of Labour and Employment had said that Rajasthan topped states with silicosis cases between 2015 and 2019.

Gajanand Sharma, Commissioner and Secretary to Government, Disabilities, told The Indian Express that if people have been left out, they would look into the same. "We have put the entire database online and it is an automatic

process. If there are any offline cases, the person will also get relief on applying online… It has also been seen that many people don't submit needed documents on time."

ScienceDaily®

Treatment length reduced for children with tuberculosis

March 9, 2022 | University College London

A UCL-led international trial exploring the effectiveness of tuberculosis (TB) treatment in children has led to a change in the World Health Organisation's global guidelines for managing the disease.

The research, published in *The New England Journal of Medicine,* found that the treatment duration for the majority of children with drug sensitive tuberculosis can be shortened from six to four months, thereby reducing the burden on families and healthcare systems around the world.

Principal Investigator, Professor Diana Gibb (MRC Clinical Trials Unit at UCL) said: "It is estimated that nearly one quarter of children with TB die, but the vast majority (90%) die because they are not diagnosed and started on treatment. A shorter treatment for children with non-severe TB allows savings of on average $17 (£12) per child, which can be used to improve the screening coverage and find the missing children with TB."

Researchers from the MRC Clinical Trials Unit at UCL worked with partners in South Africa, Uganda, Zambia and India on the SHINE study, the first randomised control trial to assess whether children with 'minimal' TB could be effectively treated with a shorter course of treatment.

Minimal tuberculosis is non-severe lung or lymph gland TB, where the TB bacteria cannot easily be found in the sputum through smear microscopy (smear negative). In 2020 an estimated 1.1 million children fell ill with TB globally, and unlike adult patients, most of them (approximately two thirds) had a non-severe form of the disease.

Yet despite children being more likely to have minimal TB, until now their treatment length has been based on the results of trials in adults, requiring six months of a combination of daily medicines. As children on TB treatment often stay home from school, this also increases the burden on caregivers.

The SHINE team found that treatment for four months using the same standard medicines was as beneficial as a six-month treatment course for children with minimal TB.

Spending less time on treatment will mean fewer clinic visits, as well as making it easier to complete the full course of medicine. Savings to TB programmes can instead be spent on improving access to screening and diagnostic tests for the disease, which can be poor at lower-level health facilities, as well as on training health care workers.

First author, Dr Anna Turkova (MRC Clinical Trials Unit at UCL) said: "People think that a child with TB must be very sick -- that's not true. It is known that two-thirds of children who fall ill with TB every year have non-severe TB and therefore could be treated with shorter treatment."

The trial involved 1,204 children aged from two months up to 16 years with non-severe TB, who were divided randomly into two groups to take either four or six months of treatment with anti-TB medicines. Of the enrolled children, 11% were living with HIV. All children were followed for 18

months after enrolment to see whether their treatment had been successful.

The results clearly showed that children who received the shorter course did as well as those on the standard six-month treatment, regardless of the age group, country or HIV status, with few and similar side effects in both groups.

The evidence from SHINE was reviewed by the World Health Organisation Guidelines Development Group, who recommended in August 2021 that in children and adolescents with non-severe, presumed drug susceptible TB, a four-month regimen should be used rather than the standard six-month regimen. Important considerations about how to determine eligibility for the shorter treatment regimen will be described in WHO's full consolidated guidelines coming out in March 2022 and in the operational handbook.

Lead investigator at the Zambian trial site, Dr Chishala Chabala (University Teaching Hospital, Lusaka, Zambia), said: "Children are often presenting with mild disease. If they are diagnosed on time, they can now be treated with a shorter course. The SHINE results are an opportunity to improve treatment of children with TB."

Trial paediatrician Dr Priyanka Anand Kulkarni (B.J. Medical College, Pune, India) added: "For parents it's very challenging to manage the pill burden and to motivate kids to complete the full duration of treatment. The short treatment course can make it more manageable."

Children living with HIV who also have TB face problems of having to take treatment for both diseases, which complicates HIV treatment options. The shorter TB treatment will help to reduce these issues.

While undertaking the trial, training and community education helped to diagnose children with mild TB. The SHINE team is now working with its South African partners to improve ways of identifying children with the disease. They hope to explore use of artificial intelligence to read chest radiographs and help clinicians distinguish between severe and non-severe cases.

The SHINE trial was funded by the Joint Global Health Trials scheme, including the Department for Health and Social Care, the Foreign, Commonwealth and Development Office, the Medical Research Council and Wellcome. This UK-funded award is part of the EDCTP2 Programme supported by the European Union.

Jill Jones, Head of Global Health Strategy at the Medical Research Council said: "It's fantastic to see that the trial results from this study have already been taken up in WHO TB guidelines.

"TB remains a major health burden for children and so reducing treatment time by two months will have a major impact on the health and wellbeing of children affected by TB."

Additional partners included Stellenbosch University, South Africa; University of Cape Town, South Africa; National Institute for Research in Tuberculosis, India; Radboud University Medical Center, the Netherlands; International Union Against Tuberculosis and Lung Disease, France; University of Melbourne, Australia; University of York; Imperial College London and University Hospitals Birmingham.

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